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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Rate Increase by Florida Power and Light Company /

Docket No. 120015-EI
Served: 05 July 2012

THOMAS SAPORITO'S OBJECTIONS AND RESPONSE TO FLORIDA POWER & LIGHT COMPANY'S FIRST REQUEST FOR PRODUCTION OF DOCUMENTS (No.1); AND THOMAS SAPORITO'S NOTICE OF CHANGE IN MAILING ADDRESS

The undersigned Intervenor, Thomas Saporito, pursuant to the Florida Rules of Civil Procedure, Florida Administrative Code, and the Commission's Order Establishing Procedure PSC-12-0143-PCO-EI, hereby files [h]is Objections and Response to Florida Power & Light Company's First Request for Production of Documents as follows:

GENERAL OBJECTIONS

Intervenor objects to each and every request for documents that calls for information protected by the attorney-client privilege (as applied to a "pro se" litigant), the work product doctrine and/or any other applicable privilege or protection afforded by law, whether such privilage or protection appears at the time response is first made or is subsequently determined to be applicable for any reason. Intervenor in no way intends to waive such privilage or protection. Intervenor objects to each request to the extent that it seeks information that is duplicative or not relevant to the subject matter in this docket and is not reasonably calculated to lead to the discovery of admissible evidence. Intervenor objects to each request to the extent it is vague, ambiguous, overly broad, imprecise, or utilizes terms that are subject to multiple interpretations but are not properly defined or explained for purposes of such discovery requests. Intervenor objects to providing information to the extent that such information is already in the public record before a public agency and available through normal procedures or is readily accessable through Internet search engines. Intervenor expressly reserves and does not waive any and all objections [h]e may have to the admissibility, authenticity or relevancy of the information

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provided in [h]is response.

Intervenor hereby provides the following Response to Florida Power & Light Company's First Request for Production of Documents in producing the following documents:

- 2012.01.24-25 Federal Reserve Minutes
- 2012.01.25 Federal Reserve Economic Projections
- 2012.01.25 Federal Reserve Press Release
- 2012.01.31 CBO Economic Outlook
- 2012.03.13 Federal Reserve Press Release
- 2012.04.24-25 Federal Reserve Minutes
- 2012.04.25 Federal Reserve Economic Projections
- 2012.04.25 Federal Reserve Press Release
- 2012.06.20 Federal Reserve Economic Projections
- 2012.06.20 Federal Reserve Press Release
- Federal Reserve U.S. Inflation Chart

NOTICE OF MAILING ADDRESS CHANGE

The Commission and parties in this matter are hereby noticed that the undersigned's mailing address has changed – and that <u>all future correspondence and/or documents filed in the above-captioned matter should be sent to mailing address shown immediately below</u>.

Respectfully submitted this 5th day of July 2012.

Thomas Saporito
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Phone: (561) 972-8363
Email: saporito3@gmail.com

By: ______________________

CERTIFICATE OF SERVICE
DOCKET NO. 120015-EI

I HERBY CERTIFY that a true and correct copy of the foregoing document was served electronically via email link on this 5th day of July 2012 to the following:

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Minutes of the Federal Open Market Committee
January 24–25, 2012

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors in Washington, D.C., on Tuesday, January 24, 2012, at 10:00 a.m., and continued on Wednesday, January 25, 2012, at 8:30 a.m.

PRESENT:

Ben Bernanke, Chairman
William C. Dudley, Vice Chairman
Elizabeth Duke
Jeffrey M. Lacker
Dennis P. Lockhart
Sandra Pianalto
Sarah Bloom Raskin
Daniel K. Tarullo
John C. Williams
Janet L. Yellen

James Bullard, Christine Cumming, Charles L. Evans, Esther L. George, and Eric Rosengren, Alternate Members of the Federal Open Market Committee

Richard W. Fisher, Narayana Kocherlakota, and Charles I. Plosser, Presidents of the Federal Reserve Banks of Dallas, Minneapolis, and Philadelphia, respectively

William B. English, Secretary and Economist
Deborah J. Danker, Deputy Secretary
Matthew M. Luecke, Assistant Secretary
David W. Skidmore, Assistant Secretary
Michelle A. Smith, Assistant Secretary
Scott G. Alvarez, General Counsel
Thomas C. Baxter, Deputy General Counsel
Steven B. Kamin, Economist
David W. Wilcox, Economist

David Altig, Thomas A. Connors, Michael P. Leahy, William Nelson, Simon Potter, David Reifschneider, Glenn D. Rudebusch, and William Wascher, Associate Economists

Brian Sack, Manager, System Open Market Account

Michael S. Gibson, Director, Division of Banking Supervision and Regulation, Board of Governors

Nellie Liang, Director, Office of Financial Stability Policy and Research, Board of Governors

Jon W. Faust and Andrew T. Levin, Special Advisors to the Board, Office of Board Members, Board of Governors

James A. Clouse, Deputy Director, Division of Monetary Affairs, Board of Governors

Linda Robertson, Assistant to the Board, Office of Board Members, Board of Governors

Daniel E. Sichel, Senior Associate Director, Division of Research and Statistics, Board of Governors

Ellen E. Meade, Stephen A. Meyer, and Joyce K. Zickler, Senior Advisers, Division of Monetary Affairs, Board of Governors; Lawrence Slifman, Senior Adviser, Division of Research and Statistics, Board of Governors

Eric M. Engen[1] and Daniel M. Covitz, Associate Directors, Division of Research and Statistics, Board of Governors; Trevor A. Reeve, Associate Director, Division of International Finance, Board of Governors

Joshua Gallin,[1] Deputy Associate Director, Division of Research and Statistics, Board of Governors

David H. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Chiara Scotti, Senior Economist, Division of International Finance, Board of Governors; Louise Sheiner, Senior Economist, Division of Research and Statistics, Board of Governors

[1] Attended Tuesday's session only.

Lyle Kumasaka, Senior Financial Analyst, Division of Monetary Affairs, Board of Governors

Kurt F. Lewis, Economist, Division of Monetary Affairs, Board of Governors

Randall A. Williams, Records Management Analyst, Division of Monetary Affairs, Board of Governors

Kenneth C. Montgomery, First Vice President, Federal Reserve Bank of Boston

Jeff Fuhrer, Loretta J. Mester, Harvey Rosenblum, and Daniel G. Sullivan, Executive Vice Presidents, Federal Reserve Banks of Boston, Philadelphia, Dallas, and Chicago, respectively

Craig S. Hakkio, Mark E. Schweitzer, Christopher J. Waller, and Kei-Mu Yi, Senior Vice Presidents, Federal Reserve Banks of Kansas City, Cleveland, St. Louis, and Minneapolis, respectively

John Duca[2] and Andrew Haughwout,[2] Vice Presidents, Federal Reserve Banks of Dallas and New York, respectively

Julie Ann Remache, Assistant Vice President, Federal Reserve Bank of New York

Robert L. Hetzel, Senior Economist, Federal Reserve Bank of Richmond

Daniel Cooper,[2] Economist, Federal Reserve Bank of Boston

[2] Attended the discussion of the role of financial conditions in economic recovery.

Role of Financial Conditions in Economic Recovery: Lending and Leverage

Staff summarized research projects being conducted across the Federal Reserve System on the effects of changes in lending practices and household leverage on consumer spending in recent years. These projects provided a range of views regarding the size and importance of such effects. An analysis employing aggregate time-series data indicated that changes in income, household assets and liabilities, and credit availability can largely account for the movements in aggregate consumption seen since the mid-1990s; this finding suggests that changes in credit conditions may have been an important factor driving changes in the saving rate in recent years. A second analysis used data on borrowing, debt repayments, and other credit factors for individual borrowers; this study found that movements in leverage—resulting from voluntary loan repayments and from loan charge-offs—have had a substantial effect on the cash flow of many households over time, and thus presumably on their spending. However, a third study, which employed household-level data, suggested that movements in consumption before, during, and after the recession were driven primarily by employment, income, and net worth, leaving little variation to be explained by changes in leverage and credit availability.

In their discussion following the staff presentation, several meeting participants considered possible reasons for the differing results of the various analyses; participants also noted contrasts between these findings and those reported in some academic research. Several possible explanations for the varying conclusions were discussed, including differences across studies in model specification and data, as well as differences in the definition of deleveraging. In addition, it was noted that data limitations make it difficult to reach firm conclusions on this issue, at least at this time. Participants also considered the possible influence on aggregate consumer spending of changes in real interest rates and the distribution of income, the potential for policy actions to affect the fundamental factors driving household saving, and whether households' spending behavior is being affected by concerns about the future of Social Security.

Annual Organizational Matters

In the agenda for this meeting, it was reported that advices of the election of the following members and alternate members of the Federal Open Market Committee for a term beginning January 24, 2012, had been received and that these individuals had executed their oaths of office.

The elected members and alternate members were as follows:

William C. Dudley, President of the Federal Reserve Bank of New York, with Christine Cumming, First Vice President of the Federal Reserve Bank of New York, as alternate.

Jeffrey M. Lacker, President of the Federal Reserve Bank of Richmond, with Eric Rosengren, President of the Federal Reserve Bank of Boston, as alternate.

Sandra Pianalto, President of the Federal Reserve Bank of Cleveland, with Charles L. Evans, President of the Federal Reserve Bank of Chicago, as alternate.

Dennis P. Lockhart, President of the Federal Reserve Bank of Atlanta, with James Bullard, President of the Federal Reserve Bank of St. Louis, as alternate.

John C. Williams, President of the Federal Reserve Bank of San Francisco, with Esther L. George, President of the Federal Reserve Bank of Kansas City, as alternate.

By unanimous vote, the following officers of the Federal Open Market Committee were selected to serve until the selection of their successors at the first regularly scheduled meeting of the Committee in 2013:

Ben Bernanke	Chairman
William C. Dudley	Vice Chairman
William B. English	Secretary and Economist
Deborah J. Danker	Deputy Secretary
Matthew M. Luecke	Assistant Secretary
David W. Skidmore	Assistant Secretary
Michelle A. Smith	Assistant Secretary
Scott G. Alvarez	General Counsel
Thomas C. Baxter	Deputy General Counsel
Richard M. Ashton	Assistant General Counsel
Steven B. Kamin	Economist
David W. Wilcox	Economist
David Altig	
Thomas A. Connors	
Michael P. Leahy	
William Nelson	
Simon Potter	
David Reifschneider	
Glenn D. Rudebusch	
Mark S. Sniderman	
William Wascher	
John A. Weinberg	Associate Economists

By unanimous vote, the Federal Reserve Bank of New York was selected to execute transactions for the System Open Market Account.

By unanimous vote, Brian Sack was selected to serve at the pleasure of the Committee as Manager, System Open Market Account, on the understanding that his selection was subject to being satisfactory to the Federal Reserve Bank of New York.

> Secretary's note: Advice subsequently was received that the selection of Mr. Sack as Manager was satisfactory to the Board of Directors of the Federal Reserve Bank of New York.

By unanimous vote, the Authorization for Domestic Open Market Operations was amended to allow lending of securities on longer than an overnight basis to accommodate weekend, holiday, and similar trading conventions. The Guidelines for the Conduct of System Open Market Operations in Federal-Agency Issues remained suspended.

AUTHORIZATION FOR DOMESTIC OPEN MARKET OPERATIONS
(Amended January 24, 2012)

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, to the extent necessary to carry out the most recent domestic policy directive adopted at a meeting of the Committee:

A. To buy or sell U.S. Government securities, including securities of the Federal Financing Bank, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States in the open market, from or to securities dealers and foreign and international accounts maintained at the Federal Reserve Bank of New York, on a cash, regular, or deferred delivery basis, for the System Open Market Account at market prices, and, for such Account, to exchange maturing U.S. Government and Federal agency securities with the Treasury or the individual agencies or to allow them to mature without replacement;

B. To buy or sell in the open market U.S. Government securities, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, for the System Open Market Account under agreements to resell or repurchase such securities or obligations (including such transactions as are commonly referred to as repo and reverse repo transactions) in 65 business days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reason-

able limitations on the volume of agreements with individual counterparties.

2. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to use agents in agency MBS-related transactions.

3. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to lend on an overnight basis U.S. Government securities and securities that are direct obligations of any agency of the United States, held in the System Open Market Account, to dealers at rates that shall be determined by competitive bidding. The Federal Reserve Bank of New York shall set a minimum lending fee consistent with the objectives of the program and apply reasonable limitations on the total amount of a specific issue that may be auctioned and on the amount of securities that each dealer may borrow. The Federal Reserve Bank of New York may reject bids which could facilitate a dealer's ability to control a single issue as determined solely by the Federal Reserve Bank of New York. The Federal Reserve Bank of New York may lend securities on longer than an overnight basis to accommodate weekend, holiday, and similar trading conventions.

4. In order to ensure the effective conduct of open market operations, while assisting in the provision of short-term investments for foreign and international accounts maintained at the Federal Reserve Bank of New York and accounts maintained at the Federal Reserve Bank of New York as fiscal agent of the United States pursuant to Section 15 of the Federal Reserve Act, the Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York:

A. for System Open Market Account, to sell U.S. Government securities, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, to such accounts on the bases set forth in paragraph 1.A under agreements providing for the resale by such accounts of those securities in 65 business days or less on terms comparable to those available on such transactions in the market; and

B. for New York Bank account, when appropriate, to undertake with dealers, subject to the conditions imposed on purchases and sales of securities in paragraph 1.B, repurchase agreements in U.S. Government securities, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, and to arrange corresponding sale and repurchase agreements between its own account and such foreign, international, and fiscal agency accounts maintained at the Bank.

Transactions undertaken with such accounts under the provisions of this paragraph may provide for a service fee when appropriate.

5. In the execution of the Committee's decision regarding policy during any intermeeting period, the Committee authorizes and directs the Federal Reserve Bank of New York, upon the instruction of the Chairman of the Committee, to adjust somewhat in exceptional circumstances the degree of pressure on reserve positions and hence the intended federal funds rate and to take actions that result in material changes in the composition and size of the assets in the System Open Market Account other than those anticipated by the Committee at its most recent meeting. Any such adjustment shall be made in the context of the Committee's discussion and decision at its most recent meeting and the Committee's long-run objectives for price stability and sustainable economic growth, and shall be based on economic, financial, and monetary developments during the intermeeting period. Consistent with Committee practice, the Chairman, if feasible, will consult with the Committee before making any adjustment.

The Committee voted to reaffirm the Authorization for Foreign Currency Operations, the Foreign Currency Directive, and the Procedural Instructions with Respect to Foreign Currency Operations as shown below. The votes to reaffirm these documents included approval of the System's warehousing agreement with the U.S. Treasury. Mr. Lacker dissented in the votes on the Authorization for Foreign Currency Operations and the Foreign Currency Directive to indicate his opposition to foreign currency intervention by the Federal Reserve. In his view, such intervention would be ineffective if it did not also signal a shift in domestic monetary policy; and if it did signal such a shift, it could potentially compromise the Federal Reserve's monetary policy independence.

AUTHORIZATION FOR FOREIGN CURRENCY OPERATIONS

(Reaffirmed January 24, 2012)

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, for System Open Market Account, to the extent necessary to carry out the Committee's foreign currency directive and express authorizations by the Committee pursuant thereto, and in conformity with such procedural in-

structions as the Committee may issue from time to time:

A. To purchase and sell the following foreign currencies in the form of cable transfers through spot or forward transactions on the open market at home and abroad, including transactions with the U.S. Treasury, with the U.S. Exchange Stabilization Fund established by Section 10 of the Gold Reserve Act of 1934, with foreign monetary authorities, with the Bank for International Settlements, and with other international financial institutions:

Australian dollars
Brazilian reais
Canadian dollars
Danish kroner
euro
Japanese yen
Korean won
Mexican pesos
New Zealand dollars
Norwegian kroner
Pounds sterling
Singapore dollars
Swedish kronor
Swiss francs

B. To hold balances of, and to have outstanding forward contracts to receive or to deliver, the foreign currencies listed in paragraph A above.

C. To draw foreign currencies and to permit foreign banks to draw dollars under the reciprocal currency arrangements listed in paragraph 2 below, provided that drawings by either party to any such arrangement shall be fully liquidated within 12 months after any amount outstanding at that time was first drawn, unless the Committee, because of exceptional circumstances, specifically authorizes a delay.

D. To maintain an overall open position in all foreign currencies not exceeding $25.0 billion. For this purpose, the overall open position in all foreign currencies is defined as the sum (disregarding signs) of net positions in individual currencies, excluding changes in dollar value due to foreign exchange rate movements and interest accruals. The net position in a single foreign currency is defined as holdings of balances in that currency, plus outstanding contracts for future receipt, minus outstanding contracts for future delivery of that currency, i.e., as the sum of these elements with due regard to sign.

2. The Federal Open Market Committee directs the Federal Reserve Bank of New York to maintain reciprocal currency arrangements ("swap" arrangements) for the System Open Market Account for periods up to a maximum of 12 months with the following foreign banks, which are among those designated by the Board of Governors of the Federal Reserve System under Section 214.5 of Regulation N, Relations with Foreign Banks and Bankers, and with the approval of the Committee to renew such arrangements on maturity:

Foreign bank	Amount of arrangement (millions of dollars equivalent)
Bank of Canada	2,000
Bank of Mexico	3,000

Any changes in the terms of existing swap arrangements, and the proposed terms of any new arrangements that may be authorized, shall be referred for review and approval to the Committee.

3. All transactions in foreign currencies undertaken under paragraph 1.A. above shall, unless otherwise expressly authorized by the Committee, be at prevailing market rates. For the purpose of providing an investment return on System holdings of foreign currencies or for the purpose of adjusting interest rates paid or received in connection with swap drawings, transactions with foreign central banks may be undertaken at non-market exchange rates.

4. It shall be the normal practice to arrange with foreign central banks for the coordination of foreign currency transactions. In making operating arrangements with foreign central banks on System holdings of foreign currencies, the Federal Reserve Bank of New York shall not commit itself to maintain any specific balance, unless authorized by the Federal Open Market Committee. Any agreements or understandings concerning the administration of the accounts maintained by the Federal Reserve Bank of New York with the foreign banks designated by the Board of Governors under Section 214.5 of Regulation N shall be referred for review and approval to the Committee.

5. Foreign currency holdings shall be invested to ensure that adequate liquidity is maintained to meet anticipated needs and so that each currency portfolio shall generally have an average duration of no more than 18 months (calculated as Macaulay duration). Such investments may include buying or selling outright obligations of, or fully guaranteed as to principal and interest by, a foreign government or agency thereof; buying such securities under agreements for repurchase of such securities; selling such securities under agreements for the resale of such securities; and holding var-

ious time and other deposit accounts at foreign institutions. In addition, when appropriate in connection with arrangements to provide investment facilities for foreign currency holdings, U.S. Government securities may be purchased from foreign central banks under agreements for repurchase of such securities within 30 calendar days.

6. All operations undertaken pursuant to the preceding paragraphs shall be reported promptly to the Foreign Currency Subcommittee and the Committee. The Foreign Currency Subcommittee consists of the Chairman and Vice Chairman of the Committee, the Vice Chairman of the Board of Governors, and such other member of the Board as the Chairman may designate (or in the absence of members of the Board serving on the Subcommittee, other Board members designated by the Chairman as alternates, and in the absence of the Vice Chairman of the Committee, the Vice Chairman's alternate). Meetings of the Subcommittee shall be called at the request of any member, or at the request of the Manager, System Open Market Account ("Manager"), for the purposes of reviewing recent or contemplated operations and of consulting with the Manager on other matters relating to the Manager's responsibilities. At the request of any member of the Subcommittee, questions arising from such reviews and consultations shall be referred for determination to the Federal Open Market Committee.

7. The Chairman is authorized:

A. With the approval of the Committee, to enter into any needed agreement or understanding with the Secretary of the Treasury about the division of responsibility for foreign currency operations between the System and the Treasury;

B. To keep the Secretary of the Treasury fully advised concerning System foreign currency operations, and to consult with the Secretary on policy matters relating to foreign currency operations;

C. From time to time, to transmit appropriate reports and information to the National Advisory Council on International Monetary and Financial Policies.

8. Staff officers of the Committee are authorized to transmit pertinent information on System foreign currency operations to appropriate officials of the Treasury Department.

9. All Federal Reserve Banks shall participate in the foreign currency operations for System Account in accordance with paragraph 3G(1) of the Board of Governors' Statement of Procedure with Respect to Foreign Relationships of Federal Reserve Banks dated January 1, 1944.

FOREIGN CURRENCY DIRECTIVE
(Reaffirmed January 24, 2012)

1. System operations in foreign currencies shall generally be directed at countering disorderly market conditions, provided that market exchange rates for the U.S. dollar reflect actions and behavior consistent with IMF Article IV, Section 1.

2. To achieve this end the System shall:

A. Undertake spot and forward purchases and sales of foreign exchange.

B. Maintain reciprocal currency ("swap") arrangements with selected foreign central banks.

C. Cooperate in other respects with central banks of other countries and with international monetary institutions.

3. Transactions may also be undertaken:

A. To adjust System balances in light of probable future needs for currencies.

B. To provide means for meeting System and Treasury commitments in particular currencies, and to facilitate operations of the Exchange Stabilization Fund.

C. For such other purposes as may be expressly authorized by the Committee.

4. System foreign currency operations shall be conducted:

A. In close and continuous consultation and cooperation with the United States Treasury;

B. In cooperation, as appropriate, with foreign monetary authorities; and

C. In a manner consistent with the obligations of the United States in the International Monetary Fund regarding exchange arrangements under IMF Article IV.

PROCEDURAL INSTRUCTIONS WITH RESPECT TO FOREIGN CURRENCY OPERATIONS
(Reaffirmed January 24, 2012)

In conducting operations pursuant to the authorization and direction of the Federal Open Market Committee as set forth in the Authorization for Foreign Currency Operations and the Foreign Currency Directive, the Federal Reserve Bank of New York, through the Manager, System Open Market Account ("Manager"), shall be guided by the following procedural understandings with respect to consultations and clearances with the Committee, the Foreign Currency Subcommittee, and the Chairman of the Committee, unless otherwise directed by the Committee. All operations undertaken

pursuant to such clearances shall be reported promptly to the Committee.

1. The Manager shall clear with the Subcommittee (or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):

A. Any operation that would result in a change in the System's overall open position in foreign currencies exceeding $300 million on any day or $600 million since the most recent regular meeting of the Committee.

B. Any operation that would result in a change on any day in the System's net position in a single foreign currency exceeding $150 million, or $300 million when the operation is associated with repayment of swap drawings.

C. Any operation that might generate a substantial volume of trading in a particular currency by the System, even though the change in the System's net position in that currency might be less than the limits specified in 1.B.

D. Any swap drawing proposed by a foreign bank not exceeding the larger of (i) $200 million or (ii) 15 percent of the size of the swap arrangement.

2. The Manager shall clear with the Committee (or with the Subcommittee, if the Subcommittee believes that consultation with the full Committee is not feasible in the time available, or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):

A. Any operation that would result in a change in the System's overall open position in foreign currencies exceeding $1.5 billion since the most recent regular meeting of the Committee.

B. Any swap drawing proposed by a foreign bank exceeding the larger of (i) $200 million or (ii) 15 percent of the size of the swap arrangement.

3. The Manager shall also consult with the Subcommittee or the Chairman about proposed swap drawings by the System and about any operations that are not of a routine character.

By unanimous vote, the Committee reaffirmed its Program for Security of FOMC Information.

Statement on Longer-Run Goals and Monetary Policy Strategy

Following the Committee's disposition of organizational matters, participants considered a revised draft of a statement of principles regarding the FOMC's longer-run goals and monetary policy strategy. The revisions reflected discussion of an earlier draft during the Committee's December meeting as well as comments received over the intermeeting period. The Chairman noted that the proposed statement did not represent a change in the Committee's policy approach. Instead, the statement was intended to help enhance the transparency, accountability, and effectiveness of monetary policy.

In presenting the draft statement on behalf of the subcommittee on communications, Governor Yellen pointed out several key elements. First, the statement expresses the FOMC's commitment to explain its policy decisions as clearly as possible. Second, the statement specifies a numerical inflation goal in a context that firmly underscores the Federal Reserve's commitment to fostering both parts of its dual mandate. Third, the statement is intended to serve as an overarching set of principles that would be reaffirmed during the Committee's organizational meeting each year, and the bar for amending the statement would be high.

All participants but one supported adopting the revised statement of principles regarding longer-run goals and monetary policy strategy, which is reproduced below.

> "Following careful deliberations at its recent meetings, the Federal Open Market Committee (FOMC) has reached broad agreement on the following principles regarding its longer-run goals and monetary policy strategy. The Committee intends to reaffirm these principles and to make adjustments as appropriate at its annual organizational meeting each January.
>
> The FOMC is firmly committed to fulfilling its statutory mandate from the Congress of promoting maximum employment, stable prices, and moderate long-term interest rates. The Committee seeks to explain its monetary policy decisions to the public as clearly as possible. Such clarity facilitates well-informed decisionmaking by households and businesses, reduces economic and financial uncertainty, increases the effectiveness of monetary policy, and enhances transparency and accountability, which are essential in a democratic society.
>
> Inflation, employment, and long-term interest rates fluctuate over time in response to economic and financial disturbances. Moreover, monetary policy actions tend to influence economic activity and prices with a lag.

Therefore, the Committee's policy decisions reflect its longer-run goals, its medium-term outlook, and its assessments of the balance of risks, including risks to the financial system that could impede the attainment of the Committee's goals.

The inflation rate over the longer run is primarily determined by monetary policy, and hence the Committee has the ability to specify a longer-run goal for inflation. The Committee judges that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures, is most consistent over the longer run with the Federal Reserve's statutory mandate. Communicating this inflation goal clearly to the public helps keep longer-term inflation expectations firmly anchored, thereby fostering price stability and moderate long-term interest rates and enhancing the Committee's ability to promote maximum employment in the face of significant economic disturbances.

The maximum level of employment is largely determined by nonmonetary factors that affect the structure and dynamics of the labor market. These factors may change over time and may not be directly measurable. Consequently, it would not be appropriate to specify a fixed goal for employment; rather, the Committee's policy decisions must be informed by assessments of the maximum level of employment, recognizing that such assessments are necessarily uncertain and subject to revision. The Committee considers a wide range of indicators in making these assessments. Information about Committee participants' estimates of the longer-run normal rates of output growth and unemployment is published four times per year in the FOMC's Summary of Economic Projections. For example, in the most recent projections, FOMC participants' estimates of the longer-run normal rate of unemployment had a central tendency of 5.2 percent to 6.0 percent, roughly unchanged from last January but substantially higher than the corresponding interval several years earlier.

In setting monetary policy, the Committee seeks to mitigate deviations of inflation from its longer-run goal and deviations of employment from the Committee's assessments of its maximum level. These objectives are generally complementary. However, under circumstances in which the Committee judges that the objectives are not complementary, it follows a balanced approach in promoting them, taking into account the magnitude of the deviations and the potentially different time horizons over which employment and inflation are projected to return to levels judged consistent with its mandate."

All FOMC members voted to adopt this statement except Mr. Tarullo, who abstained because he questioned the ultimate usefulness of the statement in promoting better communication of the Committee's policy strategy.

Developments in Financial Markets and the Federal Reserve's Balance Sheet

The Manager of the System Open Market Account (SOMA) reported on developments in domestic and foreign financial markets during the period since the Federal Open Market Committee (FOMC) met on December 13, 2011. He also reported on System open market operations, including the ongoing reinvestment into agency-guaranteed mortgage-backed securities (MBS) of principal payments received on SOMA holdings of agency debt and agency-guaranteed MBS as well as the operations related to the maturity extension program authorized at the September 20–21 FOMC meeting. By unanimous vote, the Committee ratified the Desk's domestic transactions over the intermeeting period. There were no intervention operations in foreign currencies for the System's account over the intermeeting period.

Staff Review of the Economic Situation

The information reviewed at the January 24–25 meeting indicated that U.S. economic activity continued to expand moderately, while global growth appeared to be slowing. Overall conditions in the labor market improved further, although the unemployment rate remained elevated. Consumer price inflation was subdued, and measures of long-run inflation expectations remained stable.

The unemployment rate declined to 8.5 percent in December; however, both long-duration unemployment and the share of workers employed part time for economic reasons were still quite high. Private nonfarm employment continued to expand moderately, while

state and local government employment decreased at a slower pace than earlier in 2011. Some indicators of firms' hiring plans improved. Initial claims for unemployment insurance edged lower, on balance, since the middle of December but remained at a level consistent with only modest employment growth.

Industrial production expanded in November and December, on net, and the rate of manufacturing capacity utilization moved up. Motor vehicle assemblies were scheduled to increase, on balance, in the first quarter of 2012, and broader indicators of manufacturing activity, such as the diffusion indexes of new orders from the national and regional manufacturing surveys, were at levels that suggested moderate growth in production in the near term.

Real personal consumption expenditures continued to rise moderately in November, boosted by spending for motor vehicles and other durables, although households' real disposable income edged down. In December, however, nominal retail sales excluding purchases at motor vehicle and parts outlets declined, and sales of motor vehicles also dropped slightly. Consumer sentiment improved further in early January but was still at a low level.

Activity in the housing market improved a bit in recent months but continued to be held down by the large overhang of foreclosed and distressed properties, uncertainty about future home prices, and tight underwriting standards for mortgage loans. Starts and permits for new single-family homes rose in November and December but remained only a little above the depressed levels seen earlier in 2011. Sales of new and existing homes also firmed somewhat in recent months, but home prices continued to trend lower.

Real business expenditures on equipment and software appeared to have decelerated in the fourth quarter. Nominal orders and shipments of nondefense capital goods excluding aircraft declined in November for a second month. Forward-looking indicators of firms' equipment spending were mixed: Some survey measures of business conditions and capital spending plans improved, but corporate bond spreads continued to be elevated and analysts' earnings expectations for producers of capital goods remained muted. Nominal business spending for nonresidential construction was unchanged in November and continued to be held back by high vacancy rates and tight credit conditions for construction loans. Inventories in most industries looked to be well aligned with sales, though motor vehicle stocks remained lean.

Monthly data for federal government spending pointed to a significant decline in real defense purchases in the fourth quarter. Real state and local government purchases seemed to be decreasing at a slower rate than during earlier quarters, as the pace of reductions in payrolls eased and construction spending leveled off in recent months.

The U.S. international trade deficit widened in November as exports fell and imports rose. Exports declined in most major categories, with the exception of consumer goods. Exports of industrial supplies and materials were especially weak, though the weakness was concentrated in a few particularly volatile categories and reflected, in part, declines in prices. The rise in imports largely reflected higher imports of petroleum products and automotive products, which more than offset decreases in most other broad categories of imports.

Overall U.S. consumer prices as measured by the price index for personal consumption expenditures were unchanged in November; as measured by the consumer price index, they were flat in December as well. Consumer energy prices decreased in recent months, while increases in consumer food prices slowed. Consumer prices excluding food and energy rose modestly in the past two months. Near-term inflation expectations from the Thomson Reuters/University of Michigan Surveys of Consumers were essentially unchanged in early January, and longer-term inflation expectations remained stable.

Available measures of labor compensation indicated that wage gains continued to be modest. Average hourly earnings for all employees posted a moderate gain in December, and their rate of increase from 12 months earlier remained slow.

Recent indicators of foreign economic activity pointed to a substantial deceleration in the fourth quarter of 2011. In the euro area, retail sales and industrial production were below their third-quarter averages in both October and November. Economic activity in much of Asia was disrupted by the effects of severe flooding in Thailand, which affected supply chains in the region. Twelve-month inflation rates receded in several advanced and emerging market economies, and most central banks maintained policy rates or eased further while continuing to provide significant liquidity support.

Staff Review of the Financial Situation

Developments in Europe continued to be a central focus for investors over the intermeeting period as concerns persisted about the prospects for a durable solution to the European fiscal and financial difficulties. Nevertheless, market sentiment toward Europe appeared to brighten a bit, and U.S. economic data releases were somewhat better than investors expected, leading to some improvement in conditions in financial markets.

On balance over the period, the expected path for the federal funds rate implied by money market futures quotes was essentially unchanged. Yields on nominal Treasury securities rose slightly at intermediate and longer maturities. Indicators of inflation compensation derived from nominal and inflation-protected Treasury securities edged up.

U.S. financial institutions reportedly retained ready access to short-term funding markets; there were no significant dislocations in those markets over year-end. Dollar funding pressures for European banks eased slightly. While spreads of the London interbank offered rate (Libor) over overnight index swap (OIS) rates of the same maturity remained elevated, rates for unsecured overnight commercial paper (CP) issued by some entities with European parents declined substantially following the lowering of charges on the central bank liquidity swap lines with the Federal Reserve, the implementation by the European Central Bank (ECB) of its first three-year longer-term refinancing operation (LTRO), and the passage of year-end. In secured funding markets, spreads of overnight asset-backed CP rates over overnight unsecured CP rates also declined, and the general collateral repurchase agreement, or repo, market continued to function normally.

Indicators of financial stress eased somewhat over the intermeeting period, although they generally continued to be elevated. Market-based measures of possible spillovers from troubles at particular financial firms to the broader financial system were below their levels in the fall but remained above their levels prior to the financial crisis. Initial fourth-quarter earnings reports for large bank holding companies were mixed relative to market expectations, with poor capital market revenues weighing on the profits of institutions with significant trading operations. Although credit default swap (CDS) spreads of most large domestic bank holding companies remained elevated, they moved lower over the intermeeting period, and some institutions took advantage of easing credit conditions by issuing significant quantities of new long-term debt. Equity prices of most large domestic financial institutions outperformed the broader market, on net, over the intermeeting period. Nonetheless, the ratio of the market value of bank equity to its book value remained low for some large financial firms. Responses to the December Senior Credit Officer Opinion Survey on Dealer Financing Terms indicate that, since August, securities dealers have devoted increased time and attention to the management of concentrated credit exposures to other financial intermediaries, pointing to increased concern over counterparty risk.

Broad equity price indexes increased more than 6 percent, on net, over the intermeeting period, and option-implied equity volatility declined notably. Yields on investment-grade corporate bonds declined a bit relative to those on comparable-maturity Treasury securities, while spreads of speculative-grade corporate bond yields over yields on Treasury securities decreased noticeably. Indicators of the credit quality of nonfinancial corporations continued to be solid. Conditions in the secondary market for leveraged loans were stable, with median bid prices about unchanged. Financing conditions for large nonfinancial businesses generally remained favorable. Bond issuance by investment-grade nonfinancial corporations was robust, though below its elevated November pace, while issuance by lower-rated firms slowed, likely owing in part to seasonal factors. Issuance of leveraged loans was relatively modest in the fourth quarter compared with its rapid pace earlier in the year. Share repurchases and cash-financed mergers by nonfinancial firms maintained their recent strength in the third quarter, leaving net equity issuance deeply negative.

Financing conditions for commercial real estate (CRE) remained strained, and issuance of commercial mortgage-backed securities was very light in the fourth quarter. Responses to the January Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) indicated that bank CRE lending standards continued to be extraordinarily tight, but some banks reported having reduced the spreads of loan rates over their cost of funds (compared with a year ago) for the first time since 2007. Delinquency rates on commercial mortgages remained elevated, and CRE price indexes continued to fluctuate around levels substantially lower than their 2007 peaks.

Conditions in residential mortgage markets remained extremely tight. Although mortgage interest rates and yields on current-coupon agency MBS edged down to

near their historical lows, mortgage refinancing activity continued to be subdued amid tight underwriting standards and low levels of home equity. Mortgage delinquency rates, while improving gradually, remained elevated relative to pre-crisis norms, and house prices continued to move lower. The price of subprime residential mortgage-backed securities (RMBS), as measured by the ABX index, rose over the intermeeting period, consistent with similar changes for other higher-risk fixed-income securities. RMBS prices were supported by reports of the sale of a significant portion of the RMBS held in the Maiden Lane II portfolio.

On the whole, conditions in consumer credit markets showed signs of improvement. Consumer credit increased in November, while delinquency rates on credit card loans in securitized pools held steady in November at historically low levels. Data on credit card solicitations and from responses to the January SLOOS suggested that lending standards on consumer loans continued to ease modestly.

Financing conditions for state and local governments were mixed. Gross long-term issuance of municipal bonds remained robust in December, with continued strength in new issuance for capital projects. CDS spreads for states inched down further over the intermeeting period, and yields on long-term general obligation municipal bonds fell notably. However, downgrades of municipal bonds continued to substantially outpace upgrades in the third quarter.

In the fourth quarter, bank credit continued to increase as banks accumulated agency MBS and growth of total loans picked up. Core loans—the sum of commercial and industrial (C&I) loans, real estate loans, and consumer loans—expanded modestly. Growth of C&I loans at domestic banks was robust but was partly offset by weakness at U.S. branches and agencies of European banks. Noncore loans rose sharply, on net, reflecting in part a surge in such loans at the U.S. branches and agencies of European institutions. Responses to the January SLOOS indicated that, in the aggregate, loan demand strengthened slightly and lending standards eased a bit further in the fourth quarter.

M2 increased at an annual rate of 5¼ percent in December, likely reflecting continued demand for safe and liquid assets given investor concerns over developments in Europe. In addition, demand deposits rose rapidly around year-end, reportedly because lenders in short-term funding markets chose to leave substantial balances with banks over the turn of the year. The monetary base increased in December, largely reflecting growth in currency. Reserve balances were roughly unchanged over the intermeeting period.

International financial markets seemed somewhat calmer over the intermeeting period than they had been in previous months, and the funding conditions faced by most European financial institutions and sovereigns eased somewhat in the wake of the ECB's first three-year LTRO. Short-term euro interest rates moved lower as euro-area institutions drew a substantial amount of three-year funds from the ECB, and dollar funding costs for European banks also appeared to decline. Spreads of yields on Italian and Spanish government debt over those on German bunds narrowed over the intermeeting period, with spreads on shorter-term debt falling particularly noticeably. The apparent improvement in market sentiment was not diminished by news late in the period that Standard & Poor's lowered its long-term sovereign bond ratings of nine euro-area countries and the European Financial Stability Facility or by news that negotiations over the terms of a voluntary private-sector debt exchange for Greece had not yet reached a conclusion.

The staff's broad index of the foreign exchange value of the dollar declined slightly over the intermeeting period. While the dollar fell against most other currencies, it appreciated against the euro. Foreign stock markets generally ended the period higher, with headline equity indexes in Europe and the emerging market economies up substantially, although emerging market equity and bond funds continued to experience outflows on net during the period.

Staff Economic Outlook

In the economic forecast prepared for the January FOMC meeting, the staff's projection for the growth in real gross domestic product (GDP) in the near term was revised down a bit. The revision reflected the apparent decline in federal defense purchases and the somewhat shallower trajectory for consumer spending in recent months; the recent data on the labor market, production, and other spending categories were, on balance, roughly in line with the staff's expectations at the time of the previous forecast. The medium-term projection for real GDP growth in the January forecast was little changed from the one presented in December. Although the developments in Europe were expected to continue to weigh on the U.S. economy during the first half of this year, the staff still projected that real GDP growth would accelerate gradually in 2012 and 2013, supported by accommodative monetary policy, further improvements in credit availability, and ris-

ing consumer and business sentiment. The increase in real GDP was expected to be sufficient to reduce the slack in product and labor markets only slowly over the projection period, and the unemployment rate was anticipated to still be high at the end of 2013.

The staff's forecast for inflation was essentially unchanged from the projection prepared for the December FOMC meeting. With stable long-run inflation expectations and substantial slack in labor and product markets anticipated to persist over the forecast period, the staff continued to project that inflation would remain subdued in 2012 and 2013.

Participants' Views on Current Conditions and the Economic Outlook

In conjunction with this FOMC meeting, all participants—the five members of the Board of Governors and the presidents of the 12 Federal Reserve Banks—provided projections of output growth, the unemployment rate, and inflation for each year from 2011 through 2014 and over the longer run. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge, over time, under appropriate monetary policy and in the absence of further shocks to the economy. Starting with this meeting, participants also provided assessments of the path for the target federal funds rate that they view as appropriate and compatible with their individual economic projections. Participants' economic projections and policy assessments are described in more detail in the Summary of Economic Projections, which is attached as an addendum to these minutes.

In their discussion of the economic situation and outlook, meeting participants agreed that the information received since the Committee met in December suggested that the economy had been expanding moderately, notwithstanding some slowing in growth abroad. In general, labor market indicators pointed to some further improvement in labor market conditions, but progress was gradual and the unemployment rate remained elevated. Household spending had continued to advance at a moderate pace despite still-sluggish growth in real disposable income, but growth in business fixed investment had slowed. The housing sector remained depressed, with very low levels of activity; there were, however, signs of improvement in some local housing markets. Many participants observed that some indicators bearing on the economy's recent performance had shown greater-than-expected improvement, but a number also noted less favorable data; one noted that growth in final sales appeared to have slowed in the fourth quarter of last year even as output growth picked up. Inflation had been subdued in recent months, there was little evidence of wage or cost pressures, and longer-term inflation expectations had remained stable.

With respect to the economic outlook, participants generally anticipated that economic growth over coming quarters would be modest and, consequently, expected that the unemployment rate would decline only gradually. A number of factors were seen as likely to restrain the pace of economic expansion, including the slowdown in economic activity abroad, fiscal tightening in the United States, the weak housing market, further household deleveraging, high levels of uncertainty among households and businesses, and the possibility of increased volatility in financial markets until the fiscal and banking issues in the euro area are more fully addressed. Participants continued to expect these headwinds to ease over time and so anticipated that the recovery would gradually gain strength. However, participants agreed that strains in global financial markets continued to pose significant downside risks to the economic outlook. With unemployment expected to remain elevated, and with longer-term inflation expectations stable, almost all participants expected inflation to remain subdued in coming quarters—that is, to run at or below the 2 percent level that the Committee judges most consistent with its statutory mandate over the longer run.

In discussing the household sector, meeting participants noted that consumer spending had grown moderately in recent months. Consumer sentiment had improved since last summer, though its level was still quite low. Business contacts in the retail sector reported generally satisfactory holiday sales, but high-end retailers saw strong gains while lower-end retailers saw mixed results. Contacts also reported widespread discounting. Major express delivery companies indicated very high volumes at year-end and into January. Several participants observed that consumer spending had outpaced growth in personal disposable income last year, and a few noted that households remained pessimistic about their income prospects and uncertain about the economic outlook. These observations suggested that growth of consumer spending might slow. However, a few other participants pointed to increasing job gains in recent months as contributing to an improving trend in real incomes and thus supporting continued moderate growth in consumer spending.

Reports from business contacts indicated that activity in the manufacturing, energy, and agricultural sectors continued to advance in recent months. Businesses generally reported that they remained cautious regarding capital spending and hiring; some contacts cited uncertainty about the economic outlook and about fiscal and regulatory policy. Nonetheless, business contacts had become somewhat more optimistic, with more contacts reporting plans to expand capacity and payrolls. Some companies indicated that they planned to relocate some production from abroad to the United States. A few participants noted that national and District surveys of firms' capital spending plans suggested that the recent slowing in business fixed investment was partly temporary. The combination of high energy prices and availability of new drilling technologies was promoting strong growth in investment outlays in the energy sector.

Participants generally saw the housing sector as still depressed. The level of activity remained quite weak, house prices were continuing to decline in most areas, and the overhang of foreclosed and distressed properties was still substantial. Nonetheless, there were some small signs of improvement. The inventory of unsold homes had declined, though in part because the foreclosure process had slowed, and issuance of permits for new single-family homes had risen from its lows. One participant again noted reports from some homebuilders suggesting that land prices were edging up and that financing was available from nonbank sources. Another participant cited reports from business contacts indicating that credit standards in mortgage lending were becoming somewhat less stringent. Yet another noted that recent changes to the Home Affordable Refinance Program, which were intended to streamline the refinancing of performing high-loan-to-value mortgages, were showing some success.

Participants generally expected that growth of U.S. exports was likely to be held back in the coming year by slower global economic growth. In particular, fiscal austerity programs in Europe and stresses in the European banking system seemed likely to restrain economic growth there, perhaps with some spillover to growth in Asia. One participant noted that shipping rates had declined of late, suggesting that a slowdown in international trade might be under way.

Participants agreed that recent indicators showed some further gradual improvement in overall labor market conditions: Payroll employment had increased somewhat more rapidly in recent months, new claims for unemployment insurance had trended lower, and the unemployment rate had declined. Some business contacts indicated that they planned to do more hiring this year than last. However, unemployment—including longer-term unemployment—remained elevated, and the numbers of discouraged workers and people working part time because they could not find full-time work were also still quite high. Participants expressed a range of views on the current extent of slack in the labor market. Very high long-duration unemployment might indicate a mismatch between unemployed workers' skills and employers' needs, suggesting that a substantial part of the increase in unemployment since the beginning of the recession reflected factors other than a shortfall in aggregate demand. In contrast, the quite modest increases in labor compensation of late, and the large number of workers reporting that they are working part time because their employers have cut their hours, suggested that underutilization of labor was still substantial. A few participants noted that the recent decline in the unemployment rate reflected declining labor force participation in large part, and judged that the decline in the participation rate was likely to be reversed, at least to some extent, as the recovery continues and labor demand picks up.

Meeting participants observed that financial conditions improved and financial market stresses eased somewhat during the intermeeting period: Equity prices rose, volatility declined, and bank lending conditions appeared to improve. Participants noted that the ECB's three-year refinancing operation had apparently contributed to improved conditions in European sovereign debt markets. Nonetheless, participants expected that global financial markets would remain focused on the evolving situation in Europe and anticipated that continued policy efforts would be necessary in Europe to fully address the area's fiscal and financial problems. U.S. banks reported increases in commercial lending as some European lenders pulled back, and some banking contacts indicated that creditworthy companies' demand for credit had increased. A number of participants noted further improvement in the availability of loans to businesses, with a couple of them indicating that small business contacts had reported increased availability of bank credit. However, a few other participants commented that small businesses in their Districts continued to face difficulty in obtaining bank loans.

Participants observed that longer-run inflation expectations were still well anchored and also noted that inflation had been subdued in recent months, partly reflect-

ing a decline in commodity prices and an easing of supply chain disruptions since mid-2011. In addition, labor compensation had risen only slowly and productivity continued to increase. One participant reported that a survey of business inflation expectations indicated firms were anticipating increases in unit costs on the order of 1¾ percent this year, just a bit higher than last year. Looking farther ahead, participants generally judged that the modest expansion in economic activity that they were projecting would be consistent with a gradual reduction in the current wide margins of slack in labor and product markets and with subdued inflation going forward. Some remained concerned that, with the persistence of considerable resource slack, inflation might continue to drift down and run below mandate-consistent levels for some time. However, a couple of participants were concerned that inflation could rise as the recovery continued and argued that providing additional monetary accommodation, or even maintaining the current highly accommodative stance of monetary policy over the medium run, would erode the stability of inflation expectations and risk higher inflation.

Committee participants discussed possible changes to the forward guidance that has been included in the Committee's recent post-meeting statements. Many participants thought it important to explore means for better communicating policymakers' thinking about future monetary policy and its relationship to evolving economic conditions. A couple of participants expressed concern that some press reports had misinterpreted the Committee's use of a date in its forward guidance as a commitment about its future policy decisions. Several participants thought it would be helpful to provide more information about the economic conditions that would be likely to warrant maintaining the current target range for the federal funds rate, perhaps by providing numerical thresholds for the unemployment and inflation rates. Different opinions were expressed regarding the appropriate values of such thresholds, reflecting different assessments of the path for the federal funds rate that would likely be appropriate to foster the Committee's longer-run goals. However, some participants worried that such thresholds would not accurately or effectively convey the Committee's forward-looking approach to monetary policy and thus would pose difficult communications issues, or that movements in the unemployment rate, by themselves, would be an unreliable measure of progress toward maximum employment. Several participants proposed either dropping or greatly simplifying the forward guidance in the Committee's statement, arguing that information about participants' assessments of the appropriate future level of the federal funds rate, which would henceforth be contained in the Summary of Economic Projections (SEP), made it unnecessary to include forward guidance in the post-meeting statement. However, several other participants emphasized that the information regarding the federal funds rate in the SEP could not substitute for a formal decision of the members of the FOMC. Participants agreed to continue exploring approaches for providing the public with greater clarity about the linkages between the economic outlook and the Committee's monetary policy decisions.

Committee Policy Action

Members viewed the information on U.S. economic activity received over the intermeeting period as suggesting that the economy had been expanding moderately and generally agreed that the economic outlook had not changed greatly since they met in December. While overall labor market conditions had improved somewhat further and unemployment had declined in recent months, almost all members viewed the unemployment rate as still elevated relative to levels that they saw as consistent with the Committee's mandate over the longer run. Available data indicated some slowing in the pace of economic growth in Europe and in some emerging market economies, pointing to reduced growth of U.S. exports going forward. With the economy facing continuing headwinds from the recent financial crisis and with growth slowing in a number of U.S. export markets, members generally expected a modest pace of economic growth over coming quarters, with the unemployment rate declining only gradually. Strains in global financial markets continued to pose significant downside risks to economic activity. Inflation had been subdued in recent months, and longer-term inflation expectations remained stable. Members generally anticipated that inflation over coming quarters would run at or below the 2 percent level that the Committee judges most consistent with its mandate.

In their discussion of monetary policy for the period ahead, members agreed that it would be appropriate to maintain the existing highly accommodative stance of monetary policy. In particular, they agreed to keep the target range for the federal funds rate at 0 to ¼ percent, to continue the program of extending the average maturity of the Federal Reserve's holdings of securities as announced in September, and to retain the existing

policies regarding the reinvestment of principal payments from Federal Reserve holdings of securities.

With respect to the statement to be released following the meeting, members agreed that only relatively small modifications to the first two paragraphs were needed to reflect the incoming information and the modest changes to the economic outlook implied by the recent data. In light of the economic outlook, almost all members agreed to indicate that the Committee expects to maintain a highly accommodative stance for monetary policy and currently anticipates that economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014, longer than had been indicated in recent FOMC statements. In particular, several members said they anticipated that unemployment would still be well above their estimates of its longer-term normal rate, and inflation would be at or below the Committee's longer-run objective, in late 2014. It was noted that extending the horizon of the Committee's forward guidance would help provide more accommodative financial conditions by shifting downward investors' expectations regarding the future path of the target federal funds rate. Some members underscored the conditional nature of the Committee's forward guidance and noted that it would be subject to revision in response to significant changes in the economic outlook.

The Committee also stated that it is prepared to adjust the size and composition of its securities holdings as appropriate to promote a stronger economic recovery in a context of price stability. A few members observed that, in their judgment, current and prospective economic conditions—including elevated unemployment and inflation at or below the Committee's objective—could warrant the initiation of additional securities purchases before long. Other members indicated that such policy action could become necessary if the economy lost momentum or if inflation seemed likely to remain below its mandate-consistent rate of 2 percent over the medium run. In contrast, one member judged that maintaining the current degree of policy accommodation beyond the near term would likely be inappropriate; that member anticipated that a preemptive tightening of monetary policy would be necessary before the end of 2014 to keep inflation close to 2 percent.

At the conclusion of the discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until it was instructed otherwise, to execute transactions in the System Account in accordance with the following domestic policy directive:

> "The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to continue the maturity extension program it began in September to purchase, by the end of June 2012, Treasury securities with remaining maturities of approximately 6 years to 30 years with a total face value of $400 billion, and to sell Treasury securities with remaining maturities of 3 years or less with a total face value of $400 billion. The Committee also directs the Desk to maintain its existing policies of rolling over maturing Treasury securities into new issues and of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities in order to maintain the total face value of domestic securities at approximately $2.6 trillion. The Committee directs the Desk to engage in dollar roll transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability."

The vote encompassed approval of the statement below to be released at 12:30 p.m.:

> "Information received since the Federal Open Market Committee met in December suggests that the economy has been expanding moderately, notwithstanding some slowing in global growth. While indicators point to some further improvement in overall labor market conditions, the unemployment rate remains elevated. Household spending has continued to advance, but growth in business fixed investment has slowed, and

the housing sector remains depressed. Inflation has been subdued in recent months, and longer-term inflation expectations have remained stable.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects economic growth over coming quarters to be modest and consequently anticipates that the unemployment rate will decline only gradually toward levels that the Committee judges to be consistent with its dual mandate. Strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee also anticipates that over coming quarters, inflation will run at levels at or below those consistent with the Committee's dual mandate.

To support a stronger economic recovery and to help ensure that inflation, over time, is at levels consistent with the dual mandate, the Committee expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to ¼ percent and currently anticipates that economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014.

The Committee also decided to continue its program to extend the average maturity of its holdings of securities as announced in September. The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability."

Voting for this action: Ben Bernanke, William C. Dudley, Elizabeth Duke, Dennis P. Lockhart, Sandra Pianalto, Sarah Bloom Raskin, Daniel K. Tarullo, John C. Williams, and Janet L. Yellen.

Voting against this action: Jeffrey M. Lacker.

Mr. Lacker dissented because he preferred to omit the description of the time period over which economic conditions were likely to warrant exceptionally low levels of the federal funds rate. He expected that a preemptive tightening of monetary policy would be necessary to prevent an increase in inflation projections or inflation expectations prior to the end of 2014. More broadly, given the inclusion of FOMC participants' projections for the federal funds rate target in the Summary of Economic Projections, he saw no need to provide additional forward guidance in the Committee statement.

It was agreed that the next meeting of the Committee would be held on Tuesday, March 13, 2012. The meeting adjourned at 11:30 a.m. on January 25, 2012.

Notation Vote

By notation vote completed on December 30, 2011, the Committee unanimously approved the minutes of the FOMC meeting held on December 13, 2011.

William B. English
Secretary

Summary of Economic Projections

In conjunction with the January 24–25, 2012, Federal Open Market Committee (FOMC) meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in the deliberations of the FOMC, submitted projections for growth of real output, the unemployment rate, and inflation for the years 2012 to 2014 and over the longer run. The economic projections were based on information available at the time of the meeting and participants' individual assumptions about factors likely to affect economic outcomes, including their assessments of appropriate monetary policy. Starting with the January meeting, participants also submitted their assessments of the path for the target federal funds rate that they viewed as appropriate and compatible with their individual economic projections. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge over time under appropriate monetary policy and in the absence of further shocks. "Appropriate monetary policy" is defined as the future path of policy that participants deem most likely to foster outcomes for economic activity and inflation that best satisfy their individual interpretation of the Federal Reserve's objectives of maximum employment and stable prices.

As depicted in figure 1, FOMC participants projected continued economic expansion over the 2012–14 period, with real gross domestic product (GDP) rising at a modest rate this year and then strengthening further through 2014. Participants generally anticipated only a small decline in the unemployment rate this year. In 2013 and 2014, the pace of the expansion was projected to exceed participants' estimates of the longer-run sustainable rate of increase in real GDP by enough to result in a gradual further decline in the unemployment rate. However, at the end of 2014, participants generally expected that the unemployment rate would still be well above their estimates of the longer-run normal unemployment rate that they currently view as consistent with the FOMC's statutory mandate for promoting maximum employment and price stability. Participants viewed the upward pressures on inflation in 2011 from factors such as supply chain disruptions and rising commodity prices as having waned, and they anticipated that inflation would fall back in 2012. Over the projection period, most participants expected inflation, as measured by the annual change in the price index for personal consumption expenditures (PCE), to be at or below the FOMC's objective of 2 percent that was expressed in the Committee's statement of longer-run goals and policy strategy. Core inflation was projected to run at about the same rate as overall inflation.

As indicated in table 1, relative to their previous projections in November 2011, participants made small downward revisions to their expectations for the rate of increase in real GDP in 2012 and 2013, but they did

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, January 2012

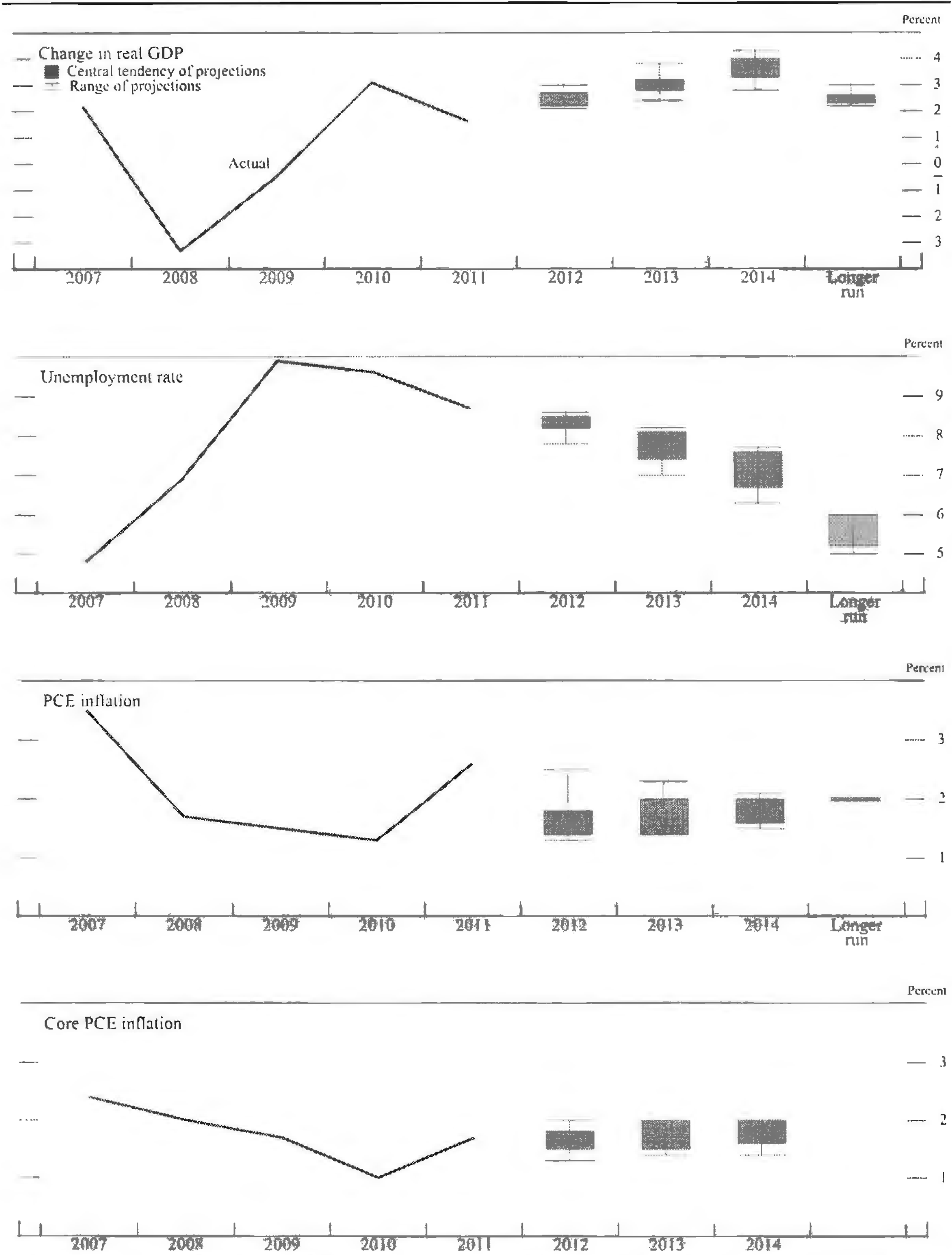
Percent

Variable	Central tendency[1]				Range[2]			
	2012	2013	2014	Longer run	2012	2013	2014	Longer run
Change in real GDP	2.2 to 2.7	2.8 to 3.2	3.3 to 4.0	2.3 to 2.6	2.1 to 3.0	2.4 to 3.8	2.8 to 4.3	2.2 to 3.0
November projection	2.5 to 2.9	3.0 to 3.5	3.0 to 3.9	2.4 to 2.7	2.3 to 3.5	2.7 to 4.0	2.7 to 4.5	2.2 to 3.0
Unemployment rate	8.2 to 8.5	7.4 to 8.1	6.7 to 7.6	5.2 to 6.0	7.8 to 8.6	7.0 to 8.2	6.3 to 7.7	5.0 to 6.0
November projection	8.5 to 8.7	7.8 to 8.2	6.8 to 7.7	5.2 to 6.0	8.1 to 8.9	7.5 to 8.4	6.5 to 8.0	5.0 to 6.0
PCE inflation	1.4 to 1.8	1.4 to 2.0	1.6 to 2.0	2.0	1.3 to 2.5	1.4 to 2.3	1.5 to 2.1	2.0
November projection	1.4 to 2.0	1.5 to 2.0	1.5 to 2.0	1.7 to 2.0	1.4 to 2.8	1.4 to 2.5	1.5 to 2.4	1.5 to 2.0
Core PCE inflation[3]	1.5 to 1.8	1.5 to 2.0	1.6 to 2.0		1.3 to 2.0	1.4 to 2.0	1.4 to 2.0	
November projection	1.5 to 2.0	1.4 to 1.9	1.5 to 2.0		1.3 to 2.1	1.4 to 2.1	1.4 to 2.2	

NOTE: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The November projections were made in conjunction with the meeting of the Federal Open Market Committee on November 1–2, 2011.

1. The central tendency excludes the three highest and three lowest projections for each variable in each year.
2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.
3. Longer-run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2012–14 and over the longer run



NOTE: Definitions of variables are in the notes to table 1. The data for the actual values of the variables are annual. The data for the change in real GDP, PCE inflation, and core PCE inflation shown for 2011 incorporate the advance estimate of GDP for the fourth quarter of 2011, which the Bureau of Economic Analysis released on January 27, 2012. This information was not available to FOMC meeting participants at the time of their meeting.

not materially alter their projections for a noticeably stronger pace of expansion by 2014. With the unemployment rate having declined in recent months by more than participants had anticipated in the previous Summary of Economic Projections (SEP), they generally lowered their forecasts for the level of the unemployment rate over the next two years. Participants' expectations for both the longer-run rate of increase in real GDP and the longer-run unemployment rate were little changed from November. They did not significantly alter their forecasts for the rate of inflation over the next three years. However, in light of the 2 percent inflation that is the objective included in the statement of longer-run goals and policy strategy adopted at the January meeting, the range and central tendency of their projections of longer-run inflation were all equal to 2 percent.

As shown in figure 2, most participants judged that highly accommodative monetary policy was likely to be warranted over coming years to promote a stronger economic expansion in the context of price stability. In particular, with the unemployment rate projected to remain elevated over the projection period and inflation expected to be subdued, six participants anticipated that, under appropriate monetary policy, the first increase in the target federal funds rate would occur after 2014, and five expected policy firming to commence during 2014 (the upper panel). The remaining six participants judged that raising the federal funds rate sooner would be required to forestall inflationary pressures or avoid distortions in the financial system. As indicated in the lower panel, all of the individual assessments of the appropriate target federal funds rate over the next several years were below the longer-run level of the federal funds rate, and 11 participants placed the target federal funds rate at 1 percent or lower at the end of 2014. Most participants indicated that they expected that the normalization of the Federal Reserve's balance sheet should occur in a way consistent with the principles agreed on at the June 2011 meeting of the FOMC, with the timing of adjustments dependent on the expected date of the first policy tightening. A few participants judged that, given their current assessments of the economic outlook, appropriate policy would include additional asset purchases in 2012, and one assumed an early ending of the maturity extension program.

A sizable majority of participants continued to judge the level of uncertainty associated with their projections for real activity and the unemployment rate as unusually high relative to historical norms. Many also attached a greater-than-normal level of uncertainty to their forecasts for inflation, but, compared with the November SEP, two additional participants viewed uncertainty as broadly similar to longer-run norms. As in November, many participants saw downside risks attending their forecasts of real GDP growth and upside risks to their forecasts of the unemployment rate; most participants viewed the risks to their inflation projections as broadly balanced.

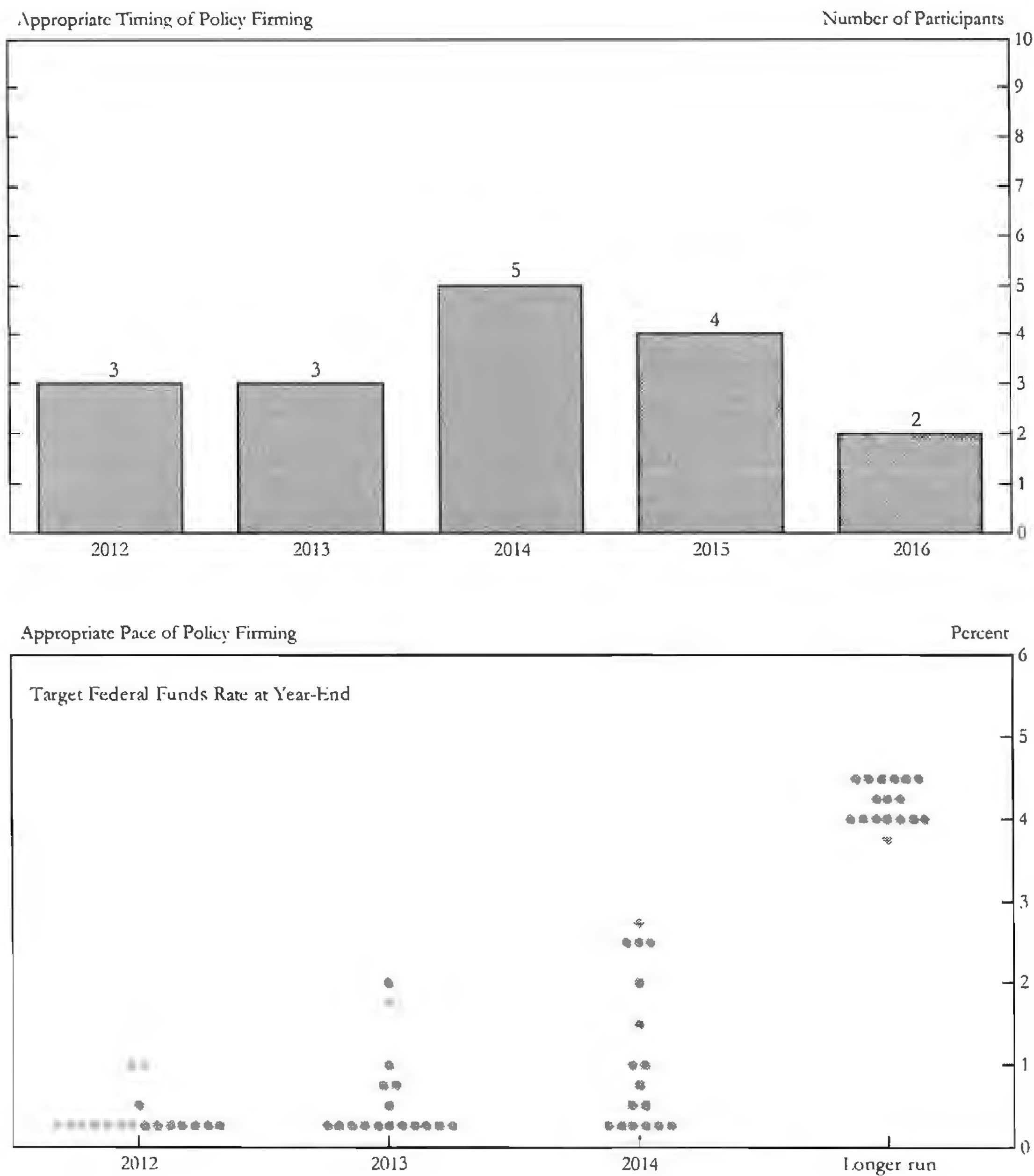
The Outlook for Economic Activity

The central tendency of participants' forecasts for the change in real GDP in 2012 was 2.2 to 2.7 percent. This forecast for 2012, while slightly lower than the projection prepared in November, would represent a pickup in output growth from 2011 to a rate close to its longer-run trend. Participants stated that the economic information received since November showed continued gradual improvement in the pace of economic activity during the second half of 2011, as the influence of the temporary factors that damped activity in the first half of the year subsided. Consumer spending increased at a moderate rate, exports expanded solidly, and business investment rose further. Recently, consumers and businesses appeared to become somewhat more optimistic about the outlook. Financial conditions for domestic nonfinancial businesses were generally favorable, and conditions in consumer credit markets showed signs of improvement.

However, a number of factors suggested that the pace of the expansion would continue to be restrained. Although some indicators of activity in the housing sector improved slightly at the end of 2011, new homebuilding and sales remained at depressed levels, house prices were still falling, and mortgage credit remained tight. Households' real disposable income rose only modestly through late 2011. In addition, federal spending contracted toward year-end, and the restraining effects of fiscal consolidation appeared likely to be greater this year than anticipated at the time of the November projections. Participants also read the information on economic activity abroad, particularly in Europe, as pointing to weaker demand for U.S. exports in coming quarters than had seemed likely when they prepared their forecasts in November.

Participants anticipated that the pace of the economic expansion would strengthen over the 2013–14 period, reaching rates of increase in real GDP above their estimates of the longer-run rates of output growth. The central tendencies of participants' forecasts for the change in real GDP were 2.8 to 3.2 percent in 2013 and

Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy



NOTE: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy and in the absence of further shocks to the economy, the first increase in the target federal funds rate from its current range of 0 to 1/4 percent will occur in the specified calendar year. In the lower panel, each shaded circle indicates the value (rounded to the nearest 1/4 percent) of an individual participant's judgment of the appropriate level of the target federal funds rate at the end of the specified calendar year or over the longer run.

3.3 to 4.0 percent in 2014. Among the considerations supporting their forecasts, participants cited their expectation that the expansion would be supported by monetary policy accommodation, ongoing improvements in credit conditions, rising household and business confidence, and strengthening household balance sheets. Many participants judged that U.S. fiscal policy would still be a drag on economic activity in 2013, but many anticipated that progress would be made in resolving the fiscal situation in Europe and that the foreign economic outlook would be more positive. Over time and in the absence of shocks, participants expected that the rate of increase of real GDP would converge to their estimates of its longer-run rate, with a central tendency of 2.3 to 2.6 percent, little changed from their estimates in November.

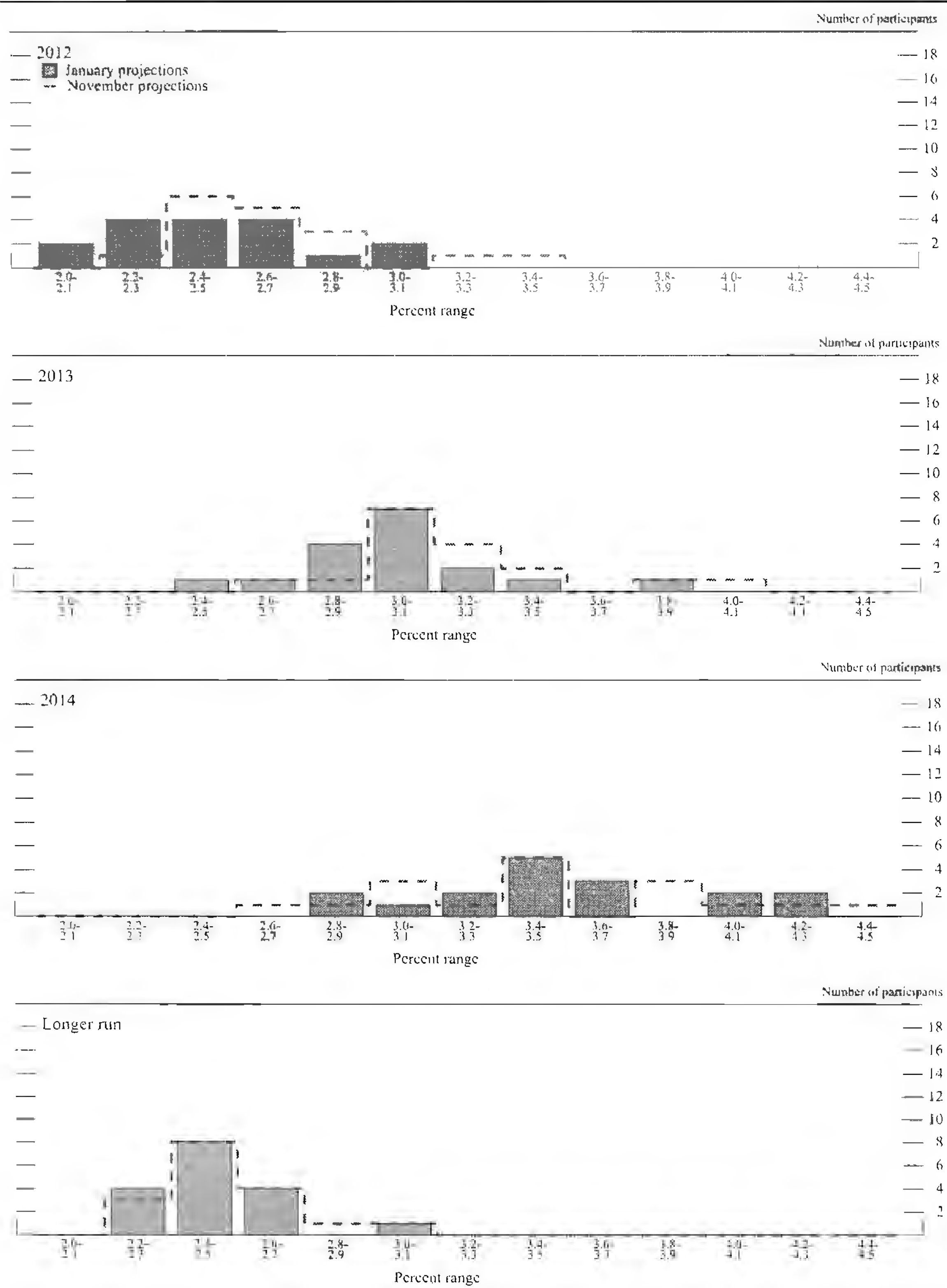
The unemployment rate improved more in late 2011 than most participants had anticipated when they prepared their November projections, falling from 9.1 to 8.7 percent between the third and fourth quarters. As a result, most participants adjusted down their projections for the unemployment rate this year. Nonetheless, with real GDP expected to increase at a modest rate in 2012, the unemployment rate was projected to decline only a little this year, with the central tendency of participants' forecasts at 8.2 to 8.5 percent at year-end. Thereafter, participants expected that the pickup in the pace of the expansion in 2013 and 2014 would be accompanied by a further gradual improvement in labor market conditions. The central tendency of participants' forecasts for the unemployment rate at the end of 2013 was 7.4 to 8.1 percent, and it was 6.7 to 7.6 percent at the end of 2014. The central tendency of participants' estimates of the longer-run normal rate of unemployment that would prevail in the absence of further shocks was 5.2 to 6.0 percent. Most participants indicated that they anticipated that five or six years would be required to close the gap between the current unemployment rate and their estimates of the longer-run rate, although some noted that more time would likely be needed.

Figures 3.A and 3.B provide details on the diversity of participants' views regarding the likely outcomes for real GDP growth and the unemployment rate over the next three years and over the longer run. The dispersion in these projections reflected differences in participants' assessments of many factors, including appropriate monetary policy and its effects on economic activity, the underlying momentum in economic activity, the effects of the European situation, the prospective path for U.S. fiscal policy, the likely evolution of credit and financial market conditions, and the extent of structural dislocations in the labor market. Compared with their November projections, the range of participants' forecasts for the change in real GDP in 2012 narrowed somewhat and shifted slightly lower, as some participants reassessed the outlook for global economic growth and for U.S. fiscal policy. Many, however, made no material change to their forecasts for growth of real GDP this year. The dispersion of participants' forecasts for output growth in 2013 and 2014 remained relatively wide. Having incorporated the data showing a lower rate of unemployment at the end of 2011 than previously expected, the distribution of participants' projections for the end of 2012 shifted noticeably down relative to the November forecasts. The ranges for the unemployment rate in 2013 and 2014 showed less pronounced shifts toward lower rates and, as was the case with the ranges for output growth, remained wide. Participants made only modest adjustments to their projections of the rates of output growth and unemployment over the longer run, and, on net, the dispersions of their projections for both were little changed from those reported in November. The dispersion of estimates for the longer-run rate of output growth is narrow, with only one participant's estimate outside of a range of 2.2 to 2.7 percent. By comparison, participants' views about the level to which the unemployment rate would converge in the long run are more diverse, reflecting, among other things, different views on the outlook for labor supply and on the extent of structural impediments in the labor market.

The Outlook for Inflation

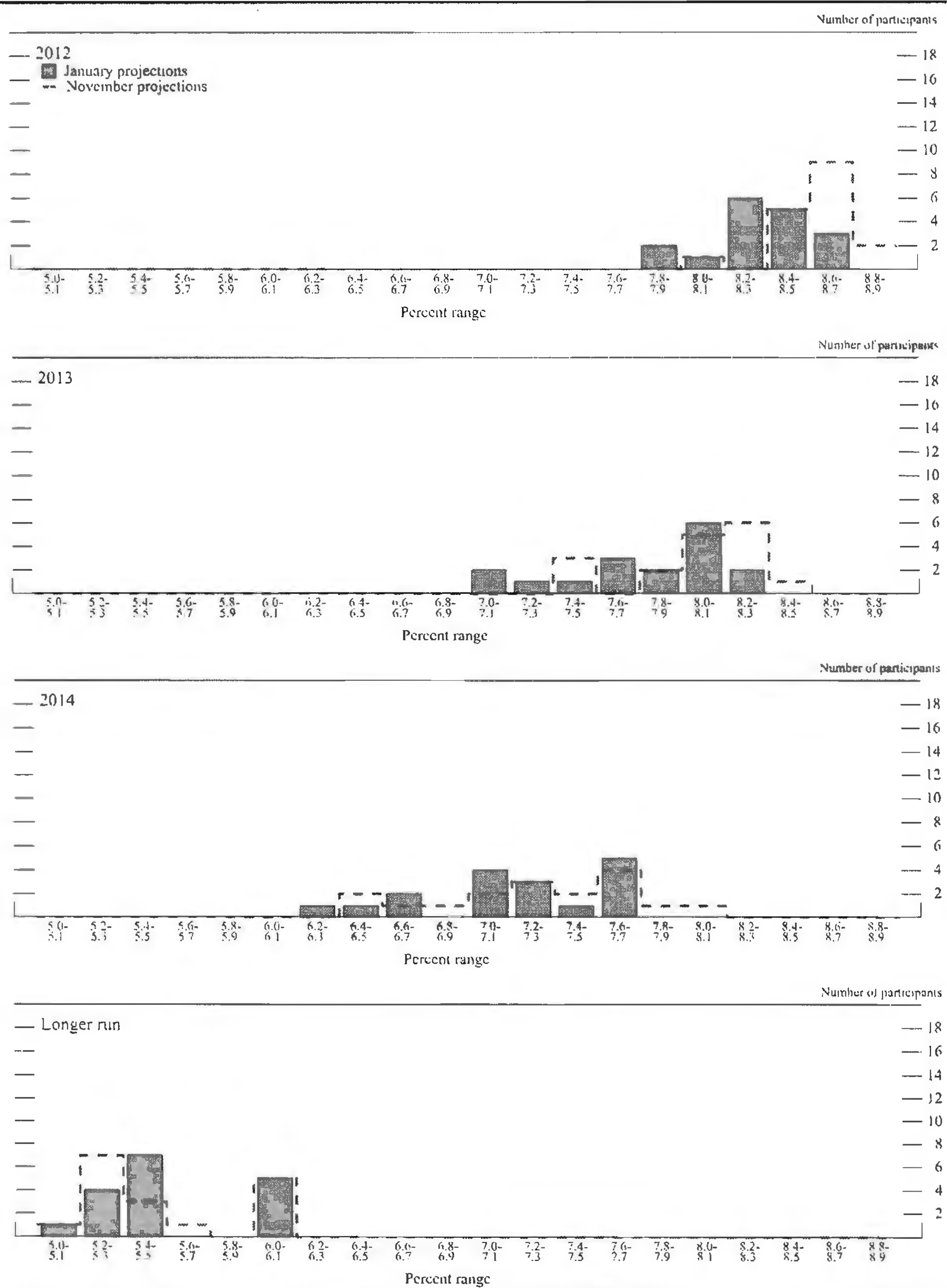
Participants generally viewed the outlook for inflation as very similar to that in November. Most indicated that, as they expected, the effects of the run-up in prices of energy and other commodities and the supply disruptions that occurred in the first half of 2011 had largely waned, and that inflation had been subdued in recent months. Participants also noted that inflation expectations had remained stable over the past year despite the fluctuations in headline inflation. Assuming no further supply shocks, most participants anticipated that both headline and core inflation would remain subdued over the 2012–14 period at rates at or below the FOMC's longer-run objective of 2 percent. Specifically, the central tendency of participants' projections for the increase in inflation, as measured by the PCE price index, in 2012 was 1.4 to 1.8 percent, and it edged up to a central tendency of 1.6 to 2.0 percent in 2014; the central tendencies of the forecasts for core PCE

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2012–14 and over the longer run



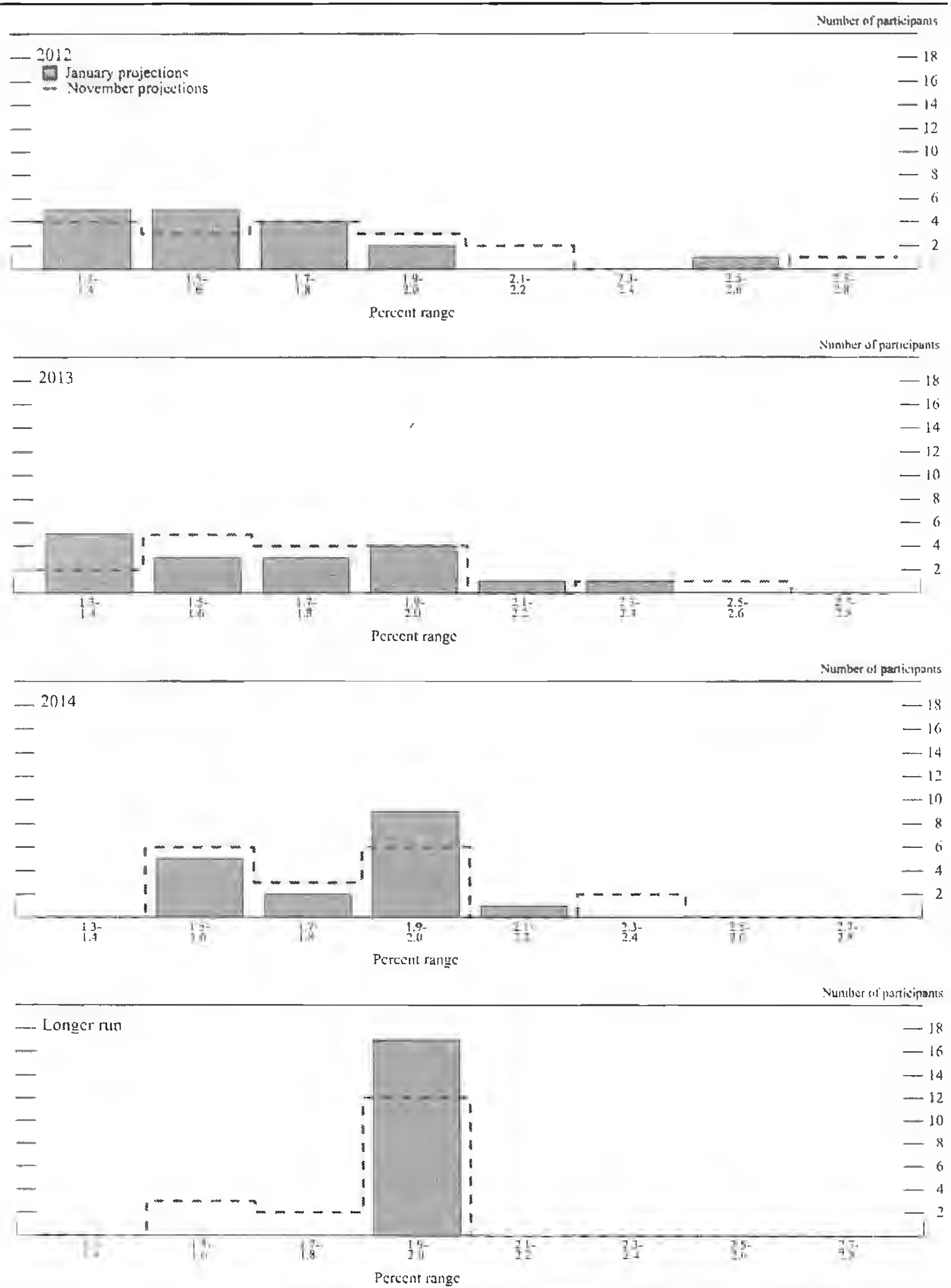
NOTE: Definitions of variables are in the general note to table 1.

Figure 3.B. Distribution of participants' projections for the unemployment rate, 2012–14 and over the longer run



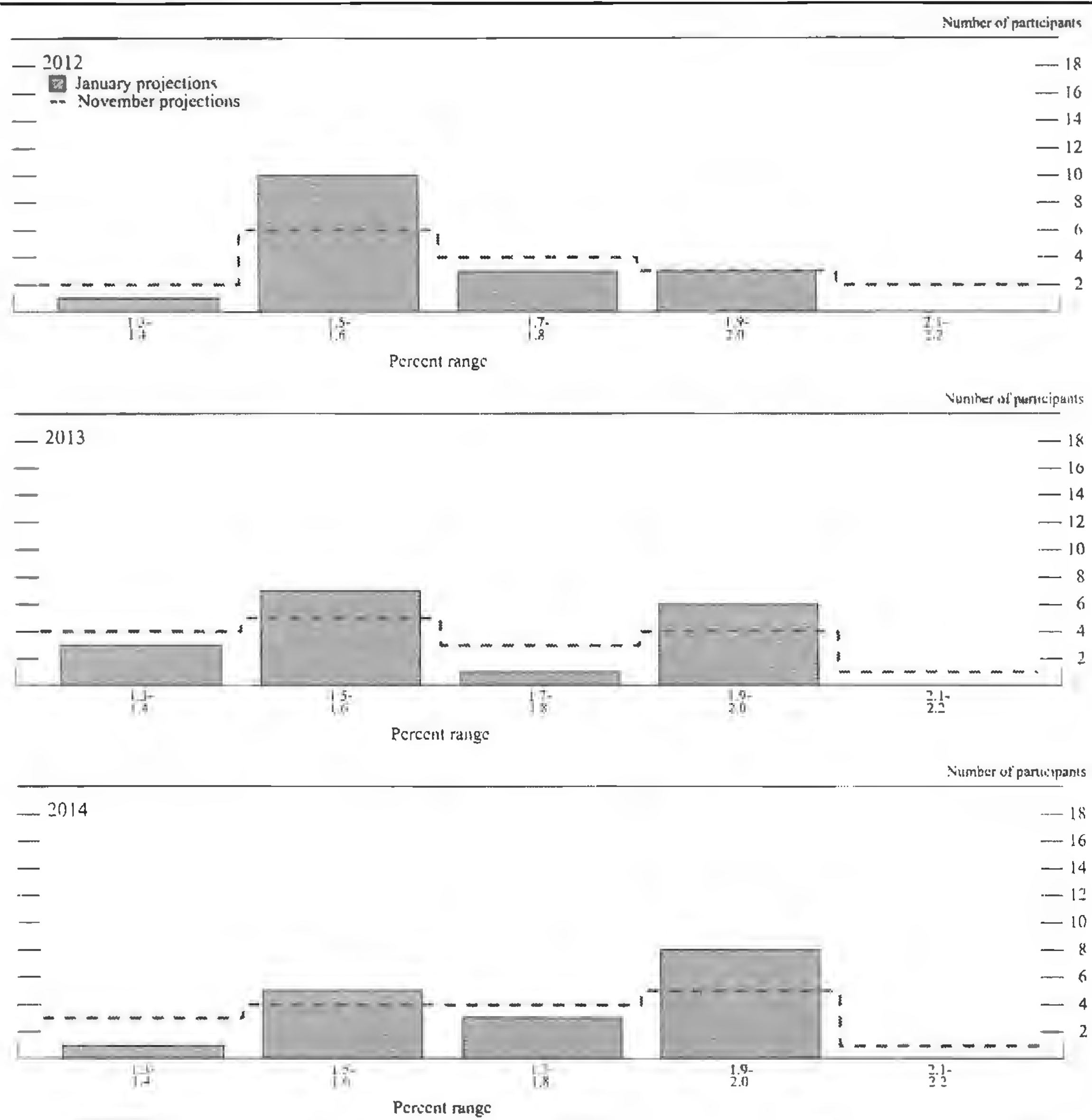
NOTE: Definitions of variables are in the general note to table 1.

Figure 3.C. Distribution of participants' projections for PCE inflation, 2012–14 and over the longer run



NOTE: Definitions of variables are in the general note to table 1.

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2012–14



NOTE: Definitions of variables are in the general note to table 1.

inflation were largely the same as those for the total measure.

Figures 3.C and 3.D provide information about the diversity of participants' views about the outlook for inflation. Compared with their November projections, expectations for inflation in 2012 shifted down a bit, with some participants noting that the slowing in inflation at the end of 2011 had been greater than they anticipated. Nonetheless, the range of participants' forecasts for inflation in 2012 remained wide, and the dispersion was only slightly narrower in 2013. By 2014, the range of inflation forecasts narrowed more noticeably, as participants expected that, under appropriate monetary policy, inflation would begin to converge to the Committee's longer-run objective. In general, the dispersion of views on the outlook for inflation over the projection period represented differences in judgments regarding the degree of slack in resource utilization and the extent to which slack influences inflation and inflation expectations. In addition, participants differed in their estimates of how the stance of monetary policy would influence inflation expectations.

Appropriate Monetary Policy

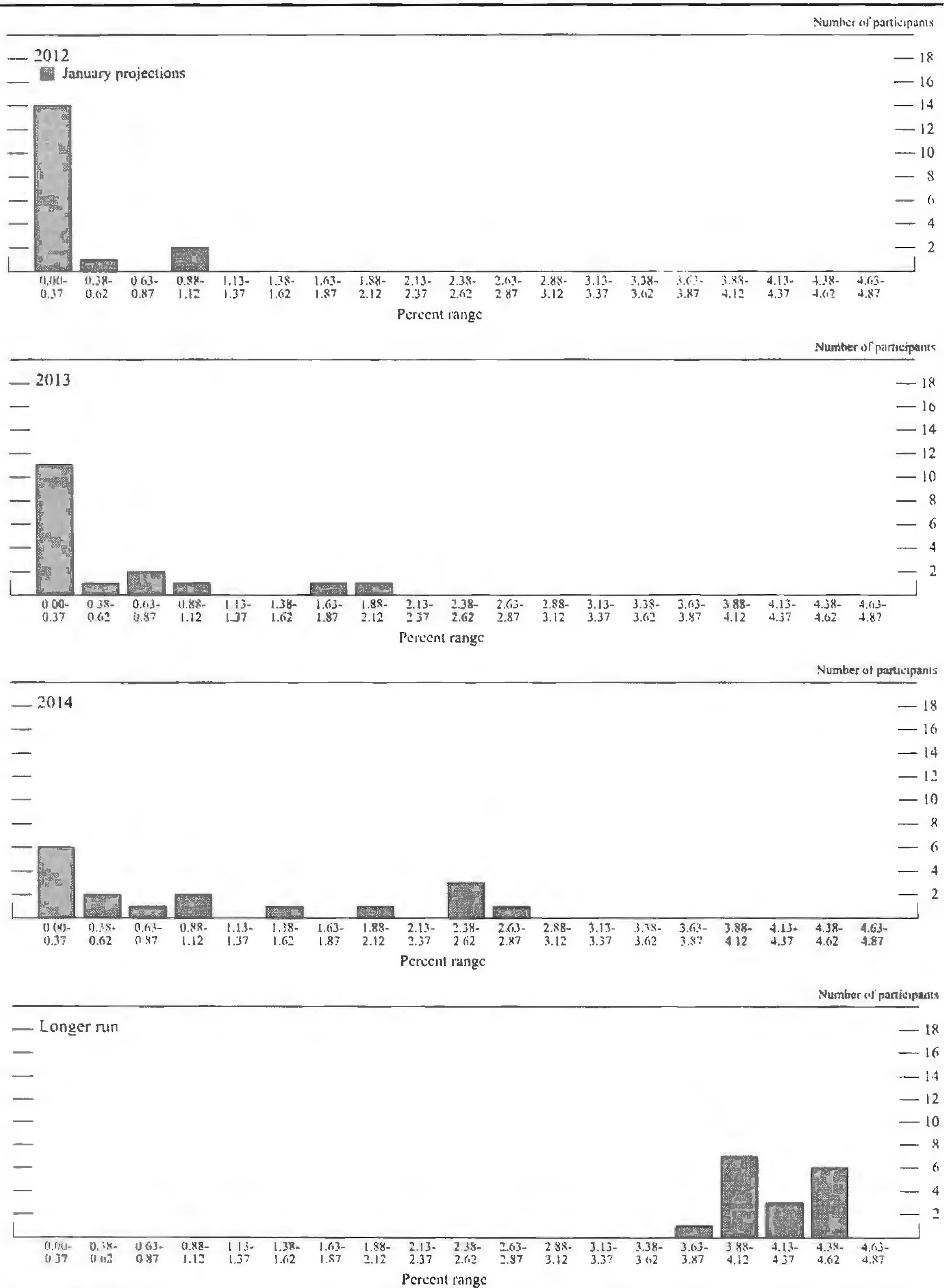
Most participants judged that the current outlook—for a moderate pace of economic recovery with the unemployment rate declining only gradually and inflation subdued—warranted exceptionally low levels of the federal funds rate at least until late 2014. In particular, five participants viewed appropriate policy firming as commencing during 2014, while six others judged that the first increase in the federal funds rate would not be warranted until 2015 or 2016. As a result, those 11 participants anticipated that the appropriate federal funds rate at the end of 2014 would be 1 percent or lower. Those who saw the first increase occurring in 2015 reported that they anticipated that the federal funds rate would be ½ percent at the end of that year. For the two participants who put the first increase in 2016, the appropriate target federal funds rate at the end of that year was 1½ and 1¾ percent. In contrast, six participants expected that an increase in the target federal funds rate would be appropriate within the next two years, and those participants anticipated that the target rate would need to be increased to around 1½ to 2¾ percent at the end of 2014.

Participants' assessments of the appropriate path for the federal funds rate reflected their judgments of the policy that would best support progress in achieving the Federal Reserve's mandate for promoting maximum employment and stable prices. Among the key factors informing participants' expectations about the appropriate setting for monetary policy were their assessments of the maximum level of employment, the Committee's longer-run inflation goal, the extent to which current conditions deviate from these mandate-consistent levels, and their projections of the likely time horizons required to return employment and inflation to such levels. Several participants commented that their assessments took into account the risks to the outlook for economic activity and inflation, and a few pointed specifically to the relevance of financial stability in their policy judgments. Participants also noted that because the appropriate stance of monetary policy depends importantly on the evolution of real activity and inflation over time, their assessments of the appropriate future path of the federal funds rate could change if economic conditions were to evolve in an unexpected manner.

All participants reported levels for the appropriate target federal funds rate at the end of 2014 that were well below their estimates of the level expected to prevail in the longer run. The longer-run nominal levels were in a range from 3¾ to 4½ percent, reflecting participants' judgments about the longer-run equilibrium level of the real federal funds rate and the Committee's inflation objective of 2 percent.

Participants also provided qualitative information on their views regarding the appropriate path of the Federal Reserve's balance sheet. A few participants' assessments of appropriate monetary policy incorporated additional purchases of longer-term securities in 2012, and a number of participants indicated that they remained open to a consideration of additional asset purchases if the economic outlook deteriorated. All but one of the participants continued to expect that the Committee would carry out the normalization of the balance sheet according to the principles approved at the June 2011 FOMC meeting. That is, prior to the first increase in the federal funds rate, the Committee would likely cease reinvesting some or all payments on the securities holdings in the System Open Market Account (SOMA), and it would likely begin sales of agency securities from the SOMA sometime after the first rate increase, aiming to eliminate the SOMA's holdings of agency securities over a period of three to five years. Indeed, most participants saw sales of agency securities starting no earlier than 2015. However, those participants anticipating an earlier increase in the federal funds rate also called for earlier adjustments to the balance sheet, and one participant assumed an early end of the maturity extension program.

Figure 3.E. Distribution of participants' projections for the target federal funds rate, 2012–14 and over the longer run



Note: The target funds rate is measured as the level of the target rate at the end of the calendar year or in the longer run.

Figure 3.E details the distribution of participants' judgments regarding the appropriate level of the target federal funds rate at the end of each calendar year from 2012 to 2014 and over the longer run. Most participants anticipated that economic conditions would warrant maintaining the current low level of the federal funds rate over the next two years. However, views on the appropriate level of the federal funds rate at the end of 2014 were more widely dispersed, with two-thirds of participants seeing the appropriate level of the federal funds rate as 1 percent or below and five seeing the appropriate rate as 2 percent or higher. Those participants who judged that a longer period of exceptionally low levels of the federal funds rate would be appropriate generally also anticipated that the pace of the economic expansion would be moderate and that the unemployment rate would decline only gradually, remaining well above its longer-run rate at the end of 2014. Almost all of these participants expected that inflation would be relatively stable at or below the FOMC's longer-run objective of 2 percent until the time of the first increase in the federal funds rate. A number of them also mentioned their assessment that a longer period of low federal funds rates is appropriate when the federal funds rate is constrained by its effective lower bound. In contrast, the six participants who judged that policy firming should begin in 2012 or 2013 indicated that the Committee would need to act decisively to keep inflation at mandate-consistent levels and to limit the risk of undermining Federal Reserve credibility and causing a rise in inflation expectations. Several were projecting a faster pickup in economic activity, and a few stressed the risk of distortions in the financial system from an extended period of exceptionally low interest rates.

Uncertainty and Risks

Figure 4 shows that most participants continued to share the view that their projections for real GDP growth and the unemployment rate were subject to a higher level of uncertainty than was the norm during the previous 20 years.[1] Many also judged the level of uncertainty associated with their inflation forecasts to be higher than the longer-run norm, but that assessment was somewhat less prevalent among participants than was the case for uncertainty about real activity. Participants identified a number of factors that contributed to the elevated level of uncertainty about the outlook. In particular, many participants continued to cite risks related to ongoing developments in Europe. More broadly, they again noted difficulties in forecasting the path of economic recovery from a deep recession that was the result of a severe financial crisis and thus differed importantly from the experience with recoveries over the past 60 years. In that regard, participants continued to be uncertain about the pace at which credit conditions would ease and about prospects for a recovery in the housing sector. In addition, participants generally saw the outlook for fiscal and regulatory policies as still highly uncertain. Regarding the unemployment rate, several expressed uncertainty about how labor demand and supply would evolve over the forecast period. Among the sources of uncertainty about the outlook for inflation were the difficulties in assessing the current and prospective margins of slack in resource markets and the effect of such slack on prices.

Table 2. Average historical projection error ranges
Percentage points

Variable	2012	2013	2014
Change in real GDP[1]	±1.3	±1.7	±1.8
Unemployment rate[1]	±0.7	±1.4	±1.8
Total consumer prices[2]	±0.9	±1.0	±1.0

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1991 through 2010 that were released in the winter by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is in David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series 2007-60 (Washington: Board of Governors of the Federal Reserve System, November).

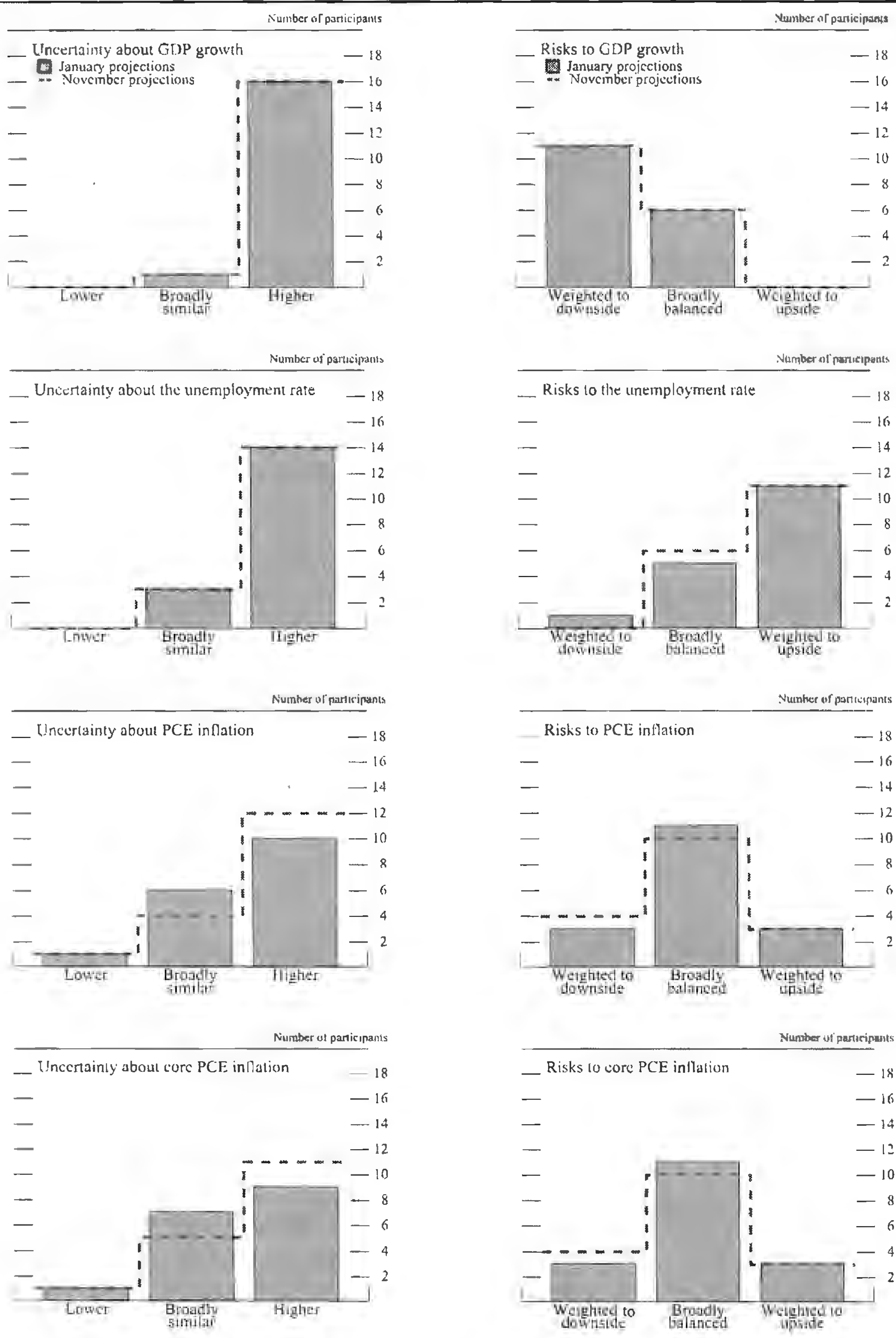
1. For definitions, refer to general note in table 1.

2. Measure is the overall consumer price index, the price measure that has been most widely used in government and private economic forecasts. Projection is percent change, fourth quarter of the previous year to the fourth quarter of the year indicated.

A majority of participants continued to report that they saw the risks to their forecasts of real GDP growth as weighted to the downside and, accordingly, the risks to their projections for the unemployment rate as skewed to the upside. All but one of the remaining participants viewed the risks to both projections as broadly balanced, while one noted a risk that the unemployment rate might continue to decline more rapidly than expected. The most frequently cited downside risks to the projected pace of the economic expansion were the

[1] Table 2 provides estimates of the forecast uncertainty for the change in real GDP, the unemployment rate, and total consumer price inflation over the period from 1991 to 2010. At the end of this summary, the box "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in the economic forecasts and explains the approach used to assess the uncertainty and risks attending the participants' projections.

Figure 4. Uncertainty and risks in economic projections



NOTE: For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty." Definitions of variables are in the general note to table 1.

possibility of financial market and economic spillovers from the fiscal and financial issues in the euro area and the chance that some of the factors that have restrained the recovery in recent years could persist and weigh on economic activity to a greater extent than assumed in participants' baseline forecasts. In particular, some participants mentioned the downside risks to consumer spending from still-weak household balance sheets and only modest gains in real income, along with the possible effects of still-high levels of uncertainty regarding fiscal and regulatory policies that might damp businesses' willingness to invest and hire. A number of participants noted the risk of another disruption in global oil markets that could not only boost inflation but also reduce real income and spending. The participants who judged the risks to be broadly balanced also recognized a number of these downside risks to the outlook but saw them as counterbalanced by the possibility that the resilience of economic activity in late 2011 and the recent drop in the unemployment rate might signal greater underlying momentum in economic activity.

In contrast to their outlook for economic activity, most participants judged the risks to their projections of inflation as broadly balanced. Participants generally viewed the recent decline in inflation as having been in line with their earlier forecasts, and they noted that inflation expectations remain stable. While many of these participants saw the persistence of substantial slack in resource utilization as likely to keep inflation subdued over the projection period, a few others noted the risk that elevated resource slack might put more downward pressure on inflation than expected. In contrast, some participants noted the upside risks to inflation from developments in global oil and commodity markets, and several indicated that the current highly accommodative stance of monetary policy and the substantial liquidity currently in the financial system risked a pickup in inflation to a level above the Committee's objective. A few also pointed to the risk that uncertainty about the Committee's ability to effectively remove policy accommodation when appropriate could lead to a rise in inflation expectations.

Forecast Uncertainty

The economic projections provided by the members of the Board of Governors and the presidents of the Federal Reserve Banks inform discussions of monetary policy among policymakers and can aid public understanding of the basis for policy actions. Considerable uncertainty attends these projections, however. The economic and statistical models and relationships used to help produce economic forecasts are necessarily imperfect descriptions of the real world, and the future path of the economy can be affected by myriad unforeseen developments and events. Thus, in setting the stance of monetary policy, participants consider not only what appears to be the most likely economic outcome as embodied in their projections, but also the range of alternative possibilities, the likelihood of their occurring, and the potential costs to the economy should they occur.

Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past *Monetary Policy Reports* and those prepared by the Federal Reserve Board's staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand within a range of 1.7 to 4.3 percent in the current year, 1.3 to 4.7 percent in the second year, and 1.2 to 4.8 in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.1 to 2.9 percent in the current year and 1.0 to 3.0 percent in the second and third years.

Because current conditions may differ from those that prevailed, on average, over history, participants provide judgments as to whether the uncertainty attached to their projections of each variable is greater than, smaller than, or broadly similar to typical levels of forecast uncertainty in the past, as shown in table 2. Participants also provide judgments as to whether the risks to their projections are weighted to the upside, are weighted to the downside, or are broadly balanced. That is, participants judge whether each variable is more likely to be above or below their projections of the most likely outcome. These judgments about the uncertainty and the risks attending each participant's projections are distinct from the diversity of participants' views about the most likely outcomes. Forecast uncertainty is concerned with the risks associated with a particular projection rather than with divergences across a number of different projections.

As with real activity and inflation, the outlook for the future path of the federal funds rate is subject to considerable uncertainty. This uncertainty arises primarily because each participant's assessment of the appropriate stance of monetary policy depends importantly on the evolution of real activity and inflation over time. If economic conditions evolve in an unexpected manner, then assessments of the appropriate setting of the federal funds rate would change from that point forward.

Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents, January 2012

Advance release of table 1 of the Summary of Economic Projections to be released with the FOMC minutes

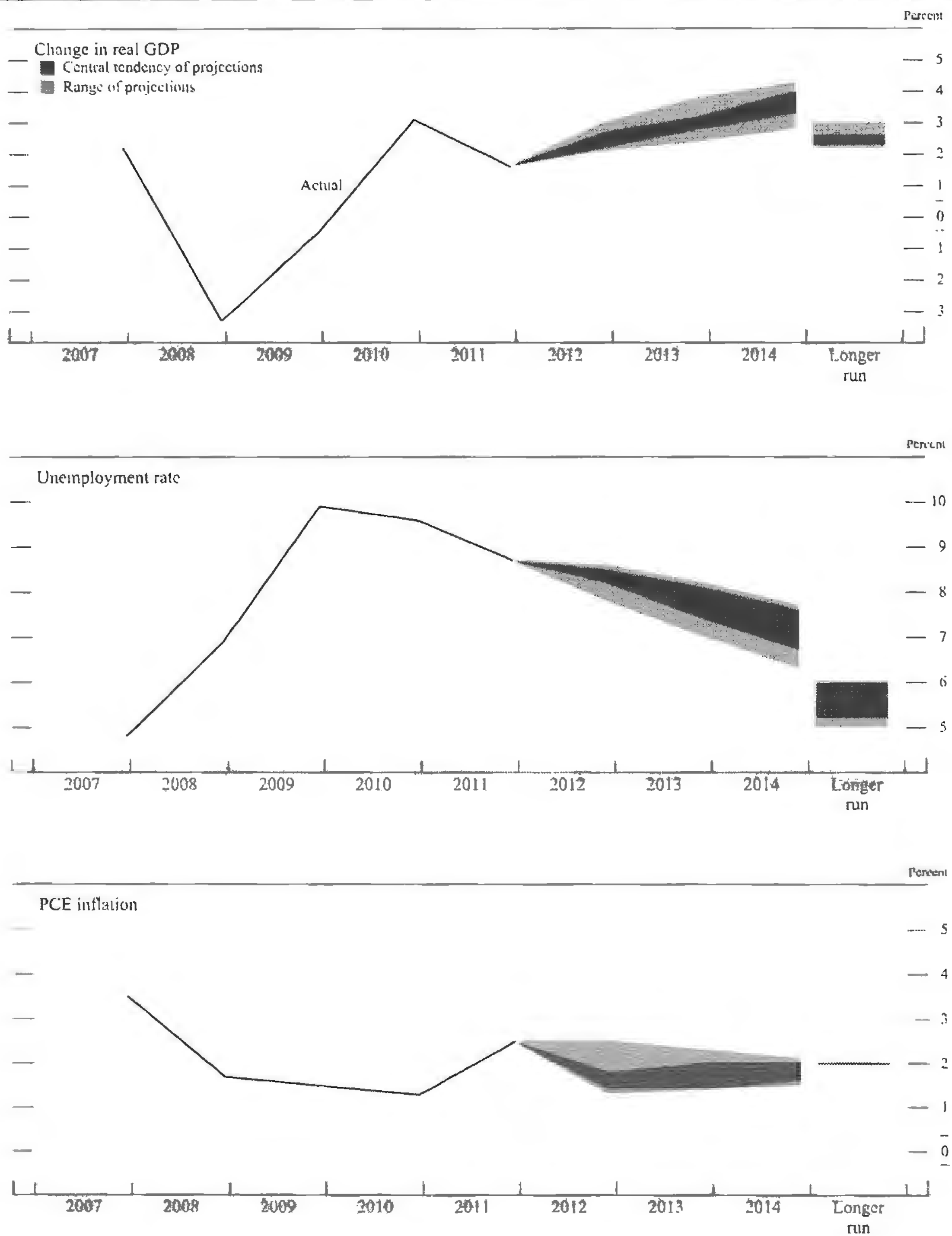
Percent

Variable	Central tendency[1]				Range[2]			
	2012	2013	2014	Longer run	2012	2013	2014	Longer run
Change in real GDP	2.2 to 2.7	2.8 to 3.2	3.3 to 4.0	2.3 to 2.6	2.1 to 3.0	2.4 to 3.8	2.8 to 4.3	2.2 to 3.0
November projection	2.5 to 2.9	3.0 to 3.5	3.0 to 3.9	2.4 to 2.7	2.3 to 3.5	2.7 to 4.0	2.7 to 4.5	2.2 to 3.0
Unemployment rate	8.2 to 8.5	7.4 to 8.1	6.7 to 7.6	5.2 to 6.0	7.8 to 8.6	7.0 to 8.2	6.3 to 7.7	5.0 to 6.0
November projection	8.5 to 8.7	7.8 to 8.2	6.8 to 7.7	5.2 to 6.0	8.1 to 8.9	7.5 to 8.4	6.5 to 8.0	5.0 to 6.0
PCE inflation	1.4 to 1.8	1.4 to 2.0	1.6 to 2.0	2.0	1.3 to 2.5	1.4 to 2.3	1.5 to 2.1	2.0
November projection	1.4 to 2.0	1.5 to 2.0	1.5 to 2.0	1.7 to 2.0	1.4 to 2.8	1.4 to 2.5	1.5 to 2.4	1.5 to 2.0
Core PCE inflation[3]	1.5 to 1.8	1.5 to 2.0	1.6 to 2.0		1.3 to 2.0	1.4 to 2.0	1.4 to 2.0	
November projection	1.5 to 2.0	1.4 to 1.9	1.5 to 2.0		1.3 to 2.1	1.4 to 2.1	1.4 to 2.2	

NOTE: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The November projections were made in conjunction with the meeting of the Federal Open Market Committee on November 1–2, 2011.

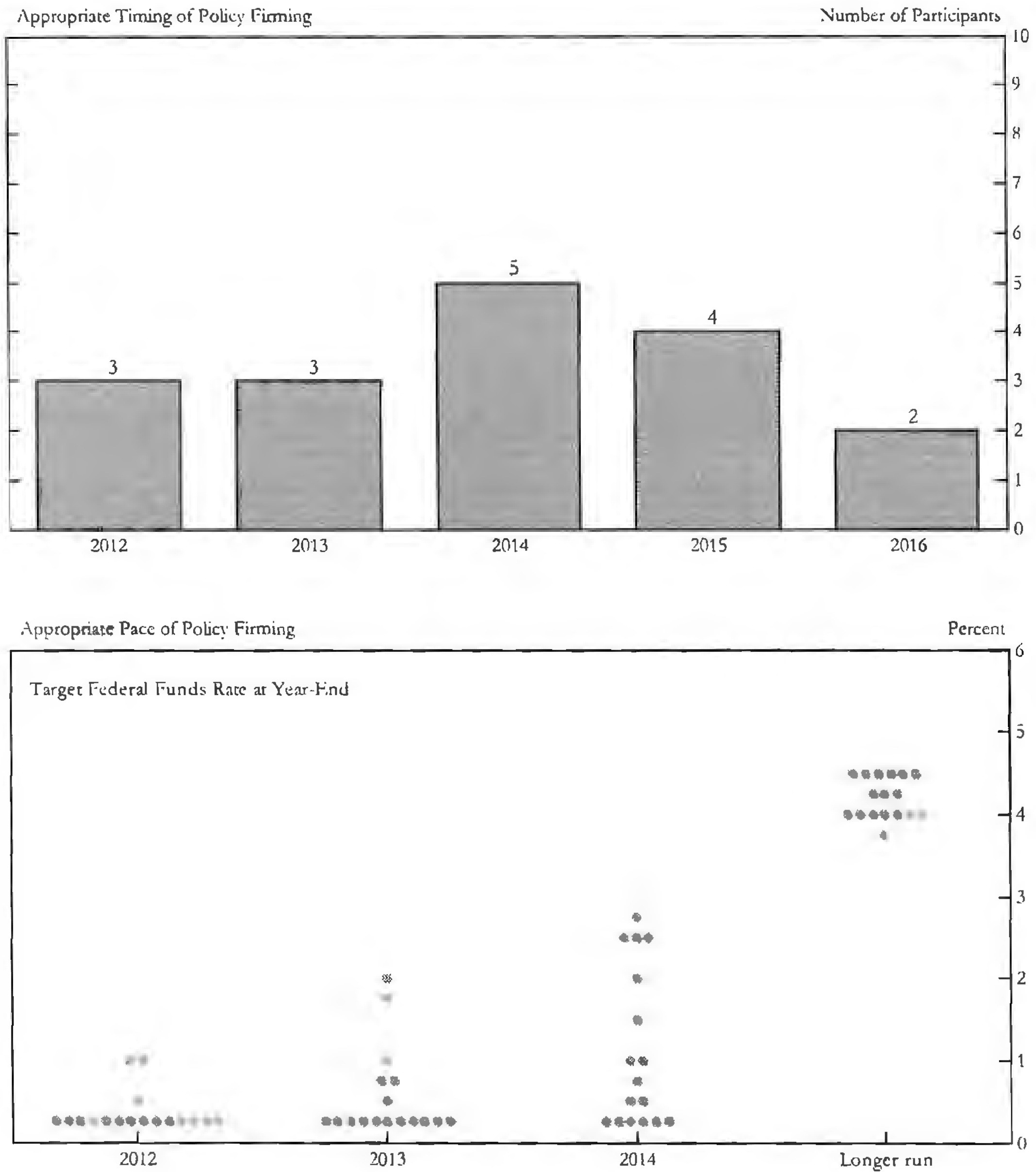
1. The central tendency excludes the three highest and three lowest projections for each variable in each year.
2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.
3. Longer-run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2012–14 and over the longer run



NOTE: Definitions of variables are in the notes to the projections table. The data for the variables are annual. Actual fourth-quarter 2011 values for the change in real GDP and for PCE inflation have not yet been published by the Bureau of Economic Analysis; the plotted values of these variables for 2011 are the median estimates taken from the Federal Reserve Bank of New York's January survey of primary dealers.

Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy



Note: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy and in the absence of further shocks to the economy, the first increase in the target federal funds rate from its current range of 0 to ¼ percent will occur in the specified calendar year. In the lower panel, each shaded circle indicates the value (rounded to the nearest ¼ percent) of an individual participant's judgment of the appropriate level of the target federal funds rate at the end of the specified calendar year or over the longer run.

Explanation of Economic Projections Charts

The charts show actual values and projections for three economic variables:

- Change in Real Gross Domestic Product (GDP)—as measured from the fourth quarter of the previous year to the fourth quarter of the year indicated, with values plotted at the end of each year.
- Unemployment Rate—the average civilian unemployment rate in the fourth quarter of each year, with values plotted at the end of each year.
- PCE Inflation—as measured by the change in the personal consumption expenditures (PCE) price index from the fourth quarter of the previous year to the fourth quarter of the year indicated, with values plotted at the end of each year.

Information for these variables is shown for each year from 2007 to 2014, and for the longer run.

The solid line, labeled "Actual," shows the historical values for each variable.[1]

The lightly shaded areas represent the ranges of the projections of policymakers. The bottom of the range for each variable is the lowest of all of the projections for that year or period. Likewise, the top of the range is the highest of all of the projections for that year or period.

The dark shaded areas represent the central tendency, which is a narrower version of the range that excludes the three highest and three lowest projections for each variable in each year or period.

The longer-run projections, which are shown on the far right side of the charts, are the rates of growth, unemployment, and inflation to which a policymaker expects the economy to converge over time—maybe in five or six years—in the absence of further shocks and under appropriate monetary policy. Because appropriate monetary policy, by definition, is aimed at achieving the Federal Reserve's dual mandate of maximum employment and price stability in the longer run, policymakers' longer-run projections for economic growth and unemployment may be interpreted, respectively, as estimates of the economy's normal or trend rate of growth and its normal unemployment rate over the longer run. Similarly, the longer-run projections of inflation are for the rate of inflation that each policymaker judges to be most consistent with the Federal Reserve's dual mandate in the longer term.

[1] Actual fourth-quarter 2011 values for the change in real GDP and for PCE inflation have not yet been published by the Bureau of Economic Analysis; the plotted values of these variables for 2011 are the median estimates taken from the Federal Reserve Bank of New York's January survey of primary dealers.

Explanation of Policy Path Charts

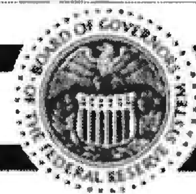
These charts are based on policymakers' projections of the appropriate path for the FOMC's target federal funds rate. The target funds rate is measured as the level of the target rate at the end of the calendar year or in the longer run. Appropriate monetary policy, by definition, is the future path of policy that each participant deems most likely to foster outcomes for economic activity and inflation that best satisfy his or her interpretation of the Federal Reserve's dual objectives of maximum employment and stable prices.

- In the upper panel, the shaded bars represent the number of FOMC participants who project that the initial increase in the target federal funds rate (from its current range of 0 to ¼ percent) would appropriately occur in the specified calendar year.
- In the lower panel, the dots represent individual policymakers' projections of the appropriate federal funds rate target at the end of each of the next several years and in the longer run. Each dot in that chart represents one policymaker's projection. Please note that for purposes of this chart the responses are rounded to the nearest ¼ percent, with the exception that all values below 37.5 basis points are rounded to ¼ percent.

These projections of the timing of the initial increase of the target federal funds rate and the path of the target federal funds rate are the ones that policymakers view as compatible with their individual economic projections.

Press Release

FEDERAL RESERVE press release



Release Date: January 25, 2012

For release at 2:00 p.m. EST

Following careful deliberations at its recent meetings, the Federal Open Market Committee (FOMC) has reached broad agreement on the following principles regarding its longer-run goals and monetary policy strategy. The Committee intends to reaffirm these principles and to make adjustments as appropriate at its annual organizational meeting each January.

The FOMC is firmly committed to fulfilling its statutory mandate from the Congress of promoting maximum employment, stable prices, and moderate long-term interest rates. The Committee seeks to explain its monetary policy decisions to the public as clearly as possible. Such clarity facilitates well-informed decisionmaking by households and businesses, reduces economic and financial uncertainty, increases the effectiveness of monetary policy, and enhances transparency and accountability, which are essential in a democratic society.

Inflation, employment, and long-term interest rates fluctuate over time in response to economic and financial disturbances. Moreover, monetary policy actions tend to influence economic activity and prices with a lag. Therefore, the Committee's policy decisions reflect its longer-run goals, its medium-term outlook, and its assessments of the balance of risks, including risks to the financial system that could impede the attainment of the Committee's goals.

The inflation rate over the longer run is primarily determined by monetary policy, and hence the Committee has the ability to specify a longer-run goal for inflation. The Committee judges that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures, is most consistent over the longer run with the Federal Reserve's statutory mandate. Communicating this inflation goal clearly to the public helps keep longer-term inflation expectations firmly anchored, thereby fostering price stability and moderate long-term interest rates and enhancing the Committee's ability to promote maximum employment in the face of significant economic disturbances.

The maximum level of employment is largely determined by nonmonetary factors that affect the structure and dynamics of the labor market. These factors may change over time and may not be directly measurable. Consequently, it would not be appropriate to specify a fixed goal for employment; rather, the Committee's policy decisions must be informed by assessments of the maximum level of employment, recognizing that such assessments are necessarily uncertain and subject to revision. The Committee considers a wide range of indicators in making these assessments. Information about Committee participants' estimates of the longer-run normal rates of output growth and unemployment is published four times per year in the FOMC's Summary of Economic Projections. For example, in the most recent

projections, FOMC participants' estimates of the longer-run normal rate of unemployment had a central tendency of 5.2 percent to 6.0 percent, roughly unchanged from last January but substantially higher than the corresponding interval several years earlier.

In setting monetary policy, the Committee seeks to mitigate deviations of inflation from its longer-run goal and deviations of employment from the Committee's assessments of its maximum level. These objectives are generally complementary. However, under circumstances in which the Committee judges that the objectives are not complementary, it follows a balanced approach in promoting them, taking into account the magnitude of the deviations and the potentially different time horizons over which employment and inflation are projected to return to levels judged consistent with its mandate.

The Budget and Economic Outlook: Fiscal Years 2012 to 2022

January 2012

The Congress of the United States ■ Congressional Budget Office

Notes

The economic forecast was completed in early December 2011, and the estimates of 2011 values shown in tables and figures in Chapter 2 and Appendix E are based, except when otherwise noted, on information that was available by that date.

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

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

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

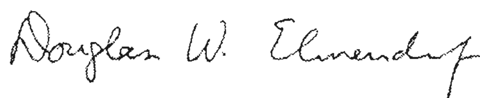
Supplemental data for this analysis are available on CBO's Web site (www.cbo.gov).

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 and Impoundment Control Act of 1974 that CBO submit to the Committees on the Budget periodic reports about fiscal policy and its baseline projections of the federal budget. In accordance with CBO's mandate to provide objective, impartial analysis, the report makes no recommendations.

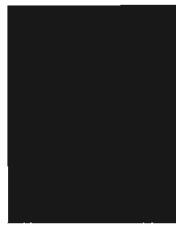
The economic projections were prepared by CBO's Macroeconomic Analysis Division. The revenue estimates were prepared by the agency's Tax Analysis Division, with assistance from the staff of the Joint Committee on Taxation. The spending projections were prepared by CBO's Budget Analysis Division. The many people at CBO who worked on this report are listed in Appendix G.

This report, along with supplemental information, is available on the agency's Web site (www.cbo.gov).



Douglas W. Elmendorf
Director

January 2012



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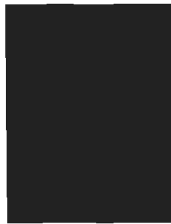


Summary

The federal budget deficit—although starting to shrink—remains very large by historical standards. How much and how quickly the deficit declines will depend in part on how well the economy does over the next few years. Probably more critical, though, will be the fiscal policy choices made by lawmakers as they face the substantial changes to tax and spending policies that are slated to take effect within the next year under current law.

The pace of the economic recovery has been slow since the recession ended in June 2009, and the Congressional Budget Office (CBO) expects that, under current laws governing taxes and spending, the economy will continue to grow at a sluggish pace over the next two years. That pace of growth partly reflects the dampening effect on economic activity from the higher tax rates and curbs on spending scheduled to occur this year and especially next. Although CBO projects that growth will pick up after 2013, the agency expects that the economy's output will remain below its potential until 2018 and that the unemployment rate will remain above 7 percent until 2015.

The Budget Outlook

As specified in law, and to provide a benchmark against which potential policy changes can be measured, CBO constructs its baseline estimates of federal revenues and spending under the assumption that current laws generally remain unchanged. On that basis, the federal budget will show a deficit of nearly $1.1 trillion in fiscal year 2012 (see Summary Table 1). Measured as a share of gross domestic product (GDP), that shortfall will be 7.0 percent, which is nearly 2 percentage points below the deficit recorded last year but still higher than any deficit between 1947 and 2008. Over the next few years, projected deficits in CBO's baseline drop markedly, averaging 1.5 percent of GDP over the 2013–2022 period. With deficits small relative to the size of the economy, debt held by the public drops—from about 75 percent of GDP in 2013 to 62 percent in 2022, which is still higher than in any year between 1952 and 2009.

Much of the projected decline in the deficit occurs because, under current law, revenues will rise considerably as a share of GDP—from 16.3 percent in 2012 to 20.0 percent in 2014 and 21.0 percent in 2022. In particular, between 2012 and 2014, revenues in CBO's baseline shoot up by more than 30 percent, mostly because of the recent or scheduled expirations of tax provisions, such as those that lower income tax rates and limit the reach of the alternative minimum tax (AMT), and the imposition of new taxes, fees, and penalties that are scheduled to go into effect. Revenues continue to rise relative to GDP after 2014 largely because increases in taxpayers' real (inflation-adjusted) income are projected to push more of them into higher tax brackets and because more taxpayers become subject to the AMT.

As the economy expands in the next several years and as statutory caps constrain discretionary appropriations, federal spending in CBO's baseline projections declines modestly relative to GDP before turning up again because of increasing expenses generated by the aging of the population and rising costs for health care. Projected spending averages 21.9 percent of GDP over the 2013–2022 period, a percentage that is less than the 23.2 percent CBO estimates for 2012 but that is still elevated by historical standards. Spending resulting from the American Recovery and Reinvestment Act and outlays for unemployment compensation and other benefits that tend to increase during economic downturns will continue to ebb over the next few years. Caps on discretionary spending and other procedures established in the recently enacted Budget Control Act also will hold down growth in federal spending. In the baseline, discretionary spending is projected to decline to 5.6 percent of GDP in

Summary Table 1.

CBO's Baseline Budget Outlook

	Actual, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
							In Billions of Dollars							
Revenues	2,302	2,523	2,988	3,313	3,568	3,784	4,039	4,243	4,456	4,680	4,926	5,181	17,692	41,179
Outlays	3,598	3,601	3,573	3,658	3,836	4,086	4,259	4,439	4,714	4,960	5,205	5,520	19,413	44,251
Deficit (-) or Surplus	**-1,296**	**-1,079**	**-585**	**-345**	**-269**	**-302**	**-220**	**-196**	**-258**	**-280**	**-279**	**-339**	**-1,721**	**-3,072**
On-budget	-1,363	-1,130	-619	-363	-282	-318	-235	-206	-258	-265	-245	-283	-1,818	-3,074
Off-budget[a]	67	52	34	19	13	16	15	10	*	-16	-34	-55	97	2
Debt Held by the Public at the End of the Year	10,128	11,242	11,945	12,401	12,783	13,188	13,509	13,801	14,148	14,512	14,872	15,291	n.a.	n.a.
							As a Percentage of Gross Domestic Product							
Revenues	15.4	16.3	18.8	20.0	20.2	20.2	20.5	20.5	20.6	20.7	20.9	21.0	20.0	20.4
Outlays	24.1	23.2	22.5	22.1	21.8	21.8	21.6	21.5	21.8	21.9	22.0	22.4	21.9	21.9
Deficit	**-8.7**	**-7.0**	**-3.7**	**-2.1**	**-1.5**	**-1.6**	**-1.1**	**-0.9**	**-1.2**	**-1.2**	**-1.2**	**-1.4**	**-1.9**	**-1.5**
Debt Held by the Public at the End of the Year	67.7	72.5	75.1	74.8	72.6	70.5	68.5	66.8	65.5	64.2	63.0	62.0	n.a.	n.a.

Source: Congressional Budget Office.

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

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

2022—the lowest level in the past 50 years. Those constraining factors will be partially offset by increases in spending for mandatory programs, particularly Social Security, Medicare, Medicaid, and other federal health care programs: Mandatory spending is projected to climb from 13.3 percent of GDP in 2013 to 14.3 percent in 2022.

Although the projected deficits under current law are much smaller than those of the past few years, in CBO's baseline the federal budget remains out of balance throughout the decade. The resulting accumulation of debt, along with rising interest rates, drives up the cost of financing that debt; in CBO's projections, net interest costs grow significantly from 1.4 percent of GDP this year to 2.5 percent in 2022.

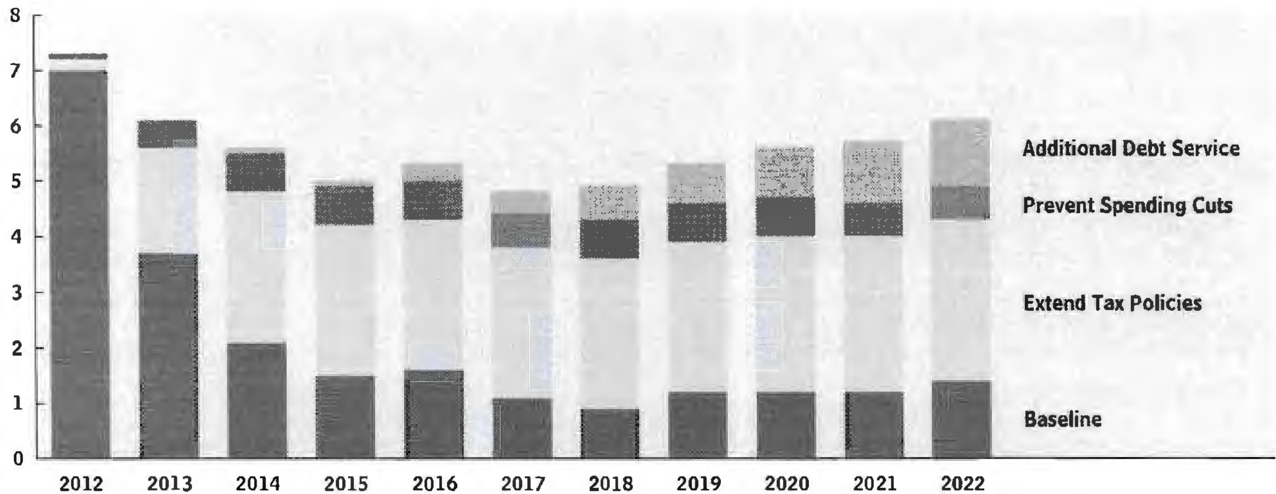
CBO's baseline projections are heavily influenced by changes in tax and spending policies that are embodied in current law—changes that in some cases represent a significant departure from recent policies. As a result, those projections show much higher revenues and lower outlays than would occur if the lower tax rates now in effect were extended and if provisions constraining future spending were not implemented. To illustrate the budgetary consequences of maintaining some tax and spending policies that have recently been in effect, CBO developed projections under an "alternative fiscal scenario." That scenario incorporates the following assumptions:

- Expiring tax provisions (other than the payroll tax reduction) are extended;
- The AMT is indexed for inflation after 2011;
- Medicare's payment rates for physicians' services are held constant at their current level (rather than dropping by 27 percent in March 2012 and more thereafter, as scheduled under current law); and

Summary Figure 1.

Deficits Projected in CBO's Baseline and Under an Alternative Fiscal Scenario

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Note: "Additional Debt Service" is the amount of interest payments on the additional debt issued to the public that would result from the policies in the alternative fiscal scenario. "Prevent Spending Cuts" involves holding Medicare's payment rates for physicians' services at their current level (rather than permitting them to drop, as scheduled under current law) and preventing the cuts to federal spending that will occur under the automatic enforcement procedures of the Budget Control Act of 2011 from taking effect (but leaving in place the original caps on discretionary appropriations in that legislation). "Extend Tax Policies" reflects the assumptions that expiring tax provisions (other than the payroll tax reduction) are instead extended and that the alternative minimum tax is indexed for inflation.

- The automatic spending reductions required by the Budget Control Act in the absence of legislation reported by the Joint Select Committee on Deficit Reduction do not take effect (thereby leaving in place the discretionary caps established by the act, which would otherwise be subject to those reductions).

Under that alternative fiscal scenario, deficits over the 2013–2022 period would be much higher, averaging 5.4 percent of GDP, rather than the 1.5 percent reflected in CBO's baseline projections (see Summary Figure 1). Debt held by the public would climb to 94 percent of GDP in 2022, the highest figure since just after World War II (see Summary Figure 2).

Even if the fiscal policies specified by current law come to pass, budgetary challenges over the longer term remain—and the challenges will be much more acute if those policies do not remain in place. Under both CBO's baseline and its alternative fiscal scenario, the aging of the population and rising costs for health care will push spending for Social Security, Medicare, Medicaid, and other federal health care programs considerably higher as a percentage of GDP. If that rising level of spending is coupled with revenues that are held close to the average share of GDP that they have represented for the past 40 years (rather than being allowed to increase, as under current law), the resulting deficits will increase federal debt to unsupportable levels. To prevent that outcome, policymakers will have to substantially restrain the growth of spending for those programs, raise revenues above their historical share of GDP, or pursue some combination of those two approaches.

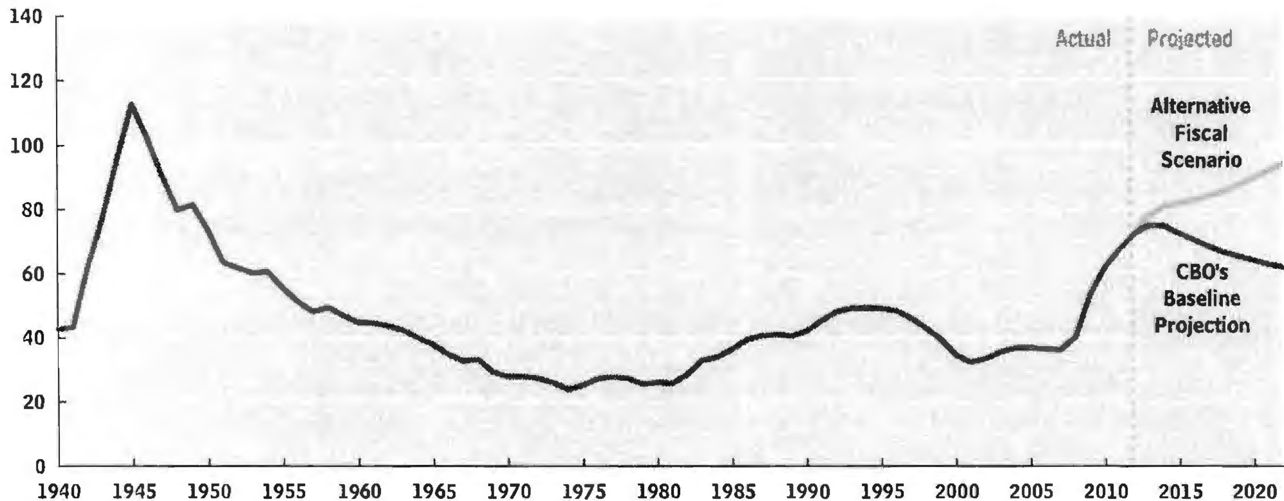
The Economic Outlook

The continued slow recovery that CBO projects for the next two years reflects the lingering effects of the financial crisis and the recession, as well as the fiscal restraint that will arise under current law. According to CBO's projections, real GDP will grow by 2.0 percent this year (as measured by the change from the fourth quarter

Summary Figure 2.

Federal Debt Held by the Public Projected in CBO's Baseline and Under an Alternative Fiscal Scenario

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Note: The alternative fiscal scenario incorporates the assumptions that all expiring tax provisions (other than the payroll tax reduction), including those that expired at the end of December 2011, are instead extended; that the alternative minimum tax is indexed for inflation after 2011 (starting at the 2011 exemption amount); that Medicare's payment rates for physicians' services are held constant at their current level; and that the automatic enforcement procedures specified by the Budget Control Act of 2011 do not take effect. The budgetary effects under the alternative fiscal scenario also include the incremental interest costs associated with projected additional borrowing.

of the previous calendar year) and by 1.1 percent next year (see Summary Table 2). CBO expects economic activity to quicken after 2013 but real GDP to remain below the economy's potential until 2018. As of late 2011, according to the agency's projections, the economy was only about halfway through the cumulative shortfall in total output that will result from the recession and its aftermath.

Considerable slack remains in the labor market, mainly as a consequence of continued weakness in demand for goods and services. In CBO's forecast, the unemployment rate remains above 8 percent both this year and next. As economic growth picks up after 2013, the unemployment rate will gradually decline, but it will still be around 7 percent at the end of calendar year 2015, before dropping to near 5½ percent by the end of 2017 and 5¼ percent by the end of 2022.

While the economy continues to recover during the next few years, inflation and interest rates will remain low. In CBO's forecast, the price index for personal consumption expenditures (PCE) increases by just 1.2 percent in 2012 and 1.3 percent in 2013, and rates on 10-year Treasury notes average 2.3 percent in 2012 and 2.5 percent in 2013. As the economy's output approaches its potential later in the decade, inflation and interest rates will rise to more normal levels. In CBO's projections for the 2018–2022 period, the annual change in the PCE price index averages 2.0 percent per year, and interest rates on 10-year Treasury notes average 5.0 percent.

Many developments could cause economic outcomes to differ substantially, in one direction or another, from those that CBO has projected. For example, the economy could grow considerably faster than the agency has forecast if the forces that have restrained the recovery fade more rapidly than anticipated. Alternatively, a significant worsening of the banking and fiscal problems in Europe could lead to further turmoil in international financial markets that could spill over to those in the United States and greatly weaken the economy here.

Summary Table 2.

CBO's Economic Projections for Calendar Years 2012 to 2022

	Estimated,	Forecast		Projected Annual Average	
	2011	2012	2013	2014-2017	2018-2022
		Fourth Quarter to Fourth Quarter (Percentage change)			
Real GDP	1.6	2.0	1.1	4.1	2.5
Inflation					
PCE price index	2.6	1.2	1.3	1.7	2.0
Core PCE price index[a]	1.8	1.2	1.4	1.6	2.0
Consumer price index[b]	3.3 [c]	1.4	1.5	1.9	2.3
Core consumer price index[a]	2.2 [c]	1.4	1.6	1.9	2.2
		Fourth-Quarter Level (Percent)			
Unemployment Rate	8.7 [c]	8.9	9.2	5.6 [d]	5.3 [e]
		Calendar Year Average (Percent)			
Interest Rates					
Three-month Treasury bills	0.1 [c]	0.1	0.1	2.0	3.7
Ten-year Treasury notes	2.8 [c]	2.3	2.5	3.8	5.0

Source: Congressional Budget Office.

Notes: Economic projections for each year from 2012 to 2022 appear in Appendix E.

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

a. Excludes prices for food and energy.

b. The consumer price index for all urban consumers.

c. Actual value for 2011.

d. Value for 2017.

e. Value for 2022.

Furthermore, changes in fiscal policy that diverge from the path assumed in CBO's baseline also could have a significant impact on economic growth. Under CBO's alternative fiscal scenario, real GDP would be noticeably higher in the next few years than it is in CBO's baseline economic forecast. Over time, however, real GDP under that scenario would fall increasingly below the level in CBO's baseline projections because the larger budget deficits would reduce private investment in productive capital.

CHAPTER

1

The Budget Outlook

The federal budget deficit—although starting to shrink—remains quite large by historical standards. How much and how quickly the deficit declines will depend in part on how well the economy does over the next few years. Probably more critical, though, will be the fiscal policy choices made by lawmakers as they face the substantial changes to tax and spending policies that are slated to take effect within the next year under current law.

To provide a benchmark against which potential policy changes can be measured, the Congressional Budget Office (CBO) constructs its baseline estimates of federal revenues and spending under the assumption that current laws generally remain unchanged. In that case, CBO estimates that the federal budget will show a deficit of nearly $1.1 trillion in fiscal year 2012 (see Table 1-1). As a percentage of gross domestic product (GDP), that shortfall will be 7.0 percent, which is nearly 2 percentage points below that recorded last year but still higher (in percentage terms) than any deficit between 1947 and 2008 (see Figure 1-1).

In large part because of the significant changes to tax and spending policies that are scheduled to take effect under current law, CBO projects baseline deficits that drop markedly over the next few years—to 3.7 percent of GDP ($585 billion) in 2013 and to 2.1 percent ($345 billion) in 2014. From 2015 through 2022, the deficits in the baseline range from 0.9 percent to 1.6 percent of GDP. Under the assumption that current laws remain unchanged, revenues would rise considerably as a share of GDP—from 16 percent in 2012 to 21 percent in 2022, CBO projects—whereas outlays would edge down slightly over the period, from 23 percent this year to 22 percent in 2022.

Those projections, however, are heavily influenced by changes in tax and spending policy that are embodied in current law. The policy changes that have a major impact on the budget outlook include the following:

- Provisions of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (Public Law 111-312, referred to in this report as the 2010 tax act) that limited the reach of the alternative minimum tax (AMT) expired on December 31, 2011. Other provisions that extended the lower tax rates and expanded credits and deductions originally enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001, the Jobs and Growth Tax Relief Reconciliation Act of 2003, and the American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5) are set to expire on December 31, 2012.

- The Temporary Payroll Tax Cut Continuation Act of 2011 (P.L. 112-78) continued for two months the reduced payroll tax originally provided in the 2010 tax act, the availability of emergency unemployment compensation enacted previously, and Medicare's existing payment rates for physicians' services (rather than allowing those rates to drop by 27 percent as was scheduled to occur). All of those provisions are currently scheduled to expire on February 29, 2012 (although legislation to extend them again is being considered).

- Provisions of the Budget Control Act of 2011 (P.L. 112-25) that established automatic enforcement procedures designed to restrain both discretionary and mandatory spending are set to take effect in January 2013. If fully implemented, those procedures will reduce discretionary outlays by $845 billion (relative to projections with no automatic cuts) over the 2013–2022 period, CBO estimates. Mandatory outlays will be $140 billion lower over the projection period as a result of the automatic procedures, largely because of reductions in Medicare spending.

Table 1-1.

Deficits or Surpluses Projected in CBO's Baseline

(Billions of dollars)

	Actual, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
Revenues	2,302	2,523	2,988	3,313	3,568	3,784	4,039	4,243	4,456	4,680	4,926	5,181	17,692	41,179
Outlays	3,598	3,601	3,573	3,658	3,836	4,086	4,259	4,439	4,714	4,960	5,205	5,520	19,413	44,251
Total Deficit	**-1,296**	**-1,079**	**-585**	**-345**	**-269**	**-302**	**-220**	**-196**	**-258**	**-280**	**-279**	**-339**	**-1,721**	**-3,072**
Net Interest	227	224	231	247	282	341	402	459	513	557	590	624	1,503	4,247
Primary Deficit (-) or Surplus[a]	-1,069	-855	-354	-98	14	39	182	264	255	277	311	286	-218	1,174
Memorandum (As a percentage of GDP):														
Total Deficit	-8.7	-7.0	-3.7	-2.1	-1.5	-1.6	-1.1	-0.9	-1.2	-1.2	-1.2	-1.4	-1.9	-1.5
Primary Deficit (-) or Surplus[a]	-7.1	-5.5	-2.2	-0.6	0.1	0.2	0.9	1.3	1.2	1.2	1.3	1.2	-0.2	0.6
Debt Held by the Public at the End of the Year	67.7	72.5	75.1	74.8	72.6	70.5	68.5	66.8	65.5	64.2	63.0	62.0	n.a.	n.a.

Source: Congressional Budget Office.

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

a. Excludes net interest.

Altering the provisions of current law to maintain policies currently or recently in effect (including continuing AMT relief) would produce markedly different budgetary outcomes. Although CBO's baseline does not incorporate such potential changes, this chapter shows how some alternative policies would be expected to affect the budget over the next 10 years. As one example, CBO has developed budget projections under an "alternative fiscal scenario," assuming—instead of current law—that certain tax provisions that have recently expired or are set to expire (including most of the provisions in the 2010 tax act but excluding the Social Security payroll tax reduction) are instead extended, that the AMT is indexed for inflation after 2011 (starting from the 2011 exemption amount), that Medicare's payment rates for physicians' services are held constant, and that the automatic enforcement procedures of the Budget Control Act do not take effect.[1] Under this scenario, deficits from 2013 through 2022 would average 5.4 percent of GDP, compared with the 1.5 percent in the baseline. (For a more detailed discussion, see Alternative Policy Assumptions on page 17.)

CBO projects that, if current laws remain in place, accumulating deficits will boost federal debt held by the public from 68 percent of GDP at the end of 2011 to 75 percent of GDP by the end of 2013; that will be the highest level since 1950.[2] Debt held by the public is projected to then fall as a percentage of GDP over the remainder of the 10-year period, reaching a low of 62 percent in 2022, although that amount is still higher than in any year between 1952 and 2009. The increase in debt (in dollar terms), along with an anticipated rise in interest rates as the economic recovery strengthens, is expected to sharply boost interest payments on the debt. CBO projects that the government's yearly net interest spending will increase significantly as a share of GDP (from 1.4 percent in 2012 to 2.5 percent in 2022).[3] In

1. The tax provisions that have recently expired include provisions that expired at the end of December 2011, most of which have been regularly extended in the past.

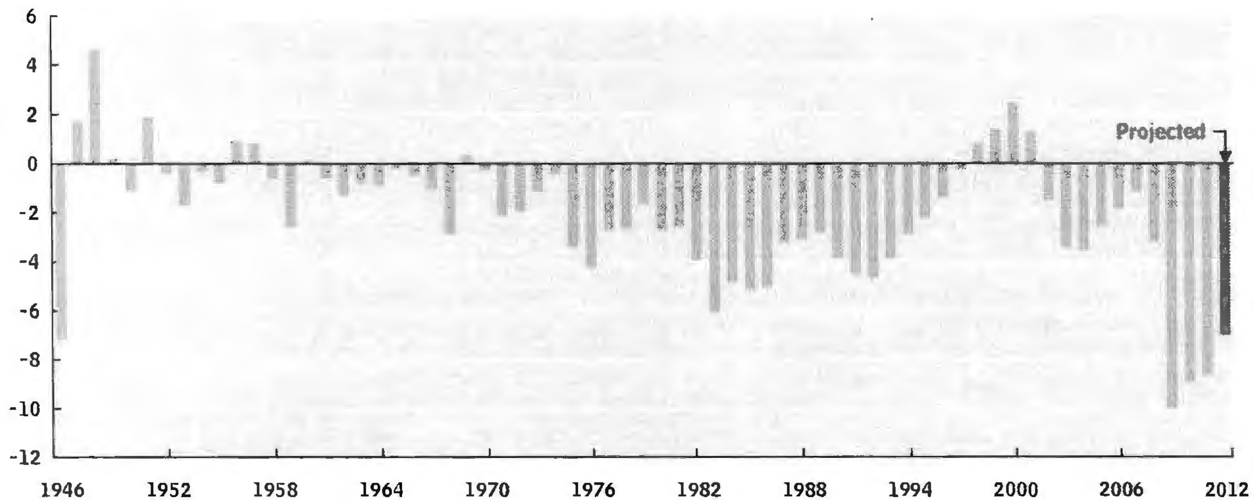
2. Another measure of federal debt is gross debt—the sum of debt held by the public and debt held by government accounts, which is debt that is issued for internal government transactions and to trust funds and other federal accounts, and is not traded in capital markets. At the end of September 2011, gross debt totaled nearly $15 trillion (or 99 percent of GDP).

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

Figure 1-1.

Deficits or Surpluses Since 1946

(Percentage of gross domestic product)



Source: Congressional Budget Office.

contrast, under the alternative fiscal scenario discussed above, CBO projects that debt held by the public would grow to 94 percent of GDP and net interest spending would reach 3.8 percent of GDP in 2022.

During the coming decade and over the longer term, the aging of the population and rising costs for health care will continue to exert significant pressure on the federal budget. The number of people age 65 or older will increase by about one-third between 2012 and 2022—from 14 percent of the population to 17 percent—substantially raising the cost of Social Security, Medicare, and Medicaid. In addition, the Affordable Care Act, enacted in 2010, will significantly increase the number of nonelderly people receiving assistance through federal health care programs.[4] Of the total federal outlays for Medicare, Medicaid, the subsidies offered through new health insurance exchanges, and related programs that CBO projects for 2022, about half will go to benefits for people over age 65, about a quarter will go to benefits for blind and disabled people, and about a quarter will go to benefits for nonelderly people who are not blind or disabled.

CBO projects that the costs per enrollee for Social Security and the major health care programs also will continue to rise, albeit at different rates because of differences in the laws that govern them. Altogether, spending on those programs will increase at an average annual rate of nearly 7 percent between 2013 and 2022, a pace that will outstrip growth in nominal GDP. Combined outlays for all of those programs, which will account for 45 percent of noninterest outlays in 2012, will constitute 60 percent of noninterest outlays in 2022, CBO projects. Moreover, those trends will persist after 2022.

Because of the aging of the population and rising costs for health care, the set of budget policies that were in effect in the past cannot be maintained in the future. In CBO's projections for 2022 under the alternative fiscal scenario, gross outlays for all federal programs apart from Social Security, the major health care programs, and net interest are projected to be 7.8 percent of GDP, lower than in any year during the past 40 years and well below the 11.4 percent of GDP that such outlays have averaged over that period. Yet the budget deficit in 2022 under that scenario is projected to be 6.1 percent of GDP. Therefore, to keep deficits and debt from causing substantial harm to the economy, policymakers will need to allow federal revenues to increase to a much higher percentage of GDP than the average over the past 40 years, make major changes to Social Security and federal health care

4. The Affordable Care Act comprises the Patient Protection and Affordable Care Act (P.L. 111-148) and the health care provisions of the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152).

programs, or pursue some combination of the two approaches.

Budgetary Outcomes in 2011 and 2012

The budget deficit in fiscal year 2011 was $1.3 trillion, nearly unchanged from the deficit recorded in the previous year.[5] As a percentage of GDP, the deficit was 8.7 percent in 2011, down slightly from the 9.0 percent recorded in 2010. Under current law, the budget shortfall will decline to $1.1 trillion (7.0 percent of GDP) in 2012, CBO projects, the fourth consecutive year it will have exceeded $1.0 trillion.

Revenues

Federal revenues increased by $140 billion (or 6 percent) from 2010 to 2011, and they are projected to grow by $220 billion (or 10 percent) in 2012 (see Table 1-2). Under current law, CBO estimates that revenues in 2012 will equal $2.5 trillion, or 16.3 percent of GDP, a larger share than in any of the past three years (when revenues totaled between 15.1 percent and 15.4 percent of GDP) but still well below the average of about 18 percent of GDP for the past 40 years.

In 2011, receipts from individual income taxes rose substantially (by $193 billion, or 21 percent), at least in part because of increases in wage and nonwage income. Those gains were offset somewhat by reductions in social insurance taxes (down by $46 billion, or 5 percent) and corporate income taxes (down by $10 billion, or 5 percent). Receipts from social insurance taxes, which consist of the payroll taxes that fund social insurance programs (such as Social Security and Medicare's Hospital Insurance program) fell because of the reduction in the Social Security payroll tax rate that took effect in January 2011. Corporate income taxes declined because the revenue-increasing effects of rising profits were more than offset by the revenue loss from legislation that allowed full expensing of investments and made other changes to depreciation rules.

In 2012, CBO expects revenues from all three of the main sources to increase by similar dollar amounts: social insurance taxes by $76 billion (or 9 percent), corporate income taxes by $70 billion (or 39 percent), and individual income taxes by $68 billion (or 6 percent). Almost all of the expected gain in revenues relative to GDP in 2012—close to 1 percentage point—results from changing tax provisions. Notably, the expiration on February 29 of the reduced Social Security payroll tax rate will boost social insurance receipts; in addition, changes that accelerated into 2011 and 2012 businesses' tax deductions for the depreciation of new equipment reduced receipts of corporate income taxes more in 2011 than they will in 2012.[6]

Outlays

Federal spending rose by 4 percent in 2011, to $3.6 trillion—a rate of increase that is significantly less than the nearly 7 percent average rate of growth in federal outlays over the previous 10 years. About half of the $142 billion increase from 2010 to 2011 occurred because downward revisions in the estimated net cost of the Troubled Asset Relief Program (TARP) in 2011 were smaller than in 2010; those revisions were recorded as reductions in outlays.[7] Excluding the TARP, total outlays grew by

5. The deficit in 2011 would have been smaller than that in 2010 except for three unusual factors: First, certain payments that ordinarily would have been made on October 1, 2011 (that is, in fiscal year 2012), were made instead in September because October 1 fell on a weekend. Second, in December 2009, banks were required to pay the deposit insurance premiums that would otherwise have been due over the following three years, thereby reducing net outlays for deposit insurance in fiscal year 2010 and boosting them in 2011. Third, the estimated costs of federal credit transactions made in earlier years (mostly those of the Troubled Asset Relief Program) were revised downward. Without those factors, the 2011 deficit would have been about $130 billion less than the shortfall in 2010.

6. If the lower Social Security payroll tax rate was extended through December 2012, revenues from that tax would be about $75 billion lower than those projected in the baseline for this year (and about the same amount, in total, as in 2011); revenues from that tax would also be $25 billion lower in 2013.

7. In keeping with procedures specified in law, the TARP's outlays are recorded as the estimated present value of all future cash flows for the program, with an adjustment for market risk (risk that investors cannot protect themselves against by diversifying their portfolios). Present value is a single number that expresses a flow of current and future income, or payments, in terms of an equivalent lump sum received or paid today. Under standard accounting for credit programs in the federal budget, the original subsidy calculation may be increased or decreased by a "credit subsidy reestimate" in subsequent years, based on updated valuations of the present-value costs of the cash flows associated with those credit programs. For an analysis of the budgetary effects of the transactions made under the authority of the TARP, see Congressional Budget Office, *Report on the Troubled Asset Relief Program—December 2011*.

Table 1-2.

Changes in Revenues, Outlays, and Deficits Between 2010 and 2012

(Billions of dollars)

	Actual		Projected,	Change	
	2010	2011	2012	2010-2011	2011-2012
Revenues					
Individual income taxes	899	1,091	1,159	193	68
Social insurance taxes	865	819	895	-46	76
Corporate income taxes	191	181	251	-10	70
Other[a]	208	211	218	3	7
Total	**2,163**	**2,302**	**2,523**	**140**	**220**
Outlays					
Mandatory					
Troubled Asset Relief Program	-110	-37	23	72	61
Unemployment compensation	159	119	82	-39	-38
Medicaid	273	275	262	2	-13
Medicare[b]	520	560	560	39	*
Social Security	701	725	770	24	45
Other[b]	370	383	373	13	-10
Subtotal	1,913	2,025	2,070	112	45
Discretionary					
Defense[c]	689	700	680	11	-20
Nondefense	658	646	628	-12	-19
Subtotal	1,347	1,346	1,308	-1	-39
Net Interest	196	227	224	31	-3
Total	**3,456**	**3,598**	**3,601**	**142**	**3**
Deficits	**-1,294**	**-1,296**	**-1,079**	**-2** [d]	**217** [e]

Source: Congressional Budget Office.

Note: * = between zero and $500 million.

a. Includes excise taxes, estate and gift taxes, remittances from the Federal Reserve, customs duties, and other miscellaneous receipts.

b. Reflects shifts of benefit payments from 2012 into 2011 because October 1, 2011, fell on a Saturday. Those shifts total $15 billion for Medicare and $14 billion for "Other" ($5 billion each for veterans' compensation and pensions and Supplemental Security Income and $4 billion for military retirement).

c. Reflects $4 billion in payments to military personnel that were shifted from 2012 to 2011 because October 1, 2011, fell on a Saturday.

d. A negative number indicates an increase in the deficit.

e. A positive number indicates a decrease in the deficit.

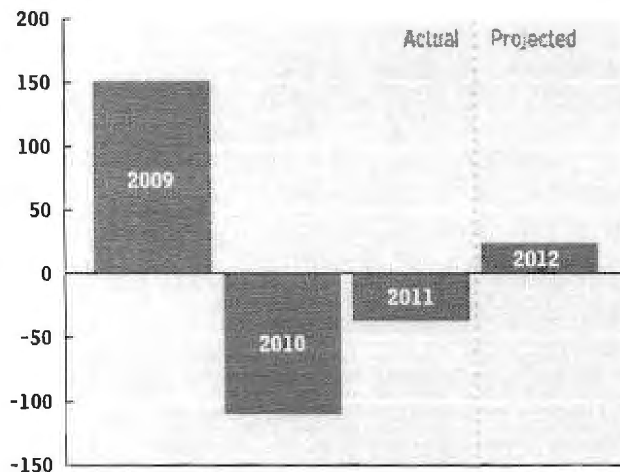
$70 billion, or about 2 percent. In 2012, CBO projects, outlays will increase by just $3 billion (or 0.1 percent). As a percentage of GDP, outlays will fall from 24.1 percent in 2011 to 23.2 percent this year—a level still higher than in any year between 1984 and 2008.

Mandatory Spending. Mandatory programs (which are governed by statutory criteria and are not controlled by the annual appropriation process) accounted for most of the change in outlays in 2011. Mandatory outlays increased by $112 billion, or 6 percent. (They grew at an average annual rate of about 7 percent between 2001 and 2010.) The growth in mandatory spending is projected to slow in 2012, to $45 billion, or about 2 percent.

Figure 1-2.

Outlays Recorded for the Troubled Asset Relief Program

(Billions of dollars)



Source: Congressional Budget Office.

Adjustments to the estimated costs of the TARP will contribute significantly to the growth in outlays from 2011 to 2012 (see Figure 1-2). Including a downward revision of prior estimates of the program's costs, TARP outlays were a negative $37 billion in 2011. This year, CBO anticipates, previous declines in the value of the U.S. Treasury's investments, particularly in shares of AIG and General Motors, will lead to a $20 billion upward revision to the estimated costs of the program. That revision, along with $3 billion in new spending (mostly for mortgage assistance) will push outlays for the TARP to $23 billion in 2012, CBO projects, thereby boosting outlays by $61 billion relative to what was recorded last year.

Excluding the TARP, mandatory spending increased by 2 percent in 2011 but will decline by nearly 1 percent in 2012, CBO estimates. The largest decline in 2012 will be in spending for unemployment compensation. The number of people receiving first-time payments of regular unemployment benefits has fallen considerably since 2010, and outlays for unemployment compensation dropped from $159 billion in that year to $119 billion in 2011. The decline is expected to continue—to $82 billion in 2012—because of further reductions in the number of people receiving benefits and because emergency unemployment compensation is scheduled to lapse at the end of February. (Extending those benefits at their current levels through December 2012 would boost outlays by $19 billion in 2012 and by $16 billion in 2013.)

Medicaid spending is projected to decline in 2012—by $13 billion (or 5 percent)—after rising by $2 billion in 2011. The drop in 2012 will occur primarily because an increase in the federal share of the program's costs expired in June 2011; that increase took effect in 2009 and had been extended in modified form since then.

Medicare outlays (excluding receipts from premiums) grew by nearly 8 percent in 2011 but are projected to change little in 2012. Those differing rates of growth, however, result largely from a shift in the timing of certain payments: October 1, 2011, fell on a weekend, so some payments to health care plans were made at the end of September, in fiscal year 2011 rather than in fiscal year 2012. Without that shift, Medicare's growth rates would have been more similar in 2011 and 2012, at 4.6 percent and 5.7 percent, respectively—slower rates of growth than witnessed in any year during the past decade other than 2010. The restrained growth in Medicare in 2011 and 2012 is at least in part a result of limitations on payment rates for certain types of providers.[8] Changes in the use of health care services related to weak economic conditions also may have contributed in 2011, although whether such changes occurred is not clear at this point.

The largest increase in mandatory spending in 2012, excluding that for the TARP, is expected to be for Social Security. Outlays grew by $24 billion (or 3 percent) for that program in 2011, and they are projected to increase by almost twice as much—$45 billion (or 6 percent)—in 2012, primarily because beneficiaries received a cost-of-living adjustment in January 2012 but not in 2011.

Discretionary Outlays. In fiscal year 2011, total discretionary budget authority—authority provided in appropriation acts to incur financial obligations that will result in immediate or future outlays—dropped by $42 billion; that authority has declined by another $24 billion in 2012. As a result, outlays decreased by 0.1 percent (nearly $1 billion) last year—the first time since 1996 that discretionary outlays had fallen—and

8. Medicare's current payment rates for physicians' services are scheduled to drop by 27 percent on March 1, 2012. Enacting legislation to maintain current rates through fiscal year 2012—at a cost of about $9 billion—would boost growth in the current year (after adjusting for the timing shift) to roughly 7 percent.

they are projected to drop by another 3 percent ($39 billion) in 2012. Although there was a small increase in defense spending in 2011, that rise was more than offset by a drop in nondefense outlays. In the current year, CBO projects, outlays for defense and nondefense programs will fall by similar amounts.

In 2011, defense outlays totaled $700 billion, an increase of $11 billion, or less than 2 percent—well below the 9 percent average annual growth rate recorded over the previous 10 years. Modest increases in spending for operations and maintenance and for military personnel were partially offset by reductions elsewhere, primarily in procurement. Defense outlays will fall by $20 billion (or 3 percent) in 2012, CBO projects, largely because of a reduction in spending for military operations in Afghanistan and Iraq.

Nondefense discretionary outlays fell by 2 percent ($12 billion) last year and are projected to decrease by 3 percent ($19 billion) in 2012. Those reductions largely are attributable to a decline in spending from ARRA funding: Nondefense discretionary outlays stemming from that legislation dropped by $24 billion in 2011. They are projected to fall by another $33 billion in 2012; the State Fiscal Stabilization Fund and student financial assistance account for the largest declines (see Box 1-1). Those reductions are partially offset by increases in outlays from funding unrelated to ARRA; such outlays rose by $12 billion last year and are projected to increase by $14 billion in 2012. Nondefense discretionary outlays will total $628 billion in 2012, CBO estimates; at 4.0 percent of GDP, such outlays will be below the amount recorded in the previous three years.

CBO's Baseline Projections for 2013 to 2022

CBO constructs its baseline in accordance with provisions set forth in the Balanced Budget and Emergency Deficit Control Act of 1985 and the Congressional Budget and Impoundment Control Act of 1974.[9] For the most part, those laws require that the baseline projections incorporate the assumption that current laws governing taxes and spending in future years are fully implemented. Under those current-law assumptions, the budget deficit drops sharply over the next three fiscal years, from 7.0 percent of GDP this year to 2.1 percent by 2014. Between 2015 and 2022, annual deficits are projected to fluctuate in a narrow range between 0.9 percent and 1.6 percent of GDP (see Table 1-3 on page 10). Two factors are critical to those projections: The first relates to the changes in tax and spending policy currently scheduled to occur (and, in the case of the AMT, already in place), and the second is the effect on the budget of the nation's continued but modest economic growth. In particular, revenues are projected to increase by 31 percent between 2012 and 2014—as a result of the scheduled expiration of several tax provisions, recently expired provisions relating to the AMT, and a gradually improving economy—and then to inch up again as a share of GDP after 2014. Despite the pressures generated by the aging population and rising health care costs, CBO projects that outlays will be relatively stable over the next decade, ranging between 21.5 percent and 22.5 percent as a share of GDP. That projection incorporates a reduction of about $1 trillion over the next 10 years stemming from the automatic spending reductions required by the Budget Control Act. In addition, spending for programs funded through ARRA is expected to continue to fall, and spending for unemployment compensation and for other benefits that tend to increase during recessions is projected to decline as the economy improves.

Even with deficits shrinking over the next few years under current law, debt held by the public will increase as a percentage of GDP from about 72 percent in 2012 to a peak of 75 percent in the following year, CBO projects. It will fall in subsequent years—although it will still be high by historical standards—to end the projection period at 62 percent of GDP. If the various provisions of current law are not fully implemented or if economic growth differs from what CBO projects, however, budgetary outcomes could be quite different.

Revenues

Under the baseline assumption that current laws remain unchanged, total revenues are projected to climb rapidly between 2012 and 2014—much more than the projected increase in GDP. Revenues as a share of GDP are projected to rise from 16.3 percent in 2012 to 20.0 percent in 2014, or about 2 percentage points more than their average share over the past 40 years. About four-fifths of that projected increase in revenues as a share of GDP stems from recent or scheduled expirations of tax

9. The provisions of the Deficit Control Act pertaining to the baseline expired in 2006, but they were reinstated last year by the Budget Control Act.

Box 1-1.

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

The American Recovery and Reinvestment Act of 2009 (ARRA; Public Law 111-5) was enacted in February 2009 in response to significant weakness in the nation's economy. Most of ARRA's effects on federal spending and revenues have now occurred, and they have been roughly in line with the original estimates of the Congressional Budget Office (CBO) and the staff of the Joint Committee on Taxation (JCT). CBO estimates that nearly 90 percent of ARRA's budgetary impact was realized by the end of fiscal year 2011 and that the law added $733 billion to budget deficits over the 2009–2011 period. When ARRA was enacted, CBO and JCT estimated that it would increase deficits through fiscal year 2011 by $719 billion (with additional effects expected in subsequent years).[1]

In initial analyses covering the period from 2009 through 2019, CBO and JCT projected that ARRA would increase deficits by $787 billion. Since that time, economic developments and other factors have differed in various ways from what CBO anticipated. In addition, legislation enacted in 2010 rescinded some funds appropriated under ARRA and limited the period in which higher payments under the Supplemental Nutrition Assistance Program (SNAP, formerly known as Food Stamps) will be available. CBO now estimates that ARRA's cumulative impact on deficits over the 2009–2019 period will be $831 billion (see the table). That amount is $44 billion more than originally projected but similar to the estimate CBO published last January. Most of the upward revision from the original estimate occurs because the values of economic variables, particularly the unemployment rate and food prices, are now different from those projected at the time the original estimates were made. As a result, spending for the increases in unemployment compensation and SNAP benefits provided by ARRA turned out to be greater than anticipated. In many other areas of the budget, spending has been slower than originally estimated.

Many of ARRA's provisions have expired: The additional unemployment compensation provided in the law is no longer available (although other legislation extended some of those benefits). Likewise, the increase in the federal share of Medicaid costs originally authorized by ARRA expired at the end of December 2010. (Subsequent legislation continued enhanced matching rates through June 2011 at a lower amount than authorized under ARRA.)[2] Obligations of discretionary funding provided by ARRA have been completed, although some outlays resulting from those obligations will occur in 2012 and later, and many provisions that reduced revenues—such as the Making Work Pay Tax Credit, tax incentives for businesses, and temporary relief from the individual alternative minimum tax—have expired.

Although CBO expects that ARRA spending will drop substantially over the next few years, the law will continue to have significant budgetary effects. In CBO's baseline, outlays from ARRA are estimated to total $60 billion in fiscal year 2012 (compared with about $145 billion for 2011) and another

1. For a discussion of why the outlays from 2009 through 2011 differed from the original estimates, see Congressional Budget Office, "Actual ARRA Spending Over the 2009–2011 Period Quite Close to CBO's Original Estimate," Director's Blog (January 5, 2012). For the original cost estimate, see Congressional Budget Office, cost estimate for the conference agreement for H.R. 1, the American Recovery and Reinvestment Act of 2009 (February 13, 2009). That estimate did not address ARRA's effects on the economy; for the most recent discussion of those effects, see Congressional Budget Office, *Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output from July 2011 Through September 2011* (November 2011).

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

Continued

Box 1-1. Continued

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

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

(Billions of dollars)

	Actual			Projected,	Total	
	2009	2010	2011	2012	2013-2019	2009-2019
Outlays						
Department of Health and Human Services programs						
Medicaid	32	40	12	1	7	91
Other	2	12	11	7	18	49
Refundable tax credits	3	45	38	4	1	91
Unemployment compensation[a]	28	33	1	1	4	66
Supplemental Nutrition Assistance Program	5	11	12	8	5	41
Department of Education programs						
State Fiscal Stabilization Fund	12	23	12	5	1	54
Other (Including Pell grants)	9	19	11	4	1	44
Department of Transportation programs	4	17	11	5	10	47
Department of Energy programs	1	8	11	9	10	39
Build America Bonds	*	1	4	4	27	36
Social Security	13	*	*	*	*	14
Other	7	25	22	13	8	75
Total Outlays	114	235	145	60	93	647
Revenues	-69[b]	-170[b]	*[b]	11	44	-184
Total Direct Effect on the Deficit[c]	**-183**	**-405**	**-145**	**-49**	**-49**	**-831**

Sources: Congressional Budget Office; Department of the Treasury.

Notes: These amounts do not reflect the slowdown in regular (non-ARRA) spending, particularly for transportation and education programs, resulting from the availability of ARRA funds. Although some slowdown in such spending clearly occurred, there is no way to identify with certainty the magnitude of that effect.

* = between -$500 and $500 million.

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

b. CBO's estimate of the extent to which the act reduced revenues in 2009, 2010, and 2011.

c. Negative numbers represent an increase in the deficit.

$93 billion from 2013 through 2019.[3] That figure includes $27 billion in payments under the Build America Bonds program (almost three-quarters of which is offset by higher revenues), $18 billion for information technology related to health care and other health-related activities, and $10 billion for programs run by the Department of Energy.

Although ARRA reduced revenues substantially in 2009 and 2010, its net effect over the next few years will generally be to increase tax receipts by amounts much smaller than those reductions, CBO anticipates. In particular, some of the tax reductions that businesses received in 2009 and 2010 because of ARRA will lead to higher tax payments in the future. For example, businesses that took advantage of provisions allowing quicker depreciation of certain assets purchased in 2009 will have less to depreciate in future years.

3. CBO estimates that ARRA's net budgetary effect from 2020 through 2022 will be less than $1 billion per year.

Table 1-3.

CBO's Baseline Budget Projections

	Actual, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
	In Billions of Dollars													
Revenues														
Individual income taxes	1,091	1,159	1,463	1,597	1,765	1,915	2,069	2,207	2,350	2,504	2,664	2,831	8,810	21,365
Social insurance taxes	819	895	975	1,017	1,076	1,142	1,205	1,266	1,324	1,385	1,447	1,513	5,415	12,349
Corporate income taxes	181	251	320	427	442	436	465	461	454	444	452	459	2,090	4,360
Other	211	218	229	273	284	291	301	310	328	347	364	378	1,378	3,105
Total	**2,302**	**2,523**	**2,988**	**3,313**	**3,568**	**3,784**	**4,039**	**4,243**	**4,456**	**4,680**	**4,926**	**5,181**	**17,692**	**41,179**
On-budget	1,737	1,896	2,290	2,585	2,798	2,965	3,172	3,330	3,498	3,676	3,877	4,085	13,809	32,276
Off-budget[a]	566	627	698	728	770	819	868	914	958	1,004	1,049	1,096	3,883	8,903
Outlays														
Mandatory	2,025	2,070	2,122	2,215	2,354	2,526	2,624	2,729	2,918	3,090	3,272	3,514	11,842	27,364
Discretionary	1,346	1,308	1,220	1,196	1,200	1,219	1,233	1,251	1,284	1,313	1,344	1,382	6,068	12,641
Net interest	227	224	231	247	282	341	402	459	513	557	590	624	1,503	4,247
Total	**3,598**	**3,601**	**3,573**	**3,658**	**3,836**	**4,086**	**4,259**	**4,439**	**4,714**	**4,960**	**5,205**	**5,520**	**19,413**	**44,251**
On-budget	3,099	3,026	2,909	2,948	3,080	3,283	3,407	3,536	3,755	3,941	4,122	4,369	15,627	35,350
Off-budget[a]	499	575	664	710	756	803	853	903	959	1,019	1,083	1,151	3,786	8,901
Deficit (-) or Surplus	**-1,296**	**-1,079**	**-585**	**-345**	**-269**	**-302**	**-220**	**-196**	**-258**	**-280**	**-279**	**-339**	**-1,721**	**-3,072**
On-budget	-1,363	-1,130	-619	-363	-282	-318	-235	-206	-258	-265	-245	-283	-1,818	-3,074
Off-budget[a]	67	52	34	19	13	16	15	10	*	-16	-34	-55	97	2
Debt Held by the Public	10,128	11,242	11,945	12,401	12,783	13,188	13,509	13,801	14,148	14,512	14,872	15,291	n.a.	n.a.
Memorandum:														
Gross Domestic Product	14,954	15,508	15,914	16,575	17,618	18,704	19,708	20,661	21,616	22,603	23,614	24,655	88,519	201,666
	As a Percentage of Gross Domestic Product													
Revenues														
Individual income taxes	7.3	7.5	9.2	9.6	10.0	10.2	10.5	10.7	10.9	11.1	11.3	11.5	10.0	10.6
Social insurance taxes	5.5	5.8	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Corporate income taxes	1.2	1.6	2.0	2.6	2.5	2.3	2.4	2.2	2.1	2.0	1.9	1.9	2.4	2.2
Other	1.4	1.4	1.4	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5
Total	**15.4**	**16.3**	**18.8**	**20.0**	**20.2**	**20.2**	**20.5**	**20.5**	**20.6**	**20.7**	**20.9**	**21.0**	**20.0**	**20.4**
On-budget	11.6	12.2	14.4	15.6	15.9	15.9	16.1	16.1	16.2	16.3	16.4	16.6	15.6	16.0
Off-budget[a]	3.8	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Outlays														
Mandatory	13.5	13.3	13.3	13.4	13.4	13.5	13.3	13.2	13.5	13.7	13.9	14.3	13.4	13.6
Discretionary	9.0	8.4	7.7	7.2	6.8	6.5	6.3	6.1	5.9	5.8	5.7	5.6	6.9	6.3
Net interest	1.5	1.4	1.5	1.5	1.6	1.8	2.0	2.2	2.4	2.5	2.5	2.5	1.7	2.1
Total	**24.1**	**23.2**	**22.5**	**22.1**	**21.8**	**21.8**	**21.6**	**21.5**	**21.8**	**21.9**	**22.0**	**22.4**	**21.9**	**21.9**
On-budget	20.7	19.5	18.3	17.8	17.5	17.6	17.3	17.1	17.4	17.4	17.5	17.7	17.7	17.5
Off-budget[a]	3.3	3.7	4.2	4.3	4.3	4.3	4.3	4.4	4.4	4.5	4.6	4.7	4.3	4.4
Deficit (-) or Surplus	**-8.7**	**-7.0**	**-3.7**	**-2.1**	**-1.5**	**-1.6**	**-1.1**	**-0.9**	**-1.2**	**-1.2**	**-1.2**	**-1.4**	**-1.9**	**-1.5**
On-budget	-9.1	-7.3	-3.9	-2.2	-1.6	-1.7	-1.2	-1.0	-1.2	-1.2	-1.0	-1.1	-2.1	-1.5
Off-budget[a]	0.4	0.3	0.2	0.1	0.1	0.1	0.1	**	**	-0.1	-0.1	-0.2	0.1	**
Debt Held by the Public	67.7	72.5	75.1	74.8	72.6	70.5	68.5	66.8	65.5	64.2	63.0	62.0	n.a.	n.a.

Source: Congressional Budget Office.

Note: n.a. = not applicable; * = between -$500 million and zero; ** = between -0.05 percent and 0.05 percent.

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

Box 1-2.

Automatic Enforcement Procedures Under the Budget Control Act

The Budget Control Act of 2011 (Public Law 112-25) specifies automatic procedures to reduce both discretionary and mandatory spending during the coming decade if lawmakers have not enacted legislation originating from the Joint Select Committee on Deficit Reduction that will reduce projected deficits by at least $1.2 trillion. Because no such legislation was enacted by January 15, those procedures are now scheduled to go into effect.

The automatic reductions will take the form of equal cuts (in dollar terms) in funding for defense and nondefense programs in fiscal years 2013 through 2021. For 2013, those reductions will be achieved by automatically canceling a portion of the budgetary resources (in an action known as sequestration) for most discretionary programs as well as for some programs and activities that are financed by mandatory spending.[1] From 2014 to 2021, the reductions will be achieved by lowering the caps on discretionary budget authority as specified in the Budget Control Act and through sequestration for mandatory spending. The law exempts a significant portion of mandatory spending from sequestration, however.

The Congressional Budget Office (CBO) has estimated how much discretionary and mandatory funding will change under the automatic enforcement mechanisms (see the table). CBO's analysis can only approximate the results, however; the Administration's Office of Management and Budget is responsible for implementing reductions on the basis of its own estimates.

Under current law, the automatic enforcement procedures will reduce budgetary resources for defense by $492 billion over the 2013–2021 period. Annual reductions will be divided proportionally between mandatory and discretionary defense spending.

1. Budgetary resources consist of all sources of authority provided to federal agencies that permit them to incur financial obligations, including new budget authority, unobligated balances, direct spending authority, and obligation limitations.

Because mandatory spending makes up much less than 1 percent of all defense spending, CBO estimates that only about $150 million will be sequestered from such programs over the period. Consequently, almost all of the required deficit reduction in the defense category will be achieved by sequestering discretionary resources in 2013 and by lowering the caps on defense appropriations for 2014 through 2021. By CBO's estimate, the automatic enforcement procedures will reduce defense spending by 10.0 percent in 2013 and by lesser amounts thereafter, declining to 8.5 percent in 2021.

Estimating the automatic reductions for nondefense programs is more complicated, particularly because of provisions in the Budget Control Act that limit spending cuts in most Medicare benefits to 2 percent and that exempt many mandatory programs (including Social Security and Medicaid) from sequestration altogether. For Medicare, CBO estimates that nearly 90 percent of the program's spending will be subject to the 2 percent limit and about 10 percent of such spending will be exempt from sequestration entirely, leaving just 1 percent of Medicare spending subject to the same sequestration as nonexempt mandatory programs.

The act requires the same total reductions—$492 billion over the 2013–2021 period—in the budgetary resources for defense and nondefense activities. In calculating the reductions required in nondefense spending, the targeted savings will first be allocated proportionally between nonexempt discretionary and mandatory programs. CBO estimates that mandatory spending will account for roughly 57 percent of all nondefense spending that is subject to enforcement procedures under the Budget Control Act during those nine years. Of that spending, the vast majority is for Medicare programs and activities that will be subject to the 2 percent limit. In the absence of such a limit, reductions in budgetary resources for Medicare would total $247 billion between 2013 and 2021, CBO estimates; with the 2 percent ceiling, however, those reductions will total $117 billion over

Continued

Table 1-4.

Federal Debt Projected in CBO's Baseline

(Billions of dollars)

	Actual, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Debt Held by the Public at the Beginning of the Year	9,019	10,128	11,242	11,945	12,401	12,783	13,188	13,509	13,801	14,148	14,512	14,872
Changes in Debt Held by the Public												
Deficit	1,296	1,079	585	345	269	302	220	196	258	280	279	339
Other means of financing	-187	36	118	111	113	103	101	96	89	84	81	80
Total	**1,109**	**1,115**	**703**	**456**	**382**	**406**	**321**	**291**	**347**	**364**	**360**	**419**
Debt Held by the Public at the End of the Year	10,128	11,242	11,945	12,401	12,783	13,188	13,509	13,801	14,148	14,512	14,872	15,291
Memorandum:												
Debt Held by the Public at the End of the Year (As a percentage of GDP)	67.7	72.5	75.1	74.8	72.6	70.5	68.5	66.8	65.5	64.2	63.0	62.0
Debt Held by the Public Excluding Financial Assets[a]												
In billions of dollars	9,275	10,337	10,916	11,257	11,516	11,813	12,028	12,214	12,459	12,726	12,991	13,315
As a percentage of GDP	62.0	66.7	68.6	67.9	65.4	63.2	61.0	59.1	57.6	56.3	55.0	54.0
Gross Federal Debt[b]	14,762	16,002	16,813	17,369	17,869	18,428	18,940	19,444	19,984	20,531	21,069	21,665
Debt Subject to Limit[c]	14,747	15,986	16,796	17,351	17,851	18,410	18,921	19,425	19,964	20,511	21,049	21,644

Source: Congressional Budget Office.

Note: GDP = gross domestic product.

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

b. Comprises federal debt held by the public plus Treasury securities held by federal trust funds and other government accounts.

c. The amount of federal debt that is subject to the overall limit set in law. Debt subject to limit differs from gross federal debt because most debt issued by agencies other than the Treasury and the Federal Financing Bank is excluded from the debt limit, currently set at $16.4 trillion.

Debt held by the public increased by $1.1 trillion in 2011, reaching 68 percent of GDP, the highest level since 1950. Under the assumptions that govern CBO's baseline (in particular, that most tax provisions expire as scheduled, that the Budget Control Act's enforcement procedures are not altered, and that Medicare's payment rates to physicians drop sharply as scheduled), the government is projected to borrow another $5.2 trillion from 2012 through 2022. Debt held by the public is projected to peak at 75 percent of GDP in 2013 and then to decline to 62 percent of GDP at the end of 2022 (see Table 1-4). Under the alternative fiscal scenario described earlier, the debt would reach $23.2 trillion, or 94 percent of GDP, by 2022.

The amount of money the Treasury borrows by selling securities (net of the amount of maturing securities that it redeems) is driven primarily by the annual budget deficit. However, several factors—collectively labeled "other means of financing" and not directly included in budget totals—also affect the government's need to borrow from the public. Those factors include reductions (or increases) in the government's cash balance as well as the cash flows associated with federal credit programs (such as student loans, rural electrification and telecommunication

programs, and lending by the Small Business Administration), because only the subsidy costs of those programs (calculated on a present-value basis) are reflected in the budget deficit.

CBO projects that Treasury borrowing will be $36 billion more than the projected budget deficit in fiscal year 2012, mainly because of borrowing to finance student loans, which will be partially offset by the sale of mortgage-backed securities held by the Treasury.[14] Each year from 2013 to 2022, borrowing by the Treasury is expected to exceed the amount of the deficit, mainly because of the need to provide financing for credit programs. Because of such programs, CBO projects, the government's annual borrowing needs during that period will be $98 billion greater, on average, than the budget deficits would indicate.

Gross federal debt consists of debt held by the public and debt issued to government accounts. In CBO's projections, debt held by the public is expected to increase by more than 50 percent between the end of 2011 and the end of 2022, and debt held by government accounts is expected to rise by nearly 40 percent. As a result, gross federal debt is projected to climb in every year from 2012 to 2022, reaching $21.7 trillion in 2022—47 percent more than its total of $14.8 trillion at the end of 2011.

Changes in CBO's Baseline Since August 2011

CBO's current estimate of the deficit for 2012 is $105 billion more than it estimated in August 2011 (see Table 1-5).[15] Technical revisions (which include all factors that change budget projections that are not directly related to new legislation or to revisions in the economic outlook) produced the largest change, boosting the estimate of the deficit by $110 billion for 2012, primarily because CBO now anticipates lower revenues than it did previously.

In total, CBO has added $325 billion to its baseline projection of the cumulative deficit from 2012 through 2021; that figure represents about 0.8 percent of projected federal spending or revenues over that period. Two main factors contribute to that outcome. CBO now projects that revenues will be $700 billion (or 2 percent) lower between 2012 and 2021 as a result of updated economic projections and other factors. In the other direction, CBO now anticipates lower interest rates in coming years; those lower rates alone reduce projected net interest costs by nearly $540 billion. On net, all other changes increase deficits by a total of about $165 billion over the 10-year period. (Changes to CBO's baseline projections since August are described in greater detail in Appendix A.)

Uncertainty in Budget Projections

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

CBO's budgetary projections depend on the agency's economic projections for the coming decade, including forecasts for such variables as interest rates, inflation, and the growth of real GDP. Discrepancies between those forecasts and economic outcomes can result in significant differences between baseline budgetary projections and budgetary outcomes. For instance, as measured by the change from the fourth quarter of the previous year, CBO's baseline economic forecast anticipates that real GDP will grow by 2.0 percent during 2012, by 1.1 percent during 2013, and by an average of 3.2 percent annually from 2014 to 2022. If the actual growth rate of real GDP was 0.1 percentage point higher or lower each year, the cumulative deficit projected for the 2013–2022 period would be about $300 billion higher or lower. (For further discussion of how various economic assumptions affect budget projections, see Appendix B.)

Uncertainty also surrounds technical factors that affect CBO's baseline projections. For example, spending per enrollee for Medicare and Medicaid—which has generally grown faster than GDP—is difficult to predict, and that spending will have a large effect on the programs' costs in coming years. If per capita costs grew 1 percentage point faster or slower per year than CBO has projected for the next decade, total outlays for Medicare

14. To help promote stability in the mortgage market and lessen upward pressure on mortgage rates, from September 2008 to December 2009 the Treasury purchased mortgage-backed securities issued by Fannie Mae and Freddie Mac in the open market. In March 2011, the Treasury announced it would sell all its remaining holdings of those securities. The cash flows stemming from such transactions do not show up directly in the budget because they are treated under the principles governing credit programs (that is, the budget records only the present value of the estimated cost or gain of the program).

15. See Congressional Budget Office, *The Budget and Economic Outlook: An Update* (August 2011).

Table 1-5.

Changes in CBO's Baseline Projections of the Deficit Since August 2011

(Billions of dollars)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total 2012-2016	Total 2012-2021
Deficit in CBO's August 2011 Baseline	-973	-510	-265	-205	-278	-231	-211	-259	-277	-279	-2,232	-3,487
Changes												
Legislative												
Revenues	-20	-9	-1	-2	*	-5	-3	-3	-4	-3	-33	-51
Outlays[a]	18	-14	-26	-31	-35	-37	-40	-44	-49	-54	-88	-312
Subtotal	-38	5	25	28	35	32	37	41	46	50	55	261
Economic												
Revenues	25	-20	-60	-81	-59	-37	-30	-40	-44	-43	-195	-389
Outlays[a]	-17	-32	-32	-28	-36	-55	-61	-51	-46	-40	-145	-398
Subtotal	42	12	-28	-53	-24	18	30	11	2	-2	-51	9
Technical												
Revenues	-118	-52	-49	-14	-3	-6	-9	-9	-4	3	-236	-260
Outlays[a]	-7	-7	8	12	19	20	29	28	32	34	25	167
Net effect of incorporating the automatic enforcement procedures[b,c]	0	-46	-20	-13	-12	-13	-14	-15	-16	-18	-92	-168
Subtotal	-110	-91	-77	-40	-34	-39	-52	-52	-52	-48	-352	-595
Total Change in the Deficit[c]	**-105**	**-75**	**-80**	**-64**	**-24**	**11**	**15**	**1**	**-4**	*	**-348**	**-325**
Deficit in CBO's January 2012 Baseline	-1,079	-585	-345	-269	-302	-220	-196	-258	-280	-279	-2,580	-3,812

Source: Congressional Budget Office.

Notes: More details about changes in CBO's projections since August 2011 are presented in Appendix A.

* = between -$500 million and zero.

a. Includes net interest payments.

b. CBO's August projections included $1.2 trillion in potential deficit reductions from legislation produced by the Joint Select Committee on Deficit Reduction or from the automatic enforcement procedures that would be triggered if no such legislation was enacted; that sum was not allocated either to outlays or to revenues. Because no legislation was reported by the committee, CBO has removed the $1.2 trillion in unallocated deficit reductions and, instead, included in the baseline the outlay reductions that will be triggered pursuant to the automatic enforcement procedures in the Budget Control Act of 2011. See Table A-2 for a detailed breakdown of the net effect of those changes.

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

(excluding receipts from premiums) and Medicaid would be about $800 billion higher or lower for that period. In addition, the Affordable Care Act made broad changes to the nation's health care and health insurance systems. Estimating the effects of those policy changes requires CBO to make projections of an array of technical, behavioral, and economic factors, some of which involve programs (such as the health insurance exchanges) that are not yet in place. As a result, there are great uncertainties surrounding the potential budgetary consequences of those policy changes.

Projections of revenues are particularly sensitive to uncertainty about technical factors. Forecasting total amounts of wages and salaries, corporate profits, and other income is part of CBO's economic projections, but forecasting the amount of revenue that the government will collect from a given quantity of such types of income requires technical assumptions about the distribution of income and about many aspects of taxpayers' behavior. For example, taxpayers' behavior determines the amount of deductions and credits people receive and how much income in the form of capital gains they realize from selling assets. Differences between CBO's judgments

about such behavior and actual outcomes can lead to significant deviations from the agency's baseline projections of revenues.

Alternative Policy Assumptions

CBO's baseline budget projections—which are constructed in accordance with provisions set forth in statute—are intended to show what would happen to federal spending, revenues, and deficits if current laws remained unchanged. As such, the baseline generally reflects the assumption that current laws governing taxes and spending in future years are fully implemented. Clearly, future legislative action could lead to markedly different budget outcomes. Moreover, in recent years, policymakers have enacted significant temporary changes to tax and spending laws, and they have extended much of that legislation—again, temporarily—when it expired. As a result of those changes and extensions, baseline projections constructed on the assumption that current laws will remain unchanged—and thus that temporary provisions will expire as scheduled—have become much less useful as indicators of the budgetary outcomes of maintaining some current policies.

To assist policymakers and analysts who may have a variety of views about the most useful benchmark for considering possible future changes in laws or policies, CBO estimated the effects on budgetary projections of some alternative assumptions about future policies (see Table 1-6). The discussion below focuses on how those policy actions would directly affect revenues and outlays.[16] Such changes also would affect the projected costs of servicing the federal debt (which are shown separately in Table 1-6).

Military and Diplomatic Operations in Afghanistan and Other War-Related Activities

CBO's projections of discretionary spending for the next 10 years include outlays for military operations and diplomatic activities in Afghanistan and Iraq and possible other future overseas contingency operations. The outlays projected in the baseline come from budget authority provided for those purposes in fiscal year 2011 and earlier, the $127 billion in budget authority provided for 2012, and the $1.4 trillion that is assumed to be appropriated for the 2013–2022 period (under the assumption that annual funding is set at the amount provided for 2012 plus adjustments for anticipated inflation, in accordance with the rules governing baseline projections).[17]

In coming years, the funding required for overseas contingency operations—in Afghanistan or other countries—may eventually be smaller than the amounts in the baseline if the number of deployed troops and the pace of operations diminish over time. Thus, CBO has formulated a budget scenario that assumes a reduction in the deployment of U.S. forces abroad for military actions and a concomitant reduction in diplomatic operations and foreign aid. Many other scenarios—some costing more and some less—are possible.

In 2011, CBO estimates, the number of U.S. active-duty, Reserve, and National Guard personnel deployed for war-related activities averaged about 195,000. Under the scenario shown in Table 1-6, the average number of military personnel deployed for war-related purposes would decline over four years: from 115,000 in 2012 to 85,000 in 2013, 60,000 in 2014, and 45,000 in 2015 and thereafter. (Those numbers could represent various allocations of forces among Afghanistan and other regions.) Under that scenario, and assuming that the related funding for diplomatic operations and foreign aid declines at a similar rate, total discretionary outlays over the 2013–2022 period would be $838 billion less than the amount in the baseline.

Other Discretionary Spending

Policymakers could vary discretionary funding in many ways from what is assumed in the baseline. For example, if appropriations after 2012 (excluding those for operations in Afghanistan and elsewhere) were to grow each year through 2022 at the same rate as nominal GDP—instead of at the rate permitted by the Budget Control Act's caps—discretionary spending would be $3 trillion higher for that period than in the baseline. If appropriations were to grow each year through 2022 at the same rate as inflation after 2012, discretionary spending would be about $1.4 trillion higher for that period than it is in the baseline. If, in contrast, lawmakers kept appropriations for 2014 through 2022 at nominal 2013 amounts

16. The estimates of the budgetary effects of alternative policies do not include any macroeconomic effects.

17. Funding for overseas contingency operations in 2012 includes $115 billion for military operations and indigenous security forces and $11 billion for diplomatic operations and foreign aid. The caps that apply to discretionary spending can be adjusted to accommodate future appropriations for overseas contingency operations.

Table 1-6.

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

(Billions of dollars)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
Policy Alternatives That Affect Discretionary Outlays													
Reduce the Number of Troops Deployed for Overseas Contingency Operations to 45,000 by 2015[a]													
Effect on the deficit[b]	0	20	48	72	87	94	98	102	104	106	108	320	838
Debt service	0	*	1	2	5	9	14	19	25	31	37	16	144
Increase Discretionary Appropriations at the Rate of Growth of Nominal GDP[c]													
Effect on the deficit[b]	0	-78	-127	-177	-232	-284	-329	-373	-417	-462	-509	-898	-2,988
Debt service	0	*	-2	-5	-13	-24	-40	-59	-80	-105	-131	-45	-460
Increase Discretionary Appropriations at the Rate of Inflation[d]													
Effect on the deficit[b]	0	-73	-107	-122	-131	-139	-145	-151	-158	-166	-173	-573	-1,366
Debt service	0	*	-2	-4	-9	-16	-24	-33	-42	-52	-62	-31	-242
Freeze Discretionary Appropriations at the Level for 2013[e]													
Effect on the deficit[b]	0	0	14	32	52	75	99	125	152	178	204	173	931
Debt service	0	0	*	1	2	5	9	14	21	30	40	7	121
Policy Alternative That Affects Mandatory Outlays													
Maintain Medicare's Payment Rates for Physicians at the Current Rate[f]													
Effect on the deficit[b]	-9	-19	-21	-23	-26	-29	-32	-36	-40	-43	-47	-119	-316
Debt service	*	*	*	-1	-2	-3	-5	-7	-10	-12	-15	-7	-56
Policy Alternatives That Affect Both Discretionary and Mandatory Outlays													
Remove the Effect of the Automatic Enforcement Procedures Specified in the Budget Control Act[g]													
Effect on the deficit[b]	0	-66	-93	-101	-104	-106	-106	-105	-105	-105	-94	-470	-984
Debt service	0	*	-1	-4	-8	-13	-19	-26	-32	-39	-45	-26	-187

Sources: Congressional Budget Office; Joint Committee on Taxation.

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

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

a. For this alternative, CBO does not extrapolate the $127 billion in budget authority for military operations, diplomatic activities, and foreign aid in Afghanistan and other countries provided for 2012. Rather, the alternative incorporates the assumption that future funding for overseas contingency operations would total $86 billion in 2013, $61 billion in 2014, $43 billion in 2015, and about $40 billion a year from 2016 on—for a total of $464 billion over the 2013–2022 period.

b. Excludes debt service.

c. These estimates reflect the assumption that appropriations will not be constrained by caps and other provisions of the Budget Control Act of 2011 and instead will mostly grow at the rate of nominal GDP from their 2012 level. However, under this alternative, appropriations for 2012 for operations in Afghanistan and other countries are assumed to grow at the rate of inflation from their 2012 level (as recorded in CBO's baseline).

d. These estimates reflect the assumption that appropriations will not be constrained by caps and other provisions of the Budget Control Act and will instead grow at the rate of inflation from their 2012 level. Discretionary funding related to federal personnel is inflated using the employment cost index for wages and salaries; other discretionary funding is adjusted using the GDP price index.

e. This option reflects the assumption that appropriations for 2013 that are covered by the caps will total $950 billion (the cap of $1,047 billion minus an estimated reduction of $97 billion resulting from the automatic enforcement procedures for that year). Such appropriations would be frozen at the 2013 level through 2022.

f. Medicare's current payment rates for physicians' services are scheduled to drop by 27 percent on March 1, 2012, and by additional amounts in subsequent years. Under this scenario, payment rates are assumed to continue at their current level through 2022.

Continued

Table 1-6. **Continued**

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

(Billions of dollars)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
Policy Alternatives That Affect the Tax Code[h]													
Extend Certain Income Tax and Estate and Gift Tax Provisions Scheduled to Expire on December 31, 2012[i]													
Effect on the deficit[b]	-2	-107	-233	-267	-283	-296	-308	-318	-330	-342	-355	-1,186	-2,840
Debt service	*	-1	-3	-8	-19	-33	-49	-68	-87	-108	-129	-64	-505
Index the AMT for Inflation[j]													
Effect on the deficit[b]	-9	-89	-39	-45	-52	-61	-73	-86	-101	-119	-140	-286	-804
Debt service	*	-1	-1	-3	-5	-8	-12	-17	-22	-29	-36	-17	-133
Extend Certain Income Tax and Estate and Gift Tax Provisions Scheduled to Expire on December 31, 2012, and Index the AMT for Inflation[k]													
Effect on the deficit[b]	-11	-232	-334	-382	-413	-445	-477	-511	-549	-589	-633	-1,805	-4,564
Debt service	*	-1	-5	-13	-29	-50	-75	-105	-136	-169	-206	-99	-790
Extend Other Expiring Tax Provisions[l]													
Effect on the deficit[b]	-12	-78	-115	-102	-89	-81	-77	-73	-73	-75	-77	-464	-839
Debt service	*	-1	-2	-4	-8	-13	-18	-24	-29	-34	-40	-28	-173
Memorandum:													
Outlays for Operations in Afghanistan and for Similar Activities in CBO's Baseline	146	141	135	133	134	135	138	140	143	146	149	677	1,392
Deficit in CBO's Baseline	-1,079	-585	-345	-269	-302	-220	-196	-258	-280	-279	-339	-1,721	-3,072

g. The Budget Control Act specified that if lawmakers did not enact legislation originating from the Joint Select Committee on Deficit Reduction that would reduce projected deficits by at least $1.2 trillion, automatic procedures would go into effect to reduce both discretionary and mandatory spending during the 2013–2021 period. Such automatic reductions in spending would take the form of equal cuts (in dollar terms) in funding for defense and nondefense programs in 2013 through 2021. For 2013, those reductions would be achieved by automatically canceling a portion of the budgetary resources (in an action known as sequestration) for most discretionary programs and for some programs and activities financed by mandatory spending. For the 2014–2021 period, the automatic procedures would be enforced by lowering the caps on discretionary budget authority specified in the Budget Control Act and through sequestration of mandatory spending. The budgetary effects of this option cannot be combined with those of any of the alternatives that affect discretionary spending other than the one to reduce the number of troops deployed for overseas contingency operations.

h. The estimates are from CBO and the staff of the Joint Committee on Taxation and are preliminary.

i. This alternative incorporates the assumption that lawmakers will extend title I of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (which extended for 2011 and 2012 income tax provisions enacted in 2001, 2003, and 2009) and title III of that act (which modified estate and gift taxation for 2010 through 2012). It does not incorporate the assumption that the AMT is indexed for inflation; the effects of that alternative are shown separately.

j. This alternative incorporates the assumption that the exemption amount for the AMT (which was increased through the end of December 2011) is extended at its higher amount and, together with the AMT tax brackets, is indexed for inflation after 2011. In addition, the treatment of nonrefundable personal credits (which also was continued through the end of 2011) is assumed to be extended.

k. The combination of extending certain income tax provisions scheduled to expire on December 31, 2012, and indexing the AMT for inflation reduces revenues by more than the sum of those alternatives considered alone. The total shown here includes an additional revenue loss of $920 billion over the 2013–2022 period that results from the interaction of the two policies.

l. These estimates reflect the impact of extending about 80 provisions, many of which expired at the end of December 2011. Nearly all of those provisions also had been extended previously; some, such as the research and experimentation tax credit, more than once. The additional first-year depreciation deduction of 50 percent for business equipment is set to expire at the end of 2012.

(after a nearly $100 billion reduction in the initial level set for 2013 in the Budget Control Act as a result of the automatic enforcement procedures), total discretionary outlays would be $931 billion lower than in the baseline for the period from 2014 through 2022. Under that scenario (sometimes called a freeze in appropriations), total discretionary spending would fall from 8.4 percent of GDP in fiscal year 2012 to 4.8 percent in 2022; for comparison, the lowest share in any year since 1962 (the earliest for which such data have been reported) was 6.2 percent in 1999.

Medicare's Payments to Physicians

Under current law, starting in March 2012, spending for Medicare will be constrained by a rate-setting system that has existed for several years—called the sustainable growth rate—which controls the fees physicians receive for their services. If the system is allowed to operate as currently structured, physicians' fees will be reduced by 27 percent in March 2012 and by additional amounts in subsequent years, CBO projects. If, instead, lawmakers override those scheduled reductions—as they have every year since 2003—spending on Medicare might be significantly greater than the amount projected in CBO's baseline. Thus, if payment rates stay as they are now through 2022, outlays for Medicare (net of premiums) would be $9 billion higher in 2012 and about $316 billion (or about 5 percent) higher between 2013 and 2022 than they are in the baseline.

Automatic Enforcement Procedures

The Budget Control Act provides for automatic procedures to reduce discretionary and mandatory spending that take effect in fiscal year 2013 and continue through 2021. If fully implemented, those procedures will require equal reductions (in dollar terms) in defense and nondefense spending. For 2013, the reductions would be achieved by automatically canceling a portion of the budgetary resources (an action known as sequestration) for most discretionary programs as well as for some programs and activities that are financed by mandatory spending.[18] For the period from 2014 through 2021, the automatic procedures would be enforced by lowering the caps on discretionary budget authority specified in the Budget Control Act and through sequestration for mandatory spending. If, instead, lawmakers chose to prevent those automatic cuts each year, spending would be nearly $1 trillion (or about 2 percent) higher over the 2013–2022 period than the amount now projected in CBO's baseline. Total discretionary outlays would be $845 billion (or 6.7 percent) higher and mandatory outlays would be $140 billion (or 0.5 percent) higher.[19]

Revenues

Under the rules that govern CBO's baseline, all provisions of the 2010 tax act are assumed to expire by January 2013. Those expirations will increase revenues by raising individual income tax rates, reducing the child tax credit, eliminating the American Opportunity Credit, raising estate tax rates, and lowering the effective exemption amount for the AMT (the last change took effect at the end of December 2011) and by making other changes.[20] If some of those expiring provisions (or others that are set to expire under current law or have recently expired) were extended through 2022, total revenues would be significantly lower than they are in the baseline. For example, if certain income tax and estate and gift tax provisions (excluding those related to the exemption amount for the AMT) were extended beyond the expiration dates set in the 2010 tax act, CBO and the staff of the Joint Committee on Taxation estimate that revenues would be lower (and, as a much smaller effect, outlays for refundable tax credits would be higher) by a total of $2.8 trillion over the 2013–2022 period.[21] Under that scenario, the effect of reducing the amount of regular income tax that people owed would be partly offset by an increase in the number of taxpayers who would be subject to the AMT.

18. Budgetary resources consist of all sources of authority provided to federal agencies that permit them to incur financial obligations, including new budget authority, unobligated balances, direct spending authority, and obligation limitations

19. The budgetary effects of this option (as shown in Table 1-6) cannot be combined with any of the alternatives that affect discretionary spending other than the one to reduce the number of troops deployed for overseas contingency operations.

20. The 2010 tax act lowered the Social Security payroll tax through December 2011; subsequent legislation extended that reduction through February 2012. The revenue scenarios discussed in this section do not include any additional extensions. If the lower rate was extended through December 2012, however, revenues from that tax would be $75 billion lower in fiscal year 2012 and $25 billion lower in fiscal year 2013, the staff of the Joint Committee on Taxation estimates.

21. The specific provisions covered by this estimate are identified in footnote i to Table 1-6. The estimate excludes any effects that the expiration of the tax provisions would have on the economy. CBO's baseline projection, in contrast, incorporates such macroeconomic effects.

Another policy that could alter revenues involves modifying the AMT. Because the exemption amount and brackets for the AMT are not indexed for inflation (as the parameters of the regular individual income tax are), many more people become subject to the AMT as time goes on. Under current law, that phenomenon will cause the impact of the AMT to increase sharply in coming years. If, instead, the parameters of the AMT were indexed for inflation after 2011 (with no other changes to the tax code), federal revenues over the next 10 years would be $804 billion lower than the amount in the baseline.

The number of taxpayers subject to the AMT will depend on whether the expiring tax provisions in the 2010 tax act remain in effect. If those provisions were extended and the AMT was indexed for inflation, the combination of the two changes would reduce revenues by $920 billion more than the sum of the effects of the two policy alternatives considered separately. Thus, the total impact of extending certain income tax and estate and gift tax provisions that are set to expire in the next 10 years and indexing the AMT for inflation would be to reduce revenues and increase outlays for refundable tax credits over the 2013–2022 period by $4.6 trillion. Under that scenario, revenues from 2013 to 2022 would average about 18 percent of GDP, equal to their 40-year average.

Other tax provisions, beyond the income tax and estate and gift tax provisions, either already expired at the end of December 2011 or are scheduled to expire in the next 10 years. If all of them (other than this year's payroll tax reduction) were extended, revenues would be lower and outlays for refundable tax credits would be higher—by a total of another $839 billion—than the amounts in the baseline for the 2013–2022 period. Therefore, the total impact of extending all expiring tax provisions (again, other than the payroll tax reduction) would be to reduce revenues and increase outlays for refundable tax credits over the next decade by a total of $5.4 trillion.

An Alternative Fiscal Scenario

If a combination of these changes to current law were made so as to maintain major polices that have been in place for a number of years, far larger deficits and much greater debt would result than are shown in CBO's current baseline. Relative to the baseline projections for the 2013–2022 period, deficits would rise by $7.9 trillion (including debt service) to yield cumulative deficits of $11 trillion over the 10-year period (see Table 1-7) if the following policy decisions were made:

- All expiring tax provisions (other than the payroll tax reduction), including those that expired at the end of December 2011, are extended;
- The AMT is indexed for inflation after 2011 (starting from the 2011 exemption amount);
- Medicare's payment rates for physicians remain unchanged from current amounts; and
- The automatic spending reductions required by the Budget Control Act do not take effect.

As a share of GDP, deficits would average 5.4 percent over the coming decade; by 2022, the deficit would equal 6.1 percent of GDP (see Figure 1-3, top panel). Debt held by the public would reach 94 percent of GDP by the end of 2022, the largest share since 1948 (see Figure 1-3, bottom panel).

The Long-Term Budget Outlook

Beyond the coming decade, the fiscal outlook is even more worrisome. At the time that CBO issued its most recent long-term projections, the 10-year baseline showed debt held by the public reaching 76 percent of GDP in 2021.[22] Under CBO's extended-baseline scenario, the long-term projections showed debt growing to 84 percent of GDP in 2035. Because the projections based on current law now show debt held by the public declining relative to GDP after 2013 (to 62 percent in 2022), the long-term outlook is a little brighter than it was earlier in the year when debt was projected to rise relative to GDP throughout the coming decade. Even under current-law projections, however, debt would still be larger relative to GDP in 2022 than in any year between 1952 and 2009. Moreover, although long-term budget projections are highly uncertain, the aging of the population and rising costs for health care would almost certainly push federal spending up sharply relative to GDP after 2022 if current laws remained in effect. Federal revenues also would continue to increase relative to GDP under current law, reaching significantly higher percentages of GDP than at any time in the nation's history. However, CBO has not updated its long-term projections to reflect its new

22. See Congressional Budget Office, *CBO's 2011 Long-Term Budget Outlook* (June 2011).

Table 1-7.

Deficits Projected in CBO's Baseline and Under an Alternative Fiscal Scenario

												Total	
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013-2017	2013-2022
In Billions of Dollars													
CBO's January 2012 Baseline													
Revenues	2,523	2,988	3,313	3,568	3,784	4,039	4,243	4,456	4,680	4,926	5,181	17,692	41,179
Outlays	3,601	3,573	3,658	3,836	4,086	4,259	4,439	4,714	4,960	5,205	5,520	19,413	44,251
Deficit	**-1,079**	**-585**	**-345**	**-269**	**-302**	**-220**	**-196**	**-258**	**-280**	**-279**	**-339**	**-1,721**	**-3,072**
Debt Held by the Public at the End of the Year	11,242	11,945	12,401	12,783	13,188	13,509	13,801	14,148	14,512	14,872	15,291	n.a.	n.a.
Alternative Fiscal Scenario													
Revenues	2,500	2,680	2,904	3,126	3,324	3,556	3,732	3,915	4,100	4,305	4,513	15,589	36,154
Outlays	3,611	3,661	3,820	4,024	4,305	4,516	4,738	5,059	5,353	5,649	6,008	20,328	47,136
Deficit	**-1,111**	**-981**	**-917**	**-899**	**-981**	**-960**	**-1,005**	**-1,144**	**-1,253**	**-1,344**	**-1,495**	**-4,739**	**-10,981**
Debt Held by the Public at the End of the Year	11,275	12,374	13,402	14,414	15,499	16,560	17,661	18,895	20,232	21,657	23,232	n.a.	n.a.
As a Percentage of Gross Domestic Product													
CBO's January 2012 Baseline													
Revenues	16.3	18.8	20.0	20.2	20.2	20.5	20.5	20.6	20.7	20.9	21.0	20.0	20.4
Outlays	23.2	22.5	22.1	21.8	21.8	21.6	21.5	21.8	21.9	22.0	22.4	21.9	21.9
Deficit	**-7.0**	**-3.7**	**-2.1**	**-1.5**	**-1.6**	**-1.1**	**-0.9**	**-1.2**	**-1.2**	**-1.2**	**-1.4**	**-1.9**	**-1.5**
Debt Held by the Public at the End of the Year	72.5	75.1	74.8	72.6	70.5	68.5	66.8	65.5	64.2	63.0	62.0	n.a.	n.a.
Alternative Fiscal Scenario													
Revenues	16.1	16.8	17.5	17.7	17.8	18.0	18.1	18.1	18.1	18.2	18.3	17.6	17.9
Outlays	23.3	23.0	23.0	22.8	23.0	22.9	22.9	23.4	23.7	23.9	24.4	23.0	23.4
Deficit	**-7.2**	**-6.2**	**-5.5**	**-5.1**	**-5.2**	**-4.9**	**-4.9**	**-5.3**	**-5.5**	**-5.7**	**-6.1**	**-5.4**	**-5.4**
Debt Held by the Public at the End of the Year	72.7	77.8	80.9	81.8	82.9	84.0	85.5	87.4	89.5	91.7	94.2	n.a.	n.a.
Memorandum:													
Deficit: Alternative Fiscal Scenario Minus CBO's January 2012 Baseline													
In billions of dollars	-33	-396	-572	-630	-679	-740	-810	-886	-973	-1,065	-1,156	-3,018	-7,909
As a percentage of GDP	-0.2	-2.5	-3.5	-3.6	-3.6	-3.8	-3.9	-4.1	-4.3	-4.5	-4.7	-3.4	-3.9
Policy Alternatives That Affect the Tax Code (Billions of dollars)													
Effect on revenues	-23	-309	-410	-442	-460	-483	-511	-541	-579	-621	-668	-2,104	-5,024
Effect on outlays	0	1	39	41	42	43	43	43	42	42	42	166	378
Effect on the deficit[a]	-23	-309	-449	-483	-502	-526	-554	-584	-622	-663	-710	-2,270	-5,403

Source: Congressional Budget Office.

Notes: The alternative fiscal scenario incorporates the assumptions that all expiring tax provisions (other than the payroll tax reduction), including those that expired at the end of December 2011, are instead extended; that the alternative minimum tax is indexed for inflation after 2011 (starting at the 2011 exemption amount); that Medicare's payment rates for physicians' services are held constant at their current level; and that the automatic enforcement procedures specified by the Budget Control Act of 2011 do not take effect. Outlays under the alternative fiscal scenario also include the incremental interest costs associated with projected additional borrowing.

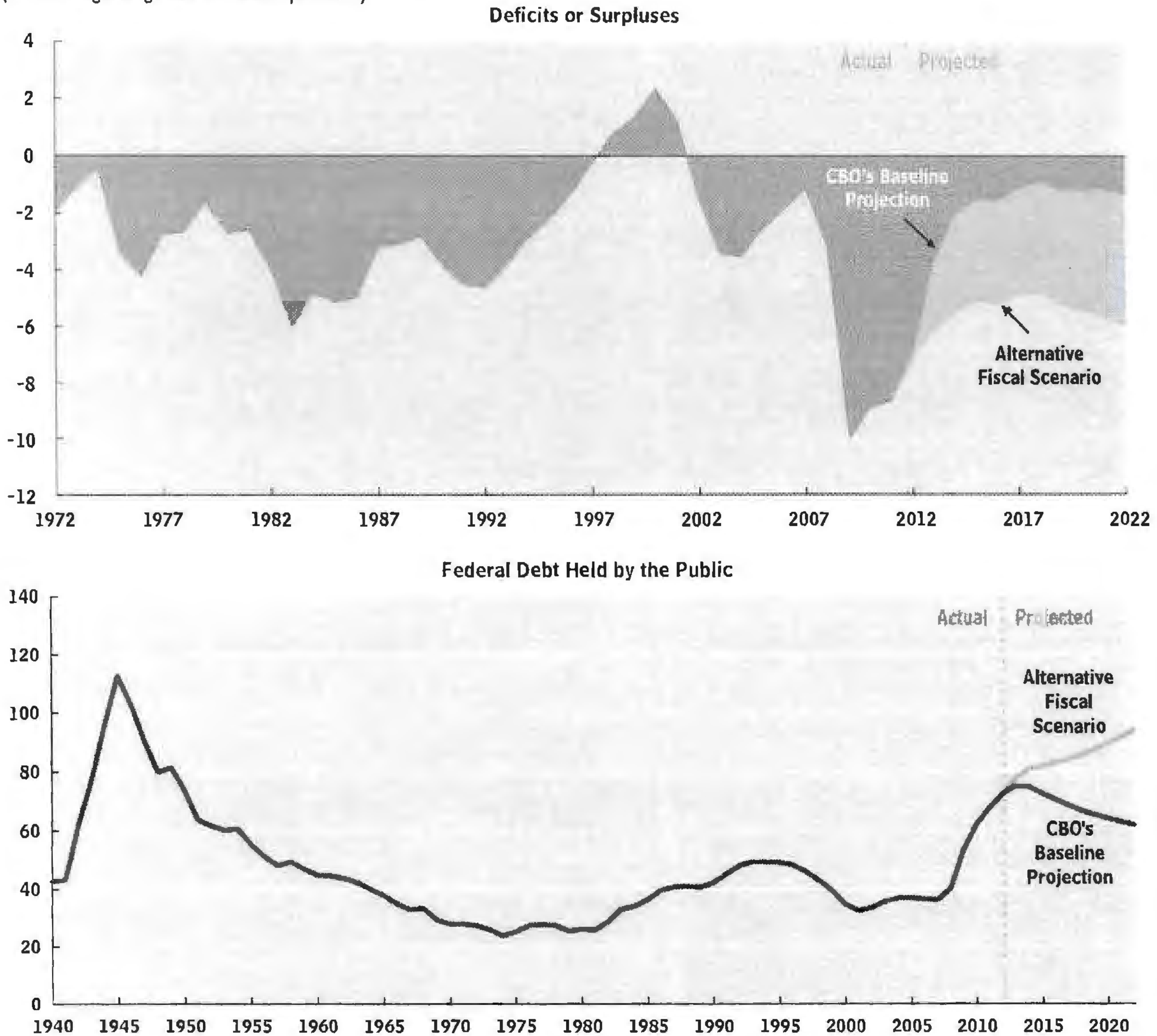
GDP = gross domestic product; n.a. = not applicable.

a. Negative numbers indicate an increase in the deficit.

Figure 1-3.

Deficits or Surpluses and Federal Debt Held by the Public, Historically and As Projected in CBO's Baseline and Under an Alternative Fiscal Scenario

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Note: The alternative fiscal scenario incorporates the assumptions that all expiring tax provisions (other than the payroll tax reduction), including those that expired at the end of December 2011, are instead extended; that the alternative minimum tax is indexed for inflation after 2011 (starting at the 2011 exemption amount); that Medicare's payment rates for physicians' services are held constant at their current level; and that the automatic spending reductions required by the Budget Control Act of 2011 do not take effect. The budgetary effects under the alternative fiscal scenario also include the incremental interest costs associated with projected additional borrowing.

10-year baseline, so the effect of those trends on budget deficits beyond 2022 given current law and the agency's latest economic and technical assumptions is not clear.

The budget outlook is much bleaker—both for the 10-year period and over the longer term—under certain policy assumptions other than those that underlie CBO's current baseline, including, for example, the alternative scenario presented in *CBO's 2011 Long-Term Budget Outlook*. That scenario is based on several assumptions (which are somewhat different from the assumptions underlying the alternative fiscal scenario discussed in this document), the most important of which are about revenues:

- That tax provisions enacted since 2001 and extended most recently in 2010 will be extended again,
- That the reach of the AMT will be restrained to stay close to its historical extent, and
- That tax laws will evolve over the long term so that revenues remain near their historical average of 18 percent of GDP.

Under that long-term scenario, revenues would increase much more slowly than spending, and debt held by the public would balloon to nearly 190 percent of GDP by 2035. Although new long-term projections made on the basis of the current baseline would differ, it is clear that, under these policy assumptions, the amounts the federal government would be required to borrow would be unsustainable.

Moreover, the projection of federal debt under such a scenario does not include the harmful effects of rising debt on economic growth and interest rates. If those effects were taken into account, debt would be projected to increase even more rapidly. Large budget deficits and burgeoning debt would reduce national saving, thus leading to higher interest rates, even more borrowing from abroad, and less domestic investment—which in turn would suppress output and income in the United States relative to what would occur if the government was borrowing less. Furthermore, raising marginal tax rates to pay for the rising costs of interest would discourage work and saving and reduce output even more; alternatively, accommodating the growth in interest payments by reducing spending on government programs would affect the beneficiaries of those programs.

A rising amount of federal debt would increasingly restrict policymakers' ability to use tax and spending policies to respond to unexpected challenges, such as economic downturns or financial crises. Burgeoning debt also would boost the likelihood of a sudden fiscal crisis, during which investors would lose confidence in the government's ability to manage its budget and the government would lose its ability to borrow at affordable rates. The explosive path of federal debt under the alternative fiscal scenario that CBO analyzed last year underscores the need for policy changes that would put the nation on a more sustainable course. To accomplish that, policymakers will need to increase revenues substantially as a percentage of GDP, decrease spending significantly from projected levels, or adopt some combination of those two approaches.

CHAPTER

2

The Economic Outlook

The pace of recovery in output and employment has been slow since the recession ended in June 2009, and the economy remains in a severe slump. The Congressional Budget Office (CBO) expects that, under current laws governing federal taxes and spending, economic activity will continue to grow slowly over the next two years. As measured by the change from the fourth quarter of the previous year, real (inflation-adjusted) gross domestic product (GDP) is projected to increase by 2.0 percent this year and by 1.1 percent next year. According to CBO's estimates, slow growth in output will hold down the growth of employment, and as a result, the unemployment rate will remain above 8 percent both this year and next. The large amount of unused resources in the economy for the next two years will help to keep the rate of inflation below 2 percent, CBO expects, and interest rates on federal borrowing will stay quite low.

Although CBO projects the growth in real GDP to pick up after 2013, the agency expects that the economy's output will remain below its potential—a level that corresponds to a high rate of use of labor and capital—until the first half of 2018. Thereafter, through 2022, CBO's economic projection is based on the assumption that real GDP will grow at its potential rate because the agency does not attempt to predict the timing or magnitude of fluctuations in the business cycle so far into the future. Under that assumption, the annual unemployment rate is projected to fall to 5.3 percent by 2022, and inflation is expected to remain close to 2 percent. Interest rates in the coming years will rise, CBO projects, as the economy strengthens and approaches its potential level.

That economic forecast reflects the stance of federal fiscal policy as specified by current law. Specifically, the forecast incorporates the expiration at the end of February of the payroll tax cut and emergency unemployment benefits that were extended for two months by the Temporary Payroll Tax Cut Continuation Act of 2011 (Public Law 112-78); the expiration of tax cuts that were extended by the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312, referred to here as the 2010 tax act), as well as various other expiring tax provisions; and the constraints on spending imposed by the Budget Control Act of 2011 (P.L. 112-25). Altogether, according to CBO's forecast, federal fiscal policy under current law will restrain economic growth this year and significantly restrain growth in 2013, but the resulting reduction in budget deficits will boost output and income later in the decade.

The recovery to date has had unusual features that have been hard to predict, and the path of the economy in coming years is also likely to be surprising in various ways. Many developments, such as the evolution of banking and fiscal problems in Europe, could cause economic outcomes to differ substantially, in one direction or the other, from those CBO has projected.

CBO's current economic forecast differs in some respects from its previous one, which was issued in August, as well as from the January *Blue Chip* consensus forecast (which is based on about 50 forecasts by private-sector economists) and the consensus of January forecasts by Federal Reserve Board members and Federal Reserve Bank presidents.[1] Compared with what it forecast in August, CBO is currently projecting weaker growth of real GDP in 2012 and 2013 but slightly stronger economic growth over the remainder of the decade, leaving real GDP 1.6 percent lower in 2021 than it was in the August forecast. The current forecast also includes a higher unemployment rate and lower interest rates through 2021. CBO's current projections for the growth of real GDP in 2012 and 2013 are also weaker than those

1. For CBO's previous forecast, see Congressional Budget Office, *The Budget and Economic Outlook: An Update* (August 2011).

by the *Blue Chip* consensus and the Federal Reserve—perhaps owing to different assumptions about federal fiscal policy—and CBO's projections for the unemployment rate are higher.

The Economic Outlook Through 2017

According to CBO's forecast, the pace of economic expansion will remain quite modest over the next two years because of the lingering effects of the financial crisis and the recession as well as the path of federal fiscal policy under current law (see Table 2-1).[2] The agency expects the growth of the economy to be a little faster in 2012 than it was last year but then to slow noticeably in 2013 given the restraint from fiscal policy embodied in current law. On average, over this year and next, CBO expects solid growth in business investment in equipment and software and an upturn in residential investment but weak growth in consumer spending and only small increases in net exports. CBO expects economic activity to pick up after 2013 but real GDP to remain below the economy's potential until 2018.

A large portion of the economic and human costs of the recession and slow recovery remains ahead. In late 2011, according to CBO's estimates, the economy was about halfway through the cumulative shortfall in output that will result from the recession and its aftermath. From the first quarter of the recession through the third quarter of 2011, the cumulative difference between GDP and estimated potential GDP amounted to $2.6 trillion; by the time the nation's output rises back to its potential level, the cumulative shortfall is expected to equal $5.7 trillion (see Figure 2-1). Not only are the costs associated with the output gap immense, but they are also borne unevenly. Those costs fall disproportionately on people who lose their jobs, who are displaced from their homes, or who own businesses that fail.

2. The growth of output and, particularly, the growth of employment have been much slower during this recovery than the average for recoveries from recessions since World War II. That weakness largely reflects the nature of the recession, whose immediate causes included a large decline in house prices and a financial crisis, events unlike anything this country has seen since the Great Depression. For further discussion of the slow recovery, see the statement of Douglas W. Elmendorf, Director, Congressional Budget Office, before the Senate Committee on the Budget, *Policies for Increasing Economic Growth and Employment in 2012 and 2013* (November 15, 2011), pp. 5–10.

Fiscal Policy

Federal fiscal policy specified in current law will reduce the growth of output slightly in 2012 and significantly in 2013 through a combination of lower federal spending and higher tax receipts (as discussed in detail in Chapter 1). Economic output would be greater in the next few years under an alternative fiscal scenario reflecting a combination of possible changes to current law, including changes that would maintain major polices that have been in place for a number of years, and it would be even higher with a further extension of the temporary payroll tax cut and emergency unemployment insurance benefits.

Current Law. CBO projects that, under current law, the budget deficit will drop from 8.7 percent of GDP in 2011 to 7.0 percent in 2012 and 3.7 percent in 2013. That reduction comes in part from the expiration of various tax and spending provisions that were extended by the 2010 tax act and the Temporary Payroll Tax Cut Continuation Act, from spending limits specified in the Budget Control Act, and from the winding down of the budgetary effects of the American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5). Some of those sources of fiscal restraint come from the expiration of provisions that have been in effect for a number of years and that are widely expected to be extended in whole or in part:

- The 2010 tax act temporarily extended numerous tax reductions that had been slated to expire at the end of 2010 and included new provisions that are scheduled to expire at the end of this year. For example, it continued through December 2012 various tax reductions enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001 and the Jobs and Growth Tax Relief Reconciliation Act of 2003, and it extended through December 2011 provisions limiting the reach of the alternative minimum tax (AMT).[3]
- The Temporary Payroll Tax Cut Continuation Act extended the current structure of physicians' fees under Medicare through February 29, 2012. Under current law, those physicians' fees will be reduced by

3. The AMT is intended to curtail the extent to which higher-income people can reduce their tax liability through the use of preferences in the tax code. If no further legislation limiting the reach of the AMT is enacted, CBO expects that the economic impact of higher taxes under the AMT will largely be delayed until 2013, when most of those additional taxes will be paid.

Table 2-1.

CBO's Economic Projections for Calendar Years 2012 to 2022

	Estimated,	Forecast		Projected Annual Average	
	2011	2012	2013	2014-2017	2018-2022
		Fourth Quarter to Fourth Quarter (Percentage change)			
Gross Domestic Product					
Real	1.6	2.0	1.1	4.1	2.5
Nominal	3.8	3.3	2.6	5.8	4.5
Inflation					
PCE price index	2.6	1.2	1.3	1.7	2.0
Core PCE price index[a]	1.8	1.2	1.4	1.6	2.0
Consumer price index[b]	3.3 [c]	1.4	1.5	1.9	2.3
Core consumer price index[a]	2.2 [c]	1.4	1.6	1.9	2.2
GDP price index	2.1	1.2	1.4	1.6	2.0
Employment Cost Index[d]	1.7	2.2	3.8	3.5	3.7
		Fourth-Quarter Level (Percent)			
Unemployment Rate	8.7 [c]	8.9	9.2	5.6 [e]	5.3 [f]
		Year to Year (Percentage change)			
Gross Domestic Product					
Real	1.7	2.2	1.0	4.0	2.5
Nominal	3.9	3.6	2.4	5.6	4.6
Inflation					
PCE price index	2.4	1.4	1.3	1.6	2.0
Core PCE price index[a]	1.4	1.4	1.3	1.6	2.0
Consumer price index[b]	3.1 [c]	1.7	1.5	1.9	2.3
Core consumer price index[a]	1.7 [c]	1.7	1.5	1.8	2.2
GDP price index	2.1	1.3	1.4	1.6	2.0
Employment Cost Index[d]	1.7	2.0	3.3	3.5	3.7
		Calendar Year Average			
Unemployment Rate (Percent)	9.0 [c]	8.8	9.1	7.0	5.4
Interest Rates (Percent)					
Three-month Treasury bills	0.1 [c]	0.1	0.1	2.0	3.7
Ten-year Treasury notes	2.8 [c]	2.3	2.5	3.8	5.0
Tax Bases (Percentage of GDP)					
Wages and salaries	44.0	44.0	43.5	44.2	45.2
Domestic economic profits	9.9	9.8	9.3	9.4	7.5

Source: Congressional Budget Office.

Notes: Economic projections for each year from 2012 to 2022 appear in Appendix E.

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

a. Excludes prices for food and energy.

b. The consumer price index for all urban consumers.

c. Actual value for 2011.

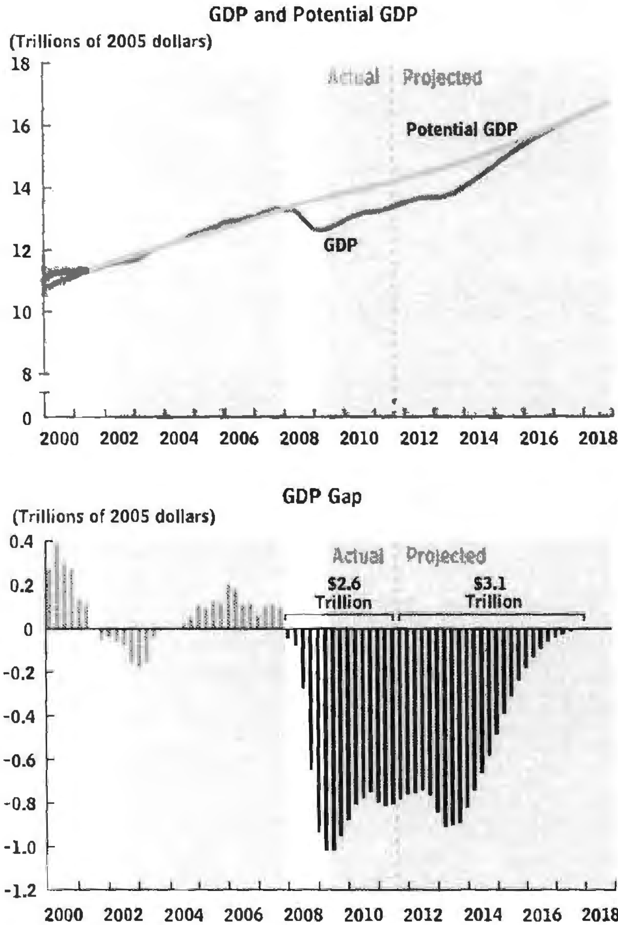
d. The employment cost index for wages and salaries of workers in private industries.

e. Value for 2017.

f. Value for 2022.

Figure 2-1.

Real Gross Domestic Product



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

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

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

The GDP gap is the difference between actual GDP and potential GDP.

Data are quarterly. Actual data are plotted through the third quarter of 2011; projections are plotted through the fourth quarter of 2018.

In the bottom panel, the dark shaded bars indicate the $5.7 trillion cumulative loss of output during the recession and subsequent slump. The bars show quarterly values at an annual rate.

27 percent in March 2012 and by additional amounts in subsequent years, CBO projects.

In contrast, restraint produced by the Budget Control Act will come from implementing newly established policies. That law put in place caps on discretionary funding for fiscal years 2012 through 2021, and it introduced automatic procedures to reduce cumulative noninterest spending in fiscal years 2013 to 2021 by nearly $1 trillion, CBO estimates.

Other sources of restraint reflect the expiration of policies that have been widely viewed as temporary:

- The Temporary Payroll Tax Cut Continuation Act extended (through February 29, 2012) the reduction of payroll taxes that was originally enacted in the 2010 tax act, and it continued emergency unemployment compensation. The expiration of those provisions will decrease the deficit by about $135 billion this calendar year compared with what it would be if the provisions remained in place through 2012, CBO estimates.
- The winding down of the budgetary effects of ARRA will continue to reduce fiscal support for economic activity. CBO estimates that ARRA's direct impact on the deficit will fall from $145 billion in fiscal year 2011 to about $50 billion in 2012 and $30 billion in 2013.

In contrast with those restraining factors of fiscal policy, the government's automatic fiscal stabilizers will provide about as much support for the economy this year as last year and will provide more in 2013 (see Appendix C). Those stabilizers are the automatic responses of revenues and outlays to cyclical movements in real GDP and unemployment. For example, when GDP falls relative to potential GDP during a recession, the reduction in income causes tax liabilities (and, therefore, revenues) to decrease automatically. In addition, some outlays—for such things as unemployment insurance and federal nutrition benefits—automatically increase. Those automatic responses provide fiscal support when the economy is below its potential, and they provide fiscal restraint when the economy is above its potential.[4]

4. CBO also projects that the economic effects of continued cutbacks in spending by state and local governments to balance their budgets will be moderated by the automatic stabilizing effects of lower taxes paid to those governments because of the slack in the economy and deflated property values.

Alternative Fiscal Scenario. Future fiscal policy is likely to differ from that embodied in current law in at least some respects. To illustrate how some changes to current law would affect the economy over the next decade, CBO examined an alternative path for fiscal policy, including certain policies that have previously been extended and are widely viewed as not being temporary. That alternative fiscal scenario incorporates the assumptions that all expiring tax provisions (other than the payroll tax reduction), including those that expired at the end of December 2011, are instead extended; that the AMT is indexed for inflation after 2011 (starting at the 2011 exemption amount); that Medicare's payment rates for physicians' services are held constant at their current level; and that the automatic enforcement procedures specified by the Budget Control Act do not take effect (but the original caps on discretionary appropriations in that legislation remain in effect). Under that scenario, budget deficits as a percentage of GDP would be larger by 0.2 percent in 2012, 2.5 percent in 2013, and 4.0 percent on average over the 2014–2022 period.

Those possible changes do not represent a prediction or recommendation about future policies; they are just one combination of many possible policy changes that might be adopted. Under that set of policies, budget deficits would be significantly larger than those in CBO's baseline budget projections, and federal debt held by the public would accumulate much more rapidly (see Chapter 1).

That alternative set of policies would lead to significantly different economic outcomes than those resulting from the policies embodied in current law. In particular, under those alternative assumptions, real GDP would be higher in the first few years of the projection period than in CBO's baseline economic forecast, primarily as a result of increased aggregate demand (see Table 2-2). CBO estimates that real GDP would be greater than projected under current law by between 0.2 percent and 0.8 percent in the fourth quarter of 2012 and by between 0.5 percent and 3.7 percent in the fourth quarter of 2013. Higher GDP would result in a lower unemployment rate and somewhat higher interest rates over the next few years.

The projected impact on GDP in later years reflects two opposing forces. The lower marginal tax rates under those alternative assumptions would increase people's incentives to work and save, but the larger budget deficits would reduce (or "crowd out") private investment in productive capital. In calculating the net effect of those two forces, CBO employed a range of estimates of the impact of marginal tax rates on labor supply and the impact of deficits on investment. By the end of 2022, real GDP would be between 2.1 percent smaller and 0.2 percent larger than it would be under current law, CBO estimates, depending on the particular assumptions employed.[5] In years beyond 2022, the impact on GDP would tend to become more negative, as the projected impact of the alternative fiscal scenario on deficits, and therefore investment, rose.

That alternative set of policies would also lead to different levels of gross national product (GNP). GNP excludes foreigners' earnings on investments in the domestic economy but includes U.S. residents' earnings overseas; thus, changes in GNP are a better measure of a policy's effects on U.S. residents' income than are changes in GDP.[6] CBO estimates that the effects of the alternative fiscal scenario on GNP would be similar to its effects on GDP in 2012 and 2013. Real GNP would be greater than projected under current law by between 0.2 percent and 0.7 percent in the fourth quarter of 2012 and by between 0.5 percent and 3.5 percent in the fourth quarter of 2013. By the end of 2022, real GNP would be between 3.7 percent and 1.0 percent smaller than it would be under current law.

Monetary Policy and Interest Rates

CBO projects that interest rates will remain very low for the next several years and then will rise to more-normal levels as output approaches its potential (see Figure 2-2). That forecast reflects CBO's view that the demand for credit will be restrained and the rate of inflation will be low while the economy has so many unused productive resources and that investors will continue to seek the relative safety provided by U.S. Treasury securities while banking and fiscal problems continue in Europe.

As a consequence, in CBO's forecast, the interest rate on three-month Treasury bills remains largely unchanged

5. The additional growth in federal debt under those alternative assumptions would have other damaging effects, including increasing the risk of a fiscal crisis; see Congressional Budget Office, *Federal Debt and the Risk of a Fiscal Crisis*, Issue Brief (July 2010).

6. For a more detailed discussion, see Congressional Budget Office, *CBO's 2011 Long-Term Budget Outlook* (June 2011), pp. 27–28.

Table 2-2.

Economic Effects of Policies in CBO's Baseline and Under an Alternative Fiscal Scenario

	2012	2013	2022
	Difference Between Fourth-Quarter Level and Baseline (Percent)		
Real GDP (Percentage difference from baseline)	0.2 to 0.8	0.5 to 3.7	-2.1 to 0.2
	Fourth Quarter to Fourth Quarter (Percent)		
Growth in Real GDP			
CBO's January 2012 baseline	2.0	1.1	2.4
Alternative fiscal scenario	2.3 to 2.8	1.4 to 4.1	2.1 to 2.3
Difference (Percentage points)	0.2 to 0.8	0.3 to 2.9	-0.2 to -0.1
	Fourth-Quarter Level (Percent)		
Unemployment Rate (Fourth-quarter level, in percent)			
CBO's January 2012 baseline	8.9	9.2	5.3
Alternative fiscal scenario	8.7 to 8.8	7.4 to 8.9	5.3
Difference (Percentage points)	-0.2 to -0.1	-1.8 to -0.3	0
Interest Rate on Three-Month Treasury Bills			
CBO's January 2012 baseline	0.1	0.2	3.8
Alternative fiscal scenario	0.1 to 0.1	0.2 to 0.2	4.0 to 4.5
Difference (Percentage points)	0 to 0	0 to 0	0.3 to 0.7
Interest Rate on Ten-Year Treasury Notes			
CBO's January 2012 baseline	2.4	2.6	5.0
Alternative fiscal scenario	2.4 to 2.7	2.6 to 2.9	5.3 to 5.7
Difference (Percentage points)	0 to 0.3	0 to 0.3	0.3 to 0.7
Memorandum:			
Real GNP (Percentage difference between fourth-quarter level and baseline)[a]	0.2 to 0.7	0.5 to 3.5	-3.7 to -1.0

Source: Congressional Budget Office.

Notes: The alternative fiscal scenario incorporates the assumptions that all expiring tax provisions (other than the payroll tax reduction), including those that expired at the end of December 2011, are instead extended; that the alternative minimum tax is indexed for inflation after 2011 (starting at the 2011 exemption amount); that Medicare's payment rates for physicians' services are held constant at their current level; and that the automatic enforcement procedures specified by the Budget Control Act of 2011 do not take effect.

Ranges of estimated effects are shown for the alternative fiscal scenario to reflect the uncertainty that exists about many of the economic relationships that are important in the models used to calculate those effects.

GDP = gross domestic product; GNP = gross national product.

a. Changes in GNP exclude foreigners' earnings on investments in the domestic economy but include U.S. residents' earnings overseas and are therefore a better measure of the effects on U.S. residents' income than are changes in gross domestic product.

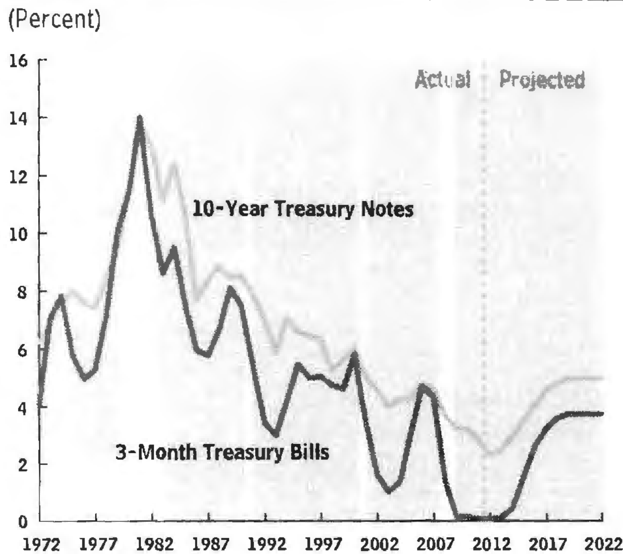
through 2013 from its average value in 2011. That forecast is consistent with the Federal Reserve's announced intention—at the time the forecast was completed in early December—to keep its target for the federal funds rate (an interest rate on overnight lending among banks that the Federal Reserve adjusts to conduct monetary policy) exceptionally low at least through mid-2013.[7] It is also consistent with the projected path of short-term rates implied by financial markets when CBO completed its forecast.

7. On January 25, 2012, the Federal Reserve announced that it expects economic conditions to warrant exceptionally low levels for the federal funds rate at least through late 2014; see www.federalreserve.gov/newsevents/press/monetary/20120125a.htm.

Figure 2-2.

Interest Rates

(Percent)



Sources: Congressional Budget Office; Federal Reserve.

Note: Data are annual. Actual data are plotted through 2011; projections are plotted through 2022.

Similarly, CBO expects the interest rate on 10-year Treasury notes to remain very low for the next two years and then to rise through 2018. The rates that CBO projects for 2012 and 2013 are lower than the average rate in 2011 because the rate fell sharply over the course of the year amid growing unease about economic and financial conditions in Europe and the potential for weaker economic activity in the United States. In CBO's forecast, the rate remains low for the next two years owing to the fiscal restraint that will occur under current law and a modest pace of economic expansion. As the pace of expansion picks up, CBO expects the rate for 10-year Treasury notes to rise steadily. That path for the note rate over the next few years is generally consistent with the path implied by prices in financial markets in early December.

The Household Sector

CBO's forecast for the household sector in the next few years includes weak growth in consumer spending and an upturn in residential investment—reflecting moderate growth in disposable personal income, slowly improving household net worth and consumer confidence, and more favorable conditions for borrowing by consumers. In particular, CBO expects consumer spending to grow by 2 percent in 2012 but to slow considerably in the first half of 2013—as tax cuts expire and the automatic spending cuts specified by the Budget Control Act take effect under current law—before picking up noticeably thereafter. CBO also expects spending on residential construction to accelerate in both 2012 and 2013. However, it will take several years for the economy to absorb the large existing stock of vacant homes and bring the construction of new housing units back to levels consistent with population growth and the demand for replacement units.

Income, Net Worth, and Confidence. According to CBO's projections, real disposable (after-tax) personal income will grow by more than 3 percent this year (as measured by the change from the fourth quarter of last year), after falling slightly in 2011—reflecting a lower rate of inflation in consumer prices and faster growth in wages and salaries. In 2013, real disposable income will decline as a result of the fiscal restraint under current law but will rebound in 2014.

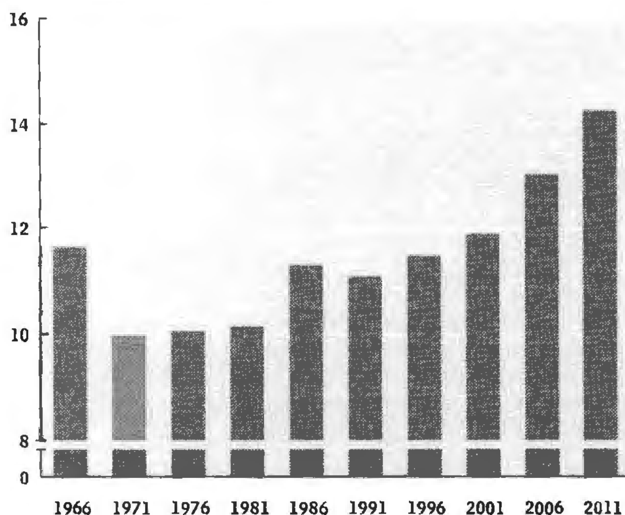
Improvement in households' net worth (assets minus liabilities) relative to disposable personal income has been modest in the past two years and is likely to remain so over the next two years. CBO projects that the value of households' assets will grow slowly, with small gains in house prices and in the value of corporate shares. On the liability side, the total amount of home mortgages has fallen by $730 billion since its peak in 2008, from $10.6 trillion to $9.9 trillion. The value of households' liabilities is likely to continue to decline slightly for some time, as mortgage defaults continue at still high, though declining, rates, and as households pay down existing debt and avoid new debt, a process commonly known as deleveraging. Borrowing by households also will be limited by standards and terms for borrowing that are tighter than they were before the financial crisis, as discussed below.

The economic impact of the decline in the total amount of home mortgages is uncertain. Defaults generally reduce housing-related costs for the households involved, which may boost their spending on other goods and services, but that increase in spending is offset to some degree by a decline in spending by the investors holding those mortgages. In addition, to the extent that the decline in mortgage balances reflects, at least in part, an ongoing desire among households to reduce their liabilities—independent of the value of their assets—saving would continue to be boosted and spending dampened.

Figure 2-3.

Vacant Housing Units

(Percentage of total units)



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

Notes: Housing units comprise occupied units and vacant units, including units intended for year-round use and seasonal units.

Data are annual. The value for 2011 equals the average for the first three quarters of that year.

Consumer confidence will improve further, CBO expects, as the economy continues to expand over the next few years. Confidence often reflects movements in such factors as employment and households' net worth, but it can also exert its own influence on consumer spending and households' willingness to incur debt—and many analysts believe the weak level of confidence has slowed the economic recovery. Consumer confidence fell sharply during much of last year, but rebounded substantially near the year's end. Its continued improvement will probably support consumer spending going forward.

Credit Conditions. CBO expects that lenders will continue to ease their standards and terms on loans to consumers over the next few years. According to the Federal Reserve's survey of senior loan officers at commercial banks, banks eased their lending standards and loan terms for consumers in 2011.[8] Nevertheless, banks are likely to remain more cautious in their lending than they were before the financial crisis—in part because the losses they are experiencing on mortgage and consumer loans made in earlier years are still exceptionally high.

The market for home mortgages remains impaired, with the great majority of new loans provided with support from the federal government, but CBO expects the private market to improve over the next few years.[9] Loans carrying government guarantees accounted for 88 percent of the mortgages issued in the first nine months of 2011, down slightly from 94 percent in 2009. Interest rates on such mortgages with 30-year maturities were near historic lows of around 4 percent in the second half of 2011. CBO expects those rates to remain unusually low for the next several years. Still, lending standards remain strict compared with those during the housing boom, and borrowers with credit histories that are less than stellar or who owe more than their homes are worth continue to have trouble obtaining new credit or refinancing.

Moreover, private securitization—the process used by banks to convert pools of loans that do not carry a federal guarantee into marketable mortgage-backed securities—which flourished before the financial crisis, has yet to revive. CBO expects banks to slowly begin to issue increasing numbers of those mortgage-backed securities as the economy continues to expand.

The Housing Market. According to CBO's projections, construction of new homes will remain restrained in the next few years, in part because an unusually large share of housing units remains vacant (see Figure 2-3). Even in normal market conditions, the number of vacant homes is substantial, but currently the number far exceeds what would be expected under those conditions. Indeed, CBO estimates that there were roughly 2.1 million excess vacant housing units, or 1.6 percent of the total stock, in the third quarter of 2011. In the agency's projections, excess vacant units are gradually eliminated over the next two years, largely because of a rebound in household formation combined with subdued rates of new construction. That boost in household formation, which fell markedly during the recession and has remained low, is expected to occur as economic activity strengthens, the unemployment rate falls, credit conditions for

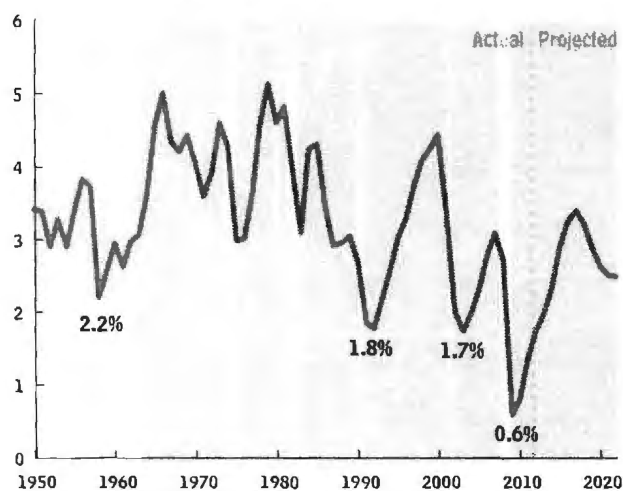
8. Board of Governors of the Federal Reserve System, *The October 2011 Senior Loan Officer Opinion Survey on Bank Lending Practices* (November 7, 2011), www.federalreserve.gov/boarddocs/snLoanSurvey/201111/default.htm.

9. The federal government supports mortgage financing by guaranteeing loans through Fannie Mae, Freddie Mac, and agencies such as the Federal Housing Administration for borrowers who meet those organizations' qualifications.

Figure 2-4.

Net Business Fixed Investment

(Percentage of gross domestic product)



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

Notes: Business fixed investment consists of businesses' spending on nonresidential structures, equipment, and software. It is shown here net of depreciation.

Data are annual. Actual data are plotted through 2010, and the value for 2011 is CBO's estimate; projections are plotted through 2022.

mortgages improve, and confidence returns.[10] Gradually, as excess vacant units are absorbed, housing construction will recover.

House prices are nearing the end of their decline, in CBO's estimation, but a sustained increase will probably not begin until the second half of this year, when the agency expects there to be fewer foreclosures and distressed sales. Nevertheless, the growth of house prices will be dampened by the continuing excess of vacant units. As measured by the Federal Housing Finance Agency's price index for home purchases, house prices will grow on average by 1.1 percent this year and next, CBO projects, but will not be back to their prerecession peak until 2018.

10. The decrease in household formation has dampened not only homebuilding but also consumer spending, because the formation of a new household is usually accompanied by spending on furniture, appliances, and other goods and services.

The Business Sector

CBO projects that real business investment will grow by an average of about 6 percent per year (as measured from fourth quarter to fourth quarter) over the next two years and at an even faster pace for a few years thereafter. Although business investment makes up only about one-tenth of GDP, it will continue to account for a large share of the growth of real GDP in the next few years, as it did in 2010 and 2011. Such growth will be concentrated in fixed investment, meaning investment in structures, equipment, and software; in contrast, investment in inventories (the other component of business investment), which provided the most support for the growth of output early in the recovery, will probably provide less support this year and next year now that firms have rebuilt their stocks to more-normal levels.

A key reason why fixed investment by businesses is projected to grow substantially, especially after 2013, is that net fixed investment (gross fixed investment minus depreciation) currently remains low relative to GDP (see Figure 2-4). During the recession, net fixed investment by businesses fell sharply as a share of GDP when the costs of financing investment rose and the demand for goods and services fell. Businesses had little need to expand their productive capacity when so much of their existing capacity was idle and commercial real estate was vacant. By 2009, net fixed investment as a share of GDP was at its lowest level in more than half a century. Since then, that share has risen as businesses have responded to some recovery in the demand for goods and services, and CBO expects that trend to continue over the next two years. When the growth of economic activity picks up after 2013, investment will continue to grow faster than GDP as businesses make up for the investment they postponed during the recession.

Given the improvements in demand for goods and services and the cost of capital, business investment might have been expected to grow even more rapidly in 2011 than it did. It may be that many firms have been unusually uncertain about the prospects for demand for their products, their access to credit, and government policy. As one sign of that uncertainty, corporations have built up large holdings of cash and bank deposits. But, CBO projects, as economic activity continues to improve and those uncertainties are resolved, businesses will feel more confident about the future and increase their investment in structures, equipment, and software.

Figure 2-5.

Economic Growth in the United States and Among Its Leading Trading Partners

(Percentage change from same quarter of previous year)

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

Notes: Growth among the leading trading partners is calculated using a weighted average of the rates of growth of their gross domestic products. The weights are their shares of U.S. exports, and the trading partners are Australia, Brazil, Canada, China, the euro zone, Hong Kong, Japan, Korea, Mexico, Singapore, Switzerland, Taiwan, and the United Kingdom.

Data are quarterly. The last actual data are for the third quarter of 2011 for the United States but vary for other countries; projections are plotted through the fourth quarter of 2022.

Improved conditions in lending markets will provide further support for business investment. According to the Federal Reserve's survey of senior loan officers, banks continued to ease their lending standards and loan terms for medium-sized and large firms in 2011.[11] Even if those standards and terms remain tighter for some time than they were before the recession, borrowing by larger firms should not be hindered because they generally have direct access to financial markets, where interest rates on corporate securities have fallen to levels last seen almost 50 years ago.

Although banks' lending to small businesses has increased since mid-2009, it is still far below its prerecession level. The extent to which that situation results from constraints on the supply of loans versus lower demand for loans is hard to quantify. On the supply side, bank loans have recently become easier for owners of small businesses to obtain, but they remain less available than before the financial crisis because of strains on banks' capital and a tightening of underwriting criteria that have been only partly reversed. On the demand side, according to responses from a recent survey, owners of small businesses are limiting their borrowing because of poor sales rather than constraints on their ability to borrow.[12]

International Trade

CBO expects that an increase in real net exports will make a small contribution to the growth of real GDP this year and next, on average. A primary reason for that projection is that average growth among the nation's leading trading partners will probably be stronger than that in the United States over the period, driven largely by growth in emerging economies (see Figure 2-5). Another reason is that, on average over the next two years, CBO expects the exchange value of the dollar will remain below what it averaged in 2009 and 2010, despite its recent increase partly in response to the banking and fiscal problems in Europe.

CBO expects a shallow recession in the euro zone (comprising the 17 members of the European Union that use the euro as their currency) to slow the average growth among the advanced economies. A consensus of private forecasters expects the average growth in the European Union to slow from an already weak 1.6 percent in 2011 to zero this year, mainly reflecting a sharp downgrade of the forecasters' projections of growth in the euro zone.[13] Economic growth in the United Kingdom, France, and Germany is expected to be below 1 percent, while the countries most affected by Europe's banking and fiscal problems—Greece, Italy, Portugal, and Spain—are expected to be in recession. The sharp downgrade in the outlook for the euro zone reflects at least

11. Board of Governors of the Federal Reserve System, *The October 2011 Senior Loan Officer Opinion Survey.*

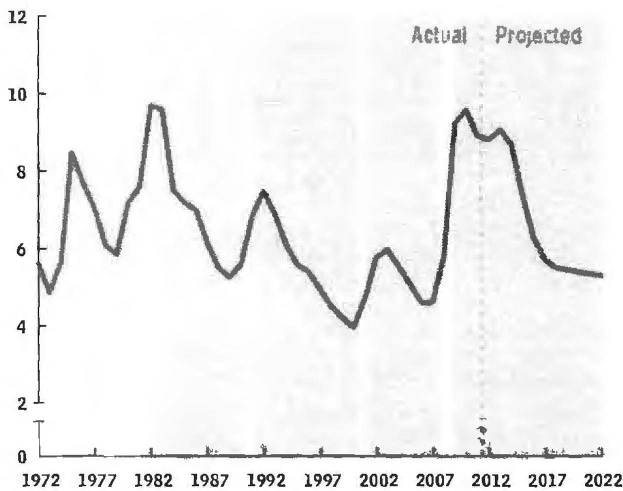
12. Participants in the survey ranked credit close to the bottom of a 10-item list. See William C. Dunkelberg and Holly Wade, *NFIB Small Business Economic Trends* (National Federation of Independent Business Research Foundation, January 2012), www.nfib.com/Portals/0/PDF/sbet/sbet201201.pdf.

13. Consensus Economics, *Consensus Forecasts* (January 2012).

Figure 2-6.

Unemployment Rate

(Percent)



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

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

Data are annual. Actual data are plotted through 2011; projections are plotted through 2022.

three factors: investors' concerns about mounting government debt, government austerity programs aimed at slowing the growth of that debt, and a sharp curtailing of lending by European banks to reduce their exposure to risk.

The outlook is brighter for emerging economies, particularly those in Asia. A consensus forecast has the economies of that area expanding at a robust rate of 6.7 percent in 2012, just a bit slower than the 7.2 percent growth during 2011.[14] Continued growth in spending by the domestic sectors of those economies and in trade among them is expected to offset much of the reduction in growth from weaker exports to the advanced economies.

CBO projects that the exchange value of the dollar (weighted to account for trading partners' shares of U.S. trade) will decline at a moderate pace, on average, over the next 10 years. That value fell for most of the past decade, as international investors became less willing to add to their increasingly large holdings of U.S. dollar assets. However, the value of the dollar turned sharply upward during the global financial crisis, when international investors purchased large amounts of U.S. Treasury securities to reduce their exposure to volatile or steadily falling prices of other assets. The value of the dollar resumed its decline, as the worst of the financial crisis passed, but has strengthened again since last July, as concerns have escalated about the banking and fiscal problems in Europe. In CBO's forecast, the dollar returns to its downward trend when the European problems fade in the next few years.

The Labor Market

Although conditions in the labor market have improved somewhat in recent months, considerable slack remains, largely as a consequence of the continued weakness in the demand for goods and services. In CBO's forecast, the unemployment rate in 2012 and 2013 remains largely unchanged from its value last year.[15] However, in the forecast, as growth picks up after 2013, the unemployment rate falls to 6.9 percent by the end of 2015 and 5.6 percent by the end of 2017 (see Figure 2-6). According to the agency's projections, the growth of wages and salaries will remain modest through 2017, and—owing largely to demographic factors—the rate of participation in the labor force will fall by about 1 percentage point by 2017.[16]

Cyclical and Structural Unemployment. In CBO's view, most of the 3.5 percentage-point rise in the unemployment rate since the onset of the recession can be directly attributed to a cyclical decline in the demand for goods and services, and hence for workers.[17] However, CBO estimates that part of that rise—roughly 1 percentage point—reflects structural factors associated with the recession but not directly linked to the current level of aggregate demand. Those structural factors include a mismatch between the requirements of existing job openings

14. Consensus Economics, *Asia Pacific Consensus Forecasts* (January 2012).

15. Other measures also show a great deal of weakness in the labor market; see the statement of Douglas W. Elmendorf, *Policies for Increasing Economic Growth and Employment*, pp. 12–13.

16. The rate of participation in the labor force is the share of the civilian noninstitutionalized population age 16 or older that is either working or actively seeking work.

17. The unemployment rate was 8.5 percent in December 2011, up from 5.0 percent at the end of the previous economic expansion in December 2007. The recession pushed the unemployment rate to a high of 10.0 percent in October 2009.

and the characteristics of job seekers, including their skills and locations; the lasting effect of long-term unemployment on individual workers' ability to find and hold a job; and the effect of extended unemployment insurance benefits on incentives to continue searching for work (as opposed to either accepting a job offer or dropping out of the labor force).[18] Although quantifying the relative importance of these factors is quite difficult, CBO estimates that in late 2011 the rate of unemployment attributable to sources other than the current level of demand for goods and services—the so-called natural rate of unemployment—was about 6 percent, up from about 5 percent before the recession. In CBO's projections, most of the effect of those structural factors on the unemployment rate fades by 2022.

Roughly half of the 1 percentage-point rise in unemployment that CBO attributes to structural factors reflects mismatches between the skills and locations of available unemployed workers and the needs of employers, CBO estimates. One important source of such mismatches is the decline in demand for construction workers that followed the collapse of the housing market. The effect of mismatches on the unemployment rate is projected to diminish gradually over the next five years—as people acquire new skills and, in some cases, relocate to faster-growing regions and as some older workers who lost their jobs during the recession leave the labor force.

About a quarter of the 1 percentage-point increase due to structural factors can be attributed to the effects that extended unemployment insurance benefits have had on the supply of labor. Such benefits induced some unemployed people to search for work less intensively or to reject unsatisfactory job offers. The benefits also encouraged some unemployed people who would otherwise have stopped looking for a job and dropped out of the labor force to stay in it to remain eligible for benefits.[19] If extended unemployment insurance benefits expire on February 29, as scheduled under current law, those effects will dissipate by the summer of 2012.

The remaining roughly one-quarter of a percentage point reflects the difficulties that the long-term unemployed (people who have gone without a job for at least six months) face in finding work. Such workers may encounter difficulties resulting from the stigma attached to long-term unemployment—that is, employers' perception that the long-term unemployed would be low-quality workers—and from the erosion of their skills while they are unemployed. As a result, some workers who have been unemployed for a long time, especially those displaced from a long-tenured job, are likely to have trouble landing another stable job. Consequently, they could remain unemployed for an extended period; moreover, even after they are reemployed, many will remain more vulnerable than before to additional future spells of unemployment.[20] As a factor boosting unemployment, such difficulties for the long-term unemployed will, in CBO's view, increase in importance over the next two years (as some people who are currently out of work stay out of work longer) and then persist for several more years, before gradually diminishing but not completely disappearing by 2022.

Participation in the Labor Force. The unemployment rate would be even higher than it is now had participation in the labor force not declined as much as it has over the past few years. The rate of participation in the labor force fell from 66 percent in 2007 to an average of 64 percent in the second half of 2011, an unusually large decline over so short a time. About a third of that decline reflects factors other than the downturn, such as the aging of the baby-boom generation. But even with those factors removed, the estimated decline in that rate during the past four years is larger than has been typical of past downturns, even after accounting for the greater severity of this downturn. Had that portion of the decline in the labor force participation rate since 2007 that is attributable to neither the aging of the baby boomers nor the downturn in the business cycle (on the basis of the experience in previous downturns) not occurred, the unemployment rate in the fourth quarter of 2011 would

18. For further details, see the discussion of structural unemployment in Congressional Budget Office, *The Budget and Economic Outlook: An Update* (August 2011), pp. 46–47.

19. At the same time, by increasing recipients' spending and thus the demand for goods and services in the economy as a whole, those benefits on net have boosted employment, in CBO's estimation. For a fuller discussion of the effects that extended unemployment insurance benefits have had on the labor market, see the statement of Douglas W. Elmendorf, *Policies for Increasing Economic Growth and Employment in 2012 and 2013*, pp. 26–27.

20. For a broader discussion of the costs of job loss, see Congressional Budget Office, *Losing a Job During a Recession*, Issue Brief (April 2010).

have been about 1¼ percentage points higher than the actual rate of 8.7 percent.[21]

By CBO's estimates, the rate of labor force participation will fall to slightly above 63 percent by 2017. The dampening effects of the increase in tax rates in 2013 scheduled under current law and additional retirements by baby boomers are projected to more than offset the strengthening effects of growing demand for labor as the economy recovers further.[22]

Labor Compensation. The weak demand for labor has restrained and will probably continue to restrain the growth of labor compensation over the next few years. Real income from wages and salaries in late 2011 remained more than 4 percent below its prerecession level and was little changed from early in the year. That pattern largely reflects the sharp decline and subdued recovery in employment, along with stagnant real average hourly wages over the past several years. (The modest growth in real compensation during 2011 also reflects a higher rate of inflation in consumer prices.) In CBO's forecast, wage and salary income grows in real terms at an average rate of 3.6 percent a year between 2012 and 2017, reflecting the projected growth of employment (which picks up considerably after 2013) and an average increase of about 1¾ percent per year in real hourly wages.

Inflation

CBO projects that prices will rise at a subdued pace over the next few years. The rate of consumer price inflation slowed significantly in the second half of 2011, after temporary factors boosted it earlier in the year. According to the agency's projections, the price index for personal consumption expenditures (PCE) will increase by 1.2 percent in 2012 (as measured by the change from the fourth quarter of the previous year) and by 1.3 percent in 2013 (see Figure 2-7). The core PCE price index—which excludes prices for food and energy—is projected to increase by a similar amount because prices in futures markets for crude oil and agricultural commodities suggest that inflation in food and energy prices will be modest. The consumer price index for all urban consumers (CPI-U) and its core version are expected to increase a little more rapidly than their PCE counterparts (reflecting both different methods used to calculate that index and a larger role for housing rents in that index).

Underlying CBO's projections for inflation is the large amount of excess productive capacity (underused labor and capital resources and vacant housing) that exists in the economy. In particular, the high rate of unemployment has constrained workers' ability to obtain increases in their wages and salaries, an important cost of business. In the third quarter of 2011, unit labor costs (wages and benefits per unit of output) in the nonfarm business sector were about 2 percent lower than in the same quarter three years earlier. With the unemployment rate anticipated to remain high, CBO expects wage growth to remain subdued for the next several years, thus restraining pressure on firms to raise prices. In addition, the manufacturing sector was using about 75 percent of its capacity in late 2011, up from a low of 64 percent in mid-2009 but still below the prerecession figure of about 79 percent. Such a low rate of capacity utilization indicates that production shortages are unlikely to emerge in the near term and push prices up.

CBO expects the inflation rate to slowly rise toward 2 percent, as measured by the PCE price index, after 2013. That projection is consistent with the Federal Reserve's longer-run goal for inflation in that index of 2 percent.

Some analysts have expressed concern that the large amount of excess bank reserves created by the Federal Reserve's extraordinary purchases of assets during the financial crisis will push inflation above 2 percent. Because those reserves are in excess of the amount of reserves that banks need to hold for regulatory and other reasons, banks can lend out those reserves when loan demand picks up. The main worry appears to be that the Federal Reserve may be too slow to draw down those reserves, leading to excessive borrowing and spending by consumers and firms. In particular, some analysts fear that the central bank may be unwilling to risk retarding economic growth and destabilizing financial markets by selling its assets quickly. However, even if the Federal Reserve is reluctant to sell assets when economic growth picks up, it has several other policy tools for restraining borrowing, such as raising the federal funds rate and raising the interest rate paid on excess reserves.

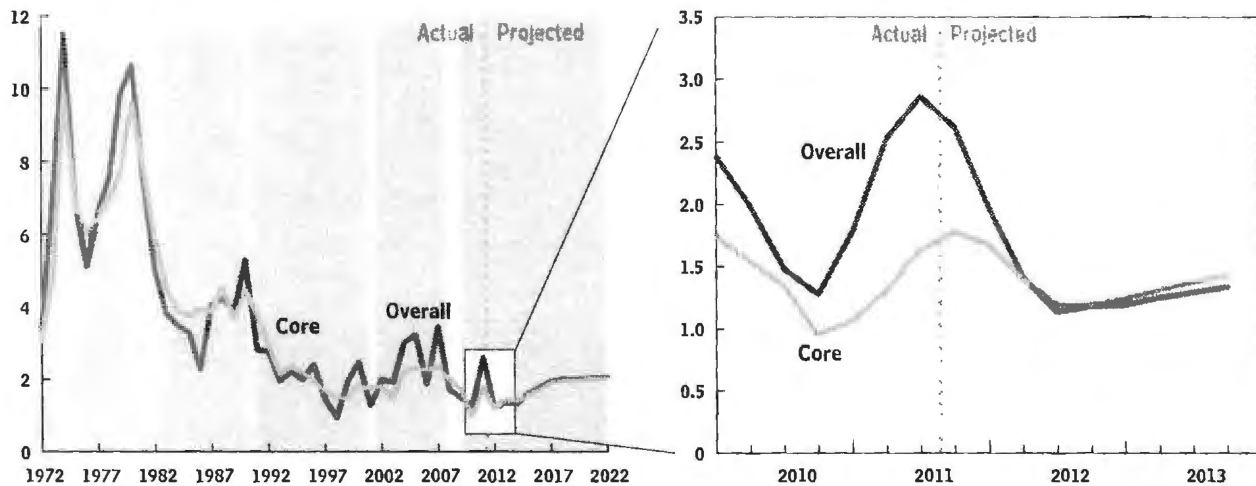
21. That calculation assumes that the unexplained shortfall in labor force participation had no effect on total employment.

22. See Congressional Budget Office, *CBO's Labor Force Projections Through 2021*, Background Paper (March 2011).

Figure 2-7.

Inflation

(Percentage change in prices from previous year)



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

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

The left-hand panel shows annual data, as measured by the change from the fourth quarter of the previous year. Actual data are plotted through 2010, and the value for 2011 is CBO's estimate; projections are plotted through 2022.

The right-hand panel shows quarterly data, as measured by the change from the same quarter of the previous year. Actual data are plotted through the third quarter of 2011; projections are plotted through the fourth quarter of 2013.

Some Uncertainties in the Economic Outlook Through 2017

Economic forecasts are always subject to a considerable degree of uncertainty, but the uncertainty surrounding CBO's current forecast through 2017 is especially great because the present business cycle has been unusual in a variety of ways. Following the agency's usual practice, CBO constructed its current forecast to lie in the middle of the distribution of possible future outcomes for the economy, assuming the fiscal policy embodied in current law. Actual outcomes will undoubtedly differ from CBO's forecast in at least some respects.

On the upside, the economy could grow considerably faster than CBO has forecast if the forces that have restrained the recovery fade more rapidly than the agency anticipates. A faster pace of household formation, combined with a rapid easing of borrowing constraints in mortgage markets, for example, could support stronger residential investment, accelerating the recovery in the housing market and a return to rising house prices. Households' increased wealth could then buttress consumer spending. Those conditions could, in turn, speed up the growth of employment and boost businesses' spending on structures, equipment, and software, potentially leading to a self-reinforcing cycle of increased spending, hiring, and income.

Another possible catalyst for increased spending and economic growth would be unexpectedly rapid improvement in businesses' confidence. That situation could quicken the pace of business investment and hiring, especially because many corporations have large cash reserves on hand. Those conditions could then increase wages and consumer spending, encouraging businesses to undertake further spending and hiring.

However, outcomes that are considerably worse than CBO's forecast are also possible. A significant worsening of the banking and fiscal problems in Europe, for example, could lead to further turmoil in international financial markets that could spill over to U.S. financial markets—reducing wealth, severely constraining the

availability of credit, reducing hiring, and causing higher unemployment. Those conditions could trigger a self-reinforcing downward spiral, weakening the growth of households' income and diminishing consumers' and businesses' confidence and, in turn, lessening spending by households and businesses and therefore the need for workers.

Other events could also lead to outcomes worse than CBO projects. A surge in oil prices or drop in households' wealth could decrease the demand for goods and services. Those conditions could discourage businesses from investing and hiring, possibly triggering another downward spiral of lower spending, confidence, and employment.

The Economic Outlook for 2018 to 2022

The outlook for real GDP after 2017, when GDP is projected to equal its potential level, is based not on estimates of cyclical movements in the economy but on projections of trends in the factors that underlie potential output, namely, the size of the labor force, the stock of productive capital, and the productivity of those factors. Those projections take into account the predicted effects that the slow economic recovery will have on investment in productive capital and that current-law fiscal policy will have on the labor supply and capital investment. They also incorporate the expectation that the Federal Reserve will aim to keep inflation low and stable.

In CBO's projections, the growth of real GDP averages 2.5 percent a year between 2018 and 2022, and the unemployment rate averages 5.4 percent—a level consistent with CBO's estimate of the natural rate of unemployment, which declines from 5.5 percent to 5.3 percent during that period. Both inflation and core inflation as measured by the PCE price index average 2.0 percent over that five-year period; inflation as measured by the CPI-U is slightly higher. The interest rates on 3-month Treasury bills and 10-year Treasury notes average 3.7 percent and 5.0 percent, respectively, during those years. By the end of the projection period, labor income as a share of gross domestic income (GDI, or the total income earned in the production of gross domestic product in the United States) approaches, but remains below, its long-run historical average. In addition, domestic economic profits (corporations' domestic profits adjusted to remove distortions in depreciation allowances caused by tax rules and to exclude the effect of inflation on the value of inventories) as a share of GDI decline to a level below their historical average.

Potential Output

Potential output will grow at an average annual rate of 2.3 percent during the 2012–2022 period as a whole and by 2.5 percent for years between 2018 and 2022, CBO projects (see Table 2-3). Those rates are substantially lower than the average rate since 1950—3.3 percent—largely because, according to the agency's projections, the growth of the potential labor force (the labor force adjusted for variations caused by the business cycle) will continue to decline during the next 10 years. In addition, CBO expects the growth of capital services (the flow of services available for production from the stock of capital goods) and the growth of productivity to be slightly slower over the next decade than they have been, on average, since 1950.

In CBO's projections, growth of the potential labor force averages 0.7 percent annually during the 2012–2022 period, about half of the average growth rate since 1950 and a little below the average rate since 2002. The tempered pace in the coming decade stems from a projected further decline in participation in the labor force resulting primarily from the aging of the baby-boom generation. Policy changes incorporated in current law are also expected to slow the growth of the labor supply in the next 10 years. Those changes—which include the expiration of various tax cuts in 2012 and 2013—will raise marginal tax rates on personal income above those of the past decade and thus will modestly reduce people's incentive to work. In addition, the major health care legislation enacted in 2010 is anticipated to reduce the supply of labor slightly in the latter part of the decade.[23]

Capital services are projected to grow at an average rate of 3.6 percent a year in the 2012–2022 period—0.3 percentage points lower than the average rate since 1950 but more than a percentage point higher than the average rate from 2002 to 2011. Two major factors account for the lower projected growth in capital services relative to the long-term average. First, projected increases in federal debt are likely to displace some private capital investment. Second, the slower-than-average growth rate

23. For details about the effects of that legislation on the labor market, see Congressional Budget Office, *The Budget and Economic Outlook: An Update* (August 2010), Box 2-1, pp. 48–49.

Table 2-3.

Key Assumptions in CBO's Projection of Potential GDP

(By calendar year, in percent)

	Average Annual Growth						Projected Average Annual Growth		
	1950-1973	1974-1981	1982-1990	1991-2001	2002-2011	Total, 1950-2011	2012-2017	2018-2022	Total, 2012-2022
Overall Economy									
Potential GDP	3.9	3.2	3.1	3.2	2.3	3.3	2.2	2.5	2.3
Potential Labor Force	1.6	2.5	1.6	1.2	0.8	1.5	0.7	0.7	0.7
Potential Labor Productivity[a]	2.3	0.7	1.5	1.9	1.4	1.8	1.5	1.8	1.7
Nonfarm Business Sector									
Potential GDP	4.0	3.5	3.2	3.5	2.5	3.5	2.7	2.9	2.8
Potential Hours Worked	1.4	2.3	1.6	1.2	0.5	1.3	0.6	0.7	0.7
Capital Services	3.8	4.3	4.1	4.7	2.4	3.9	3.4	3.8	3.6
Potential TFP	1.9	0.7	0.8	1.3	1.4	1.4	1.2	1.3	1.2
Potential TFP excluding adjustments	1.9	0.7	0.8	1.3	1.3	1.4	1.3	1.3	1.3
Total adjustments (Percentage points)	0	0	0	*	0.2	*	-0.1	0	**
Effects of the recession[b]	0	0	0	0	**	**	-0.1	0	**
Temporary adjustment[c]	0	0	0	*	0.2	*	0	0	0
Contributions to the Growth of Potential GDP (Percentage points)									
Potential Hours Worked	0.9	1.6	1.2	0.8	0.3	0.9	0.4	0.5	0.5
Capital Input	1.2	1.3	1.2	1.4	0.7	1.2	1.0	1.1	1.1
Potential TFP	1.9	0.7	0.8	1.3	1.4	1.4	1.2	1.3	1.2
Total Contributions	4.0	3.5	3.2	3.5	2.5	3.5	2.7	2.9	2.8
Potential Labor Productivity[d]	2.6	1.3	1.6	2.3	2.0	2.2	2.1	2.2	2.1

Source: Congressional Budget Office.

Note: GDP = gross domestic product; TFP = total factor productivity; * = between zero and 0.05 percent; ** = between -0.05 percent and zero.

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

b. An adjustment to reflect the effects of the recession on potential GDP beyond its impact on capital accumulation and labor supply.

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

d. The estimated trend in the ratio of potential GDP to potential hours worked in the nonfarm business sector.

projected for the potential labor force means that smaller increases in the stock of structures, equipment, and software will be needed to equip the workforce with the same amount of capital per worker, resulting in less business investment than would otherwise occur. However, growth in capital services should pick up from its average pace of the past decade as businesses make up for some of the investment they postponed during the recession.

In CBO's projections, the growth rate of potential total factor productivity (average real output per unit of combined labor and capital services) in the nonfarm business sector averages 1.2 percent per year from 2012 through 2022, 0.2 percentage points lower than both the average since 1950 and the average since 2002. The projected growth rate is lower than those averages in part because CBO views the unusually rapid growth of total factor

productivity in the early 2000s as a temporary phenomenon.

Recessions in the United States typically affect potential output only by reducing capital investment. However, studies have found that recoveries from recessions that stemmed from financial crises tend to be significantly more protracted than other recoveries.[24] On the basis of such studies and other analysis, CBO has incorporated some persistent effects of the recession into its projections of potential labor supply and potential total factor productivity. Taking into account all of the effects of the financial crisis and the recession, CBO projects that potential output will be about 1¼ percent lower in 2022 than it would have been without them (see Box 2-1 on page 44).

Income

Economic outcomes and federal tax revenues depend not only on the amount of total income in the economy but also on how it is divided among its constituent parts: wages and salaries, domestic economic profits, proprietors' income, interest and dividend income, and other categories. CBO forecasts various categories of income by projecting their shares of total gross domestic income. (In principle, GDI equals GDP, but in practice they differ because of difficulties in measuring both aggregates.[25])

Labor income has fallen sharply as a share of GDI since 2009. Much of the weakness of labor income has derived from the fact that wages and salaries have grown more slowly than the other components of GDI in the past two years.[26] In CBO's projections, labor income grows faster than GDI over the next decade, bringing its share from about 59 percent of GDI in late 2011 to about 62 percent by 2022, approaching its historical average since 1980 (see Figure 2-8).[27]

Domestic economic profits have rebounded sharply during the recovery from the recession. As a percentage of GDI, they fell from a 40-year high of 10.2 percent in the second half of 2006 to a low of 4.4 percent in late 2008. By mid-2011, they had nearly recovered to their prerecession peak. Both the decline and subsequent rebound of corporate profits were particularly dramatic in the financial sector, but they were also apparent in the nonfinancial sector. In CBO's projections, profits' share of GDI declines modestly between now and 2022 because of higher interest rates (after 2013) and the rise in labor income's share of GDI.

Comparison with Other Economic Projections

Compared with its previous forecast, which was published in August, CBO's current one projects growth of real output that is slower in the next few years but slightly faster for the rest of the coming decade (see Table 2-4). The changes since the previous forecast reflect several factors, including downward revisions to historical data on GDP and diminished near-term prospects for economic growth in other countries. As a result of those changes, CBO's projection of real output in 2021 is about 1.6 percent lower now than it was in the August forecast.

The unemployment rate is higher throughout the projection period in this forecast than in the previous one. That difference reflects both a weaker near-term outlook for

24. See, for example, Carmen M. Reinhart and Kenneth S. Rogoff, "The Aftermath of Financial Crises," *American Economic Review*, vol. 99, no. 2 (May 2009), pp. 466–472; and Carmen M. Reinhart and Vincent R. Reinhart, "After the Fall," in Federal Reserve Bank of Kansas City, *Macroeconomic Challenges: The Decade Ahead* (Kansas City: Federal Reserve Bank, 2011).

25. The national income and product accounts, compiled by the Department of Commerce's Bureau of Economic Analysis, track the amount and composition of GDP, the prices of its components, and the distribution of the costs of production as income; the sum of those costs is GDI.

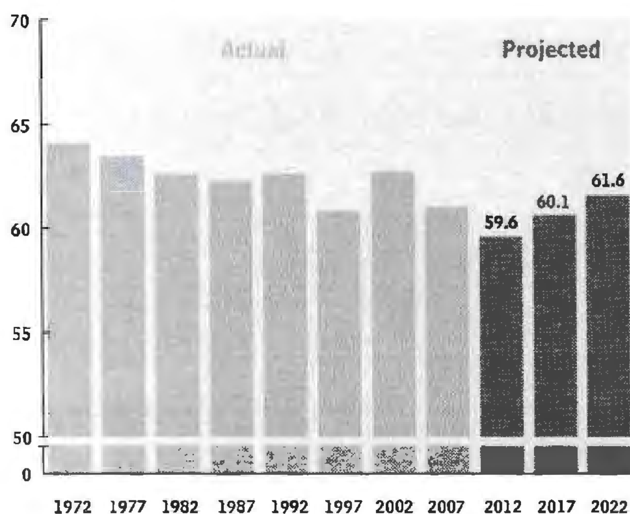
26. Labor income also includes supplemental benefits, which consist of employers' contributions to pensions, health insurance premiums, and social insurance (such as Social Security and Medicare) on behalf of their employees. In addition, CBO attributes 65 percent of the income of sole proprietorships and partnerships to labor income.

27. Labor income's share of GDI has been on a downward trend since 1970, when it was about 65 percent. There is no consensus among analysts about why that decline has occurred, but several possible explanations have been offered. See, for example, Ann Harrison, "Has Globalization Eroded Labor's Share? Some Cross-Country Evidence" (draft, Department of Agricultural and Resource Economics, University of California at Berkeley, October 2002); Adreas Hornstein, Per Krusell, and Giovanni Violante, "Technology–Policy Interaction in Frictional Labor Markets," *Review of Economic Studies*, vol. 74, no. 4 (October 2007), pp. 1089–1124; and Anastasia Guscina, *Effects of Globalization on Labor's Share in National Income*, Working Paper 06/294 (International Monetary Fund, December 2006).

Figure 2-8.

Labor Income

(Percentage of gross domestic income)



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

Notes: Labor income is defined as labor compensation plus 65 percent of proprietors' income. Gross domestic income is the sum of all income earned in the production of gross domestic product.

Data are annual. Values for 2012, 2017, and 2022 are projected.

the demand for labor than CBO projected in August and a reassessment of the natural rate of unemployment. Because the unemployment rate has been high for so long and is expected to remain elevated for the next few years, more people than CBO previously estimated can be expected to face lasting difficulties in the labor market. Consequently, the agency has boosted its estimate of the natural rate of unemployment during the latter years of the projection period—from a constant 5.2 percent beginning in 2017 to 5.5 percent in 2018 and to rates diminishing to 5.3 percent by 2022.

The current forecast also includes lower interest rates over the coming decade. During the first half of the projection period, the lower rates reflect primarily the drop in rates that has occurred since the last forecast was completed. Over the second half of the projection period, the lower rates reflect a weaker outlook for the economy and a decline in the rates predicted for the medium term by many private-sector forecasters, as well as the drop in rates that has occurred.

CBO has also compared its current projections with the *Blue Chip* consensus forecast published in January and the Federal Reserve's forecasts from the January 2012 meeting of the Federal Open Market Committee. The Federal Reserve reports two sets of forecasts—a range (reflecting the forecasts of the members of the Board of Governors and the presidents of the Federal Reserve Banks) and a central tendency (the range excluding the three highest and three lowest projections). CBO's projections for real GDP growth are below those of the *Blue Chip* and the low end of the Federal Reserve's range for 2012 and 2013 (see Table 2-5 on page 46). CBO's projection for the unemployment rate is above that of the *Blue Chip* and the high end of the Federal Reserve's range for 2012 and 2013. Those differences probably stem from a variety of factors, including varying assumptions about the government's future tax and spending policies (many other forecasters may be assuming changes to current law); the economic news available when the forecasts were completed; and the economic and statistical models used by the different forecasters.

Table 2-4.

Comparison of CBO's Current and Previous Economic Projections for Calendar Years 2012 to 2021

	Estimated,	Forecast		Projected Annual Average	
	2011	2012	2013	2014-2017	2018-2021
		Fourth Quarter to Fourth Quarter (Percentage change)			
Real GDP					
January 2012	1.6	2.0	1.1	4.1	2.5
August 2011	2.3	2.7	1.5	3.9	2.4
Nominal GDP					
January 2012	3.8	3.3	2.6	5.8	4.5
August 2011	3.8	4.0	3.0	5.6	4.4
PCE Price Index					
January 2012	2.6	1.2	1.3	1.7	2.0
August 2011	2.4	1.3	1.3	1.7	2.0
Consumer Price Index[a]					
January 2012	3.3 [b]	1.4	1.5	1.9	2.3
August 2011	2.8	1.3	1.3	2.0	2.3
GDP Price Index					
January 2012	2.1	1.2	1.4	1.6	2.0
August 2011	1.4	1.3	1.4	1.7	2.0
Employment Cost Index[c]					
January 2012	1.7	2.2	3.8	3.5	3.7
August 2011	2.2	2.9	3.2	3.5	3.5
Real Potential GDP					
January 2012	1.7	1.8	1.9	2.5	2.5
August 2011	2.0	2.0	2.3	2.6	2.4
		Calendar Year Average			
Unemployment Rate (Percent)					
January 2012	9.0 [b]	8.8	9.1	7.0	5.4
August 2011	8.9	8.7	8.7	6.2	5.2
Interest Rates (Percent)					
Three-month Treasury bills					
January 2012	0.1 [b]	0.1	0.1	2.0	3.7
August 2011	0.1	0.1	0.2	2.5	4.0
Ten-year Treasury notes					
January 2012	2.8 [b]	2.3	2.5	3.8	5.0
August 2011	3.3	3.2	3.3	4.6	5.3
Tax Bases (Percentage of GDP)					
Wages and salaries					
January 2012	44.0	44.0	43.5	44.2	45.1
August 2011	43.5	44.1	44.0	44.7	45.2
Domestic economic profits					
January 2012	9.9	9.8	9.3	9.4	7.7
August 2011	8.6	8.5	8.1	8.2	7.2

Source: Congressional Budget Office.

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

a. The consumer price index for all urban consumers.

b. Actual value for 2011.

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

Box 2-1.

Lasting Effects of the Recent Recession on Potential Output

The financial crisis that began in 2007 and the decline in house prices that began a year earlier had a sharp impact on the U.S. economy, nearly freezing credit markets and pushing the economy into the most severe recession since World War II. International experience shows that downturns following such crises tend to last longer than other downturns, and the return to high employment tends to be slower.[1] It also shows that such recessions—more so than other recessions—dampen investment, raise the level and average duration of unemployment, and reduce the number of hours that employees work. As a result, recessions following such financial crises tend not only to reduce output below what it would have been otherwise, but also to reduce the economy's potential to produce output even after all resources are productively employed. Researchers who have studied past recessions induced by such financial crises have not arrived at a consensus about the magnitude of their effects on potential output. The estimate developed by the Congressional Budget Office (CBO) for the current U.S. experience is within the range estimated by other researchers.

CBO projects that the recession will have a lasting negative effect on the quantity of productive capital. Investment plunged during the recession because of a spike in financing costs and a decline in demand for goods and services. Although investment is currently on the rise—and CBO projects it to grow more strongly in the next few years—not all of the capital investment that was forgone during the recession and early recovery will have been recouped even a decade from now. Moreover, CBO expects that the large government deficits during the recession and afterward will raise the cost of capital in the future, further constraining investment.

The recession will also have lingering negative effects on the labor market. The shortage of jobs has led some people to retire earlier than they might have otherwise or to leave the labor force in other ways (by applying for and receiving disability benefits, for instance).[2] In addition, the high level of long-term

1. See, for example, Carmen M. Reinhart and Kenneth S. Rogoff, "The Aftermath of Financial Crises," *American Economic Review*, vol. 99, no. 2 (May 2009), pp. 466–472; and Carmen M. Reinhart and Vincent R. Reinhart, "After the Fall," in Federal Reserve Bank of Kansas City, *Macroeconomic Challenges: The Decade Ahead* (Kansas City: Federal Reserve Bank, 2011).

2. Applications for disability benefits tend to rise in recessions. See Congressional Budget Office, *Losing a Job During a Recession*, Issue Brief (April 2010).

Continued

Box 2-1. Continued

Lasting Effects of the Recent Recession on Potential Output

unemployment will impede the recovery because when people are out of work—especially for a protracted period—their skills and connection to the workforce tend to erode, and they therefore may have more difficulty moving into new jobs. CBO has incorporated those factors into its economic forecast. As a result, the levels projected for the potential labor force, potential employment, and potential hours worked through 2022 are slightly lower than CBO would have forecast in the absence of the recession, and the projected unemployment rate is higher. The lower potential labor force, in turn, will further constrain investment in productive capital.

The recession could also reduce the growth of potential total factor productivity (average real output per unit of combined labor and capital services) over the next several years by delaying how quickly resources are reallocated to their most productive uses, slowing the rate at which workers gain new skills as technologies evolve, and curtailing businesses' spending on research and development. To account for the possibility of such effects, CBO has trimmed its estimate of the growth rate of potential total factor productivity by a small amount—0.1 percentage point a year between 2010 and 2014. As with the reduction in the potential labor force, lower potential total factor productivity will further constrain investment.

Combining estimates of the effects on the quantity of productive capital, potential hours worked, and potential total factor productivity, potential output will be about 1¼ percent lower in 2022 than it would have been without the financial crisis and the recession, CBO projects. About 0.4 percentage points of that effect arises directly from the smaller labor supply, a similar amount stems directly from lower total factor productivity, and about 0.5 percentage points comes from the smaller capital stock.[3]

3. CBO has revised this estimate downward since last August. The change reflects a reassessment of the effect of the recession on the quantity of productive capital that was partly offset by an upward revision to CBO's estimate of the natural rate of unemployment at the end of the coming decade.

Table 2-5.

Comparison of Economic Projections by CBO, the *Blue Chip* Consensus, and the Federal Reserve

	2012	2013	2014	Longer Run [a]
Real GDP				
CBO	2.0	1.1	4.6	2.4
Blue Chip	2.3	2.8	n.a.	n.a.
Federal Reserve				
Range	2.1 to 3.0	2.4 to 3.8	2.8 to 4.3	2.2 to 3.0
Central tendency	2.2 to 2.7	2.8 to 3.2	3.3 to 4.0	2.3 to 2.6
PCE Price Index				
CBO	1.2	1.3	1.3	2.0
Federal Reserve				
Range	1.3 to 2.5	1.4 to 2.3	1.5 to 2.1	2.0
Central tendency	1.4 to 1.8	1.4 to 2.0	1.6 to 2.0	2.0
Core PCE Price Index[b]				
CBO	1.2	1.4	1.4	2.0
Federal Reserve				
Range	1.3 to 2.0	1.4 to 2.0	1.4 to 2.0	n.a.
Central tendency	1.5 to 1.8	1.5 to 2.0	1.6 to 2.0	n.a.
Consumer Price Index[c]				
CBO	1.4	1.5	1.5	2.3
Blue Chip	2.0	2.2	n.a.	n.a.
GDP Price Index				
CBO	1.2	1.4	1.4	2.0
Blue Chip	1.8	1.9	n.a.	n.a.
Unemployment Rate				
CBO	8.9	9.2	8.3	5.3
Blue Chip	8.5	8.0	n.a.	n.a.
Federal Reserve				
Range	7.8 to 8.6	7.0 to 8.2	6.3 to 7.7	5.0 to 6.0
Central tendency	8.2 to 8.5	7.4 to 8.1	6.7 to 7.6	5.2 to 6.0
Interest Rates				
Three-month Treasury bills				
CBO	0.1	0.2	0.8	3.8
Blue Chip	0.1	0.6	n.a.	n.a.
Ten-year Treasury notes				
CBO	2.4	2.6	3.2	5.0
Blue Chip	2.6	3.3	n.a.	n.a.

Sources: Congressional Budget Office; Aspen Publishers, Blue Chip Economic Indicators (January 10, 2012); Board of Governors of the Federal Reserve System, "Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents, January 2012" (January 25, 2012), www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20120125.pdf.

Notes: The Blue Chip consensus is the average of about 50 forecasts by private-sector economists. The range of estimates from the Federal Reserve reflects the forecasts of the members of the Board of Governors and the presidents of the Federal Reserve Banks. The central tendency is that range with the three highest and three lowest projections.

The Blue Chip consensus does not provide forecasts of the PCE or core PCE price index. The Federal Reserve does not provide forecasts of the consumer price index, the GDP price index, nominal GDP, or interest rates.

GDP = gross domestic product; PCE = personal consumption expenditures; n.a = not applicable.

a. For CBO, values are for 2022. For the Federal Reserve, values represent assessments of the rate that each variable would be expected to converge to under appropriate monetary policy and in the absence of further shocks to the economy.

b. Excludes prices for food and energy.

c. The consumer price index for all urban consumers.

CHAPTER

3

The Spending Outlook

The Congressional Budget Office (CBO) estimates that, under current law, federal outlays in 2012 will total $3.6 trillion, about the same amount as in 2011. Those outlays will equal an estimated 23.2 percent of gross domestic product (GDP), which is below last year's figure but still above the 21.0 percent average share of the past 40 years. As the economy expands in the next several years and as statutory caps constrain discretionary appropriations, federal spending in CBO's baseline projections declines modestly relative to GDP; later in the decade, spending turns up again relative to GDP owing to rapid growth in Social Security, federal health care programs, and interest on the public debt. Over the next decade, annual spending averages 21.9 percent of GDP under the assumptions that govern baseline projections.

Although mandatory spending is projected to rise from last year's levels—by about $45 billion—to $2.1 trillion this year, discretionary spending is projected to drop by nearly as much, to $1.3 trillion in 2012 (see Table 3-1). As a result of persistently low interest rates, payments for net interest are expected to remain low despite the burgeoning debt. CBO estimates that net interest payments will total $224 billion in 2012, slightly less than in 2011. (See Box 3-1 for descriptions of the three major types of federal spending.) Total spending in 2012 would have been about 2 percent higher than in 2011 but for a shift in the timing of certain payments from last October, the beginning of fiscal year 2012, to last September, the end of fiscal year 2011.[1]

CBO's baseline projection for 2013 shows federal spending totaling about the same amount in nominal terms as in 2011 and 2012—roughly $3.6 trillion—but a smaller amount relative to GDP, 22.5 percent. Total mandatory spending will rise under current law, but discretionary spending will be severely constrained by the caps established by the Budget Control Act of 2011 (Public Law 112-25) and by the further reduction in spending resulting from automatic enforcement procedures also established in that act; CBO estimates that discretionary outlays in 2013 will be lower by about $73 billion, or 0.5 percent of GDP, than they would be if appropriations for that year grew at the rate of inflation.

In CBO's baseline projections for 2014 through 2022, spending rises by nearly 5 percent per year, on average. During those years, outlays for net interest are projected to shoot up by an average of more than 11 percent per year as interest rates rise to more typical levels. Mandatory spending is projected to rise at an average rate of 6 percent per year, while discretionary spending is constrained by caps through 2021 and therefore projected to rise at an average rate of less than 2 percent a year. (In contrast, over the past 20 years, discretionary spending rose by 4.9 percent per year, on average, about the same as the average nominal rate of growth of the economy over that period.)

The biggest difference in federal spending relative to GDP in the coming decade—as compared with outlays over the past 40 years—will be the widening gap between mandatory and discretionary spending (see Figure 3-1 on page 50). Under the assumptions that govern CBO's baseline projections:

- Mandatory spending is projected to rise from 13.3 percent of GDP in 2013 to 14.3 percent in 2022. That increase relative to the size of the economy is more than accounted for by growing outlays for Social Security, Medicare, and Medicaid, which are projected to rise from 10.6 percent of GDP in 2013 to 12.1 percent in 2022. In contrast, outlays for all other

1. Because October 1, 2011, fell on a weekend, certain payments that would ordinarily have been made on that date were instead made in September, shifting outlays from fiscal year 2012 into fiscal year 2011; without those timing shifts, spending would have been about $33 billion higher in 2012 (and lower by the same amount in 2011).

Box 3-1.

Categories of Federal Spending

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

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

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

For individual discretionary accounts, CBO's baseline depicts the path of that spending as directed by the provisions of the Balanced Budget and Emergency Deficit Control Act of 1985. That act stated that current appropriations should be assumed to grow with inflation in the future. However, the Budget Control Act of 2011 (Public Law 112-25) imposed caps on discretionary appropriations through 2021, and the baseline incorporates the assumption that such appropriations, in total, will not exceed those caps.

The caps can be adjusted upward for certain appropriations, however—specifically, those for war-related activities known as overseas contingency operations, certain types of disaster assistance, specified "program integrity" initiatives, or designated emergencies. As a result, CBO's baseline projections use the most recent appropriations for those categories to project future adjustments to the caps.

In addition to spending from appropriations subject to caps on new funding, the baseline includes discretionary spending for highway infrastructure, highway and motor carrier safety, public transit, and airport infrastructure programs that receive mandatory budget authority from authorizing legislation. Each year, however, the annual appropriation acts control spending for those programs by limiting how much of the budget authority the Department of Transportation can obligate. For that reason, such obligation limitations are treated as a measure of discretionary resources, and the resulting outlays are considered discretionary spending. Thus far in 2012, transportation obligation limitations total $52 billion.

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

Table 3-1.

Outlays Projected in CBO's Baseline

	Actual, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
							In Billions of Dollars							
Mandatory														
Social Security	725	770	814	857	902	950	1,004	1,063	1,128	1,197	1,269	1,345	4,527	10,530
Medicare	560	560	598	629	658	712	739	769	835	890	948	1,041	3,335	7,820
Medicaid	275	262	281	330	370	407	432	456	487	522	564	605	1,819	4,453
Other spending	656	678	645	618	652	694	698	706	752	774	798	841	3,306	7,178
Offsetting receipts	-190	-200	-214	-219	-227	-236	-249	-265	-284	-294	-308	-319	-1,146	-2,617
Subtotal	2,025	2,070	2,122	2,215	2,354	2,526	2,624	2,729	2,918	3,090	3,272	3,514	11,842	27,364
Discretionary														
Defense	700	680	636	625	627	642	649	658	679	695	711	734	3,180	6,657
Nondefense	646	628	583	571	572	578	584	593	605	619	632	647	2,888	5,984
Subtotal	1,346	1,308	1,220	1,196	1,200	1,219	1,233	1,251	1,284	1,313	1,344	1,382	6,068	12,641
Net interest	227	224	231	247	282	341	402	459	513	557	590	624	1,503	4,247
Total	**3,598**	**3,601**	**3,573**	**3,658**	**3,836**	**4,086**	**4,259**	**4,439**	**4,714**	**4,960**	**5,205**	**5,520**	**19,413**	**44,251**
On-budget	3,099	3,026	2,909	2,948	3,080	3,283	3,407	3,536	3,755	3,941	4,122	4,369	15,627	35,350
Off-budget[a]	499	575	664	710	756	803	853	903	959	1,019	1,083	1,151	3,786	8,901
							As a Percentage of Gross Domestic Product							
Mandatory														
Social Security	4.8	5.0	5.1	5.2	5.1	5.1	5.1	5.1	5.2	5.3	5.4	5.5	5.1	5.2
Medicare	3.7	3.6	3.8	3.8	3.7	3.8	3.7	3.7	3.9	3.9	4.0	4.2	3.8	3.9
Medicaid	1.8	1.7	1.8	2.0	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.5	2.1	2.2
Other spending	4.4	4.4	4.1	3.7	3.7	3.7	3.5	3.4	3.5	3.4	3.4	3.4	3.7	3.6
Offsetting receipts	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
Subtotal	13.5	13.3	13.3	13.4	13.4	13.5	13.3	13.2	13.5	13.7	13.9	14.3	13.4	13.6
Discretionary														
Defense	4.7	4.4	4.0	3.8	3.6	3.4	3.3	3.2	3.1	3.1	3.0	3.0	3.6	3.3
Nondefense	4.3	4.0	3.7	3.4	3.2	3.1	3.0	2.9	2.8	2.7	2.7	2.6	3.3	3.0
Subtotal	9.0	8.4	7.7	7.2	6.8	6.5	6.3	6.1	5.9	5.8	5.7	5.6	6.9	6.3
Net interest	1.5	1.4	1.5	1.5	1.6	1.8	2.0	2.2	2.4	2.5	2.5	2.5	1.7	2.1
Total	**24.1**	**23.2**	**22.5**	**22.1**	**21.8**	**21.8**	**21.6**	**21.5**	**21.8**	**21.9**	**22.0**	**22.4**	**21.9**	**21.9**
On-budget	20.7	19.5	18.3	17.8	17.5	17.6	17.3	17.1	17.4	17.4	17.5	17.7	17.7	17.5
Off-budget[a]	3.3	3.7	4.2	4.3	4.3	4.3	4.3	4.4	4.4	4.5	4.6	4.7	4.3	4.4
Memorandum:														
Gross Domestic Product (Billions of dollars)	14,954	15,508	15,914	16,575	17,618	18,704	19,708	20,661	21,616	22,603	23,614	24,655	88,519	201,666

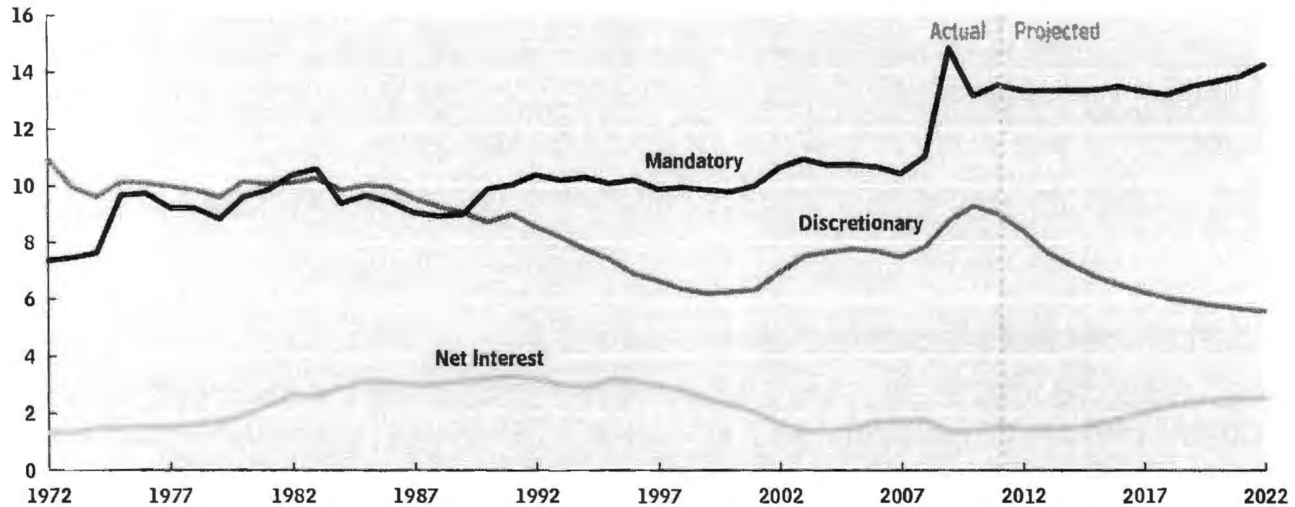
Source: Congressional Budget Office.

a. Off-budget outlays stem from transactions related to the Social Security trust funds and the net cash flow of the Postal Service.

Figure 3-1.

Outlays, by Category

(Percentage of gross domestic product)



Source: Congressional Budget Office.

mandatory programs (net of offsetting receipts, which have the effect of lowering outlays) are projected to decline as a share of GDP, falling from 2.7 percent in 2013 to 2.1 percent in 2022. Over the next 10 years, mandatory spending is projected to average 13.6 percent of GDP, in contrast to the 10.1 percent of GDP it averaged from 1972 to 2011.

- Projected discretionary spending decreases from 7.7 percent of GDP in 2013 to 5.6 percent in 2022. By 2022, discretionary spending would be a smaller share of the economy than it has been in any of the past 40 years, and the operations of the federal government would differ significantly from what they are today.

- Net interest payments will mount rapidly as interest rates rise; those payments will climb from 1.5 percent of GDP in 2013 to 2.5 percent in 2022.

In developing its baseline projections, CBO generally assumes that provisions of current law will be implemented, consistent with the rules established by the Balanced Budget and Emergency Deficit Control Act of 1985. Therefore, when projecting spending for mandatory programs, CBO assumes that existing laws will remain unchanged and that future outlays will depend on the evolution of caseloads, benefit costs, and other factors. When projecting spending for discretionary programs, CBO assumes that the discretionary appropriations provided between 2012 and 2021 will be constrained by the statutory caps and other procedures established in the Budget Control Act.[2]

However, if policies are implemented that diverge from the current-law path assumed in the baseline, total outlays in the future would be different from those presented in the baseline. For example, under the alternative fiscal scenario described in Chapter 1, outlays between 2013 and 2022 would be higher by 1.4 percent of GDP, or $2.9 trillion (see Figure 3-2).[3]

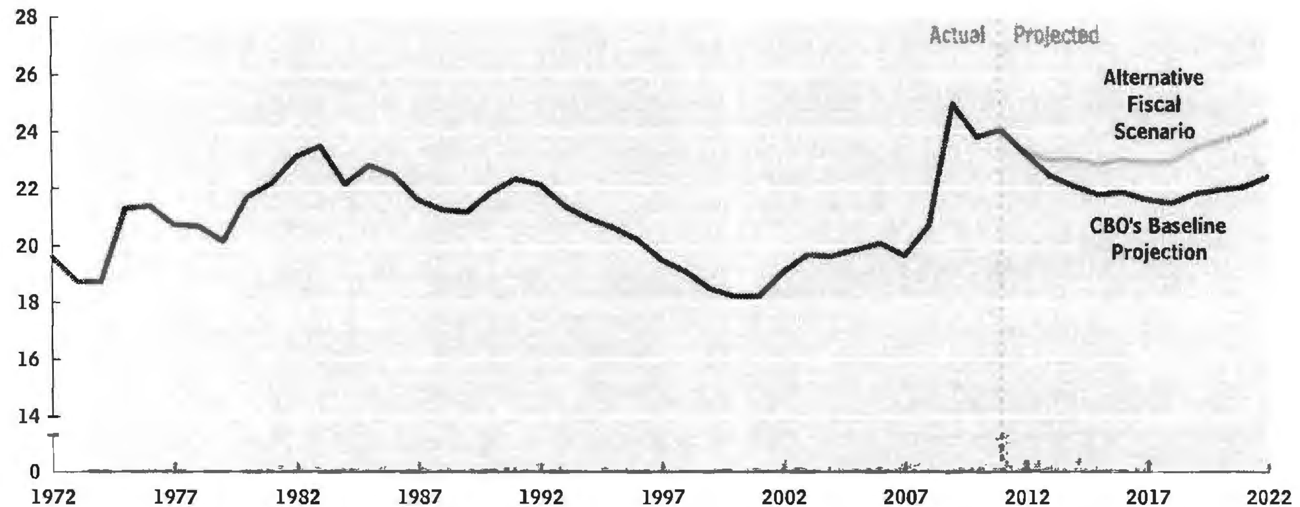
2. CBO developed those projections of discretionary spending by first inflating the appropriations provided for 2012 and then reducing the total funding projections by the amounts necessary to achieve compliance with the annual caps, as shown in Table 3-6 on page 76. Because no caps are specified for 2022, CBO has assumed that budget authority for that year would equal the totals for 2021 with an adjustment for inflation.

3. The alternative fiscal scenario incorporates the assumptions that all expiring tax provisions (other than the payroll tax reduction), including those that expired at the end of December 2011, are instead extended; that the alternative minimum tax is indexed for inflation after 2011 (starting at the 2011 exemption amount); that Medicare's payment rates for physicians' services are held constant at their current level; and that the automatic enforcement procedures specified by the Budget Control Act of 2011 do not take effect. Outlays under the alternative fiscal scenario also include the incremental interest costs associated with projected additional borrowing.

Figure 3-2.

Outlays Projected in CBO's Baseline and Under an Alternative Fiscal Scenario

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Note: The alternative fiscal scenario incorporates the assumptions that all expiring tax provisions (other than the payroll tax reduction), including those that expired at the end of December 2011, are instead extended; that the alternative minimum tax is indexed for inflation after 2011 (starting at the 2011 exemption amount); that Medicare's payment rates for physicians' services are held constant at their current level; and that the automatic spending reductions required by the Budget Control Act of 2011 do not take effect. Outlays under the alternative fiscal scenario also include the incremental interest costs associated with projected additional borrowing.

Mandatory Spending

Mandatory—or direct—spending programs account for more than half of federal outlays. The category includes spending for entitlement programs and certain other payments to people, businesses, nonprofit institutions, and state and local governments. Mandatory spending is generally governed by statutory criteria and is not normally constrained by the annual appropriation process.[4] Mandatory spending includes, as a credit against gross spending, certain types of payments, classified as offsetting receipts, that federal agencies receive from the public and other government agencies.

In 2011, mandatory outlays rose by roughly 6 percent to $2.0 trillion, or about 13.5 percent of GDP. More than half of that increase stemmed from higher outlays for Medicare and Social Security. If no new laws are enacted that affect mandatory spending, such spending will rise by just 2 percent in 2012, to $2.1 trillion, or 13.3 percent of GDP, in CBO's estimation. Under current law, mandatory spending will remain near $2.1 trillion in 2013, CBO expects, after which point it will steadily increase at an average rate of close to 6 percent per year, reaching $3.5 trillion in 2022 (see Table 3-2).

From 2014 to 2019, mandatory spending will stay between 13.2 percent and 13.5 percent of GDP under current law, CBO estimates, but it will increase relative to the size of the economy later in the projection period, rising to 14.3 percent of GDP by 2022. (Spending is particularly high in that fiscal year because October 1, 2022, falls on a weekend, and some payments will be shifted into September; without that timing shift, mandatory spending would amount to 14.1 percent of GDP in 2022.) By comparison, mandatory spending has averaged 11.7 percent of GDP during the past 10 years and 10.1 percent during the past 40 years.

4. Each year, some mandatory programs are modified by provisions contained in annual appropriation acts. Such changes may decrease or increase spending (either for just one year or for multiple years) for the affected programs.

Table 3-2.

Mandatory Outlays Projected in CBO's Baseline

(Billions of dollars)

	Actual, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
Social Security	725	770	814	857	902	950	1,004	1,063	1,128	1,197	1,269	1,345	4,527	10,530
Health Care Programs														
Medicare[a]	560	560	598	629	658	712	739	769	835	890	948	1,041	3,335	7,820
Medicaid	275	262	281	330	370	407	432	456	487	522	564	605	1,819	4,453
Health insurance subsidies, exchanges, and related spending	*	*	1	17	36	58	72	81	87	92	98	104	183	645
MERHCF	9	9	9	10	11	12	12	13	14	15	16	17	54	129
Children's Health Insurance Program	9	9	10	11	12	11	6	6	6	6	6	6	49	78
Other	4	7	8	14	27	25	26	25	28	30	32	34	101	250
Subtotal	856	847	906	1,011	1,114	1,223	1,288	1,350	1,456	1,555	1,664	1,808	5,542	13,375
Income Security														
Supplemental Nutrition Assistance Program	77	80	82	80	80	80	78	77	75	74	73	73	400	772
Supplemental Security Income	53	47	53	55	56	62	59	55	62	63	65	73	285	603
Unemployment compensation	119	82	58	60	54	51	49	50	53	56	59	61	272	552
Earned income and child tax credits	78	79	81	48	47	46	45	45	46	46	47	49	267	500
Family support[b]	26	26	25	25	25	25	25	25	25	25	25	25	125	252
Child nutrition	18	19	21	22	22	23	24	25	26	27	28	29	112	247
Foster care	7	7	7	8	8	8	8	9	9	9	10	10	39	85
Making Work Pay and other tax credits[c]	25	6	5	*	0	0	0	0	0	0	0	0	5	5
Subtotal	405	345	333	297	293	295	288	286	295	301	308	320	1,505	3,015
Federal Civilian and Military Retirement														
Civilian[d]	83	87	89	92	94	97	100	103	107	110	114	118	473	1,025
Military	55	49	54	56	57	63	60	58	64	66	68	75	290	621
Other	6	8	8	8	9	10	10	11	12	13	14	14	46	109
Subtotal	144	144	152	156	160	170	171	172	183	189	196	207	809	1,755
Veterans[e]														
Income security	59	56	59	60	62	68	64	60	67	68	70	77	313	655
Other	12	12	13	12	13	14	14	15	16	17	17	18	67	149
Subtotal	71	68	72	73	74	81	78	75	83	85	87	95	379	804
Other Programs														
Agriculture	15	13	19	16	16	16	16	16	16	16	16	16	83	164
Fannie Mae and Freddie Mac[f]	5	7	3	3	2	2	2	2	3	3	3	3	13	27
Troubled Asset Relief Program	-37	23	3	2	2	1	0	0	0	0	0	0	8	8
Higher education	-33	-11	-18	-20	-19	-14	-7	-2	1	1	1	0	-78	-77
Deposit insurance	-9	3	3	-10	-11	-14	-16	-18	-9	-10	-11	-13	-48	-110
Other	73	59	50	49	49	51	49	49	48	46	46	52	249	489
Subtotal	15	96	60	40	39	43	44	48	57	56	56	59	226	502

Continued

Table 3-2. Continued

Mandatory Outlays Projected in CBO's Baseline

(Billions of dollars)

	Actual, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
Offsetting Receipts														
Medicare[g]	-80	-85	-94	-98	-103	-111	-119	-128	-138	-144	-154	-164	-525	-1,253
Federal share of federal employees' retirement														
Social Security	-15	-15	-16	-16	-17	-17	-18	-19	-19	-20	-21	-21	-85	-185
Military retirement	-21	-22	-21	-21	-21	-22	-22	-23	-24	-25	-26	-27	-106	-230
Civil service retirement and other	-28	-28	-29	-30	-32	-33	-35	-37	-39	-41	-43	-44	-158	-362
Subtotal	-63	-65	-65	-67	-69	-72	-75	-79	-82	-86	-89	-92	-349	-778
Receipts related to natural resources	-13	-13	-14	-14	-15	-16	-16	-17	-22	-21	-20	-20	-74	-174
MERHCF	-11	-11	-9	-10	-10	-11	-11	-12	-13	-14	-14	-15	-52	-119
Other	-23	-25	-32	-29	-29	-27	-28	-29	-30	-30	-31	-28	-146	-293
Subtotal	-190	-200	-214	-219	-227	-236	-249	-265	-284	-294	-308	-319	-1,146	-2,617
Total	**2,025**	**2,070**	**2,122**	**2,215**	**2,354**	**2,526**	**2,624**	**2,729**	**2,918**	**3,090**	**3,272**	**3,514**	**11,842**	**27,364**
Memorandum:														
Mandatory Spending Excluding Offsetting Receipts	2,215	2,269	2,336	2,434	2,582	2,762	2,874	2,994	3,202	3,384	3,580	3,833	12,988	29,980
Medicare Spending Net of Offsetting Receipts	480	475	504	531	555	601	620	641	697	746	795	877	2,810	6,567

Source: Congressional Budget Office.

Notes: Data on spending for benefit programs in this table generally exclude administrative costs, which are discretionary.

MERHCF = Department of Defense Medicare-Eligible Retiree Health Care Fund (including TRICARE for Life);
* = between zero and $500 million.

a. Excludes offsetting receipts from premium payments and from payments by states from savings on Medicaid prescription drug costs.

b. Includes Temporary Assistance for Needy Families and various programs that involve payments to states for child support enforcement and family support, child care entitlements, and research to benefit children.

c. Includes outlays for the first-time homebuyer credit, the American Opportunity Tax Credit, and other tax credits.

d. Includes Civil Service, Foreign Service, Coast Guard, and other, smaller retirement programs as well as annuitants' health care benefits.

e. Income security includes veterans' compensation, pensions, and life insurance programs. Other benefits are primarily education subsidies.

f. The amount recorded for 2011 reflects net cash transfers from the Treasury to Fannie Mae and Freddie Mac. The amounts shown for 2012 through 2022 reflect CBO's estimate of the subsidy cost of new loans and guarantees made by those two entities in each year, adjusted for market risk.

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

At $1.6 trillion in 2012, federal outlays for Social Security, Medicare, Medicaid, and other health care programs will make up more than 70 percent of mandatory spending (or 10.4 percent of GDP). Spending for those programs will rise by $1.5 trillion from 2012 to 2022—accounting for nearly all of the growth in mandatory spending over that period. By 2022, spending for those programs will represent more than 80 percent of mandatory spending and 12.8 percent of GDP.

Programs that are designed to provide income security—such as unemployment compensation, the Supplemental Nutrition Assistance Program (SNAP, formerly known as Food Stamps), and certain refundable tax credits—will account for about 17 percent of mandatory spending in 2012.[5] By 2022, though, outlays for those programs will be about 9 percent of mandatory spending, because the expected economic expansion will allow spending for many of those programs to recede to more typical levels and because scheduled changes to tax provisions will reduce the refundable portion of certain tax credits. Under current law, spending for income security programs will equal 2.2 percent of GDP in 2012 but only 1.3 percent of GDP by 2022, CBO projects.

Other mandatory spending includes retirement benefits for civilian and military federal employees, benefits for veterans, support for agriculture, subsidies for Fannie Mae and Freddie Mac, activities of the Troubled Asset Relief Program (TARP), student loans, and deposit insurance. Under current law, spending for those programs will equal 2.0 percent of GDP in 2012 but will fall to 1.5 percent of GDP by 2022, in CBO's estimation. In addition, CBO estimates that offsetting receipts will reduce mandatory spending by 1.3 percent of GDP each year.

Social Security

Social Security, which is the largest federal spending program, provides cash benefits to the elderly, people with disabilities, and their dependents. Social Security comprises two main parts: Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI). Social Security outlays grew by 3.5 percent in 2011, primarily because of rising caseloads, both from an increasing share of the population that is elderly and from more people qualifying for disability benefits. Holding down growth was the lack of a cost-of-living adjustment (COLA), owing to a decline in prices in 2009 that was only partly reversed in 2010.

CBO estimates that, under current law, outlays for Social Security will total $770 billion in 2012, or 5.0 percent of GDP. Over the next decade, spending for Social Security benefits will climb steadily (by an average of about 6 percent per year) as the nation's elderly population grows and as average benefits rise. By 2022, CBO estimates, Social Security outlays will total $1.3 trillion, or about 5.5 percent of GDP.

Old-Age and Survivors Insurance. OASI, the larger of Social Security's two components, pays full benefits to workers who start collecting those benefits at age 66 or 67, depending on a worker's year of birth; workers can choose to start collecting reduced benefits as early as age 62. The program also makes payments to eligible spouses and children and to some survivors (primarily elderly widows and young children) of deceased workers. OASI benefits totaled $591 billion in 2011, accounting for more than 80 percent of Social Security's outlays.

About 44 million people received OASI benefits in 2011. Over the 2012–2022 period, as more baby boomers become eligible to receive benefits under the program, the number of people collecting those benefits will increase by an average of about 3 percent per year, CBO estimates, reaching 61 million by 2022.

Average benefits rise over time, because beneficiaries generally receive annual cost-of-living adjustments and because initial benefits are based on people's lifetime earnings, which tend to increase over time. OASI beneficiaries received a COLA of 3.6 percent in January 2012. (Beneficiaries of Social Security and most other programs that provide COLAs are protected from a drop in benefit payments when prices fall. Thus, although the consumer price index in 2009 and 2010 was below its value in 2008, individuals' benefits in 2010 and 2011 remained at the previous year's amounts.)

CBO anticipates COLAs of 1.3 percent in 2013 and 2 percent annually, on average, from 2014 through 2022. By CBO's estimates, the average benefit will rise by 3 percent per year over the 2012–2022 period. The increasing average benefit, in combination with the growing

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

number of beneficiaries, is projected to boost OASI outlays by an average of about 6 percent per year over that period.

Disability Insurance. Social Security's disability benefits are paid to workers who suffer debilitating health conditions before they reach OASI's normal retirement age. (Payments also are made to the eligible spouses and children of those recipients.) In 2011, the federal government paid $128 billion in benefits under DI.

The number of people receiving DI benefits jumped by almost 5 percent in 2011, to 10 million, as poor employment prospects led many people to seek other sources of income. That high rate of growth is expected to slow in 2012 and in subsequent years, as a gradually strengthening economy leads fewer people to seek disability benefits and as a greater portion of the population qualifies for benefits under OASI. Like OASI beneficiaries, those receiving benefits under DI received a COLA of 3.6 percent for 2012. Including COLAs that CBO projects will be paid in future years, average DI benefits under current law will grow by just under 3 percent per year, and the program's outlays will rise by an average of about 4 percent annually from 2012 through 2022.

Medicare, Medicaid, and Other Health Care Programs

At $856 billion, gross outlays for Medicare, Medicaid, and other mandatory federal programs related to health care accounted for just under 40 percent of mandatory spending (not including offsetting receipts) in 2011.[6] CBO estimates that outlays for those programs will dip to $847 billion in 2012, or 5.5 percent of GDP, reflecting a decline in Medicaid spending. In CBO's baseline projections, spending for health programs more than doubles between 2012 and 2022, rising by an average of nearly 8 percent per year and reaching $1.8 trillion in 2022. That spending is expected to represent 7.3 percent of GDP in 2022, an increase of nearly 2 percentage points from its share this year. Rising spending for Medicare accounts for about one-half of that growth, rising spending for Medicaid accounts for roughly one-third, and the remaining growth stems primarily from the new subsidies to be provided through health insurance exchanges beginning in 2014.

6. *Gross outlays* reflect total spending for the programs. That figure does not include offsetting receipts, which are treated as negative outlays for budgetary purposes and are discussed separately later in this chapter. *Net outlays* include such offsetting receipts.

CBO and the staff of the Joint Committee on Taxation have not completed the process of updating last year's estimates of the effects of the Affordable Care Act[7] on insurance coverage—that is, on the number of people who will receive subsidies through exchanges and the associated federal costs, on the number of people with employment-based health insurance, or on the number of Medicaid beneficiaries who will be newly eligible under provisions of the law.[8] Such updates will be included in CBO's March 2012 baseline projections.

Medicare. The Medicare program provides subsidized medical insurance for the elderly and for some people with disabilities. Medicare has three principal components: Part A (Hospital Insurance), Part B (Medical Insurance, which covers doctors' services, outpatient care, home health services, and other medical services), and Part D (the program for outpatient prescription drugs).[9] People generally become eligible for Medicare at age 65 or two years after they qualify for Social Security disability benefits. In 2011, Medicare had about 48 million beneficiaries; that number is expected to climb by about 3 percent per year over the next decade, reaching 66 million by 2022.

Gross spending for Medicare will total $560 billion (or 3.6 percent of GDP) in 2012, CBO estimates, the same as the amount recorded last year. (Gross spending excludes receipts from premiums and some payments from states, which are discussed in the section of this chapter on offsetting receipts, beginning on page 64.) Spending this year would have been higher but for a shift in certain payments from fiscal year 2012 into fiscal year 2011 because the first scheduled date for payments to health plans in 2012 fell on a weekend. Adjusted for that timing shift, gross spending for Medicare will grow by an estimated 5 percent in 2012.

7. The Affordable Care Act comprises the Patient Protection and Affordable Care Act (P.L. 111-148) and the health care provisions of the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152).

8. Specifically, those projecrions reflect the estimates included in Congressional Budget Office, *Budget and Economic Outlook: An Update* (August 2011), updated for any effects on insurance coverage of legislation enacted since March 2011, such as the Three Percent Withholding Repeal and Job Creation Act (P.L. 112-56).

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

A number of provisions of law are set to constrain the rates that Medicare pays to providers of health care:

- Under current law, payments to physicians will be constrained by the *sustainable growth rate* mechanism, or SGR. If the SGR is applied as it is currently structured, those fees will be reduced by 27 percent in March 2012 and by additional amounts in subsequent years, CBO projects. However, if future legislation overrides the scheduled reductions (as has happened in every year since 2003), spending on Medicare might be significantly greater than the amount that is projected in CBO's baseline. For example, if payment rates for physicians remained at their 2011 amounts through 2022, net Medicare outlays over the next 10 years would be about $316 billion (or roughly 4 percent) higher than in CBO's baseline projections. If those payments were increased over time, the impact on Medicare outlays would be even greater.

- Medicare's payments to other types of providers will also be constrained, but not as tightly. Provisions of the Affordable Care Act will hold annual increases in payment rates for most other Medicare services to about 1 percentage point less than inflation—which would still represent nominal increases of about 1 percent per year in payment rates under CBO's economic projections.

- Moreover, under provisions of the Budget Control Act, payment rates for most Medicare services furnished from February 2013 through January 2022 will be reduced by a further 2 percent.

Even with the constraining effect of the SGR and other provisions, spending for Medicare under current law is anticipated to grow by an average of 6 percent per year. CBO projects that gross Medicare outlays in 2022 will exceed $1.0 trillion, almost 90 percent more than they are expected to be this year. As a result, CBO projects that, under current law, Medicare spending will rise as a share of GDP from 3.8 percent in 2013 to 4.2 percent by 2022.[10]

The single largest driver of that growth in Medicare's share of GDP is the increase in the number of beneficiaries. Medicare caseloads grow at an average rate of 3 percent per year in CBO's projections, as members of the baby-boom generation become eligible for benefits at age 65. In contrast, spending per beneficiary is expected to grow much more slowly over the coming decade than it has grown historically: The growth in Medicare spending per beneficiary over the 2012–2022 period is projected to average just 1 percent a year more than the rate of inflation. In comparison, such real growth in Medicare spending per beneficiary averaged 3.4 percent a year between 1985 and 2007.[11] (That growth rate excludes the impact on Medicare spending of enacting Part D, the prescription drug program, which began in 2006.)

The projections of slower growth in per beneficiary spending through 2022 result from the anticipated influx of younger, healthier beneficiaries—which will bring down the average cost per beneficiary—and the constraining effects of the SGR formula and the limits on updates to payment rates for other services. Nevertheless, over the next 10 years, federal spending per beneficiary for Parts A and B is projected to grow by about 30 percent, while federal spending per beneficiary for Part D will double, largely because of a combination of rising drug costs and the more generous benefits enacted in the Affordable Care Act.

Medicaid. Medicaid is a joint federal and state program that funds medical care for certain poor, elderly, and disabled people. The federal government shares costs with states for approved services; that share varies from state to state but has averaged about 57 percent until recently. Provisions in the American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5) and in subsequent legislation temporarily increased the federal portion of costs to about 68 percent, on average, in 2010 and 64 percent, on average, in 2011. The federal share returned to

10. That figure for gross spending excludes receipts of premiums and some payments from states, which will rise from $94 billion in 2013 to $164 billion in 2022 under CBO's baseline projections. The effect of those offsetting receipts will be to reduce Medicare spending as a share of GDP to 3.2 percent in 2013 and 3.6 percent in 2022.

11. [The cited growth rate was corrected on February 10, 2012.] In its *Long-Term Budget Outlook* (June 2011), CBO uses the concept of "excess cost growth" to explain long-term growth in health care spending. Excess cost growth is defined as the change in health care spending per capita relative to the growth rate of GDP per capita after removing the effects of demographic changes on health care spending. Using that definition, CBO estimates that excess cost growth for Medicare averaged 1.4 percent per year between 1985 and 2007. As a measure of health care spending, excess cost growth is less useful during business-cycle expansions and contractions or when health care policy is changing in fundamental ways—both of which are occurring over the next decade.

57 percent in 2012. Federal outlays for Medicaid totaled $275 billion in 2011—less than 1 percent above the previous year's amount. That slow growth was the net effect of an increase in Medicaid program costs and the reduction in federal matching rates.

CBO expects that federal spending for Medicaid will drop by nearly 5 percent in 2012 as states become responsible for a higher share of total costs than had been the case in recent years. Spending for the program will climb again in 2013 and will shoot up rapidly in 2014, 2015, and 2016 as a result of provisions in the Affordable Care Act. By 2022, under current law, federal outlays for Medicaid are expected to total $605 billion, more than twice the 2012 amount; spending will equal about 2.5 percent of GDP, compared with 1.7 percent this year.

That growth is attributable to a substantial jump in the number of beneficiaries and a large federal share of spending for certain groups of new enrollees. About 67 million people were enrolled in Medicaid at some point in 2011. Enrollment is expected to rise rapidly over the decade as more people become eligible for Medicaid under provisions of the Affordable Care Act and as the number of elderly people rises. By 2022, about 95 million people will be enrolled in Medicaid at some point in the year, CBO estimates. For many of those new enrollees, the federal share of their costs will be significantly larger than the share for individuals enrolled in Medicaid today.[12]

Other Health Care Programs. In addition to Medicare and Medicaid, the federal government operates other programs through which it subsidizes the provision of health care. That assistance has been available primarily to people with relatively low income, but also to federal civilian and military employees and retirees. Provisions in the Affordable Care Act will significantly increase the scope and scale of such benefits in the coming decade. In CBO's baseline projections, federal spending for mandatory health care programs other than Medicare and Medicaid rises from $26 billion this year to $161 billion in 2022. A portion of that spending will be offset by revenues, which are reflected elsewhere in the budget.[13]

The Affordable Care Act establishes new exchanges for the purchase of health insurance and authorizes government subsidies for such purchases for individuals and families who meet income and other eligibility criteria.[14] The subsidies for health insurance premiums are structured as refundable tax credits; the portions of such credits that exceed taxpayers' liabilities are classified as outlays, while the portions that reduce tax payments appear in the budget as reductions in revenues. CBO estimates that about 8 million people will receive exchange subsidies in 2014 and roughly 20 million will receive them by 2022.[15] Outlays for providing those subsidies, operating the exchanges, and running related programs will total $104 billion by 2022, according to CBO's estimates.

The Department of Defense's Medicare-Eligible Retiree Health Care Fund (MERHCF), which includes TRICARE for Life, provides health care benefits to retirees of the uniformed services (and to their dependents and surviving spouses) who are eligible for Medicare. Outlays for those benefits totaled nearly $9 billion in 2011. Over the coming decade, spending from MERHCF is projected to rise at about the same rate as spending for many other federal health care programs—by an average of roughly 7 percent each year—and to reach $17 billion in 2022.

The Children's Health Insurance Program (CHIP) provides health insurance coverage to children in families with income that, although modest, is too high to qualify for Medicaid. The program is jointly financed by the federal government and the states and is administered by the states within broad federal guidelines. Total federal spending for CHIP was approximately $9 billion in 2011, and it will be roughly the same amount in 2012, CBO estimates. Annual CHIP spending will grow rapidly through 2015 (the last year in which that program is

12. The Affordable Care Act provides enhanced federal matching rates for certain populations made eligible under the act, leading to an average federal share of spending for Medicaid ranging between 60 percent and 62 percent in 2014 and later years.

13. About $25 billion of the spending on other health programs in 2022 reflects payments made to health insurance plans through a system of risk adjustment and reinsurance. Those payments are fully funded through collections from health insurance plans that are reflected in the budget as revenues.

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

15. Other individuals and certain employers can purchase health insurance through the exchanges, but they will not be eligible to receive subsidized premiums.

authorized), when total spending is estimated to be about $12 billion. Under the rules governing baseline projections, the program's funding after 2015 is assumed to decline to about $6 billion per year, and projected outlays fall to that amount a few years later.[16] Nearly 8.2 million people will be enrolled in CHIP at some point in 2012, CBO estimates. Enrollment will drop later in the decade and be much smaller in 2022, according to baseline projections, mostly because funding for the program is assumed to drop after 2015.

Spending on other mandatory health care programs includes the cost of health benefits for federal retirees and, starting in 2017, for Postal Service retirees; of program management and funding for state grants and demonstrations; and of new programs established under the Affordable Care Act to make payments to health plans for risk adjustment and reinsurance. That other spending is expected to rise from $7 billion in 2012 to $34 billion in 2022. Most of the increase in spending for that category is a result of those new programs, which include payments to health insurance plans whose pool of enrollees is expected to have above-average costs (known as risk adjustment) and to plans that enroll individuals who end up having high costs (known as reinsurance). Spending for risk adjustment and reinsurance is estimated by CBO to total $169 billion over the 2014–2022 period. Under current law, that amount will be offset by revenues of an equal magnitude collected from health insurance plans; those collections are reflected on the revenue side of the budget.

Income Security Programs

The federal government makes various payments to people and government entities to assist the disabled, the poor, the unemployed, needy families with children, and children who have been abused or neglected. Federal spending for SNAP, unemployment compensation, Supplemental Security Income (SSI), the refundable portions of the earned income tax credit (EITC) and child tax credit, family support, foster care, and other services dipped by nearly 8 percent in 2011 to $405 billion, or 2.7 percent of GDP. Spending for those programs peaked in 2010 at $437 billion; in contrast, such spending totaled $203 billion in 2007, before the economic downturn (see Figure 3-3). The surge in spending occurred partly because outlays for many of those programs tend to rise automatically when the economy falters (and ebb later as the economy recovers) and partly because lawmakers enacted temporary measures to augment payments to needy populations.

Under current law, spending on income security programs is projected to decline by another 15 percent in 2012, reflecting the anticipated improvement in the economy and the expiration of certain provisions of law. CBO projects that such spending will continue to fall for several years thereafter and remain below the 2012 level through 2022. By that year, outlays for those programs are anticipated to be 1.3 percent of GDP, less than half of the share of GDP such spending represented in 2011.

Supplemental Nutrition Assistance Program. Outlays for SNAP have risen significantly over the past few years. They climbed to $77 billion in 2011, more than double the amount they were in 2007, as enrollment (measured by the average monthly caseload) surged to almost 45 million (as compared to 26 million in 2007). CBO estimates that the program's spending will rise again this year, to $80 billion, largely because of a further projected increase in participation. Participation in SNAP continued to swell after past recessions even as the unemployment rate began to wane, so CBO expects that the number of people collecting SNAP benefits will continue to rise in the short term, peaking at more than 47 million in 2014. Eventually, as the economy continues to improve, SNAP enrollment will recede to 34 million by 2022, CBO projects.

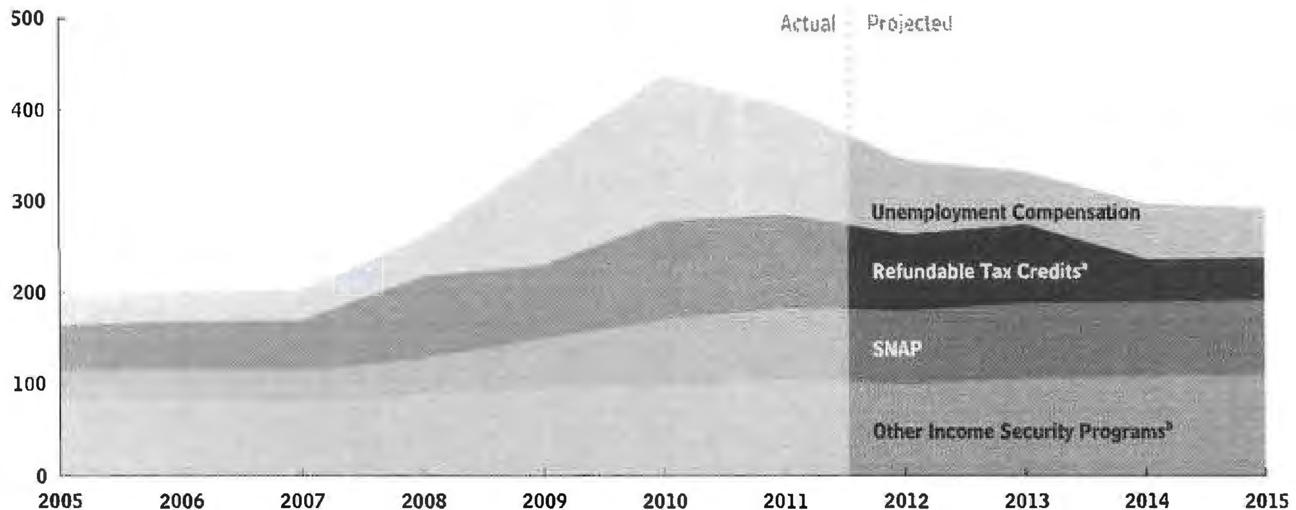
According to CBO's estimates, the average benefit provided under SNAP will not change in 2012. Provisions in current law hold the maximum monthly SNAP benefit for a household of four at $668 until October 31, 2013. CBO expects that the maximum benefit for SNAP will drop to $649 for the remainder of fiscal year 2014; after that, it will be adjusted annually according to a formula that accounts for inflation in the price of food, rising to an estimated $776 by 2022. In that year, outlays for SNAP benefits will total $73 billion, CBO projects—$8 billion less than spending for the program this year.

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

Figure 3-3.

Outlays for Income Security Programs

(Billions of dollars)



Source: Congressional Budget Office.

Note: SNAP = Supplemental Nutrition Assistance Program.

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

b. Includes Supplemental Security Income and programs related to family support, child nutrition, and foster care.

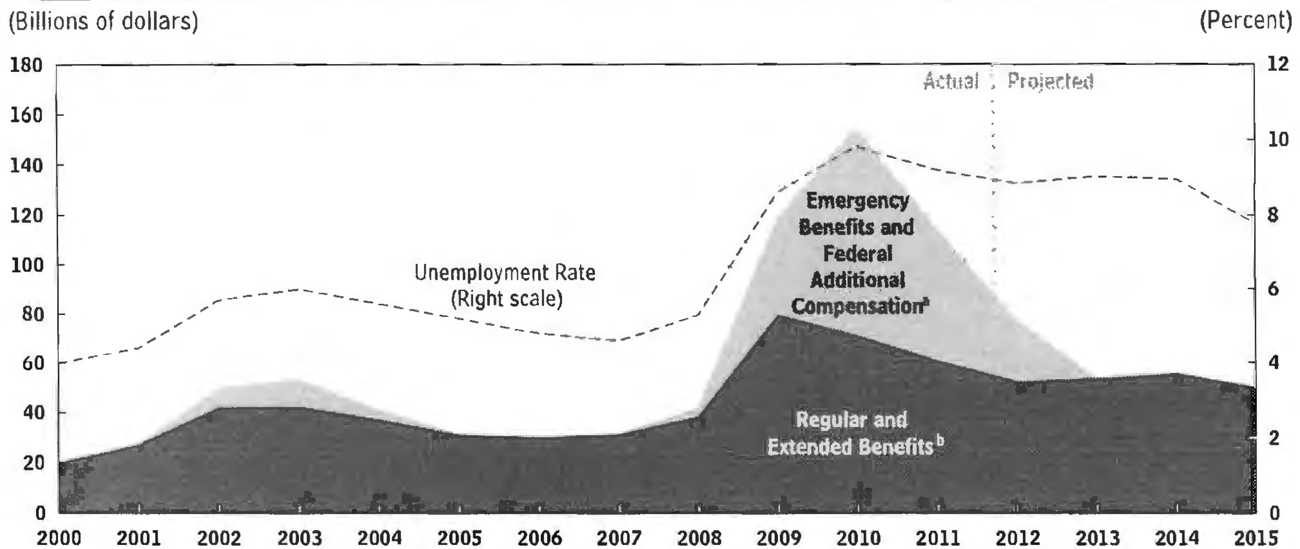
Supplemental Security Income. SSI provides cash benefits to people with low income who are elderly or disabled. Outlays for SSI rose by more than 11 percent in 2011 to $53 billion. According to CBO's estimates, benefit payments for SSI will drop by 11 percent in 2012 and jump by 14 percent in 2013. Those sharp changes, and similar ones in some later years, stem from shifts in the timing of payments of benefits because some scheduled payment dates fall on weekends. Without such timing shifts, outlays for SSI would have grown by about 2 percent in 2011 and would rise by 7 percent in 2012 and by nearly 4 percent in 2013. After 2013, spending for SSI benefits will rise at an average annual rate of about 4 percent and will total $73 billion in 2022, CBO projects.

Unemployment Compensation. In 2011, outlays for unemployment compensation fell by 25 percent from 2010 levels, to $119 billion. Despite the drop, such outlays, which continue to be buoyed by persistently high unemployment and temporarily enhanced benefits for jobless individuals, still were significantly higher than the $33 billion they were in 2007, before the start of the last recession. Assuming there are no changes to current law, outlays will drop again in 2012, CBO estimates, to $82 billion.

Two main factors account for the drop: Under current law, temporary benefits for the long-term unemployed (people without a job for more than 26 consecutive weeks) will expire beginning in March 2012; also, CBO expects that the number of people receiving first-time payments of regular unemployment benefits will continue to fall. First-time payments will probably decline as the economic recovery persists because the share of the unemployed population represented by new entrants into the labor force (who do not qualify for unemployment compensation) will rise, and the share represented by people who lose their job (who may qualify for unemployment compensation) will decline. In subsequent years, outlays for unemployment compensation will continue to fall as the unemployment rate gradually decreases. By 2022, CBO projects, unemployment compensation will amount to $61 billion, or 0.2 percent

Figure 3-4.

Outlays for Unemployment Benefits



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

a. Emergency benefits may be temporarily authorized during periods of high unemployment. A program that provided people who exhausted their regular benefits with up to an additional 26 weeks was available from March 2002 through December 2003. A program providing up to 13 additional weeks of benefits began in July 2008. That program was subsequently extended and expanded to provide up to 53 weeks of benefits to people who run out of regular benefits before the end of February 2012. In addition, a weekly supplement of $25 was available to people receiving regular, emergency, and extended benefits from February 2009 through December 2010.

b. Regular benefits are provided according to state laws under broad federal parameters. Typically, regular benefits are available for up to 26 weeks. Extended benefits may provide an additional 13 or 20 weeks of benefits depending on state law and the unemployment rate in a state. Regular benefits are financed by state employment taxes (which flow through the Unemployment Trust Fund). Extended benefits are financed jointly by the states and the federal government. (From February 2009 through February 2012, the costs of extended benefits are fully financed by the federal government, and special provisions make it easier for states to qualify to pay those benefits.)

of GDP, roughly the same share of the economy that it was in 2007.

Since late 2008, spending for unemployment compensation has been boosted significantly by changes in law that temporarily provide additional benefits to people who have been out of work for more than 26 weeks (see Figure 3-4). Those provisions allow individuals who exhaust their regular benefits to collect emergency unemployment compensation (EUC) for as many as 53 additional weeks. (In addition, supplemental benefit payments of $25 each week—called federal additional compensation—were available from February 2009 through December 2010.) Temporary enhancements to the extended benefits (EB) program have also added to the benefits available to many unemployed people. Although payments for EUC and those enhancements to EB will start to phase out in March 2012 under current law, that additional compensation will amount to $27 billion this year, according to CBO's estimates.[17]

Earned Income and Child Tax Credits. The EITC is a fully refundable credit available primarily to people with earnings and income that fall below established maximums. The child tax credit is a partially refundable credit available to qualifying families with dependent children. Either credit reduces a filer's overall tax liability; if the credit exceeds the liability, the excess may be refunded depending on the filer's earnings. The refundable portions (which are categorized as outlays) totaled $78 billion in 2011 and are projected to reach $81 billion by 2013.

17. If those expiring provisions affecting EUC and EB were extended through December 2012, total spending for unemployment compensation would be $19 billion higher in 2012 and $16 billion higher in 2013, CBO estimates.

Under current law, outlays for the child tax credit will be significantly lower in 2014 and beyond, for two reasons. First, the maximum amount of the credit will drop from $1,000 to $500. Second, the expiration of various tax cuts at the end of 2012 will boost many people's tax liabilities; consequently, more of the impact of the credit will be reflected as a reduction in revenues rather than as an increase in outlays. As a result, under current law, outlays for those two credits will fall to $49 billion in 2022, CBO projects.

Family Support. Spending for family support programs—grants to states that help fund welfare programs, child support enforcement, and child care entitlements—is expected to edge downward in the next few years, declining from $26 billion in 2011 to $25 billion in 2013 and later years. Two factors contribute to that pattern. First, special funding added to the Temporary Assistance for Needy Families (TANF) program by ARRA expired at the end of fiscal year 2010 (although outlays from that budget authority will continue for the next few years). Second, funding for the regular TANF program—the largest component of the family support programs—is capped at roughly $17 billion annually (although some additional funding is available if states' unemployment rates or SNAP caseloads exceed certain thresholds). Under current law, the regular TANF program and child care entitlements are funded through February 2012, but CBO's baseline reflects an assumption (following the provisions of the Deficit Control Act) that such funding will continue throughout the projection period.

Child Nutrition and Foster Care. CBO projects that spending for child nutrition—which provides cash and commodities for meals and snacks in schools, day care settings, and summer programs—will rise by 5 percent in 2012, to $19 billion, spurred by increased participation in the free lunch program. CBO anticipates that provisions in the Healthy Hunger-Free Kids Act of 2010 (P.L. 111-296) will lead to further growth in program participation and higher reimbursement rates for meals beginning in 2013. As a result, spending for child nutrition will climb to $29 billion in 2022, CBO projects.

Federal grants to states for foster care and adoption assistance are expected to remain near last year's amounts—about $7 billion—in 2012. CBO estimates that such spending will increase over the coming decade, reaching $10 billion in 2022.

Making Work Pay and Other Tax Credits. ARRA created a number of temporary refundable tax credits, many of which expired at the end of December 2010. As a result of those expirations, 2011 was the last year in which outlays were affected by those credits. Outlays for the Making Work Pay tax credit, the first-time homebuyer tax credit, a credit toward the purchase of health insurance for the unemployed, and the adoption tax credit came to $19 billion in 2011. The American Opportunity Tax Credit, which allows certain individuals (including those who owe no taxes) to claim a credit for college expenses, was extended for two years at the end of 2010 by the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312). Outlays for that credit totaled $6 billion in 2011 and are estimated to be about $5 billion in both 2012 and 2013.

Other Federal Retirement and Disability Programs

Benefits for federal civilian and military retirees and payments for veterans' pensions and disability benefits totaled $215 billion in 2011, or about 1.4 percent of GDP. Spending for those benefits jumped by more than 9 percent in 2011, primarily because of a sharp rise in veterans' benefits. CBO projects that federal retirement and disability benefits will grow at an average rate of nearly 3 percent annually. By 2022, spending for retirees' benefits and mandatory veterans' programs will amount to $301 billion, or 1.2 percent of GDP, according to CBO's baseline projections.

Civilian and Military Retirement. Retirement and survivors' benefits for federal civilian employees (along with benefits through several smaller retirement programs for employees of various government agencies and for retired railroad workers) amounted to $89 billion in 2011. Such outlays will grow by about 3 percent annually over the coming 10 years, CBO projects, reaching $132 billion by 2022. Growth in federal retirement benefits is attributable primarily to cost-of-living adjustments for retirees and to rising federal salaries, which boost benefits for people entering retirement. (As with recipients of Social Security benefits, recipients of civilian and military retirement benefits did not receive a COLA in 2010 or 2011.)

One factor that is restraining growth in spending for retirement benefits is the ongoing, gradual replacement of the Civil Service Retirement System (CSRS) with the Federal Employees Retirement System (FERS). FERS covers employees hired after 1983 and provides a smaller defined benefit than that provided by CSRS. FERS

recipients, however, are eligible to receive Social Security benefits based on their federal employment (CSRS employees are not), and their contributions to the federal Thrift Savings Plan are matched in part by their employing agencies.

The federal government also provides retirement and disability benefits to personnel who retire from the uniformed services. Outlays for military annuities totaled $55 billion in 2011 but will dip to $49 billion this year because of a shift in the timing of some benefit payments; those outlays are projected to grow over the next 10 years by more than 4 percent per year, on average, reaching $75 billion in 2022. Most of the growth in military retirement programs results from COLAs and rising levels of basic pay.

Veterans' Benefits. Mandatory spending for veterans—including disability compensation, pensions, burial benefits, life insurance, and readjustment benefits—has increased rapidly over the past few years. After rising steeply in 2010, such spending jumped by 22 percent in 2011, to $71 billion. (Those figures do not include the significant amount of spending for veterans' health care, which is funded by discretionary appropriations and is discussed later in this chapter.) Most of the recent growth in mandatory spending for veterans resulted from changes in regulations for disability compensation as well as the phasing-in of the Post 9/11 GI Bill (P.L. 110-252, title V), which greatly expanded education benefits. In addition, some of last year's high outlays stemmed from a shift in the timing of certain benefit payments (13 payments were made in 2011, rather than the usual 12), because October 1, 2011, fell on a weekend. CBO projects a slower rate of growth between 2012 and 2022—averaging about 3 percent a year—resulting in outlays of $95 billion in 2022.

Other Mandatory Spending

Net spending for other mandatory programs totaled $15 billion in 2011. Such outlays include the net impact of the Troubled Asset Relief Program, the costs of supporting Fannie Mae and Freddie Mac, net outlays for deposit insurance, subsidy costs for student loans, and other payments. Outlays for that set of programs are estimated to be substantially larger in 2012, totaling $96 billion, mostly because of changes in the estimated costs of the TARP that were recorded in 2011 and are expected to be made in 2012. CBO projects that total outlays for those programs will drop to $60 billion in 2013 before leveling out at an annual average of just under $50 billion during the rest of the coming decade.

Troubled Asset Relief Program. The TARP was created by the Emergency Economic Stabilization Act of 2008 (EESA, P.L. 110-343) to enable the Secretary of the Treasury to purchase or insure troubled financial assets. (Authority to make new commitments under the program expired last year, but the Treasury can still make new disbursements in mortgage assistance programs for which funds have already been committed.) EESA specified that the budgetary impact of the TARP should be estimated as the present value of its anticipated net outlays, with that present value calculated using a discount rate that adjusts for market risk.[18] Following standard procedures for the valuation of credit programs in the federal budget, the Administration's original estimate of net outlays for the TARP is increased or decreased by *credit subsidy reestimates* in subsequent years, based on updated valuations of the cash flows associated with the program.

In 2009, the Administration recorded an estimated cost of $151 billion for the TARP. Subsequent improvements in financial markets and in the financial condition of some of the largest firms that received TARP funds led the Administration to lower its estimate of the program's costs; the revised estimate was reflected in the budget as part of the negative net outlays of $110 billion reported in 2010 and $37 billion recorded last year. In 2012, CBO anticipates another revision to the estimated costs of the program, this time an upward adjustment of about $20 billion, because the market value of the assets still held by the Treasury has declined. From 2012 to 2016, outlays for the TARP, mainly for mortgage programs, are projected to range between $1 billion and $3 billion a year. As CBO reported in December 2011, it estimates the total cost of the TARP over its lifetime to be $34 billion.[19]

Fannie Mae and Freddie Mac. The government placed Fannie Mae and Freddie Mac, two institutions that facilitate the flow of funding for home loans nationwide, into conservatorship in September 2008 as a result of their

18. Present value is a single number that expresses a flow of current and future income, or payments, in terms of an equivalent lump sum received or paid today.

19. See Congressional Budget Office, *Report on the Troubled Asset Relief Program—December 2011*.

mounting losses.[20] Because the Administration considers Fannie Mae and Freddie Mac to be nongovernmental entities for federal budgeting purposes, it records the Treasury's net cash infusions to the two entities as outlays in the budget. In 2011, those net infusions totaled $5 billion.

In contrast to the Administration's approach, CBO projects the budgetary impact of the two entities' operations as if they were being conducted by a federal agency, because of the degree of management and financial control that the government exercises over them.[21] Therefore, CBO estimates the net lifetime costs—that is, the subsidy costs—of new loans and guarantees to be issued by the entities and counts those costs as federal outlays in the year of issuance. CBO expects that such costs for new loans and guarantees issued in 2012 will be $7 billion. (By comparison, CBO expects that net cash infusions to Fannie Mae and Freddie Mac will total $5 billion in 2012.) Recent legislation set new fees for loans guaranteed by those entities, which CBO expects will reduce future subsidy costs. For that reason, as well as the expected stabilization of housing markets over the next several years, CBO anticipates that subsidy costs for new loans and guarantees will decline after 2012, ranging between $2 billion and $3 billion annually from 2013 to 2022.

Deposit Insurance. Net outlays for deposit insurance were *negative* $9 billion last year, reflecting repayment of the remaining loans made by the federal government to stabilize the corporate credit union system. Because financial institutions insured by the Federal Deposit Insurance Corporation have prepaid approximately $24 billion in premiums that otherwise would have been paid over the 2012–2013 period, receipts during the next two years will be lower than they would normally be. As a result, CBO estimates, net outlays for deposit insurance will be $3 billion annually in 2012 and 2013. Beginning in 2014, premium payments will exceed amounts spent on failed institutions, CBO projects, and net outlays for deposit insurance will again be negative.

20. 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.

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

Remaining Mandatory Programs. Outlays for the remaining mandatory programs, including those for higher education and support for agriculture, will account for less than 2 percent of gross mandatory spending in the next 10 years. Outlays for those programs totaled $56 billion in 2011 and are projected to reach $68 billion in 2022 under current law. Such spending will be about 0.3 percent of GDP throughout the coming decade.

Mandatory spending for agricultural support totaled $15 billion in 2011; it is projected to average $16 billion in each year between 2012 and 2022, under the baseline assumption that current farm programs remain in place after the 2008 farm bill (the Food, Conservation, and Energy Act of 2008, P.L. 110-246) expires in 2012. That spending will dip in 2012, to about $13 billion, largely because of changes in the timing of mandated payments for crop insurance and commodity programs. Starting in 2013, spending for the crop insurance program is expected to rise as a result of projected increases in crop prices and the value of insured crops. The higher spending for crop insurance will be offset by the scheduled termination of some other agricultural support programs, such as agriculture disaster assistance and payments to tobacco growers.

Outlays for mandatory programs for higher education were *negative* $33 billion (on a present-value basis) in 2011 primarily because the Department of Education reduced its previous estimate of the subsidy costs of student loans by $30 billion, thereby decreasing outlays by that amount.[22] CBO estimates that subsidies for student loans made in 2012 will be negative $27 billion but will be partially offset by mandatory spending of $16 billion for the Pell Grant program, resulting in total outlays of negative $11 billion.[23] (Those projected outlays do not include any potential revision to the estimated subsidy costs of loans or guarantees made before 2012.) In

22. Calculations of subsidy costs follow the standard loan-valuation procedures called for in the Federal Credit Reform Act of 1990 (FCRA, P.L. 101-508). Under FCRA, the discounted present value of expected income from federal student loans is projected to exceed the discounted present value of the government's costs. Credit programs that produce net income rather than net outlays are said to have *negative subsidy rates*, which result in negative outlays. The original subsidy calculation may be increased or decreased by a *credit subsidy reestimate* in subsequent years, based on updated valuations of the present-value costs of the cash flows associated with the programs.

23. Under current law, funding for Pell grants is provided from discretionary and mandatory sources.

subsequent years, slowly rising interest rates will drive up the cost to the government of student loans, CBO projects, but those loans will continue to carry negative subsidies through 2022.[24] Overall, for higher education programs, CBO projects that rising costs for loans and continued mandatory spending for Pell grants will result in net outlays turning slightly positive in 2019. Over the 2013–2022 period, net mandatory outlays for higher education will total negative $77 billion, in CBO's estimation.

Other mandatory spending includes outlays for telecommunications subsidies provided from the Universal Service Fund; certain programs in the Departments of Justice, Homeland Security, and Agriculture; and payments to subsidize the interest costs for Build America Bonds. Outlays for that set of programs totaled $73 billion in 2011 and are estimated to be $52 billion in 2022.

Offsetting Receipts

Offsetting receipts are certain payments made to the federal government by citizens or businesses and certain payments made between federal agencies; they are recorded as negative outlays (that is, credits against direct spending). Such receipts include beneficiaries' premiums for Medicare; intragovernmental payments made by federal agencies for their employees' retirement benefits; royalties and other charges for production of oil and natural gas on federal lands; proceeds from sales of harvested timber and minerals extracted from federal lands; and various fees paid by users of public property and services. In 2011, offsetting receipts totaled $190 billion (see Table 3-2 on page 52).

Offsetting receipts for Medicare in 2011 reached $80 billion, constituting a little more than 40 percent of all offsetting receipts. Over the coming years, those receipts will rise at about the same rate as spending for Medicare, totaling $164 billion in 2022 under CBO's baseline projections. The bulk of those receipts are premiums paid by Medicare beneficiaries, but the amount also includes recoveries of overpayments made to providers and payments made by states to cover a portion of the prescription drug costs for low-income beneficiaries.

In 2011, $63 billion in offsetting receipts consisted of intragovernmental transfers from federal agencies to the federal funds from which employees' retirement benefits are paid (mostly trust funds for Social Security and for military and civilian retirement). Those intragovernmental payments from agencies' operating accounts to the funds have no net effect on outlays in the budget. Such payments will grow by nearly 4 percent per year, on average, CBO estimates, reaching $92 billion in 2022. Intragovernmental transfers also are made to MERHCF under the TRICARE for Life program; those payments are made on an accrual basis according to the number of military personnel and are intended to pay for the health care costs of future retirees. Such payments totaled $11 billion in 2011 and, because of rising health care costs, are projected to grow to $15 billion by 2022.

Receipts stemming from the extraction of natural resources—particularly oil, natural gas, and minerals—from federally owned lands totaled $13 billion in 2011. By 2022, CBO estimates, those receipts will be $20 billion.

Legislation Assumed in the Baseline

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

CBO's baseline projections therefore incorporate the assumption that the following programs whose authorizations expire within the current projection period will continue: SNAP, TANF, CHIP, rehabilitation services, child care entitlement grants to states, trade adjustment assistance for workers, child nutrition, and family preservation and support. Most farm subsidies are assumed to

24. An alternative to the procedures in FCRA for estimating the cost to taxpayers—called fair-value accounting—more fully incorporates the cost to the government of the risks inherent in its credit transactions. That approach produces estimated costs that either correspond to or approximate market prices. Under fair-value accounting, the budgetary cost of most loan programs would be higher than they are under FCRA. In 2010, CBO compared the cost of the federal student loan programs calculated on a FCRA basis with the cost that would be estimated using fair-value accounting. See Congressional Budget Office, *Costs and Policy Options for Federal Student Loan Programs* (March 2010).

continue as well. In addition, the Deficit Control Act directed CBO to assume that a cost-of-living adjustment for veterans' compensation would be granted each year. In CBO's projections, the assumption that expiring programs will continue increases mandatory outlays by $11 billion in 2012 and by about $1.2 trillion between 2013 and 2022 (see Table 3-3). Almost two-thirds of that increase over 10 years is attributable to SNAP.

Discretionary Spending

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

Several transportation programs have an unusual budgetary treatment: Their budget authority is provided in authorizing legislation, rather than in appropriation acts, but their spending is constrained by *obligation limitations* imposed by appropriation bills. Consequently, their budget authority is considered mandatory, but their outlays are discretionary. (The largest of those programs is the Federal-Aid Highway Program, which is funded from the Highway Trust Fund.) As a result, total discretionary outlays in the budget are greater than total discretionary budget authority. In some cases, the amounts of those obligation limitations are added to discretionary budget authority to produce a measure of the total *funding* provided for discretionary programs.

In CBO's baseline projections, most appropriations for the 2013–2021 period are assumed to be constrained by the caps and automatic enforcement procedures put in place by the Budget Control Act; for 2022, CBO projects discretionary funding under the assumption that it will grow from the 2021 amount at the rate of inflation. (Funding for certain purposes, such as war-related costs, is not constrained by the caps established in the Budget Control Act.) Because discretionary funding would grow much more slowly than the economy under those assumptions, discretionary outlays in CBO's baseline projections fall from 7.7 percent of GDP in 2013 to 5.6 percent of GDP in 2022, a smaller share than in any of the past 50 years.

Trends in Discretionary Outlays

Discretionary outlays declined from about 10 percent of GDP during much of the 1970s and 1980s to 6.2 percent in 1999 (see Figure 3-5 on page 68). Those outlays then began to increase again relative to the size of the economy, reaching 7.0 percent of GDP in 2002 and 7.9 percent in 2008. That rise occurred in part because of actions taken in response to the terrorist attacks of September 11, 2001, and subsequent military operations in Afghanistan and Iraq. (Funding for those operations from 2001 to 2012 is examined in Box 3-2 on page 70.) In 2009 and 2010, discretionary outlays jumped to 8.9 percent and 9.4 percent of GDP, respectively, in part because of $281 billion in discretionary funding provided by ARRA in 2009. In 2011, discretionary outlays declined to 9.0 percent of GDP, mostly because of decreased spending from ARRA funding.

Trends in discretionary spending during the past few decades have been heavily influenced by spending on defense. From 6.2 percent of GDP in 1986, defense discretionary outlays declined to a low of 3.0 percent of GDP between 1999 and 2001. Boosted by operations in Afghanistan and Iraq and because of added funding for a wide variety of programs and activities not directly related to the wars in those countries, defense outlays rose to 4.0 percent of GDP in 2005 and to 4.7 percent of GDP in 2009, where they remained for the following two years.

Nondefense discretionary programs encompass such activities as transportation, education grants, housing assistance, health-related research, veterans' health care, most homeland security activities, the federal justice system, foreign aid, and environmental protection. Between 1990 and 2008, nondefense outlays represented a fairly stable share of GDP, ranging between 3.2 percent and 3.8 percent. Funding from ARRA helped push up that share to 4.2 percent of GDP in 2009 and 4.6 percent in 2010. As spending from ARRA started to wane, however, nondefense discretionary spending declined slightly as a share of GDP, to 4.3 percent, in 2011.

Discretionary Appropriations and Outlays in 2012

For 2012, discretionary budget authority provided to date totals $1,199 billion, roughly 2 percent less than the $1,222 billion provided for fiscal year 2011. Total

Table 3-3.

Costs for Mandatory Programs That Continue Beyond Their Current Expiration Date in CBO's Baseline

(Billions of dollars)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
Supplemental Nutrition Assistance Program													
Budget authority	0	82	80	80	80	78	77	75	74	73	73	400	772
Outlays	0	79	80	80	80	78	77	75	74	73	73	396	769
Temporary Assistance for Needy Families													
Budget authority	10	17	17	17	17	17	17	17	17	17	17	87	173
Outlays	8	15	17	17	17	17	17	17	17	17	17	84	171
Commodity Credit Corporation[a]													
Budget authority	0	3	10	11	11	11	11	12	12	12	13	45	105
Outlays	0	1	9	10	10	11	11	12	12	12	13	40	100
Children's Health Insurance Program													
Budget authority	0	0	0	0	6	6	6	6	6	6	6	11	40
Outlays	0	0	0	0	5	6	6	6	6	6	6	11	40
Veterans' Compensation COLAs													
Budget authority	2	3	3	4	5	6	7	9	10	11	14	21	72
Outlays	2	2	3	4	5	6	7	9	10	11	14	21	71
Rehabilitation Services and Disability Research													
Budget authority	0	3	3	3	3	3	4	4	4	4	4	17	35
Outlays	0	1	3	3	3	3	3	4	4	4	4	14	32
Child Care Entitlements to States													
Budget authority	2	3	3	3	3	3	3	3	3	3	3	15	29
Outlays	1	3	3	3	3	3	3	3	3	3	3	14	29
Trade Adjustment Assistance for Workers													
Budget authority	0	0	0	1	1	1	1	1	1	1	1	3	8
Outlays	0	0	0	*	1	1	1	1	1	1	1	2	7
Child Nutrition[b]													
Budget authority	0	0	0	0	1	1	1	1	1	1	1	2	6
Outlays	0	0	0	0	1	1	1	1	1	1	1	1	6

Continued

Table 3-3. **Continued**

Costs for Mandatory Programs That Continue Beyond Their Current Expiration Date in CBO's Baseline

(Billions of dollars)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
Ground Transportation Programs Not Subject to Annual Obligation Limitations													
Budget authority	1	1	1	1	1	1	1	1	1	1	1	3	6
Outlays	*	*	1	1	1	1	1	1	1	1	1	3	6
Family Preservation and Support													
Budget authority	*	*	*	*	*	*	*	*	*	*	*	2	3
Outlays	*	*	*	*	*	*	*	*	*	*	*	2	3
Ground Transportation Programs Controlled by Obligation Limitations[c]													
Budget authority	29	49	49	49	49	49	49	49	49	49	49	244	487
Outlays	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Transportation Programs Controlled by Obligation Limitations[c]													
Budget authority	2	4	4	4	4	4	4	4	4	4	4	18	35
Outlays	0	0	0	0	0	0	0	0	0	0	0	0	0
Natural Resources													
Budget authority	0	0	0	0	0	0	0	0	0	0	0	0	0
Outlays	0	0	0	*	*	*	*	*	*	*	*	*	*
Total													
Budget authority	**45**	**164**	**169**	**172**	**180**	**179**	**179**	**180**	**181**	**182**	**184**	**865**	**1,772**
Outlays	**11**	**102**	**116**	**118**	**126**	**127**	**127**	**128**	**129**	**130**	**132**	**589**	**1,234**

Source: Congressional Budget Office.

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

a. Agricultural commodity price and income supports under the Farm Security and Rural Investment Act of 2002 (FSRIA) generally expire after 2012. Although permanent price support authority under the Agricultural Adjustment Act of 1939 and the Agricultural Act of 1949 would then become effective, CBO continues to adhere to the rule in section 257(b)(2) of the Deficit Control Act that indicates that the baseline should assume that FSRIA's provisions remain in effect.

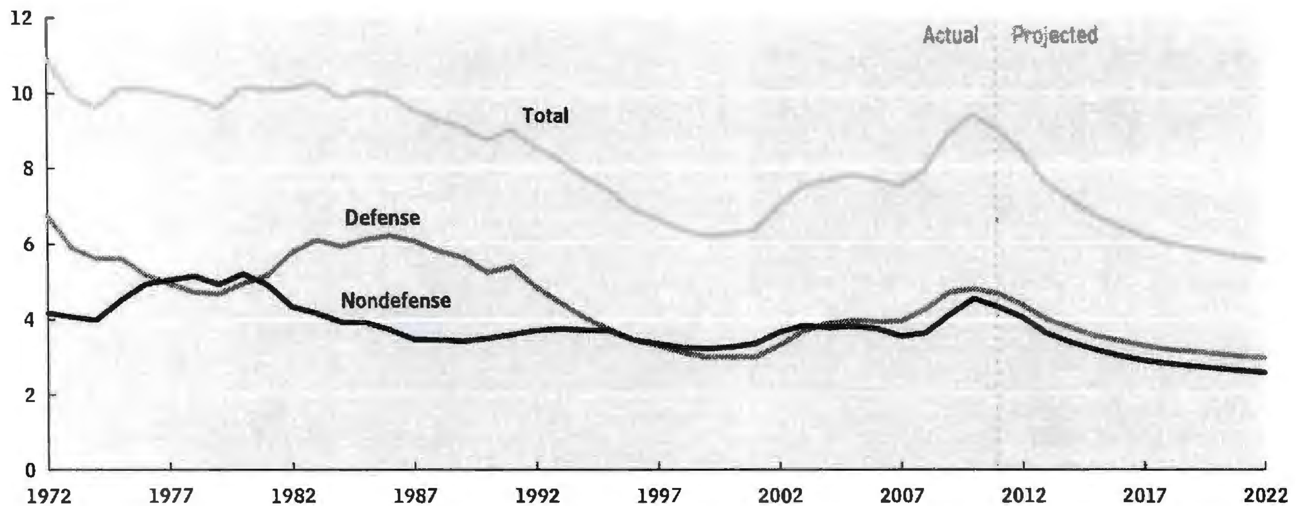
b. Includes the Summer Food Service program and states' administrative expenses.

c. Authorizing legislation provides contract authority, which is counted as mandatory budget authority. However, because spending is subject to obligation limitations specified in annual appropriation acts, outlays are considered discretionary.

Figure 3-5.

Discretionary Outlays, by Category

(Percentage of gross domestic product)



Source: Congressional Budget Office.

funding, including obligation limitations, also decreased by about 2 percent, from $1,277 billion in 2011 to $1,251 billion in 2012. The decrease in budget authority for 2012 stems mainly from a $33 billion reduction in funding for operations in Afghanistan and Iraq; appropriations for military activities fell by $44 billion, whereas funding for consular activities and foreign aid programs increased by $11 billion. The decrease in war funding was partially offset by an $11 billion increase in funding spread among many programs, including disaster relief ($6 billion) and veterans' health care ($2 billion).

In the absence of additional appropriations for 2012, CBO projects thar discretionary outlays will decrease from $1,346 billion in 2011 to $1,308 billion in 2012, a decline of 3 percent. Defense spending is anticipated to drop by $20 billion in 2012, mostly as a result of reduced funding for military activities in Afghanistan and Iraq. Nondefense outlays are expected to be $19 billion lower, largely because of a $17 billion decrease in spending for education programs funded by ARRA. As a share of the economy, total discretionary spending is estimated to fall from 9.0 percent of GDP in 2011 to 8.4 percent in 2012.

Defense Discretionary Funding. Three major categories of funding within the Department of Defense account for 83 percent of the defense appropriation in 2012: operations and maintenance ($286 billion), military personnel ($151 billion), and procurement ($121 billion). Appropriations for research and development ($72 billion) account for another 11 percent of total funding for defense. The rest of the appropriation (about 6 percent) is made up of funding for military construction, family housing, and other Department of Defense programs ($16 billion); funding for the atomic energy activities of the Department of Energy ($17 billion); and funding for various defense-related programs in other departments and agencies ($7 billion).

Budget authority provided for defense discretionary programs in 2012 is about 6 percent less than it was in 2011, dropping from $711 billion to $670 billion. That reduction results entirely from a decrease in funding for the military operations in Afghanistan and Iraq. Because the last U.S. troops left Iraq in December 2011, less funding is required for 2012. As a result, lawmakers have reduced the Department of Defense's war-related appropriations for operations and maintenance by $24 billion, for military personnel by $7 billion, and for procurement by $11 billion.

Nondefense Discretionary Funding. Seven broad budget categories (called budget functions) account for more than 75 percent of the $581 billion in resources appropriated in 2012 for nondefense discretionary activities (see Table 3-4). Activities related to education, training, employment, and social services together have received

Table 3-4.

Changes in Nondefense Discretionary Funding Between 2011 and 2012

(Billions of dollars)

Budget Function	2011	2012	Change
Education, Training, Employment, and Social Services	92	92	0
Transportation[a]	85	86	1
Income Security	63	61	-3
Veterans' Benefits and Services	57	59	2
Health	55	56	1
International Affairs	52	56	3
Administration of Justice	50	51	*
Natural Resources and Environment	33	35	2
General Science, Space, and Technology	30	30	-1
General Government	17	17	-1
Community and Regional Development	15	18	4
Agriculture	6	6	*
Medicare	6	6	*
Social Security	6	6	*
Energy	4	5	*
Commerce and Housing Credit	-6	-1	5
Other	-1	*	1
Total	**566**	**581**	**16**

Source: Congressional Budget Office.

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

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

$92 billion, claiming 16 percent of total nondefense discretionary funding.[25] Transportation programs have received $86 billion (or 15 percent) of the total, which includes $52 billion in obligation limitations for several ground and air transportation programs. The following categories of programs each account for 10 percent of the total: income security programs ($61 billion), veterans' benefits and services ($59 billion), health ($56 billion), and international affairs ($56 billion).[26] Administration of justice accounts for roughly 9 percent of total discretionary funding for nondefense activities.

Projections for 2013 Through 2022

Discretionary outlays are expected to total $1,220 billion in 2013—about 7 percent ($88 billion) less than the amount anticipated for 2012. They are projected to continue decreasing through 2014 and then to slowly increase, reaching $1.4 trillion by 2022. As a share of GDP, they are projected to fall markedly, from 9.0 percent in 2011 to 5.6 percent in 2022.

The projected decline in discretionary spending relative to GDP stems from provisions of the Budget Control Act. That act set outright caps on certain types of discretionary spending (excluding funding for overseas contingency operations, disaster relief, other emergencies, and certain "program integrity" initiatives) over the 2012–2021 period.[27] In addition, the act provided that if lawmakers did not enact legislation, following specified procedures, to cut projected deficits by at least $1.2 trillion, automatic procedures would take effect, reducing discretionary and mandatory spending over that period. (The Joint Select Committee on Deficit Reduction, which was created by the act, was tasked with the goal of

25. Spending for student loans and several other federal programs in the category of education, training, employment, and social services is not included in that total because their funding is considered mandatory.

26. Some significant income security programs, such as unemployment compensation and TANF, are not reflected in the total because they are included in mandatory spending.

27. Program integrity initiatives are aimed at reducing improper benefit payments in one or more of the following programs: Disability Insurance, Supplemental Security Income, Medicare, Medicaid, and the Children's Health Insurance Program. See Congressional Budget Office, *Final Sequestration Report for Fiscal Year 2012* (January 12, 2012), for more information on the discretionary caps.

Box 3-2.

Funding for Operations in Afghanistan and Iraq and for Related Activities

Since September 2001, lawmakers have provided almost $1.4 trillion in budget authority for operations in Afghanistan and Iraq and related activities (see the table). That amount includes funding for military and diplomatic operations in Afghanistan, Iraq, and certain other regions; for some veterans' benefits and services; and for related activities of the Department of Justice. Appropriations specifically designated for those purposes averaged about $100 billion a year from 2003 through 2006, rose to $170 billion in 2007 and $187 billion in 2008, and then declined to an average of $160 billion over the 2009–2011 period. For 2012, the Congress appropriated $127 billion for those purposes in the Consolidated Appropriations Act, 2012 (Public Law 112-74).

Funding to date for military operations and other defense activities totals $1.25 trillion, most of which has gone to the Department of Defense (DoD). Of that amount, the Congress has provided about $730 billion for operations and maintenance costs, $290 billion for procurement, and $170 billion for military personnel costs. Lawmakers also have provided $77 billion to train and equip indigenous security forces in Afghanistan and Iraq.[1] In addition, $64 billion has been provided for diplomatic operations and foreign aid to Afghanistan, Iraq, and other countries that are assisting the United States in those efforts. The majority of those funds have gone to the Economic Support Fund ($17 billion), to the Iraq Relief and Reconstruction Fund ($16 billion), and for diplomatic and consular programs ($13 billion).

DoD reports that in fiscal year 2011, obligations for operations in Afghanistan and Iraq and for related activities averaged $11.9 billion per month (about $600 million less than the monthly amount reported for 2010). Operation Enduring Freedom (in and around Afghanistan) accounted for 68 percent of those obligations in 2011—up from 51 percent in 2010 and 34 percent in 2009. Operation New Dawn (formerly Operation Iraqi Freedom) accounted for 32 percent of those obligations, down from 49 percent in 2010 and 65 percent in 2009.

Because most appropriations for operations in Afghanistan and Iraq and for related activities appear in the same budget accounts as appropriations for DoD's other functions, it is impossible to determine precisely how much has been spent on those activities. The Congressional Budget Office (CBO) estimates that the $1.3 trillion appropriated for military operations, other defense activities, and indigenous security forces in those two countries has resulted in outlays of about $1.1 trillion through 2011; about $160 billion of that total occurred in 2011. Of the $64 billion appropriated for international affairs activities related to the war efforts, about $50 billion was spent through 2011, CBO estimates, including $5 billion in 2011. In total, outlays for all of those activities amounted to about $165 billion last year. On the basis of sums appropriated for 2012, outlays will total about $145 billion this year, in CBO's estimation.

1. That $77 billion includes $5 billion provided to Iraqi security forces in 2004 in an appropriation for the State Department's Iraq Relief and Reconstruction Fund.

Continued

developing such legislation but was unable to reach an agreement.) Such automatic reductions in spending will take the form of equal cuts in funding of $492 billion each for defense and nondefense programs from 2013 through 2021. For 2013, those reductions would be achieved by automatically canceling a portion of the budgetary resources (through a process called sequestration) for most discretionary programs as well as for some programs and activities financed by mandatory spending.[28]

28. Budgetary resources consist of all sources of authority provided to federal agencies that permit them to incur financial obligations, including new budget authority, unobligated balances, direct spending authority, and obligation limitations.

Box 3-2. Continued

Funding for Operations in Afghanistan and Iraq and for Related Activities

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

(Billions of dollars of budget authority)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total, 2001-2012
Military Operations and Other Defense Activities[a]													
Iraq	0	0	51	70	50	85	113	133	90	59	42	10	703
Afghanistan	0	12	12	13	8	12	24	29	38	87	98	89	421
Other[b]	14	5	18	5	11	13	15	13	13	5	6	6	123
Subtotal	14	18	80	88	69	110	152	175	140	151	146	104	1,246
Indigenous Security Forces[c]													
Iraq	0	0	0	5	6	3	6	3	1	1	2	0	26
Afghanistan	*	0	0	0	1	2	7	3	6	9	12	11	51
Subtotal	*	0	0	5	7	5	13	6	7	10	13	11	77
Diplomatic Operations and Foreign Aid[d]													
Iraq	0	0	3	15	1	3	3	3	2	2	0	4	36
Afghanistan	0	*	1	2	1	*	1	1	5	2	0	5	18
Other	*	1	5	*	*	*	*	*	1	*	0	2	10
Subtotal	*	2	8	17	3	3	4	5	7	4	0	11	64
Other Services and Activities[e]													
Iraq	0	0	*	0	*	*	1	1	*	0	0	0	2
Afghanistan	0	0	0	0	*	*	*	*	*	0	0	0	*
Other	0	0	0	0	*	*	*	*	*	0	0	0	1
Subtotal	0	0	*	0	*	*	1	2	*	0	0	0	3
Total	**14**	**19**	**88**	**110**	**79**	**118**	**170**	**187**	**154**	**165**	**159**	**127**	**1,390**

Source: Congressional Budget Office.

Note: * = between zero and $500 million.

a. CBO estimated the funding provided for operations in Afghanistan and Iraq by allocating funds on the basis of information in budget justification materials from the Department of Defense and in monthly reports on its obligations. Some allocations for prior years have been adjusted on the basis of more recent information.

b. Includes Operation Noble Eagle (homeland security missions, such as combat air patrols, in the United States), the restructuring of Army and Marine Corps units, classified activities other than those funded by appropriations for the Iraq Freedom Fund, efforts to increase the size of the Army and Marine Corps, and other operations. (For fiscal years 2005 through 2012, funding for Operation Noble Eagle has been intermingled with regular appropriations for the Department of Defense; that funding is not included in this table.)

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

d. In 2010 and 2011, most funding for diplomatic operations in, and foreign aid to, countries helping the United States fight terrorism was in regular appropriations and cannot be separated from appropriations for activities unrelated to those operations.

e. Includes funding for some veterans' benefits and services and for certain activities of the Department of Justice. Excludes about $12 billion in spending by the Department of Veterans Affairs for the incremental costs for medical care, disability compensation, and survivors' benefits for veterans of operations in Afghanistan and Iraq and the war on terrorism. That amount was based on CBO's estimates of spending from regular appropriations for the Department of Veterans Affairs and was not explicitly appropriated for war-related expenses.

For the final alternative scenario, CBO projected what would occur if lawmakers canceled the automatic enforcement procedures for discretionary spending specified in the Budget Control Act. Those automatic procedures will reduce discretionary (and mandatory) spending beginning in fiscal year 2013 and continuing through 2021 (see Table 3-6 on page 76). If, instead, lawmakers chose to prevent those automatic cuts to discretionary spending each year, outlays would be $845 billion (or about 7 percent) higher over the 2013–2022 period than the amount projected in CBO's baseline.

Net Interest

Outlays for net interest were $227 billion in 2011 and are projected to edge down to $224 billion in 2012 (see Table 3-7 on page 77). That decrease is mainly attributable to a smaller inflation adjustment for inflation-protected securities and lower interest outlays for Treasury bills, offset partially by higher interest costs for Treasury notes and bonds. As a share of GDP, net interest was 1.5 percent in 2011 and is expected to be 1.4 percent in 2012.

Net interest outlays are dominated by the interest paid to holders of the debt that the Department of the Treasury issues to the public. The Treasury also pays interest on debt issued to trust funds and other government accounts, but such payments are intragovernmental transactions that have no effect on the budget deficit. In addition, other federal accounts pay and receive interest for various reasons.[32]

The federal government's interest payments depend primarily on market interest rates and the amount of debt held by the public; however, other factors, such as the rate of inflation and the maturity structure of outstanding securities, also affect interest costs. (For example, longer-term securities generally carry higher interest rates than do shorter-term securities.) Interest rates are determined by a combination of market forces and the policies of the Federal Reserve System. Debt held by the public is determined mostly by cumulative budget deficits, which depend on policy choices about spending and revenues and on economic conditions and other factors. At the end of 2011, debt held by the public reached $10.1 trillion, and in CBO's baseline, it is projected to total $15.3 trillion in 2022. (For detailed projections of debt held by the public, see Table 1-5 on page 16.)

Although debt held by the public surged in the past few years to its highest level relative to GDP since the early 1950s, outlays for net interest have remained low relative to GDP because interest rates on Treasury securities have fallen to remarkably low levels. Rates on 3-month Treasury bills plummeted from an average of almost 5 percent in 2007 to an average of 0.1 percent in 2011. Similarly, rates on 10-year Treasury notes dropped from an average of nearly 5 percent in 2007 to an average of 3 percent in 2011. As a result, even though debt held by the public rose dramatically—climbing from 36 percent of GDP at the end of 2007 to 68 percent at the end of 2011—outlays for net interest as a share of GDP fell from 1.7 percent in 2007 to 1.5 percent in 2011. By comparison, such outlays averaged about 3 percent of GDP in the 1980s and 1990s.

Baseline Projections of Net Interest

Under CBO's baseline assumptions, net interest costs are expected to increase significantly from 2013 through 2022. Rising debt and higher interest rates are projected to boost those costs from $231 billion in 2013 to $624 billion in 2022. Debt held by the public is projected to increase by nearly 50 percent (in nominal terms) over the next 10 years, reaching $15.3 trillion in 2022.[33] In addition, CBO estimates that the interest rate paid on 3-month Treasury bills will rise from less than 0.1 percent in 2012 to 3.8 percent in 2020 through 2022, and the rate on 10-year Treasury notes will increase from 2.3 percent in 2012 to 5.0 percent by 2019. As a result, under current law, net interest as a share of GDP is projected to reach 2.5 percent of GDP in 2022.

Gross Interest on Treasury Securities

In 2011, interest paid by the Treasury on all of its debt issuances totaled $454 billion (see Table 3-7). More than 40 percent of that total, $188 billion, represents payments to other entities (such as trust funds) within the federal government; the remainder is paid to owners of Treasury debt issued to the public. In CBO's baseline, gross interest payments from 2013 through 2022 total nearly $6.5 trillion. Almost 70 percent of that amount

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

33. Debt held by the public does not include securities issued by the Treasury to federal trust funds and other government accounts. Those securities are included as part of the measure of gross debt (see Chapter 1).

Table 3-5.

CBO's Projections of Discretionary Spending Under Selected Policy Alternatives

(Billions of dollars)

	Actual, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
CBO's January 2012 Baseline (Budget Control Act Caps and Automatic Enforcement Procedures in Effect Through 2021)														
Budget Authority														
Defense	711	670	609	620	632	645	661	676	692	708	725	743	3,167	6,712
Nondefense	511	529	481	495	506	516	527	540	554	568	581	597	2,525	5,365
Total	**1,222**	**1,199**	**1,089**	**1,115**	**1,138**	**1,162**	**1,187**	**1,216**	**1,246**	**1,277**	**1,307**	**1,340**	**5,692**	**12,077**
Outlays														
Defense	700	680	636	625	627	642	649	658	679	695	711	734	3,180	6,657
Nondefense	646	628	583	571	572	578	584	593	605	619	632	647	2,888	5,984
Total	**1,346**	**1,308**	**1,220**	**1,196**	**1,200**	**1,219**	**1,233**	**1,251**	**1,284**	**1,313**	**1,344**	**1,382**	**6,068**	**12,641**
Reduce the Number of Troops Deployed for Certain Types of Overseas Military Operations to 45,000 by 2015[a]														
Budget Authority														
Defense	711	670	571	557	550	558	570	583	597	612	627	643	2,807	5,869
Nondefense	511	529	476	488	498	507	517	530	544	558	571	586	2,486	5,276
Total	**1,222**	**1,199**	**1,047**	**1,046**	**1,048**	**1,065**	**1,088**	**1,113**	**1,141**	**1,170**	**1,198**	**1,229**	**5,293**	**11,145**
Outlays														
Defense	700	680	618	582	562	562	564	569	586	601	615	636	2,887	5,894
Nondefense	646	628	582	567	566	570	576	584	596	609	623	637	2,861	5,909
Total	**1,346**	**1,308**	**1,200**	**1,149**	**1,128**	**1,133**	**1,139**	**1,153**	**1,182**	**1,210**	**1,238**	**1,273**	**5,748**	**11,803**
Increase Discretionary Appropriations at the Rate of Growth of Nominal Gross Domestic Product After 2012[b]														
Budget Authority														
Defense	711	670	684	709	748	789	827	864	901	939	978	1,019	3,757	8,457
Nondefense	511	529	540	562	598	636	670	703	736	770	806	843	3,005	6,864
Total	**1,222**	**1,199**	**1,224**	**1,271**	**1,346**	**1,425**	**1,497**	**1,567**	**1,637**	**1,709**	**1,784**	**1,862**	**6,762**	**15,321**
Outlays														
Defense	700	680	681	697	726	767	800	831	873	910	948	994	3,670	8,225
Nondefense	646	628	616	626	651	684	717	750	784	820	858	896	3,296	7,404
Total	**1,346**	**1,308**	**1,297**	**1,323**	**1,377**	**1,451**	**1,517**	**1,580**	**1,657**	**1,730**	**1,806**	**1,890**	**6,966**	**15,629**
Increase Discretionary Appropriations at the Rate of Inflation After 2012[c]														
Budget Authority														
Defense	711	670	680	694	709	725	742	762	781	801	822	843	3,551	7,561
Nondefense	511	529	537	548	561	575	589	605	622	639	657	676	2,811	6,010
Total	**1,222**	**1,199**	**1,217**	**1,242**	**1,270**	**1,301**	**1,332**	**1,367**	**1,403**	**1,441**	**1,479**	**1,519**	**6,362**	**13,571**
Outlays														
Defense	700	680	679	687	698	718	729	741	765	785	805	831	3,511	7,437
Nondefense	646	628	614	617	623	633	643	655	670	687	705	723	3,130	6,570
Total	**1,346**	**1,308**	**1,293**	**1,303**	**1,321**	**1,351**	**1,372**	**1,396**	**1,435**	**1,471**	**1,509**	**1,555**	**6,641**	**14,007**

Continued

Table 3-5. Continued

CBO's Projections of Discretionary Spending Under Selected Policy Alternatives

(Billions of dollars)

	Actual, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
Freeze Most Discretionary Appropriations at the Level Provided for 2013[d]														
Budget Authority														
Defense	711	670	609	610	612	614	617	619	622	624	627	630	3,062	6,185
Nondefense	511	529	481	481	482	481	480	481	481	482	483	488	2,404	4,818
Total	**1,222**	**1,199**	**1,089**	**1,091**	**1,094**	**1,095**	**1,097**	**1,100**	**1,102**	**1,106**	**1,110**	**1,118**	**5,467**	**11,003**
Outlays														
Defense	700	680	636	619	613	617	613	610	617	620	622	631	3,099	6,199
Nondefense	646	628	583	563	554	550	545	542	541	542	543	547	2,796	5,511
Total	**1,346**	**1,308**	**1,220**	**1,182**	**1,167**	**1,167**	**1,159**	**1,152**	**1,158**	**1,162**	**1,165**	**1,178**	**5,895**	**11,710**
Remove the Effect on Discretionary Spending of the Automatic Enforcement Procedures Specified in the Budget Control Act[e]														
Budget Authority														
Defense	711	670	663	675	687	700	715	731	746	763	780	799	3,440	7,260
Nondefense	511	529	524	533	543	553	563	576	588	602	614	630	2,716	5,726
Total	**1,222**	**1,199**	**1,187**	**1,208**	**1,230**	**1,253**	**1,278**	**1,306**	**1,335**	**1,365**	**1,394**	**1,430**	**6,156**	**12,986**
Outlays														
Defense	700	680	669	671	679	695	704	712	733	749	765	789	3,417	7,166
Nondefense	646	628	607	604	608	614	620	628	640	652	666	681	3,053	6,320
Total	**1,346**	**1,308**	**1,276**	**1,276**	**1,286**	**1,309**	**1,324**	**1,341**	**1,373**	**1,401**	**1,431**	**1,470**	**6,470**	**13,486**

Source: Congressional Budget Office.

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

a. For this alternative, CBO does not extrapolate the $127 billion in budget authority for military operations, diplomatic activities, and foreign aid in Afghanistan and other countries provided for 2012. Rather, the alternative incorporates the assumption that future funding for overseas contingency operations would total $86 billion in 2013, $61 billion in 2014, $43 billion in 2015, and about $40 billion a year from 2016 on—for a total of $464 billion over the 2013–2022 period.

b. These estimates reflect the assumption that appropriations will not be constrained by caps and other provisions of the Budget Control Act of 2011 and instead will mostly grow at the rate of nominal GDP from their 2012 level. However, under this alternative, appropriations for 2012 for operations in Afghanistan and other countries are assumed to grow at the rate of inflation from their 2012 level (as recorded in CBO's baseline).

c. These estimates reflect the assumption that appropriations will not be constrained by caps and other provisions of the Budget Control Act and will instead grow at the rate of inflation from their 2012 level. Discretionary funding related to federal personnel is inflated using the employment cost index for wages and salaries; other discretionary funding is adjusted using the gross domestic product price index.

d. This option reflects the assumption that appropriations for 2013 will total $950 billion (the cap of $1,047 billion minus an estimated reduction of $97 billion resulting from the automatic enforcement procedures for that year). Such appropriations would be frozen at the 2013 level through 2022.

e. The Budget Control Act specified that if lawmakers did not enact legislation originating from the Joint Select Committee on Deficit Reduction that would reduce projected deficits by at least $1.2 trillion, automatic procedures would go into effect to reduce both discretionary and mandatory spending during the 2013–2021 period. Such automatic reductions in spending would take the form of equal cuts (in dollar terms) in funding for defense and nondefense programs in 2013 through 2021. For 2013, those reductions would be achieved by automatically canceling a portion of the budgetary resources (in an action known as sequestration) for most discretionary programs and for some programs and activities financed by mandatory spending. For the 2014–2021 period, the automatic procedures would be enforced by lowering the caps on discretionary budget authority specified in the Budget Control Act and through sequestration of mandatory spending.

Table 3-6.

Discretionary Spending Projected in CBO's Baseline

(Billions of dollars)

												Total	
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013-2017	2013-2022
						Budget Authority[a]							
Defense													
Increase discretionary appropriations at the rate of inflation	670	680	694	709	725	742	762	781	801	822	843	3,551	7,561
Adjustments to meet discretionary caps[b]	n.a.	-71	-74	-77	-80	-82	-85	-90	-93	-97	-100	-384	-848
Subtotal	670	609	620	632	645	661	676	692	708	725	743	3,167	6,712
Nondefense													
Increase discretionary appropriations at the rate of inflation	529	537	548	561	575	589	605	622	639	657	676	2,811	6,010
Adjustments to meet discretionary caps[b]	n.a.	-56	-53	-55	-59	-63	-65	-68	-71	-76	-79	-286	-645
Subtotal	529	481	495	506	516	527	540	554	568	581	597	2,525	5,365
Total Discretionary													
Increase discretionary appropriations at the rate of inflation	1,199	1,217	1,242	1,270	1,301	1,332	1,367	1,403	1,441	1,479	1,519	6,362	13,571
Adjustments to meet discretionary caps[b]	n.a.	-128	-127	-132	-139	-145	-151	-158	-164	-172	-179	-670	-1,494
All Discretionary Budget Authority	**1,199**	**1,089**	**1,115**	**1,138**	**1,162**	**1,187**	**1,216**	**1,246**	**1,277**	**1,307**	**1,340**	**5,692**	**12,077**
						Outlays							
Defense													
Increase discretionary appropriations at the rate of inflation	680	679	687	698	718	729	741	765	785	805	831	3,511	7,437
Adjustments to meet discretionary caps[b]	n.a.	-42	-61	-71	-76	-80	-83	-86	-90	-94	-97	-331	-780
Subtotal	680	636	625	627	642	649	658	679	695	711	734	3,180	6,657
Nondefense													
Increase discretionary appropriations at the rate of inflation	628	614	617	623	633	643	655	670	687	705	723	3,130	6,570
Adjustments to meet discretionary caps[b]	n.a.	-31	-46	-51	-55	-59	-62	-65	-68	-72	-76	-242	-586
Subtotal	628	583	571	572	578	584	593	605	619	632	647	2,888	5,984
Total Discretionary													
Increase discretionary appropriations at the rate of inflation	1,308	1,293	1,303	1,321	1,351	1,372	1,396	1,435	1,471	1,509	1,555	6,641	14,007
Adjustments to meet discretionary caps[b]	n.a.	-73	-107	-122	-131	-139	-145	-151	-158	-166	-173	-573	-1,366
All Discretionary Outlays	**1,308**	**1,220**	**1,196**	**1,200**	**1,219**	**1,233**	**1,251**	**1,284**	**1,313**	**1,344**	**1,382**	**6,068**	**12,641**

Source: Congressional Budget Office.

Note: n.a. = not applicable.

a. Budget authority refers to the authority provided by law to incur financial obligations, which eventually result in outlays.

b. For 2013, such adjustments include a sequestration of budgetary resources. For 2022, CBO assumed that discretionary funding will equal the caps for 2021, adjusted for inflation.

Table 3-7.

Federal Interest Outlays Projected in CBO's Baseline

(Billions of dollars)

	Actual, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
Interest on Treasury Debt Securities[a] (Gross interest)	454	445	441	446	485	543	611	679	744	804	848	893	2,526	6,493
Interest Received by Trust Funds														
Social Security	-116	-114	-110	-105	-100	-97	-97	-101	-105	-108	-111	-113	-509	-1,046
Other[b]	-72	-69	-59	-50	-53	-49	-49	-48	-50	-55	-56	-58	-260	-526
Subtotal	-188	-183	-169	-155	-153	-146	-146	-149	-154	-163	-167	-170	-769	-1,572
Other Interest[c]	-36	-38	-40	-44	-49	-56	-63	-70	-76	-83	-91	-98	-252	-671
NRRIT Investment Income (Non-Treasury holdings)[d]	-3	*	*	*	*	*	*	*	*	*	*	*	-1	-3
Net Interest Outlays	**227**	**224**	**231**	**247**	**282**	**341**	**402**	**459**	**513**	**557**	**590**	**624**	**1,503**	**4,247**

Source: Congressional Budget Office.

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

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

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

c. Primarily interest on loans to the public.

d. Earnings on investments by the National Railroad Retirement Investment Trust (NRRIT), an entity created to manage and invest assets of the Railroad Retirement program.

reflects interest paid on debt held by the public, which is projected to nearly triple during the coming decade.

Interest Received by Trust Funds

The Treasury has issued more than $4.6 trillion in securities to federal trust funds and other government accounts. Trust funds are the dominant holders of such securities, owning more than 90 percent of them. The interest paid on those securities has no net impact on federal spending because it is credited to accounts elsewhere in the budget. In 2012, trust funds will be credited with $183 billion of such intragovernmental interest, CBO estimates, mostly for the Social Security and Civil Service Retirement and Disability trust funds. That total is projected to diminish in future years, in part because the balances in certain trust funds will decline.

Other Interest

The $38 billion in other interest that CBO anticipates the government will receive in 2012 represents the net result of many transactions, including interest collections and interest payments.

The largest interest collections come from the government's credit financing accounts, which have been established to record the cash transactions related to federal direct loan and loan guarantee programs. For those programs, net subsidy costs are recorded in the budget, but the cash flows that move through the credit financing accounts are not. Credit financing accounts pay interest to and receive interest from Treasury accounts that appear in the budget; but, on net, they pay more interest to the Treasury than they receive from it. CBO estimates that net receipts from the credit financing accounts will total $29 billion in 2012 and will steadily increase to $64 billion in 2022. Interest payments attributable to the direct student loan program dominate the annual totals.

Among the interest outflows from the government are payments for interest on tax refunds issued more than 45 days after the date on which the corresponding tax returns were filed and interest payments made for certain bonds issued to finance the resolution of the savings and loan crisis of the 1980s. Together, those payments are expected to total more than $5 billion in 2012 and to average $5 billion to $7 billion per year through 2022.

CHAPTER

4

The Revenue Outlook

If current laws remain unchanged, federal revenues will grow by almost 10 percent in fiscal year 2012, to a total of about $2.5 trillion, the Congressional Budget Office (CBO) projects. Those revenues will equal 16.3 percent of gross domestic product (GDP), substantially above the range of 15.1 percent to 15.4 percent of GDP seen in the past three years, though still well below the roughly 18 percent of GDP that revenues have averaged over the past 40 years (see Figure 4-1). Almost all of the projected growth in revenues relative to GDP in 2012 comes from changes in tax rules that have already occurred or that are scheduled to occur this year under current law. The most notable are the acceleration of businesses' tax deductions for the depreciation of new equipment into 2011 and 2012 (which reduced revenues to a greater extent in 2011 than it will in 2012) and the scheduled expiration at the end of February 2012 of a 2 percentage-point reduction in the payroll tax rate for Social Security.

Under current law—the assumption that underlies CBO's baseline budget projections—revenues are projected to grow even faster between 2012 and 2014: by a total of 31 percent, far outstripping the 7 percent total growth in GDP projected for that two-year period. As a result, revenues as a share of GDP are projected to rise by 3.7 percentage points during that period, reaching 20.0 percent of GDP in 2014—a level that has been exceeded only once since World War II. About four-fifths of that projected increase stems from expiring tax provisions and other scheduled changes in tax rules, several of which are particularly important:

- Reductions in individual income taxes that were initially enacted in calendar years 2001, 2003, or 2009, and extended for two years in 2010, are set to expire at the end of December 2012, boosting revenues significantly thereafter (see Box 4-1 on page 82).
- The latest temporary measure to keep a large number of taxpayers from being subject to the individual alternative minimum tax (AMT) expired at the end of December 2011. That expiration is expected to have a significant impact on revenues starting in the spring of 2013, when people file their tax returns for 2012.
- The temporary cut of 2 percentage points in the portion of Social Security taxes paid by employees is due to expire at the end of February 2012, which will increase payroll tax receipts in fiscal year 2013 and thereafter relative to those in 2012.
- The impact of recent changes in the rules under which businesses deduct the costs of investments in equipment will also boost revenues in 2013 and 2014.
- An acceleration of corporate tax payments will shift revenues into 2014 that would have been paid between 2015 and 2017.
- Various taxes, fees, and tax credits enacted in the Affordable Care Act are scheduled to take effect in 2013 and 2014, with the net effect of raising revenues beginning in those years, CBO estimates.[1]

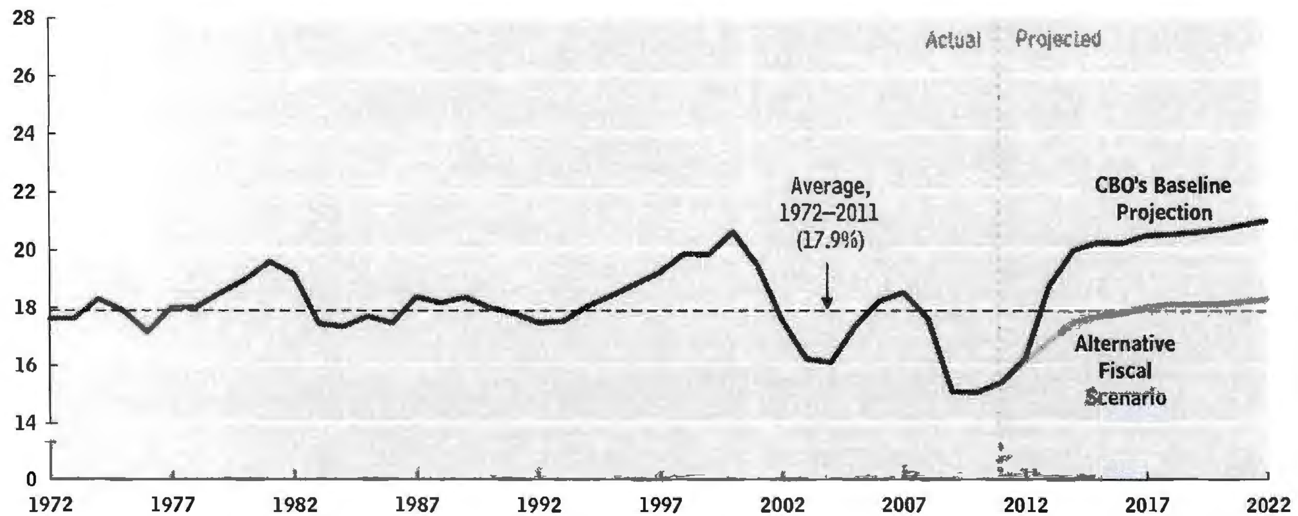
The rest of the increase in revenues as a percentage of GDP projected for 2013 and 2014 is attributable to other factors, such as the expectation that capital gains realizations by households and average tax rates on corporate profits—both of which have been significantly depressed during the recent recession and slow recovery—will increase to levels more consistent with historical experience.

1. As referred to in this report, the Affordable Care Act comprises the Patient Protection and Affordable Care Act (Public Law 111-148) and the health care provisions of the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152).

Figure 4-1.

Revenues Projected in CBO's Baseline and Under an Alternative Fiscal Scenario

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Note: The alternative fiscal scenario incorporates the assumptions that all expiring tax provisions (other than the payroll tax reduction), including those that expired at the end of December 2011, are instead extended and that the alternative minimum tax is indexed for inflation after 2011 (starting at the 2011 exemption amount).

After 2014, revenues continue to rise relative to GDP in CBO's baseline, reaching 21.0 percent by 2022. That continued increase results largely from various features of the individual income tax system that cause average tax rates—taxes as a percentage of income—to rise over time:

- Real bracket creep, in which growth in real (inflation-adjusted) income pushes more income into higher tax brackets;
- Continued expansion in the reach of the AMT; and
- Increases in withdrawals from tax-deferred retirement accounts as baby boomers retire.

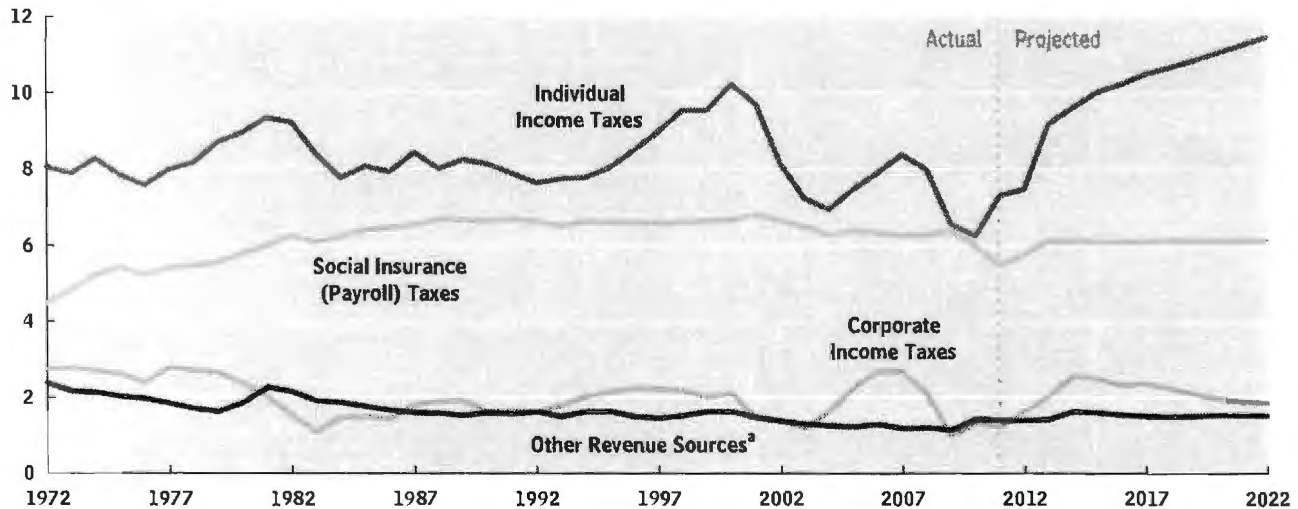
CBO's current revenue projections are lower than its previous projections, which were published last August, by a total of $700 billion (or 2 percent) over the 2012–2021 period. The reductions in projected revenues mostly reflect changes in CBO's economic forecast and adjustments for technical factors; recently enacted legislation has had a fairly small effect on projected revenues. (For details of the changes in CBO's revenue projections since August, see Appendix A.)

CBO's current-law projections are not meant to be a prediction of future revenues but rather a benchmark against which lawmakers can measure the effects of possible changes to tax laws. If, for example, future legislation maintained some tax policies that are in effect now or that were in effect recently—by extending all of the tax provisions set to expire in coming years (except the reduction in the payroll tax rate) and reinstating the provisions that expired at the end of December 2011—revenues would grow much more slowly than in CBO's baseline projections, equaling about 17.5 percent of GDP in 2014 rather than 20.0 percent. Under that alternative fiscal scenario, revenues would still rise relative to GDP through 2014 mainly because of factors related to the economic recovery, the expiration of the temporary payroll tax cut, and the effects of the new taxes and fees enacted in the Affordable Care Act (see Figure 4-1). In later years, revenues would continue to rise relative to GDP—averaging 18 percent between 2015 and 2022—mainly because of real bracket creep and the growth of retirement income. Nevertheless, total revenues between 2012 and 2022 would be about $5 trillion (or 12 percent) lower than in CBO's baseline. (For more about how extending expiring tax provisions would affect revenues, see Chapter 1.)

Figure 4-2.

Revenues, by Major Source

(Percentage of gross domestic product)



Source: Congressional Budget Office.

a. Excise taxes, estate and gift taxes, earnings of the Federal Reserve System, customs duties, and various miscellaneous levies.

Other provisions of the tax code—which are not scheduled to expire—also have a significant impact on the revenue outlook. In particular, the many exclusions, deductions, exemptions, and credits in both the individual and corporate income tax systems have the effect of reducing tax revenues, for any given level of tax rates, by sizable amounts. Some of those provisions are referred to as "tax expenditures" because, like government spending programs, they provide financial assistance to particular activities, entities, or groups of people. The tax expenditures that have the largest impact on revenues involve the exclusion from workers' taxable income of employers' contributions for health care, health insurance premiums, and long-term care insurance premiums; the exclusion of contributions to and earnings of pension funds (minus pension benefits included in taxable income); and the deduction for interest paid on mortgages for owner-occupied residences. CBO estimates that under current law, those and other major tax expenditures will total just under $12 trillion over the 2013–2022 period—an amount equal to 5.8 percent of GDP, or more than a quarter of the revenues projected for that period.[2]

2. See Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2011–2015*, JCS-1-12 (January 17, 2012). CBO extrapolated the estimates beyond 2015 using its economic forecast and included projected effects on payroll taxes.

Changes in the Composition of Revenues over Time

Federal revenues come from various sources: individual income taxes, social insurance (payroll) taxes, corporate income taxes, excise taxes, estate and gift taxes, earnings of the Federal Reserve System that are passed on to the Treasury, customs duties, and miscellaneous fines and fees. Individual income taxes are the largest source of federal revenues: On average, they have contributed about 45 percent of total revenues (and equaled 8 percent of GDP) over the past 40 years. Social insurance taxes—mainly for Social Security and for Medicare's Hospital Insurance program—are the second largest source of receipts, averaging 34 percent of total revenues (6 percent of GDP). Corporate income taxes have contributed roughly 10 percent of total revenues (2 percent of GDP), as have all of the other revenue sources combined.

Although that basic hierarchy has remained the same over the past four decades, the composition of revenues has varied from year to year. Receipts from individual income taxes have fluctuated more than the other major types of revenues (see Figure 4-2)—ranging from 42 percent to 50 percent of total revenues (and from 6.3 percent to 10.2 percent of GDP) but showing no trend over that period. Receipts from social insurance taxes rose as a

Box 4-1.

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

To provide a neutral benchmark against which to assess the potential effects of proposed changes in tax laws, the Congressional Budget Office (CBO) prepares its revenue baseline by assuming that current laws remain in effect—specifically, that scheduled changes to provisions of the tax code occur as specified and that no additional changes to those provisions are enacted.[1] Some of those scheduled changes have substantial consequences for CBO's baseline projections. In particular, significant tax provisions that were originally enacted in calendar years 2001, 2003, or 2009 and extended in 2010 have recently expired or are due to expire by the end of 2012.[2] In all, scheduled changes in tax rules will increase revenues as a share of gross domestic product (GDP) by about 2.9 percentage points in the next two fiscal years, 2013 and 2014, CBO projects. Nearly all of that increase is projected to persist through 2022, the end of the current 10-year projection period.[3] (Most of that revenue increase does not occur in the alternative fiscal scenario discussed in Chapter 1, which incorporates the assumption that almost all expiring tax provisions are extended.)

Expiration of Cuts in Individual Income Taxes

The largest share of that projected 2.9 percentage-point increase in revenues through 2014—about 1.5 percentage points—results from the scheduled expiration at the end of calendar year 2012 of various provisions related to the individual income tax that were initially enacted in 2001, 2003, or 2009, as well as from the expiration of certain provisions related to the alternative minimum tax (AMT). Those expirations—which are projected to boost revenues by a total of $3.8 trillion over the fiscal year 2013–2022 period—will affect various parameters of the individual income tax:

- The 10 percent tax bracket will revert to 15 percent;
- Statutory tax rates for the four highest tax brackets will revert from 25, 28, 33, and 35 percent, respectively, to 28, 31, 36, and 39.6 percent;
- For married couples who file joint tax returns, the standard deduction and the range of incomes spanned by the 15 percent tax bracket will shrink to less than twice the size of those for individual filers;
- The top tax rate of 15 percent on long-term capital gains realizations and dividends will return to the pre-2003 rates of 20 percent for capital gains and 39.6 percent for dividends;
- The phasing out of itemized deductions and personal exemptions for higher-income taxpayers will be reinstated;
- The child tax credit will revert from $1,000 to $500 per child; and
- The American Opportunity Tax Credit for higher-education expenses will expire.

1. The law that spells out how CBO should calculate its baseline makes an exception for expiring excise taxes dedicated to trust funds; they are assumed to be extended at their current rates.

2. Those provisions were first enacted in three laws—the Economic Growth and Tax Relief Reconciliation Act of 2001 (Public Law 107-16), the Jobs and Growth Tax Relief Reconciliation Act of 2003 (P.L. 108-27), and the American Recovery and Reinvestment Act of 2009 (P.L. 111-5)—and were most recently extended in the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312).

3. The estimates reported in this box exclude any budgetary effects that would result from the influence of those tax provisions on the broader economy, including effects on the division of labor compensation between taxable wages and nontaxable fringe benefits. Such effects are incorporated in CBO's projections of economic activity, and thus are reflected in the baseline revenue projections, but they are not calculated separately and therefore are not included in the estimates reported here. These estimates also do not include the effects that refundable tax credits have on outlays (which are incorporated in CBO's projections of outlays).

Continued

Box 4-1. Continued

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

Another expiration with a significant revenue effect is the end of the temporary "patch" for the AMT, which had raised the amount of income exempt from that tax in order to prevent increases in the number of taxpayers subject to it. The patch was first enacted in 2001 and extended regularly thereafter; the latest version expired at the end of December 2011. As a result, the number of taxpayers affected by the AMT will jump from about 4 million in calendar year 2011 to about 30 million in 2012, CBO projects, and receipts from the AMT will quadruple over two years, from $29 billion in fiscal year 2011 to $116 billion in 2013.

Expiration of the Cut in Payroll Tax Rates

The 2010 tax act (officially the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010) provided a one-year reduction in employees' share of the Social Security payroll tax for 2011. That reduction—from 6.2 percent to 4.2 percent—was extended through February 2012 by the Temporary Payroll Tax Cut Continuation Act of 2011 (P.L. 112-78). In its baseline, CBO assumes that the tax cut will expire as scheduled partway through fiscal year 2012, adding a total of $1.6 trillion to payroll tax revenues between 2012 and 2022 and boosting revenues as a share of GDP by about 0.3 percentage points starting in 2013.

Expiration of Accelerated Depreciation

For the past several years, provisions in the tax code have allowed businesses to deduct more of the cost of acquiring certain types of fixed investment property (such as machinery) from their taxable income in the year in which the acquisitions occur than would otherwise have been allowed. Those provisions lower revenues initially by letting companies accelerate such deductions, but they raise revenues in the future because companies will have fewer deductions remaining. The scheduled expiration of those provisions at the end of December 2012 will boost corporate and individual income tax revenues relative to GDP by 0.4 percentage points in fiscal year 2014, CBO projects, and will add a total of about $340 billion to revenues over the 2013–2022 period.

Acceleration of Corporate Income Tax Payments

Legislated changes that shift the timing of corporate income tax payments between various years will increase revenues as a share of GDP by 0.3 percentage points in 2014, CBO projects. Those changes will lead to a corresponding reduction in revenues over the following two years.

Other Scheduled Changes in Tax Provisions

Numerous other changes that are set to occur between 2012 and 2014 will have the net effect of boosting revenues relative to GDP by 0.5 percentage points by 2014. Roughly half of that increase by 2014 involves provisions enacted in major health care laws in 2010 that will take effect in coming years.[4] The provisions impose new fees and excise taxes on health insurance providers and on makers or importers of certain drugs and medical devices; they also impose penalties on employers and individuals who do not buy health insurance. In addition, those laws raise the Medicare payroll tax for people with relatively high earnings and impose an additional tax on the net investment income of higher-income taxpayers, starting in 2013. They also reduce revenues by instituting new tax credits, which take effect in 2014, to subsidize the purchase of health insurance through exchanges.

The remaining revenue increase from other scheduled changes in tax provisions comes primarily from a variety of provisions that expired at the end of 2011 (such as the research and experimentation tax credit) and from the scheduled expiration at the end of 2012 of a higher exemption amount and lower tax rates for estate and gift taxes.

4. Those laws are the Patient Protection and Affordable Care Act (P.L. 111-148) and the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152).

share of revenues in the 1970s and early 1980s; legislated increases in tax rates and in the amount of income to which those taxes apply boosted social insurance receipts to about 36 percent of total revenues (and roughly 6.5 percent of GDP) by the mid-1980s. In the past decade, however, those receipts have fallen slightly relative to GDP, accentuated by the payroll tax cut that took effect in January 2011. Receipts from corporate income taxes and other revenue sources have generally accounted for declining shares of total revenues over the past 40 years, but their paths have differed. Revenues from corporate income taxes fell substantially relative to total revenues and GDP in the early 1980s (mainly because of declining profits and legislation that accelerated depreciation deductions) and have fluctuated since then with no clear trend. By contrast, revenues from other sources, particularly excise taxes, have slowly trended downward over the past 40 years relative to total revenues and GDP.

Under current law, individual income taxes are projected to play a growing role over the next decade, accounting for 55 percent of total revenues (and equaling 11.5 percent of GDP) by 2022—well above their past peak. Receipts from social insurance taxes are projected to remain stable at about 6 percent of GDP, although their contribution to total revenues is projected to decline slightly as revenues from individual income taxes grow more quickly. Corporate income taxes are expected to make much the same contribution that they have in the past three decades, supplying about 11 percent of total revenues (and averaging 2.2 percent of GDP). Taken together, other revenue sources are expected to diminish slightly as a contributor to total revenues (although they will remain roughly stable relative to GDP).

Individual Income Taxes

Growth in individual income taxes accounts for three-quarters of the increase in total revenues as a share of GDP that CBO is projecting for the next 10 years. Changes in tax rules that are scheduled to occur under current law—and, to a lesser extent, the anticipated economic recovery, structural features of the tax system (such as real bracket creep), and other factors—are projected to push individual income tax receipts up from 7.3 percent of GDP in 2011 to 11.5 percent in 2022 (see Table 4-1).

Projected Receipts in 2012

After declining by a total of 23 percent between 2007 and 2010 and then rising by 21 percent last year, receipts from individual income taxes will grow by 6 percent this year, CBO estimates. Those receipts are projected to total $1.2 trillion in 2012, about equal to the amount collected in fiscal year 2007, before the recession.

Over half of the increase projected for this year is attributable to growth in taxable personal income (as measured in the national income and product accounts). Such income—which includes wages, salaries, dividends, interest, rental income, and proprietors' income—is a broad indicator of the base on which individuals pay income taxes. It is projected to grow by 3.3 percent this year, slightly less than the 3.7 percent growth expected for nominal GDP. Wages and salaries, the largest component of taxable personal income, are also estimated to rise by 3.3 percent in 2012.

The rest of the projected growth in individual income tax receipts this year stems from other factors, including a projection of continuing increases in capital gains realizations (which are not included in the measure of taxable personal income in the national income and product accounts) and the expiration of some tax provisions that reduced revenues in 2011. Capital gains realizations fell by more than 70 percent between calendar years 2007 and 2009, reflecting economic turmoil and steep declines in the stock and housing markets. CBO projects that receipts from capital gains will rise by 26 percent in 2012. In addition, the Making Work Pay tax credit—which was enacted in the American Recovery and Reinvestment Act of 2009 (Public Law 111-5) and which reduced receipts through the first three months of fiscal year 2011—is no longer in effect.

Projected Receipts from 2013 Through 2022

CBO projects that under current law, individual income tax receipts will rise by 26 percent in 2013 and by an average of about 7½ percent a year from 2013 through 2022. That growth will bring such receipts to $2.8 trillion in 2022, CBO projects, compared with $1.1 trillion in 2011, and will boost receipts by 4.0 percentage points relative to GDP. Factors contributing to that increase include scheduled changes in tax law, features of the existing tax system that cause revenues to rise faster than income over time, a further expected rebound in taxable income, and other effects of the economic recovery.

Some Existing Tax Provisions Will Expire and Some New Ones Will Take Effect. The most important reason for the

Table 4-1.

Revenues Projected in CBO's Baseline

	Actual, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
							In Billions of Dollars							
Individual Income Taxes	1,091	1,159	1,463	1,597	1,765	1,915	2,069	2,207	2,350	2,504	2,664	2,831	8,810	21,365
Social Insurance Taxes	819	895	975	1,017	1,076	1,142	1,205	1,266	1,324	1,385	1,447	1,513	5,415	12,349
Corporate Income Taxes	181	251	320	427	442	436	465	461	454	444	452	459	2,090	4,360
Other Revenues														
Excise taxes	72	81	85	94	100	102	107	111	116	118	121	123	488	1,076
Estate and gift taxes	7	11	14	39	44	48	52	56	60	64	68	72	197	516
Federal Reserve earnings	83	77	78	66	51	43	41	37	40	47	52	54	279	511
Customs duties	30	29	32	35	39	43	45	47	49	51	53	56	194	452
Other miscellaneous receipts	19	20	21	38	50	55	56	59	63	66	70	72	220	550
Subtotal	211	218	229	273	284	291	301	310	328	347	364	378	1,378	3,105
Total	**2,302**	**2,523**	**2,988**	**3,313**	**3,568**	**3,784**	**4,039**	**4,243**	**4,456**	**4,680**	**4,926**	**5,181**	**17,692**	**41,179**
On-budget	1,737	1,896	2,290	2,585	2,798	2,965	3,172	3,330	3,498	3,676	3,877	4,085	13,809	32,276
Off-budget[a]	566	627	698	728	770	819	868	914	958	1,004	1,049	1,096	3,883	8,903
Memorandum:														
Gross Domestic Product	14,954	15,508	15,914	16,575	17,618	18,704	19,708	20,661	21,616	22,603	23,614	24,655	88,519	201,666
							As a Percentage of Gross Domestic Product							
Individual Income Taxes	7.3	7.5	9.2	9.6	10.0	10.2	10.5	10.7	10.9	11.1	11.3	11.5	10.0	10.6
Social Insurance Taxes	5.5	5.8	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Corporate Income Taxes	1.2	1.6	2.0	2.6	2.5	2.3	2.4	2.2	2.1	2.0	1.9	1.9	2.4	2.2
Other Revenues														
Excise taxes	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5
Estate and gift taxes	*	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
Federal Reserve earnings	0.6	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Customs duties	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other miscellaneous receipts	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
Subtotal	1.4	1.4	1.4	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5
Total	**15.4**	**16.3**	**18.8**	**20.0**	**20.2**	**20.2**	**20.5**	**20.5**	**20.6**	**20.7**	**20.9**	**21.0**	**20.0**	**20.4**
On-budget	11.6	12.2	14.4	15.6	15.9	15.9	16.1	16.1	16.2	16.3	16.4	16.6	15.6	16.0
Off-budget[a]	3.8	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4

Source: Congressional Budget Office.

Note: * = between zero and 0.05 percent.

a. Receipts from Social Security payroll taxes.

rapid projected growth in individual income tax receipts over the next several years is the expiration of tax provisions originally enacted on a temporary basis in the past decade and then extended through 2011 or 2012 by the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312), also known as the 2010 tax act. Those expirations will have several notable effects beginning in 2013:

- Statutory tax rates on ordinary income, capital gains, and dividends will increase;
- The range of income spanned by the 15 percent tax bracket for couples who file joint tax returns will narrow; and
- The child tax credit will become smaller.

In addition, higher exemption amounts under the alternative minimum tax, which temporarily reduced the impact of the AMT, expired at the end of December 2011. CBO projects that in the absence of new legislation, tax liabilities from the AMT will rise in 2012, but those additional liabilities will be paid almost entirely in 2013 (when people file their tax returns), boosting receipts in that year. CBO expects most all of those liabilities to be paid with 2012 returns rather than through adjustments to withholding or quarterly tax payments before then because many taxpayers will be unaware of the change or may be expecting lawmakers to once again raise the AMT's exemption amounts.

Greater tax liabilities stemming from both the AMT and the expiration of the earlier tax cuts will raise receipts throughout the coming decade. If instead those various expired or expiring provisions were extended, revenues would be a total of $3.8 trillion lower during the 2013–2022 period than in CBO's baseline.

New tax provisions scheduled to take effect starting in 2013 will also increase income tax revenues, although to a much lesser extent than the expiring provisions (see Box 4-1 on page 82). One of those new provisions is an additional tax of 3.8 percent on "net investment income" of higher-income households—the largest component of which is capital gains realizations. That tax is set to begin in 2013.

Together, the expiration of existing provisions and introduction of new ones under current law will have the effect of raising individual income tax receipts as a share of GDP by roughly 1.6 percentage points between 2012 and 2022, CBO projects.

Structural Features of the Individual Income Tax Will Cause Revenues to Grow. Even without changes in statutory tax rates, credits, or exemption amounts, various features of the individual income tax would cause average tax rates to rise over time and boost revenues relative to GDP. For example, income tax brackets and exemptions are indexed to increase with inflation but not with growth in real income. As a result, as real income rises, more income is taxed in brackets with higher rates. That phenomenon of real bracket creep will raise individual income tax receipts as a share of GDP by about 1.0 percentage point over the next 10 years, CBO projects. Moreover, as nominal income rises, the AMT will apply to a growing share of income.[3] CBO estimates that, with the effects of the expiration of the higher exemption amounts at the end of 2011 excluded, the AMT will increase individual income tax receipts as a share of GDP by another 0.4 percentage points between now and 2022.

Growth in Retirement Distributions and Capital Gains Realizations Will Boost Taxable Income. Taxable distributions from tax-deferred retirement accounts, such as individual retirement accounts and 401(k) plans, are expected to grow more rapidly than other income in coming years as the population ages. By CBO's estimate, the taxation of distributions from such accounts will cause revenues as a share of GDP to rise by about 0.3 percentage points by 2022.

CBO also expects tax receipts from capital gains realizations to rise relative to GDP over the next decade (aside from the effects of the scheduled changes in tax rates), raising revenues as a share of GDP by 0.2 percentage points between 2012 and 2022. The large increase in capital gains realizations projected for 2012 will not be enough to bring them back to their historical relationship to GDP. But continued economic recovery and increases in asset prices are expected to boost capital gains realizations further, causing them, by 2014, to return nearly to their historical average share of GDP (after accounting for differences in the applicable tax rates). In CBO's projections, realizations stay roughly the same relative to GDP—at about 3.5 percent—through 2022.

Other Factors Will Contribute to Revenue Growth. Taken together, other factors are expected to raise individual income tax receipts as a share of GDP by about 0.5 percentage points between now and 2022. Those factors include an expectation that wages and salaries, which have fallen sharply relative to GDP since the beginning of the recession, will revert to a more normal percentage

3. As with the regular income tax, effective tax rates under the AMT increase as rising real income pushes taxpayers into higher tax brackets. In contrast to the regular income tax, however, the AMT's tax brackets and exemption amounts are not indexed for inflation. Thus, as income grows with inflation over time, more taxpayers become subject to the AMT, and those already affected by the tax tend to have a larger share of their income subject to it. For more details, see Congressional Budget Office, *The Individual Alternative Minimum Tax*, Issue Brief (January 2010). That report was issued before the most recent extension of the higher exemption amounts for the AMT.

Table 4-2.

Social Insurance Tax Revenues Projected in CBO's Baseline

(Billions of dollars)

	Actual, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
Social Security	566	627	698	728	770	819	868	914	958	1,004	1,049	1,096	3,883	8,903
Medicare	188	199	208	220	236	253	269	285	301	317	333	350	1,186	2,773
Unemployment Insurance	56	60	61	60	63	61	59	59	56	55	56	57	305	588
Railroad Retirement	4	4	5	5	5	5	5	5	6	6	6	6	24	53
Other Retirement[a]	4	4	3	3	3	3	3	3	3	3	3	3	17	33
Total	**819**	**895**	**975**	**1,017**	**1,076**	**1,142**	**1,205**	**1,266**	**1,324**	**1,385**	**1,447**	**1,513**	**5,415**	**12,349**

Source: Congressional Budget Office.

a. Consists primarily of federal employees' contributions to the Federal Employees Retirement System and the Civil Service Retirement System.

of GDP (for more details, see Chapter 2). In addition, wages and salaries of higher-income taxpayers are projected to grow faster than those of other taxpayers, boosting average tax rates.

Social Insurance Taxes

Receipts from payroll taxes that fund social insurance programs dropped by about 5 percent last year—to 5.5 percent of GDP, the lowest level relative to GDP since 1978—primarily because of a temporary cut in the Social Security taxes paid by employees. Under current law, CBO projects that social insurance tax receipts will increase by 9 percent in 2012 but remain below 6 percent of GDP for the second consecutive year. Thereafter, the scheduled expiration of the Social Security tax cut is expected to cause social insurance receipts to edge up to 6.1 percent of GDP in 2013 and remain at that percentage through the end of the 10-year projection period.

Sources of Social Insurance Tax Receipts

The two largest sources of social insurance tax receipts are payroll taxes for Social Security and for Part A of Medicare (the Hospital Insurance program). Much smaller sources are payroll taxes for unemployment insurance (most of which are imposed by states but produce amounts that are classified as federal revenues); employers' and employees' contributions to the Railroad Retirement System; and other contributions to federal retirement programs, mainly those made by federal employees (see Table 4-2). The premiums that Medicare enrollees pay for Part B (the Medical Insurance program) and Part D (prescription drug benefits) are voluntary payments and thus are not counted as tax revenues; rather, they are considered offsets to spending and appear on the spending side of the budget as offsetting receipts.

Social Security and Medicare payroll taxes are calculated as a percentage of a worker's earnings. The Social Security tax is usually 12.4 percent of earnings, with the employer and employee each paying half. It applies only up to a certain amount of a worker's annual earnings (the taxable maximum, currently $110,100); that amount is indexed to grow over time at the same pace as average earnings for all workers. The 2010 tax act lowered the Social Security tax rate for employees and self-employed workers in calendar year 2011 by 2.0 percentage points, to 4.2 percent for employees and to 10.4 percent for self-employed workers (who pay both the employer's and the employee's share of the tax). That reduction was effectively continued through the end of February 2012 by the Temporary Payroll Tax Cut Continuation Act of 2011 (P.L. 112-78).[4]

The Medicare tax applies to all earnings (with no taxable maximum) and is levied at a rate of 2.9 percent, with the

4. For people with self-employment income in 2012, the tax reduction amounts to 2 percent of earnings up to $18,350 (one-sixth of the annual taxable maximum) and is calculated regardless of when during the year those earnings are accrued. For people with wages or salaries, the tax reduction is effectively 2 percent of the amount earned in January and February 2012 up to $18,350.

employer and employee each paying half. Starting in 2013, an additional Medicare tax of 0.9 percent will be levied on the amount of an individual's earnings over $200,000 (or $250,000 for married couples filing a joint income tax return), bringing the total Medicare tax for those earners to 3.8 percent.

Projected Receipts

Because the reduction in the Social Security tax rate now extends partway through fiscal year 2012, social insurance tax receipts are projected to rise only to 5.8 percent of GDP this year. Next year, because that reduction will no longer be in effect under current law and (to a lesser extent) because the Medicare tax rate will rise for some taxpayers, social insurance receipts are projected to climb to 6.1 percent of GDP. (If, however, the rate reduction was extended through the end of December 2012, receipts from social insurance taxes would be about $75 billion lower in fiscal year 2012 and about $25 billion lower in 2013. Those receipts would amount to 5.3 percent of GDP in 2012—lower than the percentage in 2011 because the rate reduction was in effect for only nine months of that fiscal year—and 6.0 percent of GDP in 2013.)

Beyond 2013, social insurance receipts are projected to remain at 6.1 percent of GDP through 2022. That stable percentage reflects the offsetting effects of a projected increase in wages and salaries relative to GDP and a projected decrease in social insurance receipts relative to wages and salaries throughout that period. Wages and salariesare expected to increase to a percentage of GDP closer to their average since 1980 (for details, see Chapter 2). But social insurance receipts are expected to decrease relative to wages and salaries mainly because a growing share of earnings is anticipated to be above the taxable maximum amount for Social Security taxes.[5] In addition, receipts from unemployment insurance taxes are expected to decline relative to wages and salaries after 2012. Those receipts grew rapidly in the past two years, as states raised their tax rates and tax bases to replenish unemployment insurance trust funds that had been depleted because of high unemployment, but CBO expects unemployment insurance receipts to fall to more-typical levels in the coming years.

Corporate Income Taxes

The recent recession and rules that accelerated businesses' tax deductions for depreciation in the value of equipment have kept corporate income tax receipts at unusually low levels for the past three years, averaging 1.2 percent of GDP. CBO projects that those receipts will more than double relative to GDP over the next few years, reaching 2.6 percent in 2014. The projected growth mainly results from past and scheduled changes in depreciation rules and from other factors that are expected to boost the average tax rate on corporate profits back to a percentage more in keeping with that seen since the mid-1980s.

In the later years of the 10-year projection period, receipts from corporate income taxes are projected to decline again as a share of GDP, largely in tandem with a projected decrease in corporate profits relative to GDP. By 2022, corporate tax receipts amount to 1.9 percent of GDP in CBO's baseline—just about their average percentage over the past 40 years.

Projected Receipts from 2012 Through 2014

CBO expects receipts from corporate income taxes to climb by almost 40 percent ($70 billion) in 2012, to 1.6 percent of GDP, although domestic economic profits—an approximation of the base on which those taxes are paid—are expected to increase by only about 2 percent this year.[6] Corporate tax receipts are projected to grow by another 70 percent over the following two years, to 2.6 percent of GDP in 2014, even though profits are expected to remain fairly stable relative to GDP during that period. CBO is projecting such sharp increases in corporate tax receipts because of certain tax provisions that either have expired or are scheduled to expire, laws that move corporate tax payments into 2014 from later years, and CBO's expectation that the average corporate tax rate will return to more-normal levels following the substantial drop that began in 2009. Specifically, CBO

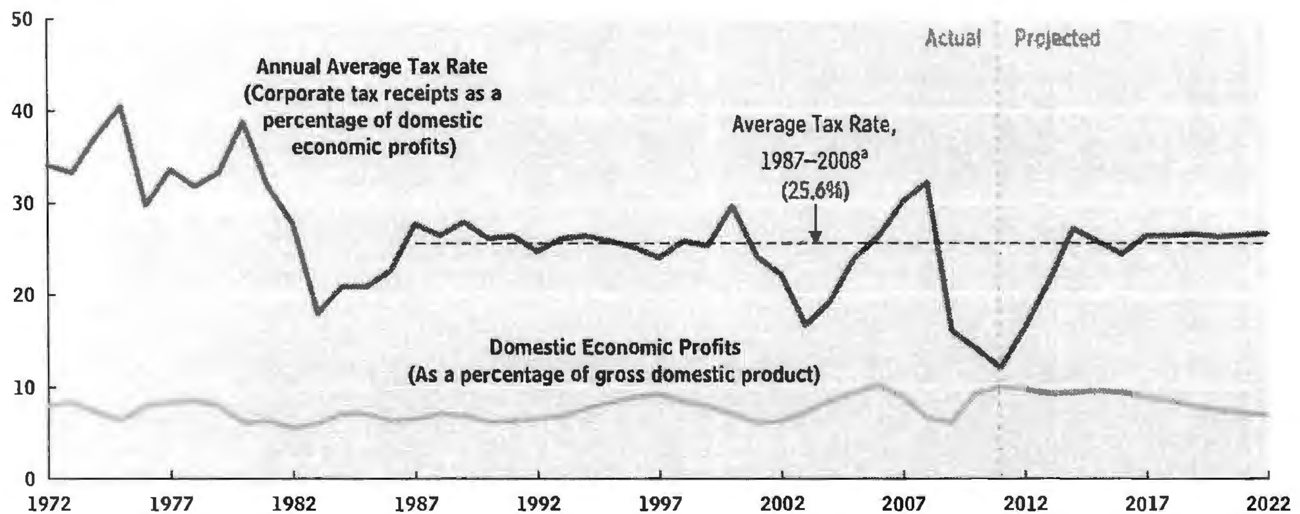
5. Because of the progressive rate structure of the income tax, the increase in the share of earnings above the Social Security taxable maximum is projected to produce an increase in individual income tax receipts that will largely offset the decrease in social insurance tax receipts.

6. Domestic economic profits, as measured in the national income and product accounts, are the profits that U.S. and foreign corporations earn from current production activities carried out within the United States. That measure of profits excludes certain income of U.S.-based multinational corporations that is derived from foreign sources, most of which does not generate corporate income tax receipts in the United States. That measure also excludes the effects of accelerated depreciation deductions.

Figure 4-3.

Average Corporate Tax Rate and Corporations' Domestic Economic Profits

(Percent)



Source: Congressional Budget Office.

Note: Domestic economic profits, as measured in the national income and product accounts, are the profits that U.S. and foreign corporations earn from current production activities carried out within the United States. They exclude certain income of U.S.-based multinational corporations that is derived from foreign sources, most of which does not generate corporate income tax receipts in the United States.

a. The Tax Reform Act of 1986 put in place corporate tax rates and a tax base that, although modified since then, still closely resemble the rates and tax base scheduled to be in effect over the 2013–2022 period.

expects the average tax rate on domestic economic profits to rise to 27 percent by 2014 (or to about 25 percent with the effects of the advance payments excluded), roughly the average seen over the period from 1987 to 2008 (see Figure 4-3). That reference period begins in 1987 because the Tax Reform Act of 1986 put in place corporate tax rates and a tax base that, though modified in some ways by subsequent legislation, still closely resemble the rates and base scheduled to be in effect over the 2013–2022 period.

Expiration of Full and Partial Expensing of Equipment Investment Will Boost Corporate Tax Payments. The average tax rate has fallen in the past few years partly because of various changes to the tax code whose effects will end or be reversed during the next few years. The most significant of those changes involves the speed at which firms that buy equipment can deduct its costs from their taxable income to reflect depreciation in the equipment's value. From 2008 through most of 2010, companies with large amounts of investment could "expense" (immediately deduct) 50 percent of the cost of their investments in equipment. The 2010 tax act expanded on that practice, allowing such companies to immediately deduct 100 percent of the costs of equipment investments made between September 8, 2010, and December 31, 2011; for equipment acquired between January 1 and December 31, 2012, such companies will be allowed to expense 50 percent of the costs.[7] After 2012, tax law is scheduled to revert to the typical rules in effect before 2008, which generally require businesses to deduct all of their equipment investments over a number of years.

The acceleration of depreciation deductions resulting from the recent law changes reduced corporate income tax receipts as a share of GDP by about 0.4 percentage points in 2011. That reduction was greater than it would have been otherwise because the provision allowing

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

50 percent expensing for tax year 2010 was enacted on a retroactive basis late in 2010, pushing the revenue losses into fiscal year 2011. CBO projects that the expensing provisions will have a substantial impact on receipts over the next several years as their effects reverse—not only ending the decline in the average corporate tax rate but boosting that rate above where it would have been without the changes in law. Specifically, corporate tax receipts were lowered in 2011 by the accelerated deductions that businesses shifted into that year. Such deductions will also reduce receipts in 2012, but the impact will be smaller, both because the expensing percentage for investment this year is lower (50 percent versus 100 percent) and because some deductions for investment made in previous years that would have been claimed in 2012 were accelerated into earlier years. Expensing provisions will boost tax receipts after 2012 because companies will already have deducted some or all of the costs of investments made in 2011 and 2012.

Other Factors Will Also Cause Receipts to Grow Through 2014. According to CBO's calculations, provisions in seven different laws—including the Worker, Homeownership, and Business Assistance Act of 2009 (P.L. 111-92) and the Hiring Incentives to Restore Employment Act (P.L. 111-147)—will cause $42 billion in corporations' estimated tax payments to be shifted from 2015, 2016, and 2017 into 2014.[8] In addition, some of the recent weakness in collections of corporate income taxes is not explained by available data on profits and other measures used to forecast corporate tax receipts; CBO projects that receipts will return to more-typical levels relative to those measures over the next few years.

Projected Receipts Beyond 2014

In CBO's baseline projections, corporate income tax receipts decline from 2.6 percent of GDP in 2014 to 1.9 percent in 2022. That decrease is attributable mainly to a projected drop in corporations' domestic economic profits as a share of GDP, from 9.7 percent in 2015 to 7.0 percent in 2022, largely because of rising interest payments on businesses' debt and increasing labor costs. In addition, the shifts in the timing of corporate tax payments that will boost receipts in 2014 under current law will cause receipts to be lower than they would be otherwise from 2015 through 2017.

8. CBO estimates that the most significant timing shifts will increase receipts by about $42 billion in 2014 and $4 billion in 2019 and will reduce receipts by about $4 billion in 2015, $35 billion in 2016, $2 billion in 2017, and $4 billion in 2020.

Other Sources of Revenues

In addition to individual income, social insurance, and corporate income taxes, the other sources of federal revenues are excise taxes, estate and gift taxes, earnings of the Federal Reserve System, customs duties, and various miscellaneous levies.

CBO projects that revenues from those other sources will total $218 billion in 2012 and $229 billion in 2013, up from $211 billion last year (see Table 4-3). As a share of GDP, those revenues will total 1.4 percent in 2012 and 2013, CBO estimates, and then range between 1.5 percent and 1.6 percent of GDP through the rest of the projection period. Increases in receipts from estate and gift taxes and from miscellaneous fees and fines—largely caused by changes in tax and other provisions—are expected to be partly offset by decreases in remittances from the Federal Reserve, as its portfolio and earnings decline to more-normal sizes relative to GDP.

Excise Taxes

Unlike taxes on income, excise taxes are levied on the production or purchase of a specific type of good or service. More than 85 percent of excise tax receipts over the coming decade will result from taxes related to highways, tobacco and alcohol, aviation, and health insurers. After falling for much of the past decade, receipts from excise taxes are expected to increase slightly as a share of GDP, from 0.5 percent in 2011 to 0.6 percent in 2014 and 2015. New excise taxes established by the Affordable Care Act, as well as the expiration of tax credits for ethanol-blended fuels, will generate those increases.

After 2015, excise tax receipts will decline slightly as a share of GDP, CBO estimates, totaling 0.5 percent from 2016 through 2022. That decline stems largely from an expectation of slow growth in highway tax receipts and a projected decline in receipts from tobacco taxes.

Highway Taxes. More than one-third of excise tax receipts come from highway taxes, primarily taxes on gasoline, diesel fuel, and blends of those fuels with ethanol. Receipts from those taxes—which are largely dedicated to the Highway Trust Fund—are projected to shoot up by 20 percent this year (to $36 billion) and then grow at an average annual rate of about 1 percent for the next

Table 4-3.

Other Sources of Revenues Projected in CBO's Baseline

(Billions of dollars)

	Actual, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
Excise Taxes														
Highway	29	36	37	37	38	39	40	40	40	41	41	41	191	395
Tobacco	17	17	17	16	16	16	16	16	15	15	15	15	81	156
Aviation	11	12	13	13	14	15	16	17	17	18	19	20	71	162
Alcohol	9	10	10	10	10	10	11	11	11	11	11	12	51	107
Health insurers	0	0	0	7	10	10	12	12	13	13	13	14	39	104
Other	5	7	9	11	11	11	12	15	19	20	21	22	55	152
Subtotal	72	81	85	94	100	102	107	111	116	118	121	123	488	1,076
Estate and Gift Taxes	7	11	14	39	44	48	52	56	60	64	68	72	197	516
Federal Reserve Earnings	83	77	78	66	51	43	41	37	40	47	52	54	279	511
Customs Duties	30	29	32	35	39	43	45	47	49	51	53	56	194	452
Other Miscellaneous Receipts														
Universal Service Fund fees	9	9	10	10	10	11	11	11	11	12	12	12	52	111
Other fees and fines	11	10	11	28	40	45	45	47	51	55	58	60	168	439
Subtotal	19	20	21	38	50	55	56	59	63	66	70	72	220	550
Total	**211**	**218**	**229**	**273**	**284**	**291**	**301**	**310**	**328**	**347**	**364**	**378**	**1,378**	**3,105**

Source: Congressional Budget Office.

10 years. Most of the increase this year is attributable to the expiration of tax credits for ethanol-blended fuels at the end of calendar year 2011. That expiration is also expected to produce about $6 billion in additional revenues by fiscal year 2013, the first full year after the credits ended.[9]

The low growth rate projected for those receipts from 2013 through 2022 reflects the expectation that gasoline consumption will be relatively flat during that period. Although the number of miles that people drive is projected to increase as the economy grows, CBO expects the effect of that increase on fuel use to be largely offset by improvements in the fuel economy of vehicles, mainly because of increases in the government's fuel economy standards. Other excise taxes—principally those on sales of diesel fuel and trucks—account for most of the small annual growth in revenues anticipated for the Highway Trust Fund through 2022.

Under current law, most of the federal excise taxes used to fund highways are scheduled to expire on March 31, 2012. However, as specified in the Balanced Budget and Emergency Deficit Control Act of 1985, CBO's baseline reflects the assumption that expiring excise taxes dedicated to trust funds will be extended (unlike other expiring tax provisions, which are assumed to follow the schedules set forth in current law).

Tobacco and Alcohol Taxes. Taxes on tobacco products will generate a total of $17 billion in revenues in 2012, CBO projects. That amount is expected to decrease by between 1 percent and 2 percent a year over the next decade, consistent with the overall decline in tobacco consumption that has been occurring for many years. By contrast, receipts from taxes on alcoholic beverages, which will total $10 billion in 2012, are projected to rise at an average rate of almost 2 percent a year through 2022, the result of expected increases in alcohol consumption.

Aviation Taxes. Receipts from excise taxes dedicated to the Airport and Airway Trust Fund (such as taxes on

9. The lower effective tax rates on ethanol-blended fuels that resulted from the tax credits did not reduce revenues credited to the Highway Trust Fund but rather the government's general revenues.

airline tickets and aviation fuel) rose by 4 percent in 2011, even though most of those taxes lapsed for two weeks during the summer. CBO projects that receipts from aviation-related taxes will grow by about 7 percent in 2012; the increase from the 2011 level would have been only about 3 percent if the temporary lapse had not dampened receipts last year.

Thereafter, aviation tax receipts are projected to rise at an average annual rate of about 5 percent, growing from $12 billion in 2012 to $20 billion in 2022. That growth roughly matches the projected growth of GDP over that period, because the main components of aviation excise taxes are levied as a percentage of dollar value, causing receipts to increase along with real economic activity and inflation. Under current law, most aviation taxes are scheduled to expire in February 2012, but like the highway taxes discussed above, they are assumed to be extended for the purposes of CBO's baseline.

Tax on Health Insurance Providers. Under the Affordable Care Act, health insurers will be subject to a new excise tax starting in 2014, which will be based on their share of total premiums assessed. However, several types of health insurers (such as self-insured plans, federal and state governments, and tax-exempt providers) will be fully or partially exempt. CBO projects that receipts from the tax will amount to $7 billion in 2014 and then rise to $14 billion by 2022.

Other Excise Taxes. As a whole, other excise taxes are projected to generate a total of about $150 billion in revenues between 2013 and 2022. Those taxes include a 2.3 percent excise tax on manufacturers and importers of certain medical devices, an annual fee charged to manufacturers and importers of brand-name drugs, a tax on certain high-cost employer-sponsored health plans, and taxes on the net investment income of some private foundations.

Estate and Gift Taxes

CBO projects that under current law, receipts from estate and gift taxes will hover around 0.1 percent of GDP in 2012 and 2013 (amounting to $11 billion and $14 billion, respectively) before rising sharply, to 0.2 percent of GDP in 2014 and 2015 and to 0.3 percent of GDP thereafter. By 2022, receipts from estate and gift taxes are projected to total $72 billion. Those estimates reflect scheduled changes in the tax code, particularly a reduction in the amount of gifts and bequests effectively exempted from such taxes and an increase in the top marginal tax rate, both of which are set to take effect in 2013.

Under the 2010 tax act, this year up to $5 million of an individual's ($10 million of a couple's) combined lifetime gifts and bequests are exempt from estate and gift taxes. Combined lifetime gifts and bequests in excess of that effective exemption amount are subject to a tax rate of 35 percent. Generation-skipping taxes—which apply to wealth transferred to an heir who is more than one generation younger—are also assessed at a tax rate of 35 percent. Starting in 2013, combined gifts and bequests will be subject to higher tax rates (a graduated rate schedule with a maximum tax rate of 55 percent), and the effective exemption amount will decline to $1 million. A 5 percent surtax will apply to transfers of wealth between $10 million and $17 million (changing the graduated rate schedule to a flat 55 percent rate on estates of at least $17 million), and the tax rate on generation-skipping transfers will also increase.

Those scheduled changes to estate and gift taxes will return the effective exemption amount and the tax rates closer to the ones that were in effect before tax cuts were enacted in 2001. As a result, CBO projects that over the next decade, receipts from estate and gift taxes will increase to percentages of GDP closer to those seen in the late 1990s.

Earnings of the Federal Reserve System

The income produced by the various activities of the Federal Reserve System (the nation's central bank), minus the cost of generating that income, is remitted to the Treasury and counted as revenues. The Federal Reserve's income stems mainly from interest on the Treasury securities and other securities that it holds. Its costs arise largely from the payment of interest on reserves that depository institutions hold at the Federal Reserve. Ordinarily, the Federal Reserve's biggest liability is currency in circulation (Federal Reserve notes), but because it pays no interest on currency, its income typically exceeds its costs by a large margin.

Over the past four years, the central bank has more than tripled the size of its asset holdings and has diversified those holdings by purchasing significant amounts of

riskier mortgage-backed securities issued by Fannie Mae, Freddie Mac, and Ginnie Mae. Those securities are risky because of the possibility that borrowers will prepay the underlying mortgages; securities that are riskier than Treasury securities generally pay higher yields as compensation for the added risk. In addition, within its holdings of Treasury securities, the Federal Reserve has shifted to ones with longer maturities and higher yields. As a result, despite a significant decline in interest rates, the Federal Reserve's earnings on its portfolio—and thus its remittances to the Treasury—have surged. In 2011, remittances totaled $83 billion (or 0.6 percent of GDP), about 2½ times their amount in 2008.

CBO projects that remittances will decline slightly from this year's level, to roughly $77 billion (or 0.5 percent of GDP) in both 2012 and 2013. They are projected to drop steadily over the following three years, to about 0.2 percent of GDP, and then remain at that level—their average over the 2000–2008 period—through 2022. Those declines mainly reflect the expectation that the size and composition of the Federal Reserve's portfolio will return to amounts more in line with historical experience.

Customs Duties and Other Miscellaneous Receipts

Customs duties and various miscellaneous revenue sources together yielded about 2 percent of total revenues (equal to about 0.3 percent of GDP) in 2011. CBO projects that receipts from customs duties will hold steady at about 0.2 percent of GDP throughout the 10-year projection period. Under current law, other miscellaneous receipts are projected to rise as a share of GDP after 2013, mainly because of fees and penalties established by the Affordable Care Act. Those include fees charged to health insurance plans to finance an equal amount of federal spending for plans whose enrollees are expected to have above-average health care costs (a practice known as risk adjustment), as well as penalties on employers who do not provide health insurance. By 2022, other miscellaneous receipts total about 0.3 percent of GDP in CBO's baseline, up from 0.1 percent in 2011.

Tax Expenditures

A number of exclusions, deductions, exemptions, and credits in the individual and corporate income systems cause revenues to be much lower than they would be otherwise. Some of those tax provisions are termed "tax expenditures" because they resemble government spending by providing financial assistance to specific activities, entities, or groups of people. Tax expenditures are more like entitlement programs than like discretionary spending programs: They are not subject to annual appropriations, and any person or entity that meets the requirements for them can receive the benefits. Because of their budgetary treatment, however, tax expenditures are much less transparent than spending on entitlement programs.

The Congressional Budget and Impoundment Control Act of 1974 defines tax expenditures as "those revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability."[10] That law requires that a list of tax expenditures be included in the federal budget, and each year both the Administration and the Congress publish estimates of individual and corporate income tax expenditures, prepared by the Treasury's Office of Tax Analysis and the staff of the Congress's Joint Committee on Taxation (JCT), respectively.[11]

Tax expenditures have a major impact on the federal budget. On the basis of estimates prepared by JCT and extrapolated by CBO through the 10-year budget window, CBO estimates that certain major tax expenditures in the individual income tax code (described below) will total nearly $12 trillion over the 2013–2022 period—or 5.8 percent of GDP—with the effects on both payroll and income taxes included.[12] (Provisions that reduce the amount of taxable income under the income tax can also reduce the amount of income subject to payroll taxes, although estimates of tax expenditures do not generally

10. Section 3(3) of the Congressional Budget and Impoundment Control Act of 1974, 2 U.S.C. 622(3), 88 Stat. 297.

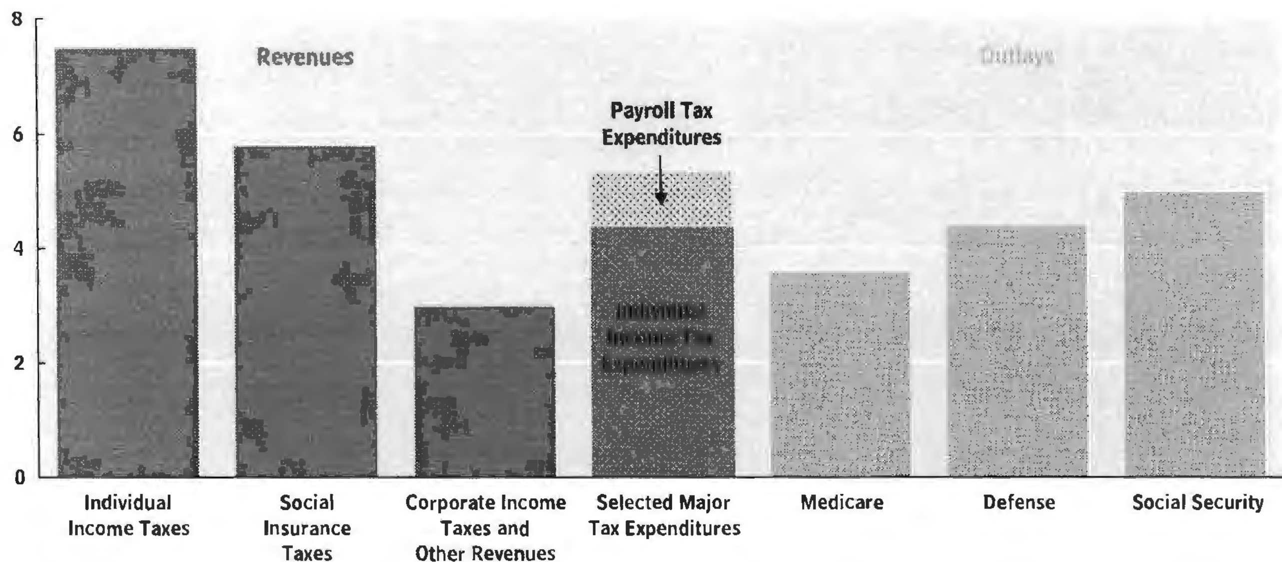
11. See Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2011–2015*, JCS-1-12 (January 17, 2012); and Office of Management and Budget, *Budget of the U.S. Government, Fiscal Year 2012: Analytical Perspectives* (February 2011), Chapter 17.

12. CBO extrapolated the estimates beyond 2015 using its economic forecast. Those extrapolated estimates, therefore, would not precisely match such estimates produced by JCT. Furthermore, although neither JCT nor the Treasury regularly includes effects on payroll taxes in estimates of tax expenditures, CBO estimated and included those effects here, where applicable.

Figure 4-4.

Selected Major Tax Expenditures in 2012, Compared with Other Categories of Revenues and Outlays

(Percentage of gross domestic product)



Source: Congressional Budget Office based on estimates by the staff of the Joint Committee on Taxation.

Notes: The selected major tax expenditures included here are the exclusion of employers' contributions for health care, health insurance premiums, and long-term care insurance premiums; net exclusions of pension contributions and earnings; the exclusion of capital gains at death; the exclusion of untaxed Social Security and Railroad Retirement benefits; the deduction for mortgage interest on owner-occupied residences; the deduction for nonbusiness income, sales, and personal property taxes paid to state and local governments; the deduction for charitable contributions; the reduced tax rates on dividends and long-term capital gains; the earned income tax credit; and the child tax credit. The individual effects of those tax expenditures are shown in Figure 4-5.

Because estimates of tax expenditures are based on people's behavior with the tax expenditures in place, the estimates do not reflect the amount of revenues that would be raised if those provisions of the tax code were eliminated and taxpayers adjusted their activities in response to the changes.

include effects beyond those on income taxes.)[13] In 2012, those major tax expenditures total more than $800 billion—or 5.3 percent of GDP, equal to about one-third of the federal revenues projected for 2012 and greater than projected spending on Social Security, on defense, or on Medicare (see Figure 4-4).

Tax expenditures, however, do not represent the amount of revenues that would be raised if the associated tax provisions were eliminated, for two main reasons:

- The change in incentives that would result from repealing a particular tax expenditure would lead taxpayers to modify their behavior in ways that would mute the revenue impact of the repeal. For example, if the preferential tax rates on capital gains realizations were eliminated, taxpayers would probably reduce the amount of capital gains they realize. Because the size of that tax expenditure is estimated on the basis of the gains that are projected to be realized with the preferential rates in place, the amount of additional revenues actually produced by eliminating that preference

13. JCT staff have previously estimated the effect on payroll taxes of the provision that excludes employers' contributions for health insurance premiums from their workers' taxable income. See Joint Committee on Taxation, *Background Materials for Senate Committee on Finance Roundtable on Health Care Financing*, JCX-27-09 (May 8, 2009). Tax expenditures that reduce the tax base for payroll taxes will also eventually decrease spending for Social Security by reducing the wage base on which Social Security benefits are calculated.

would be smaller than the estimated size of the tax expenditure.

- A simple total of the estimates for individual tax expenditures does not account for the potential interactions that would arise if multiple expenditures were repealed at the same time. For instance, eliminating a particular income exclusion would increase taxable income, pushing some income into tax brackets with higher marginal rates; eliminating *all* income exclusions would increase taxable income by the sum of the individual increases (leaving aside other considerations), but because of the structure of tax brackets and marginal rates, a larger share of that additional income would end up in tax brackets with higher rates. As a result, the effect of eliminating all exclusions would be larger than the sum of the effects of eliminating particular exclusions. Conversely, eliminating all itemized deductions would have a smaller effect than the sum of the estimates for eliminating each individual deduction, because with all of the deductions gone, more taxpayers would claim the standard deduction (instead of itemizing deductions) than would be the case if any single deduction was repealed. As it turns out, for the major tax expenditures discussed here, such interactive effects would largely offset one another.

The major tax expenditures considered here fall into four categories—exclusions from taxable income, itemized deductions, preferential tax rates, and tax credits. Of those tax expenditures, four are exclusions of certain types of income from individual income taxes: employers' contributions for health care, health insurance premiums, and long-term care insurance premiums for their employees; contributions to and earnings of pension funds (minus pension benefits that are included in taxable income); unrealized capital gains from assets that are transferred at the owner's death; and untaxed Social Security and Railroad Retirement benefits. Employers' contributions for health insurance and contributions to pension funds are also excluded from payroll taxes.

The exclusion of employers' health insurance contributions is the single largest tax expenditure in the individual income tax code; including effects on payroll taxes, that tax expenditure is projected to equal 1.8 percent of GDP over the 2013–2022 period (see Figure 4-5). The exclusion of pension contributions and earnings has the next largest impact, generating net tax expenditures (including effects on payroll taxes) estimated to total 1.1 percent of GDP over that period.[14] The exclusion of unrealized capital gains at death is projected to generate tax expenditures equal to 0.3 percent of GDP over those 10 years, and tax expenditures for the exclusion of untaxed Social Security and Railroad Retirement benefits are projected to equal 0.2 percent of GDP.

Three other major tax expenditures allow taxpayers who itemize deductions to deduct their spending for certain items from their taxable income. The deduction for interest paid on mortgages for owner-occupied residences is the biggest of those three; tax expenditures for that deduction are projected to equal 0.8 percent of GDP between 2013 and 2022. By comparison, the tax expenditures for deductions for state and local taxes and for charitable contributions are each projected to equal 0.3 percent of GDP over that period.

Some forms of income are subject to preferential tax rates under the income tax. Both long-term capital gains and dividends are taxed at lower rates in 2012 than other forms of income. Although the preferential rate on dividends is scheduled to expire at the end of December 2012, a slightly higher preferential rate on long-term capital gains will continue after that. Tax expenditures for those preferential rates on dividends and long-term capital gains are projected to total 0.5 percent of GDP between 2013 and 2022.

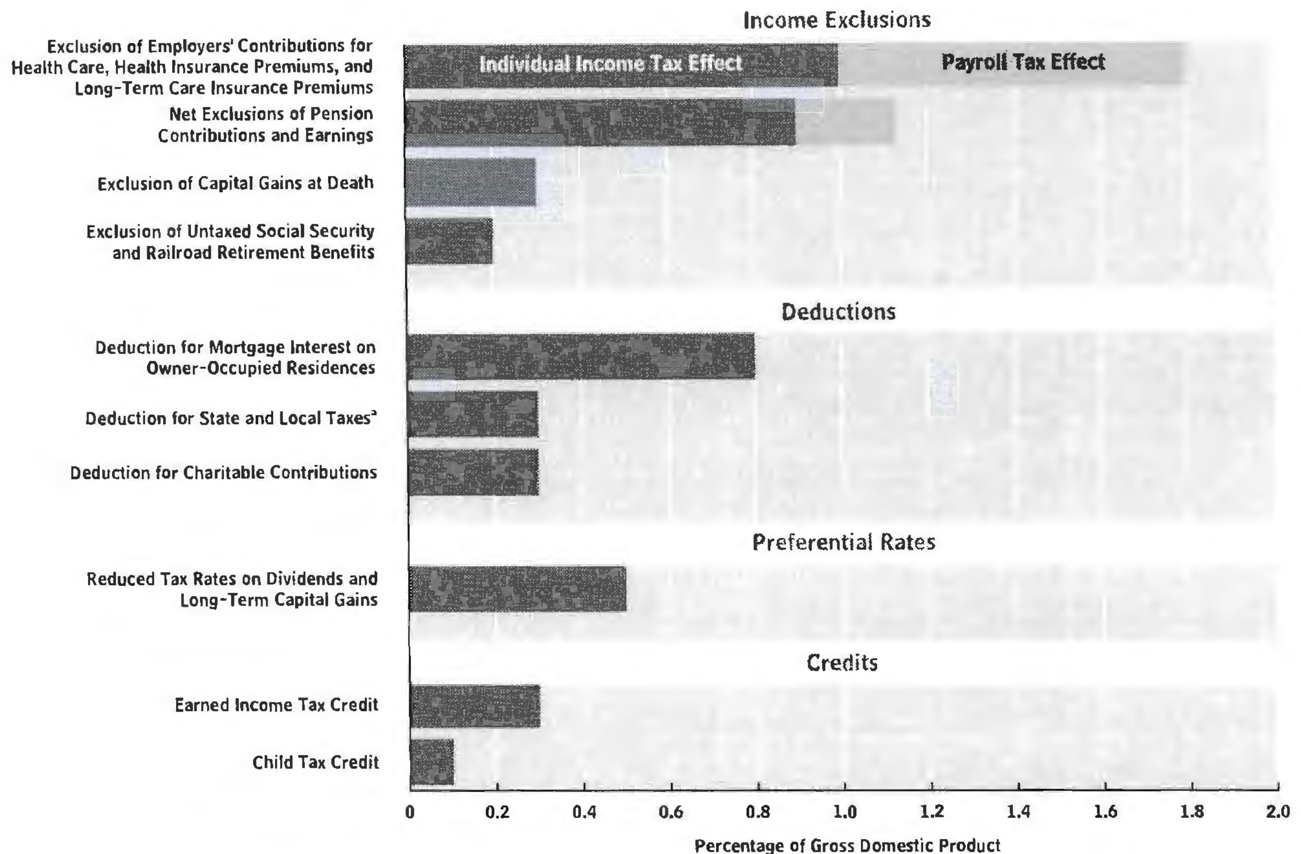
The other major tax expenditures projected by CBO are two refundable tax credits, both targeted toward households with children. Tax expenditures for the earned income tax credit (which is also available to some low-income workers without children) are projected to be 0.3 percent of GDP between 2013 and 2022, and tax expenditures for the child tax credit are projected to be 0.1 percent of GDP over that period.[15] Both credits were

14. That total includes amounts from defined-benefit and defined-contribution plans offered by employers; it does not include amounts from self-directed individual retirement arrangements or from Keogh plans that cover partners and sole proprietors.

15. The estimates for the earned income tax credit and child tax credit include the refundable portion of the credit (the amount in excess of income tax liability), which is recorded as an outlay in the federal budget.

Figure 4-5.

Effects of Selected Major Tax Expenditures from 2013 to 2022



Source: Congressional Budget Office based on estimates by the staff of the Joint Committee on Taxation.

Notes: These effects are calculated as the sum of the tax expenditures over the 2013–2022 period divided by the sum of gross domestic product over the same 10 years.

Because estimates of tax expenditures are based on people's behavior with the tax expenditures in place, the estimates do not reflect the amount of revenues that would be raised if those provisions of the tax code were eliminated and taxpayers adjusted their activities in response to the changes.

a. Consists of nonbusiness income, sales, and personal property taxes paid to state and local governments.

expanded in 2001 and again in later years, but the expansions are scheduled to expire at the end of December 2012. Thus, the projected impact of those two credits is larger in 2012—0.4 percent of GDP each—than in the 2013–2022 period.

Tax expenditures may help to achieve certain societal goals, such as a healthier population, adequate financial resources for retirement, and stable communities of homeowners. At the same time, however, tax expenditures—especially if not limited in size—may encourage overconsumption of goods that receive preferential treatment or subsidize activity that would have taken place without the tax incentives. For example, the tax expenditures for health insurance costs, pension contributions, and mortgage interest may also prompt people to consume more health services than are necessary, reallocate existing savings from accounts that are not tax-preferred to retirement accounts, and purchase more-expensive homes than they need.

APPENDIX

A

Changes in CBO's Baseline Since August 2011

The Congressional Budget Office (CBO) estimates that in the absence of further legislation affecting spending and revenues, the deficit for fiscal year 2012 will be nearly $1.1 trillion. That amount is $105 billion more than the deficit CBO projected in August 2011, when the agency released its previous set of baseline budgetary projections (see Table A-1).[1] Since August, CBO has reduced its projections of revenues by $113 billion (or 4 percent) and its projections of outlays by $7 billion (or 0.2 percent).

The agency's updated baseline also shows higher projected deficits through 2016 and small net changes for the period between 2017 and 2021.[2] For the entire projection period, from 2012 through 2021, CBO projects a cumulative deficit of $3.8 trillion, which is $325 billion more than it projected in the August baseline. Two main factors contribute to that outcome. CBO now projects that revenues will be $700 billion (or 2 percent) lower between 2012 and 2021 as a result of updated economic projections and other factors. In the other direction, CBO now anticipates lower interest rates in coming years; those lower rates alone result in projected net interest costs that are smaller by nearly $540 billion. On net, all other changes increase the deficit projection by about $165 billion for the 10-year period.

Revisions attributable to legislation enacted since August have reduced the deficit projection by $261 billion between 2012 and 2021; the net impact of economic changes reduced projected deficits by $9 billion. However, revisions of a technical nature—including both net reductions in revenues and net increases in outlays—increased projected deficits by $595 billion for the 10-year period.

Legislative Changes

Legislation enacted after CBO prepared its August baseline led the agency to raise its estimate of the deficit for 2012 by $38 billion but to lower its projection of the cumulative deficit for the 2012–2021 period by $261 billion. Three new laws accounted for most of the changes:

- The Consolidated Appropriations Act, 2012 (Public Law 112-74),
- The Temporary Payroll Tax Cut Continuation Act of 2011 (P.L. 112-78), and
- The Three Percent Withholding Repeal and Job Creation Act (P.L. 112-56).

The change in projected deficits attributable to legislation over the coming decade is almost entirely the result of a reduction in projected outlays. The agency's current baseline reflects a projected $312 billion drop in spending, largely because of decreased funding in 2012 for military operations in Afghanistan and Iraq and the extrapolation of that lower amount of funding to subsequent years. Lower projected revenues offset a small portion of the estimated decrease in spending; revenues are projected to be $20 billion lower in the current year and $51 billion lower over the 2012–2021 period.

1. Those projections were published in *The Budget and Economic Outlook: An Update* (August 2011).

2. CBO generally constructs its baseline in accordance with provisions of the Balanced Budget and Emergency Deficit Control Act of 1985 and the Congressional Budget and Impoundment Control Act of 1974. To project revenues and mandatory spending, CBO assumes that current laws, with only a few exceptions, will remain unchanged. To project total discretionary spending, CBO assumes that appropriations through 2021 will comply with the caps and other provisions of the Budget Control Act of 2011 (Public Law 112-25). The resulting baseline projections are not intended to be a prediction of future budgetary outcomes; rather, they serve as a benchmark that lawmakers can use to measure the potential effects of spending and revenue proposals.

Table A-1.

Changes in CBO's Baseline Projections of the Deficit Since August 2011

(Billions of dollars)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total 2012-2016	Total 2012-2021
Deficit in CBO's August 2011 Baseline	-973	-510	-265	-205	-278	-231	-211	-259	-277	-279	-2,232	-3,487
Legislative Changes												
Changes in Revenues												
Individual income taxes	*	*	*	-1	-1	-1	-1	-1	-1	-1	-1	-5
Corporate income taxes	*	-6	*	*	2	-3	-1	-1	-1	-1	-5	-10
Social insurance taxes	-19	-2	*	*	*	*	*	*	*	*	-22	-23
Other	-2	-1	-1	-1	-1	-1	-1	-2	-2	-2	-6	-14
All Changes in Revenues	**-20**	**-9**	**-1**	**-2**	*****	**-5**	**-3**	**-3**	**-4**	**-3**	**-33**	**-51**
Changes in Outlays												
Mandatory												
Fannie Mae and Freddie Mac	-1	-4	-4	-3	-3	-3	-4	-4	-4	-4	-16	-35
Health care programs	3	*	-1	-2	-3	-3	-3	-3	-3	-4	-2	-19
Unemployment compensation	8	0	0	0	0	0	0	0	0	0	8	8
Other	5	1	*	-1	-1	*	1	*	-3	-4	4	-2
Subtotal	16	-3	-6	-6	-7	-6	-6	-8	-10	-12	-5	-47
Discretionary	2	-11	-21	-25	-27	-28	-29	-31	-32	-32	-82	-234
Debt service	*	*	*	*	-1	-2	-4	-6	-8	-10	-1	-30
All Changes in Outlays	**18**	**-14**	**-26**	**-31**	**-35**	**-37**	**-40**	**-44**	**-49**	**-54**	**-88**	**-312**
Total Legislative Changes[a]	**-38**	**5**	**25**	**28**	**35**	**32**	**37**	**41**	**46**	**50**	**55**	**261**
Economic Changes												
Changes in Revenues												
Individual income taxes	-16	-41	-64	-79	-70	-58	-52	-50	-45	-40	-271	-516
Corporate income taxes	49	40	32	37	47	48	41	24	10	4	206	332
Social insurance taxes	-8	-17	-27	-36	-34	-26	-17	-12	-7	-4	-123	-188
Other	*	-2	-1	-2	-2	-2	-2	-2	-2	-3	-7	-18
All Changes in Revenues	**25**	**-20**	**-60**	**-81**	**-59**	**-37**	**-30**	**-40**	**-44**	**-43**	**-195**	**-389**
Changes in Outlays												
Mandatory outlays												
Student loans	-8	-13	-13	-12	-11	-10	-7	-5	-4	-4	-57	-87
Supplemental Nutrition Assistance Program	1	2	6	7	8	8	8	8	8	8	24	64
Medicare and Medicaid	*	-1	2	5	7	7	7	8	8	10	13	54
Unemployment compensation	*	2	5	10	9	5	3	3	2	2	26	41
Social Security	4	6	7	7	6	4	1	-3	-6	-8	29	16
Other	2	4	5	6	7	6	6	6	6	6	24	53
Subtotal	-1	-1	11	23	26	20	17	16	14	14	58	140
Discretionary	0	*	1	*	*	*	*	*	*	*	1	-1
Net interest												
Debt service	*	*	*	*	1	1	*	*	-1	-1	1	1
Interest rates	-16	-30	-43	-52	-63	-77	-78	-67	-59	-54	-204	-539
Subtotal	-17	-31	-44	-52	-61	-75	-78	-67	-60	-54	-204	-538
All Changes in Outlays	**-17**	**-32**	**-32**	**-28**	**-36**	**-55**	**-61**	**-51**	**-46**	**-40**	**-145**	**-398**
Total Economic Changes[a]	**42**	**12**	**-28**	**-53**	**-24**	**18**	**30**	**11**	**2**	**-2**	**-51**	**9**

Continued

Table A-1. Continued

Changes in CBO's Baseline Projections of the Deficit Since August 2011

(Billions of dollars)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total 2012-2016	Total 2012-2021
Technical Changes												
Net Effect of Incorporating the Automatic Enforcement Procedures[a,b]	**0**	**-46**	**-20**	**-13**	**-12**	**-13**	**-14**	**-15**	**-16**	**-18**	**-92**	**-168**
Changes in Revenues												
Individual income taxes	-34	-6	-5	2	1	-1	3	8	16	25	-42	9
Corporate income taxes	-78	-50	-36	-11	2	1	*	*	*	1	-172	-170
Social insurance taxes	-2	-1	-12	-10	-12	-11	-12	-15	-20	-22	-37	-117
Other	-4	5	5	4	5	5	*	-2	*	*	16	18
All Changes in Revenues	**-118**	**-52**	**-49**	**-14**	**-3**	**-6**	**-9**	**-9**	**-4**	**3**	**-236**	**-260**
Other Changes in Outlays												
Mandatory												
Medicare	*	-2	-2	-3	-5	-6	-7	-10	-13	-20	-12	-69
CLASS	0	3	7	11	12	12	11	9	7	6	33	76
Unemployment compensation	-4	-5	-7	-13	-9	-8	-6	-5	-4	-3	-39	-65
Other	4	16	20	22	19	17	21	19	23	26	81	187
Subtotal	-1	6	12	11	11	9	13	8	7	5	40	130
Discretionary	-10	-12	-5	-1	3	2	1	*	-1	*	-24	-22
Net interest												
Debt service	*	2	3	5	8	10	13	16	19	21	18	98
Other	2	-3	-2	-3	-3	-2	2	4	6	8	-9	9
Subtotal	3	-1	1	2	5	9	15	20	25	30	9	107
All Other Changes in Outlays[c]	**-7**	**-7**	**8**	**12**	**19**	**20**	**29**	**28**	**32**	**34**	**25**	**167**
Total Technical Changes[a]	**-110**	**-91**	**-77**	**-40**	**-34**	**-39**	**-52**	**-52**	**-52**	**-48**	**-352**	**-595**
All Changes												
Total Effect on the Deficit[a]	**-105**	**-75**	**-80**	**-64**	**-24**	**11**	**15**	**1**	**-4**	*****	**-348**	**-325**
Deficit in CBO's January 2012 Baseline	**-1,079**	**-585**	**-345**	**-269**	**-302**	**-220**	**-196**	**-258**	**-280**	**-279**	**-2,580**	**-3,812**
Memorandum: Effects on the Deficit[a]												
Revenues	-113	-81	-110	-98	-63	-48	-42	-52	-51	-43	-464	-700
Outlays (Excluding effects of the automatic enforcement procedures)	7	53	50	46	51	72	71	68	64	61	208	543
Net effect of incorporating the automatic enforcement procedures[b]	0	-46	-20	-13	-12	-13	-14	-15	-16	-18	-92	-168

Source: Congressional Budget Office.

Note: CLASS = Community Living Assistance Services and Supports; * = between -$500 million and $500 million.

a. Negative numbers indicate an increase in the deficit.

b. CBO's August projections included $1.2 trillion in potential deficit reduction from legislation produced by the Joint Select Committee on Deficit Reduction or from the automatic enforcement procedures that would be triggered if no such legislation was enacted; that sum was not allocated either to outlays or to revenues. Because no legislation was reported by the committee, CBO has removed the $1.2 trillion in unallocated deficit reduction and, instead, included in the baseline the outlay reductions that will be triggered pursuant to the automatic enforcement procedures in the Budget Control Act of 2011. See Table A-2 for a detailed breakdown of the net effect of those changes.

c. In addition to these effects, some outlay changes result from incorporating the automatic enforcement procedures.

Changes to Projections of Outlays

Since August, CBO has raised the amount it estimates for outlays in fiscal year 2012 by $18 billion because of legislative actions that are projected to boost discretionary outlays by $2 billion and mandatory outlays by $16 billion. For the 2012–2021 period, the estimates of outlays are down by $312 billion (or 1 percent), almost entirely because of projected changes in discretionary outlays.

Discretionary Spending. Since August, CBO has increased its baseline projections of discretionary spending by $2 billion for 2012 and decreased them by $234 billion for the 2012–2021 period because of changes stemming from the enactment of appropriations for 2012. Because most discretionary spending is constrained by the caps established in the Budget Control Act of 2011 (P.L. 112-25), the changes to spending projections in the baseline result mostly from changes in appropriations for activities that lead to adjustments in the caps—overseas contingency operations (such as military activities in Afghanistan), disaster relief, emergency requirements, and program integrity initiatives.[3]

In CBO's current baseline, the changes in discretionary spending attributable to legislation stem primarily from funding for overseas contingency operations. Based on legislation enacted to date, such funding for 2012 is $33 billion lower than the amount provided in 2011. Because projections for future appropriations for such operations are based on the assumption that they will equal current funding with an adjustment for inflation, the smaller amount in 2012 caused CBO to reduce its projection of discretionary outlays during the 2012–2021 period by about $340 billion. In contrast, funding in 2012 for disaster relief and program integrity initiatives —which also are not subject to the caps—totaled about $11 billion; extrapolating that funding with adjustments for inflation offset about a third of the change in the baseline related to overseas contingency operations.

Fannie Mae and Freddie Mac. Because of provisions in the Temporary Payroll Tax Cut Continuation Act, CBO's estimate of subsidy costs for housing mortgage assistance provided by Fannie Mae and Freddie Mac is $35 billion lower for the 2012–2021 period than the amount in the August baseline. Under that law, Fannie Mae and Freddie Mac must increase by 10 basis points (or 0.10 percentage points) the average fees for new loans and guarantees made from 2012 through 2021; proceeds from the increase must be deposited directly into the U.S. Treasury.

Health Care Programs. CBO's estimate of outlays for the 2012–2021 period for health care programs is $19 billion less than it was in August because of legislative action.

Provisions in the Three Percent Withholding Repeal and Job Creation Act would add nontaxable Social Security benefits to the definition of modified adjusted gross income for purposes of determining eligibility for certain applicants for Medicaid and for subsidies for health insurance purchased through health insurance exchanges created by the Affordable Care Act (comprising the Patient Protection and Affordable Care Act [P.L. 111-148] and the health care provisions of the Health Care and Education Reconciliation Act of 2010 [P.L. 111-152]). CBO estimates that those provisions will result in a decrease in the number of Medicaid enrollees but a net increase in the number of exchange enrollees. As a result, CBO now estimates that Medicaid outlays for the projection period will be $33 billion less over the 2012–2021 period than it projected in August and that subsidies for health insurance purchased through the exchanges will be $11 billion higher, resulting in a net reduction in outlays of $22 billion. (As discussed below, that legislation will also affect federal revenues.)

The Temporary Payroll Tax Cut Continuation Act extended, for two months, Medicare's current payment rates for physicians' services (rather than allowing those rates to drop by nearly 30 percent as was scheduled for the end of December 2011). CBO estimates that the extension will increase outlays by $3 billion in fiscal year 2012.

Unemployment Compensation. The Temporary Payroll Tax Cut Continuation Act also gave a two-month emergency benefit extension to people whose regular unemployment benefits were exhausted. Such emergency compensation currently can provide up to 53 weeks of additional benefits to the long-term unemployed (people who have gone without a job for at least six months). The

3. Program integrity initiatives are aimed at reducing improper benefit payments in one or more of the following programs: Disability Insurance, Supplemental Security Income, Medicare, Medicaid, and the Children's Health Insurance Program. See Congressional Budget Office, *Final Sequestration Report for Fiscal Year 2012* (January 12, 2012) for more information on the discretionary caps.

extension is estimated to increase outlays in 2012 by $8 billion.

Debt Service. The revisions to CBO's estimates of outlays and revenues attributable to legislative actions have led the agency to decrease its projections of the cumulative deficit for the 2012–2021 period, excluding interest, by $231 billion. That change is mainly the result of lower projected spending for overseas contingency operations, offset partially by lower expected revenues. Overall, legislative changes are estimated to decrease outlays for debt service by $30 billion from 2012 through 2021.

Changes to Projections of Revenues

Recently enacted legislation has caused CBO to reduce its revenue projections by $20 billion for 2012 and by $31 billion for the 2013–2021 period. Almost all of the effect in fiscal year 2012 occurs because of the enactment of the Temporary Payroll Tax Cut Continuation Act, which extended through February 2012 a reduction of 2 percentage points in the payroll tax that employees pay for Social Security. That extension will reduce receipts from social insurance (payroll) taxes by $19 billion in 2012 and by $2 billion in 2013, according to the staff of the Joint Committee on Taxation.

CBO also estimates that enactment of the Three Percent Withholding Repeal and Job Creation Act will reduce revenues by $20 billion over the 2012–2021 period. That law repealed a measure that was scheduled to go into effect requiring federal, state, and local government entities to withhold 3 percent of certain payments to vendors. The law also modified the income definitions used to determine eligibility for Medicaid and subsidies for health insurance purchased through exchanges scheduled to be in place in 2014—with a net effect of increasing the amount of such subsidies provided through income tax credits. (The change in the income definitions reduced outlays by more than it reduced revenues.) Enactment of free trade agreements with South Korea, Colombia, and Panama accounted for most of the remaining legislation-related reductions in revenue projections since last August.

Economic Changes

Revisions to CBO's economic forecast have resulted in higher estimates for revenues and lower estimates for outlays in fiscal year 2012, thereby reducing the estimate of the deficit by $42 billion for the year. For CBO's baseline projections over the 2012–2021 period, economic revisions generated nearly offsetting changes in outlays and revenues: A reduction of $398 billion in the projection for outlays is almost matched by a $389 billion drop in the projection for revenues.

Changes to Projections of Outlays

In updating its economic forecast, CBO modified its projections of certain variables that affect outlays, including inflation, the unemployment rate, and interest rates. Such revisions have caused the agency to lower its estimates of outlays for the current fiscal year by $17 billion and for the 10-year projection period by $398 billion. Because of a reduction in forecast interest rates, interest costs projected in CBO's baseline are substantially lower than the agency projected in August. Those changes are offset partially by higher estimates (attributable to CBO's new economic forecast) of outlays for mandatory programs.

Student Loans. Consistent with the procedures set forth in the Federal Credit Reform Act of 1990 (P.L. 101-508), annual outlays for the student loan program represent the costs of the subsidies provided by the government. Those costs are measured as the present value of the future cash flows associated with new federal loans disbursed each year, calculated using the Treasury's borrowing rates to discount those cash flows.[4] In updating its economic forecast, CBO reduced its estimate of those rates for the 2012–2021 period. With lower discount rates, the estimated present value of future cash flows associated with student loans increases (that is, such cash flows are discounted less). Because those future cash flows will be income to the government (in the form of loan repayments, interest payments, and default recoveries), CBO now anticipates that outlays for student loans will be $87 billion less than it projected in August.

Supplemental Nutrition Assistance Program. CBO's projection of spending for benefits under this program (formerly known as Food Stamps) for the 2012–2021 period is $64 billion higher than the estimate in the August baseline primarily because of an anticipated increase in participation that will stem from a projected increase in unemployment. As a result of the weaker

4. Present value is a single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) today. The present value depends on the rate of interest (known as the discount rate) that is used to translate future cash flows into current dollars.

economic forecast, CBO now expects participation to continue to grow through 2014—although much more slowly than it did between 2009 and 2011. CBO currently estimates that 47 million people will receive benefits in 2014, compared with the 44 million people that the agency projected in August.

Medicare and Medicaid. Payment rates for most services in the fee-for-service sector of Medicare, such as hospital care and services provided by physicians, home health agencies, and skilled nursing facilities, are subject to automatic updates tied to changes in the prices of the goods and services that health care providers purchase. As a result, changes in CBO's forecast of prices for goods and services (including the cost of both labor and nonlabor inputs) in the coming decade led the agency to boost its projections of outlays for Medicare by $29 billion for the 2012–2021 period.

CBO projects that Medicaid spending will be about $24 billion higher over the 2012–2021 period, principally because of higher payment rates for Medicaid services (mostly stemming from higher inflation in the cost of labor and in hospital costs) and because the unemployment rate is now projected to be higher than projected previously, resulting in higher estimated enrollment in Medicaid.

Unemployment Compensation. CBO estimates that the unemployment rate for the 2013–2021 period will be 0.6 percentage points higher, on average, than it projected last August. Consequently, spending for unemployment benefits is estimated to be $41 billion higher for the 2012–2021 period.

Social Security. Because of changes in the economic forecast, CBO raised the amount it projects for Social Security spending by $16 billion for the 2012–2021 period. The cost-of-living adjustment of 3.6 percent that Social Security beneficiaries received in January 2012 is 0.8 percentage points higher than CBO anticipated in August. Projections of larger adjustments over the 2012–2021 period boost the agency's estimates of benefit payments for the period by $61 billion. However, revisions to CBO's projections of the growth in wages and salaries (which affect initial benefits) result in estimates of benefit amounts that are lower by about $45 billion between 2012 and 2021.

Discretionary Outlays. With discretionary spending caps in place, changes to CBO's economic forecast affect only those areas of spending, such as appropriations for overseas contingency operations, that are not constrained by the caps. The economic factors that are used to extrapolate discretionary outlays are similar to those that CBO used in the August baseline. As a result, projections of discretionary outlays for the 2012–2021 period are only $1 billion lower than they were in August.

Net Interest. Economic revisions to CBO's projections of spending for net interest have two components: the effects of changes in the government's borrowing that result from the impact of economic changes on revenues and outlays and the effects of changes in the agency's economic outlook for interest rates and inflation. The net effect of economic changes on revenues and outlays in CBO's baseline is small, so those changes account for only a $1 billion increase in projected debt-service costs between 2012 and 2021.

However, CBO's updated projections of interest rates (and inflation) have resulted in estimates of net interest that are $539 billion lower than they were in August. CBO now projects that throughout the 2012–2021 period, interest rates on securities with a maturity of one year or less will be between 8 basis points and 86 basis points lower each year than it projected in the August baseline. The agency also estimates that rates on securities with a maturity of two years or longer will be lower by between 23 basis points and 99 basis points during the same period. Overall, CBO projects that changes in the economic forecast will result in outlays for net interest over the 2012–2021 period that are $538 billion lower than it estimated in August.

Changes to Projections of Revenues

Adjustments to the economic forecast since August have caused CBO to raise its estimate of revenues by $25 billion for fiscal year 2012 but to lower its estimate by a total of $389 billion for the 2012–2021 period.

Since releasing its August baseline, CBO has revised its projections of nominal gross domestic product (GDP) in three key ways: First, estimates of GDP for recent years in the national income and product accounts have been revised downward, leading to lower projections. Second, CBO now expects that, under current law, the gap between the economy's actual and potential output will close more slowly than the agency had previously expected. And third, slightly slower growth is being projected for potential GDP in the first half of the coming

decade.[5] As a result of those changed projections, CBO is estimating that wages and salaries (the largest and most highly taxed income component of GDP) will be lower than previously estimated and, consequently, that less will be collected in revenues from individual income and social insurance taxes. The agency also has lowered its estimates for personal interest income and thus is forecasting a smaller amount of revenues from individual income taxes for that reason. Working in the other direction is an upward revision to corporate profits in the economic forecast, which leads to higher projected revenues from corporate income taxes. That latter effect more than offsets the other factors in CBO's projections for 2012, but it provides only a partial offset in the later years of the projection period.

Technical Changes

Technical updates to CBO's baseline projections arise from changes in projections for revenues and outlays that occur for reasons other than new legislation or as a result of updated economic information. Since releasing its August 2011 baseline, technical changes have led CBO to boost its estimate of the deficit by $110 billion for fiscal year 2012 and by $595 billion for the 10-year projection period. The 10-year amount includes the removal of the $1.2 trillion reduction in deficits between 2012 and 2021 related to the Joint Select Committee on Deficit Reduction that CBO had included in its August projections. Because no legislation from that committee has been enacted, CBO has incorporated, in place of that $1.2 trillion placeholder, the impact of the automatic enforcement procedures required by the Budget Control Act (see Box 1-2 in Chapter 1); those procedures would result in a reduction in the deficit of about $1 trillion, leading to a net upward revision in projected deficits of $168 billion. Other technical revisions to CBO's projections increase projected budget deficits by $110 billion in 2012 and by $427 billion over the 2012–2021 period.

Changes to Projections from Incorporating the Automatic Enforcement Procedures of the Budget Control Act

CBO's August 2011 baseline included a placeholder of $1.2 trillion for the 2012–2021 period to account for legislation produced by the Joint Select Committee, or, if lawmakers failed to enact such legislation, the trigger of automatic spending cuts. That amount was not distributed between revenues and outlays in CBO's baseline, however, because there was no restriction on what types of deficit reduction the committee might consider. No legislation was reported by the committee, so the required automatic spending cuts are now reflected in CBO's baseline, distributed among the appropriate categories of outlays.

Relative to the undistributed $1.2 trillion figure included in the August projections, incorporating the automatic enforcement procedures boosts the deficit projection by $168 billion between 2012 and 2021—of which $55 billion is related to interest costs.

Moving the effect of the automatic enforcement procedures onto the spending side of the budget significantly reduces projections of outlays—by $890 billion for the 2012–2021 period—compared with the August estimates (see Table A-2). Although most of the reduction ($756 billion) applies to discretionary spending, $134 billion is for mandatory programs. Savings in borrowing costs from that $890 billion reduction in outlays will total $142 billion, CBO estimates.

Other Changes to Projections of Outlays

Other technical changes to CBO's estimates of outlays for fiscal year 2012 account for a projected net spending decrease of $7 billion. For the 10-year projection period, other technical changes boost CBO's projections of outlays by $167 billion, mainly because of projected increases in mandatory spending and net interest outlays.

Medicare. CBO's 10-year projections of outlays for Medicare are $69 billion lower than they were in August, mostly because of updated data on actual spending for 2011 and continuing analyses of changes in the use of services.

Community Living Assistance Services and Supports. On October 14, 2011, the Secretary of Health and Human Services announced that the Administration would not implement the Community Living Assistance Services and Supports (CLASS) long-term care program authorized by the Affordable Care Act. CBO has therefore updated its baseline to remove collections and expenditures related to that program.[6] In its August 2011

5. Potential GDP is the level of real (inflation-adjusted) gross domestic product that corresponds to a high rate of use of labor and capital.

6. See Congressional Budget Office, cost estimate for S. 720, Repeal the CLASS Entitlement Act (October 31, 2011).

Table A-2.

Net Effect on the Deficit of Including the Automatic Enforcement Procedures of the Budget Control Act in CBO's January 2012 Baseline

(Billions of dollars)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total 2012-2016	Total 2012-2021
	Effects of Provisions Related to the Joint Select Committee on Deficit Reduction Included in CBO's August 2011 Baseline											
Policy Changes	0	111	111	111	111	111	111	111	111	111	446	1,003
Debt Service	0	1	3	6	12	20	27	35	42	50	23	197
Total[a]	**0**	**113**	**115**	**118**	**124**	**132**	**139**	**146**	**154**	**161**	**469**	**1,200**
	Effect of Automatic Enforcement Procedures Included in CBO's January 2012 Baseline											
Policy Changes												
Discretionary outlays												
Defense	0	32	46	51	53	54	54	54	54	54	183	454
Nondefense	0	24	34	36	36	36	36	35	34	33	129	303
Subtotal	0	56	79	87	89	90	90	89	88	87	312	756
Mandatory outlays												
Medicare	0	4	8	9	9	10	10	11	12	12	30	86
Other	0	6	5	6	5	5	5	5	6	5	22	48
Subtotal	0	10	14	14	15	15	16	16	17	17	52	134
All Policy Changes	0	66	93	101	104	106	106	105	105	105	364	890
Debt Service	0	*	1	4	8	13	19	26	32	39	13	142
Total[a]	**0**	**66**	**94**	**105**	**112**	**119**	**125**	**131**	**137**	**143**	**377**	**1,032**
Net Effect on the Deficit[a]	**0**	**-46**	**-20**	**-13**	**-12**	**-13**	**-14**	**-15**	**-16**	**-18**	**-92**	**-168**

Source: Congressional Budget Office.

Note: * = between zero and $500 million.

a. Positive numbers indicate a decrease in the deficit; negative numbers indicate an increase in the deficit.

baseline projections, the agency anticipated that the CLASS program would begin collecting premiums in fiscal year 2012 and that net receipts from the program between 2012 and 2021 would total $76 billion. In the absence of that program, the government will not receive that income.

Unemployment Compensation. CBO estimates that, even though unemployment will be higher for economic reasons, fewer people than previously anticipated will make claims for unemployment compensation. The agency also estimates that the average benefit in 2012 will not increase significantly from last year's amount. Those changes led to downward technical adjustments totaling $65 billion over the 2012–2021 period.

Discretionary Spending. The updated baseline includes a $22 billion reduction projected for discretionary outlays for the 2012–2021 period, stemming from changes in the rate at which outlays are expected to occur, among other factors.

Net Interest. As a result of technical updates, CBO's estimate of net interest outlays (other than those related to the Joint Select Committee) has increased by $3 billion for 2012 and by $107 billion for the 2012–2021 period. The increase for the coming decade is attributable mainly to higher costs for debt service ($98 billion) related to technical changes in other areas of the budget. The remaining $9 billion reduction projected for net interest outlays results from the net effect of changes to

assumptions about the mix of securities that the Treasury is expected to use for borrowing and lower projected receipts from the financing accounts associated with the government's credit programs.

Changes to Projections of Revenues

Since last August's baseline projections, CBO has reduced its revenue projections to reflect both a lower projected average tax rate on domestic economic profits and smaller net payments with filings of individual income tax returns. In part, the lower projected average tax rate on corporate profits reflects a lower average rate in recent history: Corporate profits in the national income and product accounts were revised upward for 2009 through early 2011 (and corporate tax receipts have not been revised). In addition, corporate tax receipts have been weaker than expected since August. The downward technical adjustments for those factors wane over the first few years of the projection period because, as with its projections in August, CBO expects the average tax rate to rise to a level more in line with its average over the two decades before the significant drop that started in 2009.

In addition, CBO has decreased its estimate of individual income tax liabilities for 2011, thus also lowering projections for final payments by taxpayers during the 2011 tax-filing season. The resulting downward adjustment to receipts diminishes rapidly after 2012.

Beyond 2014, the changes in revenues attributable to technical factors are small, largely because of offsetting factors. One significant factor is an increase in individual income tax receipts and a decrease in social insurance tax receipts because CBO now projects relatively more wage growth for higher-income taxpayers and less for other taxpayers. Projections for income taxes increase as a result because people with higher income are subject to higher income tax rates, but projections for Social Security payroll taxes decrease because a larger share of total earnings will be received by people whose earnings are above the taxable maximum amount.

APPENDIX

B

How Changes in Economic Projections Might Affect Budget Projections

The federal budget is highly sensitive to economic conditions. Revenues depend on the amount of taxable income, including wages and salaries, other (nonwage) income received by individuals, and corporate profits. Those types of income generally rise or fall with overall economic activity, although not necessarily in proportion. Spending for many mandatory programs depends on inflation, either directly (as with Social Security and other programs that use a specified cost-of-living adjustment) or indirectly (as with Medicaid). In addition, the U.S. Treasury regularly refinances portions of the government's outstanding debt—and issues more debt to finance any new deficit spending—at market interest rates. Thus, the amount that the federal government spends for interest on its debt is directly tied to those rates.

To show how projections for the economy can affect projections of the federal budget, the Congressional Budget Office (CBO) has constructed simplified "rules of thumb." The rules provide a rough sense of how changes in individual economic variables, taken in isolation, would affect the budget totals; however, those rules of thumb are not intended to substitute for a full analysis of the implications of alternative economic forecasts.

The rules of thumb are applied to four variables:

- Real (inflation-adjusted) growth of the nation's gross domestic product (GDP),
- Interest rates,
- Inflation, and
- Wages and salaries as a share of GDP.

CBO's rule of thumb for real growth in GDP shows the effects of growth rates that are 0.1 percentage point lower each year, beginning in January 2012, than the rates that underlie the agency's baseline budget projections. (The budget projections are summarized in Chapter 1, and the economic projections are described in Chapter 2.) The rules of thumb for interest rates and inflation indicate how the budget would be affected if those rates were 1 percentage point higher each year, also starting in January 2012, than the rates used in the baseline. The final rule shows what would occur if, beginning in January 2012, wages and salaries as a percentage of GDP were 1 percentage point larger each year and, correspondingly, domestic economic profits were 1 percentage point smaller each year than the percentages used for the baseline. (The scenario incorporates no changes in the projected amount of nominal or real GDP.)

Each rule of thumb is roughly symmetrical. Thus, if economic growth was higher or interest rates, inflation, or wages and salaries as a percentage of GDP were correspondingly lower than CBO projects, the effects would be about the same as those shown here, but with the opposite sign.

CBO chose the variations of 0.1 percentage point or 1 percentage point solely for the sake of simplicity. Those changes do not necessarily indicate the extent to which actual economic performance might differ from CBO's assumptions. For example, although the rule of thumb for real GDP shows the effects of a change of 0.1 percentage point in the average rate of growth over the next 10 years, the standard deviation of growth rates of real GDP over 10-year periods is roughly six times larger, or about 0.6 percentage points.[1] However, the change of 1 percentage point used in the rules of thumb for the

1. A conventional way to measure past variability is to use the standard deviation. In the case of GDP growth, CBO calculates the extent to which actual growth over 10-year periods differs from the post–World War II average. The standard deviation is the size of the difference that is exceeded about one-third of the time.

Table B-1.

How Selected Economic Changes Might Affect CBO's Baseline Budget Projections

(Billions of dollars)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total 2013-2017	Total 2013-2022
Growth Rate of Real GDP Is 0.1 Percentage Point Lower per Year													
Change in Revenues	-1	-4	-8	-13	-18	-23	-29	-35	-42	-49	-57	-66	-278
Change in Outlays													
Mandatory spending	*	*	*	*	*	*	*	*	*	-1	-1	*	-2
Debt service	*	*	*	*	1	2	3	5	7	9	12	3	39
Total	*	*	*	*	1	2	3	4	6	9	11	3	36
Change in the Deficit[a]	**-1**	**-4**	**-8**	**-13**	**-19**	**-25**	**-32**	**-39**	**-48**	**-58**	**-68**	**-69**	**-314**
Interest Rates Are 1 Percentage Point Higher per Year													
Change in Revenues	-9	-8	-5	-3	-1	2	5	9	11	12	13	-15	35
Change in Outlays													
Higher interest rates	13	41	58	69	79	89	95	102	107	112	117	336	870
Debt service	*	*	1	3	6	10	15	21	27	33	39	21	155
Total	13	42	59	72	85	99	111	123	134	145	156	357	1,026
Change in the Deficit[a]	**-22**	**-50**	**-64**	**-75**	**-86**	**-97**	**-106**	**-114**	**-123**	**-133**	**-143**	**-372**	**-991**
Inflation Is 1 Percentage Point Higher per Year													
Change in Revenues	5	37	75	119	169	225	286	351	422	497	577	625	2,758
Change in Outlays													
Discretionary spending[b]	0	1	3	5	7	9	11	14	16	19	28	25	114
Mandatory spending	1	13	32	53	77	102	128	160	195	233	275	277	1,268
Higher interest rates[c]	20	53	73	87	100	113	122	132	141	150	157	426	1,128
Debt service	*	*	1	1	3	3	3	2	*	-3	-8	9	3
Total	20	67	109	147	187	227	265	308	352	398	452	737	2,513
Change in the Deficit[a]	**-15**	**-30**	**-34**	**-28**	**-18**	**-2**	**21**	**43**	**70**	**99**	**125**	**-112**	**245**
Wages and Salaries' Share of GDP Is 1 Percentage Point Higher per Year													
Change in Revenues	10	8	10	13	14	15	16	17	18	19	20	60	150
Change in Outlays													
Refundable tax credits[d]	*	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-6	-13
Debt service	*	*	*	-1	-1	-2	-3	-4	-5	-7	-8	-4	-31
Total	*	-2	-1	-2	-2	-3	-4	-5	-7	-8	-9	-11	-44
Change in the Deficit[a]	**10**	**10**	**11**	**15**	**16**	**18**	**20**	**22**	**25**	**27**	**29**	**71**	**194**
Memorandum:													
Deficit in CBO's January 2012 Baseline	-1,079	-585	-345	-269	-302	-220	-196	-258	-280	-279	-339	-1,721	-3,072

Source: Congressional Budget Office.

Note: GDP = gross domestic product; * = between -$500 million and $500 million.

a. Negative amounts indicate an increase in the deficit; positive amounts indicate a reduction in the deficit.

b. Most discretionary spending through 2021 is governed by caps established by the Budget Control Act of 2011 and, in CBO's baseline, would not be affected by changes in projected inflation.

c. The change in outlays attributable to higher interest rates in this scenario differs from the estimate in the rule of thumb for interest rates because the principal of inflation-protected securities issued by the Treasury grows with inflation.

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

2017 the Federal Reserve's remittances would begin to rise as a result of higher projected interest rates.

The larger deficits generated by the increase in interest payments would require the Treasury to raise more cash than is assumed in the baseline. The extra borrowing would result in further increases in the annual cost of servicing the debt; that cost would grow to $39 billion in 2022.

All together, if interest rates were a full percentage point higher than the rates assumed in CBO's baseline, the budget's bottom line would worsen by amounts that would rise over the projection period, climbing from $22 billion in 2012 to $143 billion in 2022. The cumulative deficit over the 10-year period would grow by nearly $1 trillion.

Higher Inflation

The third rule of thumb shows the budgetary effect of inflation that is 1 percentage point higher than is projected for the baseline. Although higher inflation increases both revenues and outlays, the net effect over the 2013–2022 period would be a smaller cumulative budget deficit.

Higher inflation leads to increases in wages and other income, which translate directly into more income and payroll taxes being withheld from individuals' paychecks. However, the effect of inflation on revenues is dampened (with a lag) because the thresholds for various tax brackets are indexed to rise with inflation. Faster growth in prices also boosts corporate profits, leading to increased federal receipts from businesses' quarterly estimated tax payments.

Higher inflation increases the cost of many mandatory spending programs, and it can result in projections of increased discretionary spending. Benefits for many mandatory programs are automatically adjusted each year to reflect price increases. Social Security, federal employees' retirement programs, Supplemental Security Income, disability compensation for veterans, the Supplemental Nutrition Assistance Program (formerly known as Food Stamps), and child nutrition programs, among others, are adjusted (with a lag) for changes in the consumer price index or one of its components. Many of Medicare's payment rates also are adjusted annually for inflation. Spending for some other programs, such as Medicaid, is not formally indexed to price changes but grows with inflation nonetheless. In addition, to the extent that initial benefit payments to participants in retirement and disability programs are related to wages, changes in nominal wages as a result of inflation will be reflected in future outlays for those programs.

In CBO's current baseline, projections of future spending for discretionary programs would be largely unaffected by increases in projected inflation. Previous baselines for discretionary spending reflected the assumption that funding would remain constant in real terms because future appropriations were projected by adjusting the most recent annual appropriations for anticipated inflation. However, the Budget Control Act of 2011 (Public Law 112-25) set caps on discretionary budget authority through 2021, and CBO's baseline incorporates the assumption that appropriations will be equal to those caps, except for specific adjustments permitted by law if appropriations are provided for certain purposes. Assuming that the amounts of those adjustments would be affected by price levels, higher inflation would increase projected outlays from such funding by $107 billion between 2013 and 2022.[4] In addition, for its baseline projections CBO assumed that discretionary funding in 2022 would increase with inflation from the amount specified for 2021; increasing that rate of inflation by 1 percentage point would boost outlays in 2022 by another $7 billion.

Inflation also has an impact on outlays for net interest because it affects nominal long-term interest rates. For example, if inflation rises, interest rates will climb (all else being equal), and new federal borrowing will incur higher interest costs. For this rule of thumb, CBO assumed that nominal interest rates would rise in step with inflation. Inflation-indexed securities also would incur higher costs with higher inflation.

If inflation each year was 1 percentage point higher than the rate underlying CBO's baseline, total revenues and

4. Budget authority designated as an emergency requirement or for overseas contingency operations (such as the war in Afghanistan) would lead to an increase in the caps, as would budget authority provided for certain types of disaster relief (up to an amount based on historical spending for that purpose) and certain specified "program integrity" initiatives aimed at reducing improper benefit payments in the Disability Insurance and Supplemental Security Income programs, Medicare, Medicaid, and the Children's Health Insurance Program.

APPENDIX

C

Automatic Stabilizers

The Congressional Budget Office's (CBO's) baseline projections of the budget deficit are affected by legislation that governs taxes and spending and by the automatic responses of revenues and outlays to developments in the economy. Among those latter factors, automatic stabilizers reflect cyclical movements in real (inflation-adjusted) output and unemployment.[1] During recessions, gross domestic product (GDP) falls relative to potential GDP (the quantity of output that corresponds to a high rate of use of labor and capital); tax liabilities and, therefore, revenues decline automatically with the reduction in output and income. In addition, some outlays—to pay unemployment insurance claims or to provide federal nutrition benefits, for example—automatically increase.[2] Those automatic reductions in revenues and increases in outlays help bolster economic activity during downturns, but they also temporarily increase the budget deficit. As GDP moves up closer to potential GDP, revenues automatically begin to rise and outlays automatically begin to fall, and thus the automatic stabilizers offer a smaller boost to output. When GDP rises above its potential, the automatic stabilizers begin to restrain, rather than boost, economic activity.

CBO estimates that automatic stabilizers have added significantly to the budget deficit for the past few years and will continue to do so for the next few years, before their effect declines significantly in response to improving economic conditions. In fiscal year 2011, CBO estimates, automatic stabilizers added $367 billion to the deficit, an amount equal to 2.3 percent of potential GDP (see Table C-1 on page 116 and Table C-2 on page 118).[3] That year marked the third consecutive year that automatic stabilizers added to the deficit an amount equal to or exceeding 2.0 percent of potential GDP, a mark that had been met or exceeded only twice in the past 50 years, in fiscal years 1982 and 1983 (see Figure C-1).

According to CBO's baseline projections, the contribution of automatic stabilizers to the budget deficit, measured as a share of potential GDP, will be 2.2 percent in fiscal year 2012 and 2.7 percent in fiscal years 2013 and 2014. The size of those effects in 2013 and 2014 derives mostly from the weaker economy caused by the sharp rise in taxes and reduction in spending that will occur in calendar year 2013 under current law.[4] After 2014, the projected effect of automatic stabilizers on the budget deficit shrinks steadily and reaches about zero in fiscal year 2018, when CBO projects that output will be back up to its potential.

The budget balance with the effects of automatic stabilizers filtered out is an estimate of what the surplus or deficit

1. For a description of a methodology for estimating automatic stabilizers that is similar to CBO's methodology, see Darrel Cohen and Glenn Follette, "The Automatic Fiscal Stabilizers: Quietly Doing Their Thing," *Economic Policy Review*, Federal Reserve Bank of New York, vol. 6, no. 1 (April 2000), pp. 35–68. See also Glenn Follette and Byron Lutz, *Fiscal Policy in the United States: Automatic Stabilizers, Discretionary Fiscal Policy Actions, and the Economy*, Finance and Economic Discussion Series, 2010–43 (Federal Reserve Board, September 2010).

2. CBO's estimates of the automatic stabilizers reflect the assumption that discretionary spending and interest payments do not have automatic responses to the business cycle.

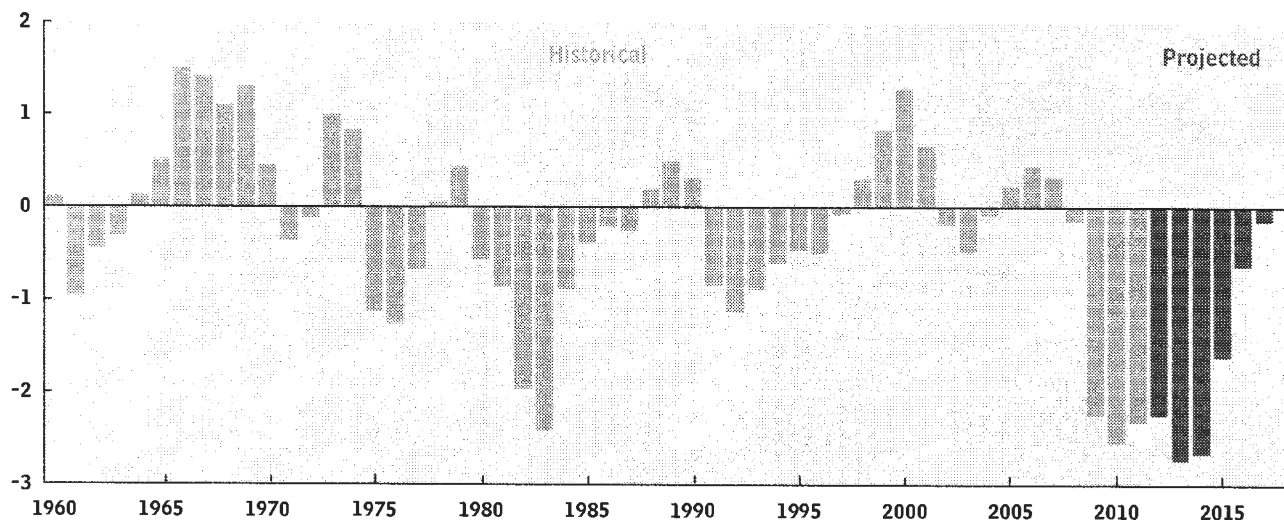
3. Those calculations and subsequent ones in this appendix involve potential, rather than actual, GDP because potential GDP excludes fluctuations that are attributable to the business cycle.

4. The size of the automatic stabilizers depends not only on the amount of slack in the economy but also on the characteristics of the tax structure. For example, revenues are more sensitive to the business cycle when tax rates are relatively high because losses in taxable income due to economic weakness then result in greater losses of tax revenues than when tax rates are lower. In particular, the higher tax rates scheduled under current law for 2013 increase the size of the automatic stabilizers, but the economic effect of the larger automatic stabilizers is far outweighed by the restraining effect that the higher tax rates have on short-term growth.

Figure C-1.

Contribution of Automatic Stabilizers to Budget Deficits and Surpluses

(Percentage of potential gross domestic product)



Sources: Congressional Budget Office; Office of Management and Budget.

Notes: Automatic stabilizers are automatic changes in revenues and outlays that are attributable to cyclical movements in real (inflation-adjusted) output and unemployment.

Potential gross domestic product is the quantity of output that corresponds to a high rate of use of labor and capital.

Data are fiscal year values, plotted through 2018.

would be if GDP was at its potential, the unemployment rate was at a corresponding level, and all other factors were unchanged.[5] That budget measure has been used in different ways. For example, some analysts use it to discern underlying trends in government saving or dissaving (that is, trends in surpluses or deficits). Others use it to approximate whether the short-run influence of the budget on aggregate demand and real output is positive or negative.[6] More generally, the measure helps analysts evaluate the extent to which changes in the budget balance are caused by cyclical developments in the economy and thus are likely to prove temporary rather than long lasting.

Under the assumptions used for CBO's baseline, the budget deficit without automatic stabilizers is projected to equal 4.3 percent of potential GDP in fiscal year 2012, down from 5.9 percent in 2011 (see Figure C-2). About half of that decrease results from a projected rise in revenues (measured as a share of potential GDP) that would occur without automatic stabilizers. The other half reflects mostly a decline in discretionary outlays (again, measured as a share of potential GDP).

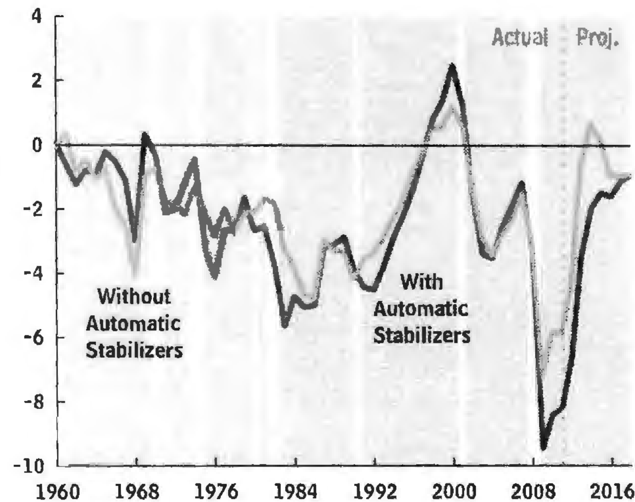
5. The "budget deficit without automatic stabilizers" has also been referred to as the "cyclically adjusted deficit" or "structural deficit."

6. For the purpose of assessing the impact of federal fiscal policy on output in the short term, economists generally prefer to use "net federal saving" with the effects of automatic stabilizers filtered out rather than the federal budget balance with those effects filtered out. Net federal saving, a figure reported by the Department of Commerce in the national income and product accounts (NIPAs), is similar to but not the same as the budget deficit because it includes various adjustments to the cash flows recorded in the federal budget to obtain a measure more directly related to current production and income. For example, net federal saving excludes some purely financial transactions of the government, such as sales of government assets and most federal outlays to bolster the financial system, that are recorded in the budget but are not clearly related to current production and income. For a discussion of the differences between the budget and NIPA measures of federal inflows and outflows, see Congressional Budget Office, *CBO's Projections of Federal Receipts and Expenditures in the Framework of the National Income and Product Accounts* (February 2011).

Figure C-2.

Budget Deficits and Surpluses With and Without Automatic Stabilizers

(Percentage of potential gross domestic product)



Sources: Congressional Budget Office; Federal Reserve.

Note: Automatic stabilizers are automatic changes in revenues and outlays that are attributable to cyclical movements in real (inflation-adjusted) output and unemployment.

Potential gross domestic product is the quantity of output that corresponds to a high rate of use of labor and capital.

Data are fiscal year values, plotted through 2018.

The projected budget deficit adjusted to remove the effects of automatic stabilizers falls sharply in 2013, to 0.7 percent of potential GDP, reflecting the large increases in revenues and reductions in spending scheduled to take place under current law. Revenues without automatic stabilizers are projected to jump to 20.1 percent of potential GDP, up from 17.3 percent in 2012, and outlays without automatic stabilizers are projected to decline to 20.8 percent of potential GDP, down from 21.7 percent in 2012.

In fiscal year 2014, the projected budget balance with the effects of automatic stabilizers excluded improves further, reaching a surplus amounting to 0.7 percent of potential GDP. Nearly all of the improvement stems from an increase in revenues (rising from 20.1 percent of potential GDP to 21.3 percent). Outlays decline by 0.2 percent of potential GDP.

Later in the coming decade, the projected budget balance without automatic stabilizers is close to zero in fiscal year 2015 and is a deficit amounting to about 1.0 percent of potential GDP in 2016, 2017, and 2018. The renewed worsening of the budget balance with the effects of automatic stabilizers filtered out primarily reflects increases in both interest payments and mandatory spending. For the years beyond 2018, CBO projects that automatic stabilizers have no effect on the budget because GDP is assumed to be at its potential level; consequently, the projected budget deficit without automatic stabilizers is the same as the projected baseline budget deficit.

Table C-1.

Deficit or Surplus With and Without Automatic Stabilizers and Related Series, by Fiscal Year, in Billions of Dollars

	Deficit (-) or Surplus With Automatic Stabilizers	— Automatic Stabilizers	= Deficit (-) or Surplus Without Automatic Stabilizers	Revenues and Outlays Without Automatic Stabilizers		GDP Gap[a]	Unemployment Gap[b] (Percent)
				Revenues	Outlays		
				Historical			
1960	*	1	*	92	92	1	-0.2
1961	-3	-5	2	99	97	-16	0.9
1962	-7	-3	-5	102	106	-7	0.5
1963	-5	-2	-3	108	111	-6	0.1
1964	-6	1	-7	112	119	3	-0.1
1965	-1	4	-5	114	119	10	-0.7
1966	-4	11	-15	122	136	34	-1.7
1967	-9	11	-20	140	160	30	-2.0
1968	-25	9	-34	146	181	23	-2.0
1969	3	12	-9	178	187	27	-2.4
1970	-3	5	-7	191	198	4	-1.9
1971	-23	-4	-19	191	211	-15	-0.2
1972	-23	-1	-22	209	231	-4	-0.1
1973	-15	13	-28	220	247	39	-0.9
1974	-6	12	-18	254	272	28	-1.2
1975	-53	-18	-35	294	329	-56	1.2
1976	-74	-23	-51	316	367	-53	1.8
1977	-54	-13	-40	366	406	-28	1.1
1978	-59	1	-60	398	459	6	**
1979	-41	11	-52	454	506	26	-0.4
1980	-74	-16	-58	530	588	-48	0.6
1981	-79	-27	-52	621	673	-56	1.2
1982	-128	-67	-61	675	736	-192	3.0
1983	-208	-89	-119	678	797	-232	4.1
1984	-185	-35	-151	697	848	-78	1.8
1985	-212	-17	-196	747	943	-35	1.2
1986	-221	-9	-212	775	987	-17	1.0
1987	-150	-12	-137	866	1,003	-32	0.4
1988	-155	9	-164	902	1,066	27	-0.3
1989	-153	26	-179	968	1,147	67	-0.7
1990	-221	18	-239	1,016	1,254	39	-0.5
1991	-269	-52	-218	1,101	1,319	-152	0.8
1992	-290	-72	-218	1,153	1,371	-168	1.7
1993	-255	-60	-195	1,206	1,401	-141	1.5
1994	-203	-43	-161	1,296	1,457	-90	0.9
1995	-164	-35	-129	1,385	1,514	-92	0.3
1996	-107	-39	-68	1,491	1,559	-94	0.2
1997	-22	-6	-16	1,586	1,602	-2	**
1998	69	25	44	1,701	1,657	61	-0.5
1999	126	75	51	1,759	1,708	181	-0.7

Continued

Table C-1. Continued

Deficit or Surplus With and Without Automatic Stabilizers and Related Series, by Fiscal Year, in Billions of Dollars

	Deficit (-) or Surplus With Automatic Stabilizers	— Automatic Stabilizers	= Deficit (-) or Surplus Without Automatic Stabilizers	Revenues and Outlays Without Automatic Stabilizers		GDP Gap[a]	Unemployment Gap[b] (Percent)
				Revenues	Outlays		
				Historical (Continued)			
2000	236	122	114	1,912	1,797	280	-1.0
2001	128	66	62	1,929	1,867	114	-0.7
2002	-158	-20	-138	1,865	2,003	-53	0.7
2003	-378	-54	-324	1,825	2,149	-126	1.0
2004	-413	-9	-403	1,885	2,288	1	0.6
2005	-318	27	-346	2,125	2,471	90	0.2
2006	-248	58	-306	2,353	2,659	152	-0.3
2007	-161	44	-205	2,530	2,734	97	-0.5
2008	-459	-21	-437	2,539	2,976	-83	0.2
2009	-1,413	-334	-1,079	2,382	3,461	-988	3.3
2010	-1,293	-389	-904	2,488	3,393	-942	4.3
2011	-1,296	-367	-928	2,614	3,543	-892	3.7
				Projected			
2012	-1,079	-368	-711	2,839	3,550	-867	3.3
2013	-585	-462	-124	3,391	3,515	-990	3.5
2014	-345	-464	120	3,720	3,601	-914	3.5
2015	-269	-294	25	3,825	3,800	-526	2.3
2016	-302	-121	-181	3,889	4,070	-194	1.0
2017	-220	-31	-189	4,066	4,255	-41	0.3
2018	-196	-3	-193	4,246	4,439	-1	**

Sources: Congressional Budget Office; Office of Management and Budget.

Notes: Automatic stabilizers are automatic changes in revenues and outlays that are attributable to cyclical movements in real (inflation-adjusted) GDP and unemployment.

GDP = gross domestic product; * = between -$500 million and $500 million; ** = between -0.05 percent and 0.05 percent.

a. The GDP gap equals GDP minus potential GDP, which is the quantity of output that corresponds to a high rate of use of labor and capital.

b. The unemployment gap equals the rate of unemployment minus the natural rate of unemployment, which is the rate of unemployment arising from all sources except fluctuations in aggregate demand.

Table C-2.

Deficit or Surplus With and Without Automatic Stabilizers and Related Series, by Fiscal Year, as a Percentage of Potential Gross Domestic Product

	Deficit (-) or Surplus With Automatic Stabilizers	— Automatic Stabilizers	= Deficit (-) or Surplus Without Automatic Stabilizers	Revenues and Outlays Without Automatic Stabilizers: Revenues	Revenues and Outlays Without Automatic Stabilizers: Outlays	GDP Gap[a]	Unemployment Gap[b] (Percent)
				Historical			
1960	0.1	0.1	-0.1	17.8	17.8	0.3	-0.2
1961	-0.6	-1.0	0.3	18.1	17.8	-2.9	0.9
1962	-1.2	-0.4	-0.8	17.7	18.5	-1.1	0.5
1963	-0.8	-0.3	-0.5	17.9	18.4	-1.0	0.1
1964	-0.9	0.1	-1.1	17.5	18.6	0.5	-0.1
1965	-0.2	0.5	-0.7	16.8	17.6	1.5	-0.7
1966	-0.5	1.5	-2.0	16.9	18.9	4.7	-1.7
1967	-1.1	1.4	-2.5	18.0	20.5	3.8	-2.0
1968	-3.0	1.1	-4.1	17.3	21.4	2.8	-2.0
1969	0.4	1.3	-1.0	19.3	20.3	2.9	-2.4
1970	-0.3	0.4	-0.7	18.9	19.7	0.4	-1.9
1971	-2.1	-0.4	-1.7	17.5	19.2	-1.3	-0.2
1972	-2.0	-0.1	-1.9	17.7	19.6	-0.4	-0.1
1973	-1.2	1.0	-2.2	17.3	19.5	3.1	-0.9
1974	-0.4	0.8	-1.3	18.0	19.3	2.0	-1.2
1975	-3.3	-1.1	-2.2	18.2	20.4	-3.5	1.2
1976	-4.1	-1.3	-2.8	17.6	20.5	-3.0	1.8
1977	-2.7	-0.7	-2.0	18.3	20.3	-1.4	1.1
1978	-2.7	*	-2.7	18.0	20.7	0.3	*
1979	-1.6	0.4	-2.1	18.3	20.4	1.0	-0.4
1980	-2.7	-0.6	-2.1	19.1	21.2	-1.7	0.6
1981	-2.5	-0.9	-1.7	19.9	21.6	-1.8	1.2
1982	-3.7	-2.0	-1.8	19.8	21.6	-5.6	3.0
1983	-5.7	-2.4	-3.2	18.5	21.7	-6.3	4.1
1984	-4.7	-0.9	-3.8	17.8	21.6	-2.0	1.8
1985	-5.1	-0.4	-4.7	17.9	22.5	-0.8	1.2
1986	-5.0	-0.2	-4.8	17.5	22.3	-0.4	1.0
1987	-3.2	-0.3	-2.9	18.5	21.4	-0.7	0.4
1988	-3.1	0.2	-3.3	18.1	21.4	0.5	-0.3
1989	-2.9	0.5	-3.4	18.2	21.5	1.3	-0.7
1990	-3.9	0.3	-4.2	17.8	22.0	0.7	-0.5
1991	-4.4	-0.8	-3.6	18.1	21.7	-2.5	0.8
1992	-4.5	-1.1	-3.4	18.0	21.4	-2.6	1.7
1993	-3.8	-0.9	-2.9	17.9	20.8	-2.1	1.5
1994	-2.9	-0.6	-2.3	18.3	20.6	-1.3	0.9
1995	-2.2	-0.5	-1.7	18.6	20.4	-1.2	0.3
1996	-1.4	-0.5	-0.9	19.1	20.0	-1.2	0.2
1997	-0.3	-0.1	-0.2	19.3	19.5	*	*
1998	0.8	0.3	0.5	19.8	19.3	0.7	-0.5
1999	1.4	0.8	0.6	19.5	18.9	2.0	-0.7

Continued

Table C-2. Continued

Deficit or Surplus With and Without Automatic Stabilizers and Related Series, by Fiscal Year, as a Percentage of Potential Gross Domestic Product

	Deficit (-) or Surplus With Automatic Stabilizers	— Automatic Stabilizers	= Deficit (-) or Surplus Without Automatic Stabilizers	Revenues and Outlays Without Automatic Stabilizers		GDP Gap[a]	Unemployment Gap[b] (Percent)
				Revenues	Outlays		
				Historical (Continued)			
2000	2.5	1.3	1.2	20.0	18.8	2.9	-1.0
2001	1.3	0.7	0.6	19.1	18.5	1.1	-0.7
2002	-1.5	-0.2	-1.3	17.6	18.9	-0.5	0.7
2003	-3.4	-0.5	-2.9	16.4	19.4	-1.1	1.0
2004	-3.5	-0.1	-3.5	16.1	19.6	*	0.6
2005	-2.6	0.2	-2.8	17.2	20.0	0.7	0.2
2006	-1.9	0.4	-2.3	18.0	20.4	1.2	-0.3
2007	-1.2	0.3	-1.5	18.4	19.9	0.7	-0.5
2008	-3.2	-0.1	-3.0	17.6	20.6	-0.6	0.2
2009	-9.5	-2.2	-7.2	16.0	23.2	-6.6	3.3
2010	-8.5	-2.5	-5.9	16.3	22.2	-6.2	4.3
2011	-8.2	-2.3	-5.9	16.5	22.4	-5.6	3.7
				Projected			
2012	-6.6	-2.2	-4.3	17.3	21.7	-5.3	3.3
2013	-3.5	-2.7	-0.7	20.1	20.8	-5.9	3.5
2014	-2.0	-2.7	0.7	21.3	20.6	-5.2	3.5
2015	-1.5	-1.6	0.1	21.1	20.9	-2.9	2.3
2016	-1.6	-0.6	-1.0	20.6	21.5	-1.0	1.0
2017	-1.1	-0.2	-1.0	20.6	21.5	-0.2	0.3
2018	-0.9	*	-0.9	20.5	21.5	*	*

Sources: Congressional Budget Office; Office of Management and Budget.

Notes: Automatic stabilizers are automatic changes in revenues and outlays that are attributable to cyclical movements in real (inflation-adjusted) GDP and unemployment.

GDP = gross domestic product; * = between -0.05 percent and 0.05 percent.

a. The GDP gap equals GDP minus potential GDP, which is the quantity of output that corresponds to a high rate of use of labor and capital.

b. The unemployment gap equals the rate of unemployment minus the natural rate of unemployment, which is the rate of unemployment arising from all sources except fluctuations in aggregate demand.

APPENDIX

D

Trust Funds

The federal government uses several accounting mechanisms to link earmarked receipts—money designated for a specific purpose—with corresponding expenditures. Those mechanisms include trust funds (such as the Social Security trust funds), special funds (such as the fund that the Department of Defense uses to finance its health care program for military retirees), and revolving funds (such as the Federal Employees Group Life Insurance fund). When the receipts designated for those funds exceed the amounts needed for expenditures, the funds are generally credited with nonmarketable debt instruments issued by the Treasury that are known as government account securities. At the end of fiscal year 2011, about $4.6 trillion in such securities was outstanding, over 90 percent of which was held by trust funds.[1]

The federal budget has numerous trust funds, although most of the money credited to such funds goes to fewer than a dozen of them. By far the largest trust funds currently are the two for Social Security (the Old-Age and Survivors Insurance Trust Fund and the Disability Insurance Trust Fund), Medicare's Hospital Insurance Trust Fund, and the funds dedicated to retirement programs for military and civilian retirement (see Table D-1).

When a trust fund receives cash receipts that are not needed immediately to pay benefits or cover other expenses, the Treasury uses the extra income (after crediting the fund for it) to reduce the amount of new federal borrowing that is necessary to finance the governmentwide deficit. In other words, in the absence of changes to other tax and spending policies, the government borrows less from the public than it would without that extra income. The reverse happens when revenues for a trust fund program fall short of expenses in a given year, assuming that there is a sufficient balance in the relevant fund.

The balance of a trust fund at any given time is a measure of the historical relationship between the related program's revenues and spending. That balance (in the form of government securities) is an asset for the individual program, such as Social Security, but a liability for the rest of the government. The resources to redeem a trust fund's government securities—and thereby pay for benefits or other spending—in some future year must be generated through taxes, income from other government sources, or borrowing from the public in that year. Trust funds have an important legal meaning in that their balances are a measure of the amounts that the government has the legal authority to spend for certain purposes under current law, but they have little relevance in an economic or budgetary sense.

To assess how all federal activities, taken together, affect the economy and financial markets, it is useful to include the cash receipts and expenditures of trust funds in the budget totals along with the receipts and expenditures of other federal programs. Therefore, the Congressional Budget Office (CBO), the Administration's Office of Management and Budget, and other fiscal analysts generally focus on the total deficit in that "unified budget," which includes the transactions of trust funds.

According to CBO's current baseline projections, federal trust funds as a group will run a surplus of $111 billion in 2012 and a cumulative surplus of $856 billion over the 2013–2022 period (see Table D-2). Those surpluses are bolstered by interest receipts on the funds' government account securities and by other sums transferred from elsewhere in the budget. Such intragovernmental transfers—which are projected to total $671 billion in 2012—reallocate costs from one category of the budget to another, but they do not directly change the total deficit or the government's borrowing needs. If intragovernmental transfers are excluded and only income from sources

1. Debt issued in the form of government account securities is included in a measure of federal debt called "gross debt." Because such debt is intragovernmental in nature, however, it is not included in the measure "debt held by the public." (For a discussion of different measures of federal debt, see Chapter 1.)

Table D-1.

Trust Fund Balances Projected in CBO's Baseline

(Billions of dollars)

	Actual, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Social Security												
Old-Age and Survivors Insurance	2,493	2,578	2,648	2,706	2,761	2,818	2,875	2,926	2,966	2,991	3,001	2,991
Disability Insurance[a]	162	131	95	56	14	0	0	0	0	0	0	0
Subtotal	2,654	2,709	2,743	2,762	2,776	2,818	2,875	2,926	2,966	2,991	3,001	2,991
Medicare												
Hospital Insurance (Part A)[a]	246	221	185	148	120	93	73	59	42	25	6	0
Supplementary Medical Insurance (Part B)	70	71	87	97	104	109	119	133	145	154	166	175
Subtotal	317	292	272	245	224	201	192	191	187	179	172	175
Military Retirement	326	374	430	490	555	621	697	783	871	966	1,067	1,170
Civilian Retirement[b]	821	841	859	877	896	914	934	956	980	1,005	1,031	1,058
Unemployment Insurance	16	34	39	37	43	49	53	59	63	65	66	69
Highway[a]	22	12	3	0	0	0	0	0	0	0	0	0
Airport and Airway	9	9	11	12	14	17	21	25	30	36	43	50
Railroad Retirement[c]	27	26	24	23	22	20	18	17	16	14	13	12
Other[d]	89	94	98	101	105	108	111	115	119	123	127	131
Total Trust Fund Balance	**4,281**	**4,391**	**4,480**	**4,548**	**4,633**	**4,748**	**4,901**	**5,073**	**5,231**	**5,379**	**5,519**	**5,657**

Source: Congressional Budget Office.

Note: These balances are for the end of the fiscal year.

a. In keeping with the rules in section 257 of the Deficit Control Act of 1985, CBO's baseline incorporates the assumption that payments will continue to be made after the trust fund has been exhausted, although there is no legal authority to make such payments. Because the manner by which those payments would continue would depend on future legislation, CBO does not show a cumulative negative balance in the trust fund after the exhaustion date.

b. Includes Civil Service Retirement, Foreign Service Retirement, and several smaller retirement trust funds.

c. The Railroad Retirement and Survivors' Improvement Act of 2001 established an entity, the National Railroad Retirement Investment Trust, that is allowed to invest in non-Treasury securities, such as stocks and corporate bonds. Most of the balances for Railroad Retirement are invested outside the Treasury.

d. Consists primarily of trust funds for federal employees' health and life insurance, Superfund, and various insurance programs for veterans.

outside the government (such as payroll taxes) is counted, the trust funds as a whole will run deficits throughout the 2013–2022 projection period—growing from $560 billion this year to $964 billion in 2022, CBO projects, and totaling nearly $7.3 trillion over the 2013–2022 period.

Without legislative action, three trust funds are projected to be exhausted during that period: Social Security's Disability Insurance Trust Fund, Medicare's Hospital Insurance Trust Fund, and the Highway Trust Fund.

Social Security Trust Funds

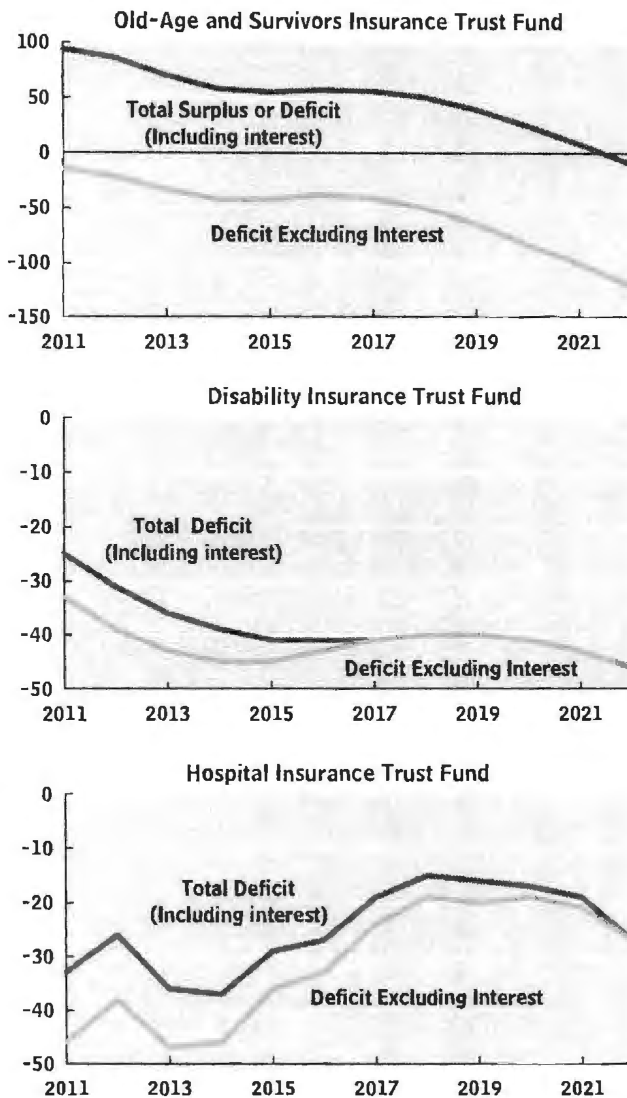
Social Security provides benefits to retired workers, their families, and some survivors of deceased workers through the Old-Age and Survivors Insurance (OASI) program; it also provides benefits to some people with disabilities and their families through the Disability Insurance (DI) program. Those benefits are financed mainly through payroll taxes collected on workers' earnings, usually at a rate of 12.4 percent, split evenly between the worker and the employer.[2]

2. The Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (Public Law 111-312), which was enacted in December 2010, reduced workers' share of the Social Security payroll tax by 2 percentage points for calendar year 2011. The Temporary Payroll Tax Cut Continuation Act of 2011 (P.L. 112-78), enacted in December 2011, extended that reduction through the end of February 2012. The amount of revenue estimated to be lost because of the reduction has been credited back to the Social Security trust funds through a transfer from the general fund. That transfer amounted to $79 billion in fiscal year 2011 and is projected to be $50 billion in 2012 (in the absence of further changes to the tax).

Figure D-1.

Annual Surpluses or Deficits Projected in CBO's Baseline for the OASI, DI, and HI Trust Funds

(Billions of dollars)



Source: Congressional Budget Office.

fund are expected to be higher than noninterest income, totaling $141 billion in 2012 and rising steadily to $211 billion in 2022. Thus, the annual cash flows of the DI program excluding interest will also add to federal deficits in each year of the projection period, by amounts ranging from $39 billion to $46 billion. Even with interest receipts included, the DI trust fund is expected to run a yearly deficit throughout that period (see Figure D-1). In the absence of legislative action, the balance of the DI fund will be exhausted in 2016, CBO projects.

Medicare Trust Funds

Cash flows for payments to hospitals and payments for other services covered by Medicare are accounted for in two trust funds. The Hospital Insurance (HI) Trust Fund accounts for payments made to hospitals and providers of post-acute care services under Part A of the Medicare program, and the Supplementary Medical Insurance (SMI) Trust Fund accounts for payments made for outpatient services, prescription drugs, and other services under Parts B and D of Medicare.[4]

Hospital Insurance Trust Fund

The HI fund is currently the larger of the two Medicare trust funds, with a balance of $246 billion at the end of 2011. The fund's income is derived largely from the Medicare payroll tax (2.9 percent of workers' earnings, divided equally between the worker and the employer) and from part of the income taxes on Social Security benefits collected from beneficiaries with relatively high income. In 2011, those sources accounted for 88 percent and 7 percent, respectively, of the $219 billion in noninterest income of the HI trust fund.[5] In addition, the trust fund is credited with interest on its balances; that interest amounted to $13 billion in 2011.

The fund's noninterest income is projected to increase from $230 billion in 2012 to $417 billion in 2022. Part of the reason for the increase is that Medicare's payroll tax rate is set to rise in 2013 to 3.8 percent for people with annual earnings above $200,000 who file individual tax returns and for couples with earnings above $250,000 who file joint tax returns. Annual expenditures from the HI trust fund are projected to grow from $268 billion in 2012 to $444 billion in 2022. CBO expects expenditures to outstrip income throughout the 2012–2022 period,

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

5. As it does with the Social Security payroll tax, the federal government makes an intragovernmental transfer from the general fund of the Treasury to the HI trust fund to cover the employer's share of the Medicare payroll tax for federal workers. That transfer is included in the income line in Table D-3.

producing annual deficits that will average $30 billion with interest receipts excluded or $24 billion with those receipts included (see Table D-3 and Figure D-1). Under current law, the balance of the HI trust fund will be exhausted in 2022, CBO projects.

Supplementary Medical Insurance Trust Fund

The SMI trust fund contains two separate accounts: one that pays for physicians' services and other health care provided on an outpatient basis under Part B of Medicare (Medical Insurance) and one that pays for prescription drug benefits under Part D. Their funding mechanisms differ slightly:

- The Part B portion of the trust fund is financed primarily through transfers from the general fund of the Treasury and monthly premium payments from Medicare beneficiaries. The basic monthly premium for the Medical Insurance program is set to cover approximately 25 percent of the program's spending (with adjustments to maintain a contingency reserve to cover unexpected spikes in spending); an additional premium is assessed on beneficiaries with relatively high income. The amount transferred from the general fund equals about three times the amount of basic premiums expected to be collected, minus the amount collected from the income-related premium and fees from drug manufacturers.

- The Part D portion of the trust fund is financed mainly through transfers from the general fund, monthly premium payments from beneficiaries, and transfers from states based on the number of people in a state who would have received prescription drug coverage under Medicaid in the absence of Medicare's drug benefit. The basic monthly premium for Part D is set to cover 25.5 percent of the program's estimated spending if all participants paid it. However, people who receive low-income subsidies under Part D are not required to pay Part D premiums, so receipts cover less than 25.5 percent of the program's costs. Higher-income participants in Part D pay an income-related premium. The amount transferred from the general fund is set to cover total expected spending for benefits and administrative costs, net of the amounts transferred from states and collected from premiums (both basic and income-related).

Unlike the HI trust fund, the accounts in the SMI trust fund do not face exhaustion, because they are not dependent solely on a specified set of revenues collected from the public. Rather, the amounts credited to those accounts from the general fund are automatically adjusted to cover the differences between program spending and specified revenues.

The Part B account of the SMI trust fund currently holds $71 billion in government account securities. To maintain a contingency reserve that is sufficient to cover unanticipated increases in spending, the fund is expected to run yearly surpluses throughout the projection period, reaching a balance of $175 billion at the end of 2022.

Highway Trust Fund

The Highway Trust Fund comprises two accounts: the highway account, which funds construction of highways and highway safety programs, and the transit account, which funds mass transit programs. CBO assumes that spending from the Highway Trust Fund will continue to be controlled by limitations on obligations set in appropriation acts. For its baseline projections, CBO further assumes that those future limitations on obligations will be equal to the 2012 amounts, adjusted annually for inflation. Under such a scenario, the two accounts will be unable to meet obligations in a timely manner sometime during 2013 (for the highway account) and 2014 (for the transit account). From 2008 to 2010, the Highway Trust Fund received transfers from the general fund of the Treasury totaling almost $35 billion to keep the trust fund from being exhausted.

Other Trust Funds

Among the remaining trust funds in the federal budget, the largest balances are held by various civilian retirement funds (a total of $821 billion at the end of 2011) and by the Military Retirement Trust Fund ($326 billion).[6] In its current baseline, CBO projects that the balances of those funds will increase steadily over the coming decade, reaching $1.1 trillion for the civilian funds and $1.2 trillion for the military retirement fund in 2022 (see Table D-1 on page 122).

6. Those civilian retirement funds include the Civil Service Retirement Trust Fund, the Foreign Service Retirement Trust Fund, and several smaller retirement funds.

CBO's Economic Projections for 2012 to 2022

The tables in this appendix expand on the information in Chapter 2 by showing the Congressional Budget Office's (CBO's) economic projections for 2012 to 2022 (by calendar year in Table E-1 and by fiscal year in Table E-2). CBO does not forecast cyclical fluctuations in its projections for years after 2017. Instead, the projected values shown in the tables for 2018 to 2022 reflect CBO's assessment of the effect of economic and demographic trends in the medium term but do not reflect an attempt to forecast the frequency or size of fluctuations in the business cycle.

Table E-1.

CBO's Economic Projections, by Calendar Year

	Estimated, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
					Year to Year (Percentage change)							
Real GDP	1.7	2.2	1.0	3.6	4.9	4.2	3.3	2.8	2.6	2.5	2.4	2.4
Nominal GDP	3.9	3.6	2.4	5.0	6.4	5.9	5.2	4.8	4.6	4.5	4.5	4.4
PCE Price Index	2.4	1.4	1.3	1.3	1.5	1.7	1.9	2.0	2.0	2.0	2.0	2.0
Core PCE Price Index[a]	1.4	1.4	1.3	1.4	1.5	1.6	1.8	1.9	2.0	2.0	2.0	2.0
Consumer Price Index[b]	3.1 [c]	1.7	1.5	1.5	1.7	2.0	2.2	2.3	2.3	2.3	2.3	2.3
Core Consumer Price Index[a]	1.7 [c]	1.7	1.5	1.6	1.7	1.9	2.1	2.2	2.2	2.2	2.2	2.2
GDP Price Index	2.1	1.3	1.4	1.4	1.5	1.7	1.9	1.9	2.0	2.0	2.0	2.0
Employment Cost Index[d]	1.7	2.0	3.3	3.5	3.6	3.5	3.4	3.8	3.8	3.6	3.5	3.6
					Calendar Year Average							
Unemployment Rate (Percent)	9.0 [c]	8.8	9.1	8.7	7.4	6.3	5.7	5.5	5.5	5.4	5.4	5.3
Interest Rates (Percent)												
Three-month Treasury bills	0.1 [c]	0.1	0.1	0.4	1.6	2.6	3.2	3.6	3.8	3.8	3.8	3.8
Ten-year Treasury notes	2.8 [c]	2.3	2.5	2.9	3.5	4.1	4.6	4.8	5.0	5.0	5.0	5.0
Tax Bases (Percentage of GDP)												
Wages and salaries	44.0	44.0	43.5	43.8	44.0	44.4	44.6	44.9	45.1	45.3	45.3	45.5
Domestic economic profits	9.9	9.8	9.3	9.6	9.7	9.4	8.8	8.3	7.8	7.4	7.2	6.9
Tax Bases (Billions of dollars)												
Wages and salaries	6,634	6,885	6,973	7,360	7,876	8,411	8,900	9,374	9,851	10,344	10,825	11,341
Domestic economic profits	1,501	1,524	1,485	1,611	1,740	1,789	1,754	1,740	1,702	1,690	1,711	1,716
Nominal GDP (Billions of dollars)	15,093	15,633	16,015	16,817	17,899	18,962	19,949	20,897	21,859	22,853	23,870	24,921

Source: Congressional Budget Office.

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

a. Excludes prices for food and energy.

b. The consumer price index for all urban consumers.

c. Actual value for 2011.

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

Table E-2.

CBO's Economic Projections, by Fiscal Year

	Actual, 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	Year to Year (Percentage change)											
Real GDP	2.1	2.1	1.2	2.7	4.8	4.5	3.5	2.8	2.6	2.5	2.4	2.4
Nominal GDP	4.1	3.7	2.6	4.2	6.3	6.2	5.4	4.8	4.6	4.6	4.5	4.4
PCE Price Index	2.1	1.8	1.2	1.3	1.4	1.7	1.9	2.0	2.0	2.0	2.0	2.0
Core PCE Price Index[a]	1.2	1.5	1.3	1.4	1.5	1.6	1.8	1.9	2.0	2.0	2.0	2.0
Consumer Price Index[b]	2.6	2.2	1.4	1.5	1.6	2.0	2.2	2.3	2.3	2.3	2.3	2.3
Core Consumer Price Index[a]	1.3	1.9	1.5	1.6	1.7	1.8	2.0	2.2	2.2	2.2	2.2	2.2
GDP Price Index	2.0	1.6	1.4	1.4	1.4	1.6	1.8	1.9	2.0	2.0	2.0	2.0
Employment Cost Index[c]	1.7	1.9	2.9	3.6	3.6	3.6	3.4	3.7	3.9	3.6	3.5	3.6
	Fiscal Year Average											
Unemployment Rate (Percent)	9.2	8.8	9.0	9.0	7.8	6.5	5.8	5.5	5.5	5.4	5.4	5.3
Interest Rates (Percent)												
Three-month Treasury bills	0.1	0.1	0.1	0.3	1.3	2.4	3.1	3.5	3.7	3.8	3.8	3.8
Ten-year Treasury notes	3.0	2.3	2.4	2.8	3.4	3.9	4.5	4.8	5.0	5.0	5.0	5.0
Tax Bases (Percentage of GDP)												
Wages and salaries	44.0	43.8	43.8	43.7	43.9	44.3	44.6	44.8	45.0	45.2	45.3	45.5
Domestic economic profits	10.0	9.8	9.4	9.5	9.7	9.5	8.9	8.5	7.9	7.5	7.2	7.0
Tax Bases (Billions of dollars)												
Wages and salaries	6,578	6,793	6,966	7,251	7,738	8,281	8,784	9,252	9,732	10,220	10,705	11,208
Domestic economic profits	1,492	1,524	1,493	1,568	1,714	1,785	1,762	1,746	1,709	1,690	1,705	1,719
Nominal GDP (Billions of dollars)	14,954	15,508	15,914	16,575	17,618	18,704	19,708	20,661	21,616	22,603	23,614	24,655

Source: Congressional Budget Office.

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

a. Excludes prices for food and energy.

b. The consumer price index for all urban consumers.

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

APPENDIX

F

Historical Budget Data

This appendix provides historical data on revenues, outlays, and the deficit or surplus—in forms consistent with the projections in Chapters 1, 3, and 4—for fiscal years 1972 to 2011. The data, which come from the Congressional Budget Office and the Office of Management and Budget, are shown both in nominal dollars and as a percentage of gross domestic product (GDP). Some of the numbers have been revised since January 2011, when these tables were previously published.

Federal revenues, outlays, the deficit or surplus, and debt held by the public are shown in Table F-1. Revenues, outlays, and the deficit or surplus have both on-budget and off-budget components. Social Security's receipts and outlays were placed off-budget by the Balanced Budget and Emergency Deficit Control Act of 1985. For the sake of consistency, Table F-1 shows the budgetary components of Social Security as off-budget before that year. The Postal Service was moved off-budget by the Omnibus Budget Reconciliation Act of 1989.

The major sources of federal revenues (including off-budget revenues) are presented in Table F-2. Social insurance taxes include payments by employers and employees for Social Security, Medicare, Railroad Retirement, and unemployment insurance, as well as pension contributions by federal workers. Excise taxes are levied on certain products and services, such as gasoline, alcoholic beverages, and air travel. Estate and gift taxes are levied on assets when they are transferred. Miscellaneous receipts consist of earnings of the Federal Reserve System and income from numerous fees and charges.

Total outlays for major categories of spending, including on- and off-budget outlays, appear in Table F-3. Spending controlled by the appropriation process is classified as discretionary. Spending governed by permanent laws, such as those that set eligibility requirements for certain programs, is considered mandatory. Offsetting receipts include the government's contributions to retirement programs for its employees, as well as fees, charges (such as Medicare premiums), and receipts from the use of federally controlled land and offshore territory. Net interest (function 900 of the budget) is composed mostly of the government's interest payments on federal debt offset by its interest income.

Table F-4 divides discretionary spending into its defense and nondefense components. Table F-5 classifies mandatory outlays by the three major entitlement programs—Social Security, Medicare, and Medicaid—and by other categories of mandatory spending. Income security programs provide benefits to recipients with limited income and assets; those programs include unemployment compensation, Supplemental Security Income, and the Supplemental Nutrition Assistance Program. Other federal retirement and disability programs provide benefits to federal civilian employees, members of the military, and veterans. The category of other mandatory programs includes the activities of the Commodity Credit Corporation, the Medicare-Eligible Retiree Health Care Fund, the subsidy costs of federal student loan programs, the Children's Health Insurance Program, and programs related to the federal government's response to problems in the housing and financial markets.

Tables showing the effects of automatic stabilizers on the budget, which have previously appeared in this appendix, are in Appendix C of this volume.

Table F-1.

Revenues, Outlays, Deficits, Surpluses, and Debt Held by the Public Since 1972

	Revenues	Outlays	Deficit (-) or Surplus: On-Budget	Social Security	Postal Service	Total	Debt Held by the Public[a]
			In Billions of Dollars				
1972	207.3	230.7	-26.1	3.1	-0.4	-23.4	322.4
1973	230.8	245.7	-15.2	0.5	-0.2	-14.9	340.9
1974	263.2	269.4	-7.2	1.8	-0.8	-6.1	343.7
1975	279.1	332.3	-54.1	2.0	-1.1	-53.2	394.7
1976	298.1	371.8	-69.4	-3.2	-1.1	-73.7	477.4
1977	355.6	409.2	-49.9	-3.9	0.2	-53.7	549.1
1978	399.6	458.7	-55.4	-4.3	0.5	-59.2	607.1
1979	463.3	504.0	-39.6	-2.0	0.9	-40.7	640.3
1980	517.1	590.9	-73.1	-1.1	0.4	-73.8	711.9
1981	599.3	678.2	-73.9	-5.0	-0.1	-79.0	789.4
1982	617.8	745.7	-120.6	-7.9	0.6	-128.0	924.6
1983	600.6	808.4	-207.7	0.2	-0.3	-207.8	1,137.3
1984	666.4	851.8	-185.3	0.3	-0.4	-185.4	1,307.0
1985	734.0	946.3	-221.5	9.4	-0.1	-212.3	1,507.3
1986	769.2	990.4	-237.9	16.7	*	-221.2	1,740.6
1987	854.3	1,004.0	-168.4	19.6	-0.9	-149.7	1,889.8
1988	909.2	1,064.4	-192.3	38.8	-1.7	-155.2	2,051.6
1989	991.1	1,143.7	-205.4	52.4	0.3	-152.6	2,190.7
1990	1,032.0	1,253.0	-277.6	58.2	-1.6	-221.0	2,411.6
1991	1,055.0	1,324.2	-321.4	53.5	-1.3	-269.2	2,689.0
1992	1,091.2	1,381.5	-340.4	50.7	-0.7	-290.3	2,999.7
1993	1,154.3	1,409.4	-300.4	46.8	-1.4	-255.1	3,248.4
1994	1,258.6	1,461.8	-258.8	56.8	-1.1	-203.2	3,433.1
1995	1,351.8	1,515.7	-226.4	60.4	2.0	-164.0	3,604.4
1996	1,453.1	1,560.5	-174.0	66.4	0.2	-107.4	3,734.1
1997	1,579.2	1,601.1	-103.2	81.3	*	-21.9	3,772.3
1998	1,721.7	1,652.5	-29.9	99.4	-0.2	69.3	3,721.1
1999	1,827.5	1,701.8	1.9	124.7	-1.0	125.6	3,632.4
2000	2,025.2	1,789.0	86.4	151.8	-2.0	236.2	3,409.8
2001	1,991.1	1,862.8	-32.4	163.0	-2.3	128.2	3,319.6
2002	1,853.1	2,010.9	-317.4	159.0	0.7	-157.8	3,540.4
2003	1,782.3	2,159.9	-538.4	155.6	5.2	-377.6	3,913.4
2004	1,880.1	2,292.8	-568.0	151.1	4.1	-412.7	4,295.5
2005	2,153.6	2,472.0	-493.6	173.5	1.8	-318.3	4,592.2
2006	2,406.9	2,655.1	-434.5	185.2	1.1	-248.2	4,829.0
2007	2,568.0	2,728.7	-342.2	186.5	-5.1	-160.7	5,035.1
2008	2,524.0	2,982.5	-641.8	185.7	-2.4	-458.6	5,803.1
2009	2,105.0	3,517.7	-1,549.7	137.3	-0.3	-1,412.7	7,544.7
2010	2,162.7	3,456.2	-1,370.5	81.7	-4.7	-1,293.5	9,018.9
2011	2,302.5	3,598.1	-1,362.8	68.0	-0.8	-1,295.6	10,127.6

Continued

Table F-1. Continued

Revenues, Outlays, Deficits, Surpluses, and Debt Held by the Public Since 1972

	Revenues	Outlays	Deficit (-) or Surplus: On-Budget	Social Security	Postal Service	Total	Debt Held by the Public[a]
			As a Percentage of Gross Domestic Product				
1972	17.6	19.6	-2.2	0.3	**	-2.0	27.4
1973	17.6	18.7	-1.2	**	**	-1.1	26.0
1974	18.3	18.7	-0.5	0.1	-0.1	-0.4	23.9
1975	17.9	21.3	-3.5	0.1	-0.1	-3.4	25.3
1976	17.1	21.4	-4.0	-0.2	-0.1	-4.2	27.5
1977	18.0	20.7	-2.5	-0.2	**	-2.7	27.8
1978	18.0	20.7	-2.5	-0.2	**	-2.7	27.4
1979	18.5	20.2	-1.6	-0.1	**	-1.6	25.6
1980	19.0	21.7	-2.7	**	**	-2.7	26.1
1981	19.6	22.2	-2.4	-0.2	**	-2.6	25.8
1982	19.2	23.1	-3.7	-0.2	**	-4.0	28.7
1983	17.5	23.5	-6.0	**	**	-6.0	33.1
1984	17.3	22.2	-4.8	**	**	-4.8	34.0
1985	17.7	22.8	-5.3	0.2	**	-5.1	36.4
1986	17.5	22.5	-5.4	0.4	**	-5.0	39.5
1987	18.4	21.6	-3.6	0.4	**	-3.2	40.6
1988	18.2	21.3	-3.8	0.8	**	-3.1	41.0
1989	18.4	21.2	-3.8	1.0	**	-2.8	40.6
1990	18.0	21.9	-4.8	1.0	**	-3.9	42.1
1991	17.8	22.3	-5.4	0.9	**	-4.5	45.3
1992	17.5	22.1	-5.5	0.8	**	-4.7	48.1
1993	17.5	21.4	-4.6	0.7	**	-3.9	49.3
1994	18.0	21.0	-3.7	0.8	**	-2.9	49.2
1995	18.4	20.6	-3.1	0.8	**	-2.2	49.1
1996	18.8	20.2	-2.3	0.9	**	-1.4	48.4
1997	19.2	19.5	-1.3	1.0	**	-0.3	45.9
1998	19.9	19.1	-0.3	1.1	**	0.8	43.0
1999	19.8	18.5	**	1.4	**	1.4	39.4
2000	20.6	18.2	0.9	1.5	**	2.4	34.7
2001	19.5	18.2	-0.3	1.6	**	1.3	32.5
2002	17.6	19.1	-3.0	1.5	**	-1.5	33.6
2003	16.2	19.7	-4.9	1.4	**	-3.4	35.6
2004	16.1	19.6	-4.9	1.3	**	-3.5	36.8
2005	17.3	19.9	-4.0	1.4	**	-2.6	36.9
2006	18.2	20.1	-3.3	1.4	**	-1.9	36.6
2007	18.5	19.7	-2.5	1.3	**	-1.2	36.3
2008	17.6	20.8	-4.5	1.3	**	-3.2	40.5
2009	15.1	25.2	-11.1	1.0	**	-10.1	54.1
2010	15.1	24.1	-9.5	0.6	**	-9.0	62.8
2011	15.4	24.1	-9.1	0.5	**	-8.7	67.7

Sources: Congressional Budget Office; Office of Management and Budget.

Note: * = between -$50 million and $50 million; ** = between -0.05 percent and 0.05 percent.

a. End of year.

Table F-2.

Revenues, by Major Source, Since 1972

	Individual Income Taxes	Social Insurance Taxes	Corporate Income Taxes	Excise Taxes	Estate and Gift Taxes	Customs Duties	Miscellaneous Receipts	Total
				In Billions of Dollars				
1972	94.7	52.6	32.2	15.5	5.4	3.3	3.6	207.3
1973	103.2	63.1	36.2	16.3	4.9	3.2	3.9	230.8
1974	119.0	75.1	38.6	16.8	5.0	3.3	5.4	263.2
1975	122.4	84.5	40.6	16.6	4.6	3.7	6.7	279.1
1976	131.6	90.8	41.4	17.0	5.2	4.1	8.0	298.1
1977	157.6	106.5	54.9	17.5	7.3	5.2	6.5	355.6
1978	181.0	121.0	60.0	18.4	5.3	6.6	7.4	399.6
1979	217.8	138.9	65.7	18.7	5.4	7.4	9.3	463.3
1980	244.1	157.8	64.6	24.3	6.4	7.2	12.7	517.1
1981	285.9	182.7	61.1	40.8	6.8	8.1	13.8	599.3
1982	297.7	201.5	49.2	36.3	8.0	8.9	16.2	617.8
1983	288.9	209.0	37.0	35.3	6.1	8.7	15.6	600.6
1984	298.4	239.4	56.9	37.4	6.0	11.4	17.0	666.4
1985	334.5	265.2	61.3	36.0	6.4	12.1	18.5	734.0
1986	349.0	283.9	63.1	32.9	7.0	13.3	19.9	769.2
1987	392.6	303.3	83.9	32.5	7.5	15.1	19.5	854.3
1988	401.2	334.3	94.5	35.2	7.6	16.2	20.2	909.2
1989	445.7	359.4	103.3	34.4	8.7	16.3	23.2	991.1
1990	466.9	380.0	93.5	35.3	11.5	16.7	28.0	1,032.0
1991	467.8	396.0	98.1	42.4	11.1	15.9	23.6	1,055.0
1992	476.0	413.7	100.3	45.6	11.1	17.4	27.2	1,091.2
1993	509.7	428.3	117.5	48.1	12.6	18.8	19.4	1,154.3
1994	543.1	461.5	140.4	55.2	15.2	20.1	23.1	1,258.6
1995	590.2	484.5	157.0	57.5	14.8	19.3	28.5	1,351.8
1996	656.4	509.4	171.8	54.0	17.2	18.7	25.5	1,453.1
1997	737.5	539.4	182.3	56.9	19.8	17.9	25.4	1,579.2
1998	828.6	571.8	188.7	57.7	24.1	18.3	32.6	1,721.7
1999	879.5	611.8	184.7	70.4	27.8	18.3	34.9	1,827.5
2000	1,004.5	652.9	207.3	68.9	29.0	19.9	42.8	2,025.2
2001	994.3	694.0	151.1	66.2	28.4	19.4	37.7	1,991.1
2002	858.3	700.8	148.0	67.0	26.5	18.6	33.9	1,853.1
2003	793.7	713.0	131.8	67.5	22.0	19.9	34.5	1,782.3
2004	809.0	733.4	189.4	69.9	24.8	21.1	32.6	1,880.1
2005	927.2	794.1	278.3	73.1	24.8	23.4	32.7	2,153.6
2006	1,043.9	837.8	353.9	74.0	27.9	24.8	44.6	2,406.9
2007	1,163.5	869.6	370.2	65.1	26.0	26.0	47.5	2,568.0
2008	1,145.7	900.2	304.3	67.3	28.8	27.6	50.0	2,524.0
2009	915.3	890.9	138.2	62.5	23.5	22.5	52.1	2,105.0
2010	898.5	864.8	191.4	66.9	18.9	25.3	96.8	2,162.7
2011	1,091.5	818.8	181.1	72.4	7.4	29.5	101.8	2,302.5

Continued

Table F-2. Continued

Revenues, by Major Source, Since 1972

	Individual Income Taxes	Social Insurance Taxes	Corporate Income Taxes	Excise Taxes	Estate and Gift Taxes	Customs Duties	Miscellaneous Receipts	Total
			As a Percentage of Gross Domestic Product					
1972	8.1	4.5	2.7	1.3	0.5	0.3	0.3	17.6
1973	7.9	4.8	2.8	1.2	0.4	0.2	0.3	17.6
1974	8.3	5.2	2.7	1.2	0.4	0.2	0.4	18.3
1975	7.8	5.4	2.6	1.1	0.3	0.2	0.4	17.9
1976	7.6	5.2	2.4	1.0	0.3	0.2	0.5	17.1
1977	8.0	5.4	2.8	0.9	0.4	0.3	0.3	18.0
1978	8.2	5.5	2.7	0.8	0.2	0.3	0.3	18.0
1979	8.7	5.6	2.6	0.7	0.2	0.3	0.4	18.5
1980	9.0	5.8	2.4	0.9	0.2	0.3	0.5	19.0
1981	9.4	6.0	2.0	1.3	0.2	0.3	0.5	19.6
1982	9.2	6.3	1.5	1.1	0.2	0.3	0.5	19.2
1983	8.4	6.1	1.1	1.0	0.2	0.3	0.5	17.5
1984	7.8	6.2	1.5	1.0	0.2	0.3	0.4	17.3
1985	8.1	6.4	1.5	0.9	0.2	0.3	0.4	17.7
1986	7.9	6.4	1.4	0.7	0.2	0.3	0.5	17.5
1987	8.4	6.5	1.8	0.7	0.2	0.3	0.4	18.4
1988	8.0	6.7	1.9	0.7	0.2	0.3	0.4	18.2
1989	8.3	6.7	1.9	0.6	0.2	0.3	0.4	18.4
1990	8.1	6.6	1.6	0.6	0.2	0.3	0.5	18.0
1991	7.9	6.7	1.7	0.7	0.2	0.3	0.4	17.8
1992	7.6	6.6	1.6	0.7	0.2	0.3	0.4	17.5
1993	7.7	6.5	1.8	0.7	0.2	0.3	0.3	17.5
1994	7.8	6.6	2.0	0.8	0.2	0.3	0.3	18.0
1995	8.0	6.6	2.1	0.8	0.2	0.3	0.4	18.4
1996	8.5	6.6	2.2	0.7	0.2	0.2	0.3	18.8
1997	9.0	6.6	2.2	0.7	0.2	0.2	0.3	19.2
1998	9.6	6.6	2.2	0.7	0.3	0.2	0.4	19.9
1999	9.6	6.6	2.0	0.8	0.3	0.2	0.4	19.8
2000	10.2	6.6	2.1	0.7	0.3	0.2	0.4	20.6
2001	9.7	6.8	1.5	0.6	0.3	0.2	0.4	19.5
2002	8.1	6.6	1.4	0.6	0.3	0.2	0.3	17.6
2003	7.2	6.5	1.2	0.6	0.2	0.2	0.3	16.2
2004	6.9	6.3	1.6	0.6	0.2	0.2	0.3	16.1
2005	7.5	6.4	2.2	0.6	0.2	0.2	0.3	17.3
2006	7.9	6.3	2.7	0.6	0.2	0.2	0.3	18.2
2007	8.4	6.3	2.7	0.5	0.2	0.2	0.3	18.5
2008	8.0	6.3	2.1	0.5	0.2	0.2	0.3	17.6
2009	6.6	6.4	1.0	0.4	0.2	0.2	0.4	15.1
2010	6.3	6.0	1.3	0.5	0.1	0.2	0.7	15.1
2011	7.3	5.5	1.2	0.5	*	0.2	0.7	15.4

Sources: Congressional Budget Office; Office of Management and Budget.

Note: * = between zero and 0.05 percent.

Table F-3.

Outlays, by Major Category, Since 1972

		Mandatory			
	Discretionary	Programmatic Outlays[a]	Offsetting Receipts	Net Interest	Total
			In Billions of Dollars		
1972	128.5	100.8	-14.1	15.5	230.7
1973	130.4	116.0	-18.0	17.3	245.7
1974	138.2	130.9	-21.2	21.4	269.4
1975	158.0	169.4	-18.3	23.2	332.3
1976	175.6	189.1	-19.6	26.7	371.8
1977	197.1	203.7	-21.5	29.9	409.2
1978	218.7	227.4	-22.8	35.5	458.7
1979	240.0	247.0	-25.6	42.6	504.0
1980	276.3	291.2	-29.2	52.5	590.9
1981	307.9	339.4	-37.9	68.8	678.2
1982	326.0	370.8	-36.0	85.0	745.7
1983	353.3	410.6	-45.3	89.8	808.4
1984	379.4	405.5	-44.2	111.1	851.8
1985	415.8	448.2	-47.1	129.5	946.3
1986	438.5	461.7	-45.9	136.0	990.4
1987	444.2	474.2	-52.9	138.6	1,004.0
1988	464.4	505.0	-56.8	151.8	1,064.4
1989	488.8	546.0	-60.1	169.0	1,143.7
1990	500.6	625.5	-57.4	184.3	1,253.0
1991	533.3	701.8	-105.3	194.4	1,324.2
1992	533.8	717.7	-69.3	199.3	1,381.5
1993	539.8	741.3	-70.4	198.7	1,409.4
1994	541.3	788.9	-71.4	202.9	1,461.8
1995	544.8	818.1	-79.2	232.1	1,515.7
1996	532.7	857.7	-71.0	241.1	1,560.5
1997	547.0	895.9	-85.8	244.0	1,601.1
1998	552.0	942.7	-83.3	241.1	1,652.5
1999	572.1	979.2	-79.2	229.8	1,701.8
2000	614.6	1,032.2	-80.8	222.9	1,789.0
2001	649.0	1,096.9	-89.2	206.2	1,862.8
2002	734.0	1,196.3	-90.3	170.9	2,010.9
2003	824.3	1,283.3	-100.8	153.1	2,159.9
2004	895.1	1,346.6	-109.0	160.2	2,292.8
2005	968.5	1,446.0	-126.5	184.0	2,472.0
2006	1,016.6	1,552.7	-140.8	226.6	2,655.1
2007	1,041.6	1,627.8	-177.9	237.1	2,728.7
2008	1,134.9	1,780.3	-185.4	252.8	2,982.5
2009	1,237.5	2,282.7	-189.4	186.9	3,517.7
2010	1,347.2	2,096.3	-183.4	196.2	3,456.2
2011	1,346.2	2,215.1	-190.3	227.1	3,598.1

Continued

Table F-3. Continued

Outlays, by Major Category, Since 1972

	Discretionary	Mandatory		Net Interest	Total
		Programmatic Outlays[a]	Offsetting Receipts		
			As a Percentage of Gross Domestic Product		
1972	10.9	8.6	-1.2	1.3	19.6
1973	9.9	8.8	-1.4	1.3	18.7
1974	9.6	9.1	-1.5	1.5	18.7
1975	10.1	10.9	-1.2	1.5	21.3
1976	10.1	10.9	-1.1	1.5	21.4
1977	10.0	10.3	-1.1	1.5	20.7
1978	9.9	10.3	-1.0	1.6	20.7
1979	9.6	9.9	-1.0	1.7	20.2
1980	10.1	10.7	-1.1	1.9	21.7
1981	10.1	11.1	-1.2	2.2	22.2
1982	10.1	11.5	-1.1	2.6	23.1
1983	10.3	11.9	-1.3	2.6	23.5
1984	9.9	10.5	-1.2	2.9	22.2
1985	10.0	10.8	-1.1	3.1	22.8
1986	10.0	10.5	-1.0	3.1	22.5
1987	9.5	10.2	-1.1	3.0	21.6
1988	9.3	10.1	-1.1	3.0	21.3
1989	9.1	10.1	-1.1	3.1	21.2
1990	8.7	10.9	-1.0	3.2	21.9
1991	9.0	11.8	-1.8	3.3	22.3
1992	8.6	11.5	-1.1	3.2	22.1
1993	8.2	11.3	-1.1	3.0	21.4
1994	7.8	11.3	-1.0	2.9	21.0
1995	7.4	11.1	-1.1	3.2	20.6
1996	6.9	11.1	-0.9	3.1	20.2
1997	6.7	10.9	-1.0	3.0	19.5
1998	6.4	10.9	-1.0	2.8	19.1
1999	6.2	10.6	-0.9	2.5	18.5
2000	6.3	10.5	-0.8	2.3	18.2
2001	6.3	10.7	-0.9	2.0	18.2
2002	7.0	11.3	-0.9	1.6	19.1
2003	7.5	11.7	-0.9	1.4	19.7
2004	7.7	11.5	-0.9	1.4	19.6
2005	7.8	11.6	-1.0	1.5	19.9
2006	7.7	11.8	-1.1	1.7	20.1
2007	7.5	11.7	-1.3	1.7	19.7
2008	7.9	12.4	-1.3	1.8	20.8
2009	8.9	16.4	-1.4	1.3	25.2
2010	9.4	14.6	-1.3	1.4	24.1
2011	9.0	14.8	-1.3	1.5	24.1

Sources: Congressional Budget Office; Office of Management and Budget.

a. Excludes offsetting receipts.

Table F-4.

Discretionary Outlays Since 1972

	Defense	Nondefense	Total
		In Billions of Dollars	
1972	79.3	49.2	128.5
1973	77.1	53.3	130.4
1974	80.7	57.5	138.2
1975	87.6	70.4	158.0
1976	89.9	85.7	175.6
1977	97.5	99.6	197.1
1978	104.6	114.1	218.7
1979	116.8	123.2	240.0
1980	134.6	141.7	276.3
1981	158.0	149.9	307.9
1982	185.9	140.0	326.0
1983	209.9	143.4	353.3
1984	228.0	151.4	379.4
1985	253.1	162.7	415.8
1986	273.8	164.7	438.5
1987	282.5	161.6	444.2
1988	290.9	173.5	464.4
1989	304.0	184.8	488.8
1990	300.1	200.4	500.6
1991	319.7	213.6	533.3
1992	302.6	231.2	533.8
1993	292.4	247.3	539.8
1994	282.3	259.1	541.3
1995	273.6	271.2	544.8
1996	266.0	266.8	532.7
1997	271.7	275.4	547.0
1998	270.3	281.7	552.0
1999	275.5	296.7	572.1
2000	295.0	319.7	614.6
2001	306.1	343.0	649.0
2002	349.0	385.0	734.0
2003	405.0	419.4	824.3
2004	454.1	441.0	895.1
2005	493.6	474.9	968.5
2006	520.0	496.7	1,016.6
2007	547.9	493.7	1,041.6
2008	612.4	522.4	1,134.9
2009	656.8	580.8	1,237.5
2010	689.0	658.2	1,347.2
2011	699.8	646.4	1,346.2

Continued

Table F-4. Continued

Discretionary Outlays Since 1972

	Defense	Nondefense	Total
		As a Percentage of Gross Domestic Product	
1972	6.7	4.2	10.9
1973	5.9	4.1	9.9
1974	5.6	4.0	9.6
1975	5.6	4.5	10.1
1976	5.2	4.9	10.1
1977	4.9	5.0	10.0
1978	4.7	5.1	9.9
1979	4.7	4.9	9.6
1980	4.9	5.2	10.1
1981	5.2	4.9	10.1
1982	5.8	4.3	10.1
1983	6.1	4.2	10.3
1984	5.9	3.9	9.9
1985	6.1	3.9	10.0
1986	6.2	3.7	10.0
1987	6.1	3.5	9.5
1988	5.8	3.5	9.3
1989	5.6	3.4	9.1
1990	5.2	3.5	8.7
1991	5.4	3.6	9.0
1992	4.8	3.7	8.6
1993	4.4	3.8	8.2
1994	4.0	3.7	7.8
1995	3.7	3.7	7.4
1996	3.4	3.5	6.9
1997	3.3	3.4	6.7
1998	3.1	3.3	6.4
1999	3.0	3.2	6.2
2000	3.0	3.3	6.3
2001	3.0	3.4	6.3
2002	3.3	3.7	7.0
2003	3.7	3.8	7.5
2004	3.9	3.8	7.7
2005	4.0	3.8	7.8
2006	3.9	3.8	7.7
2007	4.0	3.6	7.5
2008	4.3	3.6	7.9
2009	4.7	4.2	8.9
2010	4.8	4.6	9.4
2011	4.7	4.3	9.0

Sources: Congressional Budget Office; Office of Management and Budget.

Table F-5.

Mandatory Outlays Since 1972

	Social Security	Medicare	Medicaid	Income Security[a]	Other Retirement and Disability	Other Programs	Offsetting Receipts	Total
				In Billions of Dollars				
1972	39.4	8.4	4.6	16.4	16.2	15.8	-14.1	86.7
1973	48.2	9.0	4.6	14.5	18.5	21.3	-18.0	98.0
1974	55.0	10.7	5.8	17.4	20.9	21.1	-21.2	109.7
1975	63.6	14.1	6.8	28.9	26.4	29.6	-18.3	151.1
1976	72.7	16.9	8.6	37.6	27.7	25.6	-19.6	169.5
1977	83.7	20.8	9.9	34.6	31.2	23.6	-21.5	182.2
1978	92.4	24.3	10.7	32.1	33.9	34.0	-22.8	204.6
1979	102.6	28.2	12.4	32.2	38.7	32.9	-25.6	221.4
1980	117.1	34.0	14.0	44.3	44.4	37.5	-29.2	262.1
1981	137.9	41.3	16.8	49.9	50.8	42.6	-37.9	301.6
1982	153.9	49.2	17.4	53.2	55.0	42.1	-36.0	334.8
1983	168.5	55.5	19.0	64.0	58.0	45.5	-45.3	365.2
1984	176.1	61.1	20.1	51.7	59.8	36.7	-44.2	361.3
1985	186.4	69.7	22.7	52.3	61.0	56.2	-47.1	401.1
1986	196.5	74.2	25.0	54.2	63.4	48.4	-45.9	415.8
1987	205.1	79.9	27.4	55.0	66.5	40.2	-52.9	421.2
1988	216.8	85.7	30.5	57.3	71.1	43.7	-56.8	448.2
1989	230.4	93.2	34.6	62.9	57.3	67.6	-60.1	485.9
1990	246.5	107.0	41.1	68.7	60.0	102.2	-57.4	568.1
1991	266.8	114.2	52.5	87.0	64.4	117.0	-105.3	596.5
1992	285.2	129.4	67.8	110.9	66.5	57.9	-69.3	648.4
1993	302.0	143.2	75.8	121.7	68.3	30.3	-70.4	670.9
1994	316.9	159.6	82.0	118.6	72.3	39.4	-71.4	717.5
1995	333.3	177.1	89.1	117.2	75.2	26.2	-79.2	738.8
1996	347.1	191.3	92.0	121.7	77.3	28.4	-71.0	786.7
1997	362.3	207.9	95.6	122.5	80.5	27.2	-85.8	810.1
1998	376.1	211.0	101.2	122.1	82.5	49.6	-83.3	859.3
1999	387.0	209.3	108.0	129.0	85.3	60.6	-79.2	900.0
2000	406.0	216.0	117.9	133.9	87.8	70.5	-80.8	951.4
2001	429.4	237.9	129.4	143.1	92.7	64.4	-89.2	1,007.6
2002	452.1	253.7	147.5	180.4	96.1	66.5	-90.3	1,106.0
2003	470.5	274.2	160.7	196.2	99.8	81.9	-100.8	1,182.5
2004	491.5	297.0	176.2	190.6	103.6	87.5	-109.0	1,237.5
2005	518.7	332.6	181.7	196.9	109.7	106.3	-126.5	1,319.4
2006	543.9	373.6	180.6	200.1	113.1	141.4	-140.8	1,411.8
2007	581.4	436.0	190.6	203.2	122.4	94.2	-177.9	1,450.0
2008	612.1	456.0	201.4	260.7	128.9	121.2	-185.4	1,594.9
2009	677.7	499.0	250.9	350.3	137.7	367.1	-189.4	2,093.2
2010	700.8	520.5	272.8	437.5	138.4	26.4	-183.4	1,912.9
2011	724.9	559.6	275.0	404.6	144.1	106.9	-190.3	2,024.8

Continued

Table F-5. Continued

Mandatory Outlays Since 1972

	Social Security	Medicare	Medicaid	Income Security[a]	Other Retirement and Disability	Other Programs	Offsetting Receipts	Total
				As a Percentage of Gross Domestic Product				
1972	3.3	0.7	0.4	1.4	1.4	1.3	-1.2	7.4
1973	3.7	0.7	0.4	1.1	1.4	1.6	-1.4	7.5
1974	3.8	0.7	0.4	1.2	1.4	1.5	-1.5	7.6
1975	4.1	0.9	0.4	1.9	1.7	1.9	-1.2	9.7
1976	4.2	1.0	0.5	2.2	1.6	1.5	-1.1	9.8
1977	4.2	1.1	0.5	1.8	1.6	1.2	-1.1	9.2
1978	4.2	1.1	0.5	1.4	1.5	1.5	-1.0	9.2
1979	4.1	1.1	0.5	1.3	1.5	1.3	-1.0	8.9
1980	4.3	1.2	0.5	1.6	1.6	1.4	-1.1	9.6
1981	4.5	1.4	0.6	1.6	1.7	1.4	-1.2	9.9
1982	4.8	1.5	0.5	1.7	1.7	1.3	-1.1	10.4
1983	4.9	1.6	0.6	1.9	1.7	1.3	-1.3	10.6
1984	4.6	1.6	0.5	1.3	1.6	1.0	-1.2	9.4
1985	4.5	1.7	0.5	1.3	1.5	1.4	-1.1	9.7
1986	4.5	1.7	0.6	1.2	1.4	1.1	-1.0	9.4
1987	4.4	1.7	0.6	1.2	1.4	0.9	-1.1	9.1
1988	4.3	1.7	0.6	1.1	1.4	0.9	-1.1	8.9
1989	4.3	1.7	0.6	1.2	1.1	1.3	-1.1	9.0
1990	4.3	1.9	0.7	1.2	1.0	1.8	-1.0	9.9
1991	4.5	1.9	0.9	1.5	1.1	2.0	-1.8	10.1
1992	4.6	2.1	1.1	1.8	1.1	0.9	-1.1	10.4
1993	4.6	2.2	1.2	1.8	1.0	0.5	-1.1	10.2
1994	4.5	2.3	1.2	1.7	1.0	0.6	-1.0	10.3
1995	4.5	2.4	1.2	1.6	1.0	0.4	-1.1	10.1
1996	4.5	2.5	1.2	1.6	1.0	0.4	-0.9	10.2
1997	4.4	2.5	1.2	1.5	1.0	0.3	-1.0	9.9
1998	4.3	2.4	1.2	1.4	1.0	0.6	-1.0	9.9
1999	4.2	2.3	1.2	1.4	0.9	0.7	-0.9	9.8
2000	4.1	2.2	1.2	1.4	0.9	0.7	-0.8	9.7
2001	4.2	2.3	1.3	1.4	0.9	0.6	-0.9	9.9
2002	4.3	2.4	1.4	1.7	0.9	0.6	-0.9	10.5
2003	4.3	2.5	1.5	1.8	0.9	0.7	-0.9	10.8
2004	4.2	2.5	1.5	1.6	0.9	0.7	-0.9	10.6
2005	4.2	2.7	1.5	1.6	0.9	0.9	-1.0	10.6
2006	4.1	2.8	1.4	1.5	0.9	1.1	-1.1	10.7
2007	4.2	3.1	1.4	1.5	0.9	0.7	-1.3	10.5
2008	4.3	3.2	1.4	1.8	0.9	0.8	-1.3	11.1
2009	4.9	3.6	1.8	2.5	1.0	2.6	-1.4	15.0
2010	4.9	3.6	1.9	3.0	1.0	0.2	-1.3	13.3
2011	4.8	3.7	1.8	2.7	1.0	0.7	-1.3	13.5

Sources: Congressional Budget Office; Office of Management and Budget.

a. Includes unemployment compensation, Supplemental Security Income, the refundable portion of the earned income and child tax credits, the Supplemental Nutrition Assistance Program, family support, child nutrition, and foster care.

APPENDIX

G

Contributors to This Report

The economic projections that appear in this report were prepared by the Congressional Budget Office's (CBO's) Macroeconomic Analysis Division, supervised by Wendy Edelberg, Kim Kowalewski, Robert Arnold, and William Randolph. The revenue projections were prepared by the agency's Tax Analysis Division, supervised by Frank Sammartino, David Weiner, Mark Booth, and Janet Holtzblatt; the staff of the Joint Committee on Taxation provided assistance. The spending estimates were prepared by the Budget Analysis Division, supervised by Peter Fontaine, Theresa Gullo, Holly Harvey, Janet Airis, Tom Bradley, Kim Cawley, Jean Hearne, Jeffrey Holland, Sarah Jennings, and Sam Papenfuss. The report was written by analysts in those divisions. The editing and presentation of the report was handled by CBO's editing and publishing group, supervised by John Skeen, and the agency's Web team, supervised by Joseph Miller.

CBO's Panel of Economic Advisers commented on an early version of the economic forecast underlying this report. Members of the panel are Raj Chetty, Menzie D. Chinn, Dan L. Crippen, Stephen J. Davis, Robert E. Hall, Jan Hatzius, Douglas Holtz-Eakin, Simon Johnson, Anil Kashyap, Lawrence Katz, Donald Kohn, N. Gregory Mankiw, Rudolph G. Penner, Adam S. Posen, James Poterba, Joel Prakken, Carmen M. Reinhart, Alice Rivlin, and Stephen P. Zeldes. Valerie Ramey and Amir Sufi 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.

The following CBO staff members prepared the economic, revenue, and spending projections; wrote the report; edited and published it, along with supplemental materials posted along with it on CBO's Web site (www.cbo.gov); or provided other support.

Economic Projections

David Brauer	Inflation, labor markets
Stephanie Burns	Housing, research assistance
Juan Contreras	Consumer spending, incomes
Ronald Gecan	Energy prices
Priscila Hammett	Automobile sector, research assistance
Juann Hung	Net exports, exchange rates
Jonathan Huntley	Medium-term analysis of fiscal policy
Mark Lasky	Business investment, housing, short-term analysis of fiscal policy
Benjamin Page	Short- and medium-term analysis of fiscal policy
Felix Reichling	Short- and medium-term analysis of fiscal policy
Frank Russek	Federal, state, and local government spending and revenues
Robert Shackleton	Potential output, productivity
Steven Weinberg	Interest rates, monetary policy, energy prices, house prices
Christopher Williams	Forecast coordination

Revenue Projections

Paul Burnham	Retirement income
Barbara Edwards	Social insurance taxes, Federal Reserve System earnings
Jennifer Gravelle	Depreciation, international taxation
Pamela Greene	Corporate income taxes, estate and gift taxes
Ed Harris	Individual income taxes, social insurance taxes, tax modeling
Elias Leight	Excise taxes
Athiphat Muthitacharoen	Estate tax modeling
Larry Ozanne	Capital gains realizations
Kalyani Parthasarathy	Customs duties, miscellaneous receipts
Kevin Perese	Tax modeling
Kurt Seibert	Refundable tax credits, depreciation, tax modeling
Joshua Shakin	Individual income taxes

Spending Projections

Defense, International Affairs, and Veterans' Affairs

Kent Christensen	Defense (projections, working capital funds, procurement, scorekeeping)
Sunita D'Monte	International affairs
Ann Futrell	Veterans' health care
Raymond Hall	Defense (research and development, stockpile sales, atomic energy)
William Ma	Veterans' readjustment benefits, reservists' education benefits
David Newman	Defense (military construction and family housing, military activities in Afghanistan and Iraq), veterans' housing
Dawn Sauter Regan	Defense (military personnel)
Matthew Schmit	Military retirement, military health care
Jason Wheelock	Defense (other programs, operation and maintenance, compensation for radiation exposure, compensation for energy employees' occupational illness)
Dwayne Wright	Veterans' compensation and pensions

Health

Sarah Anders	Health insurance exchanges
Stephanie Cameron	Medicare, Public Health Service
Julia Christensen	Food and Drug Administration, prescription drugs
Anna Cook	Prescription drugs
Stuart Hagen	Health insurance coverage
Lori Housman	Medicare
Paul Jacobs	Health insurance coverage

Health (Continued)

Paul Masi	Medicare
Jamease Miles	Medicare, Public Health Service
Alexandra Minicozzi	Health insurance coverage
Julia Mitchell	Federal Employees Health Benefits program
Kirstin Nelson	Medicaid, Children's Health Insurance Program
Andrea Noda	Medicaid prescription drugs, Medicare Part D, long-term care, Public Health Service
Romain Parsad	Health insurance coverage
Lisa Ramirez-Branum	Medicaid, health insurance coverage, Public Health Service
Lara Robillard	Medicare
Robert Stewart	Medicaid, Children's Health Insurance Program, Indian Health Service
Ellen Werble	Food and Drug Administration, prescription drugs, Public Health Service
Rebecca Yip	Medicare Part D, Medicaid prescription drugs
Christopher Zogby	Health insurance coverage

Income Security and Education

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

Natural and Physical Resources

Megan Carroll	Energy, air transportation
Mark Grabowicz	Administration of justice, Postal Service
Kathleen Gramp	Energy, Outer Continental Shelf receipts, spectrum auction receipts
Gregory Hitz	Agriculture
Daniel Hoople	Community and regional development, Federal Emergency Management Agency, deposit insurance

Natural and Physical Resources (Continued)

David Hull	Agriculture
Jeff LaFave	Conservation and land management, other natural resources
James Langley	Agriculture
Susanne Mehlman	Pollution control and abatement, Federal Housing Administration and other housing credit programs
Matthew Pickford	General government, legislative branch
Sarah Puro	Highways, Amtrak, water transportation
Aurora Swanson	Water resources, Fannie Mae and Freddie Mac
Martin von Gnechten	Administration of justice, science and space exploration, Bureau of Indian Affairs, recreation
Susan Willie	Mass transit, commerce, Small Business Administration, Universal Service Fund

Other Areas and Functions

Janet Airis	Legislative branch appropriation bills
Shane Beaulieu	Computer support
Edward Blau	Authorization bills
Barry Blom	Federal pay, monthly Treasury data
Jared Brewster	Interest on the public debt, national income and product accounts
Joanna Capps	Appropriation bills (Labor–Health and Human Services, State–Foreign operations)
Francesca Castelli	Troubled Asset Relief Program
Mary Froehlich	Computer support
Avi Lerner	Troubled Asset Relief Program, other interest
Amber Marcellino	Federal civilian retirement
Damien Moore	Fannie Mae and Freddie Mac
Virginia Myers	Appropriation bills (Commerce–Justice, financial services, general government)
Mark Sanford	Appropriation bills (Agriculture, Defense)
Esther Steinbock	Appropriation bills (Transportation–Housing and Urban Development, military construction and veterans' affairs, energy and water development)
Santiago Vallinas	Various federal retirement programs, national income and product accounts, federal pay
Patrice Watson	Database system administrator
Adam Wilson	Appropriation bills (Homeland Security, Interior)

Writing

Christina Hawley Anthony wrote the summary. Barry Blom wrote Chapter 1, with assistance from Avi Lerner and Mark Booth. Charles Whalen wrote Chapter 2. Christina Hawley Anthony wrote Chapter 3, with assistance from Santiago Vallinas and David Newman. Mark Booth wrote Chapter 4, with assistance from Barbara Edwards, Pamela Greene, Elias Leight, Kalyani Parthasarathy, and Joshua Shakin. Amber Marcellino wrote Appendix A, with assistance from Mark Booth. Avi Lerner wrote Appendix B; Frank Russek, Appendix C; and Jared Brewster, Appendix D. Stephanie Burns compiled Appendix E, and Amber Marcellino did the same for Appendix F. Chris Howlett compiled the glossary that accompanies this report on CBO's Web site.

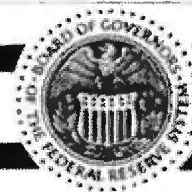
Editing and Publishing

Christine Bogusz, Chris Howlett, Kate Kelly, John Skeen, and Sherry Snyder edited the report. Maureen Costantino produced the figures and designed the cover, and she and Jeanine Rees produced the report. Sherry Snyder coordinated the presentation of supplemental data posted along with the report, with assistance from Jeanine Rees. Monte Ruffin printed the initial copies, and Linda Schimmel handled the print distribution.

Courtney Griffith, Annette Kalicki, and Jonathan Schwabish designed the slides accompanying the report on CBO's Web site. Robert Arnold, Barry Blom, Stephanie Burns, Chad Chirico, Barbara Edwards, Priscila Hammett, Elias Leight, Frank Russek, Robert Shackleton, and Christopher Williams compiled the supplemental data posted with the report, with assistance from Simone Thomas.

Press Release

FEDERAL RESERVE press release



Release Date: March 13, 2012

For immediate release

Information received since the Federal Open Market Committee met in January suggests that the economy has been expanding moderately. Labor market conditions have improved further; the unemployment rate has declined notably in recent months but remains elevated. Household spending and business fixed investment have continued to advance. The housing sector remains depressed. Inflation has been subdued in recent months, although prices of crude oil and gasoline have increased lately. Longer-term inflation expectations have remained stable.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects moderate economic growth over coming quarters and consequently anticipates that the unemployment rate will decline gradually toward levels that the Committee judges to be consistent with its dual mandate. Strains in global financial markets have eased, though they continue to pose significant downside risks to the economic outlook. The recent increase in oil and gasoline prices will push up inflation temporarily, but the Committee anticipates that subsequently inflation will run at or below the rate that it judges most consistent with its dual mandate.

To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014.

The Committee also decided to continue its program to extend the average maturity of its holdings of securities as announced in September. The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability.

Voting for the FOMC monetary policy action were: Ben S. Bernanke, Chairman; William C. Dudley, Vice Chairman; Elizabeth A. Duke; Dennis P. Lockhart; Sandra Pianalto; Sarah Bloom Raskin; Daniel K. Tarullo; John C. Williams; and Janet L. Yellen. Voting against the action was Jeffrey M. Lacker, who does not anticipate that economic conditions are likely to warrant exceptionally low levels of the federal funds rate through late 2014.

Minutes of the Federal Open Market Committee
April 24–25, 2012

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, April 24, 2012, at 1:00 p.m., and continued on Wednesday, April 25, 2012, at 8:30 a.m.

PRESENT:

Ben Bernanke, Chairman
William C. Dudley, Vice Chairman
Elizabeth Duke
Jeffrey M. Lacker
Dennis P. Lockhart
Sandra Pianalto
Sarah Bloom Raskin
Daniel K. Tarullo
John C. Williams
Janet L. Yellen

James Bullard, Christine Cumming, Charles L. Evans, Esther L. George, and Eric Rosengren, Alternate Members of the Federal Open Market Committee

Richard W. Fisher, Narayana Kocherlakota, and Charles I. Plosser, Presidents of the Federal Reserve Banks of Dallas, Minneapolis, and Philadelphia, respectively

William B. English, Secretary and Economist
Deborah J. Danker, Deputy Secretary
Matthew M. Luecke, Assistant Secretary
David W. Skidmore, Assistant Secretary
Michelle A. Smith, Assistant Secretary
Scott G. Alvarez, General Counsel
Thomas C. Baxter, Deputy General Counsel
Steven B. Kamin, Economist

Jon W. Faust and Andrew T. Levin, Special Advisors to the Board, Office of Board Members, Board of Governors

James A. Clouse, Deputy Director, Division of Monetary Affairs, Board of Governors; Matthew J. Eichner, Deputy Director, Division of Research and Statistics, Board of Governors

Linda Robertson, Assistant to the Board, Office of Board Members, Board of Governors

Thomas Laubach, Senior Adviser, Division of Research and Statistics, Board of Governors; Ellen E. Meade, Senior Adviser, Division of Monetary Affairs, Board of Governors

Daniel M. Covitz and David E. Lebow, Associate Directors, Division of Research and Statistics, Board of Governors

David Bowman, Deputy Associate Director, Division of International Finance, Board of Governors; Gretchen C. Weinbach, Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Jane E. Ihrig, Assistant Director, Division of Monetary Affairs, Board of Governors

David H. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Gregory L. Stefani, First Vice President, Federal Reserve Bank of Cleveland

Andreas L. Hornstein and Lorie K. Logan, Vice Presidents, Federal Reserve Banks of Richmond and New York, respectively

Monetary Policy under Alternative Scenarios

A staff presentation provided an overview of an exercise that explored individual participants' views on appropriate monetary policy responses under alternative economic scenarios. Committee participants discussed the potential value and drawbacks of this type of exercise for both internal deliberations and external communications about monetary policy. Possible benefits include helping to clarify the factors that individual participants judge most important in forming their views about the economic outlook and their assessments of appropriate monetary policy. Two potential limitations of this approach are that the scenario descriptions must by necessity be incomplete, and the practical range of scenarios that can be examined may be insufficient to be informative, given the degree of uncertainty surrounding possible outcomes. Some participants stated that exercises using alternative scenarios, with appropriate adjustments, could potentially be helpful for internal deliberations and, thus, should be explored further. However, no decision was made at this meeting regarding future exercises along these lines.

Developments in Financial Markets and the Federal Reserve's Balance Sheet

The Manager of the System Open Market Account (SOMA) reported on developments in domestic and foreign financial markets during the period since the Federal Open Market Committee (FOMC) met on March 13, 2012. He also reported on System open market operations, including the ongoing reinvestment into agency-guaranteed mortgage-backed securities (MBS) of principal payments received on SOMA holdings of agency debt and agency-guaranteed MBS as well as the operations related to the maturity extension program authorized at the September 20–21, 2011, FOMC meeting. By unanimous vote, the Committee ratified the Desk's domestic transactions over the intermeeting period. There were no intervention operations in foreign currencies for the System's account over the intermeeting period.

With Mr. Lacker dissenting, the Committee agreed to extend the reciprocal currency (swap) arrangements with the Bank of Canada and the Banco de México for an additional year beginning in mid-December 2012; these arrangements are associated with the Federal Reserve's participation in the North American Framework Agreement of 1994. The arrangement with the Bank of Canada allows for cumulative drawings of up to $2 billion equivalent, and the arrangement with the Banco de México allows for cumulative drawings of up to $3 billion equivalent. The vote to renew the System's participation in these swap arrangements was taken at this meeting because a provision in the Framework Agreement requires each party to provide six months' prior notice of an intention to terminate its participation. Mr. Lacker dissented because of his opposition, as indicated at the January meeting, to foreign exchange market intervention by the Federal Reserve, which such swap arrangements might facilitate, and because of his opposition to direct lending to foreign central banks.

Staff Review of the Economic Situation

The information reviewed at the April 24–25 meeting suggested that economic activity was expanding moderately. Payroll employment continued to move up, and the unemployment rate, while still elevated, declined a little further. Overall consumer price inflation increased somewhat, primarily reflecting higher prices of crude oil and gasoline, but measures of long-run inflation expectations remained stable.

The unemployment rate declined to 8.2 percent in March. The share of workers employed part time for economic reasons also moved down, but the rate of long-duration unemployment remained elevated. Private nonfarm employment rose at a slower pace in March than in the preceding three months, while total government employment was little changed in recent months after declining last year. Some indicators of job openings and firms' hiring plans improved. After being roughly flat over most of the intermeeting period, initial claims for unemployment insurance rose moderately toward the end of the period but remained at a level consistent with further moderate job gains in the coming months.

Manufacturing production expanded, on net, in February and March, while the rate of manufacturing capacity utilization was essentially unchanged. In recent months, the production of motor vehicles continued to rise appreciably in response to both higher vehicle sales and dealers' additions to relatively low levels of inventories; output gains in other industries also were solid and widespread. Motor vehicle assemblies were scheduled to step up further in the second quarter, and broader indicators of manufacturing activity, such as the diffusion indexes of new orders from the national and regional manufacturing surveys, were at levels con-

sistent with moderate increases in factory output in the second quarter.

Real personal consumption expenditures (PCE) rose briskly in February, even though households' real disposable incomes declined. In March, nominal retail sales excluding purchases of motor vehicles increased solidly, while motor vehicle sales fell off a little from their brisk pace in the previous month. Consumer sentiment was little changed, on balance, in March and early April and remained subdued.

Some measures of home prices rose in January and February, but activity in the housing market continued to be held down by the large inventory of foreclosed and distressed properties and by tight underwriting standards for mortgage loans. Starts of new single-family homes fell back in February and March to a level more in line with permit issuance; starts were apparently boosted by unseasonably warm weather in December and January. Moreover, sales of new and existing homes edged down, on net, in recent months.

Real business expenditures on equipment and software appeared to rise modestly in the first quarter. Nominal shipments of nondefense capital goods excluding aircraft increased in February and March after declining in January; new orders for these capital goods increased, on balance, in February and March, and they continued to run above the level of shipments. The buildup of unfilled orders in recent months, along with improvements in survey measures of capital spending plans and some other forward-looking indicators, pointed toward a pickup in the pace of expenditures for business equipment. In contrast, nominal business spending for nonresidential construction declined in January and February. Inventories in most industries looked to be fairly well aligned with sales in recent months, although motor vehicle stocks were still relatively lean.

Data for federal government spending in recent months indicated that real defense expenditures rose modestly in the first quarter. Real state and local government purchases appeared to be about flat last quarter, as the payrolls of these governments edged up in the first quarter and their nominal construction spending declined slightly, on net, in January and February.

The U.S. international trade deficit narrowed in February as exports rose and imports fell. The export gains were concentrated in services. Exports of goods declined largely because of a decrease in exports of automotive products. The drop in imports reflected significant declines in imports of petroleum products, automotive products, capital goods, and consumer goods. Imports from China were especially weak, which may in part reflect seasonal adjustment issues related to the timing of the Chinese New Year.

Overall U.S. consumer prices, as measured by the PCE price index, rose at a somewhat faster rate in February than in the preceding six months. In March, prices measured by the consumer price index increased at that same faster pace. Consumer energy prices climbed markedly in February and March, although survey data indicated that gasoline prices stepped down in the first half of April. Meanwhile, increases in consumer food prices were relatively subdued in recent months. Consumer prices excluding food and energy rose moderately in February and March. Near-term inflation expectations from the Thomson Reuters/University of Michigan Surveys of Consumers increased in March but then fell back in early April, while longer-term inflation expectations in the survey remained stable.

Available measures of labor compensation indicated that nominal wage gains continued to be muted. Average hourly earnings for all employees rose modestly in March, and their rate of increase from 12 months earlier remained low.

Recent indicators suggested that foreign economic activity improved on balance in the first quarter, but there were important differences across economies. In the euro area, economic indicators pointed to weakening activity as financial stresses worsened, whereas in the emerging market economies, recent data were consistent with continued expansion. Readings on foreign inflation eased, although they were still relatively high in some Latin American countries.

Staff Review of the Financial Situation

Broad financial market conditions changed little, on balance, since the March FOMC meeting. However, asset prices fluctuated substantially over the period, apparently in response to the evolving views on the U.S. and global economic outlook and changing expectations regarding the future course of monetary policy.

Yields on nominal Treasury securities moved up early in the period, reportedly as investors read incoming information, including the March FOMC statement and minutes along with the results of the Comprehensive Capital Analysis and Review (CCAR), as suggesting a somewhat stronger economic outlook than previously expected. Over subsequent weeks, however, yields drifted lower in response to disappointing economic news and increased concerns about the strains in Eu-

rope. On net, nominal Treasury yields finished the period slightly lower and measures of the expected path for the federal funds rate derived from overnight index swap (OIS) rates moved down.

Conditions in unsecured short-term dollar funding markets were stable over most of the intermeeting period despite the increase in concerns about Europe in the latter part of the period. In secured funding markets, the overnight general collateral Treasury repurchase agreement rate declined for a time late in the period, reportedly in response to the seasonal reduction in Treasury bill issuance in April, but ended the period roughly unchanged.

Broad U.S. stock price indexes followed the general pattern observed across asset markets, rising early in the period on increased investor optimism and then falling later on, to end the period little changed on net. Equity prices of financial institutions increased, reportedly as investors interpreted the first-quarter earnings of several large banking organizations and the results of the CCAR as better than expected. Yields and spreads on investment-grade corporate bonds were about unchanged, but yields and spreads on speculative-grade corporate bonds increased somewhat.

Businesses continued to raise substantial amounts of funds in credit and capital markets over recent months. Bond issuance by financial firms picked up further in March from the strong pace recorded in the previous two months. Domestic nonfinancial firms' bond issuance and growth in commercial and industrial (C&I) loans were robust in the first quarter. Leveraged loan issuance was brisk over this period as well, reportedly supported by investor demand for newly issued collateralized loan obligations as well as by interest from pension funds and other institutional investors. Gross public equity issuance by nonfinancial firms stayed strong in March. In contrast, financial conditions in the commercial real estate (CRE) sector remained strained amid weak fundamentals and tight underwriting conditions, and issuance of commercial mortgage-backed securities in the first quarter of 2012 was below that of a year ago.

With respect to credit to households, developments over the intermeeting period were mixed. Although mortgage rates remained near their historical lows, mortgage refinancing activity was subdued, and conditions in residential mortgage markets continued to be weak. By contrast, consumer credit rose at a solid pace, on balance, in recent months; nonrevolving credit, particularly student loans, expanded. Issuance of consumer asset-backed securities (ABS) edged up in recent months, supported by auto-loan ABS issuance.

Gross issuance of long-term municipal bonds was subdued in the first quarter. The ratio of general obligation municipal bond yields to yields on comparable-maturity Treasury securities was little changed over the intermeeting period, and the average spreads on credit default swaps for debt issued by states declined on net.

Bank credit slowed in March but expanded at a solid pace in the first quarter as a whole. The Senior Loan Officer Opinion Survey on Bank Lending Practices conducted in April indicated that, in the aggregate, domestic banks eased slightly their lending standards on core loans—C&I, real estate, and consumer loans—and experienced somewhat stronger demand for such loans in the first quarter of 2012. C&I loans at domestic banks continued to expand in March, with growth concentrated at large domestic banks. Banks' holdings of closed-end residential mortgage loans expanded, while home equity loans and CRE loans continued to decline. Consumer loans on banks' books rose modestly in March.

M2 expanded at a moderate pace in March, reflecting growth in liquid deposits and currency that was only partially offset by declines in small time deposits and in balances in retail money market funds.

Financial strains within the euro area increased over the intermeeting period. Spreads of yields on sovereign Italian and Spanish debt over those on comparable-maturity German bonds rose, amid official warnings that Spain would miss its fiscal target for this year and would need to make further budget cuts, as well as renewed concerns in the market about the prospects for Spanish banks. Although the spread of the three-month euro London interbank offered rate over the comparable OIS rate narrowed on balance over the period, euro-area bank equity indexes dropped sharply, driven by declines in the share prices of Spanish and Italian banks. Five-year credit default swap premiums rose for a broad range of euro-area banks, especially Spanish banks.

Against the background of these increased stresses within the euro area, foreign equity indexes declined and corporate credit spreads widened. The staff's broad nominal index of the foreign exchange value of the dollar was about unchanged over the intermeeting period as the dollar appreciated against most emerging market currencies but depreciated moderately against the yen and sterling. Amid some volatility, yields on

benchmark sovereign bonds for Germany and Japan ended the period somewhat lower. Monetary policy abroad remained generally accommodative.

The total outstanding amount on the Federal Reserve's dollar liquidity swap lines declined to $32 billion, down from $65 billion at the time of the March FOMC meeting; demand for dollars fell at the lending operations of the European Central Bank, the Bank of Japan, and the Swiss National Bank.

Staff Economic Outlook

In the economic forecast prepared for the April FOMC meeting, the staff revised up slightly its near-term projection for real gross domestic product (GDP) growth, reflecting that the unemployment rate was a little lower, the level of overall payroll employment a bit higher, and consumer spending noticeably stronger than the staff had expected at the time of the previous forecast. However, the staff's medium-term projection for real GDP growth in the April forecast was little changed from the one presented in March. The staff continued to project that real GDP would accelerate gradually through 2014, supported by accommodative monetary policy, further improvements in credit availability, and rising consumer and business sentiment. Increases in economic activity were expected to be sufficient to decrease the wide margin of slack in the labor market slowly over the projection period, but the unemployment rate was anticipated to still be elevated at the end of 2014.

The staff's forecast for inflation over the projection period was just a bit above the forecast prepared for the March FOMC meeting, reflecting somewhat higher-than-expected data on core consumer prices and a slightly narrower margin of economic slack than in the March forecast. However, with the pass-through of the recent run-up in crude oil prices into consumer energy prices seen as nearly complete, oil prices expected to edge lower from current levels, substantial resource slack persisting over the projection period, and stable long-run inflation expectations, the staff continued to forecast that inflation would be subdued through 2014.

Participants' Views on Current Conditions and the Economic Outlook

In conjunction with this FOMC meeting, meeting participants—the five members of the Board of Governors and the presidents of the 12 Federal Reserve Banks, all of whom participate in the deliberations of the FOMC—submitted their assessments of real output growth, the unemployment rate, inflation, and the target federal funds rate for each year from 2012 through 2014 and over the longer run, under each participant's judgment of appropriate monetary policy. The longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge, over time, under appropriate monetary policy and in the absence of further shocks to the economy. These economic projections and policy assessments are described in more detail in the Summary of Economic Projections (SEP), which is attached as an addendum to these minutes.

In their discussion of the economic situation and outlook, meeting participants agreed that the information received since the Committee's previous meeting suggested that the economy continued to expand moderately. Labor market conditions improved in recent months. So far this year, payroll employment had expanded at a faster pace than last year and the unemployment rate had declined further, although it remained elevated. Household spending and business fixed investment continued to expand. There were signs of improvement in the housing sector, but from a very low level of activity. Despite some volatility in financial markets over the intermeeting period, financial conditions in U.S. markets continued to improve; bank credit quality and loan demand both increased. Mainly reflecting the increase in the prices of crude oil and gasoline earlier this year, inflation had picked up somewhat. However, longer-term inflation expectations remained stable.

Participants' assessments of the economic outlook were little changed, with the intermeeting information generally seen as suggesting that economic growth would remain moderate over coming quarters and then pick up gradually. Reflecting the moderate pace of economic growth, most anticipated a gradual decline in the unemployment rate. The incoming information led some participants to become more confident about the durability of the recovery. However, others thought it was premature to infer a stronger underlying trend from the recent positive indicators, since those readings may partially reflect the effects of the mild winter weather or other temporary influences. A number of factors continued to be seen as likely limiting the economic expansion to a moderate pace in the near term; these included slow growth in some foreign economies, prospective fiscal tightening in the United States, slow household income growth, and—notwithstanding some recent signs of improvement—ongoing weakness in the housing market. Participants continued to expect most of the factors restraining economic expansion to ease over time and so anticipated that the re-

covery would gradually gain strength. The strains in global financial markets, though generally less pronounced than last fall, continued to pose a significant risk to the outlook, and the possibility of a sharp fiscal tightening in the United States was also considered a sizable risk. Most participants anticipated that inflation would fall back from recent elevated levels as the effects of higher energy prices waned, and still expected that inflation subsequently would run at or below the 2 percent rate that the Committee judges to be most consistent with its statutory mandate. However, other participants saw upside risks to the inflation outlook given the recent pickup in inflation and the highly accommodative stance of monetary policy.

In discussing the household sector, meeting participants generally noted that consumer spending continued to expand moderately, notwithstanding high gasoline prices. The recent strengthening in the pace of light motor vehicle sales was attributed to both pent-up demand and the desire for increased fuel efficiency in the wake of higher gasoline prices. Looking forward, increases in household wealth from the rise in equity prices, improving consumer sentiment, and a diminishing drag from household deleveraging were seen as helping to support continued increases in household expenditures, notwithstanding sluggish growth in real disposable income and restrictive fiscal policies.

Recent housing-sector indicators, including sales and starts, suggested some upward movement, but some participants saw the improvement as likely related to unusually warm winter weather in much of the country. Overall, the level of activity in the sector remained depressed. House prices appeared to be stabilizing but had not yet begun to rise in most markets. Most participants anticipated that the housing sector was likely to recover only slowly over time, but a few were more optimistic about the potential for a more rapid housing recovery given reports of stronger demand in some regions and of improved sentiment among builders, as well as signs that recent changes to the Home Affordable Refinance Program were contributing to the refinancing of performing high loan-to-value mortgages.

Reports from business contacts indicated that activity in the manufacturing, energy, and agriculture sectors continued to advance in recent months. Auto production had picked up in light of strengthening demand. Business contacts suggested that sentiment was improving, but many firms remained somewhat cautious in their hiring and investment decisions, with most capital investment being undertaken to improve productivity or gain market share rather than to expand capacity. Reportedly, this caution reflected in part continued uncertainty about the strength and durability of the economic recovery, as well as about government policies.

Participants expected that the government sector would be a drag on economic growth over coming quarters. They generally saw the U.S. fiscal situation also as a risk to the economic outlook; if agreement is not reached on a plan for the federal budget, a sharp fiscal tightening could occur at the start of 2013. Several participants indicated that uncertainty about the trajectory of future fiscal policy could lead businesses to defer hiring and investment. It was noted that agreement on a longer-term plan to address the country's fiscal challenges would help to alleviate uncertainty and consequent negative effects on consumer and business sentiment.

Exports have supported U.S. growth so far this year; however, some participants noted risks to the export picture from economic weakness in Europe or from a more significant slowdown in the pace of expansion in China and emerging Asia.

Labor market conditions continued to improve, although unusually warm weather may have inflated payroll job figures somewhat earlier this year. Contacts in some parts of the country said that highly qualified workers were in short supply; overall, however, wage pressures had been limited so far. The decline in labor force participation, which has been sharpest for younger workers, has been a factor in the nearly 1 percentage point decline in the unemployment rate since last August, a drop that was larger than would have been predicted from the historical relationship between real GDP growth and changes in the unemployment rate. Assessing the extent to which the changes in labor force participation reflect cyclical factors that will be reversed once the recovery picks up, as opposed to changes in the trend rate of participation, was seen as important for understanding unemployment dynamics going forward. One participant cited research suggesting that about half of the decline in labor force participation had reflected cyclical factors, and thus, as participation picks up, unemployment may decline more slowly in coming quarters compared with the recent pace. Another posited that the strength in payroll job growth in recent months may be a one-time reaction to the sharp layoffs in 2008 and 2009 and that future job gains may be somewhat weaker unless the pace of economic growth increases. Participants expressed a range

of views on the extent to which the unemployment rate was being boosted by structural factors such as mismatches between the skills of unemployed workers and those being demanded by hiring firms. A few participants acknowledged there could be structural factors at work, but said that in their view, slack remained high and weak aggregate demand was the major reason that unemployment was still elevated. Two noted the possibility that sustained high levels of long-term unemployment could result in higher structural unemployment, an outcome that might be forestalled by increased aggregate demand. A few participants noted that current measures of labor market slack would be overstated if structural factors accounted for a large portion of the current high levels of unemployment. As a result, such measures might be an unreliable guide as to how close the economy was to maximum employment. These participants pointed out that, over time, estimates of the potential level of output have declined, reducing, as a consequence, estimates of the level of economic slack. Some participants cited the recent rise in inflation, abstracting from the direct effect of the rise in energy prices, as supportive of the view that the level of slack was lower than some believe.

Participants judged that, in general, conditions in domestic credit markets had continued to improve since the March FOMC meeting. Bank credit quality and consumer and business loan demand were increasing, although commercial and residential real estate lending remained relatively weak. U.S. equity prices had risen early in the intermeeting period but subsequently declined, ending the period little changed on net; investment-grade corporate bond yields were flat to down slightly and remained at very low levels. Many U.S. financial institutions had been taking steps to bolster their resiliency, including increasing capital levels and liquidity buffers, and reducing their European exposures. A few participants indicated that they were seeing signs that very low interest rates might be inducing some investors to take on imprudent risks in the search for higher nominal returns. In contrast to improved conditions in domestic credit markets, investors' concerns about the sovereign debt and banking situation in the euro area intensified during the intermeeting period. Some participants said they thought the policy actions taken in Europe would most likely ease stress in financial markets, but some expressed the view that a longer-term solution to the banking and fiscal problems in the euro area would require substantial further adjustment in the banking and public sectors. Participants expected that global financial markets would remain focused on the evolving situation in Europe.

Readings on consumer price inflation had picked up somewhat mainly because of increases in oil and gasoline prices earlier in the year. In recent weeks, oil prices had begun to fall and readings from the oil futures market suggested this may continue; non-energy commodity prices had remained relatively stable. Several participants noted that increases in labor costs continued to be subdued. With longer-run inflation expectations well anchored and the unemployment rate elevated, most participants anticipated that after the temporary effect of the rise in oil and gasoline prices had run its course, inflation would be at or below the 2 percent rate that the Committee judges to be most consistent with its mandate. Overall, most participants viewed the risks to their inflation outlook as being roughly balanced. However, some participants saw a risk that inflation pressures could increase as the expansion continued; they pointed to the fact that inflation was currently above target and were skeptical of models that rely on economic slack to forecast inflation partly because of the difficulty in measuring slack, especially in real time. These participants were concerned that maintaining the current highly accommodative stance of monetary policy over the medium run could erode the stability of inflation expectations and risk higher inflation. In this regard, one participant noted the potential risks and costs associated with additional balance sheet actions.

In their discussion of the economic outlook and policy, some participants noted the potential usefulness of simple monetary policy rules, of the type the Committee regularly reviews, as guides for monetary policy decisionmaking and for external communications about policy. These participants suggested that because such rules give an indication of how policy should systematically respond to changes in economic conditions they might help clarify the relationship between appropriate monetary policy and the evolution of the economic outlook. While acknowledging that there could be differences across participants in the type of rules they might favor—for example, one participant expressed a preference for rules based on growth rates rather than output gaps because of measurement issues—a few participants indicated that the likely degree of commonality across participants was suggestive that this might be a promising approach to explore. However, a few other participants were more skeptical. One thought that, while prescriptions from rules might provide useful benchmarks, applying the rules mechanically and

with little thought about the embedded assumptions would be counterproductive. Another participant questioned the value of interest rate rules when the policy rate is constrained by the zero lower bound on nominal interest rates and unconventional policy options are being used, but others indicated they believed the rules could be appropriately adjusted to account for these factors. Interest was expressed in examining the usefulness of simple policy rules in a more normal environment, as well as in the current environment in which the policy rate is at the zero lower bound and large-scale asset purchases and the maturity extension program have been implemented. Participants planned to discuss further, at a future meeting, the potential merits and drawbacks of using simple rules as guides to monetary policy decisionmaking and for communications.

Committee Policy Action

Members viewed the information on U.S. economic activity received over the intermeeting period as suggesting that the economy had been expanding moderately and generally agreed that the economic outlook was broadly similar to that at the time of their March meeting. Labor market conditions had improved in recent months, and the unemployment rate had fallen, but almost all of the members saw the unemployment rate as still elevated relative to levels that they viewed as consistent with the Committee's mandate. Growth was expected to be moderate over coming quarters and then to pick up over time. Members expected the unemployment rate to decline gradually. Strains in global financial markets stemming from the sovereign debt and banking situation in Europe continued to pose significant downside risks to economic activity both here and abroad. The possibilities that U.S. fiscal policy would be more contractionary than anticipated and that uncertainty about fiscal policy could lead to a deferral of hiring and investment were other downside risks. Recent readings indicated that inflation remained above the Committee's 2 percent longer-run target, primarily reflecting the increase in oil and gasoline prices seen earlier in the year. With longer-term inflation expectations stable, most members anticipated that the increase in inflation would prove temporary and that subsequently inflation would run at or below the rate that the Committee judges to be most consistent with its mandate. However, one member thought that there were upside risks to inflation, especially if the current degree of highly accommodative monetary policy were maintained much beyond this year.

In their discussion of monetary policy for the period ahead, the Committee members reached the collective judgment that it would be appropriate to maintain the existing highly accommodative stance of monetary policy. In particular, the Committee agreed to keep the target range for the federal funds rate at 0 to ¼ percent, to continue the program of extending the average maturity of the Federal Reserve's holdings of securities as announced last September, and to retain the existing policies regarding the reinvestment of principal payments from Federal Reserve holdings of securities.

With respect to the statement to be released following the meeting, members agreed that only relatively small modifications to the first two paragraphs were needed to reflect the incoming economic data and the modest changes to the economic outlook. With the economic outlook over the medium term not greatly changed, almost all of the members again agreed to indicate that the Committee expects to maintain a highly accommodative stance for monetary policy and currently anticipates that economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014. Most members continued to anticipate that the unemployment rate would still be well above their estimates of its longer-run level, and inflation would be at or below the Committee's longer-run objective, in late 2014. Some Committee members indicated that their policy judgment reflected in part their perception of downside risks to growth, especially since the Committee's ability to respond to weaker-than-expected economic conditions would be somewhat limited by the constraint imposed on monetary policy when the policy rate is near the zero lower bound. The need to compensate for a substantial period during which the policy rate was constrained by the zero bound was also cited by a few members as a possible reason to maintain a very low level of the federal funds rate for a longer period than would otherwise be the case.

While almost all of the members agreed that the change in the outlook over the intermeeting period was insufficient to warrant an adjustment to the Committee's forward guidance, particularly given the uncertainty surrounding economic forecasts, it was noted that the forward guidance is conditional on economic developments and that the date given in the statement would be subject to revision should there be a significant change in the economic outlook. Some members recalled that gains in employment strengthened in early

2010 and again in early 2011 only to diminish as those years progressed; moreover, the uncertain effects of the unusually mild winter weather were cited as making it harder to discern the underlying trend in the economic data. They viewed these factors as reinforcing the case for leaving the forward guidance unchanged at this meeting and preferred adjusting the forward guidance only once they were more confident that the medium-term economic outlook or risks to the outlook had changed significantly. In contrast, another member thought that the forward guidance should be more responsive to changes in economic developments; that member suggested that the Committee would need to determine the appropriate threshold for altering the guidance.

The Committee also stated that it will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability. Several members indicated that additional monetary policy accommodation could be necessary if the economic recovery lost momentum or the downside risks to the forecast became great enough.

Committee members discussed the desirability of providing more clarity about the economic conditions that would likely warrant maintaining the current target range for the federal funds rate and those that would indicate that a change in monetary policy was appropriate. Doing so might help the public better understand the conditionality in the Committee's forward guidance. The Committee also discussed the relationship between the Committee's statement, which expresses the collective view of the Committee, and the policy projections of individual participants, which are included in the SEP. The Chairman asked the subcommittee on communications to consider possible enhancements and refinements to the SEP that might help better clarify the link between economic developments and the Committee's view of the appropriate stance of monetary policy.

At the conclusion of the discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until it was instructed otherwise, to execute transactions in the System Account in accordance with the following domestic policy directive:

> "The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to continue the maturity extension program it began in September to purchase, by the end of June 2012, Treasury securities with remaining maturities of approximately 6 years to 30 years with a total face value of $400 billion, and to sell Treasury securities with remaining maturities of 3 years or less with a total face value of $400 billion. The Committee also directs the Desk to maintain its existing policies of rolling over maturing Treasury securities into new issues and of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities in order to maintain the total face value of domestic securities at approximately $2.6 trillion. The Committee directs the Desk to engage in dollar roll transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability."

The vote encompassed approval of the statement below to be released at 12:30 p.m.:

> "Information received since the Federal Open Market Committee met in March suggests that the economy has been expanding moderately. Labor market conditions have improved in recent months; the unemployment rate has declined but remains elevated. Household spending and business fixed investment have continued to advance. Despite some signs of improvement, the housing sector remains depressed. Inflation has picked up somewhat, mainly reflecting higher prices of crude oil and gasoline. However, longer-term inflation expectations have remained stable.
>
> Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects economic growth to remain mod-

erate over coming quarters then to pick up gradually. Consequently, the Committee anticipates that the unemployment rate will decline gradually toward levels that it judges to be consistent with its dual mandate. Strains in global financial markets continue to pose significant downside risks to the economic outlook. The increase in oil and gasoline prices earlier this year is expected to affect inflation only temporarily, and the Committee anticipates that subsequently inflation will run at or below the rate that it judges most consistent with its dual mandate.

To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to ¼ percent and currently anticipates that economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014.

The Committee also decided to continue its program to extend the average maturity of its holdings of securities as announced in September. The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability."

Voting for this action: Ben Bernanke, William C. Dudley, Elizabeth Duke, Dennis P. Lockhart, Sandra Pianalto, Sarah Bloom Raskin, Daniel K. Tarullo, John C. Williams, and Janet L. Yellen.

Voting against this action: Jeffrey M. Lacker.

Mr. Lacker dissented because he did not believe that economic conditions were likely to warrant exceptionally low levels of the federal funds rate through late 2014. In his view, an increase in the federal funds rate was likely to be necessary by mid-2013 to prevent the emergence of inflationary pressures.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, June 19–20, 2012. Because some participants had expressed a preference for the two-day format over the one-day format for FOMC meetings, the Chairman raised the possibility of revising the FOMC meeting schedule to incorporate more two-day meetings to allow additional time for discussion. The meeting adjourned at 11:10 a.m. on April 25, 2012.

Notation Vote

By notation vote completed on April 2, 2012, the Committee unanimously approved the minutes of the FOMC meeting held on March 13, 2012.

William B. English
Secretary

Summary of Economic Projections

In conjunction with the April 24–25, 2012, Federal Open Market Committee (FOMC) meeting, meeting participants—the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in the deliberations of the FOMC—submitted their assessments of real output growth, the unemployment rate, inflation, and the target federal funds rate for each year from 2012 through 2014 and over the longer run, under each participant's judgment of appropriate monetary policy. These assessments were based on information available at the time of the meeting and participants' individual assumptions about factors likely to affect economic outcomes. The longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge, over time, under appropriate monetary policy and in the absence of further shocks to the economy. "Appropriate monetary policy" is defined as the future path of policy that participants deem most likely to foster outcomes for economic activity and inflation that best satisfy their individual interpretations of the Federal Reserve's objectives of maximum employment and stable prices.

Overall, the assessments that FOMC participants submitted in April indicated that, with appropriate monetary policy, the pace of economic recovery over the 2012–14 period would likely continue to be moderate. As depicted in figure 1, participants judged that real gross domestic product (GDP) would rise this year at a rate that slightly exceeds their estimates of its longer-run sustainable rate of increase, and then accelerate gradually through 2014. Taking into account the decline in the unemployment rate since the time of the previous Summary of Economic Projections (SEP) in January, participants generally anticipated only a small further reduction in the unemployment rate this year. They judged that the unemployment rate would then gradually move lower as economic growth picks up. Even so, participants generally projected that the unemployment rate at the end of 2014 would still be well above their estimates of the longer-run rate of unemployment that they currently view as being consistent with the FOMC's statutory mandate for promoting maximum employment and price stability. Most participants judged that inflation, as measured by the annual change in the price index for personal consumption expenditures (PCE), would be at or below the FOMC's long-run inflation objective of 2 percent under the assumption of appropriate monetary policy. Core inflation was generally projected to run at rates similar to those of overall inflation.

Relative to their previous projections in January, shown in table 1, participants revised up their projected rate of increase in real GDP in 2012 while marking down the pace of real growth over the next two years. With the unemployment rate having declined in recent months

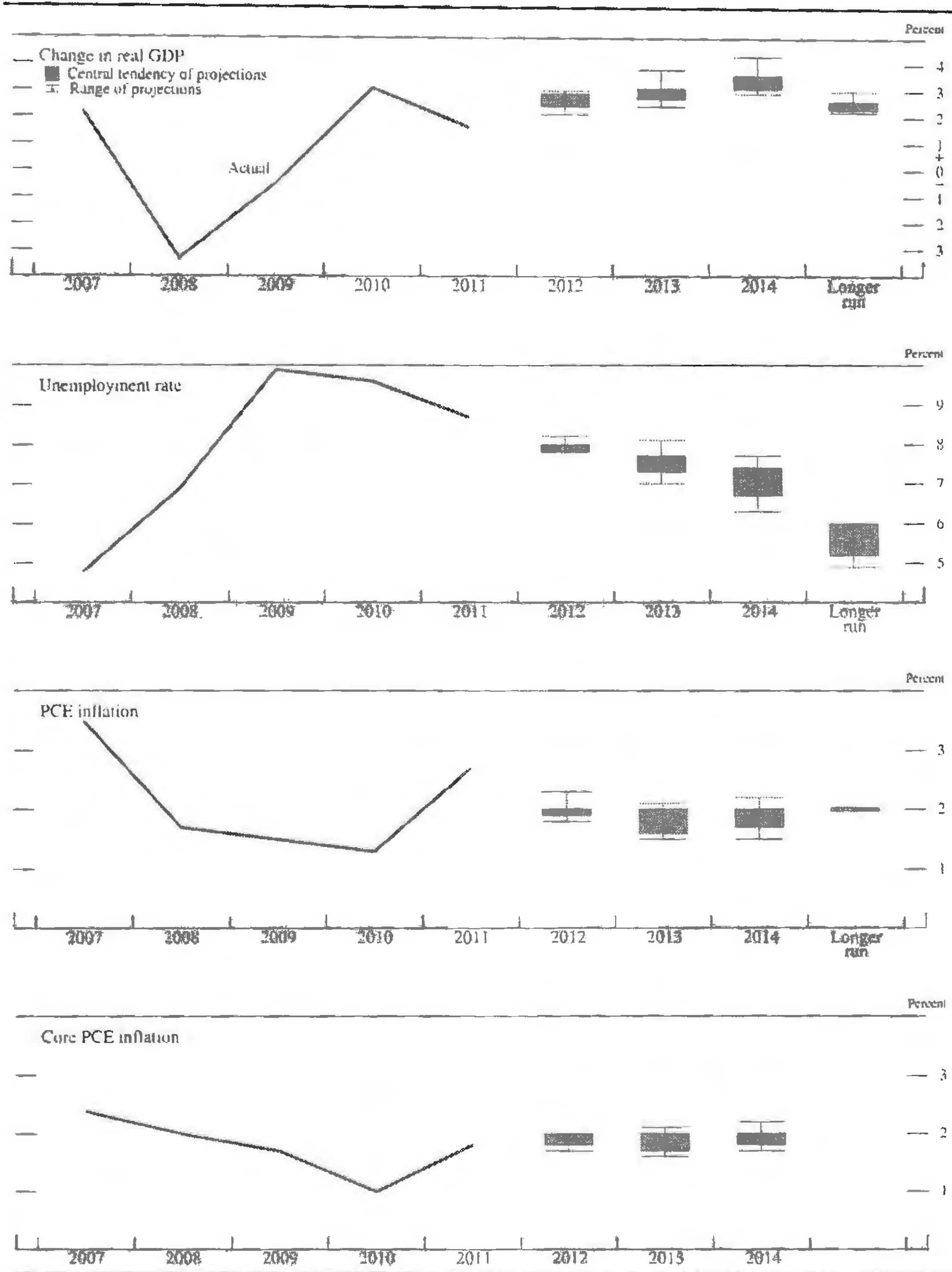
Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, April 2012
Percent

Variable	Central tendency[1]				Range[2]			
	2012	2013	2014	Longer run	2012	2013	2014	Longer run
Change in real GDP	2.4 to 2.9	2.7 to 3.1	3.1 to 3.6	2.3 to 2.6	2.1 to 3.0	2.4 to 3.8	2.9 to 4.3	2.2 to 3.0
January projection	2.2 to 2.7	2.8 to 3.2	3.3 to 4.0	2.3 to 2.6	2.1 to 3.0	2.4 to 3.8	2.8 to 4.3	2.2 to 3.0
Unemployment rate	7.8 to 8.0	7.3 to 7.7	6.7 to 7.4	5.2 to 6.0	7.8 to 8.2	7.0 to 8.1	6.3 to 7.7	4.9 to 6.0
January projection	8.2 to 8.5	7.4 to 8.1	6.7 to 7.6	5.2 to 6.0	7.8 to 8.6	7.0 to 8.2	6.3 to 7.7	5.0 to 6.0
PCE inflation	1.9 to 2.0	1.6 to 2.0	1.7 to 2.0	2.0	1.8 to 2.3	1.5 to 2.1	1.5 to 2.2	2.0
January projection	1.4 to 1.8	1.4 to 2.0	1.6 to 2.0	2.0	1.3 to 2.5	1.4 to 2.3	1.5 to 2.1	2.0
Core PCE inflation[3]	1.8 to 2.0	1.7 to 2.0	1.8 to 2.0		1.7 to 2.0	1.6 to 2.1	1.7 to 2.2	
January projection	1.5 to 1.8	1.5 to 2.0	1.6 to 2.0		1.3 to 2.0	1.4 to 2.0	1.4 to 2.0	

NOTE: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The January projections were made in conjunction with the meeting of the Federal Open Market Committee on January 24–25, 2012.

1. The central tendency excludes the three highest and three lowest projections for each variable in each year.
2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.
3. Longer-run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2012–14 and over the longer run



NOTE: Definitions of variables are in the notes to table 1. The data for the actual values of the variables are annual.

by more than participants had anticipated in the previous SEP, they generally lowered their projections for the level of the unemployment rate over coming years. Participants' expectations for both the longer-run rate of increase in real GDP and the longer-run unemployment rate were little changed from January. Their projection for the rate of inflation in 2012 moved up since January, reportedly in light of the recent increases in the prices of crude oil and gasoline, with much smaller increases in their projections for 2013 and 2014. The range and central tendency of the projections of longer-run inflation remained equal to 2 percent.

As shown in figure 2, most participants judged that highly accommodative monetary policy was likely to be warranted over coming years to promote a stronger economic recovery in the context of price stability. In particular, with inflation generally projected to be subdued over the projection period and the unemployment rate elevated, 11 participants thought that it would be appropriate for the first increase in the target federal funds rate to occur during 2014 or later, the same number as in the January SEP (upper panel). However, in contrast to their assessments in January, none of the participants indicated that 2016 was the appropriate year to first increase the target federal funds rate. The remaining 6 participants judged that it would be appropriate to raise the federal funds rate in 2012 or 2013 in order to avoid a buildup of inflationary pressures or the creation of imbalances in the financial system. Each participant's individual assessment of the appropriate year-end level of the target federal funds rate over the projection period was substantially below his or her projection of the longer-run level of the federal funds rate (lower panel). In addition, 9 participants placed the target federal funds rate at 1 percent or lower at the end of 2014.

All participants indicated that they expected the Federal Reserve's balance sheet would be normalized in a manner consistent with the principles that the FOMC agreed on at its June 2011 meeting, with the date that participants gave for the onset of the normalization process dependent on their expected timing of the first increase in the target federal funds rate. One participant reported that appropriate policy would include additional balance sheet actions in the near term to mitigate downside risks to economic growth.

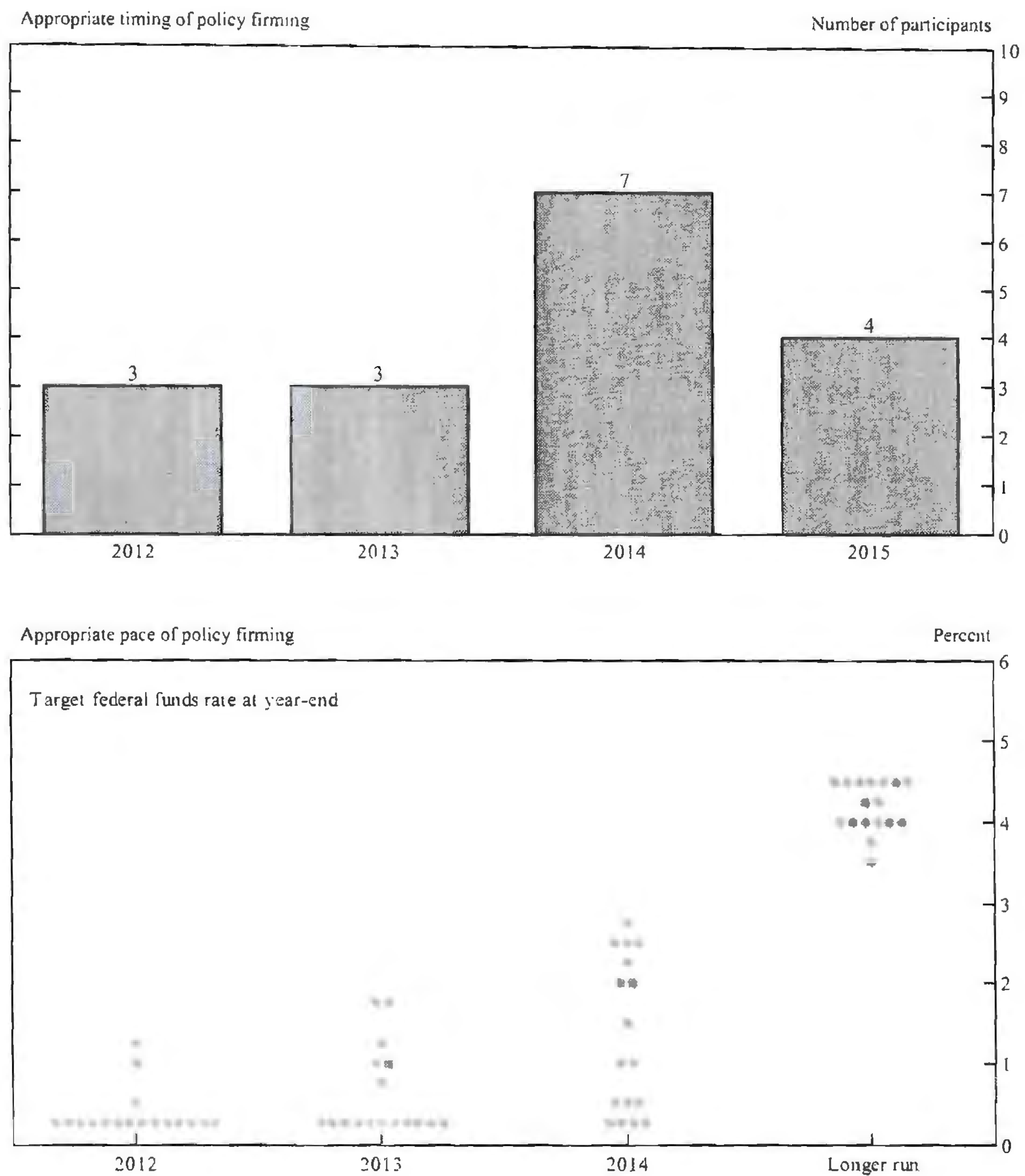
Most participants judged the level of uncertainty associated with their projections for real activity, the unemployment rate, and inflation to be unusually high relative to historical norms, although the number of participants doing so declined somewhat since the January SEP. About half of the participants now see the risks to real GDP growth as weighted to the downside and those to the unemployment rate as weighted to the upside, also down somewhat from the previous SEP. As in January, a majority of participants viewed the risks to their inflation projections as broadly balanced.

The Outlook for Economic Activity

Under appropriate monetary policy, participants continued to judge that the economy would expand at a moderate pace over the projection period. The central tendency of participants' projections for the change in real GDP growth in 2012 was 2.4 to 2.9 percent, a bit higher than in January. Growth at this rate would be a noticeable pickup from the pace of expansion in 2011 and a little above most participants' assessments of trend growth over the longer run. Most participants characterized the incoming data on consumer spending—especially for motor vehicles—as being at least somewhat stronger than had been anticipated in January, and several also pointed to some encouraging signs in recent readings on housing activity. A few participants indicated they had seen some improvements in household and business confidence. Participants projected that real GDP growth would pick up gradually over the 2013–14 period. Economic growth would be supported by monetary policy accommodation as well as some gradual improvements in credit conditions, the housing sector, and household balance sheets. The central tendencies of participants' projections of real growth in 2013 and 2014 were 2.7 to 3.1 percent and 3.1 to 3.6 percent, respectively, down somewhat from the central tendencies of the January projections. The central tendency of participants' projections for the longer-run rate of increase of real GDP was 2.3 to 2.6 percent, unchanged from January.

Participants cited several factors that would likely continue to restrain the pace of economic expansion over the projection period. In particular, tighter fiscal policy seemed likely to impart a significant drag on economic activity for a time. Moreover, uncertainty about the fiscal environment could hold back both household spending on durable goods and business capital expenditures. In addition, some participants noted that the recent stronger data might reflect temporary factors. For example, the pace of consumer spending was seen as likely to fall back some and be more in line with that of disposable personal income, and federal outlays were not expected to continue at their recent pace. Moreover, a couple of participants also pointed to the unseasonably warm winter weather as a possible con-

Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy, April 2012



NOTE: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy, the first increase in the target federal funds rate from its current range of 0 to ¼ percent will occur in the specified calendar year. In January 2012, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2012, 2013, 2014, 2015, and 2016 were, respectively, 3, 3, 5, 4, and 2. In the lower panel, each shaded circle indicates the value (rounded to the nearest ¼ percent) of an individual participant's judgment of the appropriate level of the target federal funds rate at the end of the specified calendar year or over the longer run.

tributor to the more favorable tone to the recent incoming data.

Most participants marked down their projections for the rate of unemployment over the projection period. The unemployment rate had declined from 8.7 percent, on average, in the final quarter of last year to 8.2 percent at the end of the first quarter of 2012, more than most participants anticipated when they prepared their January projections. With real GDP expected to increase at a moderate pace, the unemployment rate was projected to decline only a bit further this year, with the central tendency of participants' forecasts at 7.8 to 8.0 percent at year-end. Participants projected that in 2013 and 2014, the pickup in the pace of the expansion would be accompanied by a further gradual improvement in labor market conditions. The central tendency of participants' forecasts for the unemployment rate was 7.3 to 7.7 percent at the end of 2013 and 6.7 to 7.4 percent at the end of 2014. The central tendency of participants' estimates of the longer-run normal rate of unemployment that would prevail in the absence of further shocks to the economy was 5.2 to 6.0 percent, unchanged from January. Most participants anticipated that five or six years would be required to close the gap between the current unemployment rate and their estimates of the longer-run rate, although a few anticipated that less time would be needed.

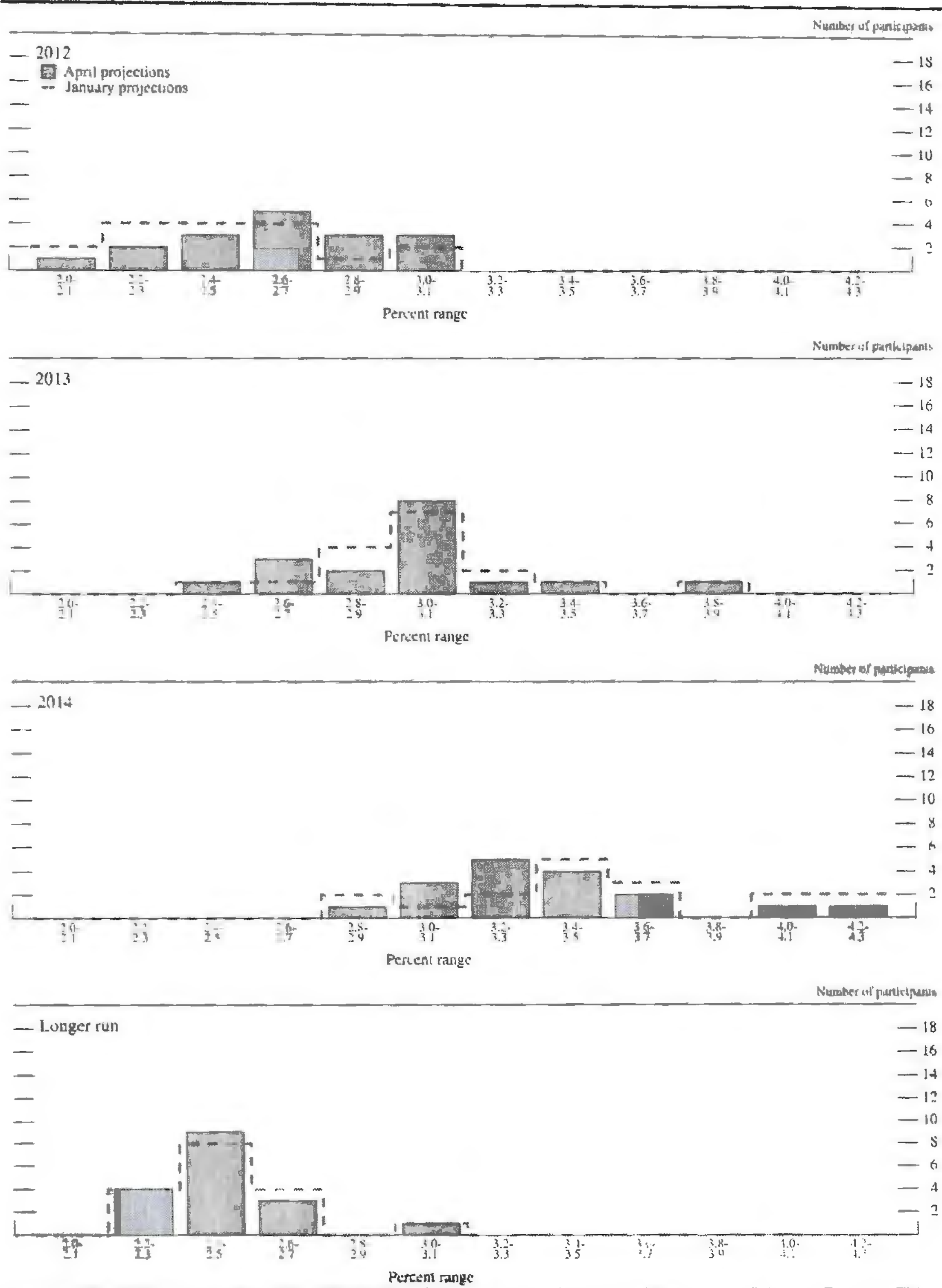
The diversity of participants' projections for real GDP growth and the unemployment rate over the next three years and over the longer run is depicted in figures 3.A and 3.B. The dispersion in these projections reflects differences in participants' assessments of many factors, including appropriate monetary policy and its effects on the economy, the underlying momentum in economic activity, the likely evolution of credit and financial market conditions, the prospective path for U.S. fiscal policy, the effects of the European situation, and the extent to which current dislocations in the labor market were structural versus cyclical. Given the decline in the rate of unemployment in the first quarter, the distribution of participants' projections of this variable for the fourth quarter of 2012 shifted noticeably lower, and the range of these projections became considerably narrower, relative to the January assessments. The distributions of the unemployment rate projections for 2013 and 2014 exhibited less pronounced shifts toward lower rates. Participants made only minor adjustments to their projections of the rates of output growth and unemployment over the longer run, leaving the dispersions of their projections for both little changed. As in January, the dispersion of estimates for the longer-run rate of output growth is fairly narrow, with only one participant's estimate outside of a range of 2.2 to 2.7 percent. By comparison, participants' views about the level to which the unemployment rate would converge in the longer run are more diverse, reflecting, among other things, different views on the outlook for labor supply and the structure of the labor market.

The Outlook for Inflation

Participants' views about the outlook for inflation generally firmed a little since January. In particular, a majority of participants indicated that the incoming readings on inflation, especially for the prices of crude oil and gasoline, were a little higher than had been anticipated. Nonetheless, assuming no further shocks, most participants judged that both headline and core inflation would remain subdued over the 2012–14 period, running at rates at or below the FOMC's longer-run objective of 2 percent under the assumption of appropriate monetary policy. Participants pointed to several factors that would help restrain inflation pressures over the projection period, including expected declines in commodity prices, modest increases in business costs, and the ongoing stability of inflation expectations. Specifically, the central tendency of participants' projections for inflation, as measured by the PCE price index, moved up in 2012 to 1.9 to 2.0 percent, and it edged up in 2013 and 2014 to 1.6 to 2.0 percent and 1.7 to 2.0 percent, respectively; the central tendencies of the forecasts for core PCE inflation were very close to those for the total measure. Participants indicated that it would take about five or six years, or less, for inflation to converge to its longer-run level.

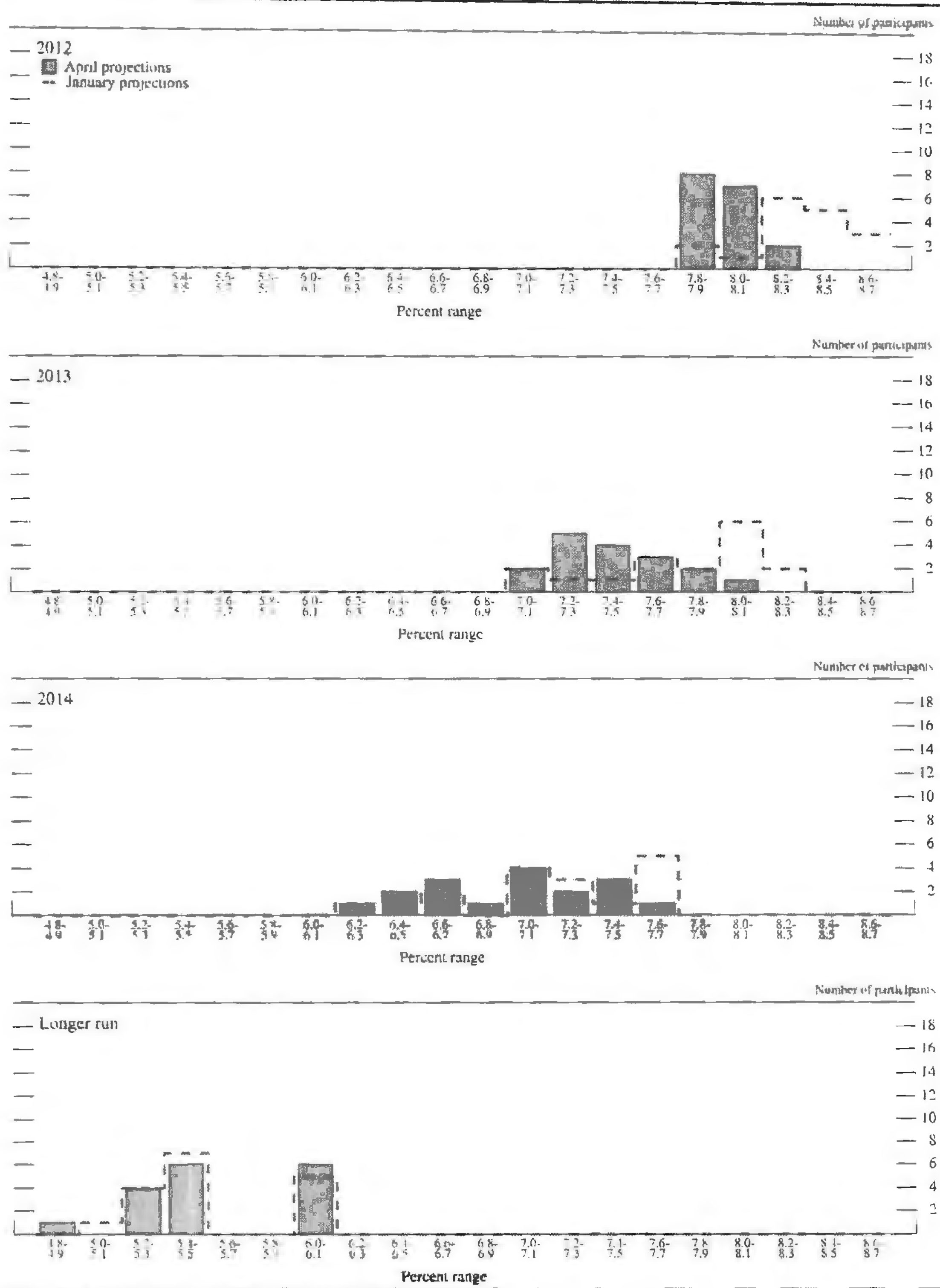
Information about the diversity of participants' views regarding the outlook for inflation is provided in figures 3.C and 3.D. Relative to the assessments that were compiled in January and reflecting the recent incoming data, the projections for inflation shifted higher in 2012 and exhibited a noticeably narrower range. The dispersion of inflation projections also narrowed in 2013, although to a lesser degree, and was little changed in 2014. In general, the dispersion of views on the outlook for inflation over the projection period represented differences in judgments regarding a range of issues, including the current degree of slack in resource utilization and the extent to which such slack influences inflation and inflation expectations. In addition, participants differed in their estimates of how the stance of monetary policy would influence inflation expectations.

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2012–14 and over the longer run



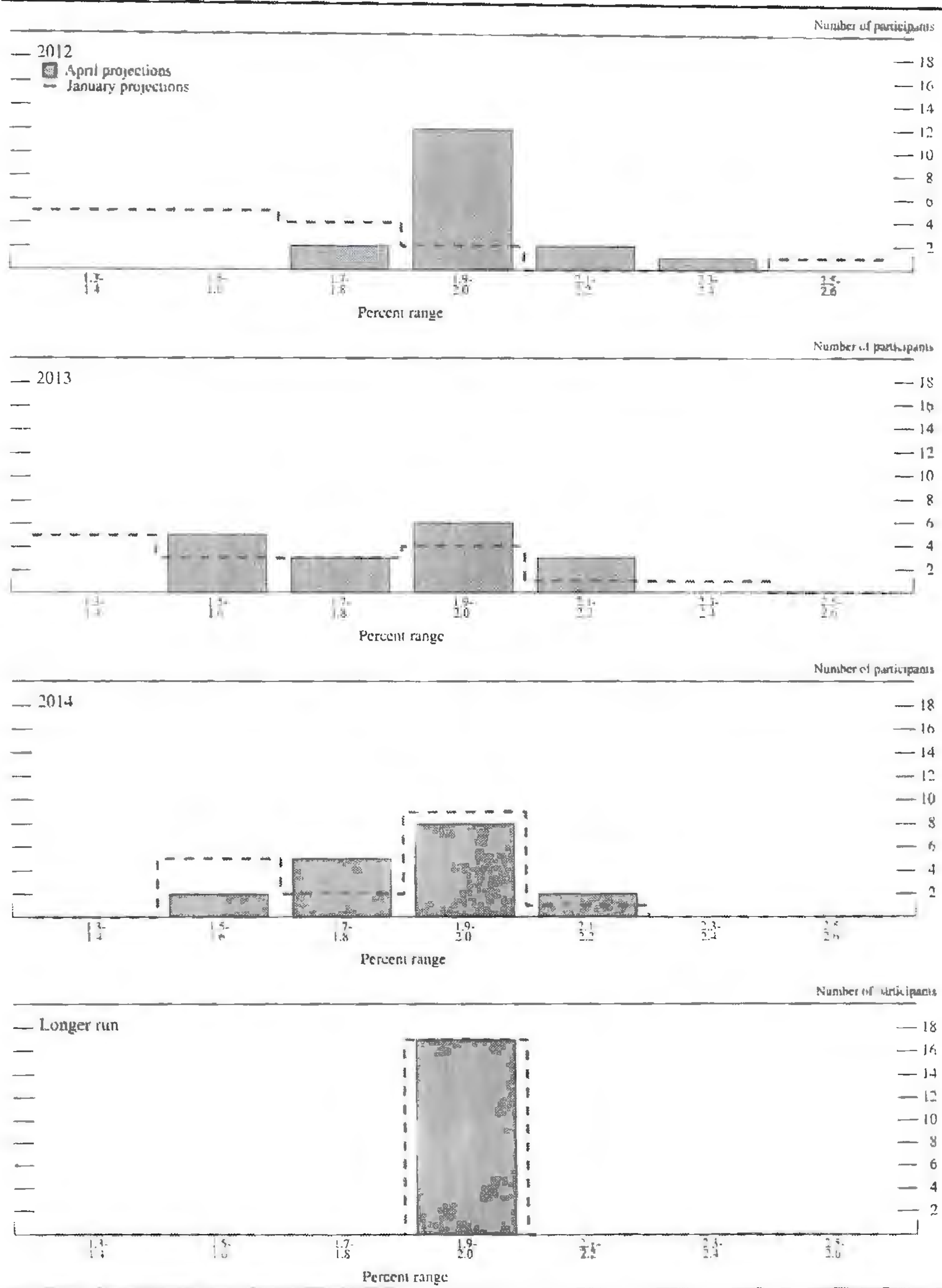
NOTE: Definitions of variables are in the general note to table 1.

Figure 3.B. Distribution of participants' projections for the unemployment rate, 2012–14 and over the longer run



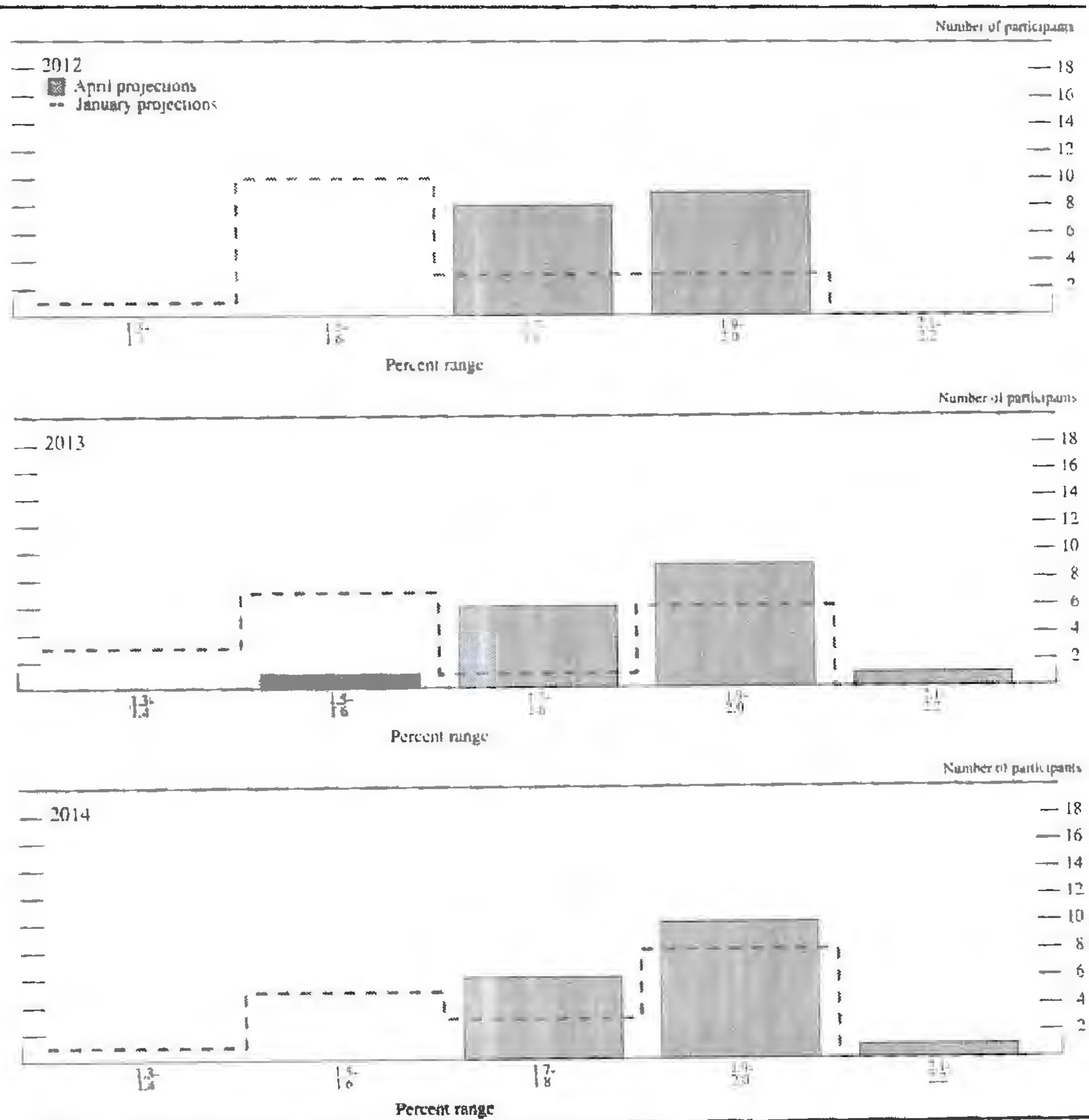
NOTE: Definitions of variables are in the general note to table 1.

Figure 3.C. Distribution of participants' projections for PCE inflation, 2012–14 and over the longer run



NOTE: Definitions of variables are in the general note to table 1.

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2012–14



NOTE: Definitions of variables are in the general note to table 1.

Appropriate Monetary Policy

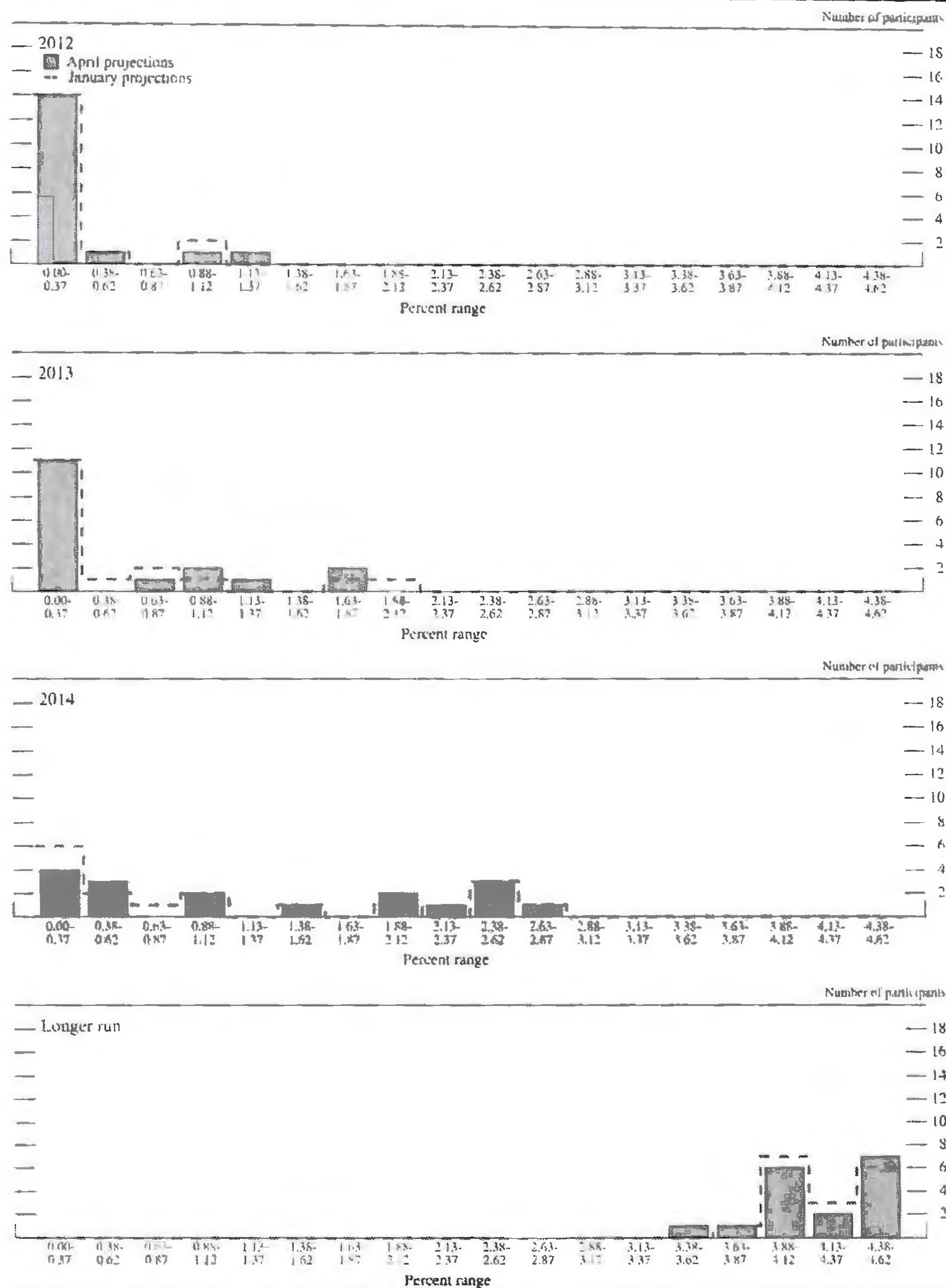
About half of the participants judged that exceptionally low levels of the federal funds rate would remain appropriate at least until late 2014. In particular, seven participants viewed appropriate policy firming as commencing during 2014, while four others judged that the first increase in the target federal funds rate would not be warranted until 2015. Nine participants anticipated that the appropriate federal funds rate at the end of 2014 would be 1 percent or lower. Those who saw the first increase occurring in 2015 anticipated that the federal funds rate would be either 1 percent or 1½ percent at the end of that year. In contrast, six participants judged that an increase in the target federal funds rate would be appropriate in 2012 or 2013, and those participants anticipated that the target rate would need to be increased to around 2 to 2¾ percent by the end of 2014. All participants reported levels for the appropriate target federal funds rate at the end of 2014 that were well below their estimates of the level expected to prevail in the longer run. Participants' estimates of the longer-run target federal funds rate ranged from 3½ to 4½ percent, reflecting the Committee's inflation objective of 2 percent and participants' individual judgments about the longer-run equilibrium level of the real federal funds rate.

Several key factors informed participants' individual expectations about the appropriate setting for monetary policy, including their assessments of the maximum level of employment, the Committee's longer-run inflation objective, the extent to which current conditions had deviated from these mandate-consistent levels and why the deviations had arisen, and their projections of the likely time periods required to return employment and inflation to levels they judge to be most consistent with the Committee's mandate. Several participants commented that their assessments took into account the risks and uncertainties associated with their outlooks for economic activity and inflation, and one pointed specifically to the potential effects of a protracted period of very low interest rates on financial stability. Participants also noted that because the appropriate stance of monetary policy depends importantly on the evolution of real activity and inflation over time, their assessments of the appropriate future path of the federal funds rate would change if economic conditions were to evolve in an unexpected manner.

Participants also provided qualitative information on their views regarding the appropriate path of the Federal Reserve's balance sheet. All participants expect that the Committee would carry out the normalization of the balance sheet according to the principles approved at the June 2011 FOMC meeting. That is, prior to the first increase in the federal funds rate, the Committee would likely cease reinvesting some or all principal payments on securities in the System Open Market Account (SOMA), and it would likely begin sales of agency securities from the SOMA sometime after the first rate increase, aiming to eliminate the SOMA's holdings of agency securities over a period of three to five years. In general, the participants linked their preferred start dates for the normalization process to their views for the appropriate timing for the first increase in the target federal funds rate. Two participants judged that once begun, asset sales should proceed relatively quickly, while one participant's assessment of appropriate monetary policy incorporated an expansion of the maturity extension program in the near term. In addition, some participants indicated that they remained open to considering additional policy-related adjustments to the balance sheet if the economic outlook deteriorated.

The distribution of participants' judgments regarding the appropriate level of the target federal funds rate at the end of each calendar year from 2012 to 2014 and over the longer run is presented in figure 3.E. Participants' views on the appropriate level of the federal funds rate at the end of 2014 continued to be relatively widely dispersed, with seven participants seeing the appropriate level of the federal funds rate at that time as most likely to be 50 basis points or less and seven seeing the appropriate rate as 2 percent or higher. Relative to the other participants, the group of participants who judged that a longer period of exceptionally low levels of the federal funds rate would be appropriate tended to include those who anticipated a somewhat more gradual increase in the pace of the economic expansion and a slower decline in the unemployment rate over the projection period. Some of these participants also mentioned their assessment that a longer period of exceptionally low federal funds rates is appropriate when the federal funds rate has previously been constrained by its effective lower bound. In contrast, the six participants who judged that policy firming should begin in 2012 or 2013 included some who projected a somewhat faster pickup in economic activity over the near term. Participants seeing an earlier increase in the target federal funds rate tended to indicate that the Committee would need to begin removing policy accommodation relatively soon in order to keep inflation at mandate-consistent levels and to limit the risk of undermining the Federal Reserve's credibility and caus-

Figure 3.E. Distribution of participants' projections for the target federal funds rate, 2012–14 and over the longer run



NOTE. The target federal funds rate is measured as the level of the target rate at the end of the calendar year or in the longer run.

ing a rise in inflation expectations. One of these participants also stressed the risk of distortions in the financial system from an extended period of exceptionally low interest rates.

Uncertainty and Risks

Most participants judged that their projections for real GDP growth and the unemployment rate were subject to a higher level of uncertainty than was the norm during the previous 20 years (figure 4).[1] However, the number reporting elevated uncertainty moved down somewhat relative to the January SEP. Many participants also judged the levels of uncertainty associated with their inflation forecasts to be higher than the longer-run historical norm, but such an assessment continued to be somewhat less prevalent among participants than was the case for uncertainty about real activity. Several factors were said to be contributing to the elevated level of uncertainty about the economic outlook, including ongoing developments regarding the fiscal and financial situation in Europe. Many participants also cited considerable uncertainty about U.S. fiscal policy over coming quarters and its potential implications for economic activity. More broadly, participants again noted difficulties in projecting the path of the economic recovery because deep recessions brought on by severe financial crises differed importantly from most historical experience. In that regard, participants continued to be uncertain about the pace at which credit conditions would improve and about the prospects for recovery in the housing sector. In addition, participants generally saw the longer-term outlook for fiscal and regulatory policies as still highly uncertain. Some participants also expressed uncertainty about the extent to which the labor market was undergoing structural changes. Among the sources of uncertainty about the outlook for inflation were the difficulties in assessing the current and prospective margins of slack in resource markets and the effect of such slack on prices. Participants also cited uncertainty about the future path of global commodity prices, which were seen as depending on idiosyncratic supply and demand factors as well as on global growth.

Table 2. Average historical projection error ranges
Percentage points

Variable	2012	2013	2014
Change in real GDP[1]	±1.1	±1.6	±1.7
Unemployment rate[1]	±0.5	±1.2	±1.7
Total consumer prices[2]	±0.8	±1.0	±1.0

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1992 through 2011 that were released in the spring by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is in David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series 2007-60 (Washington: Board of Governors of the Federal Reserve System, November).

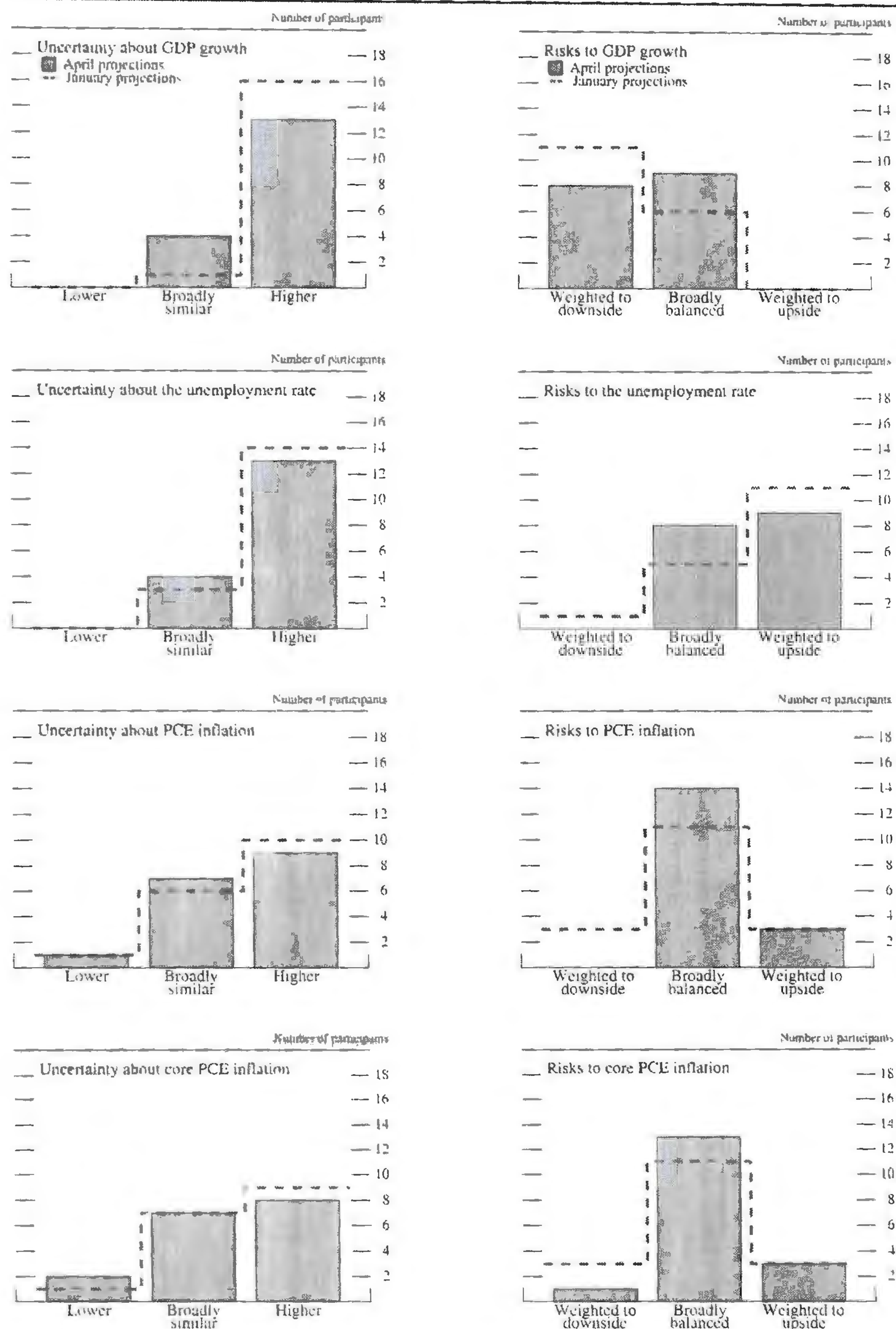
1. For definitions, refer to general note in table 1.

2. Measure is the overall consumer price index, the price measure that has been most widely used in government and private economic forecasts. Projection is percent change, fourth quarter of the previous year to the fourth quarter of the year indicated.

Turning to the balance of risks that participants attached to their economic projections, about half reported that they judged the risks to their forecasts of both real GDP growth and the unemployment rate as broadly balanced, a few more than was the case in January. Nearly all of the remaining participants viewed the risks to real GDP growth as weighted to the downside and the risks to the unemployment rate as skewed to the upside. Participants identified several downside risks to the projected pace of economic expansion, including the fiscal and financial strains in the euro area and the possibility of an abrupt fiscal consolidation in the United States. In addition, some of the factors that had restrained the U.S. recovery in recent years could persist for longer than currently expected and thus weigh on economic activity to a greater extent going forward than participants had assumed in their baseline forecasts. In particular, some participants mentioned the downside risks to consumer spending in light of meager gains in disposable personal income and households' still-weak balance sheets. Others cited the possible damping effects of high levels of uncertainty regarding regulatory policies on businesses' willingness to invest and hire. A few participants noted the risk of another disruption in global oil markets or greater tensions in the Middle East that could not only boost inflation but also reduce real incomes, consumer confidence, and spending. Some of the participants who judged the risks to be broadly balanced recognized some of these downside risks to the outlook, but they saw them as about counterbalanced by the chance that the recent signs of improvement in labor markets and

[1] Table 2 provides estimates of the forecast uncertainty for the change in real GDP, the unemployment rate, and total consumer price inflation over the period from 1992 to 2011. At the end of this summary, the box "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in the economic forecasts and explains the approach used to assess the uncertainty and risks attending the participants' projections.

Figure 4. Uncertainty and risks in economic projections



NOTE: For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty." Definitions of variables are in the general note to table 1

consumer spending could signal the emergence of a more vigorous recovery.

Most participants judged the risks to their projections of inflation as broadly balanced, including a few more than held that view in January. However, a few saw the risks as tilted to the upside, pointing to the possibility of disruptions in global oil and commodity markets or to effects from the current stance of monetary policy. Two of these participants indicated that the current highly accommodative stance of monetary policy and the substantial liquidity currently in the financial system risked a pickup in inflation to a level above the Committee's longer-run objective, or cited the risk that uncertainty about the Committee's ability to effectively remove policy accommodation when appropriate could lead to a rise in inflation expectations.

Forecast Uncertainty

The economic projections provided by the members of the Board of Governors and the presidents of the Federal Reserve Banks inform discussions of monetary policy among policymakers and can aid public understanding of the basis for policy actions. Considerable uncertainty attends these projections, however. The economic and statistical models and relationships used to help produce economic forecasts are necessarily imperfect descriptions of the real world, and the future path of the economy can be affected by myriad unforeseen developments and events. Thus, in setting the stance of monetary policy, participants consider not only what appears to be the most likely economic outcome as embodied in their projections, but also the range of alternative possibilities, the likelihood of their occurring, and the potential costs to the economy should they occur.

Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past *Monetary Policy Reports* and those prepared by the Federal Reserve Board's staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand within a range of 1.9 to 4.1 percent in the current year, 1.4 to 4.6 percent in the second year, and 1.3 to 4.7 percent in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.2 to 2.8 percent in the current year and 1.0 to 3.0 percent in the second and third years.

Because current conditions may differ from those that prevailed, on average, over history, participants provide judgments as to whether the uncertainty attached to their projections of each variable is greater than, smaller than, or broadly similar to typical levels of forecast uncertainty in the past, as shown in table 2. Participants also provide judgments as to whether the risks to their projections are weighted to the upside, are weighted to the downside, or are broadly balanced. That is, participants judge whether each variable is more likely to be above or below their projections of the most likely outcome. These judgments about the uncertainty and the risks attending each participant's projections are distinct from the diversity of participants' views about the most likely outcomes. Forecast uncertainty is concerned with the risks associated with a particular projection rather than with divergences across a number of different projections.

As with real activity and inflation, the outlook for the future path of the federal funds rate is subject to considerable uncertainty. This uncertainty arises primarily because each participant's assessment of the appropriate stance of monetary policy depends importantly on the evolution of real activity and inflation over time. If economic conditions evolve in an unexpected manner, then assessments of the appropriate setting of the federal funds rate would change from that point forward.

Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents, April 2012

Advance release of table 1 of the Summary of Economic Projections to be released with the FOMC minutes

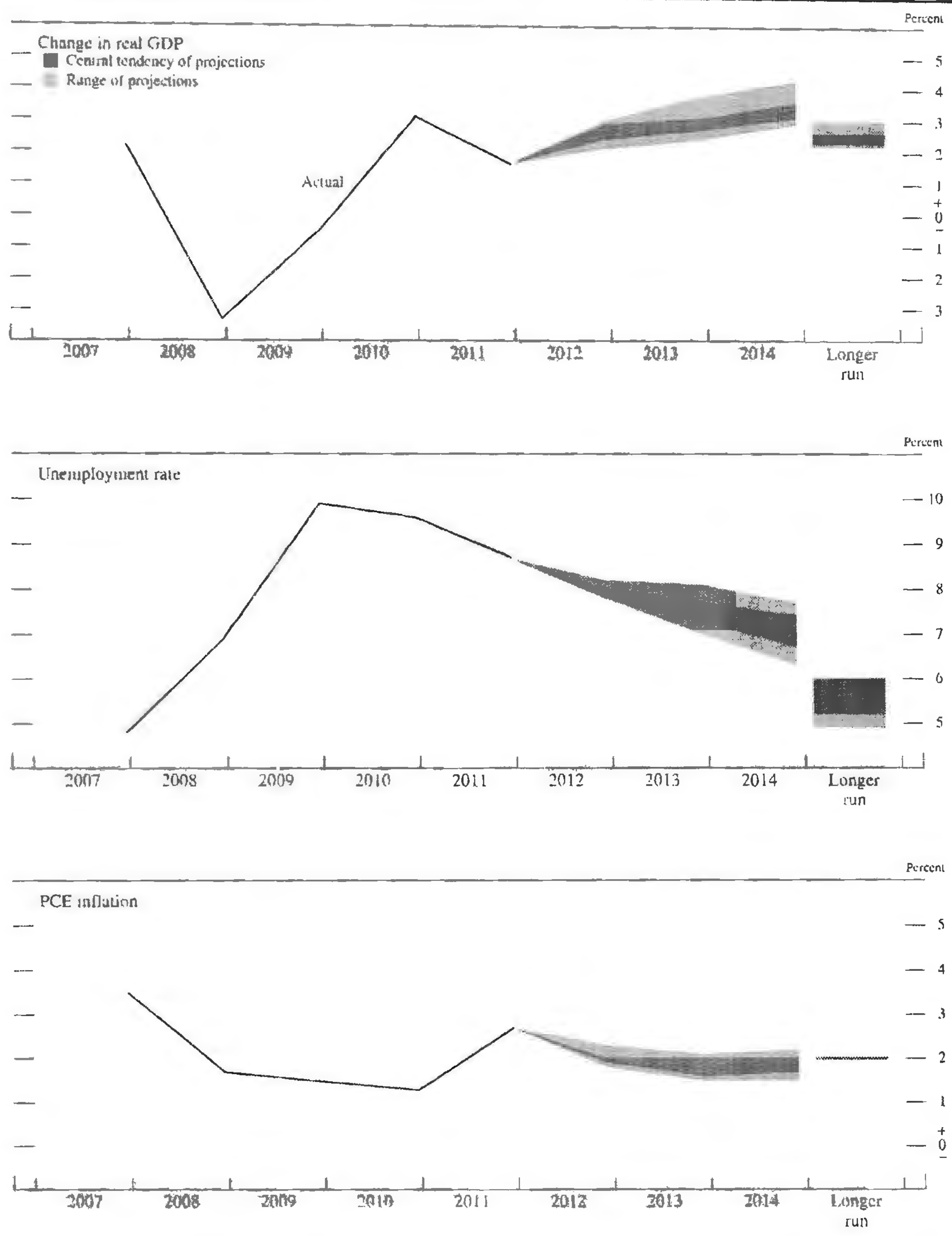
Percent

Variable	Central tendency[1]				Range[2]			
	2012	2013	2014	Longer run	2012	2013	2014	Longer run
Change in real GDP	2.4 to 2.9	2.7 to 3.1	3.1 to 3.6	2.3 to 2.6	2.1 to 3.0	2.4 to 3.8	2.9 to 4.3	2.2 to 3.0
January projection	2.2 to 2.7	2.8 to 3.2	3.3 to 4.0	2.3 to 2.6	2.1 to 3.0	2.4 to 3.8	2.8 to 4.3	2.2 to 3.0
Unemployment rate	7.8 to 8.0	7.3 to 7.7	6.7 to 7.4	5.2 to 6.0	7.8 to 8.2	7.0 to 8.1	6.3 to 7.7	4.9 to 6.0
January projection	8.2 to 8.5	7.4 to 8.1	6.7 to 7.6	5.2 to 6.0	7.8 to 8.6	7.0 to 8.2	6.3 to 7.7	5.0 to 6.0
PCE inflation	1.9 to 2.0	1.6 to 2.0	1.7 to 2.0	2.0	1.8 to 2.3	1.5 to 2.1	1.5 to 2.2	2.0
January projection	1.4 to 1.8	1.4 to 2.0	1.6 to 2.0	2.0	1.3 to 2.5	1.4 to 2.3	1.5 to 2.1	2.0
Core PCE inflation[3]	1.8 to 2.0	1.7 to 2.0	1.8 to 2.0		1.7 to 2.0	1.6 to 2.1	1.7 to 2.2	
January projection	1.5 to 1.8	1.5 to 2.0	1.6 to 2.0		1.3 to 2.0	1.4 to 2.0	1.4 to 2.0	

NOTE: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The January projections were made in conjunction with the meeting of the Federal Open Market Committee on January 24–25, 2012.

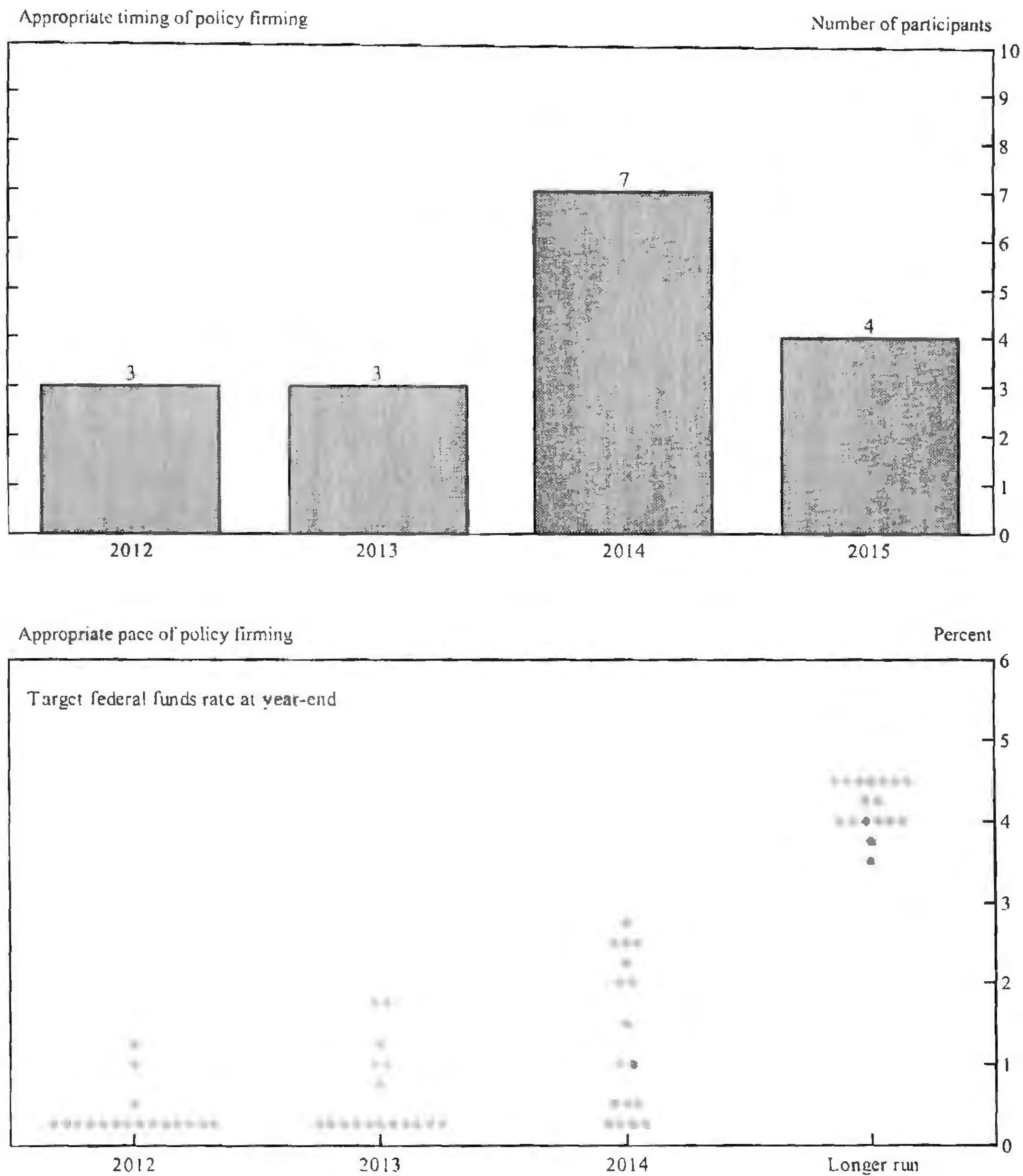
1. The central tendency excludes the three highest and three lowest projections for each variable in each year.
2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.
3. Longer run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2012–14 and over the longer run



NOTE: Definitions of variables are in the notes to table 1. The data for the actual values of the variables are annual.

Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy, April 2012



NOTE: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy and in the absence of further shocks to the economy, the first increase in the target federal funds rate from its current range of 0 to ¼ percent will occur in the specified calendar year. In January 2012, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2012, 2013, 2014, 2015, and 2016 were, respectively, 3, 3, 5, 4, and 2. In the lower panel, each shaded circle indicates the value (rounded to the nearest ¼ percent) of an individual participant's judgment of the appropriate level of the target federal funds rate at the end of the specified calendar year or over the longer run

Explanation of Economic Projections Charts

The charts show actual values and projections for three economic variables, based on FOMC participants' individual assessments of appropriate monetary policy:

- Change in Real Gross Domestic Product (GDP)—as measured from the fourth quarter of the previous year to the fourth quarter of the year indicated, with values plotted at the end of each year.
- Unemployment Rate—the average civilian unemployment rate in the fourth quarter of each year, with values plotted at the end of each year.
- PCE Inflation—as measured by the change in the personal consumption expenditures (PCE) price index from the fourth quarter of the previous year to the fourth quarter of the year indicated, with values plotted at the end of each year.

Information for these variables is shown for each year from 2007 to 2014, and for the longer run.

The solid line, labeled "Actual," shows the historical values for each variable.

The lightly shaded areas represent the ranges of the projections of policymakers. The bottom of the range for each variable is the lowest of all of the projections for that year or period. Likewise, the top of the range is the highest of all of the projections for that year or period.

The dark shaded areas represent the central tendency, which is a narrower version of the range that excludes the three highest and three lowest projections for each variable in each year or period.

The longer-run projections, which are shown on the far right side of the charts, are the rates of growth, unemployment, and inflation to which a policymaker expects the economy to converge over time—maybe in five or six years—in the absence of further shocks and under appropriate monetary policy. Because appropriate monetary policy, by definition, is aimed at achieving the Federal Reserve's dual mandate of maximum employment and price stability in the longer run, policymakers' longer-run projections for economic growth and unemployment may be interpreted, respectively, as estimates of the economy's normal or trend rate of growth and its normal unemployment rate over the longer run. The longer-run projection shown for inflation is the rate of inflation judged to be most consistent with the Federal Reserve's dual mandate.

Explanation of Policy Path Charts

These charts are based on policymakers' assessments of the appropriate path for the FOMC's target federal funds rate. The target funds rate is measured as the level of the target rate at the end of the calendar year or in the longer run. Appropriate monetary policy, by definition, is the future path of policy that each participant deems most likely to foster outcomes for economic activity and inflation that best satisfy his or her interpretation of the Federal Reserve's dual objectives of maximum employment and stable prices.

- In the upper panel, the shaded bars represent the number of FOMC participants who judge that the initial increase in the target federal funds rate (from its current range of 0 to ¼ percent) would appropriately occur in the specified calendar year.
- In the lower panel, the dots represent individual policymakers' assessments of the appropriate federal funds rate target at the end of each of the next several years and in the longer run. Each dot in that chart represents one policymaker's projection. Please note that for purposes of this chart the responses are rounded to the nearest ¼ percent, with the exception that all values below 37.5 basis points are rounded to ¼ percent.

These assessments of the timing of the initial increase of the target federal funds rate and the path of the target federal funds rate are the ones that policymakers view as compatible with their individual economic projections.

Press Release

FEDERAL RESERVE press release

Release Date: April 25, 2012

For immediate release

Information received since the Federal Open Market Committee met in March suggests that the economy has been expanding moderately. Labor market conditions have improved in recent months; the unemployment rate has declined but remains elevated. Household spending and business fixed investment have continued to advance. Despite some signs of improvement, the housing sector remains depressed. Inflation has picked up somewhat, mainly reflecting higher prices of crude oil and gasoline. However, longer-term inflation expectations have remained stable.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects economic growth to remain moderate over coming quarters and then to pick up gradually. Consequently, the Committee anticipates that the unemployment rate will decline gradually toward levels that it judges to be consistent with its dual mandate. Strains in global financial markets continue to pose significant downside risks to the economic outlook. The increase in oil and gasoline prices earlier this year is expected to affect inflation only temporarily, and the Committee anticipates that subsequently inflation will run at or below the rate that it judges most consistent with its dual mandate.

To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014.

The Committee also decided to continue its program to extend the average maturity of its holdings of securities as announced in September. The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability.

Voting for the FOMC monetary policy action were: Ben S. Bernanke, Chairman; William C. Dudley, Vice Chairman; Elizabeth A. Duke; Dennis P. Lockhart; Sandra Pianalto; Sarah Bloom Raskin; Daniel K. Tarullo; John C. Williams; and Janet L. Yellen. Voting against the action was Jeffrey M. Lacker, who does not anticipate that economic conditions are likely to warrant exceptionally low levels of the federal funds

rate through late 2014.

Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents, June 2012

Advance release of table 1 of the Summary of Economic Projections to be released with the FOMC minutes

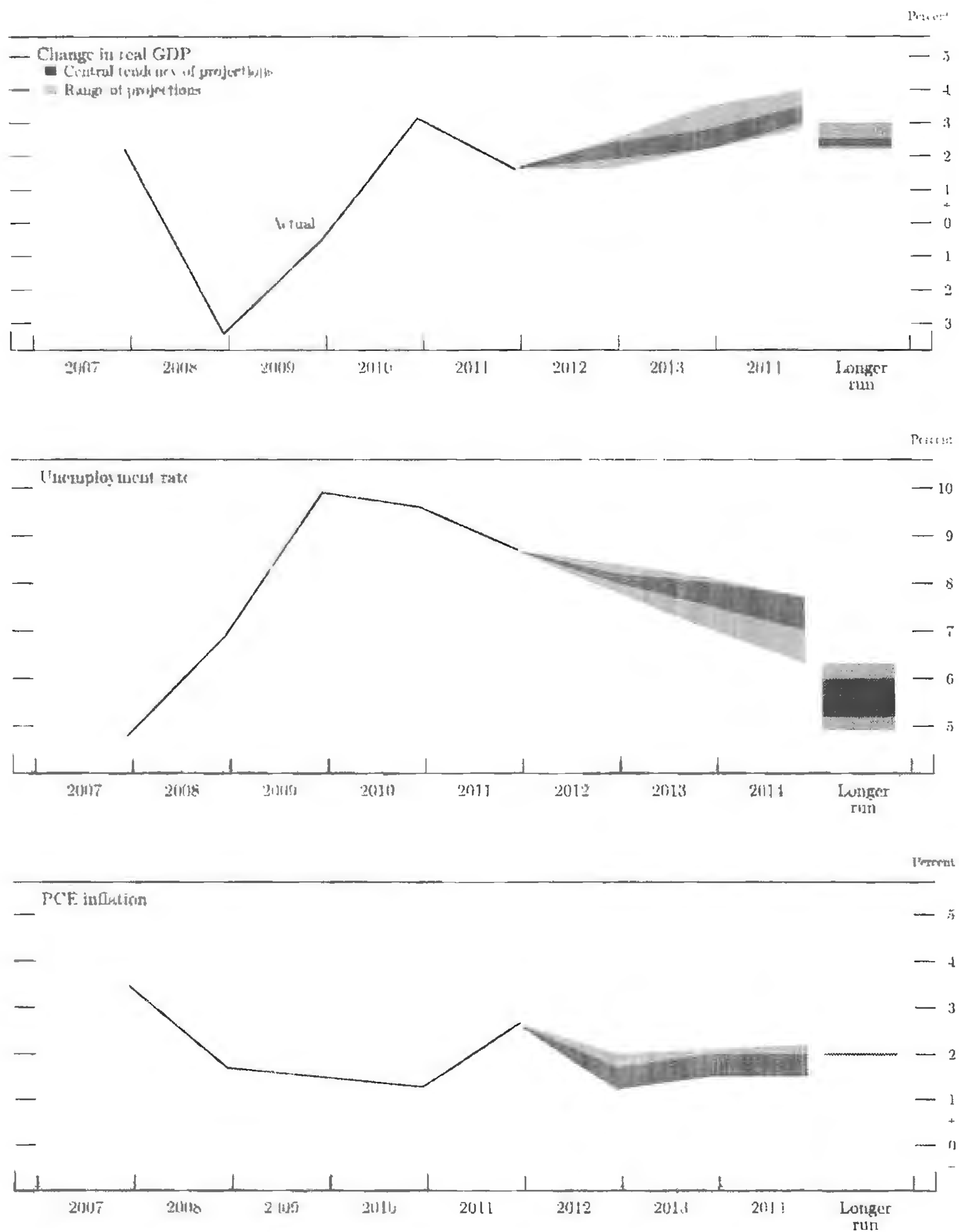
Percent

Variable	Central tendency[1]				Range[2]			
	2012	2013	2014	Longer run	2012	2013	2014	Longer run
Change in real GDP	1.9 to 2.4	2.2 to 2.8	3.0 to 3.5	2.3 to 2.5	1.6 to 2.5	2.2 to 3.5	2.8 to 4.0	2.2 to 3.0
April projection	2.4 to 2.9	2.7 to 3.1	3.1 to 3.6	2.3 to 2.6	2.1 to 3.0	2.1 to 3.8	2.9 to 4.3	2.2 to 3.0
Unemployment rate	8.0 to 8.2	7.5 to 8.0	7.0 to 7.7	5.2 to 6.0	7.8 to 8.4	7.0 to 8.1	6.3 to 7.7	4.9 to 6.3
April projection	7.8 to 8.0	7.3 to 7.7	6.7 to 7.4	5.2 to 6.0	7.8 to 8.2	7.0 to 8.1	6.3 to 7.7	4.9 to 6.0
PCE inflation	1.2 to 1.7	1.5 to 2.0	1.5 to 2.0	2.0	1.2 to 2.0	1.5 to 2.1	1.5 to 2.2	2.0
April projection	1.9 to 2.0	1.6 to 2.0	1.7 to 2.0	2.0	1.8 to 2.3	1.5 to 2.1	1.5 to 2.2	2.0
Core PCE inflation[3]	1.7 to 2.0	1.6 to 2.0	1.6 to 2.0		1.7 to 2.0	1.4 to 2.1	1.5 to 2.2	
April projection	1.8 to 2.0	1.7 to 2.0	1.8 to 2.0		1.7 to 2.0	1.6 to 2.1	1.7 to 2.2	

NOTE: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The April projections were made in conjunction with the meeting of the Federal Open Market Committee on April 24-25, 2012.

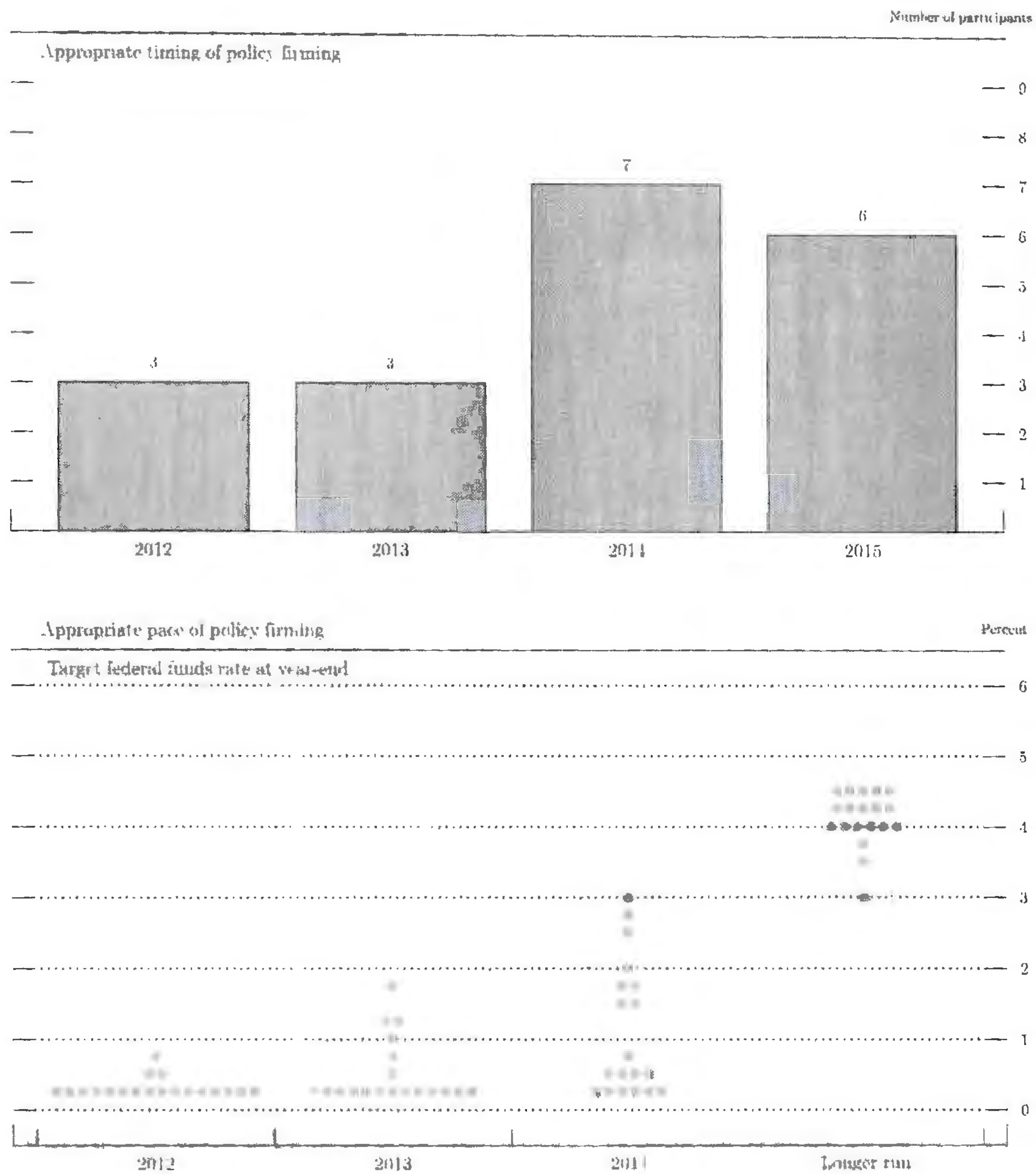
1. The central tendency excludes the three highest and three lowest projections for each variable in each year.
2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.
3. Longer-run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2012–14 and over the longer run



NOTE: Definitions of variables are in the notes to the projections table. The data for the actual values of the variables are annual.

Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy, June 2012



NOTE: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy, the first increase in the target federal funds rate from its current range of 0 to 1/4 percent will occur in the specified calendar year. In April 2012, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2012, 2013, 2014, and 2015 were, respectively, 3, 3, 7, and 4. In the lower panel, each shaded circle indicates the value (rounded to the nearest 1/4 percentage point) of an individual participant's judgment of the appropriate level of the target federal funds rate at the end of the specified calendar year or over the longer run.

Explanation of Economic Projections Charts

The charts show actual values and projections for three economic variables, based on FOMC participants' individual assessments of appropriate monetary policy:

- Change in Real Gross Domestic Product (GDP)—as measured from the fourth quarter of the previous year to the fourth quarter of the year indicated, with values plotted at the end of each year.
- Unemployment Rate—the average civilian unemployment rate in the fourth quarter of each year, with values plotted at the end of each year.
- PCE Inflation—as measured by the change in the personal consumption expenditures (PCE) price index from the fourth quarter of the previous year to the fourth quarter of the year indicated, with values plotted at the end of each year.

Information for these variables is shown for each year from 2007 to 2014, and for the longer run.

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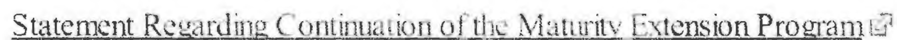
These assessments of the timing of the initial increase of the target federal funds rate and the path of the target federal funds rate are the ones that policymakers view as compatible with their individual economic projections.

Chairman; Elizabeth A. Duke; Dennis P. Lockhart; Sandra Pianalto; Jerome H. Powell; Sarah Bloom Raskin; Jeremy C. Stein; Daniel K. Tarullo; John C. Williams; and Janet L. Yellen. Voting against the action was Jeffrey M. Lacker, who opposed continuation of the maturity extension program.



Statement Regarding Continuation of the Maturity Extension Program

Related Information

Maturity Extension Program and Reinvestment Policy

Frequently Asked Questions: Maturity Extension Program and Reinvestment Policy

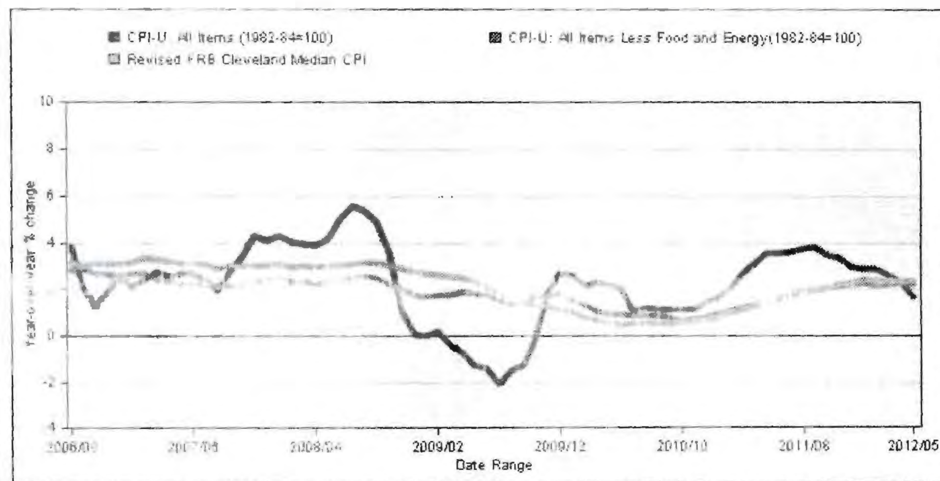
Current FAQs

June 20, 2012

What is the Federal Reserve's maturity extension program (referred to by some as "operation twist") and what is its purpose?

U.S. Inflation

Chart (Customize Chart) U.S. Inflation



Print View Download Data into Excel

Source(s): Bureau of Labor Statistics; Federal Reserve Bank of Cleveland

Note: All data are seasonally adjusted

Customize Chart

1. Choose one or more data series (up to maximum of 4 for charting)

CPI-U: All Items(1982-84=100)
CPI-U: All Items Less Food and Energy(1982-84=100)
Original FRB Cleveland Median CPI
Revised FRB Cleveland Median CPI
PPI: Finished Goods(1982=100)
PPI: Finished Goods less Food and Energy(1982=100)
PCE: Chain Price Index(2005=100)
PCE less Food & Energy Chain Price Index(2005=100)
CPI-U-Research: All items Dec 77=100
Original FRB Cleveland 16% trimmed mean CPI
Revised FRB Cleveland 16% trimmed mean CPI

Download the entire data series

2. Time Frame:

Start Date: 07/03/2006 End Date: 07/03/2012

3. Frequency:

4. Data Type:

Year-over-year growth

View Chart