## April 2010 Bluebook and Greenbook Tables and Charts

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## April 2010 Bluebook Tables and Charts ${ }^{\ddagger}$

## Recent Developments

## Chart 1 <br> Interest Rate Developments

Figure: Expected Federal Funds Rate

Line chart, 2010 to 2012. Unit is percent. There are two series, "April 22, 2010" and "March 15,2010 ." The series begin at about 0.25 and generally increase together ending at about 2.5.

Note. Mean is estimated from federal funds and Eurodollar futures and includes an allowance for term premiums and other adjustments
Source. CME Group.

## Figure: Mode of the Distribution of the Anticipated Federal Funds Rate

Line chart, 2010 to 2012. Unit is percent. There are two series, "April 22, 2010" and "March 15, 2010." April 22, 2010 begins in mid-2010 at about 0.25 and generally increases ending at about 1. March 15, 2010 begins in early 2010 at about 0.25 and generally increases ending at about 0.75 in mid-2012.

Note. Mode is estimated from distribution of federal funds rate implied by interest-rate caps and includes an allowance for term premiums and other adjustments.
Source. Bloomberg.

Figure: Distribution of expected quarter of first rate increase from the Desk's Dealer Survey

Bar chart, 2010:Q2 through 2012:Q2 or later. Unit is percent. The series begins at about 2 and increases to about 22 in $2010: Q 3$. It decreases to about 17 in Q4 then increases to about 22 in 2011:Q1. It generally decreases to about 3 in 2012:Q1 and increases ending at about 5 .

Note. Distribution is derived from the responses of 18 primary dealers to the Desk's Dealer Survey
Source. Federal Reserve Bank of New York.

## Figure: Nominal Treasury Yields

Line chat, 2007 to 2010. Unit is percent. Data are daily. The March 2010 FOMC meeting is marked by a vertical line. The end of the series is labeled April 22 . There are two series, "10-year" and "2-year." 10-year begins at about 4.75 and generally increases to about 5.25 in mid-2007. It generally decreases to about 3.5 in early 2008 then generally increases to about 4.5 in late 2008. It generally decreases to about 3 in early 2009 then generally increases to about 4 in mid-2009. It fluctuates but remains about constant to the end of the timeline. 2-year begins at about 4.5 and remains about constant until mid-2007. It generally decreases to about 1.25 in early 2008 then generally increases to about 2.5 in mid-2008. It generally decreases to about 1 in early 2009 and fluctuates but remains about constant to the end of the timeline.

Note. Par yields from a smoothed nominal off-the-run Treasury yield curve.
Source. Staff estimates.

Figure: Inflation Compensation

Line chart, 2007 to 2010. Unit is percent. Data are daily. 0 on the scale is marked by a horizontal line. The March 2010 FOMC meeting is marked by a vertical line. The end of the series is labeled April 22. There are two series, "Next 5 Years" Adjusted for the indexation-lag (carry effect), and " 5 to 10 year forward." Next 5 years begins at about 2.25 and fluctuates but remains about constant until mid-2008. It generally decreases to about negative 2 in late 2008 then generally increases ending at about 2.5 to 10 year forward begins at about 2.25 and fluctuates but remains about constant until late 2008. It generally increases to about 4.75 in late 2008 then generally decreases to about 2.5 in early 2009. It generally increases ending at about 3 .

Note. Estimates based on smoothed nominal and inflation-indexed Treasury yield curves.
Source. Barclays, PLC., and staff estimates.
Figure: 10-year Treasury implied volatility

Line chart, 2007 to 2010. Unit is percent. Data are daily. The March 2010 FOMC meeting is marked by a vertical line. The end of the series is labeled April 22 . The series begins at about 4 and generally increases to about 10 in early 2008. It generally decreases to about 6 in mid- 2008 then generally increases to about 10 in late 2008. It generally decreases to about 6 in early 2009 then generally increases to about 12 in mid-2009. It generally decreases ending at about 6 .

## [Box:] Determinants of the Ten-Year Swap Spread

## Figure: Top panel

Line chart, 1991 to 2008. There are two series, "10 year swap spread" (basis points) and "Average budget surplus/GDP over the next 10 years" (percentage). 10 year swap spread begins at about 50 and generally increases to about 120 in 2000. It generally decreases to about 30 in 004 then generally increases to about 70 in 2008. It generally decreases ending at about 15. Average budget surplus/GDP over the next 10 years begins at about negative 4 and generally increases to about 4 in 2002 . It generally decreases to about negative 2 in 2004 then generally increases to about 0 in 2007. It generally decreases ending at about negative 4.

Figure: Middle panel

Line chart, 1993 to 2009. Unit is basis points. There are two series, "10 year swap spread" and "fitted value." 10 year swap spread begins at about 35 and generally increases to about 120 in 2001. It generally decreases to about 40 in 2004 then generally increases to about 70 in 2008 . It generally decreases ending at about negative 1. Fitted value begins at about 18 and generally increases to about 100 in 2001 . It generally decreases to about 40 in 2003 then generally increases to about 70 in 2009. It generally decreases ending at about 18.

Note. 3/31/10 values: Actual equals negative 1 bp, fitted equals +18 bp .

## Figure: Bottom panel

Line chart, 1989 to 2009. Unit is basis points. There are four series, "United States," "United Kingdom," "Germany," and "Canada." United States begins at about 90 and generally decreases to about 20 in 1993. It generally increases to about 145 in 2000 then generally decreases to about 30 in 2005 . It generally increases to about 70 in 2007 then generally decreases ending at about 0. United Kingdom begins at about 30 in 1991 then generally increases to about 120 in 2001 . It generally decreases to about 20 in 2004 then generally increases to about 50 in 2008. It generally decreases ending at about negative 20 . Germany begins at about 10 and generally increases to about 40 in 1992. It generally decreases to about 0 in 1993 then generally increases to about 50 in 2001 . It generally decreases to about 10 in 2003 and generally increases to about 80 on 2009. It generally decreases ending at about 20. Canada begins at about 70 and generally increases to about 110 in 1990. It generally decreases to about 10 in 1997 then generally increases to about 30 in 2001. It generally decreases to about 20 in 2003 then generally increases to about 70 in 2007. It generally decreases to about negative 30 in 1009 then generally increases ending at about 25 .

## Chart 2 <br> Asset Market Developments

## Figure: Equity Prices

Line chart, 2008 to 2010. Unit is Jan. 26, 2010 = 100. Data are daily. The March 2010 FOMC meeting is marked by a vertical line. The end of the series is labeled April 22. There are two series, "S\&P 500" and "S\&P 500 Bank Index." S\&P 500 begins at about 120 and generally decreases to about 65 in early 009 . It generally increases ending at about 100. S\&P Bank Index begins at about 135 and generally increases to about 180 in late 2008 . It generally decreases to about 40 in early 2009 then generally increases ending at about 125.

Source. Bloomberg.
Figure: Implied volatility on S\&P 500 (VIX)

Line chart, 2002 to 2010. Unit is percent. Data are daily. The March 2010 FOMC meeting is marked by a vertical bar. The end of the series is labeled Aril 22 . The series begins at about 20 and increases to about 45 in mid-2002. It generally decreases to about 5 in early 2006. It generally increases to about 80 in late 2008 then generally decreases ending at about 15 .

Source. Chicago Board Options Exchange.

## Figure: Corporate bond spreads

Line chart, 2002 to 2010. Unit is basis points. Data are daily. The March 2010 FOMC meeting is marked by a vertical bar. The end of the series is labeled April 22. There are two series, "10-Year BBB (left scale)" and "10-year high-yield (right scale)." 10-year BBB begins at about 200 and generally increases to about 325 in 2002:Q4. It generally decreases to about 50 in 2005:Q1 and generally increases to about 650 in 2008:Q4. It generally decreases ending at about 200. 10-Year highyield begins at about 500 and generally increases to about 850 in 2002:Q2. It generally decreases to about 250 in 2005:Q1 then generally increases to about 1700 in 2009:Q1. It generally decreases ending at about 500 .

Note. Measured relative to a smoothed nominal off-the-run Treasury yield curve.

Figure: Secondary Loan Market Average Bid Price

Line chart, 2007 to 2010. Unit is percent of par. Data are daily. The March 2010 FOMC meeting is marked by a vertical line. The end of the series is labeled April 21. The series begins at about 98 and generally decreases to about 60 in late 2008. It generally increases ending at about 93 .

Source. LSTA/LPC Mark-to Market Pricing.

## Figure: Bond ratings changes of nonfinancial companies

Bar chart, 1989 to 2010. Unit is percent of outstandings. Data are annual rate. There are two series, "Upgrades" and "Downgrades." Approximate Values are: 1990: Upgrades 15, Downgrades 30. 1991: Upgrades 18, Downgrades 32. 1992: Upgrades 10, Downgrades 41. 1993: Upgrades 11, Downgrades 18. 1994: Upgrades 10, Downgrades 19. 1995: Upgrades 20, Downgrades 10. 1996: Upgrades 10, downgrades 10. 1997: Upgrades 9, Downgrades 9. 1998: Upgrades 19 , Downgrades 10. 1999: Upgrades 18, Downgrades 10. 2000: Upgrades 10, Downgrades 19. 2001: Upgrades 10, Downgrades 20. 2002: Upgrades 5, Downgrades 30. 2003: Upgrades 2, Downgrades 39. 2004: Upgrades 3, Downgrades 18. 2005: Upgrades 8, Downgrades 18. 2006: Upgrades 5, Downgrades 18. 2007 : Upgrades 6, Downgrades 10. 2008: Upgrades 2, Downgrades 19. 2009:H1 Upgrades 3, Downgrades 30. 2009:H2 Upgrades 9, Downgrades 10. 2010:Q1 Upgrades 18, Downgrades 2.

Source. Calculated using data from Moody's Investors Service.

## Figure: Nonfinancial bond default rate

Line chart, 1989 to 2010. Unit is percent of outstandings. Data are monthly. The end of the series is labeled March. The series begins at about . 5 and generally increases to about 5 in 1991. It generally decreases to about . 75 in 1993 and fluctuates but remains about constant until 1998. It generally increases to about 7 in 2001 then generally decreases to about .5 in 2004. It generally increases to about 2.5 in 2006 then generally decreases to about 0 in 2007 . It fluctuates but remains about constant until 2009. It generally increases to about 7.5 in 2010 then generally decreases ending at about . 25 .

Note. 6-month trailing defaults divided by beginning of period outstandings, at an annual rate.
Source. Moody's Investors Service.

## Chart 3

## Credit Market Developments

## Figure: Changes in selected components of debt of the nonfinancial business sector

Bar chart, 2007 to 2010. Unit is billions of dollars. Data are monthly rate. There are three series, "Bonds," "C\&l loans," and "Commercial Paper." Commercial paper and C\& loans are seasonally adjusted, bonds are not. There is also a "Sum" series presented as a line chart which sums the total of the other series. Approximate values are: 2007: Bonds 25, C\&l loans, 20, Sum 45. 2008:H1 Bonds 22, C\&l loans 18, sum 40. 2008:H2 Bonds 10, C\&l loans 5, Commercial Paper 5, Sum 20. 2009:Q1 Bonds 50, C\&l loans negative 20, Commercial paper negative 10, Sum 20. 2009:Q2 Bonds 35, C\&l loans 22, Commercial Paper 10, Sum 3. 2009:Q3 Bonds 25, C\&l loans negative 38, Commercial Paper negative 2, Sum negative 15. 2009:Q4 Bonds 26, C\&l loans negative 30, Commercial Paper negative 6, sum 0 . January 2010: Bonds 18, C\&l loans negative 30, Commercial Paper negative 6, Sum negative 18. February 2010: Bonds 30, C\&l loans negative 18, Commercial paper negative 1, Sum negative 13. March 2010: Bonds 58, C\&l loans negative 35, Commercial Paper 20, Sum 43.

Source. Bloomberg.

## Figure: Selected Interest Rates

Line chart, January 2009 to April 2010. Unit is percent. The March 2010 FOMC meeting is marked by a vertical bar. The end of the first series is labeled April 21. The end of the remaining series are labeled April 22. There are three series, "30-year fixed rate mortgage," "MBS Yield," and "On the run 10-year Treasury." 30-year fixed rate mortgage begins at about 5 and generally increases to about 5.25 in February 2009. It generally decreases to about 5 in March 2009 and remains about constant until June 2009. It generally increases to about 5.75 in June 2009 then generally decreases to about 4.75 in December 2010. It generally increases ending at about 5 . MBS Yield begins at about 4.25 and fluctuates but remains about constant until May 2009. It generally increases to about 5 in June 2009 then generally decreases to about 3.75 in December 2010. It generally increases ending at about 4.5. On the run 10-year treasury begins at about 2 and generally increases to about 4 in August 2009. It generally decreases to about 3 in December 2010 then generally increases ending at about 4.

Note. Data are business daily except for the 30-year fixed rate mortgage, which is weekly.
Source. Bloomberg.

## Figure: Gross ABS Issuance

Bar chart, 2006 to 2010. Unit is billions of dollars. Data are monthly rate. There are three series, "Credit card," "Auto," and "Student Loan." Approximate values are 2006: Credit Card 5, Auto 10, Student loan 5. 2007: Credit Card 8, Auto 7, Student Loan 5. 2008:H1 Credit Card 9, Auto 5, Student Loan 4. 2008:H2 Credit card 2, Auto 1, Student Loan 1. 2009:Q1 Credit Card 3, Auto 3, Student Loan 1. 2009:Q2 Credit Card 7, Auto 5, Student Loan 3. 2009:Q3 Credit Card 6, Auto 6, Student Loan 3. 2009:Q4 Credit Card 1, Auto 5, Student loan. January 2010: Auto 4, Student Loan 1. February 2010: Credit Card 1, Auto 5, Student Loan 2. March 2010: Credit Card 1, Auto 3, Student Loan 3. A (Issuance for April is through April 16, 2010.): Credit card .25, Student loan .75.

## Figure: Libor over OIS spreads

Line chart, September 2008 to March 2010. Unit is basis points. Data are daily. The March 2010 FOMC meeting is marked by a vertical line. The end of the series is labeled April 22. There are three series, " 6 month," " 3 month," and "1 month." 6 month begins at about 100 and generally increases to about 325 in October 2008 . It generally decreases to about 25 in December 2010 and remains about constant to the end of the timeline. 3 month begins at about 75 and generally increases to about 350 in October 2008. It generally decreases to about 0 in September 2010 and remains about constant to the end of the timeline. 1 month begins at about 50 and generally increases to about 350 in October 2008. It generally decreases to about 0 in January 2009 and fluctuates but remains about constant to the end of the timeline.

Source. British Banker's Association and Prebon.

## Figure: Spreads on 30-Day Commercial Paper

Line chart, 2007 to 2010. Unit is basis points. Data are daily. The March FOMC meeting is marked by a vertical line. The end of the series is labeled April 21 . There are two series, $A B C P$ and $A 2 / P 2$. ABCP begins at about 0 and generally increases to about 100 in mid-2007. It generally decreases to about 0 in late 2007 then generally increases to about 200. It generally decreases to about 25 in early 2008 then fluctuates but remains about constant until mid-2008 where it increases to about 400. It generally decreases ending at about 0 . A2/P2 begins at about 0 and generally increases to about 100 in mid- 2007 . It generally decreases to about 25 in late 2007 then generally increases to about 150. It generally decreases to about 50 in early 2008 then generally increases to about 600 in early 2009 . It generally decreases to about 0 in mid-2009 and remains about constant to the end of the timeline.

Note: The $A B C P$ spread is the $A A A B C P$ rate minus the $A A$ nonfinancial rate. The $A 2 / P 2$ spread is the $A 2 / P 2$ nonfinancial rate minus the $A A$ nonfinancial rate.
Source. Depository Trust and Clearing Corporation.

## Figure: Fails to Deliver

Line chart, January 2007 to April 2010. Unit is billions of dollars. Data are weekly (Wed.). The March 2010 FOMC meeting is marked by a vertical line. The end of the series is labeled April 7. There are three series, "Treasury," "Agency," and "MBS." Treasury begins at about 250 and decreases to about 0 in February 2007. It remains about constant until November 2007 where it generally increases to about 250. It generally increases to about 1100 in April 2008 then generally decreases to about 0 in October 2008. It generally increases to about 2750 in November 2008 then generally decreases to about 0 in March 2009 . It fluctuates but remains about constant to the end of the timeline. Agency begins at about 0 and remains about constant to the end of the timeline. MBS begins at about 0 and fluctuates but remains about constant until September 2009 when it generally increases to about 50. It fluctuates but generally increases to about 750 in February 2010 then generally decreases ending at about 250.

Source. FR2004.

## [Box:] Balance Sheet Developments during the Intermeeting Period

Federal Reserve Balance Sheet
Billions of dollars

|  | Change since last FOMC | $\begin{aligned} & \text { Current } \\ & (04 / 21 / 2010) \end{aligned}$ | Maximum level | Date of maximum leve |
| :---: | :---: | :---: | :---: | :---: |
| Total assets | 33 | 2,341 | 2,343 | 04/14/10 |
| Selected assets: |  |  |  |  |
| Liquidity programs for financial firms | -9 | 7 | 1,247 | 11/06/08 |
| Primary, secondary, and seasonal credit | -5 | 7 | 114 | 10/28/08 |
| Term auction credit (TAF) | -3 | 0 | 493 | 03/11/09 |
| Foreign central bank liquidity swaps | 0 | 0 | 586 | 12/04/08 |
| Primary Dealer Credit Facility (PDCF) | 0 | 0 | 156 | 09/29/08 |
| Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) | 0 | 0 | 152 | 10/01/08 |
| Lending through other credit facilities | -1 | 55 | 351 | 01/23/09 |
| Net portfolio holdings of Commercial Paper Funding Facility LLC (CPFF) | +0 | 8 | 351 | 01/23/09 |
| Term Asset-Backed Securities Loan Facility (TALF) | -1 | 47 | 49 | 03/11/10 |
| Support for specific institutions | +0 | 115 | 118 | 04/02/09 |
| Credit extended to AIG, net | -0 | 25 | 91 | 10/27/08 |
|  |  |  |  |  |


| Preferred interests in AIA Aurora LLC and ALICO Holdings LLC | +0 | 25 | 25 | 04/21/10 |
| :---: | :---: | :---: | :---: | :---: |
| Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC | +0 | 65 | 75 | 12/30/08 |
| Securities held outright* | 39 | 2,048 | 2,048 | 04/20/10 |
| U.S. Treasury securities | +0 | 777 | 791 | 08/14/07 |
| Agency securities | 1 | 169 | 169 | 03/11/10 |
| Agency mortgage-backed securities** | 38 | 1,102 | 1,102 | 04/20/10 |
| Memo: Term Securities Lending Facility (TSLF) | 0 | 0 | 236 | 10/01/08 |
| Total liabilities | 33 | 2,287 | 2,288 | 04/14/10 |
| Selected liabilities: |  |  |  |  |
| Federal Reserve notes in circulation | 2 | 895 | 896 | 04/07/10 |
| Reserve balances of depository institutions | -49 | 1,059 | 1,249 | 02/24/10 |
| U.S. Treasury, general account | -39 | 62 | 187 | 01/01/10 |
| U.S. Treasury, supplementary financing account | 125 | 200 | 559 | 10/22/08 |
| Other deposits | -4 | +0 | 81 | 03/12/10 |
| Total capital | -0 | 54 | 55 | 04/20/10 |

$+0(-0)$ denotes positive (negative) value rounded to zero. Return to table

* Par value. Return to table
 net. Total MBS purchases are about $\$ 1.25$ trillion. Return to table


## Chart 4

## International Financial Indicators

## Figure: Stock Price Indexes: Industrial countries

Line chart, 2007 to March 11, 2010. Unit is December 31, 2006 equals 100. Data are daily. The March 2010 FOMC meeting is marked by a vertical line. There are three series, "UK (FTSE 350)," "Euro Area (DJ Euro)," and "Japan (Topix)." UK (FTSE 350) begins at about 100 and fluctuates but generally increases to about 108 in mid-2007. It generally decreases to about 98 in late 2007 then generally increases to about 108 in early 2010. It generally decreases to about 85 in early 2008 then generally increases to about 100 in mid-2008. It fluctuates but generally decreases to about 60 in late 2008 then generally increases to about 72 . It generally decreases to about 55 in early 2009 then fluctuates but generally increases ending at about 90. Euro Area (DJ Euro) begins at about 100 and generally increases to about 110 in mid-2007. It generally decreases to about to about 98 in late 2007 then generally increases to about 95 . It fluctuates but generally decreases to about 45 in early 2009. It fluctuates but generally increases ending at about 70. Japan (Topix) begins at about 100 and fluctuates but generally increases to about 105 in late 2007. It fluctuates but generally decreases to about 78 in early 2008. It generally increases to about 85 in mid- 2008 then generally decreases to about 40 in early 2009. It fluctuates but generally increases ending at about 60 .

Source. Bloomberg.

## Figure: Stock Price Indexes: Emerging Market Economies

Line chart, 2007 to March 11, 2010. Unit is December 31, 2006 equals 100. Data are daily. The March 2010 FOMC meeting is marked by a vertical line. There are three series, "Brazil (Bovespa)," "Korea (KOSPI)," and "Mexico (Bolsa)." Brazil (Bovespa) begins at about 100 and fluctuates but generally increases to about 160 in early 2008. It fluctuates but generally decreases to about 75 in late 2008 then fluctuates but generally increases ending at about 150. Korea (KOSPI) begins at about 100 and fluctuates but generally increases to about 145 in late 2007. It generally decreases to about 115 in early 2008 then generally increases to about 130 in mid2008. It fluctuates but generally decreases to about 70 in late 2008 then fluctuates but generally increases ending at about 125 . Mexico (Bolsa) begins at about 100 and generally increases to about 125 in mid-2007. It fluctuates but generally decreases to about 90 in early 2008. It generally increases to about 125 in mid- 2008 then generally decreases to about 60 in early 2009. It fluctuates but generally increases ending at about 125.

Source. Bloomberg.

## Figure: Nominal 10-year government bond yields

Line chart, 2007 to March 11, 2010. Unit is percent. Data are daily. The March 2010 FOMC meeting is marked by a vertical line. There are three series, "UK (Left scale)," "Germany (left scale)," and "Japan (right scale)." UK begins at about 4.75 and generally increases to about 5.5 in late 2007 . It generally decreases to about 4.4 in early 2008 then generally increases to about 5.25 in mid-2008. It generally decreases to about 3.0 in early 2009 then fluctuates but generally increases ending at about 4.0. Germany begins at about 4.0 and generally increases to about 4.5 in mid-2007. It generally decreases to about 3.6 in early 2008 then generally increases to about 4.5 in mid-2008. It generally decreases to about 3.0 in early 2009 then generally increases to about 3.1 in mid-2009. It generally decreases ending at about 3. Japan Begins at about 1.6 and generally decreases to about 1.5 in early 2007. It generally increases to about 2.0 in mid- 2007 then generally decreases to about 1.25 in early 2008. It generally increases to about 1.8 in mid-2008 then generally decreases to about 1.2 in late 2008. It generally increases to about 1.5 in early 2009 then fluctuates but generally decreases ending at about 1.4.

Figure: Nominal trade-weighted dollar indexes

Line chart, 2007 to March 11, 2010. Unit is December 31, 2006 equals 100. Data are daily. The March 2010 FOMC meeting is marked with a vertical line. There are three series, "Broad," "Major currencies," and "other important trading partners." Broad begins at about 100 and fluctuates but generally decreases to about 90 in mid2008. It fluctuates but generally increases to about 107 in early 2009. It fluctuates but generally decreases ending at about 96 . Major currencies begins at about 100 and fluctuates but generally decreases to about 85 in early 2008. It fluctuates but generally increases to about 105 in early 2009 . It generally decreases to about 87 in early 2009 then generally increases ending at about 94. Other important trading partners begins at about 100 and generally decreases to about 90 in mid-2008. It generally increases to about 110 in early 2009 then fluctuates but generally decreases ending at about 98 .

Source. Federal Reserve.

## Chart 5

## Debt and Money

|  | Total | Business | Household | Government |
| :---: | :---: | :---: | :---: | :---: |
| 2008 | 6.0 | 5.5 | 0.1 | 17.7 |
| 2009 | 3.0 | -2.7 | -1.8 | 18.0 |
| Q1 | 3.8 | -0.7 | -1.3 | 17.9 |
| Q2 | 4.1 | -3.2 | -1.7 | 22.1 |
| Q3 | 2.6 | -3.3 | -2.7 | 17.0 |
| Q4 | 1.4 | -3.6 | -1.4 | 10.8 |
| 2010 |  |  |  |  |
| Q1p | 5.1 | 1.6 | 0.4 | 15.1 |

Source. Flow of Funds.
p Projected. Return to table

## Figure: Growth of debt of household sector

Line chart, 1991 to 2009. Unit is percent. Data are quarterly. s.a.a.r. NBER Peak is marked by a vertical line. 0 on the scale is marked by a horizontal line. The end of the series is labeled Q1 projected. There are two series, "Consumer Credit" and "Home Mortgage." Consumer credit begins at about 0 and generally increases to about 16 in mid-1994. It generally decreases to about 3 in early 1998 then fluctuates but generally increases to about 11 in early 2002 . It fluctuates but generally decreases to about 3 in early 2006 then generally increases to about 7 in early 2007. It generally decreases to about negative 7 in late 2009 then generally increases ending at about negative 2 . Home Mortgage begins at about 8 and fluctuates but generally increases to about 16 in early 2003 . It fluctuates but generally decreases ending at about 1.
 2007-June 2009. A vertical line indicates the NBER Peak in December 2007.

Source. Flow of Funds, Federal Reserve G. 19 release.

## Figure: Bank Loans

Line chart, January 2007 to March 2010. Unit is January 2008 equals 100. Data are monthly average. The data have been adjusted to remove the effects of consolidations of assets under FAS 166 and FAS 167. NBER Peak is marked by a vertical bar. The end of the series is labelled March. The series begins at about 91 and generally increases to about 104 in November 2008. It generally decreases ending at about 93.

Source. Federal Reserve.

## Figure: Change in standards and demand for bank loans

Line chart, 1991 to 2009. Unit is percent. Data are quarterly. 0 on the scale is marked by a horizontal line. The end of the series is labeled Q1. There are two series, "Aggregate standards" and "Aggregate demand." Aggregate standards begins at about 30 and generally decreases to about negative 20 in mid-1993. It generally increases to about 35 in late 1998 then generally decreases to about 5 in early 2000. It generally increases to about 40 in late 2001 then generally decreases to about negative 20 in late 2006. It generally increases to about 90 in late 2008 then generally decreases ending at about negative 10 . Aggregate demand begins at about negative 20 and fluctuates but generally increases to about 40 in early 1998. It generally decreases to about negative 40 in early 2001 then generally increases to about 20 in early 2005. It fluctuates but generally decreases to about negative 60 in late 2008 then generally increases ending at about negative 10 .

 July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009. A vertical line indicates the NBER Peak in December 2007.

Source. Senior Loan Officer Opinion Survey.
Figure: Growth of M2

Bar chart, 2007 to 2010. Unit is percent. Data are s.a.a.r. March 2010 is labeled Preliminary. The series begins at 6 and increases to 12 in $2009: Q 1$. It decreases to 2 in 2009:Q3 then increases to 4 in 2009:Q4. It decreases to negative 8 in January 2010 then increases to 8 in February 2010. It decreases to negative 4 in March 2010.

Source. Federal Reserve.

Growth of M2 and its components
Percent, s.a.a.r.

|  | M2 | Liquid deposits | Small time deposits | RMMF | Curr. | Memo: <br> Monetary base |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2008 | 8.5 | 6.9 | 12.3 | 13.4 | 5.8 | 70.3 |
| 2009 | 5.1 | 17.2 | -15.9 | -21.6 | 7.0 | 41.6 |
| H1 | 7.4 | 16.0 | -6.0 | -15.7 | 10.8 | 46.3 |
| H2 | 2.8 | 17.0 | -26.5 | -29.9 | 2.9 | 29.9 |
| 2010 |  |  |  |  |  |  |
| Jan | -8.2 | -1.6 | -28.8 | -31.3 | -1.4 | -18.4 |
| Feb | 7.8 | 17.5 | -18.4 | -23.6 | 8.5 | 74.0 |
| Mar p | -4.0 | 3.9 | -21.8 | -47.8 | 6.1 | -19.3 |

Source. Federal Reserve.
p Preliminary. Return to table

## [Box:] Effects of FAS 166/167 on Banks' Balance Sheets

Effects of FAS 166/167 on Selected Bank Loan Categories

| Loan Category | Effects of <br> FAS 166/167 <br> (\$billions) | Memo: <br> March 31, 2010 <br> (\$billions) |
| :---: | ---: | ---: |
| Total loans and leases | 451 | 6,958 |
| Credit cards and related plans | 322 | 662 |
| Other consumer loans | 41 | 536 |
| Commercial and industrial loans | 33 | 1,267 |
| Residential real estate loans* | 27 | 2,122 |
| All other loans | 28 | 2,371 |
| Allowance for loan and lease losses | 36 | 236 |

[^0]Source. Federal Reserve.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## April 2010 Bluebook Tables and Charts ${ }^{\ddagger}$

## Monetary Policy Strategies

## Chart 6

Equilibrium Real Federal Funds Rate

## Figure: Short-Run Estimates with Confidence Intervals

Line chart, 1990 to 2010. Unit is percent. There are five series, "The actual real funds rate based on lagged core inflation," "Range of four model-based Estimates," "70 percent confidence interval," "90 percent confidence interval," and "Greenbook-consistent measure (FRB/US)." The actual real funds rate based on lagged core inflation begins at about 4.25 and generally decreases to about 0 in early 1992. It generally increases to about 4 in mid- 2000 then generally decreases to about negative 2 in late 2008. It generally increases ending at about negative 1. Range of four model-based estimates is presented as a range. It begins at between about 1 and 4 and generally increases to between about 2 and 5 in early 2000. It generally decreases to between about negative 2 and negative 6 in early 2009 then generally increases ending at between about negative 2 and 1.70 percent confidence interval Is presented as a range. It begins at between about 0 and 4 . It generally increases to between about 1 and 4 in early 2000. It generally decrease to between about negative 1 and 1 in mid-2003. It generally increases to between about negative 1 and 3 in early 2006 then generally decreases to between about negative 2 and negative 6 in mid-2009. It generally increases ending between about negative 2 and 1.90 percent confidence interval is presented as a range. It begins at between about negative 1 and 5 . It generally increases to between about 0 and 6 in early 2000. It generally decreases to between about 0 and negative 7 in mid-2009 then generally increases to between about 2 and negative 3 . Greenbookconsistent measure (FRB/US) begins at about 4 in mid-1997 then generally increases to about 5 in early 2000. It generally decreases to about 0 in early 2002 and remains about constant until early 2003. It generally increases to about 3 in early 2007 then generally decreases to about negative 4 in early 2009 . It generally increases ending at about negative 1.5.

Short-Run and Medium-Run Measures

|  | rrent Estim | Current Estimate as of Previous Bluebook | Previous Estimate |
| :---: | :---: | :---: | :---: |
| Short-Run Measures |  |  |  |
| Single-equation model | -1.5 | -1.8 | -1.6 |
| Small structural model | -0.7 | -1.0 | -1.4 |
| EDO model | 1.2 | 1.1 | 0.0 |
| FRB/US model | -1.3 | -1.6 | -1.7 |
| Confidence intervals for four model-based estimates |  |  |  |
| 70 percent confidence interval | -2.4 to 1.3 |  |  |
| 90 percent confidence interval | -3.4 to 2.5 |  |  |
| Greenbook-consistent measures |  |  |  |
| EDO model | -3.1 | -3.2 | -3.8 |
| FRB/US model | -1.4 | -1.5 | -1.9 |
| Medium-Run Measures |  |  |  |
| Single-equation model | 1.1 | 1.1 | 1.1 |
| Small structural model | 1.8 | 1.7 | 1.7 |
| Confidence intervals for two model-based estimates |  |  |  |
| 70 percent confidence interval | 0.5 to 2.4 |  |  |
| 90 percent confidence interval | -0.3 to 2.9 |  |  |
| TIPS-based factor model | 2.0 |  | 2.0 |
| Memo |  |  |  |
| Actual real federal funds rate | -1.2 |  | -1.2 |


 Bluebook", because the estimates from that column would have been the same as the last column since the previous two Bluebooks fell in the same quarter.

Chart 7

## Constrained vs. Unconstrained Monetary Policy (2 Percent Inflation Goal)

Figure: Nominal Federal Funds Rate

Line chart, 2010 to 2014. Unit is percent. There are three series, "Current Bluebook: Constrained," "Current Bluebook Unconstrained," and "Previous Bluebook, unconstrained." Current Bluebook: Constrained starts at about 0 and remains about constant until mid-2013. It generally increases ending at about 3. Current and Previous Bluebook: Unconstrained begin at about 0 and generally decrease together to about negative 4 in early 2011. They generally increase together ending at about 4.

## Figure: Real Federal Funds Rate

Line chart, 2010 to 2014. Unit is percent. There are three series, "Current Bluebook: Constrained," "Current Bluebook Unconstrained," and "Previous Bluebook, unconstrained." Current Bluebook: Constrained starts at about negative 1.5 and generally increase to about negative 1 in late 2010 . It remains about constant until early 2013 where it generally increase ending at about 1. Current and Previous Bluebook: Unconstrained begin at about negative 1 and generally decrease together to about negative 5 in early 2011. They generally increase together ending at about 2.

Figure: Civilian Unemployment Rate

Line chart, 2010 to 2014. Unit is percent. There are three series, "Current Bluebook: Constrained," "Current Bluebook Unconstrained," and "Previous Bluebook, unconstrained." Current Bluebook: Constrained begins at about 10 and generally decreases to about 4.25 in late 2013. It remains about constant to the end of the timeline. Current and Previous BlueBook Unconstrained begin at about 10 and generally decrease together to about 4.25 in mid-2013. They generally increase together ending at about 5.

## Figure: Core PCE Inflation

Line chart, 2010 to 2014. Unit is percent, four-quarter average. There are three series, "Current Bluebook: Constrained," "Current Bluebook Unconstrained," and "Previous Bluebook, unconstrained." Current Bluebook: Constrained begins at about 1.5 and generally decreases to about 1.0 in early 29011 . It generally increases ending at about 2.0. Current and Previous BlueBook Unconstrained begin at about 1.5 and generally decrease together to about 1.25 in late 2010 . They generally increase together ending at about 2.0.

## Chart 8

The Policy Outlook in an Uncertain Environment

Figure: FRB/US Model Simulations of Estimated Outcome-Based Rule

Line chart, 2010 to 2014. Unit is percent. There are three series, "Current Bluebook," "Previous Bluebook," and "Greenbook assumption." The three series begin at about 0 and remain about constant until late 2011. Current and Previous Greenbook generally increase together ending at about 4 and Greenbook assumption generally increases ending at about 3.75 . 70 percent confidence interval is represented by a dark shaded range that begins at about 0 and generally increases ending at between about 2.25 and 5.75 . 90 percent confidence interval is represented by a light shaded range that begins at about 0 and generally increases ending between about 1.25 and 6.75.

Figure: Information from Financial Markets

Line chart, 2010 to 2014. Unit is percent. There are two series, "Current Bluebook" and "Previous Bluebook." Both series begin at about 0 and generally increase together ending at about 3.75. 70 percent confidence interval is represented by a dark shaded range that begins at about 0 and generally increases ending at between about 1.75 and 5.25 . 90 percent confidence interval is represented by a light shaded range that begins at about 0 and generally increases ending between about 1 and 6.5.

Near-Term Prescriptions of Simple Policy Rules

|  | Constrained Policy |  |  | Unconstrained Policy |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 1 0 Q 2}$ | $\mathbf{2 0 1 0 Q 3}$ | $\mathbf{2 0 1 0 Q 2}$ | $\mathbf{2 0 1 0 Q 3}$ |  |
| Taylor (1993) rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 0 . 7 8}$ | $\mathbf{- 0 . 7 1}$ |  |
| Previous Bluebook | 0.13 | 0.13 | -0.77 | -0.68 |  |
| Taylor (1999) rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 4 . 2 3}$ | $\mathbf{- 4 . 0 1}$ |  |
| Previous Bluebook | 0.13 | 0.13 | $\mathbf{- 4 . 2 9}$ | $\mathbf{- 4 . 0 6}$ |  |
| Estimated outcome-based rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 0 . 4 7}$ | $\mathbf{- 1 . 1 3}$ |  |


| Previous Bluebook | 0.13 | 0.13 | -0.48 | -1.15 |
| :---: | :---: | :---: | :---: | :---: |
| Estimated forecast-based rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 0 . 4 6}$ | $\mathbf{- 1 . 0 4}$ |
| Previous Bluebook | 0.13 | 0.13 | -0.45 | -1.04 |
| First-difference rule | $\mathbf{0 . 2 5}$ | $\mathbf{0 . 4 3}$ | $\mathbf{0 . 2 5}$ | $\mathbf{0 . 4 3}$ |
| Previous Bluebook | 0.27 | 0.46 | 0.27 | 0.46 |

Memo

|  | $\mathbf{2 0 1 0 Q 2}$ | $\mathbf{2 0 1 0 Q 3}$ |
| :--- | :---: | :---: |
| Greenbook assumption | 0.13 | 0.13 |
| Fed funds futures | 0.20 | 0.23 |
| Median expectation of primary dealers | 0.13 | 0.13 |
| Blue Chip forecast (April 1, 2010) | 0.20 | 0.20 |

 information.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## April 2010 Bluebook Tables and Charts

## Policy Alternatives

Table 1: Overview of Alternatives for the April 28 FOMC Statement

| March Statement |  | April Alternatives |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | A | B | C |
| Economic Activity |  |  |  |  |
| Recent Developments | has continued to strengthen | has continued to strengthen | has continued to strengthen | has continued to strengthen |
| Labor <br> Market | is stabilizing; high unemployment; employers remain reluctant to add to payrolls | is showing signs of improving; <br> high unemployment; employers remain reluctant to add to payrolls | is beginning to improve; high unemployment; employers remain reluctant to add to payrolls | is improving |
| Outlook | recovery likely to be moderate for a time; gradual return to higher levels of resource utilization | --- | recovery likely to be moderate for a time; gradual return to higher levels of resource utilization | recovery under way; gradual return to higher levels of resource utilization |
| Inflation |  |  |  |  |
| Recent Developments | substantial slack is restraining cost pressures; stable inflation expectations | stable inflation expectations but recent data suggest inflation is trending down in response to slack | substantial slack is restraining cost pressures; stable inflation expectations | energy prices have risen on balance in recent months but inflation remains subdued |
| Outlook | likely to be subdued for some time | likely to be quite subdued for some time | likely to be subdued for some time | policy adjustments will ensure inflation outcomes consistent with price stability |
| Federal Funds Rate Target |  |  |  |  |
| Intermeeting Period | 0 to $1 / 4$ percent | 0 to $1 / 4$ percent | 0 to $1 / 4$ percent | 0 to $1 / 4$ percent |
| Forward Guidance | economic conditions are likely to warrant exceptionally low levels for an extended period | anticipate maintaining the 0 to $1 / 4$ percent target range for an extended period--until economic conditions such as ... warrant a less accommodative policy | economic conditions are likely to warrant exceptionally low levels for an extended period | economic conditions are likely to warrant exceptionally low levels for some time |
| Reinvestment and Sales of SOMA Assets |  |  |  |  |
| Approach |  | [do not reinvest proceeds of agency debt and MBS but continue to roll over maturing Treasuries] | [do not reinvest proceeds of agency debt and MBS but continue to roll over maturing Treasuries] OR [no reinvestment] | no reinvestment; "Committee anticipates that it will soon begin gradual sales of agency debt and MBS" |

## April 2010 Bluebook Tables and Charts

Debt, Bank Credit, and Money Forecasts
Growth Rates for M2 and Monetary Base

|  | M2 Growth* | Monetary Base Growth** |
| :---: | :---: | :---: |
| Monthly Growth Rates |  |  |
| Oct. 09 | 4.6 | 90.4 |
| Nov. 09 | 4.9 | 51.0 |
| Dec. 09 | 3.0 | -0.7 |
| Jan. 10 | -8.2 | -18.4 |
| Feb. 10 | 7.8 | 74.0 |
| Mar. 10 | -4.0 | -19.3 |
| Apr. 10 | -2.6 | -13.2 |
| May 10 | 3.0 | 34.0 |
| Jun. 10 | 3.0 | -0.8 |
| Quarterly Growth Rates |  |  |
| 2009 Q4 | 3.9 | 62.1 |
| 2010 Q1 | -0.2 | 13.3 |
| 2010 Q2 | 0.1 | 6.6 |
| 2010 Q3 | 3.7 | 4.5 |
| 2010 Q4 | 4.7 | 1.4 |
| Annual Growth Rates |  |  |
| 2008 | 8.5 | 70.3 |
| 2009 | 5.1 | 41.6 |
| 2010 | 2.1 | 6.6 |
| 2011 | 4.2 | -5.0 |

[^1]** Seasonally adjusted, break adjusted. Forecasts are consistent with Greenbook baseline scenario in which the Federal Reserve reduces the size of its balance sheet only gradually over time by not investing the proceeds of maturing securities or prepayments on agency mortgage-backed securities. Return to table

## April 2010 Bluebook Tables and Charts

## Appendix A: Measures of the Equilibrium Real Rate

| Measure | Description |
| :---: | :--- |
| Single- <br> equation <br> Model | The measure of the equilibrium real rate in the single-equation model is based on an estimated aggregate-demand relationship between the current value of the <br> output gap and its lagged values as well as the lagged values of the real federal funds rate. |
| Small <br> Structural <br> Model | The small-scale model of the economy consists of equations for six variables: the output gap, the equity premium, the federal budget surplus, the trend growth rate <br> of output, the real bond yield, and the real federal funds rate. |
| EDO Model | Estimates of the equilibrium real rate using EDO--an estimated dynamic-stochastic-general-equilibrium (DSGE) model of the U.S. economy--depend on data for <br> major spending categories, price and wages, and the federal funds rate as well as the model's structure and estimate of the output gap. |
| FRB/US | Estimates of the equilibrium real rate using FRB/US--the staff's large-scale econometric model of the U.S. economy--depend on a very broad array of economic <br> factors, some of which take the form of projected values of the model's exogenous variables. |
| Greenbook- <br> consistent | Two measures are presented--based on the FRB/US and the EDO models. Both models are matched to the extended Greenbook forecast. Model simulations <br> determine the value of the real federal funds rate that closes the output gap conditional on the extended baseline. |
| TIPS-based |  |
| Factor |  |
| Model |  | | Yields on TIPS (Treasury Inflation-Protected Securities) reflect investors' expectations of the future path of real interest rates. The TIPS-based measure of the |
| :--- |
| equilibrium real rate is constructed using the seven-year-ahead instantaneous real forward rate derived from TIPS yields as of the Bluebook publication date. This |
| forward rate is adjusted to remove estimates of the term and liquidity premiums based on a three-factor arbitrage-free term-structure model applied to TIPS yields, |
| nominal yields, and inflation. |


|  | Actual real <br> federal funds rate <br> (current value) | Greenbook-consistent <br> FRB/US-based measure of <br> the equilibrium real funds <br> rate (current value) | Average actual <br> real funds rate <br> (twelve-quarter <br> average) |
| :--- | ---: | ---: | ---: | ---: |
| Lagged core inflation | -1.2 | -1.4 | -0.5 |
| Lagged headline inflation | -1.8 | -1.7 | -0.8 |
| Projected headline inflation | -1.1 | -1.6 | -0.6 |

## April 2010 Greenbook Part 1 Tables and Charts ${ }^{ \pm}$

## Domestic Developments

## Key Background Factors Underlying the Baseline Staff Projection

Figure: Federal Funds Rate

Line chart, 2006 to 2011. Unit is percent. Data are quarterly average. A shaded bar marks the projection period 2010:Q2 to 2011:Q4. There are four series, "Current Greenbook," "March Greenbook," "Market, Expected," and "Market, Mode." Current and March Greenbook begin at about 4.5 and generally increase together to about 5.25 in mid-2006. They remain about constant until mid-2007 then generally decrease together to about 25 in early 2009. They remain about constant to the end of the timeline. Market, Expected begins at about .25 in mid-2010 and generally increases ending at about 1.5. Market, mode begins at about . 25 and generally increases ending at about . 75 .

## Figure: Long-Term Interest Rates

Line chart, 2006 to 2011. Unit is percent. Data are quarterly average. A shaded bar marks the projection period 2010:Q2 to 2011:Q4. There are three series, "BBB corporate yield," "Conforming mortgage rate," and "10-year treasury yield." BBB Corporate yield begins at about 6 and fluctuates but generally increases to about 9.5 in late 20089. It generally decreases to about 6 in early 2010 and remains about constant to the end of the timeline. Conforming mortgage rate begins at about 6.25 and fluctuates between about 6 and 6.25 until mid-2008. It generally decreases to about 5 in late 2009 then generally increases ending at about 5.75 . 10-year treasury yield begins at about 4.75 and generally decreases to about 3 in early 2009. It generally increases ending at about 4.5.

## Figure: Equity Prices

Line chart, 2006 to 2011. Unit is 2006:Q1 equals 100, ratio scale. Data are quarter-end. A shaded bar marks the projection period 2010:Q2 to 2011:Q4. There is one series, "Dow Jones Total Stock Market Index." It begins at about 100 and generally increases to about 118 in late 2007 . It generally decreases to about 62 in early 2009 then generally increases ending at about 120.

## Figure: House Prices

Line chart, 2006 to 2011. Unit is 2006:Q1 equals 100, ration scale. Data are quarterly. A shaded bar marks the projection period 2010:Q1 to 2011:Q4. There is one series, "Loan Performance Index." It begins at about 100 and generally decreases to about 68 in early 2009. It generally increases to about 72 in mid-2009 then generally decreases to about 70 in mid-2010. It remains about constant to the end of the timeline.

## Figure: Crude Oil Prices

Line chart, 2006 to 2011. Unit is dollars per barrel. Data are quarterly average. A shaded bar marks the projection period 2010:Q2 to 2011:Q4. There is one series, "West Texas Intermediate." It begins at about 61 and generally increases to about 70 in mid-2006. It generally decreases to about 60 in early 2007 then generally increases to about 120 in early 2008. It generally decreases to about 40 in early 2009 then generally increases ending at about 90 .

## Figure: Broad Real Dollar

Line Chart, 2006 to 2011. Unit is 2006:Q1 equals 100. Data are quarterly average. A shaded bar marks the projection period 2010:Q2 to 2011:Q4. The series begins at about 100 and generally decreases to about 86 in mid-2008. It generally increases to about 98 in early 2009. It generally increases ending at about 85 .

Note: In each panel, shading represents the projection period, which begins in 2010:Q2, except where noted. In the upperleft panel that reports the federal funds rate, the black dotted line is not apparent because the paths of the federal funds rate in the March and the current Greenbooks are the same.

Summary of the Near-Term Outlook
(Percent change at annual rate except as noted)

| Measure | 2010:Q1 |  | 2010:Q2 |  |
| :---: | :---: | :---: | :---: | :---: |


| Real GDP | $\mathbf{2 . 2}$ | $\mathbf{2 . 9}$ | $\mathbf{3 . 6}$ | $\mathbf{3 . 5}$ |
| :---: | ---: | ---: | ---: | ---: |
| Private domestic final purchases | 2.0 | 3.4 | 3.8 | 3.6 |
| Personal consumption expenditures | 2.4 | 3.6 | 2.4 | 2.1 |
| Residential investment | -17.4 | -15.7 | 18.3 | 22.3 |
| Nonresidential structures | -8.6 | -10.6 | -4.6 | .4 |
| Equipment and software | 11.8 | 17.0 | 18.5 | 15.8 |
| Government outlays for consumption and investment | .2 | -2.2 | 3.9 | 3.0 |
|  | $C o n t r i b u t i o n ~ t o ~ g r o w t h ~(p e r c e n t a g e ~ p o i n t s) ~$ |  |  |  |
| Inventory investment | .6 | .7 | -.3 | -.2 |
| Net exports | -.1 | -.2 | .0 | .1 |

## Projections of Real GDP

(Percent change at annual rate from end of preceding period except as noted)

| Measure | 2010 |  | 2011 |
| :---: | :---: | :---: | :---: |
|  | H1 | H2 |  |
|  |  |  |  |
| Real GDP | 3.2 | 3.7 | 4.4 |
| Previous Greenbook | 2.9 | 3.7 | 4.4 |
| Final sales | 3.0 | 3.1 | 4.1 |
| Previous Greenbook | 2.8 | 3.0 | 4.0 |
| Personal consumption expenditures | 2.8 | 2.8 | 3.5 |
| Previous Greenbook | 2.4 | 2.8 | 3.5 |
| Residential investment | 1.5 | 3.1 | 19.8 |
| Previous Greenbook | -1.1 | 3.9 | 20.4 |
| Nonresidential structures | -5.3 | . 3 | 1.1 |
| Previous Greenbook | -6.6 | 1.3 | . 1 |
| Equipment and software | 16.4 | 13.9 | 13.2 |
| Previous Greenbook | 15.1 | 12.8 | 13.7 |
| Government purchases | . 4 | 1.3 | . 7 |
| Previous Greenbook | 2.0 | 1.1 | . 9 |
| Exports | 8.7 | 9.4 | 9.1 |
| Previous Greenbook | 9.2 | 9.0 | 8.7 |
| Imports | 7.0 | 8.5 | 7.4 |
| Previous Greenbook | 7.5 | 8.5 | 7.7 |
|  | Contribution to growth (percentage points) |  |  |
| Inventory change | . 3 | . 7 | . 3 |
| Previous Greenbook | . 1 | . 7 | . 4 |
| Net exports | -. 0 | -. 2 | -. 0 |
| Previous Greenbook | -. 0 | -. 2 | -. 1 |

Decomposition of Structural Labor Productivity

Nonfarm Business Sector
(Percent change, Q4 to Q4, except as noted)

| Measure | 1974-95 | 1996-2000 | 2001-07 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Structural labor productivity | 1.5 | 2.5 | 2.7 | 2.3 | 2.6 | 1.8 | 2.1 |
| Previous Greenbook | 1.5 | 2.5 | 2.7 | 2.3 | 2.6 | 1.8 | 2.1 |
| Contributions ${ }^{1}$ |  |  |  |  |  |  |  |
| Capital deepening | . 7 | 1.5 | . 7 | . 5 | . 0 | . 2 | . 6 |


| Previous Greenbook | .7 | 1.5 | .7 | .5 | .0 | .2 | .6 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Multifactor productivity | .5 | .7 | 1.7 | 1.6 | 2.4 | 1.5 | 1.4 |
| Previous Greenbook | .5 | .7 | 1.7 | 1.6 | 2.4 | 1.5 | 1.4 |
| Labor composition | .3 | .3 | .3 | .2 | .2 | .1 | .1 |
| Mемо |  |  |  |  |  |  |  |
| Potential GDP | 3.0 | 3.4 | 2.7 | 2.7 | 2.7 | 2.3 | 2.5 |
| Previous Greenbook | 3.0 | 3.4 | 2.7 | 2.7 | 2.7 | 2.3 | 2.5 |

Note: Components may not sum to totals because of rounding. For multiyear periods, the percent change is the annual average from Q4 of the year preceding the first year shown to Q4 of the last year shown.

1. Percentage points. Return to table

## The Outlook for the Labor Market

(Percent change, Q4 to Q4, except as noted)

| Measure | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: |
| Output per hour, nonfarm business | 1.4 | 5.6 | 1.3 | . 8 |
| Previous Greenbook | 1.4 | 5.7 | . 8 | 1.2 |
| Nonfarm private payroll employment | -2.7 | -4.7 | 1.9 | 3.6 |
| Previous Greenbook | -2.7 | -4.7 | 2.1 | 3.3 |
| Household survey employment | -1.5 | -4.0 | 1.4 | 2.2 |
| Previous Greenbook | -1.5 | -4.0 | 1.4 | 2.1 |
| Labor force participation rate ${ }^{\underline{1}}$ | 65.9 | 64.9 | 64.7 | 64.7 |
| Previous Greenbook | 65.9 | 64.9 | 64.7 | 64.6 |
| Civilian unemployment rate ${ }^{1}$ | 6.9 | 10.0 | 9.3 | 8.2 |
| Previous Greenbook | 6.9 | 10.0 | 9.4 | 8.3 |
| Мемо |  |  |  |  |
| GDP gap $\underline{\underline{2}}^{\underline{2}}$ | -4.9 | -7.3 | -6.3 | -4.5 |
| Previous Greenbook | -4.9 | -7.3 | -6.4 | -4.7 |
| 1. Percent, average for the fourth quarter. Return to table |  |  |  |  |

## Inflation Projections

(Percent change, Q4 to Q4, except as noted)

| Measure | 2008 | 2009 | 2010 | 2011 |
| :---: | ---: | ---: | ---: | ---: |
| PCE chain-weighted price index | 1.7 | 1.2 | 1.3 | 1.0 |
| Previous Greenbook | 1.7 | 1.2 | 1.3 | 1.0 |
| Food and beverages | 6.8 | -1.7 | 1.7 | .7 |
| Previous Greenbook | 6.8 | -1.7 | 1.5 | .7 |
| Energy | -9.1 | 1.1 | 7.6 | 2.4 |
| Previous Greenbook | -9.1 | 1.1 | 6.6 | 1.5 |
| Excluding food and energy | 2.0 | 1.5 | .9 | .9 |
| Previous Greenbook | 2.0 | 1.5 | 1.0 | 1.0 |
| Consumer price index | 1.6 | 1.5 | 1.3 | 1.1 |
| Previous Greenbook | 1.6 | 1.5 | 1.5 | 1.1 |
| Excluding food and energy | 2.0 | 1.7 | .6 | .9 |
| Previous Greenbook | 2.0 | 1.7 | .9 | 1.0 |
|  |  |  |  |  |
|  |  |  |  |  |


| GDP chain-weighted price index | 1.9 | .7 | 1.1 | .9 |
| :---: | ---: | ---: | ---: | ---: |
| Previous Greenbook | 1.9 | .7 | 1.2 | .9 |
| ECI for compensation of private industry workers $\boldsymbol{1}$ | 2.4 | 1.2 | 2.1 | 2.1 |
| Previous Greenbook | 2.4 | 1.2 | 2.1 | 2.1 |
| Compensation per hour, nonfarm business sector | 3.1 | .8 | 2.2 | 2.5 |
| Previous Greenbook | 3.1 | .8 | 2.2 | 2.5 |
| Prices of core goods imports른 | 3.8 | -1.6 | 2.7 | 1.2 |
| Previous Greenbook | 3.8 | -1.6 | 2.4 | 1.1 |

1. December to December. Return to table
2. Core goods imports exclude computers, semiconductors, oil, and natural gas. Return to table

## The Long-Term Outlook

(Percent change, Q4 to Q4, except as noted)

| Measure | 2010 | 2011 | 2012 | 2013 | 2014 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Real GDP | 3.5 | 4.4 | 4.7 | 4.5 | 3.4 |
| Civilian unemployment rate ${ }^{1}$ | 9.3 | 8.2 | 6.7 | 5.6 | 5.2 |
| PCE prices, total | 1.3 | 1.0 | 1.1 | 1.3 | 1.6 |
| Core PCE prices | .9 | .9 | 1.1 | 1.3 | 1.5 |
| Federal funds rate ${ }^{1}$ | .1 | .1 | 1.4 | 2.9 | 3.6 |

1. Percent, average for the final quarter of the period. Return to table

## Alternative Scenarios

| Measure and scenario | 2010 |  | 2011 | 2012 | $\begin{gathered} 2013- \\ 14 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | H2 |  |  |  |
| Real GDP |  |  |  |  |  |
| Extended Greenbook baseline | 3.2 | 3.7 | 4.4 | 4.7 | 3.9 |
| Stronger recovery | 3.9 | 5.9 | 6.1 | 4.0 | 2.9 |
| Weaker consumption | 2.9 | 2.2 | 3.2 | 5.1 | 4.7 |
| Jobless recovery | 3.1 | 3.8 | 4.3 | 5.4 | 5.9 |
| Lower potential | 3.0 | 3.1 | 3.4 | 3.2 | 2.8 |
| Greater disinflation | 3.2 | 3.8 | 4.4 | 4.9 | 4.8 |
| Unemployment rate ${ }^{1}$ |  |  |  |  |  |
| Extended Greenbook baseline | 9.5 | 9.3 | 8.2 | 6.7 | 5.2 |
| Stronger recovery | 9.4 | 8.9 | 7.1 | 5.8 | 5.2 |
| Weaker consumption | 9.5 | 9.5 | 9.0 | 7.4 | 5.2 |
| Jobless recovery | 9.7 | 9.8 | 9.6 | 8.3 | 4.4 |
| Lower potential | 9.5 | 9.5 | 8.9 | 8.0 | 7.4 |
| Greater disinflation | 9.5 | 9.3 | 8.2 | 6.6 | 4.5 |
| Core PCE inflation |  |  |  |  |  |
| Extended Greenbook baseline | . 7 | 1.0 | . 9 | 1.1 | 1.4 |
| Stronger recovery | . 7 | 1.0 | 1.0 | 1.2 | 1.6 |
| Weaker consumption | . 7 | 1.0 | . 7 | . 9 | 1.2 |
| Jobless recovery | . 7 | . 9 | . 5 | . 3 | . 7 |
| Lower potential | . 8 | 1.5 | 1.7 | 2.2 | 2.5 |
|  |  |  |  |  |  |


| Greater disinflation | .6 | .6 | .1 | -.2 | -.1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Federal funds rate ${ }^{1}$ |  |  |  |  |  |
| Extended Greenbook baseline | .1 | .1 | .1 | 1.4 | 3.6 |
| Stronger recovery | .1 | .1 | 1.5 | 2.5 | 3.9 |
| Weaker consumption | .1 | .1 | .1 | .3 | 3.5 |
| Jobless recovery | .1 | .1 | .1 | .1 | 3.6 |
| Lower potential | .1 | .1 | 1.6 | 2.9 | 4.8 |
| Greater disinflation | .1 | .1 | .1 | .1 | 2.2 |

1. Percent, average for the final quarter of the period. Return to table

Selected Greenbook Projections and 70 Percent Confidence Intervals Derived from Historical Greenbook Forecast Errors and FRB/US Simulations

| Measure | 2010 | 2011 | 2012 | 2013 | 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Real GDP (percent change, Q4 to Q4) |  |  |  |  |  |
| Projection | 3.5 | 4.4 | 4.7 | 4.5 | 3.4 |
| Confidence interval |  |  |  |  |  |
| Greenbook forecast errors | 2.2-4.8 | 2.6-6.2 | … | ... | ... |
| FRB/US stochastic simulations | 2.4-4.7 | 2.6-6.3 | 2.5-6.5 | 2.3-6.6 | 1.2-5.9 |
| Civilian unemployment rate (percent, Q4) |  |  |  |  |  |
| Projection | 9.3 | 8.2 | 6.7 | 5.6 | 5.2 |
| Confidence interval |  |  |  |  |  |
| Greenbook forecast errors | 8.8-9.8 | 7.5-9.0 | $\ldots$ | ... | ... |
| FRB/US stochastic simulations | 8.8-9.8 | 7.3-9.1 | 5.7-7.8 | 4.5-6.8 | 4.1-6.4 |
| PCE prices, total (percent change, Q4 to Q4) |  |  |  |  |  |
| Projection | 1.3 | 1.0 | 1.1 | 1.3 | 1.6 |
| Confidence interval |  |  |  |  |  |
| Greenbook forecast errors | .6-2.0 | -.2-2.2 | $\ldots$ | ... | $\ldots$ |
| FRB/US stochastic simulations | .6-2.1 | .0-2.1 | .1-2.3 | .2-2.6 | .5-2.7 |
| PCE prices excluding food and energy (percent change, Q4 to Q4) |  |  |  |  |  |
| Projection | . 9 | . 9 | 1.1 | 1.3 | 1.5 |
| Confidence interval |  |  |  |  |  |
| Greenbook forecast errors | .4-1.3 | .2-1.7 | ... | $\ldots$ | $\ldots$ |
| FRB/US stochastic simulations | .4-1.3 | .2-1.7 | .3-2.0 | .5-2.2 | .7-2.5 |
| Federal funds rate (percent, Q4) |  |  |  |  |  |
| Projection | . 1 | . 1 | 1.4 | 2.9 | 3.6 |
| Confidence interval |  |  |  |  |  |
| FRB/US stochastic simulations | .1-. 3 | .1-1.9 | .1-3.2 | 1.2-4.7 | 2.0-5.4 |

Notes: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969-2009 set of model equation residuals.

... Not applicable. The Greenbook forecast horizon has typically extended about two years. Return to table

## Forecast Confidence Intervals and Alternative Scenarios

Confidence Intervals Based on FRB/US Stochastic Simulations

Figure: Real GDP

Line chart, 2008 to 2014 . Unit is 4 -quarter percent change. 0 on the scale is marked by a horizontal line. There are six series, "Extended Greenbook Baseline," "Stronger recovery," "Weaker Consumption," "Jobless recovery," "Lower potential," and "Greater disinflation." Extended Greenbook Baseline begins at about 2 and generally decreases to about negative 4 in early 2009. It generally increases to about 4 in late 2010 then generally decreases to about 3.75 in early 2011 . It generally increases to about 4.75 in early 2013 then generally decreases ending at about 3.5. Stronger recovery begins in 2010 at about 2.75 and generally increases to about 6.5 in mid-2011. It generally decreases ending at about 2.5 . Weaker consumption begins at about 2.5 in 2010 and generally decreases to about 2.5 in mid-2011. It generally increases to about 6 in mid- 2013 then generally decreases ending at about 4 . Jobless recovery begins at about 3.5 in 2010 and generally increases to about 7 in mid-2013. It generally decreases ending at about 5. Lower potential begins at about 3.5 in 2010 and generally decreases to about 3 in late 2010 . It remains about constant until late 2013 then generally decreases ending at about 2.5. Greater disinflation begins at about 3.5 in 2010 and generally increases to about 5.5 in early 2013. It generally decreases ending at about 4.70 percent interval is presented as a dark shaded range that begins between about 2.5 and 3.5 and generally increases to between about 2.5 and 6.5 in early 2013 then generally decreases ending between about 1.25 and 6 . 90 percent interval is presented as a dark shaded range that begins between about 2 and 4. It generally increases to between about 1 and 8 in early 2013 then generally decreases ending between about 0 and 7.25 .

## Figure: Unemployment Rate

Line chart, 2008 to 2014. Unit is percent. There are six series, "Extended Greenbook Baseline," "Stronger recovery," "Weaker Consumption," "Jobless recovery," "Lower potential," and "Greater disinflation." Extended Greenbook Baseline begins at about 5.0 and generally increases to about 10.0 in late 2009 . It generally decreases ending at about 5.25. Stronger recovery begins at about 9.75 in 2010 then generally decreases to about 5.25 in late 2013 . It remains about constant to the end of the timeline. Weaker consumption begins at about 9.75 in 2010 and generally decreases ending at about 5.25 . Jobless recovery begins at about 9.75 in 2010 and remains about constant until late 2011. It generally decreases ending at about 4.5. Lower potential begins at about 9.75 in 2010 and generally decreases to about 7.5 in late 2013. It remains about constant to the end of the timeline. Greater disinflation begins at about 9.75 in 2010 and generally decreases ending at about 4.5 . 70 percent interval is presented as a dark shaded range beginning between about 9.25 and 9.75 . It generally decreases ending between about 4.25 and 6.5 . 90 percent interval is presented as a light shaded range beginning between about 9.5 and 10. It generally decreases ending between about 3.5 and 7.25 .

## Figure: PCE Prices excluding Food and Energy

Line chart, 2008 to 2014 . Unit is 4 -quarter percent change. 0 on the scale is marked by a horizontal line. There are six series, "Extended Greenbook Baseline," "Stronger recovery," "Weaker Consumption," "Jobless recovery," "Lower potential," and "Greater disinflation." Extended Greenbook baseline begins at about 2.5 and fluctuates but generally decreases to about 1.0 in late 2010. It generally increases ending at about 1.5. Stronger recovery begins at about 1.25 in early 2010 and generally decreases to about 1.0 in late 2010. It generally increases ending at about 1.75 . Weaker consumption begins at about 1.25 in early 2010 and fluctuates but generally decreases to about . 75 in early 12012. It generally increases ending at about 1.4. Jobless recovery begins at about 1.25 in early 2010 and generally decreases to about 0.25 in late 2012. It generally increases ending at about 1.0. Lower potential begins at about 1.25 in early 2010 and generally increases ending at about 2.5. Greater disinflation begins at about 1.25 in early 2010 and generally decreases to about -0.25 in late 2012. It generally increases ending at about 0 . 70 percent interval is presented as a dark shaded range beginning at about 1.25 and 1.5. It generally increases ending between about 1.25 and 2.5 . 90 percent interval is presented as a light shaded range that begins between about 0.25 and 1.5. It generally increases ending between about 0.25 and 3.0 .

## Figure: Federal Funds Rate

Line chart, 2008 to 2014. Unit is percent. 0 on the scale is marked by a horizontal line. There are six series, "Extended Greenbook Baseline," "Stronger recovery," "Weaker Consumption," "Jobless recovery," "Lower potential," and "Greater disinflation." Extended Greenbook Baseline begins at about 3 and generally decreases to about 0 in early 2009. It remains about constant until late 2011 then generally increases ending at about 3.5. Stronger recovery begins at about 0 in early 2010 and generally increases ending at about 4 . Weaker consumption begins at about 0 in early 2010 and remains about constant until mid-2012. It generally increases ending at about 3.5. Jobless recovery begins at about 0 in early 2010 and remains about constant until mid-2013. It generally increases ending at about 3.5. Lower Potential begins at about 0 in early 2010 and generally increases ending at about 5 . Greater disinflation begins at about 0 in early 2010 and remains about constant until early 2013. It generally increases ending at about 2.25 . 70 percent interval is presented as a dark shaded area beginning at 0 in mid- 2010 and generally increases ending between about 2 and 5.25 . 90 percent interval is presented as a light shaded area that begins at about 0 in early 2010 and generally increases ending between about 5 and 6.5.

## Evolution of the Staff Forecast

## Figure: Change in Real GDP

Line chart, Greenbook publication dates $1 / 23 / 2008$ to $12 / 8 / 2010$. Unit is percent, Q4/Q4. 0 on the scale is marked by a horizontal line. There are three series, " 2009 ," "2010," and "2011." 2009 begins at about 2.25 and generally increases to about 3 on $3 / 13 / 2008$. It generally decreases to about negative 2.5 on $3 / 12 / 2009$ then generally increases ending at about 0 on $4 / 21 / 2010$. 2010 begins at about 2.5 on $9 / 10 / 2010$ and remains about constant until $1 / 22 / 2009$. It generally decreases to about 1.5 on $3 / 12 / 2009$ then generally increases ending at about 3.5 on $4 / 21 / 2010$. 2011 begins at about 4.5 on $9 / 16 / 2009$ then generally increases to about 4.75 on $1 / 20 / 2010$. It generally decreases ending at about 4.5 on 4/21/2020.

## Figure: Unemployment Rate

Line chart, Greenbook publication dates $1 / 23 / 2008$ to $12 / 8 / 2010$. Unit is percent, fourth quarter. There are three series, "2009," "2010," and "2011." 2009 begins at about 5.25 and generally increases to about 10.0 on $6 / 17 / 2009$. It remains about constant until ending on $4 / 21 / 2010$. 2010 begins at about 6.0 on $9 / 10 / 2009$ and generally increases to about 9.5 on $3 / 12 / 2009$. It generally decreases to about 9.25 on $4 / 22 / 2009$ then generally increases to about $9.56 / 17 / 2009$. It generally
decreases to about 9.0 on $9 / 16 / 2009$ then generally increases to about 9.25 on $1 / 20 / 2010$. It generally decreases ending at about 9 on $4 / 21 / 2010$. 2011 begins at about 7.6 on 9/16/2009 and fluctuates but generally increases ending at about 8.0 on 4/21/2010.

Figure: Change in PCE Prices excluding Food and Energy

Line chart, Greenbook publication dates $1 / 23 / 2008$ to $12 / 8 / 2010$. Unit is percent, Q4/Q4. There are three series, "2009," "2010," and "2011." 2009 begins at about 2.0 and generally increases to about 2.25 on $6 / 18 / 2008$. It generally decreases to about 1.0 on $3 / 12 / 2009$. It generally increases to about 1.5 on $6 / 17 / 2009$ and remains about constant until it ends on $4 / 21 / 2010$. 2010 begins at about 2.0 on $9 / 10.2008$ and generally decreases to about 0.5 on $3 / 12 / 2009$. It generally increases to about 1.1 on $1 / 20 / 2010$ then generally decreases ending at about .75 on $4 / 21 / 2010$. 2011 begins at about 0.9 on $9 / 16 / 2010$ and generally increases to about 1.1 on $12 / 9 / 2009$. It remains about constant until $1 / 20 / 2010$ then generally decreases ending at about 0.9 on 4/21/2010.
 recent projections.

Changes in GDP, Prices, and Unemployment
(Percent, annual rate except as noted)

| Interval |  | Nominal GDP |  | Real GDP |  | PCE price index |  | Core PCE price index |  | Unemployment rate ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 03/10/10 | 04/21/10 | 03/10/10 | 04/21/10 | 03/10/10 | 04/21/10 | 03/10/10 | 04/21/10 | 03/10/10 | 04/21/10 |
| Quarterly |  |  |  |  |  |  |  |  |  |  |  |
| 2009: | Q1 | -4.6 | -4.6 | -6.4 | -6.4 | -1.5 | -1.5 | 1.1 | 1.1 | 8.2 | 8.2 |
|  | Q2 | -. 8 | -. 8 | -. 7 | -. 7 | 1.4 | 1.4 | 2.0 | 2.0 | 9.3 | 9.3 |
|  | Q3 | 2.6 | 2.6 | 2.2 | 2.2 | 2.6 | 2.6 | 1.2 | 1.2 | 9.7 | 9.7 |
|  | Q4 | 6.0 | 6.1 | 5.6 | 5.6 | 2.3 | 2.5 | 1.6 | 1.8 | 10.0 | 10.0 |
| 2010: | Q1 | 4.2 | 4.0 | 2.2 | 2.9 | 1.5 | 1.5 | . 8 | . 5 | 9.7 | 9.7 |
| Q2 |  | 4.5 | 4.6 | 3.6 | 3.5 | 1.3 | . 7 | 1.1 | . 9 | 9.6 | 9.5 |
| Q3 |  | 4.7 | 5.0 | 3.5 | 3.6 | 1.4 | 1.7 | 1.1 | 1.0 | 9.6 | 9.5 |
| Q4 |  | 4.7 | 4.9 | 3.8 | 3.8 | 1.1 | 1.3 | 1.0 | 1.0 | 9.4 | 9.3 |
| 2011: | Q1 | 5.0 | 5.1 | 4.0 | 4.0 | 1.0 | 1.1 | 1.0 | 1.0 | 9.0 | 8.9 |
| Q2 |  | 5.3 | 5.2 | 4.3 | 4.3 | 1.0 | 1.0 | 1.0 | . 9 | 8.8 | 8.7 |
| Q3 |  | 5.5 | 5.5 | 4.6 | 4.6 | 1.0 | 1.0 | 1.0 | . 9 | 8.6 | 8.5 |
| Q4 |  | 5.6 | 5.6 | 4.7 | 4.7 | . 9 | 1.0 | 1.0 | . 9 | 8.3 | 8.2 |


| Two-quarter ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2009: Q2 | -2.7 | -2.7 | -3.6 | -3.6 | -. 1 | -. 1 | 1.6 | 1.6 | 2.4 | 2.4 |
| Q4 | 4.3 | 4.3 | 3.9 | 3.9 | 2.5 | 2.5 | 1.4 | 1.5 | . 7 | . 7 |
| 2010: Q2 | 4.3 | 4.3 | 2.9 | 3.2 | 1.4 | 1.1 | . 9 | . 7 | -. 4 | -. 5 |
| Q4 | 4.7 | 4.9 | 3.7 | 3.7 | 1.3 | 1.5 | 1.1 | 1.0 | -. 2 | -. 2 |
| 2011: Q2 | 5.2 | 5.1 | 4.2 | 4.1 | 1.0 | 1.1 | 1.0 | 1.0 | -. 6 | -. 6 |
| Q4 | 5.5 | 5.6 | 4.6 | 4.7 | 1.0 | 1.0 | 1.0 | . 9 | -. 5 | -. 5 |
| Four-quarter ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |
| 2008:Q4 | . 1 | . 1 | -1.9 | -1.9 | 1.7 | 1.7 | 2.0 | 2.0 | 2.1 | 2.1 |
| 2009:Q4 | . 7 | . 7 | . 1 | . 1 | 1.2 | 1.2 | 1.5 | 1.5 | 3.1 | 3.1 |
| 2010:Q4 | 4.5 | 4.6 | 3.3 | 3.5 | 1.3 | 1.3 | 1.0 | . 9 | -. 6 | -. 7 |
| 2011:Q4 | 5.3 | 5.3 | 4.4 | 4.4 | 1.0 | 1.0 | 1.0 | . 9 | -1.1 | -1.1 |
| Annual |  |  |  |  |  |  |  |  |  |  |
| 2008 | 2.6 | 2.6 | . 4 | . 4 | 3.3 | 3.3 | 2.4 | 2.4 | 5.8 | 5.8 |
| 2009 | -1.3 | -1.3 | -2.4 | -2.4 | . 2 | . 2 | 1.5 | 1.5 | 9.3 | 9.3 |
| 2010 | 4.2 | 4.2 | 3.2 | 3.3 | 1.7 | 1.7 | 1.2 | 1.1 | 9.6 | 9.5 |
| 2011 | 5.0 | 5.1 | 4.0 | 4.1 | 1.1 | 1.1 | 1.0 | 1.0 | 8.7 | 8.6 |

[^2]
## Changes in Real Gross Domestic Product and Related Items

(Percent, annual rate except as noted)

| Item | 2009 |  |  |  | 2010 |  |  | 2011 |  |  |  |  | 20091 | $2010{ }^{1}$ | $2011{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| Real GDP | -6.4 | -. 7 | 2.2 | 5.6 | 2.9 | 3.5 | 3.6 | 3.8 | 4.0 | 4.3 | 4.6 | 4.7 | . 1 | 3.5 | 4.4 |
| Previous Greenbook | -6.4 | -. 7 | 2.2 | 5.6 | 2.2 | 3.6 | 3.5 | 3.8 | 4.0 | 4.3 | 4.6 | 4.7 | . 1 | 3.3 | 4.4 |
| Final sales | -4.1 | . 7 | 1.5 | 1.7 | 2.2 | 3.7 | 2.8 | 3.4 | 3.6 | 4.1 | 4.1 | 4.5 | -. 1 | 3.0 | 4.1 |
| Previous Greenbook | -4.1 | . 7 | 1.5 | 1.7 | 1.6 | 3.9 | 2.5 | 3.4 | 3.5 | 4.1 | 4.0 | 4.4 | -. 1 | 2.9 | 4.0 |
| Priv. dom. final purch. | -7.2 | -2.7 | 2.2 | 2.1 | 3.4 | 3.6 | 3.2 | 3.9 | 4.3 | 4.7 | 4.9 | 5.1 | -1.5 | 3.5 | 4.8 |
| Previous Greenbook | -7.2 | -2.7 | 2.2 | 2.1 | 2.0 | 3.8 | 3.2 | 4.0 | 4.2 | 4.7 | 4.9 | 5.1 | -1.5 | 3.2 | 4.7 |
| Personal cons. expend. | . 6 | -. 9 | 2.8 | 1.6 | 3.6 | 2.1 | 2.7 | 2.8 | 3.2 | 3.5 | 3.7 | 3.9 | 1.0 | 2.8 | 3.5 |
| Previous Greenbook | . 6 | -. 9 | 2.8 | 1.7 | 2.4 | 2.4 | 2.7 | 2.9 | 3.1 | 3.5 | 3.6 | 3.8 | 1.0 | 2.6 | 3.5 |
| Durables | 3.9 | -5.6 | 20.4 | . 4 | 9.8 | 13.6 | 10.2 | 9.3 | 9.1 | 10.7 | 11.0 | 12.1 | 4.4 | 10.7 | 10.7 |
| Nondurables | 1.9 | -1.9 | 1.5 | 4.0 | 4.5 | 3.2 | 2.4 | 2.6 | 3.0 | 3.3 | 3.4 | 3.6 | 1.3 | 3.2 | 3.3 |
| Services | -. 3 | . 2 | . 8 | 1.0 | 2.4 | . 0 | 1.7 | 1.9 | 2.3 | 2.5 | 2.6 | 2.7 | . 4 | 1.5 | 2.5 |
| Residential investment | -38.2 | -23.3 | 18.9 | 3.8 | -15.7 | 22.3 | -2.1 | 8.6 | 12.3 | 21.6 | 23.3 | 22.5 | -12.5 | 2.3 | 19.8 |
| Previous Greenbook | -38.2 | $-23.3$ | 18.9 | 3.3 | $-17.4$ | 18.3 | -2.7 | 11.0 | 13.4 | 21.5 | 23.4 | 23.5 | -12.6 | 1.4 | 20.4 |
| Business fixed invest. | -39.2 | -9.6 | -5.9 | 5.3 | 7.6 | 10.9 | 8.6 | 10.9 | 10.5 | 9.3 | 9.6 | 9.4 | -14.1 | 9.5 | 9.7 |
| Previous Greenbook | -39.2 | -9.6 | -5.9 | 5.0 | 4.9 | 11.0 | 8.2 | 10.4 | 10.2 | 9.8 | 9.7 | 9.3 | -14.1 | 8.6 | 9.7 |
| Equipment \& software | -36.4 | -4.9 | 1.5 | 19.0 | 17.0 | 15.8 | 12.5 | 15.3 | 14.2 | 13.3 | 12.8 | 12.5 | -7.5 | 15.2 | 13.2 |
| Previous Greenbook | -36.4 | -4.9 | 1.5 | 18.6 | 11.8 | 18.5 | 11.4 | 14.3 | 14.1 | 14.0 | 13.6 | 12.9 | -7.6 | 14.0 | 13.7 |
| Nonres. structures | -43.6 | -17.3 | -18.4 | -18.0 | -10.6 | . 4 | -. 2 | . 8 | 1.8 | -. 5 | 1.5 | 1.4 | -25.3 | -2.5 | 1.1 |
| Previous Greenbook | -43.6 | -17.3 | -18.4 | -18.1 | -8.6 | -4.6 | 1.0 | 1.5 | 1.1 | -. 3 | -. 1 | -. 1 | -25.3 | -2.8 | . 1 |
| Net exports ${ }^{\text {² }}$ | -386 | -330 | -357 | -348 | -352 | -348 | -356 | -355 | -356 | -353 | -357 | -353 | -356 | -353 | -355 |
| Previous Greenbook ${ }^{2}$ | -386 | -330 | -357 | -347 | -349 | -347 | -357 | -358 | -362 | -362 | -370 | -368 | -355 | -353 | -365 |
| Exports | -29.9 | -4.1 | 17.8 | 22.8 | 8.7 | 8.8 | 9.2 | 9.7 | 9.3 | 9.1 | 9.1 | 8.9 | -. 7 | 9.1 | 9.1 |
| Imports | -36.4 | $-14.7$ | 21.3 | 15.8 | 7.9 | 6.2 | 9.3 | 7.8 | 7.9 | 6.8 | 8.5 | 6.6 | -6.6 | 7.8 | 7.4 |
| Gov't. cons. \& invest. | -2.6 | 6.7 | 2.6 | -1.3 | -2.2 | 3.0 | 1.9 | . 7 | . 7 | . 8 | . 8 | . 7 | 1.3 | . 8 | . 7 |
| Previous Greenbook | -2.6 | 6.7 | 2.6 | -1.3 | . 2 | 3.9 | 1.2 | . 9 | . 9 | . 9 | 1.0 | . 9 | 1.3 | 1.5 | . 9 |
| Federal | -4.3 | 11.4 | 8.0 | . 0 | . 9 | 8.4 | 4.7 | . 7 | . 8 | . 9 | . 8 | . 8 | 3.6 | 3.6 | . 8 |
| Defense | -5.1 | 14.0 | 8.4 | -3.6 | -2.3 | 8.7 | 8.0 | 1.9 | -. 1 | . 0 | . 0 | . 0 | 3.1 | 4.0 | . 0 |
| Nondefense | -2.5 | 6.1 | 7.0 | 8.3 | 7.8 | 7.8 | -1.9 | -1.7 | 2.6 | 2.6 | 2.6 | 2.6 | 4.6 | 2.9 | 2.6 |
| State \& local | -1.5 | 3.9 | -. 6 | -2.2 | -4.2 | -. 5 | . 1 | . 6 | . 6 | . 7 | . 7 | . 7 | -. 1 | -1.0 | . 7 |
| Change in bus. inventories ${ }^{2}$ | -114 | -160 | -139 | -20 | 2 | -4 | 22 | 37 | 50 | 55 | 74 | 82 | -108 | 14 | 65 |
| Previous Greenbook ${ }^{2}$ | -114 | -160 | -139 | -19 | -2 | -12 | 18 | 30 | 44 | 52 | 71 | 80 | -108 | 9 | 62 |
| Nonfarm ${ }^{2}$ | -115 | -163 | -141 | -14 | -2 | -8 | 19 | 35 | 48 | 52 | 71 | 80 | -108 | 11 | 63 |
| Farm ${ }^{2}$ | 0 | 2 | 2 | -6 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | -0 | 3 | 3 |

1. Change from fourth quarter of previous year to fourth quarter of year indicated. Return to table
2. Billions of chained (2005) dollars. Return to table

## Changes in Real Gross Domestic Product and Related Items

| Real GDP | 3.8 | 3.1 | 2.7 | 2.4 | 2.5 | -1.9 | . 1 | 3.5 | 4.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous Greenbook | 3.8 | 3.1 | 2.7 | 2.4 | 2.5 | -1.9 | . 1 | 3.3 | 4.4 |
| Final sales | 3.8 | 2.8 | 2.7 | 2.8 | 2.7 | -1.4 | -. 1 | 3.0 | 4.1 |
| Previous Greenbook | 3.8 | 2.8 | 2.7 | 2.8 | 2.7 | -1.4 | -. 1 | 2.9 | 4.0 |
| Priv. dom. final purch. | 4.2 | 4.2 | 3.1 | 2.5 | 1.4 | -3.2 | -1.5 | 3.5 | 4.8 |
| Previous Greenbook | 4.2 | 4.2 | 3.1 | 2.5 | 1.4 | -3.2 | -1.5 | 3.2 | 4.7 |
| Personal cons. expend. | 3.4 | 3.5 | 2.7 | 3.3 | 2.0 | -1.8 | 1.0 | 2.8 | 3.5 |
| Previous Greenbook | 3.4 | 3.5 | 2.7 | 3.3 | 2.0 | -1.8 | 1.0 | 2.6 | 3.5 |
| Durables | 8.9 | 5.5 | 2.1 | 6.3 | 4.6 | -11.8 | 4.4 | 10.7 | 10.7 |
| Nondurables | 3.9 | 3.0 | 3.3 | 3.2 | 1.5 | -2.9 | 1.3 | 3.2 | 3.3 |
| Services | 2.2 | 3.4 | 2.6 | 2.8 | 1.7 | . 3 | . 4 | 1.5 | 2.5 |
| Residential investment | 11.5 | 6.6 | 5.3 | -15.7 | -20.5 | -21.0 | -12.5 | 2.3 | 19.8 |
| Previous Greenbook | 11.5 | 6.6 | 5.3 | -15.7 | -20.5 | -21.0 | -12.6 | 1.4 | 20.4 |
| Business fixed invest. | 5.9 | 7.0 | 4.4 | 7.8 | 7.9 | -6.0 | -14.1 | 9.5 | 9.7 |
| Previous Greenbook | 5.9 | 7.0 | 4.4 | 7.8 | 7.9 | -6.0 | -14.1 | 8.6 | 9.7 |
| Equipment \& software | 7.5 | 8.8 | 6.1 | 6.0 | 3.2 | -10.7 | -7.5 | 15.2 | 13.2 |
| Previous Greenbook | 7.5 | 8.8 | 6.1 | 6.0 | 3.2 | -10.7 | -7.6 | 14.0 | 13.7 |
| Nonres. structures | 1.3 | 1.7 | -. 1 | 13.0 | 18.9 | 3.2 | -25.3 | -2.5 | 1.1 |
| Previous Greenbook | 1.3 | 1.7 | -. 1 | 13.0 | 18.9 | 3.2 | -25.3 | -2.8 | . 1 |
| Net exports ${ }^{1}$ | -604 | -688 | -723 | -729 | -648 | -494 | -356 | -353 | -355 |
| Previous Greenbook ${ }^{1}$ | -604 | -688 | -723 | -729 | -648 | -494 | -355 | -353 | -365 |
| Exports | 6.2 | 7.1 | 6.7 | 10.2 | 10.2 | -3.4 | -. 7 | 9.1 | 9.1 |
| Imports | 5.1 | 10.9 | 5.2 | 4.1 | . 9 | -6.8 | -6.6 | 7.8 | 7.4 |
| Gov't. cons. \& invest. | 1.6 | . 6 | . 7 | 1.5 | 2.5 | 3.0 | 1.3 | . 8 | . 7 |
| Previous Greenbook | 1.6 | . 6 | . 7 | 1.5 | 2.5 | 3.0 | 1.3 | 1.5 | . 9 |
| Federal | 5.7 | 2.3 | 1.2 | 2.2 | 3.4 | 8.9 | 3.6 | 3.6 | . 8 |
| Defense | 8.4 | 2.4 | . 4 | 4.4 | 2.6 | 9.5 | 3.1 | 4.0 | . 0 |
| Nondefense | . 7 | 2.3 | 2.6 | -2.3 | 5.2 | 7.5 | 4.6 | 2.9 | 2.6 |
| State \& local | -. 5 | -. 4 | . 4 | 1.2 | 1.9 | -. 3 | -. 1 | -1.0 | . 7 |
| Change in bus. inventories ${ }^{1}$ | 17 | 66 | 50 | 59 | 19 | -26 | -108 | 14 | 65 |
| Previous Greenbook ${ }^{1}$ | 17 | 66 | 50 | 59 | 19 | -26 | -108 | 9 | 62 |
| Nonfarm ${ }^{1}$ | 17 | 58 | 50 | 63 | 20 | -20 | -108 | 11 | 63 |
| Farm ${ }^{1}$ | 0 | 8 | 0 | -4 | -1 | -5 | -0 | 3 | 3 |

1. Billions of chained (2005) dollars. Return to table

## Contributions to Changes in Real Gross Domestic Product

(Percentage points, annual rate except as noted)

| Item | 2009 |  |  |  | 2010 |  |  |  | 2011 |  |  |  | $2009{ }^{\underline{1}}$ | $10^{1}$ | $11^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| Real GDP | -6.4 | -. 7 | 2.2 | 5.6 | 2.9 | 3.5 | 3.6 | 3.8 | 4.0 | 4.3 | 4.6 | 4.7 | . 1 | 3.5 | 4.4 |
| Previous Greenbook | -6.4 | -. 7 | 2.2 | 5.6 | 2.2 | 3.6 | 3.5 | 3.8 | 4.0 | 4.3 | 4.6 | 4.7 | . 1 | 3.3 | 4.4 |
| Final sales | -4.1 | . 7 | 1.5 | 1.8 | 2.2 | 3.7 | 2.8 | 3.4 | 3.6 | 4.1 | 4.1 | 4.5 | -. 1 | 3.0 | 4.1 |
| Previous Greenbook | -4.1 | . 7 | 1.5 | 1.8 | 1.6 | 3.9 | 2.6 | 3.4 | 3.5 | 4.1 | 4.0 | 4.4 | -. 1 | 2.9 | 4.0 |
| Priv. dom. final purch. | -6.1 | -2.3 | 1.8 | 1.8 | 2.8 | 3.0 | 2.7 | 3.2 | 3.5 | 3.9 | 4.1 | 4.2 | -1.3 | 2.9 | 3.9 |
| Previous Greenbook | -6.1 | -2.3 | 1.8 | 1.8 | 1.7 | 3.1 | 2.6 | 3.3 | 3.5 | 3.9 | 4.0 | 4.2 | -1.3 | 2.7 | 3.9 |


| Personal cons. expend. | . 4 | -. 6 | 2.0 | 1.2 | 2.5 | 1.5 | 1.9 | 2.0 | 2.2 | 2.5 | 2.6 | 2.7 | . 7 | 2.0 | 2.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous Greenbook | . 4 | -. 6 | 2.0 | 1.3 | 1.7 | 1.7 | 1.9 | 2.1 | 2.2 | 2.5 | 2.5 | 2.7 | . 7 | 1.8 | 2.5 |
| Durables | . 3 | -. 4 | 1.4 | . 0 | . 7 | 1.0 | . 7 | . 7 | . 7 | . 8 | . 8 | . 9 | . 3 | . 8 | . 8 |
| Nondurables | . 3 | -. 3 | . 2 | . 6 | . 7 | . 5 | . 4 | . 4 | . 5 | . 5 | . 6 | . 6 | . 2 | . 5 | . 5 |
| Services | -. 1 | . 1 | . 4 | . 5 | 1.1 | . 0 | . 8 | . 9 | 1.1 | 1.2 | 1.2 | 1.3 | . 2 | . 7 | 1.2 |
| Residential investment | -1.3 | -. 7 | . 4 | . 1 | -. 4 | . 5 | -. 1 | . 2 | . 3 | . 5 | . 6 | . 6 | -. 4 | . 1 | . 5 |
| Previous Greenbook | -1.3 | -. 7 | . 4 | . 1 | -. 5 | . 4 | -. 1 | . 3 | . 3 | . 5 | . 6 | . 6 | -. 4 | . 0 | . 5 |
| Business fixed invest. | -5.3 | -1.0 | -. 6 | . 5 | . 7 | 1.0 | . 8 | 1.0 | 1.0 | . 9 | . 9 | . 9 | -1.6 | . 9 | . 9 |
| Previous Greenbook | -5.3 | -1.0 | -. 6 | . 5 | . 5 | 1.0 | . 8 | 1.0 | 1.0 | . 9 | . 9 | . 9 | -1.6 | . 8 | . 9 |
| Equipment \& software | -3.0 | -. 3 | . 1 | 1.1 | 1.0 | 1.0 | . 8 | 1.0 | 1.0 | . 9 | . 9 | . 9 | -. 5 | 1.0 | . 9 |
| Previous Greenbook | -3.0 | -. 3 | . 1 | 1.1 | . 7 | 1.1 | . 7 | . 9 | . 9 | . 9 | . 9 | . 9 | -. 5 | . 9 | . 9 |
| Nonres. structures | -2.3 | -. 7 | -. 7 | -. 6 | -. 3 | . 0 | . 0 | . 0 | . 1 | . 0 | . 0 | . 0 | -1.1 | -. 1 | . 0 |
| Previous Greenbook | -2.3 | -. 7 | -. 7 | -. 6 | -. 3 | -. 1 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | -1.1 | -. 1 | . 0 |
| Net exports | 2.6 | 1.7 | -. 8 | . 3 | -. 2 | . 1 | -. 3 | . 0 | -. 1 | . 1 | -. 2 | . 1 | 1.0 | -. 1 | . 0 |
| Previous Greenbook | 2.6 | 1.7 | -. 8 | . 2 | -. 1 | . 0 | -. 3 | -. 1 | -. 1 | . 0 | -. 3 | . 0 | 1.0 | -. 1 | -. 1 |
| Exports | -4.0 | -. 5 | 1.8 | 2.4 | 1.0 | 1.0 | 1.1 | 1.2 | 1.1 | 1.1 | 1.1 | 1.1 | -. 1 | 1.1 | 1.1 |
| Imports | 6.6 | 2.1 | -2.6 | -2.1 | -1.1 | -. 9 | $-1.4$ | -1.2 | -1.2 | -1.1 | -1.3 | -1.0 | 1.0 | -1.2 | -1.2 |
| Gov't. cons. \& invest. | -. 5 | 1.3 | . 6 | -. 3 | -. 4 | . 6 | . 4 | . 1 | . 1 | . 2 | . 2 | . 2 | . 3 | . 2 | . 1 |
| Previous Greenbook | -. 5 | 1.3 | . 6 | -. 3 | . 0 | . 8 | . 3 | . 2 | . 2 | . 2 | . 2 | . 2 | . 3 | . 3 | . 2 |
| Federal | -. 3 | . 9 | . 6 | . 0 | . 1 | . 7 | . 4 | . 1 | . 1 | . 1 | . 1 | . 1 | . 3 | . 3 | . 1 |
| Defense | -. 3 | . 7 | . 5 | -. 2 | -. 1 | . 5 | . 4 | . 1 | . 0 | . 0 | . 0 | . 0 | . 2 | . 2 | . 0 |
| Nondefense | -. 1 | . 2 | . 2 | . 2 | . 2 | . 2 | -. 1 | . 0 | . 1 | . 1 | . 1 | . 1 | . 1 | . 1 | . 1 |
| State \& local | -. 2 | . 5 | -. 1 | -. 3 | -. 5 | -. 1 | . 0 | . 1 | . 1 | . 1 | . 1 | . 1 | . 0 | -. 1 | . 1 |
| Change in bus. inventories | -2.4 | -1.4 | . 7 | 3.8 | . 7 | -. 2 | . 8 | . 5 | . 4 | . 2 | . 6 | . 3 | . 1 | . 5 | . 3 |
| Previous Greenbook | -2.4 | -1.4 | . 7 | 3.8 | . 6 | -. 3 | . 9 | . 4 | . 5 | . 2 | . 6 | . 3 | . 1 | . 4 | . 4 |
| Nonfarm | -2.4 | -1.5 | . 7 | 4.0 | . 4 | -. 2 | . 8 | . 5 | . 4 | . 1 | . 6 | . 3 | . 2 | . 4 | . 3 |
| Farm | . 1 | . 1 | . 0 | -. 2 | . 4 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 1 | . 0 |

1. Change from fourth quarter of previous year to fourth quarter of year indicated. Return to table

## Changes in Prices and Costs

(Percent, annual rate except as noted)

| Item | 2009 |  |  | 2010 |  |  |  |  |  | 2011 |  |  | $2009{ }^{\underline{1}} 2010^{1}$ |  | $2011{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| GDP chain-wt. price index | 1.9 | . 0 | . 4 | . 5 | 1.1 | 1.0 | 1.3 | 1.0 | 1.0 | . 9 | . 9 | . 8 | . 7 | 1.1 | . 9 |
| Previous Greenbook | 1.9 | . 0 | . 4 | . 4 | 2.0 | . 8 | 1.2 | . 9 | 1.0 | . 9 | . 9 | . 9 | . 7 | 1.2 | . 9 |
| PCE chain-wt. price index | -1.5 | 1.4 | 2.6 | 2.5 | 1.5 | . 7 | 1.7 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.2 | 1.3 | 1.0 |
| Previous Greenbook | -1.5 | 1.4 | 2.6 | 2.3 | 1.5 | 1.3 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | . 9 | 1.2 | 1.3 | 1.0 |
| Energy | -36.7 | -2.0 | 40.6 | 19.9 | 15.9 | -3.7 | 12.5 | 6.8 | 3.5 | 2.7 | 1.8 | 1.7 | 1.1 | 7.6 | 2.4 |
| Previous Greenbook | -36.7 | -2.0 | 40.6 | 19.9 | 14.0 | 4.1 | 5.8 | 2.7 | 2.0 | 1.8 | 1.5 | . 8 | 1.1 | 6.6 | 1.5 |
| Food | -1.1 | -3.6 | -2.1 | -. 1 | 1.9 | 2.0 | 1.7 | 1.1 | . 7 | . 7 | . 7 | . 7 | -1.7 | 1.7 | . 7 |
| Previous Greenbook | -1.1 | -3.6 | -2.1 | -. 1 | 1.8 | 1.4 | 1.7 | 1.1 | . 8 | . 7 | . 7 | . 7 | -1.7 | 1.5 | . 7 |
| Ex. food \& energy | 1.1 | 2.0 | 1.2 | 1.8 | . 5 | . 9 | 1.0 | 1.0 | 1.0 | . 9 | . 9 | . 9 | 1.5 | . 9 | . 9 |
| Previous Greenbook | 1.1 | 2.0 | 1.2 | 1.6 | . 8 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.5 | 1.0 | 1.0 |
| CPI | -2.2 | 1.9 | 3.7 | 2.6 | 1.5 | . 4 | 1.9 | 1.4 | 1.2 | 1.1 | 1.0 | 1.0 | 1.5 | 1.3 | 1.1 |
| Previous Greenbook | -2.2 | 1.9 | 3.7 | 2.6 | 1.6 | 1.4 | 1.6 | 1.2 | 1.1 | 1.1 | 1.1 | 1.0 | 1.5 | 1.5 | 1.1 |
| Ex. food \& energy | 1.6 | 2.3 | 1.5 | 1.5 | . 0 | . 6 | . 9 | . 9 | . 9 | . 9 | . 9 | . 9 | 1.7 | . 6 | . 9 |


| Previous Greenbook | 1.6 | 2.3 | 1.5 | 1.5 | . 2 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.7 | . 9 | 1.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ECI, hourly compensation² | . 7 | . 7 | 1.8 | 1.5 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 1.2 | 2.1 | 2.1 |
| Previous Greenbook ${ }^{2}$ | . 7 | . 7 | 1.8 | 1.5 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 1.2 | 2.1 | 2.1 |
| Nonfarm business sector |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour | . 9 | 7.6 | 7.8 | 6.3 | 2.7 | 1.1 | . 8 | . 4 | . 4 | . 6 | 1.1 | 1.2 | 5.6 | 1.3 | . 8 |
| Previous Greenbook | . 9 | 7.6 | 7.8 | 6.5 | 1.7 | . 9 | . 3 | . 5 | . 6 | 1.1 | 1.4 | 1.6 | 5.7 | . 8 | 1.2 |
| Compensation per hour | -4.2 | 7.7 | -. 4 | . 5 | 2.9 | . 9 | 2.4 | 2.4 | 3.3 | 2.4 | 2.2 | 2.2 | . 8 | 2.2 | 2.5 |
| Previous Greenbook | -4.2 | 7.7 | -. 4 | . 4 | 2.1 | 1.8 | 2.4 | 2.4 | 3.3 | 2.4 | 2.2 | 2.2 | . 8 | 2.2 | 2.5 |
| Unit labor costs | -5.0 | . 1 | -7.6 | -5.5 | . 2 | -. 2 | 1.6 | 2.0 | 2.9 | 1.7 | 1.1 | 1.0 | -4.6 | . 9 | 1.7 |
| Previous Greenbook | -5.0 | . 1 | -7.6 | -5.7 | . 4 | . 9 | 2.1 | 1.9 | 2.7 | 1.3 | . 8 | . 6 | -4.6 | 1.3 | 1.3 |
| Core goods imports chain-wt. price index ${ }^{3}$ | -9.4 | -2.3 | 1.3 | 4.7 | 4.0 | 2.9 | 2.3 | 1.6 | 1.4 | 1.2 | 1.1 | 1.1 | -1.6 | 2.7 | 1.2 |
| Previous Greenbook ${ }^{3}$ | -9.4 | -2.3 | 1.3 | 4.7 | 4.2 | 2.2 | 1.7 | 1.3 | 1.1 | 1.1 | 1.1 | 1.1 | -1.6 | 2.4 | 1.1 |

1. Change from fourth quarter of previous year to fourth quarter of year indicated. Return to table
2. Private-industry workers. Return to table
3. Core goods imports exclude computers, semiconductors, oil, and natural gas. Return to table

## Changes in Prices and Costs

(Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted)

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GDP chain-wt. price index | 2.1 | 3.2 | 3.5 | 2.9 | 2.7 | 1.9 | . 7 | 1.1 | . 9 |
| Previous Greenbook | 2.1 | 3.2 | 3.5 | 2.9 | 2.7 | 1.9 | . 7 | 1.2 | . 9 |
| PCE chain-wt. price index | 1.9 | 3.0 | 3.3 | 1.9 | 3.6 | 1.7 | 1.2 | 1.3 | 1.0 |
| Previous Greenbook | 1.9 | 3.0 | 3.3 | 1.9 | 3.6 | 1.7 | 1.2 | 1.3 | 1.0 |
| Energy | 8.6 | 18.6 | 21.5 | -3.7 | 19.7 | -9.1 | 1.1 | 7.6 | 2.4 |
| Previous Greenbook | 8.6 | 18.6 | 21.5 | -3.7 | 19.7 | -9.1 | 1.1 | 6.6 | 1.5 |
| Food | 3.2 | 2.7 | 1.5 | 1.7 | 4.7 | 6.8 | -1.7 | 1.7 | . 7 |
| Previous Greenbook | 3.2 | 2.7 | 1.5 | 1.7 | 4.7 | 6.8 | -1.7 | 1.5 | . 7 |
| Ex. food \& energy | 1.5 | 2.2 | 2.3 | 2.3 | 2.5 | 2.0 | 1.5 | . 9 | . 9 |
| Previous Greenbook | 1.5 | 2.2 | 2.3 | 2.3 | 2.5 | 2.0 | 1.5 | 1.0 | 1.0 |
| CPI | 2.0 | 3.4 | 3.7 | 1.9 | 4.0 | 1.6 | 1.5 | 1.3 | 1.1 |
| Previous Greenbook | 2.0 | 3.4 | 3.7 | 1.9 | 4.0 | 1.6 | 1.5 | 1.5 | 1.1 |
| Ex. food \& energy | 1.2 | 2.2 | 2.1 | 2.7 | 2.3 | 2.0 | 1.7 | . 6 | . 9 |
| Previous Greenbook | 1.2 | 2.2 | 2.1 | 2.7 | 2.3 | 2.0 | 1.7 | . 9 | 1.0 |
| ECI, hourly compensation ${ }^{1}$ | 4.0 | 3.8 | 2.9 | 3.2 | 3.0 | 2.4 | 1.2 | 2.1 | 2.1 |
| Previous Greenbook ${ }^{1}$ | 4.0 | 3.8 | 2.9 | 3.2 | 3.0 | 2.4 | 1.2 | 2.1 | 2.1 |
| Nonfarm business sector |  |  |  |  |  |  |  |  |  |
| Output per hour | 5.0 | 1.5 | 1.5 | 1.0 | 2.9 | 1.4 | 5.6 | 1.3 | . 8 |
| Previous Greenbook | 5.0 | 1.5 | 1.5 | 1.0 | 2.9 | 1.4 | 5.7 | . 8 | 1.2 |
| Compensation per hour | 5.7 | 3.4 | 3.6 | 4.5 | 3.6 | 3.1 | . 8 | 2.2 | 2.5 |
| Previous Greenbook | 5.7 | 3.4 | 3.6 | 4.5 | 3.6 | 3.1 | . 8 | 2.2 | 2.5 |
| Unit labor costs | . 6 | 1.9 | 2.0 | 3.5 | . 7 | 1.7 | -4.6 | . 9 | 1.7 |
| Previous Greenbook | . 6 | 1.9 | 2.0 | 3.5 | . 7 | 1.7 | -4.6 | 1.3 | 1.3 |
| Core goods imports chain-wt. price index² | 1.6 | 3.6 | 2.2 | 2.5 | 3.5 | 3.8 | -1.6 | 2.7 | 1.2 |
| Previous Greenbook ${ }^{2}$ | 1.6 | 3.6 | 2.2 | 2.5 | 3.5 | 3.8 | -1.6 | 2.4 | 1.1 |

[^3]| Item | 2009 |  |  |  | 2010 |  |  | 2011 |  |  |  |  | $2009{ }^{1}$ | $2010{ }^{1}$ | $2011{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| Employment and production |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nonfarm payroll employment ${ }^{\underline{-}}$ | -2.2 | -1.7 | -1.0 | -. 4 | . 0 | . 6 | . 5 | . 8 | 1.0 | 1.0 | 1.0 | 1.0 | -5.4 | 1.9 | 4.1 |
| Unemployment rate ${ }^{3}$ | 8.2 | 9.3 | 9.7 | 10.0 | 9.7 | 9.5 | 9.5 | 9.3 | 8.9 | 8.7 | 8.5 | 8.2 | 10.0 | 9.3 | 8.2 |
| Previous Greenbook ${ }^{3}$ | 8.2 | 9.3 | 9.7 | 10.0 | 9.7 | 9.6 | 9.6 | 9.4 | 9.0 | 8.8 | 8.6 | 8.3 | 10.0 | 9.4 | 8.3 |
| GDP gap ${ }^{4}$ | -7.1 | -7.8 | -8.0 | -7.3 | -7.2 | -6.9 | -6.6 | -6.3 | -5.9 | -5.5 | -5.0 | -4.5 | -7.3 | -6.3 | -4.5 |
| Previous Greenbook ${ }^{4}$ | -7.1 | -7.8 | -8.0 | -7.3 | -7.3 | -7.0 | -6.8 | -6.4 | -6.1 | -5.7 | -5.2 | -4.7 | -7.3 | -6.4 | -4.7 |
| Industrial production ${ }^{5}$ | -19.0 | -10.4 | 6.4 | 6.9 | 7.8 | 4.6 | 5.3 | 5.9 | 6.1 | 5.0 | 5.9 | 5.7 | -4.7 | 5.9 | 5.7 |
| Previous Greenbook ${ }^{5}$ | -19.0 | -10.4 | 6.4 | 6.6 | 7.4 | 3.2 | 4.2 | 5.9 | 6.0 | 5.2 | 6.0 | 6.1 | -4.7 | 5.1 | 5.8 |
| Manufacturing industr. prod. ${ }^{5}$ | -22.0 | -8.8 | 8.4 | 5.6 | 6.6 | 6.4 | 4.9 | 6.6 | 7.1 | 6.0 | 6.8 | 6.5 | -5.0 | 6.1 | 6.6 |
| Previous Greenbook ${ }^{5}$ | -22.0 | -8.8 | 8.4 | 5.5 | 5.9 | 4.1 | 4.6 | 6.7 | 6.9 | 6.0 | 6.9 | 6.8 | -5.0 | 5.3 | 6.7 |
| Capacity utilization rate - mfg. ${ }^{3}$ | 66.7 | 65.4 | 67.0 | 68.2 | 69.5 | 70.8 | 71.8 | 73.1 | 74.3 | 75.4 | 76.6 | 77.8 | 68.2 | 73.1 | 77.8 |
| Previous Greenbook ${ }^{3}$ | 66.7 | 65.4 | 67.0 | 68.2 | 69.4 | 70.3 | 71.2 | 72.5 | 73.7 | 74.8 | 76.1 | 77.3 | 68.2 | 72.5 | 77.3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Housing starts ${ }^{6}$ | . 5 | . 5 | . 6 | . 6 | . 6 | . 6 | . 7 | . 8 | . 9 | . 9 | 1.1 | 1.2 | . 6 | . 7 | 1.0 |
| Light motor vehicle sales ${ }^{6}$ | 9.5 | 9.6 | 11.5 | 10.8 | 11.0 | 11.3 | 12.1 | 12.9 | 13.6 | 14.2 | 14.7 | 15.2 | 10.3 | 11.8 | 14.4 |
| Income and saving |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nominal GDP5 | -4.6 | -. 8 | 2.6 | 6.1 | 4.0 | 4.6 | 5.0 | 4.9 | 5.1 | 5.2 | 5.5 | 5.6 | . 7 | 4.6 | 5.3 |
| Real disposable pers. income ${ }^{5}$ | . 2 | 6.2 | -3.6 | 1.0 | . 5 | 2.3 | 3.3 | 3.4 | 1.2 | 3.9 | 4.4 | 4.7 | . 9 | 2.4 | 3.6 |
| Previous Greenbook ${ }^{5}$ | . 2 | 6.2 | -3.6 | 1.8 | -. 4 | 2.7 | 3.4 | 3.4 | . 9 | 3.9 | 4.4 | 4.6 | 1.1 | 2.3 | 3.4 |
| Personal saving rate ${ }^{3}$ | 3.7 | 5.4 | 3.9 | 3.9 | 3.3 | 3.3 | 3.5 | 3.7 | 3.2 | 3.3 | 3.5 | 3.7 | 3.9 | 3.7 | 3.7 |
| Previous Greenbook ${ }^{3}$ | 3.7 | 5.4 | 3.9 | 4.1 | 3.5 | 3.6 | 3.8 | 4.0 | 3.5 | 3.6 | 3.8 | 4.0 | 4.1 | 4.0 | 4.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Corporate profits ${ }^{\text {² }}$ | 22.8 | 15.6 | 50.7 | 36.0 | 16.6 | 13.9 | 5.7 | 5.2 | 5.0 | 5.4 | 3.7 | 5.4 | 30.6 | 10.2 | 4.9 |
| Profit share of GNP3 | 8.3 | 8.6 | 9.5 | 10.1 | 10.4 | 10.6 | 10.6 | 10.6 | 10.6 | 10.6 | 10.6 | 10.6 | 10.1 | 10.6 | 10.6 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net federal saving ${ }^{8}$ | -969 | -1,269 | -1,354 | -1,307 | -1,326 | -1,357 | -1,408 | $-1,421$ | $-1,314$ | -1,275 | -1,243 | -1,234 | -1,225 | -1,378 | -1,266 |
| Net state \& local saving ${ }^{8}$ | -37 | -25 | -15 | -1 | 43 | 51 | 74 | 81 | 67 | 54 | 23 | 25 | -19 | 62 | 42 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gross national saving rate ${ }^{3}$ | 11.2 | 10.7 | 9.8 | 10.3 | 10.2 | 10.5 | 10.6 | 10.9 | 11.3 | 11.7 | 12.0 | 12.3 | 10.3 | 10.9 | 12.3 |
| Net national saving rate ${ }^{3}$ | -2.5 | -2.7 | -3.6 | -2.8 | -2.6 | -2.3 | -2.2 | -1.8 | -1.5 | -1.0 | -. 8 | -. 4 | -2.8 | -1.8 | -. 4 |

1. Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise indicated. Return to table
2. Change, millions. Return to table
3. Percent, annual values are for the fourth quarter of the year indicated. Return to table
4. Percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. Annual values are for the fourth quarter of the yea indicated. Return to table
5. Percent change, annual rate. Return to table
6. Level, millions, annual values are annual averages. Return to table
7. Percent change, annual rate, with inventory valuation and capital consumption adjustments. Return to table
8. Billions of dollars, annual values are annual averages. Return to table

## Other Macroeconomic Indicators

| Employment and production |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nonfarm payroll employment ${ }^{\underline{1}}$ | -. 1 | 2.0 | 2.4 | 2.1 | 1.2 | -2.8 | -5.4 | 1.9 | 4.1 |
| Unemployment rate ${ }^{\text {² }}$ | 5.8 | 5.4 | 5.0 | 4.5 | 4.8 | 6.9 | 10.0 | 9.3 | 8.2 |
| Previous Greenbook ${ }^{2}$ | 5.8 | 5.4 | 5.0 | 4.5 | 4.8 | 6.9 | 10.0 | 9.4 | 8.3 |
| GDP gap ${ }^{3}$ | -1.7 | -. 8 | -. 4 | -. 4 | -. 4 | -4.9 | -7.3 | -6.3 | -4.5 |
| Previous Greenbook ${ }^{3}$ | -1.7 | -. 8 | -. 4 | -. 4 | -. 4 | -4.9 | -7.3 | -6.4 | -4.7 |
| Industrial production ${ }^{4}$ | 1.6 | 3.0 | 2.6 | 1.8 | 1.8 | -6.7 | -4.7 | 5.9 | 5.7 |
| Previous Greenbook ${ }^{4}$ | 1.6 | 3.0 | 2.6 | 1.8 | 1.8 | -6.7 | -4.7 | 5.1 | 5.8 |
| Manufacturing industr. prod. ${ }^{4}$ | 1.8 | 3.6 | 3.8 | 1.2 | 1.9 | -8.7 | -5.0 | 6.1 | 6.6 |
| Previous Greenbook ${ }^{4}$ | 1.8 | 3.6 | 3.8 | 1.2 | 1.9 | -8.7 | -5.0 | 5.3 | 6.7 |
| Capacity utilization rate - mfg. ${ }^{2}$ | 74.6 | 77.3 | 79.2 | 79.0 | 78.7 | 70.9 | 68.2 | 73.1 | 77.8 |
| Previous Greenbook ${ }^{2}$ | 74.6 | 77.3 | 79.2 | 79.0 | 78.7 | 70.9 | 68.2 | 72.5 | 77.3 |
| Housing starts ${ }^{5}$ | 1.8 | 2.0 | 2.1 | 1.8 | 1.4 | . 9 | . 6 | . 7 | 1.0 |
| Light motor vehicle sales ${ }^{5}$ | 16.6 | 16.8 | 16.9 | 16.5 | 16.1 | 13.1 | 10.3 | 11.8 | 14.4 |
| Income and saving |  |  |  |  |  |  |  |  |  |
| Nominal GDP4 | 6.0 | 6.4 | 6.3 | 5.4 | 5.3 | . 1 | . 7 | 4.6 | 5.3 |
| Real disposable pers. income ${ }^{4}$ | 3.9 | 3.5 | . 6 | 4.6 | 1.0 | . 3 | . 9 | 2.4 | 3.6 |
| Previous Greenbook ${ }^{4}$ | 3.9 | 3.5 | . 6 | 4.6 | 1.0 | . 3 | 1.1 | 2.3 | 3.4 |
| Personal saving rate ${ }^{2}$ | 3.6 | 3.6 | 1.5 | 2.5 | 1.5 | 3.8 | 3.9 | 3.7 | 3.7 |
| Previous Greenbook ${ }^{2}$ | 3.6 | 3.6 | 1.5 | 2.5 | 1.5 | 3.8 | 4.1 | 4.0 | 4.0 |
|  |  |  |  |  |  |  |  |  |  |
| Corporate profits $\underline{-}$ | 12.2 | 21.9 | 19.6 | 3.7 | -5.7 | -25.1 | 30.6 | 10.2 | 4.9 |
| Profit share of GNP ${ }^{2}$ | 9.1 | 10.5 | 11.8 | 11.6 | 10.3 | 7.8 | 10.1 | 10.6 | 10.6 |
|  |  |  |  |  |  |  |  |  |  |
| Net federal saving ${ }^{7}$ | -376 | -379 | -283 | -204 | -236 | -643 | -1225 | -1378 | -1266 |
| Net state \& local saving ${ }^{7}$ | -39 | -8 | 26 | 51 | 22 | -40 | -19 | 62 | 42 |
|  |  |  |  |  |  |  |  |  |  |
| Gross national saving rate ${ }^{2}$ | 14.3 | 14.3 | 15.5 | 16.3 | 13.8 | 12.2 | 10.3 | 10.9 | 12.3 |
| Net national saving rate ${ }^{2}$ | 2.5 | 2.7 | 3.5 | 4.2 | 1.6 | -. 7 | -2.8 | -1.8 | -. 4 |

1. Change, millions. Return to table
2. Percent, values are for the fourth quarter of the year indicated. Return to table
 table
3. Percent change. Return to table
4. Level, millions, values are annual averages. Return to table
5. Percent change, with inventory valuation and capital consumption adjustments. Return to table
6. Billions of dollars, values are annual averages. Return to table

## Staff Projections of Federal Sector Accounts and Related Items

(Billions of dollars except as noted)

|  | Fiscal year |  |  |  | 2009 |  |  |  | 2010 |  |  |  | 2011 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 ${ }^{\text {a }}$ | $2009^{\text {a }}$ | 2010 | 2011 | Q1 ${ }^{\text {a }}$ | Q2 ${ }^{\text {a }}$ | Q3 ${ }^{\text {a }}$ | Q4 ${ }^{\text {a }}$ | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Unified budget |  |  |  |  | Not seasonally adjusted |  |  |  |  |  |  |  |  |  |  |  |
| Receipts ${ }^{\underline{1}}$ | 2524 | 2104 | 2146 | 2445 | 442 | 599 | 516 | 488 | 466 | 636 | 557 | 536 | 522 | 748 | 638 | 608 |
| Outlays ${ }^{1}$ | 2983 | 3520 | 3505 | 3758 | 891 | 904 | 845 | 876 | 795 | 928 | 906 | 948 | 961 | 931 | 918 | 931 |
| Surplus/deficit ${ }^{1}$ | -458 | -1416 | -1359 | -1314 | -449 | -305 | -329 | -388 | -329 | -292 | -349 | -412 | -439 | -182 | -280 | -323 |
| Previous Greenbook | -459 | -1415 | -1395 | -1295 | -449 | -305 | -329 | -388 | -474 | -271 | -263 | -411 | -427 | -170 | -287 | -331 |


| On-budget | -642 | -1553 | -1449 | -1419 | -468 | -382 | -318 | -394 | -359 | -360 | -337 | -454 | -439 | -253 | -273 | -370 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Off-budget | 183 | 137 | 91 | 105 | 19 | 77 | -11 | 6 | 30 | 67 | -13 | 42 | -1 | 71 | -7 | 47 |
| Means of financing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Borrowing | 768 | 1743 | 1494 | 1298 | 465 | 338 | 379 | 261 | 478 | 339 | 416 | 367 | 429 | 207 | 295 | 313 |
| Cash decrease | -296 | 96 | -10 | 35 | 98 | -49 | 43 | 82 | -25 | -62 | -5 | 50 | 15 | -20 | -10 | 15 |
| Other ${ }^{2}$ | -13 | -424 | -125 | -20 | -114 | 16 | -92 | 45 | -124 | 15 | -61 | -5 | -5 | -5 | -5 | -5 |
| Cash operating balance, end of period | 372 | 275 | 285 | 250 | 269 | 318 | 275 | 194 | 219 | 280 | 285 | 235 | 220 | 240 | 250 | 235 |
| NIPA federal sector |  |  |  |  | Seasonally adjusted annual rates |  |  |  |  |  |  |  |  |  |  |  |
| Receipts | 2534 | 2281 | 2334 | 2541 | 2251 | 2237 | 2189 | 2230 | 2356 | 2361 | 2390 | 2417 | 2544 | 2582 | 2623 | 2667 |
| Expenditures | 3074 | 3348 | 3684 | 3855 | 3220 | 3506 | 3542 | 3537 | 3682 | 3719 | 3799 | 3837 | 3857 | 3857 | 3866 | 3901 |
| Consumption expenditures | 914 | 972 | 1040 | 1088 | 954 | 979 | 1001 | 1011 | 1031 | 1053 | 1066 | 1072 | 1087 | 1094 | 1100 | 1107 |
| Defense | 620 | 658 | 698 | 731 | 643 | 663 | 679 | 682 | 688 | 703 | 717 | 723 | 731 | 733 | 736 | 739 |
| Nondefense | 294 | 314 | 343 | 357 | 311 | 316 | 322 | 329 | 343 | 350 | 349 | 349 | 356 | 360 | 364 | 368 |
| Other spending | 2160 | 2375 | 2644 | 2766 | 2266 | 2527 | 2541 | 2526 | 2650 | 2666 | 2732 | 2766 | 2771 | 2763 | 2766 | 2795 |
| Current account surplus | -540 | -1066 | -1350 | -1313 | -969 | -1269 | -1354 | -1307 | -1326 | -1357 | -1408 | -1421 | -1314 | -1275 | -1243 | -1234 |
| Gross investment | 141 | 158 | 161 | 166 | 152 | 159 | 163 | 159 | 157 | 162 | 166 | 166 | 166 | 165 | 165 | 165 |
| Gross saving less gross investment ${ }^{\underline{3}}$ | -563 | -1101 | -1376 | -1334 | -999 | -1304 | -1391 | -1336 | -1350 | -1383 | -1436 | -1447 | -1336 | -1295 | -1260 | -1247 |
| Fiscal indicators ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| High-employment (HEB) surplus/deficit | -496 | -761 | -961 | -985 | -681 | -911 | -967 | -907 | -925 | -973 | -1038 | -1063 | -975 | -955 | -946 | -960 |
| Change in HEB, percent of potential GDP | 1.9 | 1.6 | 1.1 | -0.1 | 1.2 | 1.5 | 0.3 | -0.4 | 0.1 | 0.3 | 0.4 | 0.1 | -0.6 | -0.2 | -0.1 | 0.0 |
| Fiscal impetus (FI), percent of GDP | 0.8 | 1.0 | 0.9 | -0.0 | 0.0 | 0.7 | 0.3 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | -0.2 | -0.0 | -0.1 | -0.2 |
| Previous Greenbook | 0.8 | 1.0 | 0.9 | -0.0 | 0.0 | 0.7 | 0.3 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | -0.2 | -0.0 | -0.1 | -0.1 |

1. Budget receipts, outlays, and surplus/deficit include corresponding social security (OASDI) categories. The OASDI surplus and the Postal Service surplus are excluded from the on-budget surplus and shown separately as off-budget, as classified under current law. Return to table
2. Other means of financing are checks issued less checks paid, accrued items, and changes in other financial assets and liabilities. Return to table
3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises. Return to table
4. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the NAIRU. Quarterly figures for change in HEB and FI are not at annual rates. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionary changes in federal spending and taxes in chained (2005) dollars, scaled by real GDP. The annual FI estimates are on a calendar year basis. Also, for FI and the change in HEB, positive values indicate aggregate demand stimulus. Return to table
a--Actual Return to table

## Change in Debt of the Domestic Nonfinancial Sectors

(Percent)

| Period ${ }^{1}$ | Total | Total | Households <br> Home mortgages | Consumer credit | Business | State and local governments | Federal government | Memo: <br> Nominal GDP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year |  |  |  |  |  |  |  |  |
| 2004 | 8.9 | 11.0 | 13.4 | 5.6 | 6.3 | 7.3 | 9.0 | 6.4 |
| 2005 | 9.5 | 11.1 | 13.2 | 4.5 | 8.8 | 10.2 | 7.0 | 6.3 |
| 2006 | 9.0 | 10.0 | 11.0 | 4.1 | 10.7 | 8.3 | 3.9 | 5.4 |
| 2007 | 8.7 | 6.7 | 6.7 | 5.8 | 13.2 | 9.5 | 4.9 | 5.3 |
| 2008 | 6.0 | . 1 | -. 6 | 1.5 | 5.5 | 2.5 | 24.2 | . 1 |
| 2009 | 3.0 | -1.8 | -1.6 | -4.4 | -2.7 | 4.8 | 22.7 | . 7 |
| 2010 | 5.7 | . 4 | -. 1 | 1.1 | 1.9 | 4.0 | 20.5 | 4.6 |
| 2011 | 5.3 | 2.1 | . 7 | 6.7 | 3.1 | 3.5 | 13.2 | 5.3 |

## Quarter

| 2008: | 1 | 5.6 | 3.1 | 2.6 | 4.6 | 8.1 | 3.9 | 8.1 | 1.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 | 3.3 | -. 0 | -. 6 | 3.5 | 6.6 | 1.8 | 5.9 | 3.5 |
|  | 3 | 8.3 | -. 6 | -2.5 | . 7 | 5.6 | 3.9 | 39.2 | 1.4 |
|  | 4 | 6.2 | -1.9 | -1.9 | -2.7 | 1.2 | . 2 | 37.0 | -5.4 |
| 2009: | 1 | 3.8 | -1.3 | -. 2 | -3.9 | -. 7 | 4.7 | 22.6 | -4.6 |
|  | 2 | 4.1 | -1.7 | -1.7 | -4.8 | -3.2 | 4.1 | 28.2 | -. 8 |
|  | 3 | 2.6 | -2.7 | -3.6 | -3.1 | -3.3 | 5.5 | 20.6 | 2.6 |
|  | 4 | 1.4 | -1.4 | -1.0 | -6.2 | -3.6 | 4.7 | 12.6 | 6.1 |
| 2010: | 1 | 5.1 | . 4 | . 5 | -1.5 | 1.6 | 3.6 | 18.5 | 4.0 |
|  | 2 | 6.7 | . 6 | . 2 | 1.0 | 2.0 | 4.1 | 23.8 | 4.6 |
|  | 3 | 5.5 | . 2 | -. 5 | 1.8 | 1.7 | 4.1 | 18.9 | 5.0 |
|  | 4 | 5.0 | . 5 | -. 5 | 3.3 | 2.4 | 4.0 | 15.2 | 4.9 |
| 2011: | 1 | 5.0 | 1.2 | . 0 | 4.6 | 2.8 | 3.5 | 13.3 | 5.1 |
|  | 2 | 5.7 | 2.0 | . 8 | 5.9 | 2.8 | 3.5 | 14.5 | 5.2 |
|  | 3 | 5.1 | 2.3 | . 8 | 7.3 | 3.1 | 3.4 | 11.4 | 5.5 |
|  | 4 | 5.3 | 2.7 | 1.0 | 8.3 | 3.5 | 3.4 | 11.2 | 5.6 |

Note. Quarterly data are at seasonally adjusted annual rates.

1. Data after 2009:Q4 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4. Return to table
2.6.3 FOF

Flow of Funds Projections: Highlights
(Billions of dollars at seasonally adjusted annual rates except as noted)

| Category | 2008 | 2009 | 2010 | 2011 | 2009 |  | 2010 |  |  |  | 2011 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Domestic nonfinancial sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net funds raised |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1562.5 | 939.8 | 1786.3 | 1777.0 | 940.3 | 146.7 | 1577.0 | 2159.4 | 1772.3 | 1636.3 | 1633.9 | 1916.1 | 1724.5 | 1833.6 |
| Net equity issuance | -336.0 | -68.1 | -179.5 | -180.0 | 65.5 | -331.3 | -178.0 | -180.0 | -180.0 | -180.0 | -180.0 | -180.0 | -180.0 | -180.0 |
| Net debt issuance | 1898.5 | 1007.9 | 1965.8 | 1957.0 | 874.9 | 478.0 | 1755.0 | 2339.4 | 1952.3 | 1816.3 | 1813.9 | 2096.1 | 1904.5 | 2013.6 |
| Borrowing indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt (percent of GDP) ${ }^{\underline{1}}$ | 226.2 | 239.4 | 239.8 | 240.7 | 241.6 | 239.2 | 238.8 | 239.6 | 240.3 | 240.5 | 240.6 | 240.7 | 240.7 | 240.5 |
| Borrowing (percent of GDP) | 13.1 | 7.1 | 13.2 | 12.5 | 6.1 | 3.3 | 12.0 | 15.8 | 13.1 | 12.0 | 11.8 | 13.5 | 12.1 | 12.6 |
| Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing $\underline{\underline{2}}$ | 20.2 | -243.1 | 60.1 | 280.3 | -366.1 | -193.1 | 51.0 | 83.3 | 33.0 | 72.8 | 158.8 | 277.1 | 317.1 | 368.2 |
| Home mortgages | -62.2 | -168.2 | -7.7 | 66.8 | -376.8 | -100.7 | 51.3 | 20.5 | -51.4 | -51.3 | 0.0 | 82.0 | 82.2 | 102.9 |
| Consumer credit | 38.8 | -115.3 | 28.3 | 167.0 | -79.5 | -155.5 | -36.7 | 24.4 | 44.1 | 81.4 | 114.6 | 148.9 | 187.3 | 217.2 |
| Debt/DPI (percent) ${ }^{3}$ | 127.3 | 125.0 | 120.6 | 117.1 | 124.6 | 122.9 | 122.2 | 121.4 | 120.1 | 118.8 | 118.4 | 117.4 | 116.5 | 115.6 |
| Business |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Financing gap ${ }^{4}$ | 232.4 | -113.6 | -66.1 | 6.0 | -204.6 | -58.9 | -69.1 | -91.3 | -59.6 | -44.6 | -18.5 | -10.3 | 19.3 | 33.7 |
| Net equity issuance | -336.0 | -68.1 | -179.5 | -180.0 | 65.5 | -331.3 | -178.0 | -180.0 | -180.0 | -180.0 | -180.0 | -180.0 | -180.0 | -180.0 |
| Credit market borrowing | 584.8 | -301.5 | 211.9 | 346.6 | -371.6 | -393.5 | 173.1 | 217.4 | 190.0 | 266.9 | 316.2 | 319.6 | 354.2 | 396.5 |
| State and local governments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing | 54.3 | 108.7 | 94.3 | 85.7 | 127.8 | 108.7 | 83.9 | 97.7 | 97.7 | 97.7 | 85.7 | 85.7 | 85.7 | 85.7 |
| Current surplus ${ }^{5}$ | 212.7 | 243.8 | 281.4 | 264.2 | 258.0 | 261.2 | 261.4 | 269.3 | 293.4 | 301.4 | 287.5 | 275.9 | 245.4 | 248.2 |

Federal government
Net borrowing

| Net borrowing (n.s.a.) | 1239.2 | 1443.9 | 1599.6 | 1244.4 | 378.7 | 261.4 | 477.7 | 339.2 | 415.9 | 366.7 | 429.3 | 207.4 | 294.9 | 312.8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unified deficit (n.s.a.) | 680.5 | 1471.3 | 1382.9 | 1224.4 | 329.4 | 388.1 | 328.9 | 292.5 | 349.5 | 412.0 | 439.3 | 182.4 | 279.9 | 322.8 |
| Depository institutions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Funds supplied | 407.6 | -643.4 | 750.6 | 270.7 | -1001.3 | -550.8 | 1649.7 | 1157.1 | 86.0 | 109.4 | 419.5 | 197.9 | 266.9 | 198.3 |

Note. Data after 2009:Q4 are staff projections.

1. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP. Return to table
2. Includes change in liabilities not shown in home mortgages and consumer credit. Return to table
3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income. Return to table
4. For corporations, excess of capital expenditures over U.S. internal funds. Return to table
5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers. Return to table
n.s.a. Not seasonally adjusted. Return to table
2.6.4 FOF
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## Last update: January 29, 2016

## April 2010 Greenbook Part 1 Tables and Charts ${ }^{ \pm}$

## International Developments

## Summary of Staff Projections

(Percent change from end of previous period, annual rate, except as noted)

| Indicator | 2009 |  | Projection |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 2010 |  |  |
|  |  |  | Q1 | Q2 | H2 |  |
| Foreign output | -3.7 | 4.4 | 4.5 | 3.7 | 3.8 | 3.8 |
| Previous Greenbook | -3.6 | 4.4 | 3.6 | 3.7 | 3.7 | 3.9 |
| Foreign consumer prices | . 2 | 2.3 | 3.4 | 2.5 | 2.1 | 2.1 |
| Previous Greenbook | . 1 | 2.2 | 3.4 | 2.5 | 2.0 | 2.1 |
|  | Contribution to growth (percentage points) |  |  |  |  |  |
| U.S. net exports | 2.1 | -. 3 | -. 2 | . 1 | -. 2 | . 0 |
| Previous Greenbook | 2.1 | -. 3 | -. 1 | . 0 | -. 2 | -. 1 |

Note: Change for year measured as Q4/Q4; half-years are Q2/Q4 or Q4/Q2.
[Box:] Credit Exposure of European Banking Systems to Greece

Banking System Credit Exposure to Greece, Portugal, Spain, and Italy
(as of end-December 2009, in billions of U.S. dollars and percent of Tier 1 capital)

|  | Greece |  | Portugal |  | Spain |  | Total |  | Memo: Italy |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Systems of: |  | Percent of Tier 1 |  | Percent of Tier 1 |  | Percent of Tier 1 |  | Percent of Tier 1 |  | Percent of Tier 1 |
| France | 98 | 33 | 51 | 17 | 248 | 83 | 398 | 133 | 580 | 194 |
| Germany | 45 | 13 | 47 | 14 | 238 | 71 | 330 | 98 | 190 | 56 |
| Netherlands | 13 | 8 | 15 | 10 | 127 | 81 | 155 | 99 | 77 | 49 |
| Spain | 1 | 1 | 110 | 38 | -- | -- | 111 | 39 | 58 | 20 |
| Switzerland | 20 | 19 | 5 | 5 | 31 | 30 | 57 | 55 | 39 | 37 |
| United Kingdom | 20 | 5 | 32 | 8 | 139 | 35 | 190 | 48 | 104 | 26 |
| Western Europe | 238 | 11 | 285 | 13 | 935 | 43 | 1,457 | 67 | 1,165 | 54 |
| Memo: |  |  |  |  |  |  |  |  |  |  |
| United States | 44 | 5 | 38 | 4 | 177 | 18 | 259 | 26 | 278 | 28 |

[^4]Bank capital is Tier 1 capital of domestic banks. Tier 1 capital is estimated for Spain from capital and reserves. For Germany, Tier 1 capital of all banks is used.
Source: BIS consolidated banking statistics.

Staff Projections for Foreign GDP Growth by Region

| Indicator | H1 | H2 | 2010 |  |  | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q1 | Q2 | H2 |  |
| Advanced foreign economies | -4.8 | 1.9 | 2.6 | 2.5 | 2.6 | 2.9 |
| Previous Greenbook | -4.8 | 2.0 | 2.4 | 2.5 | 2.8 | 3.0 |
| Emerging market economies | -2.2 | 7.7 | 6.9 | 5.1 | 5.2 | 5.0 |
| Previous Greenbook | -2.0 | 7.7 | 5.3 | 5.1 | 5.0 | 5.0 |

Note: Change for year measured as Q4/Q4; half-years are Q2/Q4 or Q4/Q2.

# [Box:] The Bank of Japan's Exit from Quantitative Easing 

## Bank of Japan Assets

Figure: Total Assets

Line chart, 1995 to 2010. Unit for left scale is percentage points. Unit for right scale is trillions of yen. There are shaded bars marking LIRP (Low Interest Rate Policy) between 1996 and 1998 and between 2006 and 2010. There is a shaded bar marking ZIRP (Zero Interest Rate Policy) between 1999 and early 2000. There is a shaded bar marking QEP (Quantitative Easing Policy) from early 2001 to early 2006. There are two series, "Total Assets (right scale)" and "Call Rate (left scale)." Total assets begins at about 50 and fluctuates but generally increases to about 150 in late 2005. It generally decreases to about 115 in mid-2008 then fluctuates but generally increases ending at about 125 . Call rate begins at about 2.25 and generally decreases to about 0 in early 2008 . It generally increases to about .25 in late 2000 then generally decreases to about 0 in mi-2001. It remains about constant until mid-2006 then generally increases to about 25 in early 2007 . It remains about constant until late 2008 then generally decreases ending at about .1.

Source. Bank of Japan/Haver Analytics, last observation November 2008.

Figure: Total Government Securities

Line chart, 1995 to 2010. Unit for left scale is percentage points. Unit for right scale is trillions of yen. There are shaded bars marking LIRP (Low Interest Rate Policy) between 1996 and 1998 and between 2006 and 2010. There is a shaded bar marking ZIRP (Zero Interest Rate Policy) between 1999 and early 2000 . There is a shaded bar marking QEP (Quantitative Easing Policy) from early 2001 to early 2006. There are two series, "Government Securities (right scale)" and "10-year benchmark rate (left scale)." Government Securities begins at about 30 and fluctuates but generally increases tabout 100 in late 2005 . It generally decreases to about 60 in late 2008 then generally increases ending at about 75 . 10-year benchmark rate begins at about 3.75 and fluctuates but generally decreases to about .75 in late 1998. It fluctuates but generally increases to about 1.75 in late 2000 then generally decreases to about . 5 in early 2003 . It fluctuates but generally increases to about 2 in early 2006 then generally decreases ending at about 1.25.

## Figure: Long-Term Government Securities

Line chart, 1995 to 2010. Unit for left scale is percentage points. Unit for right scale is trillions of yen. There are shaded bars marking LIRP (Low Interest Rate Policy) between 1996 and 1998 and between 2006 and 2010. There is a shaded bar marking ZIRP (Zero Interest Rate Policy) between 1999 and early 2000 . There is a shaded bar marking QEP (Quantitative Easing Policy) from early 2001 to early 2006. There are two series, "Long term government bonds (right scale)" and "10-year bench rate (left scale)." Long term government bonds begins at about 40 in early 2001 and generally increases to about 60 in early 2006 . It generally decreases to about 40 in late 2008 then generally increases ending at about 50. 10-year bench rate begins at about 3.75 and fluctuates but generally decreases to about 1 in late 1998. It generally increases to about 2 in early 1999 then generally decreases to about .5 in early 2003 . It fluctuates but generally increases to about 2 in early 2006 then generally decreases ending at about 1.

Note: By original maturity.

Figure: Short-Term Government Securities

Line chart, 1995 to 2010. Unit for left scale is percentage points. Unit for right scale is trillions of yen. There are shaded bars marking LIRP (Low Interest Rate Policy) between 1996 and 1998 and between 2006 and 2010. There is a shaded bar marking ZIRP (Zero Interest Rate Policy) between 1999 and early 2000. There is a shaded bar marking QEP (Quantitative Easing Policy) from early 2001 to early 2006. There are two series, "Treasury Bills and financing bills (right scale)" and " 3 month Treasury Bill rate (left scale)." Treasury bills and financing bills begins at about 20 in early 2001 and generally increases to about 35 in early 2002 . It fluctuates but generally decreases to about 25 in late 2004. It generally increases to about 35 in late 2005 then generally decreases ending at about 20. 3-month Treasury Bill rate begins at about 0 in mid-1999 and generally increases to about .25 in late 2000. It generally decreases to about 0 and remains about constant until early 2006 . It generally increases to about .75 in mid- 2007 then generally decreases ending at about 0 .

Figure: Bills Purchased from and Loans to Financial Firms

Line chart, 1995 to 2010. Unit for left scale is percentage points. Unit for right scale is trillions of yen. There are shaded bars marking LIRP (Low Interest Rate Policy)
between 1996 and 1998 and between 2006 and 2010. There is a shaded bar marking ZIRP (Zero Interest Rate Policy) between 1999 and early 2000. There is a shaded bar marking QEP (Quantitative Easing Policy) from early 2001 to early 2006. The series begins in early 1998 at about 0 and fluctuates but generally increases to about 45 at the beginning of 2006. It generally decreases to about 18 in early 2006 then fluctuates but generally increases ending at about 38 .

Note: Before June 2006, data are bills issues to financial institutions, maturity up to one year; after June 2006 data are BOJ loans including funds-supplying operations against pooled collateral and special funds-supplying operations to facilitate corporate financing.

Figure: Equities

Line chart, 1995 to 2010. Unit for left scale is an index, $01 / 04 / 68=100$. Unit for right scale is trillions of yen. There are shaded bars marking LIRP (Low Interest Rate Policy) between 1996 and 1998 and between 2006 and 2010. There is a shaded bar marking ZIRP (Zero Interest Rate Policy) between 1999 and early 2000. There is a shaded bar marking QEP (Quantitative Easing Policy) from early 2001 to early 2006. There are two series, "Equity purchased from banks" and "Topix." Equity purchased from banks begins in late 2002 at about 0 and generally increases to about 1.8 in early 2003 . It remains about constant until early 2006 then generally decreases to about 1 in early 2009. It generally increases ending at about 1.5.

## Staff Projections of Selected Trade Prices

(Percent change from end of previous period, annual rate, except as noted)

| Trade category | 2009 |  | Projection |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | H2 | Q1 | 2010 |  | 2011 |
|  |  |  |  | Q2 | H2 |  |
| Imports |  |  |  |  |  |  |
| Core goods | -5.9 | 2.9 | 4.0 | 2.9 | 2.0 | 1.2 |
| Previous Greenbook | -5.9 | 3.0 | 4.2 | 2.2 | 1.5 | 1.1 |
| Oil (dollars per barrel) | 53.71 | 71.92 | 75.77 | 80.26 | 83.19 | 85.60 |
| Previous Greenbook | 53.71 | 71.94 | 75.86 | 79.62 | 80.55 | 81.85 |
| Exports |  |  |  |  |  |  |
| Core goods | -5.3 | 5.4 | 6.7 | 4.0 | 2.7 | 1.4 |
| Previous Greenbook | -5.3 | 5.4 | 8.6 | 3.1 | 2.0 | 1.3 |

 product account chain-weighted basis.

The price of imported oil for multi-quarter periods is the price for the final quarter of the period. Imported oil includes both crude oil and refined.

## Staff Projections for Trade in Goods and Services

(Percent change from end of previous period, annual rate)

| Measure | 2009 |  | Projection |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | H2 | Q1 | 2010 |  | 2011 |
|  |  |  |  | Q2 | H2 |  |
| Real exports | -18.1 | 20.3 | 8.7 | 8.8 | 9.4 | 9.1 |
| Previous Greenbook | -18.1 | 20.1 | 9.9 | 8.4 | 9.0 | 8.7 |
| Real imports | -26.3 | 18.5 | 7.9 | 6.2 | 8.5 | 7.4 |
| Previous Greenbook | -26.3 | 18.2 | 8.6 | 6.5 | 8.5 | 7.7 |

Note: Change for year measured as Q4/Q4; half-years are Q2/Q4 or Q4/Q2.

## Alternative Scenarios: <br> Financial Distress in Europe

(Percent change from previous period, annual rate, except as noted)

|  | H1 | H2 | H1 | H2 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. real GDP |  |  |  |  |  |  |
| Baseline | 3.2 | 3.7 | 4.1 | 4.7 | 4.7 | 3.9 |
| Financial Distress in Europe | 2.9 | 2.4 | 3.1 | 4.4 | 4.8 | 4.0 |
| With Additional Spillover Abroad | 2.9 | 2.0 | 2.7 | 4.2 | 4.8 | 4.1 |
| U.S. PCE prices excluding food and energy |  |  |  |  |  |  |
| Baseline | . 7 | 1.0 | 1.0 | . 9 | 1.1 | 1.4 |
| Financial Distress in Europe | . 2 | . 1 | . 5 | . 6 | . 9 | 1.2 |
| With Additional Spillover Abroad | . 1 | -. 1 | . 4 | . 5 | . 8 | 1.2 |
| U.S. federal funds rate (percent) |  |  |  |  |  |  |
| Baseline | . 1 | . 1 | . 1 | . 1 | 1.4 | 3.6 |
| Financial Distress in Europe | . 1 | . 1 | . 1 | . 1 | . 4 | 3.0 |
| With Additional Spillover Abroad | . 1 | . 1 | . 1 | . 1 | . 3 | 2.8 |
| U.S. trade balance (percent share of GDP) |  |  |  |  |  |  |
| Baseline | -3.2 | -3.2 | -3.2 | -3.1 | -3.0 | -2.7 |
| Financial Distress in Europe | -3.7 | -4.4 | -4.3 | -4.1 | -3.8 | -3.2 |
| With Additional Spillover Abroad | -3.7 | -4.5 | -4.5 | -4.3 | -4.0 | -3.2 |

 period.

## Evolution of the Staff Forecast

## Figure: Current Account Balance

Line chart, Greenbook Publication Dates $1 / 23 / 2008$ to $12 / 8 / 2010$. Unit is percent of GDP. There are three series, "2009," "2010," and "2011." 2009 begins at about negative 4.75 and generally increases to about negative 4 on $4 / 23 / 2008$. It generally decreases to about negative 4.5 on $6 / 18 / 2008$ then generally increases to about negative 3 on 12/10/2008. It generally decreases to about negative 3.5 on $3 / 11 / 2009$ then generally increases to about negative 3 on $9 / 16 / 2009$. It remains about constant ending on $4 / 21 / 2010$. 2010 begins at about negative 3.5 on $9 / 10 / 2008$ then generally decreases to about negative 4 on $3 / 11 / 2009$. It generally increases to about negative 3 on 9/16/2009 and remains about constant ending on 4/21/2010. 2011 begins at about negative 3.25 on $9 / 16 / 2009$ and generally increases to about negative 3 on 10/29/2009. It generally decreases to about negative 3.25 on 1/20/2010 and remains about constant ending on 4/21/2919.

## Figure: Foreign Real GDP

Line chart, Greenbook Publication Dates $1 / 23 / 2008$ to $12 / 8 / 2010$. Unit is percent change, Q4/Q4. 0 on the scale is marked by a horizontal line. There are three series, "2009," "2010," and "2011." 2009 begins at about 3.5 and generally decreases to about negative 2 on $3 / 11 / 2009$. It generally increases ending on $4 / 21 / 2010$ at about .25. 2010 begins on $9 / 10 / 2008$ at about 3.5 and generally decreases to about 2.5 on $3 / 11 / 2009$. It generally increases ending on $4 / 21 / 2010$ at about 4 . 2011 begins on $9 / 16 / 2009$ at about 4 and remains about constant until 1/20/2010. It generally decreases ending on 4/21/10 at about 3.75.

## Figure: Core Import Prices

Line chart, Greenbook Publication Dates $1 / 23 / 2008$ to $12 / 8 / 2010$. Unit is percent change, Q4/Q4. 0 on the scale is marked by a horizontal line. There are three series, "2009," "2010," and "2011." 2009 begins at about 1 and remains about constant until $9 / 10 / 2008$. It decreases to about negative 4 on $3 / 11 / 2009$ then generally increases to about negative 2 on 9/16/2009. It remains about constant ending on 4/21/2010. 2010 begins on 9/10/2008 at about 1 and remains about constant until $10 / 29 / 2009$. It generally increases ending on $4 / 1 / 2010$ at about 2.5 . 2011 begins on $9 / 16 / 2011$ at about 1 and remains about constant ending on $4 / 21 / 2010$.

Note. Prices for merchandise imports excluding computers, semiconductors, oil, and natural gas.

Outlook for Foreign Real GDP and Consumer Prices: Selected Countries

|  | Projected |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measure and country | 2009 |  |  |  | 2010 |  |  |  | 2011 |  |  |  |
|  | Q1 |  | Q3 | Q4 | Q1 |  | Q3 | Q4 | Q1 | Q2 | Q3 |  |


| REAL GDP | Quarterly changes at an annual rate |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Foreign | -9.3 | 2.4 | 4.2 | 4.7 | 4.5 | 3.7 | 3.7 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 |
| Advanced Foreign Economies | -8.3 | -1.2 | 0.9 | 2.9 | 2.6 | 2.5 | 2.5 | 2.7 | 2.9 | 2.9 | 2.9 | 2.9 |
| of which: |  |  |  |  |  |  |  |  |  |  |  |  |
| Canada | -7.0 | -3.5 | 0.9 | 5.0 | 4.1 | 3.3 | 3.3 | 3.4 | 3.8 | 3.8 | 3.8 | 3.8 |
| Japan | -13.7 | 6.0 | -0.6 | 3.8 | 2.3 | 1.9 | 2.0 | 2.2 | 2.1 | 2.0 | 1.8 | 1.8 |
| United Kingdom | -10.0 | $-2.7$ | -1.1 | 1.8 | 1.4 | 2.4 | 2.7 | 2.8 | 2.8 | 2.9 | 2.8 | 2.7 |
| Euro Area² | -9.5 | -0.5 | 1.6 | 0.2 | 0.9 | 1.7 | 1.6 | 1.8 | 1.8 | 1.9 | 2.0 | 2.0 |
| Germany | -13.4 | 1.8 | 2.9 | 0.0 | 0.2 | 2.2 | 1.8 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 |
| Emerging Market Economies | -10.5 | 6.9 | 8.4 | 7.0 | 6.9 | 5.1 | 5.3 | 5.2 | 5.0 | 4.9 | 5.0 | 5.0 |
| Asia | -1.8 | 13.4 | 9.5 | 7.0 | 10.6 | 6.0 | 6.3 | 6.2 | 6.0 | 6.1 | 6.1 | 6.2 |
| Korea | 1.0 | 9.8 | 13.4 | 0.7 | 3.9 | 4.1 | 4.1 | 4.2 | 4.2 | 4.3 | 4.3 | 4.4 |
| China | 7.1 | 15.5 | 10.8 | 10.1 | 11.3 | 9.5 | 9.1 | 8.8 | 8.5 | 8.5 | 8.7 | 8.9 |
| Latin America | -18.8 | 1.9 | 7.7 | 7.6 | 4.0 | 4.3 | 4.3 | 4.2 | 3.9 | 3.9 | 3.9 | 3.9 |
| Mexico | -24.9 | 1.1 | 10.4 | 8.4 | 4.5 | 4.8 | 4.2 | 4.1 | 4.0 | 3.9 | 3.9 | 3.9 |
| Brazil | -3.6 | 5.6 | 7.0 | 8.4 | 6.5 | 5.5 | 5.0 | 4.5 | 4.2 | 4.2 | 4.2 | 4.2 |
| CONSUMER PRICES ${ }^{3}$ |  |  |  |  | our-qu | arter | chang |  |  |  |  |  |
| Total Foreign | 1.9 | 0.9 | 0.3 | 1.2 | 2.2 | 2.6 | 2.8 | 2.5 | 2.2 | 2.1 | 2.1 | 2.1 |
| Advanced Foreign Economies | 1.0 | 0.0 | -0.8 | 0.2 | 1.1 | 1.4 | 1.6 | 1.4 | 1.1 | 1.1 | 1.1 | 1.2 |
| of which: |  |  |  |  |  |  |  |  |  |  |  |  |
| Canada | 1.2 | 0.1 | -0.9 | 0.8 | 1.8 | 2.3 | 2.7 | 2.2 | 2.0 | 1.9 | 1.9 | 2.0 |
| Japan | -0.1 | -1.0 | -2.2 | -2.0 | -1.3 | -1.3 | -1.0 | -1.0 | -1.2 | -1.0 | -0.9 | -0.8 |
| United Kingdom ${ }^{4}$ | 3.0 | 2.1 | 1.5 | 2.1 | 3.3 | 3.6 | 3.3 | 2.9 | 1.9 | 1.6 | 1.7 | 1.8 |
| Euro Area ${ }^{2}$ | 1.0 | 0.2 | -0.4 | 0.4 | 1.1 | 1.5 | 1.7 | 1.3 | 1.2 | 1.1 | 1.2 | 1.2 |
| Germany | 0.8 | 0.2 | -0.4 | 0.3 | 0.8 | 1.2 | 1.3 | 1.1 | 1.0 | 0.9 | 1.0 | 1.1 |
| Emerging Market Economies | 2.7 | 1.7 | 1.3 | 2.2 | 3.3 | 3.7 | 3.9 | 3.7 | 3.3 | 3.1 | 3.1 | 3.1 |
| Asia | 1.1 | -0.2 | -0.4 | 1.3 | 2.7 | 3.3 | 3.5 | 3.0 | 2.8 | 2.7 | 2.7 | 2.6 |
| Korea | 4.0 | 2.7 | 2.0 | 2.4 | 2.7 | 2.7 | 2.8 | 2.6 | 2.4 | 2.4 | 2.4 | 2.4 |
| China | -0.6 | -1.5 | -1.3 | 0.6 | 2.2 | 2.9 | 3.3 | 2.8 | 2.6 | 2.6 | 2.5 | 2.5 |
| Latin America | 6.4 | 6.0 | 5.0 | 4.0 | 4.8 | 4.9 | 5.1 | 5.5 | 4.6 | 4.1 | 4.1 | 4.1 |
| Mexico | 6.2 | 6.0 | 5.1 | 4.0 | 4.8 | 4.8 | 4.9 | 5.3 | 4.2 | 3.7 | 3.7 | 3.7 |
| Brazil | 5.9 | 5.3 | 4.3 | 4.2 | 4.8 | 4.9 | 5.2 | 5.4 | 4.8 | 4.5 | 4.5 | 4.5 |

1. Foreign GDP aggregates calculated using shares of U.S. exports. Return to table
2. Harmonized data for euro area from Eurostat. Return to table
3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports. Return to table
4. CPI excluding mortgage interest payments, which is the targeted inflation rate. Return to table

Outlook for Foreign Real GDP and Consumer Prices: Selected Countries
(Percent, Q4 to Q4)

| Measure and country | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

REAL GDP ${ }^{1}$

| Total Foreign | 2.8 | 3.8 | 4.1 | 3.9 | 4.2 | -0.9 | 0.3 | 3.9 | 3.8 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Advanced Foreign Economies | 1.7 | 2.6 | 2.8 | 2.5 | 2.5 | -1.7 | -1.5 | 2.6 | 2.9 |


| of which: |  |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Canada | 1.5 | 3.7 | 3.1 | 1.9 | 2.8 | -1.0 | -1.2 | 3.6 | 3.8 |
| Japan | 2.4 | 1.1 | 2.9 | 2.0 | 1.7 | -4.3 | -1.4 | 2.1 | 1.9 |


| United Kingdom | 3.2 | 2.4 | 2.4 | 2.8 | 2.4 | -2.1 | -3.1 | 2.3 | 2.8 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Euro Area² | 1.2 | 1.8 | 2.1 | 3.4 | 2.2 | -1.9 | -2.2 | 1.5 | 1.9 |
| Germany | 0.1 | 0.2 | 1.6 | 4.3 | 1.6 | -1.8 | -2.4 | 1.6 | 2.2 |
| Emerging Market Economies | 4.4 | 5.6 | 5.9 | 5.8 | 6.5 | 0.1 | 2.6 | 5.6 | 5.0 |
| Asia | 6.9 | 6.0 | 7.7 | 7.2 | 8.3 | 0.4 | 6.9 | 7.2 | 6.1 |
| Korea | 3.6 | 2.7 | 5.2 | 4.6 | 5.7 | -3.2 | 6.1 | 4.1 | 4.3 |
| China | 10.3 | 9.9 | 10.3 | 10.9 | 12.4 | 7.0 | 10.8 | 9.7 | 8.6 |
| Latin America | 1.7 | 5.1 | 4.0 | 4.6 | 4.6 | -0.4 | -1.0 | 4.2 | 3.9 |
| Mexico | 1.2 | 4.6 | 3.5 | 3.8 | 3.8 | -1.2 | -2.4 | 4.4 | 3.9 |
| Brazil | 0.8 | 5.1 | 3.5 | 4.8 | 6.7 | 0.8 | 4.3 | 5.4 | 4.2 |

## CONSUMER PRICES ${ }^{3}$

| Total Foreign | 2.1 | 2.8 | 2.3 | 2.1 | 3.7 | 3.4 | 1.2 | 2.5 | 2.1 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| Advanced Foreign Economies | 1.3 | 1.8 | 1.6 | 1.4 | 2.2 | 2.0 | 0.2 | 1.4 | 1.2 |


| of which: |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Canada | 1.7 | 2.3 | 2.3 | 1.4 | 2.5 | 1.9 | 0.8 | 2.2 | 2.0 |
| Japan | -0.3 | 0.5 | -1.0 | 0.3 | 0.6 | 1.0 | -2.0 | -1.0 | -0.8 |
| United Kingdom ${ }^{4}$ | 1.3 | 1.4 | 2.1 | 2.7 | 2.1 | 3.9 | 2.1 | 2.9 | 1.8 |
| Euro Area ${ }^{2}$ | 2.0 | 2.3 | 2.3 | 1.8 | 2.9 | 2.3 | 0.4 | 1.3 | 1.2 |
| Germany | 1.1 | 2.1 | 2.2 | 1.3 | 3.1 | 1.7 | 0.3 | 1.1 | 1.1 |
| Emerging Market Economies | 3.1 | 3.9 | 3.0 | 2.9 | 5.1 | 4.6 | 2.2 | 3.7 | 3.1 |
| Asia | 2.3 | 3.1 | 2.6 | 2.3 | 5.5 | 3.7 | 1.3 | 3.0 | 2.6 |
| Korea | 3.5 | 3.4 | 2.5 | 2.1 | 3.4 | 4.5 | 2.4 | 2.6 | 2.4 |
| China | 2.7 | 3.2 | 1.4 | 2.1 | 6.6 | 2.6 | 0.6 | 2.8 | 2.5 |
| Latin America | 4.9 | 5.6 | 3.7 | 4.1 | 4.2 | 6.6 | 4.0 | 5.5 | 4.1 |
| Mexico | 3.9 | 5.3 | 3.1 | 4.1 | 3.8 | 6.2 | 4.0 | 5.3 | 3.7 |
| Brazil | 11.5 | 7.2 | 6.1 | 3.2 | 4.3 | 6.2 | 4.2 | 5.4 | 4.5 |

1. Foreign GDP aggregates calculated using shares of U.S. exports. Return to table
2. Harmonized data for euro area from Eurostat. Return to table
3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports. Return to table
4. CPI excluding mortgage interest payments, which is the targeted inflation rate. Return to table

Outlook for U.S. International Transactions

|  | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Projected |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 2009 | 2010 | 2011 |
| NIPA REAL EXPORTS and IMPORTS |  |  |  |  |  |  |  |  |  |
| Percentage point contribution to GDP growth, Q4/Q4 |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -0.1 | -0.9 | -0.2 | 0.4 | 1.0 | 0.7 | 1.0 | -0.1 | -0.0 |
| Exports of G\&S | 0.6 | 0.7 | 0.7 | 1.1 | 1.2 | -0.4 | -0.1 | 1.1 | 1.1 |
| Imports of G\&S | -0.7 | -1.6 | -0.8 | -0.7 | -0.2 | 1.2 | 1.0 | -1.2 | -1.2 |
| Percentage change, Q4/Q4 |  |  |  |  |  |  |  |  |  |
| Exports of G\&S | 6.2 | 7.1 | 6.7 | 10.2 | 10.2 | -3.4 | -0.7 | 9.1 | 9.1 |
| Services | 4.3 | 9.1 | 3.6 | 12.0 | 13.0 | -3.5 | -1.6 | 6.2 | 7.3 |
| Computers | 11.3 | 5.8 | 14.2 | 8.4 | 1.3 | -2.4 | 6.6 | 17.0 | 9.5 |
| Semiconductors | 38.3 | -6.0 | 17.6 | 2.1 | 29.1 | -12.7 | 21.7 | 13.1 | 11.0 |
| Core Goods ${ }^{\underline{1}}$ | 4.8 | 7.2 | 7.2 | 9.9 | 8.4 | -3.1 | -1.3 | 10.1 | 9.9 |
|  |  |  |  |  |  |  |  |  |  |
| Imports of G\&S | 5.1 | 10.9 | 5.2 | 4.1 | 0.9 | -6.8 | -6.6 | 7.8 | 7.4 |


| Services | 3.3 | 8.8 | 2.3 | 7.1 | 2.0 | 0.2 | -3.7 | 6.0 | 6.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oil | 1.3 | 10.7 | 1.3 | -8.2 | 0.0 | 0.3 | -16.8 | -2.2 | 0.1 |
| Natural Gas | 1.3 | 4.9 | 13.7 | -10.1 | 13.4 | -24.0 | -8.3 | 13.0 | 1.7 |
| Computers | 17.1 | 23.2 | 12.5 | 14.3 | 8.8 | -11.3 | 35.4 | 16.2 | 15.5 |
| Semiconductors | -0.1 | 9.8 | 7.5 | -0.8 | 3.6 | -9.7 | 5.6 | 5.8 | 5.0 |
| Core Goods? ${ }^{\text {? }}$ | 5.3 | 10.9 | 5.8 | 5.8 | 0.2 | -9.8 | -7.8 | 10.1 | 8.9 |
| Billions of Chained 2005 Dollars |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -603.9 | -688.0 | -722.7 | -729.2 | -647.7 | -494.3 | -355.6 | -352.5 | -354.6 |
| Exports of G\&S | 1116.8 | 1222.8 | 1305.1 | 1422.0 | 1546.1 | 1629.3 | 1472.4 | 1642.5 | 1794.4 |
| Imports of G\&S | 1720.7 | 1910.8 | 2027.8 | 2151.2 | 2193.8 | 2123.5 | 1828.0 | 1995.0 | 2149.0 |
| Billions of dollars |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE | -521.5 | -631.1 | -748.7 | -803.5 | -726.6 | -706.1 | -419.9 | -489.1 | -498.1 |
| Current Acct as Percent of GDP | -4.7 | -5.3 | -5.9 | -6.0 | -5.2 | -4.9 | -2.9 | -3.3 | -3.2 |
|  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services (BOP) | -495.0 | -610.0 | -715.3 | -760.4 | -701.4 | -695.9 | -378.6 | -462.3 | -480.7 |
|  |  |  |  |  |  |  |  |  |  |
| Investment Income, Net | 51.0 | 73.4 | 78.8 | 54.7 | 97.9 | 125.5 | 96.1 | 108.1 | 113.6 |
| Direct, Net | 112.7 | 150.9 | 173.2 | 174.0 | 236.7 | 249.9 | 206.8 | 210.0 | 232.7 |
| Portfolio, Net | -61.7 | -77.5 | -94.4 | -119.4 | -138.8 | -124.3 | -110.7 | -101.9 | -119.1 |
|  |  |  |  |  |  |  |  |  |  |
| Other Income \& Transfers, Net | -77.5 | -94.5 | -112.2 | -97.9 | -123.1 | -135.7 | -137.3 | -134.9 | -130.9 |

1. Merchandise exports excluding computers and semiconductors. Return to table
2. Merchandise imports excluding oil, natural gas, computers, and semiconductors. Return to table

Outlook for U.S. International Transactions

|  | 2006 |  |  |  | 2007 |  |  |  | 2008 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| NIPA REAL EXPORTS and IMPORTS |  |  |  |  |  |  |  |  |  |  |  |  |
| Percentage point contribution to GDP growth |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | 0.4 | 0.0 | -0.7 | 1.9 | -0.3 | 0.7 | 1.4 | 2.2 | 0.4 | 2.4 | -0.1 | 0.5 |
| Exports of G\&S | 1.6 | 0.7 | 0.1 | 1.8 | 0.4 | 0.6 | 2.0 | 1.6 | -0.0 | 1.5 | -0.5 | -2.7 |
| Imports of G\&S | -1.2 | -0.7 | -0.8 | 0.1 | -0.7 | 0.1 | -0.6 | 0.6 | 0.4 | 0.9 | 0.4 | 3.1 |
| Percentage change from previous period, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| Exports of G\&S | 16.5 | 6.9 | 0.6 | 17.8 | 3.5 | 5.2 | 18.5 | 14.5 | -0.1 | 12.1 | -3.6 | -19.5 |
| Services | 13.6 | 5.6 | 1.5 | 29.1 | 4.7 | 2.8 | 27.2 | 19.2 | -9.0 | 7.8 | -7.7 | -4.3 |
| Computers | 18.1 | 8.9 | -9.6 | 19.0 | 11.6 | -15.4 | 11.5 | 0.0 | 8.7 | 33.5 | 1.3 | -38.3 |
| Semiconductors | 22.1 | 19.5 | -14.2 | $-13.3$ | 23.7 | 26.3 | 4.7 | 69.9 | 15.0 | -3.8 | 6.5 | -50.7 |
| Core Goods ${ }^{1}$ | 17.6 | 6.7 | 1.6 | 14.5 | 1.5 | 6.4 | 15.4 | 10.8 | 3.5 | 14.3 | -2.2 | -23.7 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Imports of G\&S | 7.8 | 4.5 | 4.9 | -0.5 | 4.3 | -0.5 | 3.7 | -3.6 | -2.5 | -5.0 | -2.2 | -16.7 |
| Services | 16.1 | 1.8 | 1.3 | 10.0 | 0.4 | 2.1 | 8.6 | -2.9 | 3.0 | -7.1 | 6.1 | -0.9 |
| Oil | -20.8 | 5.0 | 22.1 | -30.1 | 0.8 | 14.7 | -3.4 | -10.4 | -1.5 | -9.3 | 2.7 | 10.3 |
| Natural Gas | -50.2 | 80.0 | 26.1 | -42.2 | 52.8 | 54.0 | 36.5 | -48.5 | -5.0 | -38.2 | 12.2 | -49.5 |
| Computers | 24.8 | 13.0 | 17.3 | 3.1 | 39.0 | -15.4 | -2.2 | 21.6 | 12.7 | 8.6 | -15.9 | -39.9 |
| Semiconductors | 2.4 | -2.8 | 17.4 | -17.3 | 7.3 | 2.6 | -0.4 | 4.9 | 5.6 | 8.9 | -6.3 | -38.2 |
| Core Goods ${ }^{\underline{2}}$ | 14.0 | 3.1 | 0.6 | 5.8 | 3.1 | -3.6 | 4.1 | -2.5 | -5.1 | -3.2 | -5.1 | -24.2 |


| Billions of Chained 2005 Dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net Goods \& Services | -732.6 | -732.8 | -756.5 | -694.9 | -705.0 | -683.4 | -638.4 | -564.0 | -550.9 | -476.0 | -479.2 | -470.9 |
| Exports of G\&S | 1388.8 | 1412.1 | 1414.1 | 1473.2 | 1485.9 | 1504.8 | 1569.9 | 1624.0 | 1623.4 | 1670.4 | 1655.2 | 1568.0 |
| Imports of G\&S | 2121.3 | 2144.9 | 2170.5 | 2168.1 | 2190.8 | 2188.1 | 2208.3 | 2188.0 | 2174.3 | 2146.5 | 2134.4 | 2038.9 |
| Billions of dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE | -794.6 | -808.3 | -859.2 | -752.1 | -796.4 | -762.1 | -686.5 | -661.3 | -717.2 | -750.9 | -736.7 | -619.5 |
| Current Account as \% of GDP | -6.0 | -6.1 | -6.4 | -5.5 | -5.8 | -5.4 | -4.8 | -4.6 | -5.0 | -5.2 | -5.1 | -4.3 |
| Net Goods \& Services (BOP) | -766.5 | -764.7 | -797.2 | -713.1 | -712.2 | -710.2 | -685.9 | -697.4 | -730.6 | -731.4 | -743.8 | -578.0 |
| Investment Income, Net | 62.4 | 57.7 | 44.0 | 54.6 | 45.8 | 58.2 | 120.7 | 167.0 | 154.0 | 112.3 | 143.7 | 92.1 |
| Direct, Net | 173.9 | 175.2 | 163.1 | 183.9 | 186.7 | 204.4 | 252.7 | 303.0 | 284.6 | 241.9 | 268.0 | 205.1 |
| Portfolio, Net | -111.5 | -117.5 | -119.1 | -129.3 | -140.9 | -146.2 | -132.0 | -136.0 | -130.6 | -129.6 | -124.2 | -113.0 |
| Other Inc. \& Transfers, Net | -90.5 | -101.3 | -106.0 | -93.6 | -130.0 | -110.1 | -121.3 | -130.9 | -140.6 | -131.8 | -136.7 | -133.6 |

1. Merchandise exports excluding computers and semiconductors. Return to table
2. Merchandise imports excluding oil, natural gas, computers, and semiconductors. Return to table

Outlook for U.S. International Transactions


NIPA REAL EXPORTS and IMPORTS


| Current Account as \% of GDP | -2.9 | -2.8 | -2.9 | -3.2 | -3.5 | -3.2 | -3.3 | -3.2 | -3.3 | -3.1 | -3.2 | -3.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net Goods \& Services (BOP) | -368.9 | -324.3 | -385.5 | -435.8 | -464.2 | -450.3 | -464.7 | -469.9 | -478.2 | -476.8 | -484.7 | -483.3 |
| Investment Income, Net | 80.1 | 73.4 | 123.3 | 107.6 | 106.6 | 104.8 | 109.3 | 111.7 | 114.8 | 117.2 | 114.8 | 107.6 |
| Direct, Net | 204.5 | 190.6 | 227.1 | 205.1 | 203.4 | 207.4 | 212.0 | 217.1 | 223.1 | 229.5 | 235.8 | 242.6 |
| Portfolio, Net | -124.3 | -117.2 | -103.8 | -97.5 | -96.8 | -102.7 | -102.6 | -105.3 | -108.3 | -112.2 | -121.0 | -134.9 |
| Other Inc. \& Transfers, Net | -128.0 | -140.0 | -147.2 | -134.2 | -146.1 | -131.0 | -133.6 | -129.2 | -142.1 | -127.0 | -129.6 | -125.2 |

1. Merchandise exports excluding computers and semiconductors. Return to table
2. Merchandise imports excluding oil, natural gas, computers, and semiconductors. Return to table
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## April 2010 Greenbook Part 2 Tables and Charts ${ }^{ \pm}$

## Domestic Nonfinancial Developments

Changes in Employment

| Measure and sector | 2009 | 2009 |  | 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Q3 | Q4 | Q1 |  | Feb. | Mar. |
|  | Average monthly change |  |  |  | Monthly change |  |  |
| Nonfarm payroll employment (establishment survey) | -395 | -261 | -90 | 54 | 14 | -14 | 162 |
| Private | -388 | -233 | -90 | 49 | 16 | 8 | 123 |
| Natural resources and mining | -8 | -5 | 0 | 8 | 8 | 6 | 9 |
| Manufacturing | -107 | -49 | -33 | 15 | 22 | 6 | 17 |
| Ex. motor vehicles | -97 | -59 | -33 | 9 | -5 | 16 | 15 |
| Construction | -84 | -72 | -39 | -35 | -60 | -59 | 15 |
| Residential | -32 | -22 | -6 | -13 | -17 | -12 | -10 |
| Nonresidential | -52 | -50 | -33 | -22 | -43 | -46 | 25 |
| Wholesale trade | -19 | -11 | -5 | 2 | -8 | 4 | 9 |
| Retail trade | -42 | -39 | -23 | 24 | 49 | 8 | 15 |
| Financial activities | -29 | -20 | -9 | -19 | -22 | -15 | -21 |
| Temporary help services | -12 | -11 | 62 | 42 | 49 | 37 | 40 |
| Nonbusiness services ${ }^{\underline{1}}$ | -6 | 18 | -12 | 47 | 35 | 34 | 73 |
| Total government | -7 | -28 | 0 | 5 | -2 | -22 | 39 |
| Federal government | 4 | 3 | 2 | 29 | 33 | 6 | 48 |
| Total employment (household survey) | -450 | -423 | -325 | 371 | 541 | 308 | 264 |
| Memo: |  |  |  |  |  |  |  |
| Aggregate hours (percent change) ${ }^{\underline{2}}$ |  |  |  |  |  |  |  |
| All employees | -6.1 | -4.1 | -1.5 | 2.1 | . 7 | -. 3 | . 4 |
| Production workers | -5.6 | -2.9 | -1.4 | 1.8 | . 3 | -. 5 | . 7 |
| Average workweek (hours) ${ }^{\underline{3}}$ |  |  |  |  |  |  |  |
| All employees | 33.9 | 33.8 | 33.8 | 34.0 | 34.0 | 33.9 | 34.0 |
| Production workers | 33.1 | 33.1 | 33.1 | 33.2 | 33.3 | 33.1 | 33.3 |
| Manufacturing | 39.8 | 39.9 | 40.3 | 40.8 | 40.9 | 40.5 | 41.0 |

1. Nonbusiness services comprises education and health, leisure and hospitality, and "other." Return to table
2. Establishment survey. Annual data are percent changes from Q4 to Q4. Quarterly data are percent changes from preceding quarter at an annual rate. Monthly data are percent changes from preceding month. Return to table
3. Establishment survey. Return to table

Figure: Changes in Private Payroll Employment

[^5]Source. U.S. Department of Labor, Bureau of Labor Statistics.
Figure: Aggregate Hours and Workweek

Line chart, 2000 to 2010. There are four series, "Production workers: Aggregate hours", "All workers: Aggregate hours", "Production workers: Workweek" and "All workers: Workweek". "Production workers: Aggregate hours" and "All workers: Aggregate hours" are measured by an index where $2007=100$. "Production workers: Workweek" and "All workers: Workweek" are measured by hours. "Production workers: Aggregate hours" begins in 2000:Q1 at about 96.3 and generally increases to about 97 by 2000:Q4. It then generally decreases to about 91.5 by 2003:Q2 and then generally increases to about 100.5 by 2007:Q4. By 2009:Q3 it has generally decreased to about 90.5 and by March 2010 it has generally increased to about 91.7. "All workers: Aggregate hours" begins in $2006: Q 1$ at about 98.5 and generally increases to about 100.5 by 2007:Q4. It then generally decreases to about 90.5 by 2009:Q3 and then generally increases to about 91.5 by March 2010 . "Production workers: Workweek" begins in 2000:Q1 at about 34.4 and generally decreases to about 33.55 by 2003:Q1. It then generally increases to about 34.05 by 2006 :Q4 and then generally decreases to about 32.95 by 2009:Q4. By March 2010 it has generally increased to about 33.3. "All workers: Workweek" begins in 2006:Q1 at about 34.5. From 2006:Q1 to 2008:Q3 it fluctuates between about 34.4 and 34.8. It then generally decreases to about 33.7 by $2009: Q 4$ and then generally increases to about 34.0 by March 2010.

Source. U.S. Department of Labor, Bureau of Labor Statistics

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): March 2001-November 2001. The vertical lines represent the last business cycle peak as defined by the NBER (December 2007).

## Selected Unemployment and Labor Force Participation Rates

(Percent; seasonally adjusted)

| Rate and group | 2009 | 2009 |  | 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Q3 | Q4 | Q1 | Jan. | Feb. | Mar. |
| Civilian unemployment rate |  |  |  |  |  |  |  |
| Total | 9.3 | 9.7 | 10.0 | 9.7 | 9.7 | 9.7 | 9.7 |
| Teenagers | 24.3 | 25.4 | 27.2 | 25.8 | 26.4 | 25.0 | 26.1 |
| 20-24 years old | 14.8 | 15.1 | 15.7 | 15.9 | 15.8 | 16.0 | 15.8 |
| Men, 25 years and older | 8.8 | 9.4 | 9.5 | 9.0 | 9.0 | 9.1 | 9.0 |
| Women, 25 years and older | 6.9 | 7.1 | 7.5 | 7.4 | 7.3 | 7.4 | 7.5 |
| Labor force participation rate |  |  |  |  |  |  |  |
| Total | 65.4 | 65.3 | 64.9 | 64.8 | 64.7 | 64.8 | 64.9 |
| Teenagers | 37.5 | 37.4 | 35.8 | 35.4 | 35.2 | 35.1 | 35.8 |
| 20-24 years old | 73.0 | 72.8 | 71.4 | 71.1 | 70.7 | 71.3 | 71.4 |
| Men, 25 years and older | 74.7 | 74.8 | 74.3 | 73.9 | 73.7 | 74.0 | 74.1 |
| Women, 25 years and older | 59.9 | 59.8 | 59.6 | 59.8 | 59.8 | 59.7 | 59.8 |

## Figure: Unemployment Rate and Persons Working Part Time for Economic Reasons

Line chart, 2001 to 2010. There are two series, "Unemployment rate" measured by percent of labor force and "Persons working part time for economic reasons" measured by percent of household employment. "Unemployment rate" begins in 2001:Q1 at about 4.2 and generally increases to about 6.3 by 2003:Q2. It then generally decreases to about 4.3 by 2007:Q2 and then generally increases to about 10.1 by 2009:Q3. By March 2010 it has generally decreased to about 9.7 . "Persons working part time for economic reasons" begins in 2001:Q1 at about 2.4 and generally increases to about 3.6 by 2003:Q3. It then generally decreases to about 2.7 by 2006:Q2 and then generally increases to about 6.5 by March 2010.

Source. U.S. Department of Labor, Bureau of Labor Statistics.

## Figure: Labor Force Participation Rate

Line chart, by percent, 2001 to 2010. The series begins in 2001:Q1 at about 67.2 and generally decreases to about 65.8 by $2004: Q 3$. It then generally increases to about 66.4 by 2006:Q4 and then generally decreases to about 65.7 by 2007:Q3. By 2008:Q1 it has generally increased to about 66.25 and by $2009: Q 4$ it has generally decreased to about 64.55. It then generally increases to about 64.9 by March 2010.

Source. U.S. Department of Labor, Bureau of Labor Statistics.

## Figure: Duration of Unemployment

Line chart, 2001 to 2010. There are two series, "Mean" measured by weeks and "Long-term unemployed" measured by percent of unemployed. The "Long-term unemployed" are persons unemployed for more than 26 weeks. "Mean" begins in 2001:Q1 at about 12.5 and generally increases to about 21 by 2004:Q2. It then generally decreases to about 16 by 2006:Q4 and then generally increases to about 31 by March 2010. "Long-term unemployed" begins in 2001:Q1 at about 11 and generally increases to about 24 by 2004:Q1. It then generally decreases to about 16 by 2006:Q4 and then generally increases to about 44 by March 2010 .

Figure: Job Losers Unemployed Less Than 5 Weeks

Line chart, by percent of household employment, 2001 to 2010. The series begins in 2001:Q1 at about 0.93 and generally increases to about 1.33 by 2001:Q4. It then generally decreases to about 0.75 by 2007:Q1 and then generally increases to about 1.6 by 2009:Q1. By March 2010 it has generally decreased to about 1.11 . There is also another line that is the 3-month moving average. It begins in 2001:Q1 at about 0.88 and generally increases to about 1.24 by 2001:Q4. It then generally decreases to about 0.82 by 2007:Q2 and then generally increases to about 1.55 by 2009:Q1. By March 2010 it has generally decreased to about 1.2 .

Source. U.S. Department of Labor, Bureau of Labor Statistics

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): March 2001-November 2001. The vertical lines represent the last business cycle peak as defined by the NBER (December 2007).

## Labor Market Indicators

## Figure: Layoffs and Initial Claims

Line chart, 2000 to 2010. There are two series, "Layoffs and discharges" which is measured by percent of private employment and "Initial claims" which is measured by thousands. "Layoffs and discharges" begins in 2000:Q4 at about 1.6. From 2000:Q4 to 2004:Q1 it fluctuates between about 1.5 and 2.0. It then generally decreases to about 1.2 by 2006:Q1 and then generally increases to about 1.7 by 2006:Q2. By 2006:Q3 it has generally decreased to about 1.35 and by $2009: Q 1$ it has generally increased to about 2.35. It then generally decreases to about 1.6 by February 2010. "Initial claims" begins in 2000:Q1 at about 290 and generally increases to about 490 by 2001:Q4. It then generally decreases to about 380 by 2002:Q2 and then generally increases to about 430 by 2003:Q2. By 2006:Q1 it has generally decreased to about 290 and by 2009:Q1 it has generally increased to about 645. It then generally decreases to about 450 by April $10,2010$.

Note. Data for initial claims are 4-week moving averages.
Source. For layoffs and discharges, Job Openings and Labor Turnover Survey; for initial claims, U.S. Department of Labor, Employment and Training Administration.

## Figure: Insured Unemployment

Line chart, by millions, 2000 to 2010. Data are 4-week moving averages. There are two series, "Including extended and emergency benefits" and "Regular state programs". "Including extended and emergency benefits" begins in 2000:Q1 at about 2.0 and generally increases to about 5.1 by $2002: Q 2$. It then generally decreases to about 2.3 by 2006:Q2 and then generally increases to about 10.7 by March 27, 2010. "Regular state programs" begins in 2000:Q1 at about 2.0 and generally increases to about 3.75 by 2001:Q4. From 2001:Q4 to 2003:Q3 it fluctuates between about 3.4 and 3.8 . It then generally decreases to about 2.3 by $2006: Q 2$ and then generally increases to about 6.5 by 2009:Q2. By April 3, 2010 it has generally decreased to about 4.6.

Source. U.S. Department of Labor, Employment and Training Administration.

## Figure: Job Openings

Line chart, 2000 to 2010. There are two series, "Job openings" and "Composite Help Wanted Index". "Job openings" is the percent of private employment plus job openings and is measured by percent. "Composite Help Wanted Index" is an index of staff composite help-wanted advertising as a percent of payroll employment and is measured by an index where $1980=100$. "Job openings" begins in 2000:Q4 at about 4.1 and generally decreases to about 2.4 by $2002: Q 4$. It then generally increases to about 3.6 by 2007:Q1 and then generally decreases to about 1.9 by 2009:Q4. By February 2010 it has generally decreased to about 2.2 . "Composite Help Wanted Index" begins in 2000:Q1 at about 91 and generally decreases to about 50 by 2003:Q2. It then generally increases to about 75 by $2006: Q 4$ and then generally decreases to about 1.0 by 2009:Q2. By March 2010 it has generally increased to about 1.4.

Source. For job openings, Job Openings and Labor Turnover Survey; for Composite Help Wanted Index, Conference Board and staff calculations.

## Figure: Hires and Hiring Plans

Line chart, 2000 to 2010. There are two series, "Hires" and "Hiring plans". "Hires" is measured by percent of private employment and begins in 2000:Q4 at about 4.5. It then generally increases to about 5.0 by 2001:Q1 and then generally decreases to about 3.85 by 2003:Q1. By 2004:Q4 it has generally increased to about 4.75 and by 2008:Q4 it has generally decreased to about 3.3. It then generally increases to about 3.4 by February 2010. "Hiring plans" is the percent planning an increase in employment minus the percent planning a reduction and is measured by percent. It is seasonally adjusted by FRB staff. It begins in 2000:Q1 at about 17.5 and generally decreases to about 4.0 by 2003:Q1. It then generally increases to about 20.0 by 2004:Q4 and then generally decreases to about -6.0 by 2009:Q1. By March 2010 it has generally increased to about 3.25.

Source. For hires, Job Openings and Labor Turnover Survey; for hiring plans, National Federation of Independent Business.

## Figure: Job Availability and Hard-to-Fill Positions

Line chart, 2000 to 2010. There are two series, "Job availability" and "Hard-to-fill". "Job availability" is the proportion of households believing jobs are plentiful, minus the proportion believing jobs are hard to get, plus 100. It is measured by index and begins in 2000:Q1 at about 143. It then generally decreases to about 75 by 2003:Q3 and then generally increases to about 110 by 2007:Q1. By March 2010 it has generally decreased to about 57. "Hard-to-fill" is the percent of small businesses surveyed with at least one "hard-to-fill" job opening and it is measured by percent. It is seasonally adjusted by the FRB staff and the data are a 3-month
moving average. It begins in 2000:Q1 at about 31.5 and generally increases to about 34 by $2000:$ Q2. It then generally decreases to about 16 by $2003: Q 3$ and then generally increases to about 27 by 2006:Q2. By 2009:Q4 it has generally decreased to about 8 and by March 2010 it has generally increased to about 10 .

Source. For job availability, Conference Board; for hard-to-fill, National Federation of Independent Business.

## Figure: Expected Labor Market Conditions

Line chart, by index, 2000 to 2010. There are two series, "Conference Board" and "Thomson Reuters/Michigan". "Conference Board" begins in 2000:Q1 at about 107 and generally decreases to about 85 by 2001:Q1. It then generally increases to about 109 by 2002:Q1 and then generally decreases to about 85 by $2003: Q 1$. By 2004:Q3 it has generally increased to about 107 and by 2005:Q3 it has generally decreased to about 90. From 2005:Q4 to 2007:Q2 it fluctuates between about 94 and 100. It then generally decreases to about 60 by 2009:Q1 and then generally increases to about 95 by March 2010. "Thomson Reuters/Michigan" begins in 2000:Q1 at about 96 and generally decreases to about 49 by 2001:Q3. It then generally increases to about 92 by 2002:Q2 and then generally decreases to about 68 by 2002:Q3. By 2004:Q3 it has generally increased to about 109 and by 2005:Q3 it has generally decreased to about 61 . It then generally increases to about 87 by 2006:Q4 and then generally decreases to about 38 by 2008:Q4. By April 2010 it has generally increased to about 90.

[^6]Source. Conference Board; Thomson Reuters/University of Michigan Surveys of Consumers.

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): March 2001-November 2001. The vertical lines represent the last business cycle peak as defined by the NBER (December 2007).

## Selected Components of Industrial Production

(Percent change from preceding comparable period)


| Business equipment | 6.7 | -11.2 | 4.9 | 16.5 | 1.9 | 1.0 | 1.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Defense and space equipment | 1.3 | 1.6 | -5.9 | 12.9 | 2.7 | . 7 | 2.3 |
| Construction supplies | 4.7 | -14.1 | -9.2 | 4.7 | 1.6 | -. 2 | 2.3 |
| Business supplies | 7.4 | -8.5 | 3.9 | . 4 | . 3 | -. 7 | . 2 |
| Materials | 24.1 | -5.5 | 7.9 | 8.9 | . 8 | . 7 | . 8 |
| Durables | 11.2 | -13.0 | 9.4 | 14.8 | 1.6 | . 6 | 1.8 |
| Nondurables | 12.9 | 2.0 | 6.6 | 4.0 | . 1 | . 7 | . 0 |

1. From fourth quarter of preceding year to fourth quarter of year shown. Return to table
2. Includes related electronic components. Return to table
3. Includes manufactured homes (not shown separately). Return to table
... Not applicable. Return to table
Source: Federal Reserve, G. 17 Statistical Release, "Industrial Production and Capacity Utilization."

## Capacity Utilization

| Sector | $\begin{aligned} & 1972- \\ & 2009 \end{aligned}$average | $\begin{gathered} 1994- \\ 95 \\ \text { high } \end{gathered}$ | $\begin{gathered} \text { 2001- } \\ 02 \\ \text { low } \end{gathered}$ | 2009 |  | 2010 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Q3 | Q4 | Q1 | Feb. | Mar. |
| Total industry | 80.6 | 84.9 | 73.5 | 70.0 | 71.4 | 73.0 | 73.0 | 73.2 |
| Manufacturing | 79.2 | 84.5 | 71.4 | 67.0 | 68.2 | 69.5 | 69.4 | 70.0 |
| Mining | 87.5 | 89.1 | 84.9 | 83.2 | 84.7 | 88.3 | 88.2 | 90.2 |
| Utilities | 86.6 | 93.3 | 84.2 | 78.1 | 80.9 | 82.3 | 84.1 | 78.6 |
| Stage-of-process groups |  |  |  |  |  |  |  |  |
| Crude | 86.5 | 89.9 | 81.7 | 82.4 | 83.9 | 86.4 | 86.3 | 87.4 |
| Primary and semifinished | 81.6 | 87.9 | 74.3 | 67.0 | 68.5 | 69.7 | 70.0 | 69.5 |
| Finished | 77.5 | 80.3 | 70.0 | 68.5 | 69.8 | 71.4 | 71.2 | 71.8 |

Source: Federal Reserve, G. 17 Statistical Release, "Industrial Production and Capacity Utilization."

## Indicators of Industrial Activity

## Figure: Manufacturing IP Diffusion Index

Line chart, by index, 2002 to 2010. There is a horizontal line at 50. The series begins in 2002:Q1 at about 52 and generally increases to about 65 by 2002 : 2 2. It then generally decreases to about 40 by 2003:Q2 and then generally increases to about 69 by 2003:Q4. By 2006:Q4 it has generally decreased to about 38 and by 2007:Q2 it has generally increased to about 64. It then generally decreases to about 12 by 2009:Q1 and then generally increases to about 67 by March 2010 .

Note. The diffusion index equals the percentage of series that increased relative to 3 months earlier plus one-half the percentage that were unchanged. The vertical line represents the last business cycle peak as defined by the NBER (December 2007).

Source. Federal Reserve Board, G. 17 Statistical Release, "Industrial Production and Capacity Utilization."

## Figure: Manufacturing Capacity Utilization

Line chart, by percent, 1997 to 2010. The series begins in 1997:Q1 at about 82.5 and generally decreases to about 71.5 by 2001 :Q4. It then generally increases to about 80 by 2006:Q1 and then generally decreases to about 65 by 2009:Q2. By March 2010 it has generally increased to about 70 .
 2001-November 2001. The vertical line represents the last business cycle peak as defined by the NBER (December 2007).

Source. Federal Reserve Board, G. 17 Statistical Release, "Industrial Capacity Utilization."
Figure: Motor Vehicle Assemblies

Line chart, by millions of units, 2002 to 2010. There are two series, "Autos and light trucks" and "Medium and heavy trucks". "Autos and light trucks" begins in 2002:Q1 at about 11.5 and generally decreases to about 3.5 by 2009:Q1. It then generally increases to about 7.7 by April 2010. "Medium to heavy trucks" begins in 2002:Q1 at about 0.2 and generally increases to about 0.3 by 2002:Q3. It then generally decreases to about 0.2 by 2003:Q1 and then generally increases to about 0.57 by 2006:Q3. By 2009:Q2 it has generally decreased to about 0.1 and by 2010:Q1 it has generally increased to about 0.18 . It then generally decreases to about 0.13 by April 2010.

Note. The April 2010 values are based on latest industry schedules.
Source. Ward's Communications.

## Figure: Utilities Output

Line chart, by scale where $2002=100,2002$ to 2010. There are two series, "Electricity" and "Natural gas". "Electricity" begins in 2002:Q1 at about 96.5 and generally increases to about 113 by 2008:Q1. It then generally decreases to about 104 by 2009:Q3 and then generally increases to about 114 by 2010:Q1. By April 2010 it has generally decreased to about 108. "Natural gas" begins in 2002:Q1 at about 91 and generally increases to about 110 by 2003:Q1. It then generally decreases to about 81 by 2006:Q1 and then generally increases to about 96 by March 2010.

Note. The April 2010 value for electricity generation is based on weekly generation data from the Edison Electrical Institute (EEI).
Source. EEI; Federal Reserve Board, G. 17 Statistical Release, "Industrial Production and Capacity Utilization."
Figure: ISM Diffusion Index and Average of Regional New Orders Diffusion Indexes

Line chart, by diffusion index, 2002 to 2010. There is a horizontal line at 50. There are two series, "ISM" and "Regional Average". "ISM" begins in 2002:Q1 at about 55 and generally increases to about 64 within about a month. It then generally decreases to about 47 by 2003:Q1 and then generally increases to about 72 by $2003: Q 4$. By 2008:Q4 it has generally decreased to about 21 and by 2009:Q4 it has generally increased to about 66 . It then generally decreases to about 61 by March 2010 . "Regional average" begins in 2002:Q1 at about 54 and generally decreases to about 45 by 2003:Q2. It then generally increases to about 65 by 2003:Q4 and then generally decreases to about 31 by 2008:Q4. By April 2010 it has generally increased to about 61.

Note: Regional average consists of new orders indexes from the Chicago, Dallas, Kansas City, New York, Philadelphia, and Richmond surveys. The April 2010 value for the regional average is based on data from the New York and Philadelphia surveys.

Source. Institute for Supply Management (ISM); Federal Reserve.
Figure: Change in Real Adjusted Durable Goods Orders

Line chart, by percent, 2002 to 2010. Data are a 3-month moving average. There is a horizontal line at zero. The series begins in 2002:Q1 at about -1.0 and generally increases to about 2.8 by 2003:Q4. It then generally decreases to about -2.1 by 2004:Q1 and then generally increases to about 2.5 by 2005:Q4. By 2007:Q1 it has generally decreased to about -1.9 and by 2007:Q4 it has generally increased to about 2.0. It then generally decreases to about -5.3 by $2008: Q 4$ and then generally increases to about 2.3 by 2009:Q3. By February 2010 it has generally decreased to about 0.

Source. Staff calculation based on data from the U.S. Census Bureau and the Bureau of Labor Statistics.

## Production of Domestic Light Vehicles

| Item | 2009 |  | 2010 |  | 2009 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q3 | Q4 | Q1 | Q2 | Dec. | Jan. | Feb. | Mar. |
| U.S. production ${ }^{1}$ | 6.4 | 7.0 | 7.4 | 7.4 | 7.0 | 7.7 | 7.2 | 7.4 |
| Autos | 2.5 | 2.8 | 2.9 | 3.2 | 2.8 | 2.9 | 3.0 | 2.9 |
| Light trucks | 3.9 | 4.2 | 4.5 | 4.2 | 4.2 | 4.8 | 4.3 | 4.5 |
| Days' supply $\underline{\underline{2}}^{\text {² }}$ | 50 | 53 | 59 | n.a. | 51 | 58 | 63 | 55 |
| Autos | 46 | 51 | 55 | n.a. | 48 | 54 | 58 | 51 |
| Light trucks | 55 | 55 | 63 | n.a. | 55 | 61 | 66 | 58 |
| Inventories ${ }^{3}$ | 1.38 | 1.43 | 1.60 | n.a. | 1.43 | 1.53 | 1.60 | 1.60 |
| Autos | . 63 | . 65 | . 71 | n.a. | . 65 | . 67 | . 71 | . 71 |
| Light trucks | . 75 | . 79 | . 90 | n.a. | . 79 | . 86 | . 89 | . 90 |
| Memo: U.S. production, total motor vehicles ${ }^{4}$ | 6.5 | 7.2 | 7.6 | 7.6 | 7.2 | 7.8 | 7.3 | 7.6 |

Note: FRB seasonals. Components may not sum to totals because of rounding.

1. Production rates for the second quarter of 2010 reflect the latest industry schedules. Return to table

## Figure: Inventories of Light Vehicles

Line chart, by millions of units, 1998 to 2010. The series begins in 1998:Q1 at about 2.9 and generally decreases to about 2.4 by 1998:Q3. It then generally increases to about 3.3 by 2000:Q3 and then generally decreases to about 2.35 by 2001:Q4. By 2004:Q3 it has generally increased to about 3.35 and by $2005: Q 3$ it has generally decreased to about 2.5. It then generally increases to about 3.0 by 2006:Q2 and then generally decreases to about 1.15 by 2009 :Q3. By March 2010 it has generally increased to about 1.6.

Source. Ward's Communications. Adjusted using FRB seasonals.

## Figure: Days' Supply of Light Vehicles

Line chart, by Days, 1998 to 2010. The series begins in 1998:Q1 at about 68 and generally decreases to about 53 by 1998:Q2. It then generally increases to about 79 by 2000:Q4 and then generally decreases to about 40 by 2001:Q4. By 2004:Q2 it has generally increased to about 83 and by $2005: Q 3$ it has generally decreased to about 45. It then generally increases to about 80 by 2005:Q4 and then generally decreases to about 65 by 2006:Q1. From 2006:Q1 to 2008:Q2 it fluctuates between about 65 and 75. It then generally increases to about 100 by 2009:Q1 and then generally decreases to about 33 by 2009:Q3. By March 2010 it has generally increased to about 55.

Source. Constructed from Ward's Communications data. Adjusted using FRB seasonals.

## Indicators of High-Tech Manufacturing Activity

## Figure: Industrial Production in the High-Tech Sector

Line chart, by ratio scale where $2002=100,2002$ to 2010 . There are three series, "Semiconductors", "Computers", and "Communications equipment". "Semiconductors" begins in 2002:Q1 at about 89 and generally increases to about 315 by 2008:Q3. It then generally decreases to about 215 by $2009: Q 1$ and then generally increases to about 280 by March 2010. "Computers" begins in 2002:Q1 at about 102 and generally increases to about 112 by 2003:Q2. It then generally decreases to about 105 by 2004:Q2 and then generally increases to about 240 by 2008:Q1. By 2009:Q2 it has generally decreased to about 165 and by March 2010 it has generally increased to about 190. "Communications equipment" begins in 2002:Q1 at about 102 and generally decreases to about 95 by 2002:Q4. It then generally increases to about 127 by 2004:Q1 and then generally decreases to about 117 by 2005:Q1. By 2006:Q2 it has generally increased to about 153 and by 2007:Q3 it has generally decreased to about 142. It then generally increases to about 178 by 2008:Q2 and then generally decreases to about 160 by 2009:Q3. By March 2010 it has generally increased to about 179.

Source. Federal Reserve Board, G. 17 Statistical Release, "Industrial Production and Capacity Utilization".

Figure: U.S. Personal Computer and Server Absorption

Line chart, by millions of units, ratio scale, 2002 to 2010. There are two series, "Servers" and "PCs". "Servers" begins in 2002:Q1 at about 0.435 and generally increases to about 0.70 by 2005:Q1. It then generally decreases to about 0.68 by 2005:Q3 and then generally increases to about 0.73 by 2006:Q3. By 2006:Q4 it has generally decreased to about 0.69 and by 2007:Q1 it has generally increased to about 0.74 . It then generally decreases to about 0.71 by 2007:Q3 and then generally increases to about 0.80 by 2008:Q2. By 2009:Q2 it has generally decreased to about 0.51 and by 2009:Q4 it has generally increased to about 0.65 . "PCs" begins in 2002:Q1 at about 11.3 and generally increases to about 16.75 by 2008:Q3. It then generally decreases to about 15.75 by 2008 :Q4 and then generally increases to about 19.7 by 2009:Q4. By 2010:Q1 it has generally decreased to about 19.0.

Note. FRB seasonals.
Source. IDC.

## Figure: High-Tech Exports

Line chart, by billions of dollars, annual rate, 2002 to 2010. Data are 3-month moving average. The series begins in 2002:Q1 at about 113 and generally increases to about 116 by 2002:Q3. It then generally decreases to about 107 by 2003:Q1 and then generally increases to about 127.5 by $2004: Q 1$. By 2004:Q3 it has generally decreased to about 122 and by 2006:Q2 it has generally increased to about 141. It then generally decreases to about 135 by $2007: Q 2$ and then generally increases to about 147 by 2008:Q2. By 2009:Q2 it has generally decreased to about 107 and by February 2010 it has generally increased to about 130 .

Note. Includes semiconductors and related equipment, communications equipment, and computers and peripherals.
Source. U.S. International Trade Commission
Figure: Capital Expenditures by Selected Telecommunications Service Providers
increases to about 57 by 2006:Q1 and then generally decreases to about 42 by 2008:Q4. By 2009:Q4 it has generally increased to about 49 . There is also an "Annual average" series presented as a scatter plot. It begins in 2002 at about 53.5 and then decreases to about 45 in 2003 . It then increases to about 52.5 by 2006 and then decreases to about 46 by 2009. The 2010 guidance for the annual average is about 52 . This 2010 outlook is based on guidance from companies representing 89 percent of total capital expenditures in 2009.

Note. FRB seasonals. Includes 11 North American service providers.
Source. Dell'Oro Group.

## Figure: Circuit Board Orders and Shipments

Line chart, by billions of dollars, 2002 to 2010. There are two series, "Orders" and "Shipments". "Orders" begins in 2002:Q1 at about 96 and generally decreases to about 67 by 2003:Q2. It then generally increases to about 129 by 2004:Q2 and then generally decreases to about 73 by 2004:Q4. By 2005:Q3 it has generally increased to about 132 and by 2006:Q3 it has generally decreased to about 95. It then generally increases to about 109 by 2008:Q1 and then generally decreases to about 70 by 2009:Q1. By February 2010 it has generally increased to about 92 . "Shipments" begins in 2002:Q1 at about 90.5 and generally decreases to about 70 by 2003:Q1. It then generally increases to about 106 by 2004:Q2 and then generally decreases to about 93 by 2004:Q4. By 2006:Q2 it has generally increased to about 115 and by 2007:Q1 it has generally decreased to about 96 . It then generally increases to about 110 by 2008:Q2 and then generally decreases to about 71 by 2009:Q2. By February 2010 it has generally increased to about 85.

Note. U.S. and Canadian orders and shipments of bare and loaded circuit boards.
Source. IPC.

## Figure: Semiconductor Manufacturing Equipment Orders and Shipments

Line chart, by billions of dollars, annual rate, 2002 to 2010. There are two series, "Orders" and "Shipments". "Orders" begins in 2002:Q1 at about 8 and generally increases to about 14 by 2002:Q3. It then generally decreases to about 8 by 2003:Q2 and then generally increases to about 18.5 by 2004:Q3. By 2005:Q2 it has generally decreased to about 11.5 and by 2006:Q2 it has generally increased to about 20. It then generally decreases to about 3 by 2009:Q2 and then generally increases to about 17 by March 2010. "Shipments" begins in 2002:Q1 at about 10 and generally increases to about 12.5 by 2002:Q3. It then generally decreases to about 9 by 2003:Q3 and then generally increases to about 18 by 2004:Q3. By 2005:Q3 it has generally decreased to about 12 and by 2007:Q2 it has generally increased to about 20.5. It then generally decreases to about 4.5 by 2009:Q2 and then generally increases to about 13.5 by March 2010 .

Note. FRB seasonals. North American headquartered manufacturers.
Source. SEMI's Book-to-Bill Report.

## Sales of Light Vehicles

| Category | 2009 | 2009 |  | 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Q3 | Q4 | Q1 | Jan. | Feb. | Mar. |
| Total | 10.3 | 11.5 | 10.8 | 11.0 | 10.8 | 10.3 | 11.8 |
| Autos | 5.4 | 6.4 | 5.7 | 5.7 | 5.7 | 5.4 | 6.0 |
| Light trucks | 4.9 | 5.1 | 5.2 | 5.3 | 5.1 | 4.9 | 5.8 |
| North American ${ }^{1}$ | 7.6 | 8.4 | 8.2 | 8.3 | 8.1 | 7.9 | 9.0 |
| Autos | 3.6 | 4.2 | 3.9 | 3.9 | 3.8 | 3.7 | 4.3 |
| Light trucks | 4.0 | 4.2 | 4.4 | 4.4 | 4.3 | 4.1 | 4.7 |
| Foreign-produced | 2.7 | 3.1 | 2.6 | 2.6 | 2.6 | 2.5 | 2.8 |
| Autos | 1.8 | 2.1 | 1.8 | 1.8 | 1.9 | 1.7 | 1.7 |
| Light trucks | . 9 | . 9 | . 8 | . 9 | . 8 | . 8 | 1.0 |


| Memo: |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Detroit Three <br> market share (percent)²ㄹ․ | 44.7 | 43.1 | 45.0 | 45.1 | 45.7 | 46.3 | 43.5 |

Note: Components may not sum to totals because of rounding.

1. Excludes some vehicles produced in Canada that are classified as imports by the industry. Return to table
2. Includes domestic and foreign brands affiliated with the Detroit Three. Return to table

Source: Ward's Communications. Adjusted using FRB seasonals.
[Content redacted.]

## Figure: Car-Buying Attitudes

Line chart, 2002 to 2010. There are two series, "Appraisal of car-buying conditions" measured by index and "Good time to buy: low prices" measured by percent. "Appraisal of car-buying conditions" begins in 2002:Q1 at about 155. From 2002:Q1 to 2004:Q1 it fluctuates between about 140 and 160 . It then generally decreases to about 107 by 2006:Q2 and then generally increases to about 140 by 2006:Q4. By 2008:Q2 it has generally decreased to about 90 and by April 2010 it has generally increased to about 139. "Good time to buy: low prices" begins in 2002:Q1 at about 36. From 2002:Q1 to 2005:Q1 it fluctuates between about 25 and 43. It then generally increases to about 56 by 2005:Q3 and then generally decreases to about 32 by 2008:Q2. By 2009:Q2 it has generally increased to about 65 and by 2010:Q1 it has generally decreased to about 50. It then generally increases to about 57 by April 2010.

Note. The April 2010 values are preliminary data.
Source. Thomson Reuters/University of Michigan Surveys of Consumers
Figure: Medium and Heavy Trucks

Line chart, by thousands of units, ratio scale, 2002 to 2010. There are two series, "Net new orders of class 5-8 trucks" and "Sales of class 4-8 trucks". "Net new orders of class 5-8 trucks" begins in 2002:Q1 at about 400 and generally increases to about 540 by 2002:Q2. It then generally decreases to about 260 by $2002: Q 3$ and then generally increases to about 750 by 2004:Q4. By 2005:Q2 it has generally decreased to about 500 and by 2006:Q2 it has generally increased to about 1050 . It then generally decreases to about 300 by 2007:Q2 and then generally increases to about 500 by 2007:Q4. By 2009:Q1 it has generally decreased to about 160 and by 2009:Q4 it has generally increased to about 450. It then generally decreases to about 140 by 2010:Q1 and then generally increases to about 240 by March 2010 . "Sales of class 4-8 trucks" begins in 2002:Q1 at about 310 and generally increases to about 360 by 2002:Q3. It then generally decreases to about 290 by 2003:Q1 and then generally increases to about 560 by 2006:Q4. By 2009:Q2 it has generally decreased to about 180 and by March 2010 it has generally increased to about 240.

Note. Annual rate, FRB seasonals.
Source. For sales, Ward's Communications; for orders, ACT Research.

## Real Personal Consumption Expenditures

| Category | 2009 |  | 2010 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q3 | Q4 | Q1 ${ }^{\text {e }}$ | Jan. ${ }^{\text {e }}$ | Feb. ${ }^{\text {e }}$ | Mar. ${ }^{\text {e }}$ |
|  | Annual rate |  |  | Monthly rate |  |  |
| Total real PCE | 2.8 | 1.6 | n.a. | . 3 | . 5 | n.a. |
| Motor vehicles | 53.7 | -23.7 | -7.4 | -5.2 | -3.8 | 11.7 |
| Goods ex. motor vehicles | 3.8 | 5.6 | 7.4 | . 9 | 1.0 | . 5 |
| Services | . 8 | 1.0 | n.a. | . 2 | . 4 | n.a. |
| Ex. energy | . 8 | . 5 | n.a. | . 1 | . 2 | n.a. |
| Memo: |  |  |  |  |  |  |
| Real PCE control ${ }^{1}$ | 3.2 | 6.0 | 7.7 | . 6 | 1.4 | . 5 |
| Nominal retail control2 | 1.4 | 5.4 | 7.4 | . 7 | 1.2 | . 5 |

[^7]n.a. Not available.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

## Figure: Change in Real PCE Goods

Line chart, by percent, 1990 to 2010. There is a horizontal line at zero. There are two series, " 6 -month moving average" and "Monthly". " 6 -month moving average" begins in 1990 at about -0.38 and generally decreases to about -0.73 by 1991. It then generally increases to about 0.65 by 1994 and then generally decreases to about -0.18 by 1995. By 1998 it has generally increased to about 0.8 and by 2001 it has generally decreased to about -0.17 . From 2001 to 2007 it fluctuates between about -0.8 and 0.18 . It then generally decreases to about -0.8 by 2008 and then generally increases to about 0.7 by March 2010. "Monthly" begins in 2006:Q1 at about 1.4 and generally decreases to about -0.6 by 2006:Q2. It then generally increases to about 1.2 by 2006:Q4 and then generally decreases to about -1.9 by 2008:Q4. By 2009:Q3 it has generally increased to about 2.7 and by 2009:Q4 it has generally decreased to about -2.4. It then generally increases to about 1.4 by March 2010 .

## Figure: Change in Real PCE Services

Line chart, by percent, 1990 to 2010. There is a horizontal line at zero. There are two series, " 6 -month moving average" and "Monthly". " 6 -month moving average" begins in 1990 at about 0.38 and generally decreases to about -0.075 by 1991. It then generally increases to about 0.45 by 1992 and then generally decreases to about 0.13 by 1994. By 2000 it has generally increased to about 0.5 and by 2001 it has generally decreased to about 0.05 . It then generally increases to about 0.33 by 2004 and then generally decreases to about -0.09 by 2008. By February 2010 it has generally increased to about 0.19 . "Monthly" begins in 2006:Q1 at about -0.11 and generally increases to about 0.56 within a month. It then generally decreases to about 0.0 by 2006:Q2 and then generally increases to about 0.5 by $2007: Q 1$. By 2008:Q3 it has generally decreased to about -0.37 and by February 2010 it has generally increased to about 0.39 .

Source. U.S. Department of Commerce, Bureau of Economic Analysis

Note. The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. The vertical line represents the last business cycle peak as defined by the NBER (December 2007).

## Fundamentals of Household Spending

## Figure: Household Net Worth and Dow Jones Total Market Index

Line chart, 2000 to 2010. There are two series, "Ratio of household net worth to DPI" which is measured by ratio and "Total Market Index" which is measured by index. "Ratio of household net worth to DPI" begins in 2000:Q1 at about 6.2 and generally decreases to about 5.0 by 2002:Q3. It then generally increases to about 6.4 by 2006:Q1. From 2006:Q1 to 2007:Q3 it fluctuates between about 6.2 and 6.4. It then generally decreases to about 4.5 by 2009:Q1 and then generally increases to about 4.9 by 2009:Q4. "Total Market Index" begins in 2000:Q1 at about 13400 and generally decreases to about 7600 by $2002: Q 3$. It then generally increases to about 15700 by 2007:Q4 and then generally decreases to about 7400 by 2009:Q1. By April 20, 2010 it has generally increased to about 12800 .

Note. The 2004:Q4 value for "Ratio of household net worth to DPI" excludes the effect on income of the one-time Microsoft dividend in December 2004
Source. Federal Reserve Board; U.S. Department of Commerce, Bureau of Economic Analysis; Wall Street Journal.

Figure: Change in Real Disposable Personal Income

Line chart, by 12-month percent change, 2000 to 2010. There is a horizontal line at zero. The series begins in $2000: \mathrm{Q} 1$ at about 4.4 and generally increases to about 6.0 by 2000:Q4. It then generally decreases to about 1.3 by 2001:Q2. From 2001:Q2 to 2003:Q1 it fluctuates between about 0.5 and 5.0 . It then generally increases to about 4.5 by 2003:Q3 and then generally decreases to about 0.9 by 2005:Q3. By 2006:Q4 it has generally increased to about 5.0 and by 2008:Q1 it has generally decreased to about -0.7. It then generally increases to about 4.9 by 2008:Q2 and then generally decreases to about -1.0 by 2008:Q3. From 2008:Q3 to February 2010 it fluctuates between about -1.3 and 2.05. In February 2010 it is at about 1.0.

Note. The values for December 2004 and December 2005 exclude the effect on income of the one-time Microsoft dividend in December 2004
Source. U.S. Department of Commerce, Bureau of Economic Analysis
Figure: Personal Saving Rate

Line chart, by percent, 2000 to 2010. The series begins in 2000:Q1 at about 3.4 and generally decreases to about 1.9 in $2001: Q 2$. It then generally increases to about 4.9 by 2001:Q3 and then generally decreases to about 1.0 by 2001:Q4. By 2002:Q1 it has generally increased to about 4.2 . From $2002: Q 1$ to $2004: Q 3$ it fluctuates between about 2.7 and 4.3. It then generally decreases to about 0.7 by 2005:Q2 and then generally increases to about 2.8 by 2006:Q2. By 2008:Q2 it has generally decreased to about 0.8 and by 2009:Q2 it has generally increased to about 6.4. It then generally decreases to about 3.05 by February 2010 .

Note. The value for December 2004 excludes the effect on income of the one-time Microsoft dividend in that month.
Source. U.S. Department of Commerce, Bureau of Economic Analysis.

Figure: Target Federal Funds Rate and 10-Year Treasury Yield

Line chart, by percent, 2000 to 2010. There are two series, "Treasury yield" and "Federal funds rate". "Treasury yield" begins in 2000:Q1 at about 6.7 and generally decreases to about 3.3 by 2003:Q2. It then generally increases to about 5.1 by 2006:Q2 and then generally decreases to about 2.0 by 2008:Q4. By April 20,2010 it has generally increased to about 3.9. "Federal funds rate" begins in 2000:Q1 at about 5.55 and increases to about 6.5 by 2000:Q2. It then generally decreases to about 1.0 by 2003:Q2 and then generally increases to about 5.25 by 2006:Q2. It remains constant at 5.25 until 2007:Q3 and then generally decreases to about 0.13 by 2008:Q4. It remains constant here at 0.13 until April 20, 2010.

Source. Federal Reserve Board

## Figure: Consumer Confidence

Line chart, 1990 to 2010. There are two series, "Thomson Reuters/Michigan" and "Conference Board". "Thomson Reuters/Michigan" is measured by scale where 1966=100. It begins in 1990:Q1 at about 93 and generally decreases to about 63 by 1990:Q4. It then generally increases to about 112 by 1999:Q4 and then generally decreases to about 82 by 2001:Q3. From 2001:Q3 to 2006:Q4 it fluctuates between about 74 and 105. It then generally decreases to about 55 by $2008: Q 4$ and then
generally increases to about 69 by April 2010. "Conference Board" is measured by scale where $1985=100$. It begins in 1990:Q1 at about 107 and generally decreases to about 46 by 1992:Q1.It then generally increases to about 145 by 2000:Q2 and then generally decreases to about 60 by 2003:Q1. By 2007:Q3 it has generally increased to about 110 and by 2009:Q1 it has generally decreased to about 22 . It then generally increases to about 52 by March 2010 .

Note. The Thomson Reuters/Michigan April 2010 value is preliminary. The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. The vertical line represents the last business cycle peak as defined by the NBER (December 2007).

Source. Thomson Reuters/University of Michigan Surveys of Consumers; Conference Board.

## Private Housing Activity

(Millions of units, seasonally adjusted; annual rate except as noted)

| Sector | 2009 |  |  | 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | Q3 | Q4 | Q1 | Jan. | Feb. | Mar. |
| All units |  |  |  |  |  |  |  |
| Starts | . 55 | . 59 | . 56 | . 62 | . 61 | . 62 | . 63 |
| Permits | . 57 | . 57 | . 60 | . 65 | . 62 | . 64 | . 69 |
| Single-family units |  |  |  |  |  |  |  |
| Starts | . 45 | . 50 | . 48 | . 53 | . 51 | . 54 | . 53 |
| Permits | . 44 | . 46 | . 47 | . 52 | . 50 | . 51 | . 54 |
| Adjusted permits ${ }^{\underline{1}}$ | . 44 | . 48 | . 49 | . 53 | . 52 | . 52 | . 56 |
| New homes |  |  |  |  |  |  |  |
| Sales | . 37 | . 41 | . 37 | n.a. | . 32 | . 31 | n.a. |
| Months' supply ${ }^{2}$ | 9.12 | 7.72 | 7.72 | n.a. | 8.88 | 9.19 | n.a. |
| Existing homes |  |  |  |  |  |  |  |
| Sales | 4.57 | 4.65 | 5.23 | n.a. | 4.43 | 4.37 | n.a. |
| Months' supply ${ }^{2}$ | 8.34 | 8.07 | 6.90 | n.a. | 8.20 | 8.48 | n.a. |
| Multifamily units |  |  |  |  |  |  |  |
| Starts | . 11 | . 09 | . 08 | . 09 | . 10 | . 08 | . 10 |
| Built for rent | . 09 | . 08 | . 06 | n.a. | n.a. | n.a. | n.a. |
| Built for sale | . 02 | . 01 | . 02 | n.a. | n.a. | n.a. | n.a. |
| Permits | . 14 | . 11 | . 12 | . 13 | . 12 | . 12 | . 14 |
| Condos and co-ops |  |  |  |  |  |  |  |
| Existing home sales | . 59 | . 63 | . 73 | n.a. | . 62 | . 65 | n.a. |

1. Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas. Return to table
2. At current sales rate; expressed as the ratio of seasonally adjusted inventories to seasonally adjusted sales. Quarterly and annual figures are averages of monthly figures. Return to table
n.a. Not available.

Source: Census Bureau.

## Figure: Private Housing Starts and Permits

Line chart, by millions of units, 1999 to 2010. Data are seasonally adjusted annual rate. There are three series, "Single-family starts", "Single-family adjusted permits", and "Multifamily starts". "Single-family starts" and "Single-family adjusted permits" follow each other very closely. They both start in 1999:Q1 at about 1.33. From 1999:Q1 to 2001:Q3 they fluctuate between about 1.1 and 1.4. They then generally increase to about 1.85 by 2005:Q4 and then generally decrease to about 0.35 by 2009:Q1. By March 2010 they have generally increased to about 0.55. "Multifamily starts" begins in 1999:Q1 at about 0.4. From 1999:Q1 to 2008:Q3 it fluctuates between about 0.2 and 0.5 . It then generally decreases to about 0.1 by March 2010.

Note. Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas.
Source. Census Bureau.

Indicators of Single-Family Housing
Figure: New Single-Family Home Sales

Line chart, by millions of units (annual rate), 2002 to 2010. There is one series, "Total (left scale)". "Total" begins in 2002:Q1 at about 0.9 and generally increases to about 1.42 by 2005:Q3. It then generally decreases to about 0.32 by 2009:Q1 and then generally increases to about 0.43 by 2009:Q3. By February 2010 it has generally decreased to about 0.3.

Source: For total, Census Bureau; [redacted].

## Figure: Inventories of New Homes and Homeowner Vacancy Rate

Line chart, 2002 to 2010. There are two series, "Inventories of new homes" and "Homeowner vacancy rate". "Inventories of new homes" is measured by thousands of units. It begins in 2002:Q1 at about 310 and generally increases to about 575 by 2006:Q3. It then generally decreases to about 230 by February 2010 . "Homeowner vacancy rate" is measured by percent. It begins in 2002:Q1 at about 1.50 and generally increases to about 1.70 by $2003: Q 3$. It then generally decreases to about 1.55 by 2004:Q1 and then generally increases to about 2.50 by 2007:Q1. By 2007:Q2 it has generally decreased to about 2.35 and by $2008: Q 1$ it has generally increased to about 2.60 . It then generally decreases to about 2.25 by 2009:Q4.

Note. Homeowner vacancy rate is seasonally adjusted by Board staff.
Source. Census Bureau.

## Figure: Existing Single-Family Home Sales

Line chart, 2002 to 2010. There are two series, "Existing home sales" and "Pending home sales". "Existing home sales" is measured by index where $2001=100$. It begins in 2002:Q1 at about 99 and generally decreases to about 88 by 2002:Q3. It then generally increases to about 124 by 2005:Q3 and then generally decreases to about 71 by 2008:Q4. By 2009:Q4 it has generally increased to about 110 and by February 2010 it has generally decreased to about 80 . "Pending home sales" is measured by millions of units at an annual rate. It begins in 2002:Q1 at about 5.5 and generally decreases to about 5.2 by 2002:Q2. It then generally increases to about 6.4 by 2005:Q3 and then generally decreases to about 4.4 by 2009:Q1. By 2009:Q4 it has generally increased to about 5.85 and by February 2010 it has generally decreased to about 5.1.

Source. National Association of Realtors.

## Figure: Mortgage Rates

Line chart, by percent, 2002 to 2010. The series is "30-year conforming fixed-rate mortgage" and begins in 2002:Q1 at about 7.1 and generally decreases to about 5.2 by 2003:Q2. From 2003:Q2 to 2005:Q2 it fluctuates between about 5.2 and 6.4. It then generally increases to about 6.75 by 2006:Q3. From 2006:Q3 to 2008:Q4 it fluctuates between about 5.6 and 6.8. It then generally decreases to about 4.75 by 2009:Q2. From 2009:Q2 to April 2010 it fluctuates between about 4.7 and 5.5 . By April 14, 2010 it is at about 5.15 .

Note. 2-week moving average.
Source. Federal Home Loan Mortgage Corporation.

## Figure: Prices of Existing Homes

Line chart, by index where $2000=100.2002$ to 2010. There are three series, "LP price index", "Monthly FHFA purchase-only index" and "20-city S\&P/Case-Shiller monthly price index". "LP price index" begins in 2002:Q1 at about 115 and generally increases to about 190 by $2006: Q 1$. It then generally decreases to about 130 by 2009:Q1 and then generally increases to about 135 by February 2010. "Monthly FHFA purchase-only index" begins in 2002:Q1 at about 111 and generally increases to about 159 by 2007:Q2. It then generally decreases to about 140 by January 2010. "20-city S\&P/Case-Shiller monthly price index" begins in 2002:Q1 at about 115 and generally increases to about 194 by 2006:Q1. It then generally decreases to about 132 by 2009:Q2 and then generally increases to about 139 by January 2010 .

Note. LP and S\&P/Case-Shiller are seasonally adjusted by Board staff. FHFA is re-indexed to 2000.
Source. For FHFA, Federal Housing Finance Agency; for S\&P/Case-Shiller, Standard \& Poor's; For LP, LoanPerformance, a division of First American CoreLogic.

## Figure: House Price Expectations

Line chart, by diffusion index, 2007 to 2010. There is a horizontal line at zero. There are two series, " 5 years ahead" and " 1 year ahead". " 5 years ahead" begins in 2007:Q1 at about 63. From 2007:Q1 to April 2010 it fluctuates between about 42 and 62 . In April 2010 it's at about 48. " 1 year ahead" begins in 2007:Q1 at about 28 and generally decreases to about -10 by 2008:Q2. It then generally increases to about 2 by 2008:Q3 and then generally decreases to about -20 by 2009 :Q1. By 2009:Q3 it has generally increased to about 10 and by April 2010 it has generally decreased to about 1.

Note. Diffusion index is constructed by subtracting expectations of decrease from expectations of increase. The April 2010 values are preliminary.
Source. Thomson Reuters/University of Michigan Surveys of Consumers

Orders and Shipments of Nondefense Capital Goods
(Percent change; seasonally adjusted current dollars)

| Category | Q3 Annu |  | Dec. | Jan. | Feb. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shipments | 3.8 | 9.0 | 4.1 | -4.4 | . 1 |
| Excluding aircraft | 2.2 | 8.7 | 2.3 | -1.9 | . 6 |
| Computers and peripherals | . 1 | 22.0 | 2.2 | 4.0 | -6.9 |
| Communications equipment | 33.5 | -5.0 | -3.0 | 1.4 | -2.6 |
| All other categories ${ }^{\underline{1}}$ | -. 2 | 8.8 | 2.8 | -2.8 | 1.8 |
| Orders | 28.6 | 1.6 | 2.2 | 3.9 | 6.0 |
| Excluding aircraft | 14.1 | 13.5 | 3.0 | -4.4 | 2.0 |
| Computers and peripherals | 5.5 | 26.4 | . 4 | -10.6 | 3.1 |
| Communications equipment | 31.2 | -10.4 | 3.7 | -3.9 | -1.2 |
| All other categories ${ }^{1}$ | 13.4 | 14.9 | 3.3 | -3.7 | 2.1 |
| Memo: |  |  |  |  |  |
| Shipments of complete aircraft² | 36.4 | 39.8 | 48.3 | 31.7 | 31.5 |

1. Excludes most terrestrial transportation equipment. Return to table
2. From Census Bureau, Current Industrial Reports; billions of dollars, annual rate. Return to table

Source: Census Bureau.

## Figure: Communications Equipment

Line chart, by billions of chained (2005) dollars, ratio scale. There are two series, "Shipment" and "Orders". "Shipments" begins in 2000 :Q1 at about 8.8 and generally increases to about 10.5 by 2000:Q4. It then generally decreases to about 5 by 2003:Q2 and then generally increases to about 6.5 by $2004: Q 2$. From $2004: Q 2$ to 2005:Q4 it fluctuates between about 4.7 and 6.5. It then generally increases to about 7 by 2006:Q1. From 2006:Q1 to 2008:Q3 it fluctuates between about 5.8 and 7 . It then generally decreases to about 5.5 by February 2010. "Orders" begins in 2000:Q1 at about 8.8 and generally increases to about 14.1 by $2000: Q 2$. It then generally decreases to about 3 by 2002:Q3 and then generally increases to about 7.5 by 2003:Q4. From 2003:Q4 to $2005: Q 4$ it fluctuates between about 4.8 and 7.5 . It then generally increases to about 9 by 2006:Q1 and then generally decreases to about 4.9 by 2009:Q1. By February 2010 it has generally increased to about 6 .
 communications equipment for monthly interpolation.

Source. Census Bureau.

## Figure: Non-High-Tech, Nontransportation Equipment

Line chart, by billions of chained (2005) dollars, ratio scale, 2000 to 2010. There are two series, "Orders" and "Shipments". "Orders" begins in 2000:Q1 at about 46.5 and generally decreases to about 42 within the quarter. It then generally increases to about 46.5 by 2000:Q3 and then generally decreases to about 35.5 by $2002: Q 1$. By 2006:Q3 it has generally increased to about 49 and by 2007:Q1 it has generally decreased to about 44. From 2007:Q1 to 2008:Q3 it fluctuates between about 44 and 47. It then generally decreases to about 32.5 by 2009:Q2 and then generally increases to about 36.5 by February 2010. "Shipments" begins in 2000:Q1 at about 44.3 and generally decreases to about 42 within the quarter. It then generally increases to about 45 by 2000:Q2 and then generally decreases to about 37 by 2002:Q1. By 2002:Q3 it has generally increased to about 40.5 and by 2003:Q1 it has generally decreased to about 37.5 . It then generally increases to about 46 by 2006:Q4 and then generally decreases to about 42.5 by 2007:Q1. From 2007:Q1 to 2008:Q3 it fluctuates between about 42.5 and 45 . It then generally decreases to about 35.3 by 2009:Q3 and then generally increases to about 36.5 by February 2010.
 Bureau of Economic Analysis.

Source. Census Bureau.

## Figure: Computers and Peripherals

Line chart, 2000 to 2010. There are two series, "Industrial production" and "Real M3 shipments". "Industrial production" is measured by index where $2000=100$. It begins in 2000:Q1 at about 96 and generally increases to about 108 by 2001:Q2. It then generally decreases to about 96 by 2001:Q3. From 2001:Q3 to 2003:Q1 it fluctuates between about 96 and 100. It then generally increases to about 110 by 2003:Q2 and then generally decreases to about 100 by 2004:Q2. By 2008:Q1 it has generally increased to about 230 and by 2009:Q2 it has generally decreased to about 160. It then generally increases to about 185 by March 2010 . "Real M3 shipments" is measured by billions of chained (2005) dollars, ratio scale. It begins in 2000:Q1 at about 8.5 and generally increases to about 10 by 2000 Q4. From 2000:Q4 to 2003:Q1 it fluctuates between about 9 and 10.4. It then generally increases to about 18.5 by 2007:Q3 and then generally decreases to about 13.5 by 2008:Q4. By February 2010 it has generally increased to about 18.

Source. Census Bureau; FRB Industrial Production.
Figure: Shipments Diffusion Index

Line chart, by diffusion index, 2000 to 2010. Data are 3-month moving average. There is a horizontal line at 50 . The series begins in $2000: Q 1$ at about 51 and generally increases to about 74 by 2000:Q2. It then generally decreases to about 16 by 2001:Q2 and then generally increases to about 81 by 2005:Q4. By 2007:Q1 it has generally decreased to about 45. From 2007:Q1 to 2008:Q3 it fluctuates between about 41 and 70 . It then generally decreases to about 13 by 2009 :Q1 and then generally increases to about 67 by February 2010.

Note. The diffusion index equals the percentage of 26 nontransportation equipment categories that experienced an increase in shipments relative to 3 months prior.
Source. Census Bureau.

## Fundamentals of Equipment and Software Investment

## Figure: Real Business Output

Line chart, by 4-quarter percent change, 1990 to 2009. There is a horizontal line at zero. The series begins in 1990:Q1 at about 2.8 and generally decreases to about -2.2 by 1991:Q1. It then generally increases to about 5.2 by 1992:Q4. From 1992:Q4 to 2000:Q2 it fluctuates between about 2.5 and 6 . It then generally decreases to about 0 by 2001:Q4 and then generally increases to about 5 by 2004:Q1. By 2009:Q2 it has generally decreased to about -5.6 and by $2009: Q 4$ it has generally increased to about -0.2.

Source. U.S. Department of Commerce, Bureau of Economic Analysis.

## Figure: User Cost of Capital

Line chart, by 4-quarter percent change, 1990 to 2009. There is a horizontal line at zero. There are two series, "Non-high-tech" and "High-tech". "Non-high-tech" begins in early 1990 at about -2 and then generally increases to about 1.5 by the end of 1990 . It then generally decreases to about -8.5 by 1991 and then generally increases to about 14 by 1994. By 1995 it has generally decreased to about -7 and by 1996 it has generally increased to about 4.5 . It then generally decreases to about -4 by 1997 and then generally increases to about 6 by 1999. By 2003 it has generally decreased to about -11 and by 2006 it has generally increased to about 2.5. It then generally decreases to about -4 by 2007 and then generally increases to about 14.5 by 2008. By 2009:Q4 it has generally decreased to about -13 . "Hightech" begins in early 1990 at about -8 and generally increases to about -6 by the end of 1990 . It then generally decreases to about -13 by 1992 and then generally increases to about -1 by 1994. By 1995 it has generally decreased to about -11.5 and by 2000 it has generally increased to about -2.5 . It then generally decreases to about -13.5 by 2001 and then generally increases to about -8 by 2002. By 2003 it has generally decreased to about -13.5 and by 2005 it has generally increased to about -2.5 . It then generally decreases to about -7.5 by 2007 and then generally increases to about 0 by 2008. By 2009:Q4 it has generally decreased to about -11 .

Source. Staff calculation.

## Figure: Corporate Bond Yields

Line chart, by percent, 1990 to 2010. There are two series, "10-year high-yield" and "10-year BBB". "10-year high-yield" begins in 1990 at about 14.5 and generally decreases to about 8.8 by 1997. It then generally increases to about 13.5 by 2000 and then generally decreases to about 7 by 2005 . By 2008 it has generally increased to about 17.9 and by April 2010 it has generally decreased to about 8.4. "10-year BBB" begins in 1990 at about 10.25 and generally decreases to about 6.5 by early 1994. It then generally increases to about 9.1 by late 1994 and then generally decreases to about 6.25 by 1998 . By 2000 it has generally increased to about 8.9 and by 2005 it has generally decreased to about 5.2. It then generally increases to about 10 by 2008 and then generally decreases to about 5.75 by April 2010 .

Note. End of the month. April 2010 value as of April 20th.
Source. Merrill Lynch
Figure: NFIB: Survey on Loan Availability

Line chart, by percent, 1990 to 2010. There are two series, "Credit expected to be tighter" and "Credit more difficult to obtain". "Credit expected to be tighter" begins in 1990 at about 7 and generally increases to about 13 by 1991. It then generally decreases to about 1 by 1998 and then generally increases to about 9 by 2000 . From 2000 to 2005 it fluctuates between about 2 and 9 . It then generally increases to about 16 by March 2010 . "Credit more difficult to obtain" begins in 1990 at about 7 and generally increases to about 13 by 1991. It then generally decreases to about -0.5 by 1999 and then generally increases to about 7 by 2000 . By 2002 it has generally decreased to about -0.4 and by March 2010 it has generally increased to about 14 .
 obtaining credit. Seasonally adjusted.

Source. National Federation of Independent Business (NFIB).

## Figure: Surveys of Business Conditions

Line chart, by diffusion index, 1990 to 2010. There are two series "ISM" and "Philadelphia Fed". "ISM" begins in 1990 at about 47 and generally decreases to about 39 by 1991. It then generally increases to about 59 by 1994 . From 1994 to 2000 it fluctuates between about 45 and 59 . It then generally decreases to about 41 by 2001 and then generally increases to about 62 by 2004. By 2008 it has generally decreased to about 32 and by April 2010 it has generally increased to about 60 . "Philadelphia Fed" begins in early 1990 at about 46 and generally decreases to about 26 by the end of 1990 . It then generally increases to about 71 by 1993 and then generally decreases to about 39 by 1995. From 1995 to 2000 it fluctuates between about 39 and 65 . It then generally decreases to about 32 by 2001 and then generally increases to about 69 by 2003. By 2008 it has generally decreased to about 30 and by March 2010 it has generally increased to about 55 .

Source. Institute for Supply Management (ISM), Manufacturing ISM Report on Business; Philadelphia Fed Business Outlook Survey.

Note. Shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001November 2001. The vertical lines represent the last business cycle peak as defined by the NBER (December 2007).

## Nonresidential Construction and Indicators

(All spending series are seasonally adjusted at an annual rate; nominal CPIP deflated by BEA prices through Q4 and by staff projection thereafter)

## Figure: Total Structures

Line chart, by billions of chained (2005) dollars, 2000 to 2010. The series begins in $2000: Q 1$ at about 315 and generally increases to about 362 by $2000: Q 3$. It then generally decreases to about 257 by 2002:Q4. From 2002:Q4 to 2003:Q4 it fluctuates between about 255 and 271. It then generally decreases to about 249 by 2005:Q3 and then generally increases to about 363 by 2008:Q2. By February 2010 it has generally decreased to about 256.

Source. Census Bureau
Figure: Office, Commercial, Communication, and Other

Line chart, by billions of chained (2005) dollars, 2000 to 2010. There are four series, "Office", "Commercial", "Communication" and "Other". "Office" begins in 2000:Q1 at about 55 and generally increases to about 73 by 2000:Q4. It then generally decreases to about 34 by 2003:Q2. From 2003:Q2 to 2005:Q3 it fluctuates between about 34 and 40. It then generally increases to about 49 by 2008:Q3 and then generally decreases to about 24 by February 2010. "Commercial" begins in 2000:Q1 at about 80 and generally decreases to about 63 by 2003:Q1. From 2003:Q1 to 2006:Q4 it fluctuates between about 63 and 75 . It then generally increases to about 79 by 2007:Q2 and then generally decreases to about 34 by February 2010. "Communication" begins in 2000:Q1 at about 23 and generally increases to about 28 by 2001:Q2. It then generally decreases to about 15 by 2003:Q1 and then generally increases to about 26 by 2008:Q2. By February 2010 it has generally decreased to about 16. "Other" begins in 2000:Q1 at about 85 and generally increases to about 92 by 2000:Q2. It then generally decreases to about 77 by 2003:Q1. From 2003:Q1 to 2004:Q3 it fluctuates between about 74 and 88. It then generally decreases to about 72 by 2005:Q2 and then generally increases to about 107 by 2008:Q3. By February 2010 it has generally decreased to about 71.

Note. Other consists of structures for religious organizations, education, lodging, amusement and recreation, transportation, and health care
Source. Census Bureau.

## Figure: Manufacturing and Power

Line chart, by billions of chained (2005) dollars, 2000 to 2010. There are two series, "Power" and "Manufacturing". "Power" begins in 2000:Q1 at about 31 and generally increases to about 46 by 2000:Q4. It then generally decreases to about 24 by 2001:Q1 and then generally increases to about 54 by 2002:Q1. By 2004:Q2 it has generally decreased to about 22 and by February 2010 it has generally increased to about 64.5. "Manufacturing" begins in 2000 :Q1 at about 41 and generally increases to about 53 by 2001:Q1. It then generally decreases to about 22 by 2003:Q1 and then generally increases to about 68 by $2009: Q 2$. By February 2010 it has generally decreased to about 44.

## Source. Census Bureau

## Figure: Drilling and Mining Indicators

Line chart, 2000 to 2010. There are two series, "Footage drilled" measured in millions of feet and "Drilling rigs in operation" measured by number. "Footage drilled" begins in 2000:Q1 at about 11 and generally increases to about 16 by 2001:Q2. It then generally decreases to about 12 by $2002: Q 1$ and then generally increases to about 34 by 2008:Q4. By 2009:Q2 it has generally decreased to about 13 and by February 2010 it has generally increased to about 25. "Drilling rigs in operation" begins in 2000:Q1 at about 800 and generally increases to about 1300 by 2001:Q2. It then generally decreases to about 775 by 2002 :Q2 and then generally increases to about 1950 by 2008:Q3. By 2009:Q2 it has generally decreased to about 900 and by April 2010 it has generally increased to about 1575 .

Note. The April readings for drilling rigs are based on data through April 16, 2010. Both series are seasonally adjusted by FRB staff.
Source. For footage drilled, U.S. Department of Energy, Energy Information Agency; for drilling rigs, Baker Hughes.

## Figure: Vacancy Rates

Line chart, by percent, 2000 to 2010. There are three series, "Office", "Industrial" and "Retail". "Office" begins in 2000:Q1 at about 9 and generally decreases to about 8 by 2000:Q2. It then generally increases to about 17 by 2003:Q1 and then generally decreases to about 12.5 by $2007: Q 2$. By $2010: Q 1$ it has generally increased to about 16.5. "Industrial" begins in 2000:Q1 at about 7.3 and generally decreases to about 6.7 by 2000:Q3. It then generally increases to about 12 by 2004:Q1 and then generally decreases to about 9.5 by 2007:Q3. By 2010:Q1 it has generally increased to about 14 . "Retail" begins in $2000: Q 1$ at about 7.5 and generally decreases to about 7 by 2001:Q1. It then generally increases to about 8.4 by 2002:Q2 and then generally decreases to about 7.4 by $2006: Q 1$. By $2010: Q 1$ it has generally increased to about 13.

Note. Industrial space includes both manufacturing structures and warehouses. The 2010:Q1 value for the "Industrial" series is a preliminary value.
Source. CB Richard Ellis Economic Advisors.
Figure: Architectural Billings and Nonresidential Construction Employment

Line chart, 2000 to 2010. Data are 3-month moving averages. There are two series, "Billings" measured by diffusion index and "Change in employment" measured by percent. "Billings" begins in 2000:Q1 at about 57 and generally decreases to about 44 by 2001:Q4. It then generally increases to about 59 by $2005: Q 4$ and then generally decreases to about 49 by 2006:Q3. By 2007:Q2 it has generally increased to about 57.5 and by 2009:Q1 it has generally decreased to about 35 . It then generally increases to about 44.5 by March 2010. "Change in employment" begins in 2001:Q2 at about 0 and generally decreases to about -0.8 by 2002:Q2. It then generally increases to about 0.9 by 2006:Q1 and then generally decreases to about -2.1 by 2009:Q1. By March 2010 it has generally increased to about -0.75 .

Note. Employment consists of industrial, commercial, and specialty trade construction
Source. For billings, American Institute of Architects; for employment, U.S. Department of Labor, Bureau of Labor Statistics.

## Nonfarm Inventory Investment

(Billions of dollars; seasonally adjusted annual rate)

| Measure and sector | 2009 |  |  |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q2 | Q3 | Q4 | Dec. | Jan. | Feb. |
| Real inventory investment (chained 2005 dollars) |  |  |  |  |  |  |
| Total nonfarm business | -163.1 | -141.4 | -13.7 | ... | .. | ... |
| Motor vehicles | -48.1 | -4.6 | 21.0 | ... | $\cdots$ | ... |
| Nonfarm ex. motor vehicles | -115.1 | -136.9 | -34.7 | $\ldots$ | ... | ... |
| Manufacturing and trade ex. wholesale and retail motor vehicles and parts | -110.9 | -129.3 | -16.4 | -57.4 | $-19.8{ }^{\text {e }}$ | n.a. |
| Manufacturing | -39.8 | -55.3 | -6.1 | -22.1 | $-4.6{ }^{\text {e }}$ | n.a. |
| Wholesale trade ex. motor vehicles \& parts | -52.5 | -51.9 | -1.4 | -42.3 | $-1.9{ }^{\text {e }}$ | n.a. |
| Retail trade ex. motor vehicles \& parts | -18.6 | -22.1 | -8.8 | 6.9 | $-13.3{ }^{\text {e }}$ | n.a. |
| Book-value inventory investment (current dollars) |  |  |  |  |  |  |
| Manufacturing and trade ex. wholesale and retail motor vehicles and parts | -146.3 | -121.8 | 20.5 | -18.7 | 19.2 | 54.5 |
| Manufacturing | -66.0 | -49.8 | 7.5 | -10.0 | 16.1 | 30.2 |
| Wholesale trade ex. motor vehicles \& parts | -56.5 | -47.8 | 13.9 | -25.5 | 11.7 | 28.4 |
| Retail trade ex. motor vehicles \& parts | -23.7 | -24.2 | -. 9 | 16.7 | -8.6 | -4.2 |

n.a. Not available.
... Not applicable.
e Staff estimate of real inventory investment based on revised book-value data. Return to table
Source: For real inventory investment, U.S. Dept. of Commerce, Bureau of Economic Analysis; for book-value data, Census Bureau.
Figure: Inventory Ratios ex. Motor Vehicles

Line chart, by months, 2000 to 2010. There are two series, "Staff flow-of-goods system" and "Census book-value data". "Staff flow-of-goods system" begins in 2000:Q1 at about 1.77. From 2000:Q1 to 2002:Q1 it fluctuates between about 1.71 and 1.77. It then generally decreases to about 1.5 by $2007: Q 4$ and then generally increases to about 1.67 by 2009:Q2. By March 2010 it has generally decreased to about 1.57. "Census book-value data" begins in $2000: Q 1$ at about 1.35 and generally increases to about 1.41 by 2001:Q2. It then generally decreases to about 1.18 by 2006:Q1 and then generally increases to about 1.25 by 2006:Q4. By 2008:Q2 it has generally decreased to about 1.2 and by 2008:Q4 it has generally increased to about 1.41. It then generally decreases to about 1.22 by February 2010 .
 vehicles and parts, and inventories are relative to sales.

Source. Census Bureau; staff calculation.

## Figure: ISM Customers' Inventories: Manufacturing

Line chart, by index, 2000 to 2010. There is a horizontal line at 50 because a number below 50 indicates inventories are "too low". The series begins in 2000 :Q1 at about 47 and generally increases to about 56 by 2001:Q1. It then generally decreases to about 38 by 2002:Q2 and then generally increases to about 46.5 by 2002:Q4. By 2004:Q2 it has generally decreased to about 37 and by 2008:Q4 it has generally increased to about 57.5 . It then generally decreases to about 32 by 2010:Q1 and then generally increases to about 39 by March 2010.

Source. Institute for Supply Management (ISM), Manufacturing ISM Report on Business.

Line chart, by percent change, 2004 to 2009. Data are annual rate. There is a horizontal line at zero. There are two series, "Current" and "4-quarter moving average". "Current" begins in early 2004 at about 5 . From 2004 to early 2007 it fluctuates between about -8 and 13 . It then generally increases to about 10 by mid- 2007 and then generally decreases to about 2.5 by late 2007. By mid-2008 it has generally increased to about 14 and by early 2009 it has generally decreased to about -5 . It then generally increases to about 12 by mid-2009 and then generally decreases to about 0 by 2009:Q4. "4-quarter moving average" begins in 2004 at about 7.5 and generally decreases to about 1 by early 2005. It then generally increases to about 4 by early 2006 and then generally decreases to about -1.5 by early 2007 . By late 2008 it has generally increased to about 8.5 and by 2009:Q4 it has generally decreased to about 4.

Note. National income and product accounts measure.
Source. U.S. Department of Commerce, Bureau of Economic Analysis.

## Figure: Real Defense Spending

Line chart, by billions of chained (2005) dollars, 2004 to 2010. There are two series, "Unified" which is a monthly series and "NIPA" which is a quarterly series. "Unified" begins in early 2004 at about 535 and generally decreases to about 505 by mid-2004. It then generally increases to about 565 within a month or so and then generally decreases to about 435 by late 2004. By the end of 2004 it has generally increased to about 535 . From the end of 2004 to early 2007 it fluctuates between about 480 and 570. It then generally increases to about 660 by March 2010. "NIPA" begins in early 2004 at about 505 and generally increases to about 525 by mid2004. It then generally decreases to about 510 by late 2004 and then generally increases to about 535 by mid-2005. By late 2005 it has generally decreased to about 510 and by mid-2009 it has generally increased to about 530. It then generally decreases to about 620 by 2010:Q1.

Note. Nominal unified defense spending is seasonally adjusted and deflated by BEA prices. NIPA defense purchases exclude consumption of fixed capital; the 2010:Q1 values for NIP is an estimate.

Source. Monthly Treasury Statement; U.S. Department of Commerce, Bureau of Economic Analysis.

## Figure: Unified Budget Deficit

Line chart, 2000 to 2010. There is a horizontal line at zero. There are two series, "Billions of dollars" measured in billions of dollars and "Percent of GDP" measured in percent of GDP. "Billions of dollars" begins in 2000 at about 150 and then generally increases to about 280 by 2001 . It then generally decreases to about -450 by 2004 and then generally increases to about -150 by 2007. By early 2010 it has generally decreased to about-1500 and by March 2010 it has generally increased to about -1350. "Percent of GDP" begins in 2000 at about 1.7 and generally increases to about 2.8 by 2001. It then generally decreases to about -4 by 2004 and then generally increases to about -1.2 by 2007. By March 2010 it has generally decreased to about -10.5 .

Note. Adjusted for payment-timing shifts; cumulative deficit over the previous 12 months.
Source. Monthly Treasury Statement

## Figure: Federal Debt Held by the Public

Line chart, by percent of GDP, 2000 to 2010. The series begins in 2000 at about 37.3 and generally decreases to about 31 by 2001 . It then generally increases to about 37 by 2005 and then generally decreases to about 35 by 2007. By March 2010 it has generally increased to about 57 .

Source. Monthly Treasury Statement

## Figure: Unified Outlays and Receipts

Line chart, by percent change from year earlier, 2000 to 2010. There is a horizontal line at zero. There are two series, "Outlays" and "Receipts". "Outlays" begins in 2000 at about 4 and generally increases to about 9.5 by 2002. It then generally decreases to about 6 by mid- 2003 and then generally increases to about 7.5 within a month or so. By mid-2004 it has generally decreased to about 5 and by mid-2006 it has generally increased to about 9 . It then generally decreases to about 2 by late 2007 and then generally increases to about 18.5 by late 2009. By March 2010 it has generally decreased to about 4 . "Receipts" begins in early 2000 at about 7 and generally increases to about 11.5 by late 2000. It then generally decreases to about -13 by 2002 and then generally increases to about 15 by late 2005 . By late 2009 it has generally decreased to about -18 and by March 2010 it has generally increased to about -12.5 .

Note. Adjusted for payment-timing shifts; based on cumulative outlays or receipts over the previous 12 months.
Source. Monthly Treasury Statement.

Recent Unified Federal Outlays and Receipts

| Function or source | Jan.-Mar. 2010 |  |
| :--- | ---: | ---: |
| Outlays | Bilions of dollars | Percent change* |
| National defense | 835 | -7.4 |
| Major transfers ${ }^{1}$ | 169 | 9.5 |
| Other primary spending | 562 | 11.2 |
| Net interest | 50 | -74.9 |


|  |  |  |  |
| :--- | ---: | ---: | :---: |
| Receipts | 466 | 5.4 |  |
| Individual income and payroll taxes | 391 | -1.5 |  |
| Corporate income taxes | 20 | 241.5 |  |
| Other | 55 | 39.7 |  |
|  |  |  |  |
| Deficit (-) | -369 | -19.6 |  |

Note: Adjusted for payment-timing shifts.

* Relative to same year-earlier period. Percent change in deficit is calculated on an absolute-value basis. Return to table

1. Includes Social Security, Medicare, Medicaid, and income security programs. Return to table

Source: Monthly Treasury Statement.

## State and Local Indicators

## Figure: Real Spending on Consumption and Investment

Line chart, by percent change, 1999 to 2009. Data are annual rate. There is a horizontal line at zero. There are two series, "Spending" and "4-quarter moving average". "Spending" begins in 1999:Q1 at about 4.5 and generally decreases to about 2.5 by 1999:Q2. It then generally increases to about 5 by $1999: Q 4$ and then generally decreases to about 0 by 2000:Q2. By 2001:Q2 it has generally increased to about 8.8 and by 2001:Q3 it has generally decreased to about -3 . It then generally increases to about 8.8 by 2001:Q4 and then generally decreases to about -1.5 by 2003:Q1. From 2003:Q1 to 2005:Q2 it fluctuates between about -1.7 and 1.7. It then generally increases to about 3 by 2007:Q1 and then generally decreases to about -2 by 2008:Q4. By 2009:Q2 it has generally increased to about 4 and by 2009:Q4 it has generally decreased to about -2.3. "4-quarter moving average" begins in 1999:Q1 at about 6 and generally decreases to about 2 by 2000:Q4. It then generally increases to about 4.5 by 2001:Q4 and then generally decreases to about -0.7 by 2005:Q2. By 2007:Q1 it has generally increased to about 2 and by 2009:Q4 it has generally decreased to about 0 .

Source. U.S. Department of Commerce, Bureau of Economic Analysis; national income and product accounts.

## Figure: Net Change in Employment

Bar chart, in thousands of jobs, 1999 to 2010. Data are monthly average. The series begins in 1999 at about 40 and decreases to about 25 in 2000 . It then increases to about 45 by 2001 and then decreases to about 0 by 2003. By 2007 it has increased to about 22 and by 2009:Q3 it has decreased to about -31. It then increases to about -2 by 2009:Q4 and then decreases to about -24 by 2010:Q1.

Source. U.S. Department of Labor, Bureau of Labor Statistics, Employment Situation.

## Figure: Real Construction

Line chart, by billions of chained (2005) dollars, 1999 to 2010. Data are annual rate. The series begins in 1999 at about 202 and generally increases to about 217 by early 2000. It then generally decreases to about 208 by late 2000 and then generally increases to about 238 by early 2002 . By late 2004 it has generally decreased to about 215 and by late 2007 it has generally increased to about 231. It then generally decreases to about 217 by early 2009 and then generally increases to about 233 by late 2009. By 2010:Q1 it has generally decreased to about 213.

Note. Nominal CPIP deflated by BEA prices through 2009:Q4 and by a staff projections thereafter. Observation for 2010:Q1 is the average of January and February.
Source. Census Bureau, Construction Spending.

## Figure: State Revenues

Line chart, by percent change from year earlier, 1999 to 2009. There is a horizontal line at zero. There are two series, "Individual and corporate income taxes" and "Total revenues". "Individual and corporate income taxes" begins in 1999 at about 4 and generally increases to about 18 by 2000 . It then generally decreases to about -21.5 by 2002 and then generally increases to about 27 by 2005. By early 2009 it has generally decreased to about -23.5 and by $2009: Q 4$ it has generally increased to about -3. "Total Revenues" begins in 1999 at about 4 and generally increases to about 12.5 by 2000 . It then generally decreases to about -10 by 2002 and then generally increases to about 16 by 2005. By early 2009 it has generally decreased to about -17.5 and by 2009:Q4 it has generally increased to about -3 .

Source. Census Bureau, Quarterly Summary of State and Local Government Tax Revenue.

## Figure: Local Revenues

Line chart, by percent change from year earlier, 1999 to 2009. There is a horizontal line at zero. There are two series, "Property taxes" and "Total revenues". "Property taxes" begins in 1999 at about 6 . From 1999 to 2001 it fluctuates between about -1 and 8 . It then generally increases to about 23 by 2002 and then generally decreases to about -8.5 by mid-2003. By late 2003 it has generally increased to about 16 and by mid-2004 it generally decreases to about 2 . From mid-2004 to 2009:Q4 it fluctuates between about 0.5 and 12. By 2009:Q4 it's at about 6 . "Total revenues" begins in 1999 at about 3 . From 1999 to 2001 it fluctuates between about 1 and 9. It then generally increases to about 15 by 2002 and then generally decreases to about -5 by mid- 2003 . By late 2003 it has generally increased to about 13.5 and by 2004 it has generally decreased to about 4. From 2004 to 2006 it fluctuates between about 2.5 and 12 . From 2006 to early 2008 it fluctuates between
about 1 and 9. It then generally increases to about 7.5 by mid-2008 and then generally decreases to about -1 by mid-2009.By 2009:Q4 it has generally increased to about 4.5.

Source. Census Bureau, Quarterly Summary of State and Local Government Tax Revenue.

Consumer Price Measures
(Percent change)

| Measures | 12-month change | 3-month change | 1-month change |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Mar. 2009 | Mar. 2010 | Annual rate | Monthly rate |
|  |  | Dec. 2009 | Mar. 2010 | Feb. 2010 | Mar. 2010

CPI

| Total | -.4 | $\mathbf{2 . 3}$ | $\mathbf{2 . 5}$ | . $\mathbf{9}$ | .0 | .1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Food | 4.4 | .2 | 1.0 | 2.3 | .1 | .2 |
| Energy | -23.0 | 18.3 | 15.3 | 9.2 | -.5 | .0 |
| Ex. food and energy | 1.8 | $\mathbf{1 . 1}$ | $\mathbf{1 . 3}$ | -.2 | . $\mathbf{1}$ | .0 |
| Core goods | .4 | 1.9 | 2.9 | -.1 | -.1 | -.1 |
| Core services | 2.3 | .8 | .7 | -.2 | .1 | .1 |
| Housing services | 1.5 | -.7 | -.6 | -2.3 | .0 | -.1 |
| Other services | 3.5 | 2.8 | 2.6 | 2.5 | .3 | .3 |
| Memo: Trimmed mean | 2.3 | 1.0 | 1.2 | .6 | .0 | .0 |
|  |  |  |  |  |  |  |
| Chained CPI (n.s.a.) $\boldsymbol{1}$ | -.1 | 2.5 | $\ldots$ | .. | $\ldots$ | $\ldots$ |
| Ex. food and energy ${ }^{1}$ | 1.7 | .8 | $\ldots$ | $\ldots$ | $\ldots$ | ... |

PCE prices ${ }^{2}$

| Total | .2 | $\mathbf{2 . 0}$ | $\mathbf{2 . 5}$ | $\mathbf{1 . 0}$ | .0 | .1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Food and bev. at home | 4.6 | -.5 | 1.4 | 2.3 | .1 | .3 |
| Energy | -24.8 | 18.5 | 16.1 | 8.6 | -.6 | -.1 |
| Ex. food and energy | 1.7 | $\mathbf{1 . 3}$ | $\mathbf{1 . 8}$ | .4 | .0 | .1 |
| Core goods | .7 | .1 | -.7 | -1.6 | -.1 | -.1 |
| Core services | 2.0 | 1.7 | 2.6 | 1.1 | .1 | .2 |
| Housing services | 2.4 | .0 | -.4 | -.5 | .0 | -.1 |
| Other services | 1.9 | 2.2 | 3.5 | 1.6 | .1 | .2 |
| Memo: Trimmed mean | 2.3 | $\ldots$ | 1.4 | .. | .0 | .. |
|  |  |  |  |  |  |  |
| Core market-based | 2.1 | 1.1 | 1.0 | .4 | .1 | .1 |
| Core non-market-based | -.9 | 2.5 | 6.4 | .8 | -.1 | .2 |

1. Higher-frequency figures are not applicable for data that are not seasonally adjusted (n.s.a.). Return to table
2. PCE prices in March are staff estimates. Return to table
... Not applicable.
Source: For consumer price index (CPI), U.S. Dept. of Labor, Bureau of Labor Statistics; for personal consumption expenditures (PCE), U.S. Dept. of Commerce, Bureau of Economic Analysis.

## Producer Price Measures

| PPI |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Total finished goods | $\mathbf{- 1 . 4}$ | $\mathbf{4 . 4}$ | $\mathbf{5 . 9}$ | $\mathbf{5 . 1}$ | $\mathbf{1 . 4}$ | $\mathbf{- . 6}$ |
| Food | .8 | 3.4 | 8.0 | 8.6 | .4 | .4 |
| Energy | -18.5 | 16.6 | 24.7 | 11.7 | 5.1 | -2.9 |
| Ex. food and energy | $\mathbf{3 . 8}$ | $\mathbf{1 . 0}$ | $\mathbf{- . 5}$ | $\mathbf{1 . 6}$ | . $\mathbf{3}$ | . $\mathbf{. 1}$ |
| Core consumer goods | 4.0 | 1.7 | .0 | 2.7 | .4 | .2 |
| Capital equipment | 3.6 | .1 | -1.3 | .5 | .3 | -.1 |
|  |  |  |  |  |  |  |
| Intermediate materials | -5.2 | 5.6 | 7.3 | 9.9 | 1.7 | .1 |
| Ex. food and energy | -.2 | 2.8 | 4.0 | 7.8 | .5 | .9 |
| Crude materials | -34.5 | 28.6 | 41.4 | 28.9 | 9.6 | -3.5 |
| Ex. food and energy | -29.7 | 34.9 | 13.6 | 50.4 | 6.6 | -.6 |

Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

## Consumer Prices

(12-month change except as noted; PCE prices in December are staff estimates)

## Figure: PCE Prices

Line chart, by percent, 2003 to 2010. There is a horizontal line at zero. There are two series, "Total PCE" and "Core PCE". "Total PCE" begins in $2003: Q 1$ at about 2.4 and generally decreases to about 1.75 by 2003:Q2. It then generally increases to about 4 by 2005:Q3 and then generally decreases to about 1.5 by $2006: Q 4$. By 2008:Q3 it has generally increased to about 4.5 and by 2009:Q3 it has generally decreased to about -1. It then generally increases to about 2 by March 2010 . "Core PCE" begins in 2003:Q1 at about 1.7 and generally decreases to about 1.35 by 2003:Q3. It then generally increases to about 2.35 by 2005 Q1 and then generally decreases to about 2.05 by 2005:Q3. By 2008:Q3 it has generally increased to about 2.65 and by March 2010 it has generally decreased to about 1.3 .

Source. U.S. Department of Commerce, Bureau of Economic Analysis.

## Figure: Measures of Core PCE

Line chart, by percent, 2003 to 2010. There are three series, "Trimmed mean", "Excluding food and energy", and "Market-based components". "Trimmed mean" begins in 2003:Q1 at about 2.1 and generally decreases to about 1.7 by 2003:Q4. It then generally increases to about 3 by 2007:Q1 and then generally decreases to about 2.4 by 2007:Q3. By 2008:Q3 it has generally increased to about 2.9 and by March 2010 it has generally decreased to about 1 . "Excluding food and energy" begins in 2003:Q1 at about 1.7 and generally decreases to about 1.35 by 2003:Q3. It then generally increases to about 2.35 by 2005:Q1 and then generally decreases to about 2.05 by 2005:Q3. By 2008:Q3 it has generally increased to about 2.65 and by March 2010 it has generally decreased to about 1.3 . "Market-based components" begins in 2003:Q1 at about 1.5 and generally decreases to about 1.2 by 2003:Q3. It then generally increases to about 2.5 by 2006 Q3 and then generally decreases to about 1.75 by 2007:Q3. By 2008:Q3 it has generally increased to about 2.6 and by March 2010 it has generally decreased to about 1.05 .

Source. For trimmed mean, Federal Reserve Bank of Dallas; for all else, U.S. Department of Commerce, Bureau of Economic Analysis.
Figure: CPI and PCE excluding Food and Energy

Line chart, by percent, 2003 to 2010. There are three series, "PCE", "CPI", and "CPI chained". "PCE" begins in $2003: Q 1$ at about 1.7 and generally decreases to about 1.35 by 2003:Q3. It then generally increases to about 2.35 by 2005:Q1 and then generally decreases to about 2.05 by 2005:Q3. By 2008:Q3 it has generally increased to about 2.65 and by March 2010 it has generally decreased to about 1.3. "CPI" begins in 2003:Q1 at about 1.9 and generally decreases to about 1.1 by 2003:Q4. It then generally increases to about 2.4 by 2005:Q1 and then generally decreases to about 2 by 2005:Q3. By $2006: Q 3$ it has generally increased to about 3 and by 2007:Q3 it has generally decreased to about 2.2. It then generally increases to about 2.5 by 2008:Q3 and then generally decreases to about 1.1 by March 2010. "CPI chained" begins in 2003:Q1 at about 1.6 and generally decreases to about 0.7 by 2003:Q4. It then generally increases to about 2.3 by $2004: Q 4$ and then generally decreases to about 1.7 by 2005:Q4. By 2006:Q3 it has generally increased to about 2.6 and by 2007:Q3 it has generally decreased to about 1.65 . It then generally increases to about 2.3 by 2008:Q3 and then generally decreases to about 0.8 by March 2010.

Source. For CPI, U.S. Department of Labor, Bureau of Labor Statistics; for PCE, U.S. Department of Commerce, Bureau of Economic Analysis.

## Figure: PCE Goods and Services

Line chart, by percent, 2003 to 2010. There is a horizontal line at zero. There are two series, "Services excluding energy" and "Goods excluding food and energy". "Services excluding energy" begins in 2003:Q1 at about 3.1. From 2003:Q1 to 2008:Q2 it fluctuates between about 3 and 3.8 . It then generally decreases to about 1.2 by 2009:Q3 and then generally increases to about 1.7 by March 2010. "Goods excluding food and energy" begins in 2003:Q1 at about -1.6 and generally decreases to about -2.5 by 2003:Q3. It then generally increases to about 0.1 by 2004:Q4. From 2004:Q4 to $2006: Q 3$ it fluctuates between about -0.4 and 0.2 . It then generally decreases to about -1 by 2007:Q3 and then generally increases to about 1.5 by 2009:Q2. By March 2010 it has generally decreased to about 0.1 .

Figure: Total PCE

Line chart, by percent, 2003 to 2010. There are two series, "Annual rate" and "3-month change". "Annual rate" begins in 2003:Q1 at about 2.4 and generally decreases to about 1.75 by 2003:Q2. It then generally increases to about 4 by 2005:Q3 and then generally decreases to about 1.5 by 2006:Q4. By 2008:Q3 it has generally increased to about 4.5 and by 2009:Q3 it has generally decreased to about -1. It then generally increases to about 2 by March 2010 . " $3-$ month change" begins in early 2003:Q1 at about 1.8 and generally increases to about 3.8 by late 2003:Q1. It then generally decreases to about -1 by $2003: Q 2$ and then generally increases to about 3.9 by 2003:Q3. From 2003:Q3 to 2005:Q2 it fluctuates between about 1.3 and 3.8 . It then generally increases to about 8 by $2005: Q 3$ and then generally decreases to about -0.5 by 2005:Q4. By 2006:Q3 it has generally increased to about 4 and by 2006:Q4 it has generally decreased to about -1.3 . It then generally increases to about 6.5 by 2008:Q3 and then generally decreases to about -8 by 2008:Q4. By 2009:Q3 it has generally increased to about 3.7 and by March 2010 it has generally decreased to about 1.3.

Source. U.S. Department of Commerce, Bureau of Economic Analysis.

## Figure: PCE excluding Food and Energy

Line chart, by percent, 2003 to 2010. There are two series, "Annual rate" and "3-month change". "Annual rate" begins in 2003:Q1 at about 1.7 and generally decreases to about 1.35 by 2003:Q3. It then generally increases to about 2.35 by 2005:Q1 and then generally decreases to about 2.05 by $2005: Q 3$. By $2008: Q 3$ it has generally increased to about 2.65 and by March 2010 it has generally decreased to about 1.3. "3-month change" begins in 2003:Q1 at about 0.8 and then generally increases to about 2.7 by 2004:Q2. From 2004:Q2 to 2008:Q3 it fluctuates between about 1.2 and 3.4 . It then generally decreases to about 0.2 by $2008: Q 4$ and then generally increases to about 2.2 by 2009:Q2. By March 2010 it has generally decreased to about 0.4.

Source. U.S. Department of Commerce, Bureau of Economic Analysis.

## Energy and Food Price Indicators

(Data from U.S. Department of Energy, Energy Information Administration, except as noted)

## Figure: Total Gasoline Margin

Line chart, by cents per gallon, 2005 to 2010. The series is retail price less average spot crude price. It begins in 2005:Q1 at about 100 and generally decreases to about 80 by $2005: Q 2$. It then generally increases to about 155 by 2005:Q3 and then generally decreases to about 96 by $2005: Q 4$. By $2006: Q 3$ it has generally increased to about 135 and by 2006:Q4 it has generally decreased to about 95 . It then generally increases to about 165 by 2007:Q2 and then generally decreases to about 72 by early 2008:Q3. By late 2008:Q3 it has generally increased to about 159 and by the end of 2008:Q4 it has generally decreased to about 72 . It then generally increases to about 125 by 2009:Q1 and then generally decreases to about 74 by 2009:Q2. By April 19, 2010 it has generally increased to about 95.

Note. Regular grade seasonally adjusted by FRB staff, less average spot crude price: 60\% West Texas Intermediate, $40 \%$ Maya heavy crude. Includes gasoline taxes.

## Figure: Gasoline Price Decomposition

Line chart, by cents per gallon, 2005 to 2010. There are three series, "Retail price", "Rack price", and "Average spot crude price". "Retail price" begins in 2005:Q1 at about 195 and generally increases to about 300 by 2005:Q3. It then generally decreases to about 220 by 2005:Q4 and then generally increases to about 300 by 2006:Q3. By 2006:Q4 it has generally decreased to about 225 and by 2008:Q3 it has generally increased to about 400. It then generally decreases to about 175 by the end of 2008:Q4 and then generally increases to about 275 by April 19, 2010. "Rack price" begins in 2005:Q1 at about 135 and generally increases to about 235 by 2005:Q3. It then generally decreases to about 160 by 2005:Q4 and then generally increases to about 240 by 2006:Q3. By 2007:Q1 it has generally decreased to about 155 and by 2008:Q3 it has generally increased to about 350. It then generally decreases to about 117 by the end of 2008:Q4 and then generally increases to about 215 by April 19, 2010. "Average spot crude price" begins in 2005:Q1 at about 95 and generally increases to about 170 by 2006:Q3. It then generally decreases to about 110 by 2007:Q1 and then generally increases to about 330 by 2008:Q3. By the end of 2008:Q4 it has generally decreased to about 70 and by April 19,2010 it has generally increased to about 180 .

Note. The series, "Retail price" is regular grade seasonally adjusted by FRB staff. The series, "Average spot crude prices" is $60 \%$ West Texas Intermediate, $40 \%$ Maya heavy crude.

## Figure: Gasoline Inventories

Line chart, by millions of barrels, 2005 to 2010. Data are adjusted for ethanol use. The RBOB component of total motor gasoline inventories is adjusted for ethanol use after 2006, boosting reported stocks; estimated by FRB staff. The series begins at about 197 in 2005:Q4 and generally increases to about 225 by 2006:Q1. It then generally decreases to about 210 by 2006:Q4, and then generally increases to about 232 by 2007:Q1. It then generally decreases to about 200 by $2007: Q 3$, and generally increases to 240 by 2008:Q1. It then generally decreases to about 195 by 2008:Q4, and generally increases to about 223 by 2009:Q1. By 2009:Q3 it has generally decreased to about 210 and by April 16, 2010 it has generally increased to about 230.

[^8]Figure: Natural Gas Prices

Line chart, by dollars per million BTU, 2004 to 2010. There are two series, "Natural Gas Prices" and "Futures price". There is a vertical line at April 20 , 2010 representing when the series "Natural Gas Prices" ends and the series "Futures Prices" begins. "Natural Gas Prices" begin in 2004:Q4 at about 5.5 and generally increases to about 15.5 by 2005:Q4. It then generally decreases to about 4 by 2006:Q3 and then generally increases to about 12 by 2007:Q1. By 2007:Q3 it has generally decreased to about 5 and by 2008:Q2 it has generally increased to about 14. It then generally decreases to about 2 by 2009:Q3 and then generally increases to about 8.5 by 2009:Q4. By April 20, 2010 it has generally decreased to about 4 . "Futures price" begins on April 20, 2010 at about 4 and generally increases to about 5.4 by the end of 2010 .

Note. National average spot price
Source. Bloomberg

## Figure: PCE: Food at Home and Core Prices

Line chart, by 12-month percent change, 2005 to 2010. There is a horizontal line at zero. There are two series, "Food and beverages" and "Excluding food and energy". "Food and beverages" begins in 2005:Q1 at about 2 and generally decreases to about 0.8 by 2006:Q2. It then generally increases to about 7 by $2008: Q 4$ and then generally decreases to about -2 by 2009:Q4. By March 2010 it has generally increased to about -0.5. "Excluding food and energy" begins in 2005:Q1 at about 2.3. From 2005:Q1 to 2008:Q3 it fluctuates between about 2 and 2.7. It then generally decreases to about 1.2 by March 2010 .

Note. The March 2010 values are staff estimates
Source. U.S. Department of Commerce, Bureau of Economic Analysis
Figure: Spot Prices of Agricultural Commodities

Line chart, by dollars per bushel, 2005 to 2010. There are six series, "Corn", "Soybeans", "Wheat", "Corn Futures price", "Soybeans Futures price" and "Wheat Futures price". There is a vertical line at April 20, 2010 representing when the series' "Corn", "Soybeans" and "Wheat" end and the series' "Corn Futures price", "Soybeans Futures price" and "Wheat Futures price" begin. "Corn" begins in 2005:Q1 at about 1.9 and generally increases to about 4 by 2007:Q1. It then generally decreases to about 2.8 by 2007:Q3 and then generally increases to about 7 by 2008:Q2. By 2008:Q4 it has generally decreased to about 2.8 . From 2008:Q4 to 2010:Q1 it fluctuates between about 2.8 and 4. On April 20, 2010 it is at about 3.5. "Soybeans" begins in 2005:Q1 at about 5.5 and generally increases to about 7.5 by 2005 :Q2. It then generally decreases to about 5 by 2006:Q3 and then generally increases to about 16 by 2008:Q2. By 2008:Q4 it has generally decreased to about 8 and by 2009:Q2 it has generally increased to about 12.5. It then generally decreases to about 9.5 by April 20, 2010. "Wheat" begins in 2005:Q1 at about 4 and generally increases to about 13.5 by 2008:Q1. It then generally decreases to about 4.75 by April 20, 2010. "Corn Futures price" begins on April 20,2010 at about 3.5 and generally increases to about 4.3 by the end of 2010. "Soybeans Futures price" begins on April 20, 2010 at about 9.5 and then generally increases to about 9.9 by 2010:Q3. It then generally decreases to about 9.75 by the end of 2010. "Wheat Futures price" begins on April 20, 2010 at about 4.75 and then generally increases to about 5.2 by the end of 2010 .

Source. Commodity Research Bureau

## Broad Measures of Inflation

(Percent change, Q4 to Q4)

| Measure | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: |
| Product prices | 2.9 | 2.7 | 1.9 | .7 |
| GDP price index | 3.0 | 2.8 | 1.7 | .8 |
| Less food and energy | 2.3 | 2.2 | 1.6 | .6 |
| Nonfarm business chain price index |  |  |  |  |
| Expenditure prices | 2.6 | 3.5 | 1.9 | .6 |
| Gross domestic purchases price index | 2.9 | 2.8 | 2.0 | .7 |
| Less food and energy | 1.9 | 3.6 | 1.7 | 1.2 |
| PCE price index | 2.3 | 2.5 | 2.0 | 1.5 |
| Less food and energy | 1.8 | 3.5 | 1.9 | 1.3 |
| PCE price index, market-based components | 2.2 | 2.2 | 2.3 | 1.7 |
| Less food and energy | 1.9 | 4.0 | 1.6 | 1.5 |
| CPI | 2.7 | 2.3 | 2.0 | 1.7 |
| Less food and energy | 1.7 | 3.6 | 1.8 | 1.6 |
| Chained CPI | 2.3 | 1.9 | 1.9 | 1.3 |
| Less food and energy | 3.0 | 3.1 | 2.9 | 1.2 |
| Median CPI | 2.6 | 2.8 | 2.9 | 1.2 |
| Trimmed mean CPI | 2.7 | 2.7 | 2.5 | 1.4 |
| Trimmed mean PCE |  |  |  |  |

## Surveys of Inflation Expectations

(Percent)

| Period |  | Actual CPI inflation ${ }^{1}$ | Tho 1 ye | son Reuters | chigan Surv 5 to 10 | ars ${ }^{3}$ | Professional forecasters $(10 \text { years })^{4}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean | Median | Mean | Median | CPI | PCE |
| 2008: | Q2 |  | 4.4 | 6.4 | 5.0 | 3.8 | 3.3 | 2.5 | 2.2 |
|  | Q3 | 5.3 | 5.4 | 4.7 | 3.6 | 3.1 | 2.5 | 2.2 |
|  | Q4 | 1.6 | 3.0 | 2.8 | 2.9 | 2.8 | 2.5 | 2.2 |
| 2009: | Q1 | . 0 | 2.4 | 2.0 | 3.3 | 2.9 | 2.4 | 2.2 |
|  | Q2 | -1.2 | 3.4 | 2.9 | 3.1 | 2.9 | 2.5 | 2.3 |
|  | Q3 | -1.6 | 3.1 | 2.6 | 3.2 | 2.9 | 2.5 | 2.2 |
|  | Q4 | 1.4 | 3.1 | 2.7 | 3.1 | 2.9 | 2.3 | 2.1 |
| 2010: | Q1 | 2.4 | 3.5 | 2.7 | 3.2 | 2.8 | 2.4 | 2.1 |
| 2009: | Dec. | 2.7 | 3.0 | 2.5 | 3.0 | 2.7 | $\ldots$ | $\ldots$ |
| 2010: | Jan. | 2.6 | 3.4 | 2.8 | 3.3 | 2.9 | . | ... |
|  | Feb. | 2.1 | 3.6 | 2.7 | 3.3 | 2.7 | 2.4 | 2.1 |
|  | Mar. | 2.3 | 3.4 | 2.7 | 3.1 | 2.7 | $\ldots$ | $\cdots$ |
|  | Apr. | n.a. | 3.8 | 2.9 | 3.2 | 2.7 | $\ldots$ | $\cdots$ |

[^9]3. Responses to the question, By about what percent per year do you expect prices to go up, on average, during the next 5 to 10 years? Return to table
4. Median CPI and PCE price projections. Return to table
... Not applicable.
n.a. Not available.
 forecasters, the Federal Reserve Bank of Philadelphia.

## Measures of Expected Inflation

## Figure: Survey Measures (Thomson Reuters/University of Michigan)

Line chart, by percent, 1978 to 2010. Data are Quarterly. There are two series, "Median, next 5 to 10 years" and "Median, next 12 months". "Median, next 5 to 10 years" begins in 1981 at about 6.5 and generally decreases to about 4.5 by 1985 . There is no data from late 1985 to early 1990 . In mid-1990 it begins at about 4.2 and then generally decreases to about 2.8 by 1998. Here it remains about constant until 2010:Q1. "Median, next 12 months" begins in 1978 at about 6 and generally increases to about 10.2 by 1980. It then generally decreases to about 2.5 by 1983, and generally increases to about 4.8 by late 1990 . By 1992 it has generally decreased to about 2.7. From 1992 to 2000 it fluctuates between about 2.4 and 3 . It then generally decreases to about 1 by late 2001 , and then generally increases to about 5 by 2008. By 2010:Q1 it has generally decreased to about 2.8.

There is a second line chart, by percent, showing monthly data from 2005 to April 2010. There are two series, "Median, next 5 to 10 years" and "Median, next 12 months". "Median, next 5 to 10 years" begins in 2005:Q1 at about 2.8. From 2005:Q1 to 2008:Q1 it fluctuates between about 2.8 to 3.2 . It then generally increases to about 3.4 by 2008:Q2 and then generally decreases to about 2.75 by April 2010. "Median, next 12 months" begins in 2005:Q1 at about 2.9 and generally increases to about 4.6 by 2005:Q4. It then generally decreases to about 3 by 2006:Q4, and then generally increases to about 5.2 by 2008:Q1. By 2008:Q4 it has generally decreased to about 1.75 and by April 2010 it has generally increased to about 2.9.

Source. Thomson Reuters/University of Michigan Surveys of Consumers.
Figure: Inputs to Models of Inflation

Line chart, by percent, 1971 to 2010. Data are quarterly. There are two series, "FRB/US long-run expectations measure for PCE inflation" and "Distributed lag of core PCE inflation". "FRB/US long-run expectations measure for PCE inflation" begins in 1971 at about 3 and generally increases to about 7.8 by 1981 . It then generally decreases to about 2 by 1999 and remains relatively constant here until 2010:Q1. "Distributed lag of core PCE inflation" begins in 1971 at about 4.9 and generally
decreases to about 3.5 by 1973. It then generally increases to about 8.8 by 1981 and then generally decreases to about 2 by $2010: Q 1$.

There is a second line chart, by percent, showing Quarterly data from 2005 to 2010 . There are two series, "FRB/US long-run expectations measure for PCE inflation" and "Distributed lag of core PCE inflation". "FRB/US long-run expectations measure for PCE inflation" begins in 2005:Q1 at about 2 and remains about constant here until 2007:Q2 when it generally increases to about 2.3 by 2009:Q2. It then generally decreases to about 2.1 by 2010:Q1. "Distributed lag of core PCE inflation" begins in 2005:Q1 at about 1.9 and generally increases to about 2.5 by 2008:Q1. It then generally decreases to about 1.8 by $2010: Q 1$.

Note. The distributed lag of core PCE inflation is derived from one of the reduced-form Phillips curves used by Board staff.
Source. For the distributed lag of core PCE inflation, FRB staff calculations; for the FRB/US measure, for 2007 forward, the median projection for PCE inflation over the next 10 years from the Survey of Professional Forecasters (SPF); for 1990 to 2006, the equivalent SPF projection for the CPI; for 1981 to 1989, a related survey for the CPI conducted by Richard Hoey; and for the period preceding 1981, a model-based estimate constructed by Board staff. The survey data before 2007 are adjusted down 0.5 percentage point to put the CPI projections approximately on a PCE basis.

## Figure: Inflation Compensation from TIPS

Line chart, by percent, 2001 to 2010. Data are Quarterly. There are two series, " 5 to 10 years ahead" and "Next 5 years". " 5 to 10 years ahead" begins in 2001:Q1 at about 2.1 and generally increases to about 3.1 by 2003:Q4. It then generally decreases to about 2.5 by 2005:Q3, and generally increases to about 3 by 2008:Q1. By 2009:Q1 it has generally decreased to about 2.5 and by 2010:Q1 it has increased to about 3. "Next 5 years" begins in 2001:Q1 at about 1.6 and generally decreases to about 1.1 by 2002:Q4. It then generally increases to about 2.7 by 2005:Q1 and then generally decreases to about -0.7 by 2008:Q4. By 2010:Q1 it has generally increased to about 1.9.

There is a second line chart, by percent, showing Weekly data from 2005 to 2010 . There are two series, " 5 to 10 years ahead" and "Next 5 years". " 5 to 10 years ahead" begins in 2005:Q1 at about 2.7. From 2005:Q1 to 2007:Q2 it fluctuates between about 2.3 and 2.9 . It then generally increases to about 3.5 by $2008: Q 3$ and then generally decreases to about 2 by 2008:Q4. By April 20, 2010 it has generally increased to about 3 . "Next 5 years" begins in $2005: Q 1$ at about 2.7 and generally decreases to about 1.8 by 2008:Q1. It then generally increases to about 2.5 by 2008:Q2 and then generally decreases to about -1.6 by $2008: Q 4$. By April 20,2010 it has generally increased to about 1.8.
 indexation-lag effect.

Source. FRB staff calculations.

## Commodity Price Indexes

## Figure: Journal of Commerce

Line chart, by ratio scale where 2006=100, 1991 to 2010. There are two series, "Industrials" and "Metals". "Industrials" begins in 1991 at about 57 and generally increases to about 70 by 1995. It then generally decreases to about 50 by 1999. By 2001 it has generally increased to about 65 and by early 2002 it has generally decreased to about 46. It then generally increases to about 140 by early 2008 and then generally decreases to about 60 by late 2008 . By April 20 , 2010 it has generally increased to about 130. "Metals" begins in 1991 at about 48 and generally decreases to about 38 by 1993. It then generally increases to about 58 by 1995 and then generally decreases to about 36 by 1999. By 2000 it has generally increased to about 50 and by late 2001 it has generally decreased to about 32 . It then generally increases to about 160 by early 2008 and then generally decreases to about 60 by early 2009 . By April 20,2010 it has generally increased to about 135.

Note. The Journal of Commerce (JOC) industrial price index is based almost entirely on industrial commodities, with a small weight given to energy commodities. Copyright for JOC data is held by CIBCR, 1994.

## Figure: Commodity Research Bureau

Line chart, by ratio scale where $1967=100,1991$ to 2010 . There are two series, "Spot industrials" and "Futures". "Spot industrials" begins in 1991 at about 300 and generally decreases to about 250 by 1993. It then generally increases to about 350 by 1995 and then generally decreases to about 220 by 2001 . By early 2008 it has generally increased to about 550 and by late 2008 it has generally decreased to 320. It then generally increases to about 520 by April 20, 2010. "Futures" begins in 1991 at about 225 and generally decreases to about 200 by 1992. It then generally increases to about 260 by 1996 and then generally decreases to about 180 by 1999. By late 2000 it has generally increased to about 240 and by late 2001 it has generally decreased to 180 . It then generally increases to about 625 by early 2008 and by late 2008 it has generally decreased to about 340. It then generally increases to about 475 by April 20, 2010.
 commodities and splits the remaining weight roughly equally among energy commodities, industrial commodities, and precious metals.

Selected Commodity Price Indexes
(Percent change)

| Index | 2009 $\boldsymbol{\underline { 1 }}$ | 12/29/09 <br> to <br> 3/9/10 | 3/9/10 <br> to | 4/20/10 |
| :--- | ---: | ---: | ---: | ---: |


| CRB spot foodstuffs | 16.9 | 4.9 | 1.0 | 18.3 |
| :--- | ---: | ---: | ---: | ---: |
| CRB futures | 38.4 | -2.6 | .3 | 29.3 |

[^10]2. March 9, 2010, is the Tuesday preceding publication of the March Greenbook. Return to table

## Hourly Compensation and Unit Labor Costs

(Percent change from preceding period at compound annual rate; based on seasonally adjusted data)

| Category | $\begin{gathered} \text { 2007:Q4 } \\ \text { to } \\ \text { 2008:Q4 } \end{gathered}$ | $\begin{gathered} \text { 2008:Q4 } \\ \text { to } \\ \text { 2009:Q4 } \end{gathered}$ | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q1 | Q2 | Q3 | Q4 ${ }^{\text {e }}$ |
| Compensation per hour |  |  |  |  |  |  |
| Nonfarm business | 3.1 | . 8 | -4.2 | 7.7 | -. 4 | . 5 |
| Output per hour |  |  |  |  |  |  |
| Nonfarm business | 1.4 | 5.6 | . 9 | 7.6 | 7.8 | 6.3 |
| Unit labor costs |  |  |  |  |  |  |
| Nonfarm business | 1.7 | -4.6 | -5.0 | . 1 | -7.6 | -5.5 |

e Staff estimate. Return to table
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

## Figure: Compensation per Hour

Line chart, by percent change from year-earlier period, 1996 to 2009. There are two series, "Productivity and costs" and "ECI". "Productivity and costs" begins in 1996 at about 3 and generally increases to about 6.8 by 1998. It then generally decreases to about 3 by 1999 and then generally increases to about 8.5 by 2000 . By 2002 it has generally decreased to about 2.5 and by 2003 it has generally increased to about 5.5 . It then generally decreases to about 0.8 by $2009: Q 4$. "ECI" begins in 1996 at about 2.8 and generally increases to about 4.8 by 2000. It then generally decreases to about 1 by 2009:Q4.

Note. The Productivity and costs 2009:Q4 value is a staff estimate
Source. U.S. Department of Labor, Bureau of Labor and Statistics
Figure: Unit Labor Costs

Line chart, by percent change from year-earlier period, 1996 to 2009. There is a horizontal line at zero. The series begins in 1996 at about 1 and generally increases to about 3.8 by 1998. It then generally decreases to about 0.5 by mid-1999 and then generally increases to about 5 by early 2000 . By early 2002 it has generally decreased to about -3.5 and by late 2002 it has generally increased to about 1.8. By 2004 it has generally decreased to about -0.8 and by 2007 it has generally increased to about 3.8. It then generally decreases to about 0 by early 2008 and then generally increases to about 2 by mid-2008. By 2009:Q4 it has generally decreased to about -4.7.

Note. The value for 2009:Q4 is a staff estimate.
Source. U.S. Department of Labor, Bureau of Labor Statistics
Figure: Average Hourly Earnings

Line chart, by percent change from year-earlier period, 1996 to 2010. There are two series, "Production workers" and "All employees". "Production workers" begins in 1996 at about 3.25 and generally increases to about 4.4 by 1998. It then generally decreases to about 3.5 by 1999 and then generally increases to about 4.25 by the end of 2000. By early 2002 it has generally decreased to about 2.6 and by early 2003 it has generally increased to about 3.5 . It then generally decreases to about 1.4 by 2004 and then generally increases to about 4.2 by 2006. By March 2010 it has generally decreased to about 2.1. "All employees" begins in 2007 at about 3.6 and generally decreases to about 2.8 by 2008. It then generally increases to about 3.6 by early 2009 and then generally decreases to about 1.8 by March 2010 .

Source. U.S. Department of Labor, Bureau of labor Statistics
Figure: Markup, Nonfarm Business

Line chart, by ratio, 1996 to 2009. There is a horizontal line at about 1.58 representing the average from 1968 to the present. The series begins in 1996 at about 1.61 and generally increases to about 1.63 by 1997. It then generally decreases to about 1.53 by 2001 and then generally increases to about 1.75 by 2009 :Q4.

Note. The markup is the ratio of output price to unit labor costs. The value for 2009:Q4 is a staff estimate.
Source. For output price, U.S. Department of Commerce, Bureau of Economic Analysis; for unit labor costs, U.S. Department of Labor, Bureau of Labor Statistics.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

Last update: January 29, 2016

## Accessible Material

## April 2010 Greenbook Part 2 Tables and Charts ${ }^{\ddagger}$

## Domestic Financial Developments

## Selected Financial Market Quotations

| Instrument | $2008$ <br> Sept. 12 | $\text { Jan. } 26$ | $2010$ <br> Mar. 15 | Apr. 20 | Change to Apr. 20 from selected dates (percentage points) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Short-term |  |  |  |  |  |  |  |
| FOMC intended federal funds rate | 2.00 | . 13 | . 13 | . 13 | -1.87 | . 00 | . 00 |
| Treasury bills ${ }^{\underline{1}}$ |  |  |  |  |  |  |  |
| 3-month | 1.46 | . 07 | . 17 | . 16 | -1.30 | . 09 | -. 01 |
| 6-month | 1.80 | . 14 | . 24 | . 24 | -1.56 | . 10 | . 00 |
| Commercial paper (A1/P1 rates) ${ }^{\underline{2}}$ |  |  |  |  |  |  |  |
| 1-month | 2.39 | . 14 | . 21 | . 23 | -2.16 | . 09 | . 02 |
| 3-month | 2.75 | . 20 | . 20 | . 28 | -2.47 | . 08 | . 08 |
| Large negotiable CDs ${ }^{1}$ |  |  |  |  |  |  |  |
| 3-month | 2.79 | . 20 | . 23 | . 30 | -2.49 | . 10 | . 07 |
| 6-month | 3.09 | . 29 | . 34 | . 41 | -2.68 | . 12 | . 07 |
| Eurodollar deposits ${ }^{\underline{3}}$ |  |  |  |  |  |  |  |
| 1-month | 2.60 | . 28 | . 28 | . 30 | -2.30 | . 02 | . 02 |
| 3-month | 3.00 | . 40 | . 40 | . 40 | -2.60 | . 00 | . 00 |
|  |  |  |  |  |  |  |  |
| Bank prime rate | 5.00 | 3.25 | 3.25 | 3.25 | -1.75 | . 00 | . 00 |
| Intermediate- and long-term |  |  |  |  |  |  |  |
| U.S. Treasury ${ }^{4}$ |  |  |  |  |  |  |  |
| 2-year | 2.24 | . 85 | . 95 | 1.02 | -1.22 | . 17 | . 07 |
| 5-year | 2.97 | 2.38 | 2.42 | 2.56 | -. 41 | . 18 | . 14 |
| 10-year | 3.93 | 3.80 | 3.84 | 3.91 | -. 02 | . 11 | . 07 |
| U.S. Treasury indexed notes ${ }^{5}$ |  |  |  |  |  |  |  |
| 5-year | 1.33 | . 38 | . 56 | . 65 | -. 68 | . 27 | . 09 |
| 10-year | 1.77 | 1.37 | 1.56 | 1.53 | -. 24 | . 16 | -. 03 |
|  |  |  |  |  |  |  |  |
| Municipal general obligations (Bond Buyer) ${ }^{6}$ | 4.54 | 4.30 | 4.33 | 4.43 | -. 11 | . 13 | . 10 |
| Private instruments |  |  |  |  |  |  |  |
| 10-year swap | 4.26 | 3.72 | 3.77 | 3.80 | -. 46 | . 08 | . 03 |
| 10-year FNMA? | 4.36 | 4.14 | 4.18 | 4.27 | -. 09 | . 13 | . 09 |
| 10-year AAㅇ | 6.62 | 5.04 | 5.02 | 4.92 | -1.70 | -. 12 | -. 10 |
| 10 -year BBB ${ }^{8}$ | 7.22 | 5.74 | 5.72 | 5.70 | -1.52 | -. 04 | -. 02 |
| 10 -year high yield ${ }^{8}$ | 10.66 | 8.76 | 8.64 | 8.34 | -2.32 | -. 42 | -. 30 |
| Home mortgages (FHLMC survey rate) |  |  |  |  |  |  |  |
| 30-year fixed | 5.78 | 4.98 | 4.96 | 5.07 | -. 71 | . 09 | . 11 |
|  |  |  |  |  |  |  |  |


| Stock exchange index | Record high |  | 2010 |  |  | Change to Apr. 20 from selected dates (percent) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level | Date | Jan. 26 | Mar. 15 | Apr. 20 | Record high | 2010 Jan. 26 | 2010 Mar. 15 |
| Dow Jones Industrial | 14,165 | 10-9-07 | 10,194 | 10,642 | 11,117 | -21.51 | 9.05 | 4.46 |
| S\&P 500 Composite | 1,565 | 10-9-07 | 1,092 | 1,151 | 1,207 | -22.87 | 10.53 | 4.92 |
| Nasdaq | 5,049 | 3-10-00 | 2,204 | 2,362 | 2,500 | -50.48 | 13.46 | 5.85 |
| Russell 2000 | 856 | 7-13-07 | 612 | 674 | 722 | -15.68 | 17.87 | 6.99 |
| D.J. Total Stock Index | 15,807 | 10-9-07 | 11,282 | 11,980 | 12,600 | -20.29 | 11.69 | 5.18 |

1. Secondary market. Return to table
2. Financial commercial paper. Return to table
3. Bid rates for Eurodollar deposits collected around 9:30 a.m. eastern time. Return to table
4. Derived from a smoothed Treasury yield curve estimated using off-the-run securities. Return to table
5. Derived from a smoothed Treasury yield curve estimated using all outstanding securities and adjusted for the carry effect. Return to table
6. Most recent Thursday quote. Return to table
7. Constant-maturity yields estimated from Fannie Mae domestic noncallable coupon securities. Return to table
8. Derived from smoothed corporate yield curves estimated using Merrill Lynch bond data. Return to table

NOTES:
September 12, 2008, is the last business day before Lehman Brothers Holdings filed for bankruptcy.
January 26,2010 , is the day before the January 2010 FOMC monetary policy announcement.
March 15, 2010, is the day before the most recent FOMC monetary policy announcement.

## Policy Expectations, Treasury Yields, and Liquidity Facilities

Figure: Interest Rates

Line chart, by percent, March 16, 2010 to April 20, 2010. Data are 5-minute intervals from 8:00 a.m. to 4:00 p.m. No adjustments for term premiums. There is a vertical line on March 16 representing the March FOMC, April 2 representing the Employment report, and April 6 representing the FOMC minutes release. There are two series, "10-year Treasury yield" and "December 2010 Eurodollar". "10-year Treasury yield" begins on March 16 at about 3.71 and generally decreases to about 3.62 by March 18. It then generally increases to about 3.71 by March 19 and then generally decreases to about 3.65 by March 23 . By March 25 it has generally increased to about 3.91 and by March 31 it has generally decreased to about 3.82. It then generally increases to about 4 by April 5 and then generally decreases to about 3.84 by April 8. By April 9 it has generally increased to about 3.92 and by April 13 it has generally decreased to about 3.8 . It then generally increases to about 3.89 by April 15 and then generally decreases to about 3.77 by April 16. By April 20 it has generally increased to about 3.8. "December 2010 Eurodollar" begins on March 16 at about 0.87 and generally decreases to about 0.77 by March 18. It then generally increases to about 0.9 by March 19 and then generally decreases to about 0.81 by March 23. By March 25 it has generally increased to about 0.93 and by April 1 it has generally decreased to about 0.84 . It then generally increases to about 0.95 by April 6 and then generally decreases to about 0.79 by April 8 . By April 9 it has generally increased to about 0.84 and by April 19 it has generally decreased to about 0.69 . It then generally increases to about 0.74 by April 20.

Source. Bloomberg

## Figure: Implied Federal Funds Rate

Line chart, by percent, April 2010 to August 2012. There are three series, "Most Recent Expected" "Most Recent Modal" and "Day before last FOMC Expected". "Most Recent Expected" begins in April 2010 at about 0.2 and generally increases to about 2.3 by August 2012. "Most Recent Modal" begins in April 2010 at about 0.22 and generally decreases to about 0.19 by September 2010. It then generally increases to about 1.25 by June 2012. "Day before last FOMC Expected" begins in April 2010 at about 0.19 and generally increases to about 2.31 by August 2012.

[^11] Source. CME Group; Bloomberg.

## Figure: Treasury Yield Curve

Line chart, by percent, 0 to 20 years ahead. There are two series, "March 15, 2010" and "April 20, 2010". "March 15, 2010" begins in year 0 at about 0.2 and generally increases to about 4.4 by year 15. It then remains about constant until year 20 where it ends at about 4.5. "April 20, 2010" begins in year 0 at about 0.2 and generally increases to about 4.5 by year 15. It then remains about constant until year 20 where it ends at about 4.55 .

Note. Smoothed yield curve estimated from off-the-run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semiannual coupons.

## Source. Federal Reserve Board

Figure: Inflation Compensation

Line chart, by percent, January 2008 to April 2010. Data are daily. There is a horizontal line at zero. There is also a vertical line at the middle of March 2010 representing the March FOMC meeting. There are two series, " 5 to 10 years ahead" and "Next 5 years". " 5 to 10 years ahead" begins in January 2008 at about 2.7 and generally increases to about 3.2 by March 2008. It then generally decreases to about 2.8 by April 2008 where it remains relatively constant until September 2008 . It then generally increases to about 3.8 by October 2008 and then generally decreases to about 2 by November 2008. By April 20, 2010 it has generally increased to about 3.05. "Next 5 years" begins in January 2008 at about 2.3 and generally increases to about 2.7 by July 2008. It then generally decreases to about -1.7 by November 2008 and then generally increases to about 1.95 by April 20, 2010.

Source. Federal Reserve Board

Figure: 10-Year Swap Spread

Line chart, by basis points, 2006 to 2010 . Data are daily. There is a vertical line at March 2010 representing the March FOMC meeting. The series begins in early 2006 at about 56 and generally increases to about 62 by mid-2006. It then generally decreases to about 45 by early 2007 and then generally increases to about 77 by mid2007. From mid-2007 to late 2008 it fluctuates between about 55 and 92 . It then generally decreases to about 8 by mid- 2009 and within a month or so it generally increases to about 44. By April 20, 2010 it has generally decreased to about -1.

Note. Spread over 10-year Treasury yield estimated from off-the-run curve
Source. JPMorgan.

## Corporate Yields, Risk Spreads, and Stock Prices

## Figure: Selected Stock Price Indexes

Line chart, by scale where March $15,2010=100$, mid-2008 to April 2010. Data are daily. There is a vertical line at March 2010 representing the March FOMC meeting and a vertical line at September 2008 representing the Lehman failure. There are two series, "S\&P 500" and "S\&P Financial". "S\&P 500" begins in mid-2008 at about 110 and generally decreases to about 60 by late 2008. It then generally increases to about 80 by the end of 2008 and then generally decreases to about 59 by early 2009. By April 20, 2010 it has generally increased to about 105. "S\&P Financial" begins in mid-2008 at about 133 and generally increases to about 147 by September 2008. It then generally decreases to about 40 by early 2009 and then generally increases to about 107 by April 20, 2010.

Source. Standard \& Poor's
Figure: Implied Volatility on S\&P 500 (VIX)

Line chart, by percent, 2007 to 2010. Data are daily. There is a vertical line at March 2010 representing the March FOMC meeting. The series begins in early 2007 at about 12 and generally increases to about 32 by early 2008. It then generally decreases to about 16 by mid-2008 and then generally increases to about 80 by late 2008. By April 20, 2010 it has generally decreased to about 17.

Source. Chicago Board of Exchange
Figure: Expected Real Equity Return and Long-Run Treasury Yield

Line chart, by percent, 1990 to April 20, 2010. Data are monthly. There are two series, "Expected real yield on 10-year Treasury" and "Expected 10-year real equity return". "Expected real yield on 10-year Treasury" is off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation. It begins in 1990 at about 4.3 and then generally decreases to about 2.1 by 1993 . From 1993 to 2001 it fluctuates between about 2.1 and 4.5 . It then generally decreases to about 1 by 2003 and then generally increases to about 3 by 2007. It then generally decreases to about 1.7 by April 20, 2010. "Expected 10-year real equity return" begins in early 1990 at about 7.5 and generally increases to about 9.5 by late 1990. It then generally decreases to about 7 by late 1991 and then generally increases to about 8.8 by 1994 . By 2000 it has generally decreased to about 2.2 and by 2002 it has generally increased to about 6.8 . It then generally decreases to about 5 by 2004 and then generally increases to about 12 by 2008. By April 20, 2010 it has generally decreased to about 8.3.

Note. The April 20, 2010 value is the latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S.
Source. Thomson Financial

## Figure: Corporate Bond Yields

Line chart, by percent, 2007 to 2010. Data are daily. There is a vertical line at March 2010 representing the March FOMC meeting. There are two series, "10-year highyield" and "10-year BBB". "10-year high-yield" begins in early 2007 at about 8.3 and generally increases to about 20 by late 2008 . It then generally decreases to about 13.3 by early 2009 and then increases to about 17 a couple months later. By April 20, 2010 it has generally decreased to about 8.8 . "10-year BBB" begins in early 2007 at about 6.3. From early 2007 to mid-2008 it fluctuates between about 5.8 and 6.8 . It then generally increases to about 10 by late 2008 . By April, 2010 it has generally decreased to about 5.5.

Source. Staff estimates of smoothed yield curves based on Merrill Lynch bond data.

## Figure: Far-Term and Near-Term Forward High-Yield Corporate Bond Spreads

term" and "Far-term". "Near-term" begins in early 2006 at about 400 and generally increases to about 450 by late 2006. It then generally decreases to about 300 by mid-2007 and then generally increases to about 900 by early 2008. By late 2008 it has generally decreased to about 550 and by the end of 2008 it has generally increased to about 2000. It then generally decreases to about 700 by April 20, 2010. "Far-term" begins in early 2006 at about 370 . From early 2006 to late 2007 it fluctuates between about 250 and 390. It then generally increases to about 1300 by the end of 2008 and then generally decreases to about 750 by early 2009 . Within a few months it generally increases to about 1250 and by April 20, 2010 it has generally decreased to about 200 .

Note. Near-term has a forward spread between years 2 and 3 . Far-term has a forward spread between years 9 and 10 .
Source. Staff estimates.

Figure: 30-Day Commercial Paper Spreads

Line chart, by basis points, 2007 to 2010. Data are daily. There is a vertical line at March 2010 representing the March FOMC meeting. There are two series, "ABCP" and "A2/P2". "ABCP" begins in 2007:Q1 at about 0 and remains stable here until early 2007:Q3. It then generally increases to about 125 by late $2007: Q 3$ and then generally decreases to about 10 by early 2007:Q4. By late 2007:Q4 it has generally increased to about 200 and by 2008:Q1 it has generally decreased to about 20. It then generally increases to about 100 by 2008:Q2 and then generally decreases to about 50 by 2008:Q3. By 2008:Q4 it has generally increased to about 400 and then it generally decreases to about 25 by early 2009. From early 2009 to April 20, 2010 it fluctuates between about 0 and 70 . "A2/P2" follows "ABCP" almost exactly until 2008:Q4 where it continues to increase to about 620 by early 2009:Q1. It then generally decreases to about 25 by mid-2009. From mid-2009 to April 20,2010 it fluctuates between about 0 and 45 .

Note. The $A B C P$ spread is the $A A A B C P$ rate minus the $A A$ nonfinancial rate. The $A 2 / P 2$ spread is the $A 2 / P 2$ nonfinancial rate minus the $A A$ nonfinancial rate.
Source. Depository Trust \& Clearing Corporation.

## Corporate Earnings and Credit Quality

Figure: S\&P 500 Earnings Per Share

Line chart, by dollars per share, 2000 to 2010. Data are quarterly and seasonally adjusted by Board staff. The series begins in $2000: Q 1$ at about 14 and generally decreases to about 10.5 by 2001:Q4. It then generally increases to about 24 by 2007:Q2 and then generally decreases to about 16 by 2007:Q4. By 2008:Q1 it has generally increased to about 19.5 and by 2008:Q4 it has generally decreased to about 5.5. It then generally increases to about 18.5 by 2010:Q1. This 2010:Q1 value is a staff estimate based on earnings reports of firms that have reported earnings for Q1 and Wall Street analyst forecasts.

Source. Thomson Financial

## Figure: Revisions to Expected S\&P 500 Earnings

Line chart, by percent, 2000 to 2010. Data are monthly. There is a horizontal line at zero. The index/series is a weighted average of the percent change in the consensus forecasts of current-year and following-year earnings per share for a fixed sample. The series begins in early 2000 at about 0 and generally decreases to about -6 by late 2001. It then generally increases to about 0.5 by early 2002 and then generally decreases to about -3 by late 2002 . By mid-2004 it has generally increased to about 2 and by February 2009 it has generally decreased to about -13 . It then generally increases to about 3 by late 2009 and then generally decreases to about 0.5 by mid-April 2010.

Note. Revision in February 2009 was -17.2\%
Source. Thomson Financial

## Figure: Financial Ratios for Nonfinancial Corporations

Line chart, by ratio, 1989 to 2009. Data are annual through 1999 and quarterly thereafter. There are two series, "Debt over total assets" and "Liquid assets over total assets". "Debt over total assets" begins in 1989 at about 0.332 and generally decreases to about 0.28 by 1996. It then generally increases to about 0.31 by 1999 and then generally decreases to about 0.29 by 2000. By 2002 it has generally increased to about 0.315 and by 2006 it has generally decreased to about 0.24 . It then generally increases to about 0.295 by 2008 and then generally decreases to about 0.27 by 2009:Q4. "Liquid assets over total assets" begins in 1989 at about 0.055 and generally increases to about 0.10 by 2004. It then generally decreases to about 0.087 by 2008 and then generally increases to about 0.107 by $2009: Q 4$.

Note. The 2009:Q4 values are preliminary
Source. Compustat

## Figure: Bond Ratings Changes of Nonfinancial Companies

Bar chart, by percent of outstandings, 1991 to 2010. Data are annual rate. There are two series, "Upgrades" and "Downgrades". "Upgrades" begins in 1991 at about 15. By 1992 it has decreased to about 7 and it then increases to about 9 by 1993. In 1994 it is at about 6 and in 1995 it has increased to about 20 . It then decreases to about 9 by 1997 and increases to about 14 by 1998. By 2002 it has decreased to about 2 and by 2007 it has generally increased to about 11 . It then decreases to about 3 by 2008 and then increases to about 15 by 2010:Q1. "Downgrades" begins in 1991 at about 34. It then increases to about 44 by 1992 and then decreases to about 8 by 1995. It then generally increases to about 37 by 2002 and then decreases to about 9 by 2004. By 2006 it has increased to about 13 and by 2007 it has decreased to about 10. It then increases to about 28 by 2009:H1 and then decreases to about 4 by 2010:Q1.

Line chart, by percent of outstandings, 1990 to 2010. There is a horizontal line at zero. There are two series, "C\&l loan delinquency rate" and "Nonfinancial bond default rate". The "C\&l loan delinquency rate" begins in 1990 at about 5 and increases to about 6.2 by 1991. It then generally decreases to about 1.6 by 1997 and then generally increases to about 3.9 by 2002. By 2007 it has generally decreased to about 1.2 and by 2009:Q4 it has generally increased to about 4.5 . The "Nonfinancial bond default rate" is the 6-month trailing defaults divided by beginning-of-period outstandings, at an annual rate. It begins in 1990 at about 3 and generally increases to about 5.7 by 1991. It then generally decreases to about 0.10 by 1993 . From 1993 to 1999 it fluctuates between about 0.1 and 1 . It then generally increases to about 7 by 2002 and then generally decreases to about 0.35 by 2004 . By 2005 it has generally increased to about 2.7 and by 2006 it has generally decreased to about 0.1. It then generally increases to about 7.5 by 2009 and then generally decreases to about 0.3 by March 2010 .

Source. For default rate, Moody's Investors Service; for delinquency rate, Call Report data.
Figure: Expected Nonfinancial Year-Ahead Defaults

Line chart, by percent of liabilities, 1994 to 2010. Data are monthly. The series begins in 1994 at about 0.4 and generally decreases to about 0.2 by 1998 . It then generally increases to about 4.4 by 2002 and then generally decreases to about 0.25 by 2007. By late 2008 it has generally increased to about 5 and by April 2010 it has generally decreased to about 1.45 .

Note. Firm-level estimates of default weighted by firm liabilities as a percent of total liabilities, excluding defaulted firms.
Source. Calculated using firm-level data from Moody's KMV

## Business Finance

Gross Issuance of Securities by U.S. Corporations
(Billions of dollars; monthly rates, not seasonally adjusted)

| Type of security | 2006 | 2007 | 2008 | 2009 |  | 2010 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | H1 | H2 | Q1 | Mar. | Apr. ${ }^{\text {¹ }}$ |
| Nonfinancial corporations |  |  |  |  |  |  |  |  |
| Stocks ${ }^{1}$ | 4.7 | 5.5 | 3.7 | 5.3 | 5.2 | 4.2 | 7.0 | 6.2 |
| Initial public offerings | 1.8 | 1.6 | . 3 | . 2 | 1.1 | . 7 | 1.2 | . 8 |
| Seasoned offerings | 2.9 | 3.8 | 3.4 | 5.1 | 4.1 | 3.5 | 5.8 | 5.4 |
| Bonds ${ }^{\underline{2}}$ | 29.3 | 35.1 | 27.7 | 50.1 | 31.1 | 40.2 | 64.8 | 45.0 |
| Investment grade | 13.1 | 17.5 | 19.5 | 32.6 | 13.9 | 16.3 | 23.5 | 18.0 |
| Speculative grade | 6.2 | 7.5 | 1.8 | 5.3 | 7.8 | 6.4 | 8.4 | 9.0 |
| Other (sold abroad/unrated) | 10.1 | 10.0 | 6.4 | 12.2 | 9.5 | 17.5 | 32.9 | 18.0 |
| Memo |  |  |  |  |  |  |  |  |
| Net issuance of commercial paper ${ }^{3}$ | 2.4 | -. 4 | 1.6 | -12.4 | -1.9 | 4.5 | 17.2 | 6.4 |
| Change in C\&l loans at commercial banks ${ }^{3}$ | 11.8 | 21.8 | 11.2 | -22.2 | -28.6 | -25.9 | -32.2 | n.a. |
| Financial corporations |  |  |  |  |  |  |  |  |
| Stocks ${ }^{1}$ | 5.3 | 8.6 | 13.5 | 15.9 | 12.6 | 6.3 | 9.0 | 6.7 |
| Bonds ${ }^{2}$ | 180.6 | 151.7 | 45.4 | 44.5 | 33.9 | 36.2 | 52.7 | 35.0 |

Note: Components may not sum to totals because of rounding.

1. Excludes private placements and equity-for-equity swaps that occur in restructurings. Return to table
 to Standard \& Poor's if unrated by Moody's. Return to table
2. For all nonfinancial firms; period-end basis, seasonally adjusted. Return to table
n.a. Not available. Return to table
p Forecast based on preliminary data. Return to table
Source: Depository Trust \& Clearing Corporation; Thomson Financial; Federal Reserve Board.
Figure: Selected Components of Net Debt Financing

Bar chart, in billions of dollars, 2006 to 2010. Data are monthly rate, nonfinancial firms. There are three series, "Commercial paper", "C\&l loans" and "Bonds". Commercial paper and C\&I loans are seasonally adjusted on a period-end basis. There is also a "Total" series presented as a line chart which sums the total of the other 3 series. Approximate values are: 2006: Bonds 18, C\&l loans 10, Commercial paper 3, Total 31. 2007: Bonds 26, C\&l loans 20, Total 46. 2008: Bonds 17, C\&I
loans 12, Commercial paper 2, Total 31. 2009:H1: Bonds 40, C\&l loans -22, Commercial paper -14, Total 4. 2009:H2: Bonds 23, C\&l loans -28, Commercial paper -2, Total -7. 2010:Q1: Bonds 34, C\&l loans -26, Commercial paper 5, Total 13.

Source. Depository Trust \& Clearing Corporation; Thomson Financial; Federal Reserve Board.

## Figure: Components of Net Equity Issuance

Bar chart, in billions of dollars, 2005 to 2009. Data are monthly rate, nonfinancial firms. There are four series, "Public issuance", "Private issuance", "Repurchases" and "Cash mergers". There is also a "Total" series presented as a line chart which sums the total of the other 4 series. Approximate values are: 2005: Private issuance 8, Public issuance 5, Repurchases -28, Cash mergers -14, Total -29. 2006: Private issuance 13, Public issuance 5, Repurchases -37 , Cash mergers -23 , Total -42 . 2007: Private issuance 20, Public issuance 6, Repurchases -43, Cash mergers -41, Total -58. 2008: Private issuance 23, Public issuance 4, Repurchases -30, Cash mergers -15, Total -18. 2009:H1: Private issuance 15, Public issuance 6, Repurchases -9, Cash mergers -6, Total 6. 2009:Q3: Private issuance 12, Public issuance 6, Repurchases -10, Cash mergers -4, Total 4. 2009:Q4: Private issuance 10, Public issuance 6, Repurchases -15, Cash mergers -33, Total -32. 2010:Q1: Private issuance 10, Public issuance 5, Repurchases -18, Cash mergers -14, Total -17.

Note. The 2009:Q4 and 2010:Q1 values are preliminary estimates.
Source. Thomson Financial, Investment Benchmark Report; Money Tree Report by PricewaterhouseCoopers, National Venture Capital Association, and Venture Economics

## Commercial Real Estate

## Figure: Commercial Mortgage Debt

Line chart, by percent change, annual rate, 2001 to 2009. Data are quarterly. There is a horizontal line at zero. The series begins in early 2001 at about 8 and generally increases to about 11 by the end of 2001. It then generally decreases to about 7 by 2002 and then generally increases to about 16 by late 2005 . By early 2007 it has generally decreased to about 8 and by late 2007 it has generally increased to about 15.5. It then generally decreases to about -9 by 2009 :Q4.

Source. Federal Reserve

## Figure: Commercial Real Estate Sales

Line chart, 2001 to 2010. Data are 3-month moving averages. There are two series, "Share of properties sold at nominal loss" which is measured by percent and "Value of sales" which is measured in billions of dollars. "Share of properties sold at nominal loss" begins in early 2001 at about 5 and generally increases to about 15 by late 2001. It then generally decreases to about 7 by mid-2002. From mid- 2002 to early 2008 it fluctuates between about 7 and 15 . It then generally increases to about 48 by March 2010. "Value of sales" begins in 2001 at about 5 and generally increases to about 75 by early 2007. It then generally decreases to about 47 by late 2007 and within a month or two it generally increases to about 62. By March 2010 it has generally decreased to about 5.

Source. Real Capital Analytics
Figure: Prices of Commercial Real Estate

Line chart, by index where 2001:Q1 = 100, 1996 to 2010. There are two series, "Moody's index" and "NCREIF TBI". "Moody's index" begins in 2001 at about 100 and generally increases to about 195 by late 2007. It then generally decreases to about 113 by February 2010. "NCREIF TBI" begins in 1996 at about 75 and generally increases to about 197 by early 2007. It then generally decreases to about 120 by 2009:Q4.

Note. NCREIF TBI series re-weighted by staff to exclude multifamily
Source. NCREIF; MIT Center for Real Estate; Moody's Investors Service.

## Figure: Delinquency Rates on Commercial Mortgages on Existing Properties

Line chart, by percent, 1996 to 2010. There are three series, "At life insurance companies", "CMBS" which are commercial mortgage-backed securities, and "At commercial banks" which is excluding farmland. "At life insurance companies" begins in 1996 at about 2.3 and generally decreases to about 0.2 by 2003 . It remains relatively stable here until 2009:Q4. "CMBS" begins in 1999 at about 0.4 and generally increases to about 2 by 2003 . It then generally decreases to about 0.4 by 2007 and then generally increases to about 7.2 by March 2010. "At commercial banks" begins in 1996 at about 3.4 and generally decreases to about 1.3 by 2000 . It then generally increases to about 1.8 by 2001 and then generally decreases to about 1 by 2006. By 2009:Q4 it has generally increased to about 5.2 .

Source. Citigroup; Call Report data; ACLI

## Figure: Delinquency Rates on Construction Loans at Banks

Line chart, by percent, 2007 to 2009. Data are quarterly. There are two series, "Residential construction" and "Commercial construction". "Residential construction" begins in 2007:Q1 at about 3 and increases to about 28 by 2009:Q4. "Commercial construction" begins in 2007:Q1 at about 2 and increases to about 16 by $2009: Q 4$.

Source. Call Report data
Figure: Commercial Mortgage CDS Index Prices (CMBX)

Line chart, by percent, May 2007 to April 2010. Data are daily, by rating. There is a vertical line at March 2010 representing the March FOMC meeting. There are three series, "Senior AAA", "Junior AAA", and "BBB-". Each index corresponds to pools of mortgages securitized in 2006:H1. "Senior AAA" begins in May 2007 at about 100 and generally decreases to about 82 by March 2008. It then generally increases to about 95 by May 2008 and then generally decreases to about 55 by November 2008. By April 15, 2010 it has generally increased to about 93. "Junior AAA" begins in January 2008 at about 98 and generally decreases to about 64 by March 2008. It then generally increases to about 90 by May 2008 and then generally decreases to about 25 by April 2009. By April 15,2010 it has generally increased to about 66. "BBB-" begins in May 2007 at about 101 and generally decreases to about 30 by March 2008. It then generally increases to about 50 by May 2008 and then generally decreases to about 7 by April 2009. By September 2009 it has generally increased to about 20 and by April 15,2010 it has generally decreased to about 17.

Source. JPMorgan Chase \& Co.

## Residential Mortgages

## Figure: Mortgage Rate and MBS Yield

Line chart, by percent, April 2007 to April 2010. Data are weekly. There is a vertical line at the end of March 2010 representing the March FOMC meeting. There are two series, "30-year conforming fixed mortgage rate" and "MBS yield". "30-year conforming fixed mortgage rate" begins in April 2007 at about 6.2 and generally increases to about 6.75 by June 2007. It then generally decreases to about 5.5 by January 2008 and then generally increases to about 6.7 by July 2008 . By April 2009 it has generally decreased to about 4.75 and by June 2009 it has generally increased to about 5.6. It then generally decreases to about 4.75 by December 2009 and then generally increases to about 5.1 by April 14, 2010. "MBS yield" begins in April 2007 at about 5.8 and generally increases to about 6.4 by June 2007 . It then generally decreases to about 4.75 by January 2008 and then generally increases to about 6 by February 2008. By March 2008 it has generally decreased to about 5 and by July 2008 it has generally increased to about 6.2. It then generally decreases to about 3.7 by January 2009 and then generally increases to about 5 by June 2009. By December 2009 it has generally decreased to about 3.9 and by April 20, 2010 it has generally increased to about 4.4 .

Note. For MBS yield, Fannie Mae 30-year current coupon rate.
Source. For mortgage rate, Freddie Mac; for MBS yield, Bloomberg.
Figure: Spread of Fixed Mortgage Rate to 10-year Treasury Yield

Line chart, by basis points, April 2007 to April 2010. Data are weekly. There is a vertical line at March 2010 representing the March FOMC meeting. The series begins in April 2007 at about 145 and generally increases to about 250 by August 2008. It then generally decreases to about 85 by May 2009 and then generally increases to about 160 by July 2009. By April 14, 2010 it has generally decreased to about 12 .

Note. Treasury Yield estimated from off-the-run curve.
Source. Bloomberg; Freddie Mac.

## Figure: Residential Mortgage Debt

Line chart, by percent change from year earlier, 2001 to 2009 . Data are quarterly. The series begins in 2001 at about 9.3 and generally increases to about 14.3 by 2006. It then generally decreases to about -2.5 by mid-2009 and then generally increases to about -2.0 by 2009:Q4.

Source. Federal Reserve Board

## Figure: Prices of Existing Homes

Line chart, by index peaks normalized to 100, 2005 to 2010. Data are monthly. There are three series, "FHFA price index", "LP price index", and "20-city S\&P/CaseShiller price index". "FHFA price index" begins in 2005 at about 88 and generally increases to about 100 by early 2007 . It then generally decreases to about 89 by late 2008 and it remains relatively stable here until January 2010 when it decreases to about 87 . "LP price index" begins in 2005 at about 87.5 and generally increases to about 101 by 2006. It then generally decreases to about 70 by early 2009 and then generally increases to about 72 by February 2010. "20-city S\&P/Case-Shiller price index" begins in 2005 at about 86 and generally increases to about 100 by 2006. It then generally decreases to about 68 by early 2009 and then generally increases to about 71 by January 2010.

Source. For FHFA, Federal Housing Finance Agency; for LP, LoanPerformance, a division of First American CoreLogic; for S\&P/Case-Shiller, Standard \& Poor's.

## Figure: Delinquencies on Prime Mortgages

Line chart, by percent of loans, 2001 to 2010. Data are monthly. There are two series, "Variable-rate" and "Fixed-rate". "Variable rate" begins in 2001 at about 2.5 and generally decreases to about 1 by 2005. It then generally increases to about 16.2 by February 2010. "Fixed-rate" begins in 2001 at about 1.5 and remains relatively stable here until 2007 when it begins increasing. By February 2010 it has increased to about 5.8.

Note. Percent of loans 90 or more days past due or in foreclosure. Prime includes near-prime mortgages
Source. McDash Analytics
Figure: Delinquencies on Subprime and FHA-Backed Mortgages

Line chart, 2003 to 2010. Data are monthly. There are two series, "Subprime" which is measured by percent of loans and "FHA" which is measured by number of loans
in thousands. "Subprime" begins in 2003 at about 9 and generally decreases to about 6 by 2005. It then generally increases to about 36 by January 2010 . "FHA" begins in late 2006 at about 260 and generally decreases to about 230 within a month or two. It then generally increases to about 280 by early 2007 and then generally decreases to about 230 by mid-2007. By February 2010 it has generally increased to about 550 .

Note. Percent of loans 90 or more days past due or in foreclosure. For subprime mortgages, rates are for securitized loans.
Source. For FHA-backed mortgages, U.S. Department of Housing and Urban Development; for subprime mortgages, LoanPerformance, a division of First American CoreLogic.

## Consumer Credit and Mutual Funds

## Figure: Consumer Credit

Line chart, by percent change, annual rate, 2004 to 2010. Data are 3-month change. There is a horizontal line at zero. There are two series, "Revolving" and "Nonrevolving". "Revolving" begins in early 2004 at about 3 and generally decreases to about 1 by mid-2004. It then generally increases to about 8 by late 2004 and then generally decreases to about 2 by mid-2005. By mid-2007 it has generally increased to about 10 and by early 2009 it has generally decreased to about -12 . It then generally increases to about -6 by late 2009 and by January 2010 has generally decreased to about -13. It then generally increases to about -7 by February 2010. "Nonrevolving" begins in early 2004 at about 6 . From early 2004 to mid- 2005 it fluctuates between about 4 and 9 . It then generally decreases to about 2 by late 2005 and then generally increases to about 6 by mid-2007. By early 2009 it has generally decreased to about -3 and by February 2010 it has generally increased to about 2.5.

Source. Federal Reserve Board

## Figure: Gross Consumer ABS Issuance

Bar chart, in billions of dollars, 2006 to 2010. Data are monthly rate. There are two series, "TALF eligible" and "Non-TALF". Approximate values are: 2006: Non-TALF 19. 2007: Non-TALF 19. 2008:H1: Non-TALF 18. 2008:H2: Non-TALF 3.5. 2009:H1: TALF eligible 6, Non-TALF 4. 2009:Q3: TALF eligible 11, Non-TALF 3. 2009:Q4: TALF eligible 3, Non-TALF 5. January 2010: Non-TALF 5. February 2010: TALF eligible 1, Non-TALF 6. March 2010: TALF eligible 4.5, Non-TALF 2.5. April 2010: Non-TALF 1.5. The April 2010 value is through April 16.

Note. Credit card, auto, and student loan ABS.
Source. Inside MBS \& ABS; Merrill Lynch; Bloomberg; Federal Reserve Board

## Figure: Spread of Consumer Interest Rates to Treasury Yield

Line chart, by percent, 2001 to 2010. There are two series, "Credit cards (offer rate)" and "New auto loans (transaction rate)". "Credit cards" begins in early 2001 at about 10.8 and generally increases to about 11.8 by late 2001. It then generally decreases to about 7 by 2005 and then generally increases to about 13.5 by February 2010. "New auto loans" begins in early 2001 at about 4 and generally decreases to about 1.5 by late 2001. It then generally increases to about 4.5 by early 2002 . From early 2002 to late 2005 it fluctuates between about 2.5 and 5 . It then generally decreases to about 0 by mid- 2006 and then generally increases to about 6.5 by early 2009. By April 11, 2010 it has generally decreased to about 3.5.

Note. Spreads are relative to 2-year Treasury yields. For credit cards, monthly; for auto loans, weekly.
Source. For credit cards, Mintel: for auto loans, PIN.

## Figure: Delinquencies on Consumer Loans

Line chart, by percent, 1998 to 2010. There are three series, "Credit card loans in securitized pools", "Nonrevolving consumer loans at commercial banks", and "Auto loans at captive finance companies". "Credit card loans in securitized pools" begins in 1998 at about 5.2 and generally decreases to about 4.5 by 2000 . It then generally increases to about 5.5 by 2003 and then generally decreases to about 3.2 by late 2005. By 2009 it has generally increased to about 6.3 and by February 2010 it has generally decreased to about 5.6. "Nonrevolving consumer loans at commercial banks" begins in 1998 at about 3 and generally decreases to about 2.2 by early 2006. It then generally increases to about 3.7 by early 2009 and then generally decreases to about 3.5 by 2009:Q4. "Auto loans at captive finance companies" begins in 1998 at about 3 and generally decreases to about 2.3 by late 1999. It then generally increases to about 2.9 by 2001 and then generally decreases to about 1.8 by 2004. By February 2010 it has generally increased to about 3.1.

Source. For auto loans, Federal Reserve Board; for credit cards, Moody's Investors Service; for nonrevolving consumer loans, Call Report.

Net Flows into Mutual Funds
(Billions of dollars, monthly rate)

| Fund type | 2008 | 2009 |  |  | 2010 |  |  | Assets |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | H1 | Q3 | Q4 | Jan. | Feb. | Mar. ${ }^{\text {e }}$ | Feb. |
| Total long-term funds | -18.8 | 23.3 | 47.9 | 34.0 | 47.7 | 29.0 | 49.3 | 7,831 |
| Equity funds | -19.4 | -0.1 | 0.9 | -4.4 | 16.9 | 0.1 | 8.7 | 4,891 |
| Domestic | -12.6 | 0.9 | -3.7 | -10.8 | 6.8 | -5.0 | 1.1 | 3,656 |
| International | -6.9 | -1.0 | 4.6 | 6.4 | 10.1 | 5.1 | 7.6 | 1,234 |
| Hybrid funds | -1.7 | -0.3 | 5.2 | 2.8 | 3.5 | 2.3 | 3.9 | 645 |


| Bond funds | $\mathbf{2 . 3}$ | $\mathbf{2 3 . 7}$ | $\mathbf{4 1 . 8}$ | $\mathbf{3 5 . 7}$ | $\mathbf{2 7 . 3}$ | $\mathbf{2 6 . 5}$ | $\mathbf{3 6 . 7}$ | $\mathbf{2 , 2 9 6}$ |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| High-yield | -0.1 | 2.8 | 1.4 | 0.5 | 0.7 | -2.8 | 2.3 | $\mathbf{1 8 7}$ |
| Other taxable | 1.7 | 16.2 | 31.8 | 30.4 | 22.1 | 24.4 | 30.3 | 1,636 |
| Municipals | 0.7 | 4.8 | 8.7 | 4.8 | 4.5 | 4.9 | 4.1 | 472 |
| Money market funds | $\mathbf{5 7 . 9}$ | $\mathbf{- 2 7 . 3}$ | $\mathbf{- 8 1 . 1}$ | $\mathbf{- 4 3 . 0}$ | $\mathbf{- 8 3 . 0}$ | $\mathbf{- 6 8 . 9}$ | $\mathbf{- 1 6 7 . 7}$ | $\mathbf{3 , 1 5 1}$ |

Note: Excludes reinvested dividends.
e Staff estimate. Return to table
Source: Investment Company Institute.

## Treasury Finance

## Figure: Treasury Auction Amounts

Line chart, in billions of dollars, 2005 to 2010. Data are quarterly. There is a horizontal line at zero. There are four series, "2-year", "3-year", " 5 -year" and "10-year". "2year" begins in early 2005 at about 73 and generally decreases to about 60 by late 2005. It then generally increases to about 65 by early 2006 and then generally decreases to about 55 by 2007. By 2010:Q1 it has generally increased to about 133. "3-year" begins in early 2005 at about 21 and generally decreases to about 18 by late 2005. It then generally increases to about 20 by 2006 and then generally decreases to about 0 by late 2007. It remains at 0 until late 2008 and then increases to about 119 by 2010:Q1. "5-year" begins in early 2005 at about 45 and generally decreases to about 39 by late 2005. It remains relatively stable here until late 2007 . It then increases to about 125 by 2010:Q1. "10-year" begins in 2005 at about 21 and remains relatively stable there until early 2008. It then generally increases to about 60 by mid-2009 and then generally decreases to about 43 by late 2009. By 2010:Q1 it has generally increased to about 67.

Note. No 3-year issuance occurred between 2007:Q3 and 2008:Q3.
Source. U.S. Treasury

## Figure: Foreign Participation in Treasury Auctions

Line chart, by percent of total issue, 2003 to 2010. Data are 6-month moving average. There is a vertical line at March 2010 to represent the March FOMC meeting. There are two series, "Indirect bids" and "Actual foreign allotment". "Indirect bids" begins in mid-2003 at about 27 and generally increases to about 44 by 2004 . It then generally decreases to about 30 by mid-2005 and then generally increases to about 38 by early 2006. By late 2006 it has decreased to about 26 and by early 2007 it has generally increased to about 33 . It then generally decreases to about 24 by 2008 and then generally increases to about 48 by late 2009 . By April 15 , 2010 it has generally decreased to about 44. "Actual foreign allotment" begins in early 2003 at about 14 and generally increases to about 27 by 2004 . It then generally decreases to about 15 by mid-2005. From mid-2005 to mid-2008 it fluctuates between about 14 and 20 . It then generally increases to about 30 by late 2009 and then generally decreases to about 25 by April 15, 2010.
 auctions and reopenings.

Source. Federal Reserve Board

## Figure: Daily Treasury Market Volume

Line chart, in billions of dollars, 2004 to 2010. Data are monthly average. There is a vertical line at March 2010 to represent the March FOMC meeting. The series begins in mid-2004 at about 75 and fluctuates but generally increases to about 200 by mid- 2007 . From mid- 2007 to late 2008 it fluctuates between about 125 and 205. It then generally decreases to about 70 by early 2009. By April 2010 it has generally increased to about 105.

Note. April 2010 observation is the month-to-date average.
Source. Bloomberg

## Figure: Average Absolute Nominal Yield Curve Fitting Error

Line chart, by basis points, 2001 to 2010. Data are daily. There is a vertical line at March 2010 to represent the March FOMC meeting. The series begins in early 2001 at about 3 and remains relatively stable here until late 2001 when it increases to about 13 and then immediately decreases to about 2.5 . From the end of 2001 to mid2003 it fluctuates between about 1.5 and 4 . In mid-2003 it increases to about 6.5 and then immediately decreases to about 2 . From late 2003 to mid-2007 it fluctuates between about 1 and 4. It then generally increases to about 23 by late 2008 and then generally decreases to about 2 by April 20,2010 .

Note. Calculated from securities with 2 to 10 years until maturity, excluding on-the-run and first off-the-run securities.
Source. Federal Reserve Board

## Figure: Treasury On-the-Run Premium

Line chart, by basis points, 2001 to 2010. Data are monthly average. There is a vertical line at March 2010 to represent the March FOMC meeting. There is one series, "10-year note". It begins in 2001 at about 12 and generally increases to about 28 by 2002. It then generally decreases to about 5 by 2006 and then generally increases to about 60 by early 2009. By April 2010 it has generally decreased to about 10.

## Figure: Fails-to-Deliver of Treasury Securities

Line chart, by billions of dollars, 2007:Q1 to 2010:Q2. Data are weekly. There is a vertical line at March 2010 to represent the March FOMC meeting. The series begins in 2007:Q1 at about 250 and almost immediately decreases to about 0 . It remains relatively stable at 0 until 2007:Q4. It then generally increases to about 1200 by 2008:Q1 and then generally decreases to about 0 by 2008:Q2. By 2008:Q4 it has generally increased to about 2700 and by $2009: Q 2$ it has generally decreased to about 0 . It remains relatively stable again at 0 until the series ends on April 7, 2010.

Source. Federal Reserve Board, FR 2004, Government Securities Dealers Reports.

State and Local Government Finance

Gross Offerings of Municipal Securities
(Billions of dollars; monthly rate, not seasonally adjusted)

| Type of security | 2006 | 2007 | 2008 | 2009 |  | 2010 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | H1 | H2 | Q1 | Mar. | Apr. ${ }^{\text {² }}$ |
| Total | 36.1 | 40.4 | 37.6 | 36.6 | 42.7 | 36.2 | 46.0 | 37.0 |
| Long-term¹ | 32.5 | 35.5 | 32.6 | 33.0 | 35.5 | 34.4 | 43.5 | 34.0 |
| Refundings ${ }^{\underline{2}}$ | 10.6 | 12.6 | 14.6 | 11.6 | 13.1 | 11.9 | 13.4 | 11.0 |
| New capital | 21.9 | 22.9 | 17.9 | 21.3 | 22.5 | 22.4 | 30.1 | 23.0 |
| Short-term | 3.7 | 4.9 | 5.0 | 3.6 | 7.2 | 1.8 | 2.5 | 3.0 |
| Memo: Long-term taxable | 2.5 | 2.4 | 2.3 | 4.5 | 9.9 | 11.3 | 14.6 | 10.0 |

1. Includes issues for public and private purposes. Return to table
2. All issues that include any refunding bonds. Return to table
p Forecast based on preliminary data through April 15, 2010. Return to table
Source: Thomson Financial.

## Figure: Ratings Changes

Bar chart, by number of ratings changes, 1989 to 2009. Data are in annual rate. There are two series, "Upgrades" and "Downgrades". "Upgrades" begins in 1989 at about 250. From 1989 to 1997 it fluctuates between about 200 and 325. In 1998 it increases to about 700 and in 1999 it decreases to about 550 . It then increases to about 650 by 2001 and then decreases to about 450 by 2003. By 2005 it has increased to about 650, by 2006 it's at about 600 and by 2007 it's at about 650 . It then decreases to about 400 by $2009: \mathrm{H} 1$, and then increases to about 410 by 2009:H2. "Downgrades" begins in 1989 at about 200 . From 1989 to 1995 it fluctuates between about 150 and 200. In 1996 it decreases to about 100 and then increases to about 150 by 1998 . By 2000 it has decreased to about 125 and by 2003 it has increased to about 300. It then decreases to about 140 by 2007 and by 2009: H 2 it has increased to about 650 .

Source. Moody's Credit Trends

## Figure: Municipal Bond Yields

Line chart, by percent, 2005 to 2010. Data are weekly. There is a vertical line at March 2010 to represent the March FOMC meeting. There is one series, " 20 -year general obligation". It begins in 2005 at about 4.5. From 2005 to early 2008 it fluctuates between about 4.0 and 4.8 . It then generally increases to about 6.0 by mid2008 and then generally decreases to about 3.9 by late 2009. By April 15, 2010 it has generally increased to about 4.45 .

Source. Municipal Market Advisors; Bond Buyer.
Figure: Municipal Bond Yield Ratio

Line chart, by ratio (general obligation over Treasury), 2002 to 2010. Data are weekly. There is one series, " $20-$ year". It begins in early 2002 at about 0.9 and generally increases to about 0.99 by mid-2003. It then generally decreases to about 0.89 by early 2004 and then generally increases to about 0.97 by mid- 2005 . By early 2007 it has generally decreased to about 0.85 and by late 2008 it has generally increased to about 1.87 . It then generally decreases to about 0.96 by April 15,2010 .

Source. Bond Buyer

| Aggregate and components | Percent change (annual rate) ${ }^{\mathbf{1}}$ |  |  |  |  | Level (billions of dollars), Mar. (p) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 | 2009 | Jan. | $\begin{aligned} & 2010 \\ & \text { Feb. } \end{aligned}$ | Mar. (p) |  |
| M2 | 8.5 | 5.1 | -8.2 | 7.8 | -4.0 | 8,513 |
| Components ${ }^{2}$ |  |  |  |  |  |  |
| Currency | 5.8 | 7.0 | -1.4 | 8.5 | 6.1 | 872 |
| Liquid deposits ${ }^{3}$ | 6.9 | 17.2 | -1.6 | 17.5 | 3.9 | 5,771 |
| Small time deposits | 12.3 | -15.9 | -28.8 | -18.4 | -21.8 | 1,105 |
| Retail money market funds | 13.4 | -21.6 | -31.3 | -23.6 | -47.8 | 760 |
| Memo: |  |  |  |  |  |  |
| Institutional money market funds | 24.6 | -2.1 | -22.8 | -39.4 | -47.8 | 2,021 |
| Monetary base | 70.3 | 41.6 | -18.4 | 74.0 | -19.3 | 2,075 |

1. For years, Q4 to Q4; for quarters and months, calculated from corresponding average levels. Return to table
2. Nonbank traveler's checks are not listed. Return to table
3. Sum of demand deposits, other checkable deposits, and savings deposits. Return to table
p Preliminary. Return to table
Source: Federal Reserve Board.

## Commercial Bank Credit

(Percent change, annual rate, except as noted; seasonally adjusted)

| Type of credit | 2008 | 2009 | $\begin{gathered} \text { H1 } \\ 2009 \end{gathered}$ | $\begin{gathered} \text { Q3 } \\ 2009 \end{gathered}$ | $\begin{gathered} \text { Q4 } \\ 2009 \end{gathered}$ | $\begin{aligned} & \text { Q1 } \\ & 2010 \end{aligned}$ | Mar. $2010$ | Level ${ }^{\underline{1}}$ <br> Mar. 2010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 4.2 | -7.1 | -5.5 | -8.7 | -9.3 | -6.8 | -5.3 | 9,308 |
| Loans ${ }^{2}$ |  |  |  |  |  |  |  |  |
| Total | 4.2 | -10.2 | -7.5 | -14.4 | -12.7 | -10.1 | -6.3 | 6,983 |
| Core | 4.6 | -8.3 | -4.6 | -12.4 | -12.5 | -11.5 | -9.1 | 6,201 |
| To businesses |  |  |  |  |  |  |  |  |
| Commercial and industrial | 14.6 | -18.6 | -14.7 | -26.2 | -23.8 | -20.6 | -17.9 | 1,284 |
| Commercial real estate | 6.4 | -4.4 | -1.4 | -6.1 | -8.9 | -9.5 | -8.1 | 1,609 |
| To households |  |  |  |  |  |  |  |  |
| Residential real estate | -3.9 | -6.2 | -1.7 | -11.3 | -10.4 | -6.6 | -6.1 | 2,120 |
| Revolving home equity | 12.8 | . 5 | 6.0 | -4.9 | -4.8 | -3.3 | -2.0 | 605 |
| Closed-end mortgages | -8.8 | -8.5 | -4.5 | -13.7 | -12.5 | -7.9 | -7.9 | 1,515 |
| Consumer | 7.2 | -3.7 | -. 6 | -5.6 | -8.1 | -12.8 | -6.1 | 1,187 |
| Memo: Originated ${ }^{3}$ | 7.0 | -3.9 | -1.0 | -5.7 | -8.0 | -12.8 | -9.2 | 1,216 |
| Other | 1.6 | -23.4 | -28.1 | -30.3 | -14.3 | 1.8 | 16.6 | 783 |
| Securities |  |  |  |  |  |  |  |  |
| Total | 4.1 | 4.1 | 1.8 | 10.7 | 1.9 | 3.5 | -2.3 | 2,325 |
| Treasury and agency | 16.2 | 9.2 | 1.9 | 23.9 | 8.4 | 8.5 | 4.3 | 1,463 |
| Other ${ }^{4}$ | -9.5 | -3.3 | 1.6 | -8.3 | -8.1 | -4.5 | -13.5 | 862 |

Note: Yearly annual rates are Q4 to Q4; quarterly and monthly annual rates use corresponding average levels. Data have been adjusted to remove the effects of mark-to-market accounting rules (FAS 115) and the initial consolidation of certain variable interest entities (FIN 46) and off-balance sheet vehicles (FAS 166 and 167). Data also account for the effects of nonbank structure activity of $\$ 5$ billion or more.

1. Billions of dollars. Pro rata averages of weekly (Wednesday) levels. Return to table
2. Excludes interbank loans. Return to table
3. Includes an estimate of outstanding loans securitized by commercial banks that retained recourse or servicing rights. Return to table

Source: Federal Reserve Board.

Figure: Loans and Leases in Bank Credit

Line chart, in billions of dollars, 2007:Q1 to 2010:Q1. Data are monthly, SA. There is a vertical line at the end of 2007 which represents the last business cycle peak as defined by the NBER. The series begins in 2007:Q1 at about 7070 and generally increases to about 8000 by 2008:Q1. It then generally decreases to about 7900 by 2008:Q2 and then generally increases to about 8100 by 2008:Q4. By mid-2010:Q1 it has generally decreased to about 7010 and by March 31,2010 it has increased to about 7450 .

Note. Data for March 31, 2010 reflect banks adoptions of FAS 166/167.
Source. Federal Reserve.

## Figure: Survey Measures of Standards and Demand for Loans

Line chart, by net percent, 1990 to 2010. Data are quarterly. There is a horizontal line at zero. There are two series, "Standards" and "Demand". "Standards" begins in 1991:Q2 at about 30 and generally decreases to about -23 by 1993:Q3. It then generally increases to about 10 by 1996:Q4 and then generally decreases to about -7 by 1998:Q2. By 1998:Q4 it has generally increased to about 33 and by 1999:Q3 it has generally decreased to about 3 . It then generally increases to about 43 by 2001:Q1 and then generally decreases to about -20 by $2005: Q 1$. By 2009:Q1 it has generally increased to about 88 and by $2010: Q 2$ it has generally decreased to about -13. "Demand" begins in 1991:Q4 at about -18 and generally increases to about 37 by 1994:Q1. It then generally decreases to about -12 by $1995: Q 1$ and then generally increases to about 25 by 1995:Q3. By 1997:Q2 it has generally decreased to about -5 and by 1998:Q2 it has generally increased to about 40 . It then generally decreases to about -47 by 2001:Q1 and then generally increases to about 30 by 2005:Q3. By 2008:Q4 it has generally decreased to about -60 and by 2010:Q2 it has generally increased to about -13.

 1990-March 1991, and March 2001-November 2001. A vertical line indicates the NBER Peak in December 2007.

Source. Senior Loan Officer Opinion Survey.

# Appendix: Senior Loan Officer Opinion Survey on Bank Lending Practices <br> Measures of Supply and Demand for Commercial and Industrial Loans, by Size of Firm Seeking Loan 

## Figure: Net Percentage of Domestic Respondents Tightening Standards for Commercial and Industrial Loans

Line chart, by percent, 1990 to 2010. There is a vertical line at January 2010 representing the January survey. There is also a horizontal line at zero. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms". "Loans to large and medium-sized firms" begins in 1990:Q2 at about 58 and generally decreases to about -20 by 1993:Q3. It then generally increases to about 38 by 1998:Q4 and then generally decreases to about 5 by 1999:Q3. By 2001:Q1 it has generally increased to about 60 and by 2005:Q2 it has generally decreased to about -25 . It then generally increases to about 84 by $2008: Q 4$ and then generally decreases to about -7 by 2010:Q2. "Loans to small firms" begins in 1990:Q2 at about 53 and generally decreases to about -15 by 1994:Q4. It then generally increases to about 4 by 1996:Q1 and then generally decreases to about -12 by 1996:Q4. By 2001:Q1 it has generally increased to about 48 and by 2005:Q2 it has generally decreased to about -22. It then generally increases to about 73 by 2008:Q4 and then generally decreases to about 0 by $2010: Q 2$.

## Figure: Net Percentage of Domestic Respondents Increasing Spreads of Loan Rates over Banks' Costs of Funds

Line chart, by percent, 1990 to 2010. There is a vertical line at January 2010 representing the January survey. There is also a horizontal line at zero. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms". "Loans to large and medium-sized firms" begins in 1990:Q2 at about 10 and generally increases to about 60 by 1991:Q1. It then generally decreases to about -59 by 1994:Q2 and then generally increases to about 50 by 1998:Q4. By 1999:Q2 it has generally decreased to about 8 and by 2001:Q4 it has generally increased to about 55. It then generally decreases to about -70 by 2005:Q2 and then generally increases to about 100 by 2008:Q4. By 2010:Q2 it has generally decreased to about -7. "Loans to small firms" begins in 1990:Q2 at about 5 and generally increases to about 39 by 1991:Q1. It then generally decreases to about -32 by 1993:Q4. From 1993:Q4 to 1998:Q3 it fluctuates between about -40 and -5 . It then generally increases to about 20 by 1998:Q4 and then generally decreases to about -1 by 1999:Q4. By 2001:Q4 it has generally increased to about 40 and by 2005:Q2 it has generally decreased to about -55. It then generally increases to about 92 by 2008:Q4 and then generally decreases to about 10 by $2010: Q 2$.

## Figure: Net Percentage of Domestic Respondents Reporting Stronger Demand for Commercial and Industrial Loans

Line chart, by percent, 1991 to 2010. There is a vertical line at January 2010 representing the January survey. There is also a horizontal line at zero. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms". "Loans to large and medium-sized firms" begins in 1991:Q4 at about -30 and generally increases to about 40 by 1994:Q2. It then generally decreases to about -5 by 1996:Q1 and then generally increases to about 28 by 1998:Q2. By 1998:Q3 it has decreased to about -10 and by 1998:Q4 it has increased to about 27. It then generally decreases to about -70 by 2001:Q4 and then generally increases to about 45 by 2005:Q1. By 2007:Q2 it has generally decreased to about -23 and by 2008:Q2 it has generally increased to about 0 . It then generally decreases to about -60 by 2009:Q1 and then generally increases to about -8 by 2010:Q2. "Loans to small firms" begins in 1991:Q4 at about -27 and generally increases to about 40 by 1994 :Q2.

It then generally decreases to about 4 by 1996:Q4 and then generally increases to about 21 by 1998:Q2. By 2001:Q4 it has generally decreased to about -50 and by 2004:Q3 it has generally increased to about 40. It then generally decreases to about -63 by 2009:Q2 and then generally increases to about -10 by $2010: Q 2$.

## Measures of Supply and Demand for Commercial Real Estate Loans

## Figure: Net Percentage of Domestic Respondents Tightening Standards for Commercial Real Estate Loans

Line chart, by percent, 1990 to 2010. There is a vertical line at January 2010 representing the January survey. There is also a horizontal line at zero. The series begins in 1990:Q3 at about 70 and generally decreases to about -7 by 1994:Q2. It then generally increases to about 14 by 1996:Q1 and then generally decreases to about -10 by 1997:Q3. By 1998:Q4 it has generally increased to about 47 and by 1999:Q2 it has generally decreased to about 6 . It then generally increases to about 47 by 2002:Q1 and then generally decreases to about -25 by 2005:Q1. By 2008:Q4 it has generally increased to about 88 and by 2010:Q2 it has generally decreased to about 12 .

## Figure: Net Percentage of Domestic Respondents Reporting Stronger Demand for Commercial Real Estate Loans

Line chart, by percent, 1995 to 2010. There is a vertical line at January 2010 representing the January survey. There is also a horizontal line at zero. The series begins in 1995:Q2 at about 13 and generally increases to about 27 by 1995:Q4. It then generally decreases to about -2 by 1996:Q2 and then generally increases to about 48 by 1998:Q2. By 2001:Q4 it has generally decreased to about -53 and by 2004:Q3 it has generally increased to about 25. It then generally decreases to about -67 by 2009:Q2 and then generally increases to about -6 by 2010:Q2.

## Measures of Supply and Demand for Residential Mortgage Loans

Figure: Net Percentage of Domestic Respondents Tightening Standards for Residential Mortgage Loans

Line chart, by percent, 1990 to 2007. There is a horizontal line at zero. There is one series, "All residential". It begins in 1990:Q3 at about 9 and increases to about 32 by 1991:Q1. It then generally decreases to about -16 by 1993:Q4 and then generally increases to about 5 by 1995:Q4. From 1995:Q4 to 2000:Q2 it fluctuates between about -7 and 5 . It then generally increases to about 11 by 2003:Q1 and then generally decreases to about -9 by 2004:Q2. From 2004:Q2 to 2006:Q3 it fluctuates between about -10 and 2. It then generally increases to about 17 by 2007:Q1.

There is a second line chart, by percent, from 2007 to 2010. There is a horizontal line at zero. There are three series, "Prime", "Nontraditional" and "Subprime". "Prime" begins in 2007:Q2 at about 15 and generally increases to about 72 by 2008:Q3. It then generally decreases to about 1 by 2010:Q2. "Nontraditional" begins in $2007: Q 2$ at about 46 and generally decreases to about 40 by 2007:Q3. It then generally increases to about 90 by 2008:Q4 and then generally decreases to about 5 by 2010:Q2. "Subprime" begins in 2007:Q2 at about 56 and remains relatively stable here until 2007:Q4. It then generally increases to about 100 by 2008:Q4 and then generally decreases to about 47 by 2009:Q1.

Note. For data starting in 2007:Q2, changes in standards for prime, nontraditional, and subprime mortgage loans are reported separately. Series are not reported when the number of respondents is 3 or fewer.

Figure: Net Percentage of Domestic Respondents Reporting Stronger Demand for Residential Mortgage Loans

Line chart, by percent, 1990 to 2007:Q1. There is a horizontal line at zero. There is one series, "All residential". It begins in 1990:Q4 at about -47 and generally decreases to about -58 by 1991:Q1. It then generally increases to about 60 by 1991:Q2 and then generally decreases to about 5 by 1991:Q4. From 1991:Q4 to 1994:Q1 it fluctuates between about 4 and 46. It then generally decreases to about -78 by 1995:Q1 and then generally increases to about 52 by 1995:Q3. By 1996:Q3 it has generally decreased to about -23 and by 1998:Q2 it has generally increased to about 64. It then generally decreases to about -62 by 2000:Q1 and then generally increases to about 47 by 2001:Q2. From 2001:Q2 to 2003:Q3 it fluctuates between about -1 and 47. It then generally decreases to about -39 by 2004 :Q1 and then generally increases to about 20 by 2005:Q3. By 2006:Q4 it has generally decreased to about -60 and by $2007: Q 1$ it has generally increased to about -35 .

There is a second line chart, by percent, from 2007:Q2 to 2010. There is a horizontal line at zero. There are three series, "Prime", "Nontraditional" and "Subprime". "Prime" begins in 2007:Q2 at about -20 and generally decreases to about -60 by 2008:Q1. It then generally increases to about -25 by $2008: Q 2$ and then generally decreases to about -53 by 2008:Q4. By 2009:Q2 it has generally increased to about 37 and by 2010:Q2 it has generally decreased to about -14. "Nontraditional" begins in 2007:Q2 at about -15 and generally decreases to about -70 by 2008:Q1. It then generally increases to about -30 by $2008: Q 2$ and then generally decreases to about -72 by 2008:Q4. By 2009:Q4 it has generally increased to about -5 and by 2010:Q2 it has generally decreased to about -33. "Subprime" begins in 2007:Q2 at about -20 and generally decreases to about -73 by 2008:Q1. It then generally increases to about -30 by 2008:Q3 and then generally decreases to about -100 by 2008:Q4. By 2009:Q1 it has increased to about -50.

[^12] or fewer

Figure: Net Percentage of Domestic Respondents Tightening Standards for Consumer Loans

Line chart, by percent, 1996 to 2010. There is a vertical line at January 2010 representing the January survey. There is also a horizontal line at zero. There are two series, "Credit card loans" and "Other consumer loans". "Credit card loans" begins in 1996:Q1 at about 27 and generally increases to about 50 by 1996:Q3. It then generally decreases to about -4 by 2000:Q3 and then generally increases to about 20 by 2001:Q2. By 2005:Q2 it has generally decreased to about -9 and by 2006:Q1 it has generally increased to about 4. It then generally decreases to about -12 by 2007:Q2 and then generally increases to about 66 by 2008:Q3. By 2010:Q2 it has decreased to about 9. "Other consumer loans" begins in 1996:Q1 at about 16 and generally increases to about 25 by 1996:Q3. It then generally decreases to about -1 by 1999:Q1 and then generally increases to about 20 by 2001:Q4. By 2005:Q2 it has generally decreased to about -10 and by $2008: Q 3$ it has generally increased to about 67. It then generally decreases to about -7 by 2010:Q2.

Figure: Net Percentage of Domestic Respondents Reporting Increased Willingness to Make Consumer Installment Loans

Line chart, by percent, 1990 to 2010. There is a vertical line at January 2010 representing the January survey. There is also a horizontal line at zero. The series begins in 1990:Q2 at about 7 and generally decreases to about -15 by 1991:Q1. It then generally increases to about 30 by 1994:Q1 and then generally decreases to about -7 by 1996:Q3. By 1999:Q2 it has generally increased to about 13 and by 2001:Q4 it has generally decreased to about -10 . It then generally increases to about 21 by 2005:Q3 and then generally decreases to about -48 by 2008:Q4. By 2010:Q2 it has generally increased to about 12 .

Figure: Net Percentage of Domestic Respondents Reporting Stronger Demand for Consumer Loans

Line chart, by percent, 1991 to 2010. There is a vertical line at January 2010 representing the January survey. There is also a horizontal line at zero. The series begins in 1991:Q4 at about -28 and fluctuates but generally increases to about 38 by 1994:Q2. It then fluctuates but generally decreases to about -35 by $2001: Q 1$ and then fluctuates but generally increases to about 33 by 2003:Q3. By 2008:Q4 it has fluctuated but decreased to about -50 and by 2010:Q2 it has fluctuated but increased to about -18.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

Last update: January 29, 2016

## April 2010 Greenbook Part 2 Tables and Charts ${ }^{ \pm}$

## International Developments

## Trade in Goods and Services

|  | 2009 | Annual rate |  |  | Monthly rate |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2009 |  | 2010 | 2009 | 20 |  |
|  |  | Q3 | Q4 | Q1 ${ }^{\text {e }}$ | Dec. | Jan. | Feb. |
|  | Percent change |  |  |  |  |  |  |
| Nominal BOP |  |  |  |  |  |  |  |
| Exports | -1.3 | 25.4 | 29.1 | 10.3 | 3.4 | -. 2 | . 2 |
| Imports | -7.2 | 36.8 | 35.3 | 13.1 | 4.9 | -1.8 | 1.7 |
| Real NIPA |  |  |  |  |  |  |  |
| Exports | -. 7 | 17.8 | 22.8 | $\cdots$ | $\ldots$ | $\ldots$ | $\ldots$ |
| Imports | -6.6 | 21.3 | 15.8 | ... | ... | ... | $\ldots$ |
|  | Billions of dollars |  |  |  |  |  |  |
| Nominal BOP |  |  |  |  |  |  |  |
| Net exports | -378.6 | -385.5 | -435.8 | -459.9 | -39.9 | -37.0 | -39.7 |
| Goods, net | -517.0 | -528.4 | -582.0 | -604.0 | -51.9 | -49.4 | -51.3 |
| Services, net | 138.4 | 142.9 | 146.2 | 144.0 | 12.0 | 12.4 | 11.6 |

... Not applicable. Return to table
BOP Balance of payments. Return to table
NIPA National income and product accounts. Return to table
e BOP data are two months at an annual rate. Return to table
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; Census Bureau.

## U.S. International Trade in Goods and Services

(Quarterly)

## Figure: Trade Balance

Line chart, in billions of dollars, annual rate, 1999 to 2010. The series begins in 1999 at about -210 and generally decreases to about -800 by 2006 . It then generally increases to about -690 by 2007 and then generally decreases to about -750 by 2008 . By early 2009 it has generally increased to about -325 and by February 2010 it has decreased to about -470.

Figure: Contribution of Net Exports to Growth of Real Gross Domestic Product

Bar chart, by percentage points, annual rate, 1999 to 2009. The series begins in 1999:Q1 at about -1.6 and increases to about -0.25 by 1999:Q4. It then decreases to about -1.5 by 2000:Q1 and then generally increases to about 0.3 by 2001:Q2. By 2002:Q4 it has generally decreased to about -1.3 and by 2003:Q3 it has generally increased to about 0.4 . It then generally decreases to about -1.75 by $2004: Q 2$. From $2004: Q 3$ to $2006: Q 3$ it fluctuates between about -0.75 and 0.4 . It then generally increases to about 2.7 by 2009:Q1 and then generally decreases to about 0.3 by 2009:Q4.

Figure: Selected Exports

[^13]at about 125 and generally increases to about 165 by 2000. It then generally decreases to about 130 by 2002 and then generally increases to about 400 by 2008 . By 2009 it has generally decreased to about 230 and by early 2010 it has increased to about 320 . "Consumer goods" begins in 1999 at about 80 and generally increases to about 170 by 2008. By 2009 it has generally decreased to about 140 and by early 2010 it has generally increased to about 160 . "Aircraft" begins in 1999 at about 60. From 1999 to 2004 it fluctuates between about 40 and 60. It then generally increases to about 75 by early 2010.

Figure: Selected Imports

Line chart, in billions of dollars, annual rate, 1999 to 2010. There are four series, "Capital goods", "Consumer goods", "Industrial supplies" and "Oil". "Capital goods" begins in 1999 at about 280 and generally increases to about 365 by 2000. It then decreases to about 275 by 2001 and then generally increases to about 470 by 2008. By 2009 it has decreased to about 340 and by early 2010 it has increased to about 410 . "Consumer goods" begins in 1999 at about 230 and generally increases to about 290 by 2000. It then generally decreases to about 277 by 2001 and then generally increases to about 490 by 2008 . By 2009 it has generally decreased to about 420 and by the early 2010 it has increased to about 450 . "Industrial supplies" begins in 1999 at about 140 and generally increases to about 190 by early 2001. It then generally decreases to about 150 by late 2001 and then generally increases to about 350 by 2008 . By 2009 it has generally decreased to about 175 and by the early 2010 it has increased to about 240. "Oil" begins in 1999 at about 45 and generally increases to about 125 by 2000 . It then generally decreases to about 80 by early 2002 and then generally increases to about 527 by 2008. By 2009 it has generally decreased to about 210 and by the early 2010 it has increased to about 325 .

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; Census Bureau.

## U.S. Exports and Imports of Goods and Services

(Billions of dollars; annual rate, balance of payments basis)

|  | Levels |  |  |  | Change ${ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | 2010 |  | 10 | 2009 | 2010 | 20 |  |
|  | Q4 | Q1 ${ }^{\text {e }}$ | Jan. | Feb. | Q4 | Q1 ${ }^{\text {e }}$ | Jan. | Feb. |
| Exports of goods and services | 1674.7 | 1716.4 | 1714.6 | 1718.1 | 103.5 | 41.6 | -3.2 | 3.5 |
| Goods exports | 1147.7 | 1181.6 | 1181.1 | 1182.0 | 93.1 | 33.9 | -7.9 | 1.0 |
| Gold | 15.3 | 16.9 | 18.9 | 14.9 | 1.0 | 1.6 | 1.6 | -4.0 |
| Other goods | 1132.4 | 1164.7 | 1162.2 | 1167.2 | 92.1 | 32.3 | -9.5 | 5.0 |
| Capital goods | 414.1 | 419.5 | 417.2 | 421.9 | 32.5 | 5.4 | -12.6 | 4.7 |
| Aircraft \& parts | 76.7 | 73.8 | 77.8 | 69.9 | 6.5 | -2.9 | -6.3 | -7.9 |
| Computers \& accessories | 40.9 | 42.7 | 43.4 | 41.9 | 3.4 | 1.8 | 1.7 | -1.5 |
| Semiconductors | 42.9 | 44.3 | 43.1 | 45.6 | 4.4 | 1.5 | . 7 | 2.6 |
| Other capital goods | 253.7 | 258.7 | 252.9 | 264.5 | 18.2 | 5.0 | -8.7 | 11.6 |
| Automotive | 104.1 | 108.8 | 107.5 | 110.0 | 18.0 | 4.7 | -6.5 | 2.4 |
| Ind. supplies (ex. ag., gold) | 303.8 | 317.3 | 314.2 | 320.3 | 20.7 | 13.4 | 2.5 | 6.1 |
| Consumer goods | 160.2 | 160.2 | 161.6 | 158.8 | 10.3 | . 0 | 2.1 | -2.9 |
| Agricultural | 109.6 | 113.9 | 116.5 | 111.4 | 10.4 | 4.3 | 1.6 | -5.1 |
| All other goods | 40.6 | 45.0 | 45.1 | 44.8 | . 2 | 4.4 | 8.2 | -. 3 |
| Services exports | 527.0 | 534.8 | 533.5 | 536.0 | 10.4 | 7.8 | 4.7 | 2.5 |
| Imports of goods and services | 2110.5 | 2176.3 | 2158.0 | 2194.5 | 153.8 | 65.8 | -38.6 | 36.5 |
| Goods imports | 1729.7 | 1785.5 | 1773.6 | 1797.5 | 146.7 | 55.8 | -38.3 | 23.9 |
| Oil | 301.8 | 328.6 | 326.0 | 331.3 | 26.2 | 26.8 | -12.3 | 5.3 |
| Gold | 10.7 | 9.3 | 9.9 | 8.7 | 2.0 | -1.4 | -. 4 | -1.2 |
| Other goods | 1417.1 | 1447.6 | 1437.7 | 1457.5 | 118.5 | 30.5 | -25.7 | 19.8 |
| Capital goods | 400.7 | 407.5 | 405.3 | 409.7 | 36.2 | 6.8 | -13.7 | 4.4 |
| Aircraft \& parts | 31.2 | 28.3 | 29.6 | 26.9 | 2.1 | -2.9 | -4.3 | -2.6 |
| Computers \& accessories | 114.6 | 116.9 | 113.6 | 120.1 | 19.2 | 2.3 | -8.1 | 6.5 |
| Semiconductors | 23.6 | 23.0 | 22.9 | 23.2 | 1.4 | -. 6 | -. 2 | . 3 |
|  |  |  |  |  |  |  |  |  |


| Other capital goods | 231.3 | 239.3 | 239.1 | 239.5 | 13.6 | 8.1 | -1.1 | .3 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |
| Automotive | 207.4 | 197.9 | 202.7 | 193.2 | 29.9 | -9.4 | -16.8 | -9.5 |
| Ind. supplies (ex. oil, gold) | 214.6 | 238.3 | 234.3 | 242.4 | 24.6 | 23.8 | 11.5 | 8.1 |
| Consumer goods | 448.9 | 450.0 | 443.1 | 456.8 | 26.5 | 1.1 | -10.4 | 13.7 |
| Foods, feeds, beverages | 82.8 | 85.9 | 86.3 | 85.4 | 2.0 | 3.1 | 1.6 | -.9 |
| All other goods | 62.8 | 68.0 | 66.0 | 70.0 | -.8 | 5.2 | 2.1 | 4.0 |
|  |  |  |  |  |  |  |  |  |
| Services imports | 380.8 | 390.8 | 384.5 | 397.1 | 7.1 | 9.9 | -.3 | 12.6 |
| Memo: |  |  |  |  |  |  |  |  |
| Oil quantity (mb/d) | 11.41 | 12.05 | 11.82 | 12.28 | .11 | .65 | -.67 | .45 |
| Oil import price (\$/bbl) | 72.37 | 74.69 | 75.49 | 73.88 | 5.68 | 2.30 | 1.36 | -1.61 |

1. Change from previous quarter or month. Return to table
e Estimate based on average of two months. Return to table
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; Census Bureau.

## Prices of U.S. Imports and Exports

## Figure: Merchandise Imports

Line chart, by 12-month percent change, 1999 to 2010. There is a horizontal line at zero. There are two series, "Non-oil goods" and "Core goods". "Non-oil goods" begins in 1999 at about -2.5 and generally increases to about 2.5 by early 2001. It then generally decreases to about -5.5 by early 2002 and then generally increases to 4 by late 2004. By late 2006 it has generally decreased to about 0 and by 2008 it has generally increased to about 8 . It then generally decreases to about -7.5 by mid-2009 and then generally increases to about 2 by early 2010. "Core goods" begins in 1999 at about -1.8 and generally increases to about 1.8 by 2000 . It then generally decreases to about -3.8 by early 2002 and then generally increases to 4.1 by late 2004. By early 2006 it has generally decreased to about 1 and by 2008 it has generally increased to about 8.7. It then generally decreases to about -6.2 by mid- 2009 and then generally increases to about 3 by early 2010 .

## Figure: Categories of Core Imports

Line chart, by 12-month percent change, 1999 to 2010. There is a horizontal line at zero. There are two series, "Material-intensive goods" and "Finished goods". "Material-intensive goods" begins in 1999 at about -4.5 and generally increases to about 7 by 2000 . It then generally decreases to about -10 by 2002 and then generally increases to about 13.5 by 2004. By 2005 it has generally decreased to about 4 and by 2006 it has generally increased to about 12 . It then generally decreases to about 5.5 by 2007 and then generally increases to about 18 by 2008 . By mid- 2009 it has generally decreased to about -17 and by early 2010 it has increased to about 9.5 . "Finished goods" begins in 1999 at about 0 and remains relatively stable here until mid-2001. It then generally decreases to about -1.5 by 2002 and then generally increases to about 2.5 by 2005. By 2006 it has generally decreased to about 0 and by 2008 it has generally increased to about 4 . It then generally decreases to about 0 by early 2010.

Figure: Oil

Line chart, by dollars per barrel, 1999 to 2010. There are two series, "Spot West Texas Intermediate" and "Import unit value". "Spot West Texas Intermediate" begins in 1999 at about 12 and generally increases to about 36 by late 2000. It then generally decreases to about 19 by late 2001 and then generally increases to about 76 by mid-2006. By late 2006 it has generally decreased to about 50 and by early 2008 it has generally increased to about 135 . It then generally decreases to about 36 by early 2009 and then generally increases to about 76 by early 2010. "Import unit value" begins in 1999 at about 10 and generally increases to about 30 by late 2000 . It then generally decreases to about 15 by late 2001 and then generally increases to about 67 by mid- 2006 . By late 2006 it has generally decreased to about 54 and by early 2008 it has generally increased to about 125. It then generally decreases to about 36 by early 2009 and then generally increases to about 74 early 2010 .

## Figure: Natural Gas

Line chart, 1999 to 2010. There are two series, "Import price index" measured by a scale in which $2000=100$ and "Spot Henry Hub" measured by dollars per million Btu. "Import price index" begins in 1999 at about 60 and generally increases to about 215 by early 2001. It then generally decreases to about 60 by early 2002 and then generally increases to about 190 by early 2003. By late 2003 it has generally decreased to about 110 and by late 2005 it has generally increased to about 275 . It then generally decreases to about 120 by mid-2006 and then generally increases to about 290 by mid-2008. By 2009 it has generally decreased to about 75 and by early 2010 it has increased to about 125. "Spot Henry Hub" begins in 1999 at about 2 and generally increases to about 10 by late 2000 . It then generally decreases to about 2 by late 2001 and then generally increases to about 9 by early 2003. By late 2003 it has generally decreased to about 4 and by late 2005 it has generally increased to about 15. It then generally decreases to about 4 by mid- 2006 and then generally increases to about 13 by mid- 2008 . By mid- 2009 it has generally decreased to about 2.5 and by early 2010 it has increased to about 5.5.

## Figure: Merchandise Exports

Line chart, by 12-month percent change, 1999 to 2010. There is a horizontal line at zero. There are two series, "Core goods" and "Total goods". "Core goods" begins in

1999 at about -2 and generally increases to about 3 by early 2000. It then generally decreases to about -2.5 by early 2002 and then generally increases to about 6 by mid-2004. From mid-2004 to mid-2007 it fluctuates between about 2.5 and 7. It then generally increases to about 14 by mid-2008 and then generally decreases to about -11 by mid-2009. By early 2010 it has generally increased to about 4 . "Total goods" begins in 1999 at about -3 and generally increases to about 2 by early 2002 . It then generally decreases to about -3 by early 2002 and then generally increases to about 4.5 by mid-2004. From mid-2004 to mid-2007 it fluctuates between about 2 and 5.5. It then generally increases to about 11 by mid-2008 and then generally decreases to about -8 by mid-2009. By early 2010 it has generally increased to about 3.

Figure: Categories of Core Exports

Line chart, by 12-month percent change, 1999 to 2010. There is a horizontal line at zero. There are two series, "Material-intensive goods" and "Finished goods". "Material intensive goods" begins in 1999 at about -6 and generally increases to about 7.5 by early 2000 . It then generally decreases to about -7 by early 2002 and then generally increases to about 13 by mid-2004. From late 2004 to mid- 2007 it fluctuates between about 5 and 12.5 . It then generally increases to about 24 by mid2008 and then generally decreases to about -22 by mid-2009. By early 2010 it has generally increased to about 7.5 . "Finished goods" begins in 1999 at about 0 and generally increases to about 1.5 by 2000. It then generally decreases to about 0 by 2002 and then generally increases to about 3.5 by late 2008 . By early 2010 it has generally decreased to about 1.5.

Source. Bureau of Labor Statistics; Wall Street Journal; Commodity Research Bureau.

## Prices of U.S. Imports and Exports



| Computers | -1.5 | 6.0 | -9.5 | -1.8 | -2.0 | 2.2 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Semiconductors | -.8 | -14.6 | -.4 | .6 | -.3 | -.6 |
|  |  |  |  |  |  |  |
| NIPA prices |  |  |  |  |  |  |
| Chain price index | 11.4 | 16.5 | n.a. | $\ldots$ | $\ldots$ | $\ldots$ |
| Imports of goods \& services | .6 | 5.0 | n.a. | $\ldots$ | $\ldots$ | $\ldots$ |
| Non-oil merchandise | 1.3 | 4.7 | n.a. | $\ldots$ | $\ldots$ | $\ldots$ |
| Core goods ${ }^{1}$ | 4.6 | 5.8 | n.a. | $\ldots$ | $\ldots$ | $\ldots$ |
| Exports of goods \& services | 4.6 | 5.7 | n.a. | $\ldots$ | $\ldots$ | $\ldots$ |
| Total merchandise | 5.1 | 5.6 | n.a. | $\ldots$ | $\ldots$ | $\ldots$ |
| Core goods ${ }^{2}$ |  |  |  |  |  |  |

1. Excludes computers, semiconductors, and natural gas. Return to table
2. Excludes computers and semiconductors. Return to table
... Not applicable.
n.a. Not available. Return to table

BLS Bureau of Labor Statistics. Return to table
NIPA National income and product accounts.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; Bureau of Labor Statistics.

## U.S. Current Account

| Period | Goods and services, net | Investment income, net | Other income and transfers, net | Current account balance | Current account/ GDP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Annual |  |  |  |  |  |
| 2008 | -695.9 | 125.6 | -135.7 | -706.1 | -4.9 |
| 2009 | -378.6 | 96.1 | -137.3 | -419.9 | -2.9 |
| Quarterly |  |  |  |  |  |
| 2009: Q1 | -368.9 | 80.1 | -128.0 | -416.7 | -2.9 |
| Q2 | -324.3 | 73.4 | -140.0 | -391.0 | -2.8 |
| Q3 | -385.5 | 123.3 | -147.2 | -409.4 | -2.9 |
| Q4 | -435.8 | 107.6 | -134.2 | -462.4 | -3.2 |
| Change |  |  |  |  |  |
| Q1-Q4 | 209.1 | -12.0 | 5.7 | 202.8 | 1.4 |
| Q2-Q1 | 44.6 | -6.8 | -12.1 | 25.8 | 0.2 |
| Q3-Q2 | -61.2 | 50.0 | -7.1 | -18.4 | -0.1 |
| Q4-Q3 | -50.3 | -15.7 | 13.0 | -53.0 | -0.3 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

## Summary of U.S. International Transactions

(Billions of dollars; not seasonally adjusted except as noted)

|  | 2008 | 2009 | 2009 |  |  |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q1 | Q2 | Q3 | Q4 | Jan. | Feb. |
| Official financial flows | -54.1 | 939.4 | 321.3 | 315.2 | 123.5 | 179.5 | 28.7 | 22.2 |
| 1. Change in foreign official assets in the U.S. (increase, +) | 480.5 | 405.5 | 78.5 | 123.7 | 71.6 | 131.7 | 18.8 | 22.4 |
| a. Long-term Treasury securities | 203.8 | 426.8 | 35.0 | 103.2 | 99.7 | 188.8 | 44.1 | 35.3 |


| b. Short-term Treasury securities | 272.4 | 68.4 | 84.8 | 21.2 | 25.8 | -63.4 | -25.8 | -5.7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| c. Long-term agency securities | 66.9 | -35.0 | 1.0 | -1.3 | -28.1 | -6.6 | 0.0 | 2.3 |
| d. Other ${ }^{\underline{1}}$ | -62.7 | -54.8 | -42.4 | 0.6 | -25.9 | 12.9 | 0.5 | -9.6 |
| 2. Change in U.S. official assets (decrease, + ${ }^{\underline{2}}$ | -534.6 | 534.0 | 242.8 | 191.4 | 51.9 | 47.8 | 9.9 | -0.1 |
| Private financial flows | 559.1 | -741.7 | -286.4 | -252.5 | -37.8 | -133.9 | ... | ... |
| Banks |  |  |  |  |  |  |  |  |
| 3. Change in net foreign positions of banking offices in the U.S. ${ }^{3}$ | -4.6 | -462.2 | -293.0 | -175.0 | 0.9 | 5.0 | 35.9 | -11.0 |
| Securities ${ }^{4}$ |  |  |  |  |  |  |  |  |
| 4. Foreign net purchases (+) of U.S. securities | 70.1 | 36.4 | 2.7 | -3.6 | 17.0 | 20.3 | -33.1 | 13.0 |
| a. Treasury securities | 196.1 | 33.2 | 52.7 | -21.0 | -12.0 | 13.4 | 6.3 | 21.5 |
| b. Agency bonds | -186.2 | -46.6 | -49.0 | 2.9 | 6.7 | -7.2 | -12.1 | -4.5 |
| c. Corporate and municipal bonds | 3.1 | -85.7 | -10.9 | -22.5 | -28.8 | -23.5 | -32.5 | -16.7 |
| d. Corporate stocks ${ }^{5}$ | 57.2 | 135.6 | 9.9 | 37.0 | 51.1 | 37.5 | 5.1 | 12.8 |
| 5. U.S. net acquisitions (-) of foreign securities | 46.5 | -219.7 | -33.5 | -91.3 | -48.0 | -46.9 | -21.8 | -4.8 |
| a. Bonds | 46.8 | -151.1 | -32.4 | -54.3 | -21.1 | -43.3 | -16.5 | -3.4 |
| b. Stocks ${ }^{5}$ | -0.4 | -68.7 | -1.1 | -37.0 | -26.9 | -3.6 | -5.2 | -1.5 |
| Other flows ${ }^{6}$ |  |  |  |  |  |  |  |  |
| 6. U.S. direct investment (-) abroad | -332.0 | -221.0 | -40.9 | -48.1 | -68.5 | -63.5 | $\ldots$ | $\ldots$ |
| 7. Foreign direct investment in the U.S. | 319.7 | 152.1 | 24.0 | 37.0 | 47.5 | 43.6 | $\ldots$ | ... |
| 8. Net derivatives (inflow, +) | -28.9 | 50.8 | 7.2 | 11.3 | 11.5 | 20.8 | ... | $\ldots$ |
| 9. Foreign acquisitions of U.S. currency | 29.2 | 12.6 | 11.8 | -1.9 | 4.2 | -1.4 | ... | $\ldots$ |
| 10. Other (inflow, +)T | 459.2 | -90.7 | 35.3 | 19.2 | -2.2 | -111.8 | ... | $\ldots$ |
| U.S. current account balance ${ }^{\mathbf{6}}$ | -706.1 | -419.9 | -104.2 | -97.7 | -102.3 | -115.6 | ... | ... |
| Capital account balance ${ }^{8}$ | 1.0 | -2.9 | -0.7 | -0.7 | -0.7 | -0.7 | $\ldots$ | ... |
| Statistical discrepancy ${ }^{6}$ | 200.1 | 224.9 | 70.0 | 35.8 | 17.4 | 70.6 | ... | ... |



1. Includes foreign official net purchases of stocks, bonds, short-term securities, and changes in other bank-reported liabilities to foreign official institutions. Return to table

 borrowing and lending under repurchase agreements). Includes changes in custody liabilities other than U.S. Treasury bills. Return to table

2. Includes stocks acquired through nonmarket means such as mergers and reincorporations. Return to table
3. Quarterly data; seasonally adjusted. Return to table
 revisions (in lines 1 through 5 and 8) since publication of the quarterly data in the Survey of Current Business. Return to table
4. Seasonally adjusted; consists of transactions in nonproduced nonfinancial assets and capital transfers. Return to table
... Not applicable.
Source: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Treasury International Capital reports with staff adjustments.

## Foreign Official Financial Inflows (+) through February 2010

(Billions of dollars; monthly rate, not seasonally adjusted)

## Figure: Total

Line chart, 2005 to 2010. There is a horizontal line at zero. There are two series, "Monthly" and " 6 -month moving average". "Monthly" begins in 2005:Q1 at about 18 and generally increases to about 63 by 2006:Q3. It then generally decreases to about -19 by 2007:Q3 and then generally increases to about 110 by 2008:Q1. By 2008:Q4 it has generally decreased to about -10 and by 2009:Q2 it has generally increased to about 57. It then generally decreases to about 22 by February 2010. "6month moving average" begins in 2005:Q1 at about 27 and generally decreases to about 18 by 2005:Q2. It then generally increases to about 45 by 2006 Q2 and then generally decreases to about 35 by 2006:Q4. By 2007:Q1 it has generally increased to about 50 and by 2007:Q3 it has generally decreased to about 22. It then
generally increases to about 65 by 2008:Q2 and then generally decreases to about 8 by 2009:Q1. By 2009:Q3 it has generally increased to about 38 and by February 2010 it has generally decreased to about 30.

## Figure: Treasury Securities

Line chart, 2005 to 2010. There is a horizontal line at zero. There are two series, "Monthly" and " 6 -month moving average". "Monthly" begins in 2005:Q1 at about 11. From 2005:Q1 to 2005:Q3 it fluctuates between about -10 and 18. It then generally increases to about 34 by 2006:Q1 and then generally decreases to about - 30 by 2007:Q3. By 2008:Q4 it has generally increased to about 80 and by 2009:Q1 it has generally decreased to about 22 . It then generally increases to about 59 by 2009:Q4 and then generally decreases to about 29 by February 2010. "6-month moving average" begins in 2005:Q1 at about 17 and generally decreases to about 7 by 2005:Q2. It then generally increases to about 20 by 2006:Q1. From 2006:Q1 to 2006:Q4 it fluctuates between about 15 and 20 . It then generally decreases to about -1 by 2007:Q3 and then generally increases to about 55 by 2009:Q1. By February 2010 it has generally decreased to about 34.

## Figure: Long-Term Agency Securities

Line chart, 2005 to 2010. There is a horizontal line at zero. There are two series, "Monthly" and "6-month moving average". "Monthly" begins in 2005:Q1 at about 8 and generally increases to about 35 by 2007:Q1. It then generally decreases to about -3 by 2007:Q4 and then generally increases to about 37 by 2008:Q1. By 2008:Q4 it has generally decreased to about -40 and by 2009:Q1 it has generally increased to about 10. It then generally decreases to about -13 by $2009: Q 3$ and then generally increases to about 3 by February 2010. "6-month moving average" begins in 2005:Q1 at about 5 and generally increases to about 28 by 2007:Q2. It then generally decreases to about 5 by 2007:Q4 and then generally increases to about 30 by 2008:Q2. By 2008:Q4 it has generally decreased to about -19 and by 2009:Q2 it has generally increased to about 1. It then generally decreases to about -3 by February 2010.

Figure: Foreign Official Balances Held at the Federal Reserve Bank of New York, Daily through April 9, 2010

Line chart, May 2007 to April 2010. There are three series, "Total Balances Including repo", "Treasury securities", and "Agency securities". "Total Balances Including repo" begins in May 2007 at about 1950 and generally increases to about 3050 by April 9, 2010. "Treasury securities" begins in May 2007 at about 1200 and remains relatively stable here until January 2008. It then generally increases to about 2200 by April 9, 2010. "Agency securities" begins in May 2007 at about 700 and generally increases to about 1000 by July 2008. It then generally decreases to about 770 by November 2009 and stays relatively stable here until April 9 , 2010.

Note. Total foreign official inflows consists of net purchases of Treasury securities, long-term agency securities, short-term securities, corporate stocks and bonds, and bank flows.

Source. U.S. Treasury International Capital reports with staff adjustments and the Federal Reserve Bank of New York.

## Private Securities Flows through February 2010

(Billions of dollars; monthly rate, not seasonally adjusted)

## Foreign Net Purchases (+) of U.S. Securities

## Figure: Total

Line chart, 2005 to 2010. There is a horizontal line at zero. There are two series, "Monthly" and " 6 -month moving average". "Monthly" begins in 2005 :Q1 at about 40. From 2005:Q1 to 2006:Q3 it fluctuates between about 0 and 80. It then generally increases to about 150 by 2007:Q2 and then generally decreases to about -80 by 2009:Q1. From 2009:Q1 to February 2010 it fluctuates between about -55 and 50. In February 2010 it's at about 12. "6-month moving average" begins in 2005:Q1 at about 41. From 2005:Q1 to 2006:Q3 it fluctuates between about 40 and 60. It then generally increases to about 95 by 2007:Q2 and then generally decreases to about -5 by 2008:Q3. From 2008:Q3 to February 2010 it fluctuates between about -12 and 15. In February 2010 it's at about 5.

## Figure: Treasury Securities

Line chart, 2005 to 2010. There is a horizontal line at zero. There are two series, "Monthly" and " 6 -month moving average". "Monthly" begins in 2005:Q1 at about 12 and generally decrease to about -40 by 2006:Q2. It then generally increases to about 92 by 2008:Q4 and then generally decreases to about -39 by $2009: Q 1$. From 2009:Q1 to February 2010 it fluctuates between about -40 and 50. In February 2010 it's at about 21. "6-month moving average" begins in 2005:Q1 at about 0 and generally increases to about 20 by 2005:Q2. It then generally decreases to about -15 by 2006:Q2 and then generally increases to about 28 by $2008:$ Q4. By $2009: Q 4$ it has generally decreased to about -8 and by February 2010 it has generally increased to about 9 .

## Figure: Agency Bonds

From 2005:Q1 to 2006:Q3 it fluctuates between about -5 and 15. It then generally decreases to about -19 by 2007:Q1 and then generally increases to about 15 by 2007:Q2. By 2008:Q3 it has generally decreased to about -45 and by 2009:Q2 it has generally increased to about 7. It then generally decreases to about -5 by February 2010. "6-month moving average" begins in 2005:Q1 at about 8 and generally decreases to about -10 by 2007:Q1. It then generally increases to about 5 by 2007:Q3 and then generally decreases to about -30 by 2008:Q3. By 2009:Q3 it has generally increased to about 3 and by February 2010 it has generally increased to about -3 .

## Figure: Corporate and Municipal Bonds

Line chart, 2005 to 2010. There is a horizontal line at zero. There are two series, "Monthly" and "6-month moving average". "Monthly" begins in 2005:Q1 at about 14 and generally increases to about 87 by 2007:Q2. It then generally decreases to about -32 by January 2010 and then generally increases to about -18 by February 2010. "6-month moving average" begins in 2005:Q1 at about 25 and generally increases to about 60 by 2007:Q1. It then generally decreases to about -15 by $2008: Q 4$ and then generally increases to about 3 by 2009:Q2. By February 2010 it has generally decreased to about -14.

## Figure: Corporate Stocks

Line chart, 2005 to 2010. There is a horizontal line at zero. There are two series, "Monthly" and " 6 -month moving average". "Monthly" begins in $2005: Q 1$ at about 12 and generally increases to about 25 by 2006:Q1. It then generally decreases to about -3 by 2006:Q2 and then generally increases to about 43 by 2007:Q2. By 2007:Q3 it has generally decreased to about -32 and by 2007:Q4 it has generally increased to about 39. It then generally decreases to about -7 by $2008: Q 3$ and then generally increases to about 25 by 2009:Q3. By February 2010 it has generally decreased to about 11. "6-month moving average" begins in 2005:Q1 at about 10 and generally decreases to about 3 by 2005:Q3. It then generally increases to about 18 by 2006:Q2 and then generally decreases to about 7 by 2006:Q3. By 2007:Q2 it has generally increased to about 25 and by 2008:Q4 it has generally decreased to about 0 . It then generally increases to about 18 by $2009: Q 4$ and then generally decreases to about 11 by February 2010.

Source: For all figures, U.S. Treasury International Capital reports with staff adjustments.

## U.S. Net Acquisitions (-) of Foreign Securities

Figure: Total

Line chart, 2005 to 2010. There is a horizontal line at zero. There are two series, "Monthly" and "6-month moving average". "Monthly" begins in $2005: Q 1$ at about -11 and generally decreases to about -60 by 2007:Q1. It then generally increases to about 30 by 2008:Q2 and then generally decreases to about -35 by $2009: Q 2$. By February 2010 it has generally increased to about -5 . " 6 -month moving average" begins in 2005:Q1 at about -14 and generally decreases to about -45 by $2007:$ Q2. It then generally increases to about 25 by 2008:Q4 and then generally decreases to about -23 by 2009:Q3. By February 2010 it has generally increased to about -14.

## Figure: Bonds

Line chart, 2005 to 2010. There is a horizontal line at zero. There are two series, "Monthly" and "6-month moving average". "Monthly" begins in 2005:Q1 at about -3 and generally increases to about 15 by 2005:Q3. It then generally decreases to about -45 by 2007:Q1 and then generally increases to about 32 by 2008:Q3. By 2009:Q1 it has generally decreased to about -28 and by February 2010 it has generally increased to about -5. "6-month moving average" begins in 2005:Q1 at about -9 and generally increases to about -4 by 2005:Q4. It then generally decreases to about -30 by 2007:Q2 and then generally increases to about 15 by $2008: Q 4$. By 2009:Q2 it has generally decreased to about -15 and by February 2010 it has generally increased to about -13.

Figure: Stock Purchases \& Swaps

Line chart, 2005 to 2010. There is a horizontal line at zero. There are two series, "Monthly" and "6-month moving average". "Monthly" begins in 2005:Q1 at about -9 and generally decreases to about -25 by 2005:Q4. It then generally increases to about 6 by 2006:Q3 and then generally decreases to about -35 by 2006 :Q4. By 2008:Q4 it has generally increased to about 20 and by 2009:Q2 it has generally decreased to about -14. It then generally increases to about -6 by February 2010. "6month moving average" begins in 2005:Q1 at about -5 and generally decreases to about -19 by 2005:Q4. By 2006:Q3 it has generally increased to about -5 and by 2007:Q1 it has generally decreased to about -20. It then generally increases to about 10 by 2008:Q4 and then generally decreases to about -11 by 2009 :Q3. By February 2010 it has generally increased to about -2.

Source: For all figures, U.S. Treasury International Capital reports with staff adjustments.

| Latest |  | March Greenbook |
| :---: | :---: | :---: |
| Exchange rates* |  |  |
| Euro (\$/euro) | 1.3446 | 1.0 |
| Yen (\#/\$) | 93.280 | 3.8 |
| Sterling (\$/E) | 0.0154 | -2.4 |
| Canadian dollar (C\$/\$) | 0.9984 | -2.6 |
| Nominal dollar indexes*^ |  |  |
| Broad index | 102.2 | -0.7 |
| Major Currencies index | 75.7 | -0.1 |
| OITP index | 130.6 | -1.3 |
| Stock market indexes |  |  |
| DJ Euro Stoxx | 283 | 4.3 |
| Nikkei 225 | 10901 | 3.2 |
| FTSE 100 | 5784 | 3.2 |
| S\&P 500 | 1207 | 5.9 |

* Positive percent change denotes appreciation of U.S. dollar. Return to table
^ Indexed to 100 in Jan. 1997 for the Broad and OITP indexes and Mar. 1973 for the Major Currencies index. Return to table


## Figure: Exchange Value of the Dollar

Line chart, by scale where January 4, $2005=100$, 2005 to 2010. Data are weekly. There are three series, "Major currencies index", "Euro", and "Yen". "Major currencies index" begins in 2005:Q1 at about 100 and generally increases to about 108 by 2005:Q4. It then generally decreases to about 86 by $2008: Q 2$ and then generally increases to about 107 by 2009:Q2. By 2009:Q4 it has generally decreased to about 89 and by 2010:Q2 it has generally increased to about 94 . "Euro" begins in 2005:Q1 at about 100 and generally increases to about 114 by 2005:Q4. It then generally decreases to about 83 by $2008: Q 3$ and then generally increases to about 107 by 2009:Q2. By 2009:Q4 it has generally decreased to about 89 and by 2010:Q2 it has generally increased to about 99 . "Yen" begins in 2005:Q1 at about 100 and generally increases to about 118 by 2007:Q3. It then generally decreases to about 95 by 2008:Q1 and then generally increases to about 105 by $2008: Q 3$. By 2009:Q1 it has generally decreased to about 85 and by 2009:Q2 it has generally increased to about 96. It then generally decreases to about 89 by $2010: Q 2$.

There is a second line chart, December 2009 to April 2010. March 9, 2010=100. Data are daily. The March 2010 Greenbook is marked in the time series. There are three series, "Major currencies index", "Euro", and "Yen". "Major currencies index" begins in early December at about 95 and generally increases to about 99.5 by late December. It then generally decreases to about 97 by January and then increases to about 102 by February. From February to April it fluctuates between about 98.5 and 102. In April it's at about 100. "Euro" begins in early December at about 90 and generally increases to about 95.5 by late December. It then generally decreases to about 93 by January and then generally increases to about 101.5 by April. "Yen" begins in December at about 97 and generally increases to about 104 by early January. It then generally decreases to about 99.5 by late January. From late January to early March it fluctuates between about 97 and 102 . It then generally increases to about 104 by April.

## Figure: Stock Market Indexes

Line chart, by scale where January 4, $2005=100,2005$ to 2010. Data are weekly. There are three series, "DJ Euro Stoxx", "Nikkei 225", and "S\&P 500". "DJ Euro Stoxx" begins in 2005:Q1 at about 100 and generally increases to about 165 by 2007:Q2. It then generally decreases to about 60 by 2009:Q1 and then generally increases to about 105 by 2010:Q2. "Nikkei 225 " begins in 2005:Q1 at about 100 and generally increases to about 150 by early $2006: Q 2$. It then generally decreases to about 125 by late 2006:Q2 and then generally increases to about 155 by 2007:Q3. By 2009:Q1 it has generally decreased to about 60 and by $2010: Q 2$ it has generally increased to about 93. "S\&P 500" begins in 2005:Q1 at about 100 and remains relatively stable here until 2006:Q3. It then generally increases to about 130 by 2007:Q3 and then generally decreases to about 55 by 2009:Q1. By 2010:Q2 it has generally increased to about 100.

There is a second line chart, December 2009 to April 2010. March 9, 2010=100. Data are daily. The March 2010 Greenbook is marked in the time series. There are three series, "DJ Euro Stoxx", "Nikkei 225", and "S\&P 500". "DJ Euro Stoxx" begins in December at about 98.5 and generally increases to about 104 by January. It then generally decreases to about 91 by February and then generally increases to about 104.5 by April. "Nikkei 225 " begins in December at about 90.5 and generally increases to about 104.5 by January. It then generally decreases to about 94 by February and then generally increases to about 107.5 by early April. By late April it has decreased to about 105. "S\&P 500" begins in December at about 97.5 and generally increases to about 100.5 by January. It then generally decreases to about 94 by February and then generally increases to about 106 by April.

Industrial Countries: Nominal and Real Interest Rates

|  | Latest | Change since <br> Mar. Greenbook | Latest | Change since <br> Mar. Greenbook | Latest | Change since <br> Mar. Greenbook |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Germany | 0.58 | -0.02 | 3.10 | -0.03 | 0.69 | -0.07 |
| Japan | 0.24 | -0.01 | 1.33 | 0.02 | 1.34 | -0.35 |
| United Kingdom | 0.65 | 0.01 | 4.02 | -0.03 | 0.70 | -0.19 |
| Canada | 0.43 | 0.04 | 3.71 | 0.20 | $\ldots$ | $\ldots$ |
| United States | 0.31 | 0.05 | 3.82 | 0.11 | 1.51 | -0.06 |

... Not applicable.
Libor: London interbank offered rate. Return to table

## Figure: Nominal 10-Year Government Bond Yields

Line chart, by percent, 2005 to 2010. Data are weekly. There are three series, "Germany", "Japan", and "United States". "Germany" begins in 2005:Q1 at about 3.7 and generally decreases to about 3 by 2005:Q3. It then generally increases to about 4.7 by 2007:Q2 and then generally decreases to about 3.75 by $2008: Q 1$. By 2008:Q3 it has generally increased to about 4.8 and by 2009:Q1 it has generally decreased to about 2.8. From 2009:Q1 to 2010:Q2 it fluctuates between about 2.8 and 3.7 and by 2010:Q2 it is at about 3.1. "Japan" begins in 2005:Q1 at about 1.4 and generally increases to about 2 by $2006: Q 2$. It then generally decreases to about 1.3 by 2010:Q2. "United States" begins in 2005:Q1 at about 4.25 and generally increases to about 5.2 by 2006:Q3. It then generally decreases to about 3.3 by 2008:Q1 and then generally increases to about 4.2 by 2008:Q2. It then generally decreases to about 2.1 by 2008:Q4 and then generally increases to about 3.8 by 2010:Q2.

There is a second line chart, December 2009 to April 2010. Data are daily. The March 2010 Greenbook is marked in the time series. There are three series, "Germany", "Japan" and "United States". "Germany" begins in early December at about 3.2 and generally increases to about 3.45 by late December. It then generally decreases to about 3.1 by early March and remains relatively constant here until the end of the series. "Japan" begins in December at about 1.25 . From December to April it fluctuates between about 1.2 and 1.4. By mid-April it's at about 1.35. "United States" begins in early December at about 3.35 and generally increases to about 3.8 by late December. It then generally decreases to about 3.6 by January. From January to March it fluctuates between about 3.6 and 3.75 . It then generally increases to about 4 by early April and then decreases to about 3.8 by mid-April.

## Figure: Inflation-Indexed 10-Year Government Bond Yields

Line chart, by percent, 2005 to 2010. Data are weekly. There are three series, "France", "Japan", and "United States". "France" begins in 2005:Q1 at about 1.4 and generally decreases to about 0.9 by 2005:Q3. It then generally increases to about 2.5 by 2007:Q2 and then generally decreases to about 1.2 by 2008:Q1. By 2008:Q4 it has generally increased to about 2.8 and by 2010:Q2 it has generally decreased to about 0.5. "Japan" begins in 2005:Q1 at about 0.6 and generally decreases to about 0.4 by 2005:Q2. It then generally increases to about 1.1 by 2008:Q2 and then generally decreases to about 0.9 by $2008: Q 3$. By 2008:Q4 it has generally increased to about 4.9 and by 2010:Q2 it has generally decreased to about 1.25. "United States" begins in 2005:Q1 at about 1.75 and generally increases to about 2.6 by 2006:Q2. It then generally decreases to about 2.1 by 2006:Q4 and then generally increases to about 2.8 by 2007:Q2. By 2008:Q1 it has generally decreased to about 1.1 and by 2008:Q4 it has increased to about 3.5. It then generally decreases to about 1.5 by 2010:Q2.

There is a second line chart, December 2009 to April 2010. Data are daily. The March 2010 Greenbook is marked in the time series. There are three series, "France", "Japan" and "United States". "France" begins in December at about 0.75 . From December to February it fluctuates between about 0.6 and 0.85 . It then generally decreases to about 0.3 by late March and then generally increases to about 0.55 by mid-April. "Japan" begins in early December at about 2.0 and generally increases to about 2.05 by mid-December. It then generally decreases to about 1.5 by late January and then generally increases to about 1.7 by March. By mid-April it has generally decreased to about 1.3. "United States" begins in early December at about 1.25 and generally increases to about 1.6 by late December. It then generally decreases to about 1.35 by February and then generally increases to about 1.75 by early April. By mid-April it has generally decreased to about 1.5 .

## Measures of Market Volatility

## Figure: Dollar-Euro Options-Implied Volatility

Line chart, by percent, 2005 to 2010. Data are weekly. There are two series, "1-month" and "3-month". They track closely together throughout the chart. They begin in 2005:Q1 at about 11 and generally decrease to about 5 by 2007:Q2. They then generally increase to about 12.5 by $2008:$ Q1 and then generally decreases to about 8 by 2008:Q3. By 2008:Q4 they have generally increased to about 27.5 and by 2010:Q2 they have generally decreased to about 10 .

There is a second line chart, December 2009 to April 2010. Data are daily. The March 2010 Greenbook is marked in the time series. There are two series, "1-month" and "3-month". "1-month" begins in early December at about 10.7 and generally decreases to about 9.7 by mid-December. It then generally increases to about 11.2 by late December. It then generally decreases to about 9.75 by mid-January and then generally increases to about 12.6 by early February. By mid-March it has generally decreased to about 9.0 and by late March it has generally increased to about 11.0. It then generally decreases to about 10.0 by mid-April. " $3-\mathrm{month}$ " begins in early December at about 12.3 and generally decreases to about 11.55 by mid-December. By late December it has generally increased to about 12.5 . It then generally decreases to about 10.4 by January and then generally increases to about 12.75 by February. By mid-March it has generally decreased to about 10.0 and by late March it has generally increased to about 11.6. It then generally decreases to about 10.6 by mid-April.

Line chart, by percent, 2005 to 2010. Data are weekly. There are two series, "1-month" and "3-month". "1-month" begins in 2005:Q1 at about 10 and generally decreases to about 6 by 2007:Q2. It then generally increases to about 18 by 2008:Q1 and then generally decreases to about 10 by $2008: Q 3$. By 2008:Q4 it has generally increased to about 34 and by 2010:Q2 it has generally decreased to about 10. "3-month" begins in 2005:Q1 at about 10 and generally decreases to about 6 by 2007:Q2. It then generally increases to about 15 by 2008:Q1 and then generally decreases to about 10 by 2008:Q3. By 2008:Q4 it has generally increased to about 25 and by 2010:Q2 it has generally decreased to about 11 .

There is a second line chart, December 2009 to April 2010. Data are daily. The March 2010 Greenbook is marked in the time series. There are two series, "1-month" and "3-month". "1-month" begins in early December at about 13.25 and generally decreases to about 12.2 within a few days. By late December it has generally increased to about 14.1 and by mid-January it has generally decreased to about 11.5. It then generally increases to about 13.4 by February and then generally decreases to about 10.0 by mid-March. By early April it has generally increased to about 11.25 and by mid-April it has generally decreased to about 10.0. " 3 -month" begins in early December at about 13.75 and generally increases to about 15 by late December. By mid-January it has generally decreased to about 12.7 . It then generally increases to about 13.6 by early February and then generally decreases to about 10.8 by March. By early April it has generally increased to about 12.0 and by mid-April it has generally decreased to about 11.0.

Note. Yen-Dollar Options-Implied Volatility is annualized volatility derived from at-the-money options.

## Figure: Realized Stock Market Volatility

Line chart, by percent, 2005 to 2010. Data are weekly. There are three series, "DJ Euro Stoxx", "Nikkei 225", and "S\&P 500". "DJ Euro Stoxx" begins in 2005:Q1 at about 10 and remains relatively stable here until 2006:Q2. It then generally increases to about 22 by 2006:Q3 and then generally decreases to about 9 by $2006: Q 4$. By early 2008:Q2 it has generally increased to about 31 and by late 2008:Q2 it has generally decreased to about 15 . It then generally increases to about 60 by 2008:Q4 and then generally decreases to about 18 by 2010:Q2. "Nikkei 225 " begins in 2005:Q1 at about 16 and generally increases to about 25 by 2006 :Q3. It then generally decreases to about 10 by 2007:Q1 and then generally increases to about 35 by 2008:Q1. By 2008:Q3 it has generally decreased to about 20 and by 2008:Q4 it has generally increased to about 75. It then generally decreases to about 20 by 2010:Q2. "S\&P 500" begins in 2005 :Q1 at about 10 and remains relatively stable here until 2007:Q1. By early 2008:Q2 it has generally increased to about 27 and by late 2008:Q2 it has generally decreased to about 15 . It then generally increases to about 73 by 2008:Q4 and then generally decreases to about 12 by 2010:Q2.

There is a second line chart, December 2009 to April 2010. Data are daily. The March 2010 Greenbook is marked in the time series. There are three series, "DJ Euro Stoxx", "Nikkei 225", and "S\&P 500". "DJ Euro Stoxx" begins in December at about 21 and generally decreases to about 17 by late January. By early February it has generally increased to about 19.5 and by late February it has generally decreased to about 16.5. It then generally increases to about 17.5 by April. "Nikkei 225 " begins in early December at about 19.5 and generally increases to about 21 by mid-December. It then generally decreases to about 18 by early January. By February it has generally increased to about 22 and by April it has generally decreased to about 15 . "S\&P 500" begins in December at about 17 and generally decreases to about 13 by early February. It then generally increases to about 15 within a few days and then generally decreases to about 12.8 by April.

Note. Realized Stock Market Volatility is an annualized standard deviation of 60-day window of daily returns.
Figure: Realized 10-Year Bond Volatility
Line chart, by percent, 2005 to 2010. Data are weekly. There are three series, "Germany", "Japan", and "United States". "Germany" begins in 2005:Q1 at about 4 and remains relatively stable here until 2006:Q4. It then generally decreases to about 2.5 by 2007:Q1 and then generally increases to about 10 by 2009:Q1. By 2010:Q2 it has generally decreased to about 4.0. "Japan" begins in 2005:Q1 at about 4 and generally increases to about 6 by $2006: Q 2$. It then generally decreases to about 2.5 by 2007:Q2 and then generally increases to about 6.5 by 2008:Q3. By 2010:Q2 it has generally decreased to about 2. "United States" begins in 2005:Q1 at about 6 and generally decreases to about 4 by 2006:Q3. It then generally increases to about 11.5 by 2008:Q2 and then generally decreases to about 7.5 by $2008: Q 3$. By 2008:Q4 it has generally increased to about 16 and by 2010:Q2 it has generally decreased to about 6.0.

There is a second line chart, December 2009 to April 2010. Data are daily. The March 2010 Greenbook is marked in the time series. There are three series, "Germany", "Japan", and "United States". "Germany" begins in early December at about 6 and remains constant here until late December. It then generally decreases to about 4 by early February and remains relatively constant here until the end of the series in April. "Japan" begins in early December at about 3 and remains constant here until early February. It then generally decreases to about 2 by April. "United States" begins in December at about 8.0 and generally decreases to about 7 by April.

Note. Realized 10-Year Bond Volatility is an annualized standard deviation of 60 -day window of daily returns.

Emerging Markets: Exchange Rates and Stock Market Indexes

|  | Exchange value of the dollar |  | Stock market index |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percent change since |  |  | Percent change since |
|  | Latest |  | Latest |  |
|  | Mar. Greenbook* |  |  | Mar. Greenbook |
| Mexico | 12.2220 | -3.2 | 33813 | 4.0 |
| Brazil | 1.7509 | -2.2 | 69318 | -0.4 |
| China | 6.8253 | -0.0 | 2980 | -2.9 |


| Hong Kong | 7.7634 | 0.0 | 21623 | 2.0 |
| :--- | ---: | ---: | ---: | ---: |
| Korea | 1117.8 | -1.5 | 1718 | 3.4 |
| Thailand | 32.16 | -1.7 | 766 | 6.5 |

* Positive percent change denotes appreciation of U.S. dollar. Return to table

Figure: Exchange Value of the Dollar

Line chart, 2005 to 2010. January 4, 2005=100. Data are weekly. There are four series, "Mexico", "Brazil", "Korea", and "China". "Mexico" begins in 2005:Q1 at about 100. From 2005:Q1 to 2007:Q4 it fluctuates between about 93 and 105. It then generally decreases to about 85 by $2008: Q 3$ and then generally increases to about 140 by 2009:Q1. By 2010:Q2 it has generally decreased to about 107. "Brazil" begins in 2005:Q1 at about 100 and generally decreases to about 60 by 2008:Q3. It then generally increases to about 92 by 2008:Q4 and then generally decreases to about 67 by 2010:Q2. "Korea" begins in 2005:Q1 at about 100. From 2005:Q1 to 2005:Q4 it fluctuates between about 95 and 100. It then generally decreases to about 90 by 2006:Q2 and remains relatively stable here until 2007:Q4. It then generally increases to about 150 by 2009:Q1 and then generally decreases to about 107 by 2010:Q2. "China" begins in 2005:Q1 at about 100 and generally decreases to about 83 by 2008:Q3. It remains constant here at 83 until 2010:Q2.

There is a second line chart, December 2009 to April 2010. March 9, 2010=100. Data are daily. The March 2010 Greenbook is marked in the time series. There are four series, "Mexico", "Brazil", "Korea", and "China". "Mexico" begins in early December at about 101.7 and generally increases to about 103.7 by late December. By early January it has generally decreased to about 99.9 and by early February it has generally increased to about 105.5. It then generally decrease to about 98.5 by April. "Brazil" begins in early December at about 96.3 and generally increases to about 100.1 by December. It then generally decreases to about 96 by early January. By February it has increased to about 105.5 and by April is has generally decreased to about 96.3 . "Korea" begins in early December at about 101.3 and generally increases to about 104.5 by mid-December. By January has generally decreased to about 99 . It then generally increases to about 103 by February and then generally decreases to about 97.5 by April. "China" begins in December at about 100 and remains constant here through April.

## Figure: Stock Market Indexes

Line chart, 2005 to 2010. January 4, 2005=100. Data are weekly. There are four series, "Mexico", "Brazil", "Korea", and "Hong Kong". "Mexico" begins in 2005:Q1 at about 100 and generally increases to about 250 by 2007:Q3. From 2007:Q3 to 2008:Q2 it fluctuates between about 205 and 250 . It then generally decreases to about 125 by mid-2008:Q4 and then generally increases to about 175 by late 2008:Q4. By 2009:Q1 it has generally decreased to about 125 and by 2010:Q2 it has generally increased to about 260. "Brazil" begins in 2005:Q1 at about 100 and generally increases to about 170 by early 2006:Q2. It then generally decreases to about 130 by late 2006:Q2 and then generally increases to about 290 by 2008:Q2. By 2008:Q4 it has generally decreased to about 125 and by $2010: Q 2$ it has generally increased to about 270. "Korea" begins in 2005:Q1 at about 100 and generally increases to about 160 by early 2006:Q2. It then generally decreases to about 135 by late 2006:Q2 and then generally increases to about 225 by 2007:Q4. By 2008:Q4 it has generally decreased to about 115 and by $2010: Q 2$ it has generally increased to about 195. "Hong Kong" begins in 2005:Q1 at about 100 and generally increases to about 220 by 2007:Q4. It then generally decreases to about 80 by $2009: Q 1$ and then generally increases to about 150 by 2010:Q2.

There is a second line chart, December 2009 to April 2010. March 9, 2010=100. Data are daily. The March 2010 Greenbook is marked in the time series. There are four series, "Mexico", "Brazil", "Korea", and "Hong Kong". "Mexico" begins in December at about 98 and generally increases to about 102.5 by mid-January. It then generally decreases to about 93 by late January and then generally increases to about 104 by April. "Brazil" begins in December at about 100 and generally decreases to about 95 by late December. It then generally increases to about 103.5 by early January. By early February it has generally decreased to about 91 and by April is has generally increased to about 100.5. "Korea" begins in early December at about 94.5 and generally increases to about 104 by mid-January. By February it has generally decreased to about 92 and by April it has generally increased to about 105. "Hong Kong" begins in early December at about 104.5 and generally increase to about 106.5 within a few days. It then generally decreases to about 99 by mid-December and by early January it has generally increased to about 105.5 . It then generally decreases to about 94 by late January and then generally increases to about 101.5 by April.

## Emerging Markets: Short-Term Interest Rates and Dollar-Denominated Bond Spreads

Percent

|  | Short-term interest rates* |  | Dollar-denominated bond spreads** |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Latest | Change since Mar. Greenbook | Latest | Change since Mar. Greenbook |
| Mexico | 4.46 | 0.02 | 1.27 | -0.05 |
| Brazil | 8.95 | -0.18 | 1.76 | -0.09 |
| Argentina | 10.69 | -0.13 | 6.19 | -0.89 |
| China | ... | $\ldots$ | 0.26 | -0.62 |
| Korea | 2.10 | 0.00 | - | $\ldots$ |
| Taiwan | 1.23 | -0.01 | $\ldots$ | $\ldots$ |
| Singapore | 0.25 | -0.06 | $\ldots$ | $\ldots$ |
| Hong Kong | 0.09 | 0.01 | $\ldots$ | $\ldots$ |

[^14]
## Figure: EMBI+ Spreads

Line chart, by percent, 2005 to 2010. Data are weekly. There are three series, "Overall", "Mexico", and "Brazil". "Overall" begins in 2005:Q1 at about 3.75 and generally decreases to about 1.5 by 2007:Q2. It then generally increases to about 8.0 by 2008:Q4 and then generally decreases to about 2.3 by 2010 :Q2. "Mexico" begins in 2005:Q1 at about 1.75 and generally decreases to about 0.8 by 2007:Q2. It then generally increases to about 5.5 by $2008: Q 4$ and then generally decreases to about 1.2 by 2010:Q2. "Brazil" begins in 2005:Q1 at about 4.0 and generally decreases to about 1.5 by 2007:Q2. It then generally increases to about 3.0 by 2008:Q1 and then generally decreases to about 1.75 by 2008:Q2. By 2008:Q4 it has generally increased to about 5.9 and by 2010:Q2 it has generally decreased to about 1.8.

There is a second line chart, December 2009 to April 2010. Data are daily. The March 2010 Greenbook is marked in the time series. There are three series, "Overall", "Mexico", and "Brazil". "Overall" begins in December at about 3.15 and generally decreases to about 2.6 by early January. It then generally increases to about 3.25 by early February and then generally decreases to about 2.35 by April. "Mexico" begins in December at about 1.7 and generally decreases to about 1.5 by early January. It then generally increases to about 2.1 by early February and then generally decreases to about 1.25 by April. "Brazil" begins in December at about 2.2 and generally decreases to about 1.9 by early January. It then generally increases to about 2.45 by early February and then generally decreases to about 1.75 by April.

## Figure: EMBI Global Spreads

Line chart, by percent, 2005 to 2010. Data are weekly. There are three series, "China", "Malaysia", and "Indonesia". "China" begins in 2005:Q1 at about 0.6 and remains relatively constant here until 2007:Q3. It then generally increases to about 3.0 by 2008:Q4 and then generally decreases to about 0.2 by 2010:Q2. "Malaysia" begins in 2005:Q1 at about 0.8 and remains relatively constant here until 2007:Q3. It then generally increases to about 5.0 by $2008: Q 4$ and then generally decreases to about 1.0 by 2010:Q2. "Indonesia" begins in 2005:Q1 at about 2.4 and generally increases to about 3.2 by 2005:Q2. It then generally decreases to about 1.5 by 2007:Q2 and then generally increases to about 10.5 by 2008:Q4. By 2010:Q2 it has generally decreased to about 1.9.

There is a second line chart, December 2009 to April 2010. Data are daily. The March 2010 Greenbook is marked in the time series. There are three series, "China", "Malaysia", and "Indonesia". "China" begins in December at about 0.8 and generally decreases to about 0.3 by early January. It then generally increases to about 1.1 by early February and then generally decreases to about 0.25 by April. "Malaysia" begins in December at about 1.65 and generally decreases to about 1.1 by early January. It then generally increases to about 1.65 by mid-February and then generally decreases to about 0.5 by late March. By early April it has generally increased to about 1.8 and by mid-April it has generally decreased to about 1.2. "Indonesia" begins in early December at about 3.1 and generally decreases to about 2.3 by late December. By mid-February it has generally increased to about 2.9 and by April it has generally decreased to about 1.9.

## Advanced Foreign Economies

## Figure: Average Real Gross Domestic Product

Line chart, by annualized percent change, 2002 to 2009. Data are quarterly. There is a horizontal line at zero. The series begins in 2002 at about 3.0 and generally decreases to about 0.5 by mid-2003. It then generally increases to about 3.5 by late 2003 and then generally decreases to about 1.5 by early 2005 . By mid- 2005 it has generally increased to about 3.3 and by mid-2006 it has generally decreased to about 1.5. It then generally increases to about 3.5 by early 2007 and then generally decreases to about -8.5 by early 2009. By late 2009 it has increased to about 3.0.

Note. Chain weighted by moving bilateral shares in U.S. merchandise exports.
Source. FRB staff calculations.

## Figure: Consumer Prices

Line chart, by 12-month percent change, 2002 to 2010. Data are monthly. There is a horizontal line at zero. There are four series, "Japan", "Euro area", "Canada", and "United Kingdom". "Japan" begins in 2002 at about -1.5 and generally increases to about 1.0 by late 2004. It then generally decreases to about -1.5 by late 2005 and then generally increases to about 1.0 by mid-2006. By late 2007 it has generally decreased to about -0.5 and by mid- 2008 it has generally increased to about 2.3 . It then generally decreases to about -2.75 by late 2009 and then generally increases to about -1.2 by early 2010. "Euro area" begins in early 2002 at about 2.6 . From early 2002 to mid-2007 it fluctuates between about 1.5 and 2.6. It then generally increases to about 4.0 by mid-2008 and then generally decreases to about -0.8 by mid-2009. By early 2010 it has generally increased to about 1.5. "Canada" begins in early 2002 at about 1.3 and generally increases to about 4.5 by early 2003 . It then generally decreases to about 0.5 by early 2004 and then increases to about 2.5 by mid-2004. From mid-2004 to mid-2006 it fluctuates between about 1.5 and 3.5. It then generally decreases to about 0.7 by late 2006 and then generally increases to about 3.5 by late 2008. By mid-2009 it has generally decreased to about -1.0 and by early 2010 it has generally increased to about 1.6. "United Kingdom" begins in 2002 at about 1.6 and generally increases to about 3.0 by early 2007 . It then generally decreases to about 1.75 by mid- 2007 and then generally increases to about 5.2 by mid-2008. By late 2009 it has generally decreased to about 1.0 and by early 2010 it has generally increased to about 3.4.

Source. Haver Analytics

## Figure: Official or Targeted Interest Rates

Line chart, by percent, 2002 to 2010. There is a horizontal line at zero. There are four series, "Japan", "Euro area", "Canada", and "United Kingdom". "Japan" begins in 2002 at about 0 and remains constant here until mid-2006. It then generally increases to about 0.5 by early 2007 and remains constant here until late 2008 . It then
decreases to about 0.1 by early 2009 and remains constant here until early 2010. "Euro area" begins in early 2002 at about 3.25 and remains constant here until late 2002. It then decreases to about 2.0 by mid-2003 and remains constant here until late 2005 . By mid-2008 it has increased to about 4.25 and by mid-2009 it has decreased to about 1.0. It remains constant here at 1.0 until early 2010. "Canada" begins in early 2002 at about 2.25 and generally increases to about 3.25 by early 2003. It then decreases to about 2.0 by mid-2004 and then increases to about 4.5 by mid-2007. By mid-2009 it has decreased to about 0.25 and remains constant here until early 2010. "United Kingdom" begins in 2002 at about 4.0 and remains constant here until early 2003. By mid-2003 it has generally decreased to about 3.5 and by mid-2004 it has generally increased to about 4.75. It remains constant here at 4.75 until mid- 2005 when it decreases to about 4.5 . It remains constant here at 4.5 until mid-2006. It then increases to about 5.75 by mid- 2007 and then decreases to about 0.5 by early 2009. It remains constant here at 0.5 until early 2010 .

Source. Bloomberg

## Japanese Real GDP

(Percent change from previous period except as noted, annual rate)

| Component | $2008{ }^{1}$ | $2009{ }^{1}$ | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q1 | Q2 | Q3 | Q4 |
| GDP | -4.3 | -1.4 | -13.7 | 6.0 | -. 6 | 3.8 |
| Total domestic demand | -1.8 | -3.3 | -11.3 | -1.1 | -1.9 | 1.5 |
| Consumption | -1.8 | 1.1 | -5.2 | 4.6 | 2.4 | 2.8 |
| Private investment | -5.3 | -15.7 | -29.5 | -18.7 | -12.9 | 1.2 |
| Public investment | -8.7 | 7.4 | 15.3 | 28.9 | -5.8 | -5.0 |
| Government consumption | -. 5 | 1.8 | 3.2 | 1.1 | . 3 | 2.5 |
| Inventories ${ }^{\text {2 }}$ | . 5 | -1.5 | -3.3 | -1.4 | -. 8 | -. 5 |
| Exports | -13.4 | -5.3 | -66.3 | 42.2 | 37.8 | 21.7 |
| Imports | . 9 | -15.5 | -53.9 | -14.7 | 23.3 | 5.1 |
| Net exports ${ }^{2}$ | -2.3 | 1.0 | -5.4 | 5.9 | 2.1 | 2.2 |

## 1. Q4/Q4. Return to table

2. Percentage point contribution to GDP growth. Return to table

Source: Haver Analytics.

Japan

## Figure: Economic Activity

Line chart, by scale where $2005=100,2002$ to 2010. There are two series, "Industrial production" and "Tertiary services". "Industrial production" begins in 2002 at about 87.5 and generally increases to about 111 by 2007. It then generally decreases to about 70 by early 2009 and then increases to about 94 by early 2010. "Tertiary services" begins in 2002 at about 95.5 and generally increases to about 103.5 by 2007. It then generally decreases to about 94 by early 2009 and then generally increases to about 98 by early 2010.

Source. Haver Analytics

## Figure: Real Trade

Line chart, by scale where $2005=100,2002$ to 2010 . There are two series, "Real exports" and "Real imports". "Real exports" begins in 2002 at about 73 and generally increases to about 136 by early 2008. It then generally decreases to about 75 by early 2009 and then generally increases to about 110 by early 2010 . "Real imports" begins in 2002 at about 82 and generally increases to about 110 by early 2007. From early 2007 to late 2008 it fluctuates between about 100 and 110 . It then generally decreases to about 81 by early 2009 and then increases to about 98 by early 2010 .

Source. Haver Analytics
Figure: Labor Market

Line chart, 2002 to 2010. There are two series, "Unemployment rate" which is measured by percent and "Job openings to applications" which is measured by ratio. "Unemployment rate" begins in early 2002 at about 5.25 and generally increases to about 5.5 by mid-2002. It then generally decreases to about 3.55 by mid- 2007 and then generally increases to about 5.75 by mid-2009. By early 2010 it has generally decreased to about 4.85 . "Job openings to applications" begins in 2002 at about 0.5 and generally increases to about 1.08 by 2006. It then generally decreases to about 0.475 by early 2010 .

Line chart, 2002 to 2010. By percent, 12-month basis, n.s.a. There is a horizontal line at zero. There are two series, "Consumer price inflation" and "Core". "Consumer price inflation" begins in 2002 at about -1.4 and generally increases to about 1.0 by late 2004 . It then generally decreases to about -1.1 by late 2005 and then generally increases to about 1.05 by 2006. By 2007 it has generally decreased to about -0.25 and by 2008 it has generally increased to about 2.5 . It then generally decreases to about -2.8 by late 2009 and then generally increases to about -1.1 by early 2010. "Core" begins in 2002 at about -0.8 and generally increases to about -0.2 by 2003. It then generally decreases to about -0.9 by 2004 and then generally increases to about 0.1 by 2008 . By early 2010 it has generally decreased to about -1.25.

Note. Core excludes all food and energy; staff calculation
Source. Haver Analytics

Economic Indicators
(Percent change from previous period except as noted)

| Indicator | 2009 |  | $\begin{gathered} 2010 \\ \text { Q1 } \end{gathered}$ | 2009 <br> Dec. | 2010 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q3 | Q4 |  |  | Jan. | Feb. | Mar. |
| Housing starts | -7.2 | 11.0 | n.a. | 3.3 | 5.4 | -7.9 | n.a. |
| Machinery orders ${ }^{1}$ | -. 9 | . 5 | n.a. | 20.1 | -3.7 | -5.4 | n.a. |
| Household expenditures | . 6 | . 9 | n.a. | . 9 | . 3 | -. 0 | n.a. |
| New car registrations | 19.8 | 9.0 | -3.1 | . 9 | -1.2 | -6.0 | . 6 |
| Business sentiment ${ }^{2}$ | -38.0 | -32.0 | -24.0 | $\ldots$ | $\ldots$ | $\ldots$ | ... |
| Wholesale prices ${ }^{\underline{3}}$ | -8.3 | -5.2 | -1.7 | -3.8 | -2.2 | -1.6 | -1.3 |

1. Private sector, excluding ships and electric power. Return to table
2. Tankan survey, diffusion index. Level. Return to table
3. Percent change from year earlier; not seasonally adjusted. Return to table
n.a. Not available.
... Not applicable.
Source: Haver Analytics.

## Euro-Area Real GDP

(Percent change from previous period except as noted, annual rate)

| Component | $2008{ }^{1} 2009{ }^{1}$ |  | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q1 | Q2 | Q3 | Q4 |
| GDP | -1.9 | -2.2 | -9.5 | -. 5 | 1.6 | . 2 |
| Total domestic demand | -. 4 | -2.9 | -8.7 | -3.2 | 1.6 | -. 9 |
| Consumption | -. 7 | -. 6 | -1.9 | . 3 | -. 5 | -. 2 |
| Investment | -6.0 | -8.8 | -19.3 | -6.2 | -3.7 | -5.2 |
| Government consumption | 2.4 | 1.8 | 2.2 | 2.6 | 3.0 | -. 4 |
| Inventories ${ }^{\text {² }}$ | . 8 | -1.0 | -4.0 | -2.5 | 2.0 | . 5 |
| Exports | -7.0 | -4.6 | -28.4 | -4.1 | 12.1 | 7.6 |
| Imports | -3.8 | -6.3 | -27.0 | -10.6 | 12.2 | 5.1 |
| Net exports ${ }^{2}$ | -1.5 | . 7 | -. 8 | 2.7 | . 1 | 1.0 |
| Memo: GDP of selected countries |  |  |  |  |  |  |
| France | -1.7 | -. 3 | -5.2 | 1.1 | . 9 | 2.4 |
| Germany | -1.8 | -2.4 | -13.4 | 1.8 | 2.9 | . 0 |
| Italy | -3.3 | -3.0 | -10.4 | -1.9 | 2.1 | -1.3 |

[^15]Source: Haver Analytics.

## Euro Area

## Figure: Nominal Exports and Imports

Line chart, by billions of U.S. dollars, 2002 to 2010. There are two series, "Exports" and "Imports". "Exports" begins in 2002 at about 77 and generally increases to about 224 by 2008. It then generally decreases to about 127 by early 2009 and then generally increases to about 160 by early 2010 . "Imports" begins in 2002 at about 72 and generally increases to about 226 by 2008. It then generally decreases to about 127 by early 2009 and then generally increases to about 152 by early 2010 .

## Source. Haver Analytics

## Figure: Economic Sentiment

Line chart, by percent balance, 2002 to 2010. There is a horizontal line at zero. There are two series, "Consumer confidence" and "Industrial confidence". "Consumer confidence" begins in 2002 at about -10 and generally decreases to about -22 by 2003 . It then generally increases to about 0 by 2007 and then generally decreases to about -35 by 2009. By early 2010 it has generally increased to about -17.5. "Industrial confidence" begins in early 2002 at about -15 and generally increases to about -8 by mid-2002. It then generally decreases to about -13 by 2003 and then generally increases to about -3 by 2004 . By 2005 it has generally decreased to about -10 and by 2007 it has generally increased to about 7 . It then generally decreases to about -38 by 2009 and then generally increases to about -10 by early 2010 .

Source. Haver Analytics

## Figure: Unemployment Rate

Line chart, by percent, 2002 to 2010 . The series begins in 2002 at about 8.0 and generally increases to about 9.0 by 2005 . It then generally decreases to about 7.1 by 2008 and then generally increases to about 10 by early 2010.

Source. Haver Analytics

## Figure: Consumer Price Inflation

Line chart, 2002 to 2010. By percent, 12-month basis, n.s.a. There is a horizontal line at zero. There are two series, "Consumer price inflation" and "Core". "Consumer price inflation" begins in 2002 at about 2.6 and generally decreases to about 1.5 by early 2004. It then generally increases to about 2.6 by mid- 2004 . From mid- 2004 to mid-2006 it fluctuates between about 1.9 and 2.7. It then generally decreases to about 1.4 by late 2006 and then generally increases to about 4.1 by 2008 . By 2009 it has generally decreased to about -0.95 and by early 2010 it has generally increased to about 1.4. "Core" begins in 2002 at about 2.45 and generally decreases to about 1.7 by 2003. It then generally increases to about 2.2 by 2004 and then generally decreases to about 1.3 by early 2006 . By early 2007 it has generally increased to about 1.9 and by early 2010 it has generally decreased to about 1.0.

Note. Core excludes all food and energy; staff calculations
Source. Haver Analytics

Economic Indicators
(Percent change from previous period except as noted)

| Indicator | 2009 |  | 2010 | 2009 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q3 | Q4 | Q1 | Dec. | Jan. | Feb. | Mar. |
| Industrial production ${ }^{1}$ | . 8 | 2.0 | n.a. | . 8 | 1.6 | . 9 | n.a. |
| Retail sales volume $\underline{\underline{2}}$ | -. 2 | -. 0 | n.a. | . 8 | -. 3 | -. 6 | n.a. |
| New car registrations | 2.6 | 1.0 | -6.6 | -1.7 | -9.2 | 2.8 | 7.2 |
| Employment | -. 5 | -. 3 | n.a. | ... | $\ldots$ | $\ldots$ | $\ldots$ |
| Producer prices ${ }^{3}$ | -7.1 | -4.1 | n.a. | -2.2 | -. 6 | . 0 | n.a. |
| M3 ${ }^{3}$ | 2.7 | -. 3 | n.a. | -. 7 | -. 8 | -1.2 | n.a. |

1. Excludes construction. Return to table
2. Excludes motor vehicles. Return to table
3. Eurostat harmonized definition. Percent change from year earlier. Return to table
n.a. Not available.
... Not applicable.
Source: Haver Analytics

## U.K. Real GDP

| Component | $2008{ }^{1}$ | $2009{ }^{1}$ | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q1 | Q2 | Q3 | Q4 |
| GDP | -2.1 | -3.1 | -10.0 | -2.7 | -1.1 | 1.8 |
| Total domestic demand | -3.4 | -2.7 | -9.3 | -3.9 | -. 3 | 3.1 |
| Consumption | -. 9 | -2.2 | -6.2 | -3.4 | -. 2 | 1.2 |
| Investment | -9.1 | -14.0 | -26.3 | -25.9 | 11.8 | -10.3 |
| Government consumption | 3.3 | 2.2 | -1.6 | 3.7 | 2.5 | 4.2 |
| Inventories ${ }^{\text {² }}$ | -2.1 | . 5 | -. 5 | 2.3 | -2.4 | 2.9 |
| Exports | -3.6 | -4.8 | -25.7 | -6.8 | 2.4 | 16.0 |
| Imports | -8.1 | -3.8 | -23.6 | -11.1 | 4.9 | 20.0 |
| Net exports ${ }^{2}$ | 1.5 | -. 2 | -. 1 | 1.4 | -. 7 | -1.3 |

1. Q4/Q4. Return to table
2. Percentage point contribution to GDP growth. Return to table

Source: Haver Analytics.

## United Kingdom

## Figure: Consumer Price Inflation

Line chart, 2002 to 2010. By percent, 12-month basis, n.s.a. There are two series, "Consumer price inflation" and "Core". "Consumer price inflation" begins in early 2002 at about 1.6 and generally decreases to about 0.5 by mid-2002. It then generally increases to about 2.5 by 2005 and then generally decreases to about 1.7 by 2006. By early 2007 it has generally increased to about 3.2 and by late 2007 it has generally decreased to about 1.7 . It then generally increases to about 5.6 by 2008 and then generally decreases to about 0.8 by 2009. By early 2010 it has generally increased to about 3.4. "Core" begins in early 2002 at about 1.2 and generally decreases to about 0.8 by mid-2002. It then generally increases to about 1.2 by late 2002 and then generally decreases to about 0.5 by mid- 2003 . From mid- 2003 to late 2004 it fluctuates between about 0.4 and 1.0. It then generally increases to about 1.5 by 2005 and then generally decreases to about 0.5 by 2006 . By 2007 it has generally increased to about 1.8 and by early 2008 it has generally decreased to about 0.7 . It then generally increases to about 1.9 by mid-2008 and then generally decreases to about 0.5 by late 2008. By early 2010 it has generally increased to about 1.9.

Note. Core excludes all food and energy; staff calculations
Source. Haver Analytics

## Figure: Unemployment Rates

Line chart, by percent, 2002 to 2010. There are two series, "Labor Force Survey" and "Claimant count". "Labor Force Survey" begins in 2002 at about 5.1 and generally decreases to about 4.6 by 2005. It then generally increases to about 5.5 by 2006 and then generally decreases to about 5.1 by 2008 . By eaerly 2010 it has generally increased to about 7.8. "Claimant count" begins in 2002 at about 3.1 and generally decreases to about 2.6 by 2004 . It then generally increases to about 3.0 by 2006 and then generally decreases to about 2.3 by 2008 . By early 2010 it has generally increased to about 4.9.

Source. Haver Analytics

## Figure: Purchasing Managers Survey

Line chart, by scale where 50+ = expansion, 2002 to 2010. There are two series, "Services" and "Manufacturing". "Services" begins in early 2002 at about 52 and generally increases to about 57.5 by mid-2002. It then generally decreases to about 48 by early 2003 and then generally increases to about 60 by late 2003 . By 2004 it has generally decreased to about 54 and by 2006 it has generally increased to about 61 . It then generally decreases to about 40 by 2008 and then generally increases to about 56.5 by early 2010. "Manufacturing" begins in early 2002 at about 47.5 and generally increases to about 53 by mid-2002. It then generally decreases to about 46.5 by 2003 and then generally increases to about 56.5 by early 2004. By 2005 it has generally decreased to about 46 and by 2007 it has generally increased to about 56.5. It then generally decreases to about 35 by 2009 and then generally increases to about 57 by early 2010 .

Source. Reuters.

## Figure: Labor Costs

Line chart, 2002 to 2010. By percent, 12-month basis. There is a horizontal line at zero. There are two series, "Unit wage costs" and "Average earnings". "Unit wage costs" begins in 2002 at about 3 and generally decreases to about -5.5 by 2004. It then generally increases to about 3.5 by 2006 and then generally decreases to about -2.5 by 2007. By early 2009 it has generally increased to about 13 and by late 2009 it has generally decreased to about -0.5 . "Average earnings" begins in 2002 at about 3. From 2002 to late 2008 it fluctuates between about 2.5 and 5.0. It then generally decreases to about -2.5 by early 2009 and then generally increases to about 3 by mid-2009. By early 2010 it has generally decreased to about -0.3 and within a week or so it has generally increased to about 5.5 .

Note. Unit wage costs are from manufacturing industries. Average earnings are from the whole economy, including bonuses.

Economic Indicators
(Percent change from previous period except as noted)

| Indicator | 2009 |  | 2010 | 2009 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q3 | Q4 | Q1 | Dec. | Jan. | Feb. | Mar. |
| Industrial production | -1.0 | . 4 | n.a. | . 5 | -. 5 | . 9 | n.a. |
| Producer input prices ${ }^{\underline{1}}$ | -8.7 | 4.0 | 8.4 | 7.4 | 7.7 | 7.5 | 10.1 |
| Retail sales volume | 1.6 | . 6 | n.a. | -. 2 | -3.0 | 2.1 | n.a. |
| Business confidence² | -7.0 | . 3 | 5.3 | -7.0 | 4.0 | 7.0 | 5.0 |
| Consumer confidence ${ }^{2}$ | -14.1 | -8.8 | -4.1 | -9.7 | -5.1 | -2.2 | -5.0 |
| Trade balance ${ }^{3}$ | -12.7 | -14.1 | n.a. | -4.5 | -6.3 | -3.2 | n.a. |

1. Percent change from year earlier. Return to table
2. Percent balance. Return to table
3. Level in billions of U.S. dollars. Return to table
n.a. Not available.

Source: Haver Analytics; FRB staff calculations.

## Canadian Real GDP

| Component | $2008{ }^{1}$ | $2009{ }^{1}$ | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q1 | Q2 | Q3 | Q4 |
| GDP | -1.0 | -1.2 | -7.0 | -3.5 | . 9 | 5.0 |
| Total domestic demand | -1.1 | -. 3 | -11.8 | . 7 | 7.1 | 3.8 |
| Consumption | . 2 | 1.9 | -1.3 | 1.6 | 3.7 | 3.6 |
| Investment | -3.6 | -5.4 | -27.5 | -6.1 | 10.6 | 6.5 |
| Government consumption | 3.1 | 4.4 | 2.0 | 3.5 | 6.2 | 5.8 |
| Inventories ${ }^{\underline{2}}$ | -1.1 | -1.1 | -4.7 | . 3 | 1.3 | -. 7 |
| Exports | -7.3 | -7.5 | -30.2 | -19.1 | 12.2 | 15.4 |
| Imports | -7.7 | -4.0 | -39.2 | -5.7 | 36.0 | 8.9 |
| Net exports ${ }^{2}$ | . 7 | -1.0 | 4.3 | -4.2 | -6.3 | 1.5 |

1. Q4/Q4. Return to table
2. Percentage point contribution to GDP growth. Return to table

Source: Haver Analytics.

## Canada

Figure: Real Gross Domestic Product by Industry

Line chart, by percent change from year earlier, 2002 to 2010. There is a horizontal line at zero. The series begins in early 2002 at about 1.5 and generally increases to about 3.8 by late 2002. It then generally decreases to about 0.5 by 2003 and then generally increases to about 4.5 by 2004 . By 2005 it has generally decreased to about 2.0 and by early 2006 it has generally increased to about 4.2. It then generally decreases to about 1.7 by late 2006 and then generally increases to about 3.3 by 2007. By mid-2009 it has generally decreased to about -4.4 and by early 2010 it has generally increased to about 1.3

Note. Constructed from various Statistics Canada surveys and supplements to the quarterly income and expenditure-based estimates.
Source. Haver Analytics
Figure: Real Trade

Line chart, by scale where $2002=100,2002$ to 2010. There are two series, "Real exports" and "Real imports". "Real exports" begins in 2002 at about 98 and generally decreases to about 91 by 2003. It then generally increases to about 113 by early 2006 and then generally decreases to about 104 by late 2006 . By the end of 2006 it
has generally increased to about 114 and by mid-2009 it has generally decreased to about 77. It then generally increases to about 89 by early 2010 . "Real imports" begins in 2002 at about 94 and generally increases to about 146 by 2008. It then generally decreases to about 107 by early 2009 and then generally increases to about 124 by early 2010.

Source. Haver Analytics

Figure: Unemployment Rate

Line chart, by percent, 2002 to 2010 . The series begins in 2002 at about 8.0 and generally decreases to about 7.4 by early 2003 . It then generally increases to about 7.9 by mid- 2003 and then generally decreases to about 5.9 by early 2008. By mid- 2009 it has generally increased to about 8.7 and by early 2010 it has generally decreased to about 8.2.

Source. Haver Analytics

## Figure: Consumer Price Inflation

Line chart, 2002 to 2010. By percent, 12-month basis, n.s.a. There is a horizontal line at zero. There are two series, "Consumer price inflation" and "Core". "Consumer price inflation" begins in early 2002 at about 1.3 and generally increases to about 4.8 by early 2003 . It then generally decreases to about 0.6 by early 2004 and then generally increases to about 2.6 by mid-2004. From mid-2004 to early 2006 it fluctuates between about 1.5 and 3.6 . It then generally decreases to about 0.5 by mid2006 and then generally increases to about 3.5 by 2008. By mid-2009 it has generally decreased to about -1.1 and by early 2010 it has generally increased to about 1.55. "Core" begins in 2002 at about 1.3 and generally increases to about 4.2 by early 2003. It then generally decreases to about 1.0 by early 2004 and then generally increases to about 2.3 by 2007. By late 2008 it has generally decreased to about 0.7 and from late 2008 to late 2009 it fluctuates between about 0.6 and 1.4 . The series ends in early 2010 at about 1.5.

Note. Core excludes all food and energy; staff calculations
Source. Haver Analytics

Economic Indicators
(Percent change from previous period except as noted)

| Indicator | 2009 |  | 2010 | 2009 | 2010 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Q3 | Q4 | Q1 | Dec. | Jan. | Feb. | Mar. |
| Industrial production | -1.2 | 2.1 | n.a. | .5 | 1.3 | n.a. | n.a. |
| New manufacturing orders | 2.1 | 6.2 | n.a. | 11.1 | -1.3 | 1.2 | n.a. |
| Retail sales | 1.4 | 1.3 | n.a. | .8 | .1 | n.a. | n.a. |
| Employment | -.0 | .3 | .4 | -.2 | .3 | .1 | .1 |
| Wholesale sales | 3.0 | 3.7 | n.a. | 1.6 | 2.9 | n.a. | n.a. |
| Ivey PMII | 56.4 | 55.2 | 53.5 | 48.4 | 50.8 | 51.9 | 57.8 |

1. PMI Purchasing managers index. Not seasonally adjusted. 50+ indicates expansion. Return to table
n.a. Not available.

Source: Haver Analytics; Bank for International Settlements.

## Chinese Economic Indicators

(Percent change from previous period, seasonally adjusted, except as noted)

| Indicator | 2008 | 2009 | $\begin{gathered} 2009 \\ \text { Q4 } \end{gathered}$ | 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Q1 | Jan. | Feb. | Mar. |
| Real GDP ${ }^{1}$ | 7.0 | 10.8 | 10.1 | 11.3 | $\ldots$ | $\ldots$ | $\ldots$ |
| Industrial production | 4.3 | 19.5 | 3.0 | 2.9 | 1.6 | -3.0 | 6.4 |
| Consumer prices ${ }^{2}$ | 1.2 | 1.9 | . 7 | 2.2 | 1.5 | 2.7 | 2.4 |
| Merch. trade balance ${ }^{\text {3 }}$ | 298.1 | 195.8 | 165.7 | 108.2 | 119.6 | 204.3 | . 6 |

1. Gross domestic product. Annual rate. Quarterly data estimated by staff from reported 4-quarter growth rates. Annual data are Q4/Q4. Return to table
2. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec. Return to table
3. Billions of U.S. dollars, annualized. Imports are valued at cost, insurance, and freight. Return to table
n.a. Not available.
... Not applicable.
Source: CEIC

## Indian Economic Indicators

(Percent change from previous period, seasonally adjusted, except as noted)

| Indicator | 2008 | 2009 | 2009 | 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q4 | Q1 | Jan. | Feb. | Mar. |
| Real GDP ${ }^{1}$ | 3.2 | 6.0 | -1.9 | n.a. | ... | $\ldots$ | $\ldots$ |
| Industrial production | 4.4 | 6.6 | 2.9 | n.a. | -. 3 | -. 5 | n.a. |
| Consumer prices ${ }^{2}$ | 9.7 | 13.9 | 12.6 | n.a. | 15.2 | 13.8 | n.a. |
| Wholesale prices ${ }^{2}$ | 6.1 | 8.1 | 5.0 | 9.7 | 9.4 | 9.9 | 9.9 |
| Merch. trade balance ${ }^{3}$ | -126.2 | -88.4 | -116.6 | n.a. | -135.1 | -160.7 | n.a. |
| Current account ${ }^{4}$ | -31.0 | -31.5 | -48.1 | n.a. | $\ldots$ | $\ldots$ | $\ldots$ |

1. Gross domestic product. Annual rate. Annual data are Q4/Q4. Return to table
2. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec. Return to table
3. Billions of U.S. dollars, annualized. Return to table
4. Billions of U.S. dollars, not seasonally adjusted, annualized. Return to table
n.a. Not available.
... Not applicable.
Source: CEIC.

## China and India

## Figure: Industrial Production

Line chart, by scale where Jan. $2000=100,2003$ to 2010. There are two series, "China" and "India". "China" begins in 2003 at about 143 and generally increases to about 393 by early 2010. "India" begins in 2003 at about 117 and generally increases to about 205 by early 2010.

Source. CEIC.

## Figure: Consumer Prices

Line chart, by percent change from year earlier, 2003 to 2010. There is a horizontal line at zero. There are two series, "China" and "India". "China" begins in 2003 at about 0.3 and generally increases to about 5.5 by 2004. It then generally decreases to about 0.7 by 2006 and then generally increases to about 9.0 by 2008 . By 2009 it has generally decreased to about -2.0 and by early 2010 it has generally increased to about 2.4. "India" begins in 2003 at about 3.5 and generally decreases to about 2.0 by 2004. It then generally increases to about 13.8 by early 2010 .

Source. China Statistic and Consultancy Service Center; CEIC.

## Figure: Merchandise Trade Balances

Line chart, by billions of dollars, 2003 to 2010. Data are 3-month moving average (n.s.a.). There is a horizontal line at zero. There are two series, "China" and "India". "China" begins in early 2003 at about 2 and generally increases to about 5 by late 2003. It then generally decreases to about -0.5 by 2004 and then generally increases to about 27 by mid-2007. By late 2007 it has generally decreased to about 17 and by early 2009 it has generally increased to about 39 . It then generally decreases to about 9 by early 2010. "India" begins in 2003 at about -0.5 and generally decreases to about -12 by 2008 . It then generally increases to about -6 by 2009 and then generally decreases to about -13 by early 2010 .

Source. China Statistic and Consultancy Service Center; CEIC.
Figure: Benchmark Interest Rates

Line chart, by percent, 2003 to 2010. There are two series, "China" and "India". "China" begins in 2003 at about 5.3 and remains constant here until late 2004 . It then generally increases to about 5.6 by late 2004 and remains constant here until early 2006. It then generally increases to about 7.5 by 2007 and then generally decreases to about 5.3 by late 2008. It remains constant here at 5.3 until early 2010 . "India" begins in early 2003 at about 5.5 and within a month or two increases to about 7.5. It then generally decreases to about 4.5 by late 2003 and then generally increases to about 6.0 by early 2004 . By mid- 2004 it has generally decreased to about 4.5 and by 2008 it has generally increased to about 9.0 . It then generally decreases to about 4.7 by early 2009 and then increases to about 5.0 by early 2010 .

Line chart, by percent of gross domestic product, 2003 to 2009. There are two series, "China" and "India". "China" begins in early 2003 at about 9 . From early 2003 to late 2006 it fluctuates between about 9 and 13. It then generally decreases to about 6 by late 2009. "India" begins in 2003 at about 21 and generally decreases to about 16 by 2006. It then generally increases to about 22 by late 2008 and then generally decreases to about 20 by late 2009 .

Source. Bank for International Settlements; Haver Analytics

Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to 2009. There are two series, "China" and "India". "China" begins in 2003 at about 18.5 and generally increases to about 21.5 by 2004. It then generally decreases to about 16 by early 2005 and then generally increases to about 20 by mid-2005. By 2007 it has generally decreased to about 14 and by 2008 it has generally increased to about 15. It then generally decreases to about 8.5 by early 2009 and then generally increases to about 11 by late 2009 . "India" begins in 2003 at about 6.5 and generally decreases to about 4 by 2004. It then generally increases to about 7 by late 2005 . From late 2005 to mid- 2007 it fluctuates between about 6 and 7 . It then generally increases to about 19 by late 2008 and then generally decreases to about 15.5 by late 2009 .

Source. Bank for International Settlements; CEIC.

Economic Indicators for Newly Industrialized Economies: Growth

|  | 20082009 |  | 2009 |  |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q3 | Q4 | Dec. | Jan. | Feb. |
| Real GDP ${ }^{1}$ |  |  |  |  |  |  |  |
| Hong Kong | -2.9 | 2.5 | 1.7 | 9.5 | ... | ... | ... |
| Korea | -3.2 | 6.1 | 13.4 | . 7 | ... | ... | ... |
| Singapore | -4.1 | 4.0 | 11.5 | -2.8 | ... | ... | ... |
| Taiwan | -6.3 | 8.5 | 10.2 | 18.0 | ... | ... | .. |
| Industrial production |  |  |  |  |  |  |  |
| Hong Kong | -6.6 | -8.4 | -2.6 | . 6 | . | ... | $\ldots$ |
| Korea | 3.4 | -1.3 | 6.9 | 1.2 | 2.4 | . 0 | 3.6 |
| Singapore | -4.2 | -4.2 | 8.4 | -11.8 | 19.1 | 14.4 | -3.6 |
| Taiwan | -1.8 | -8.4 | 8.0 | 9.7 | 4.6 | 1.5 | 4.1 |

1. Gross domestic product. Annual rate. Annual data are $\mathrm{Q} 4 / \mathrm{Q} 4$. Return to table
n.a. Not available
... Not applicable.
Source: CEIC.

Economic Indicators for Newly Industrialized Economies: Merchandise Trade Balance
(Billions of U.S. dollars; seasonally adjusted, annualized)

|  | 2008 | 2009 | 2009 | 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q4 | Q1 | Jan. | Feb. | Mar. |
| Hong Kong | -25.9 | -28.9 | -40.5 | n.a. | -66.7 | -34.0 | n.a. |
| Korea | 5.7 | 56.1 | 56.8 | n.a. | 33.2 | 36.2 | n.a. |
| Singapore | 18.4 | 24.1 | 34.6 | n.a. | 35.2 | 18.9 | n.a. |
| Taiwan | 4.4 | 20.3 | 10.4 | 5.6 | 11.0 | 2.8 | 3.0 |

[^16]|  | $2008{ }^{\underline{1}} 2009{ }^{1}$ |  | $\begin{gathered} 2009 \\ \text { Q4 } \end{gathered}$ | 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q1 | Jan. | Feb. | Mar. |
| Hong Kong | 2.1 | 1.2 |  | 1.3 | n.a. | 1.0 | 2.7 | n.a. |
| Korea | 4.1 | 2.8 | 2.4 | 2.7 | 3.1 | 2.7 | 2.3 |
| Singapore | 5.5 | -. 5 | -. 8 | n.a. | . 2 | 1.0 | n.a. |
| Taiwan | 1.3 | -. 2 | -1.3 | 1.3 | . 3 | 2.4 | 1.3 |

1. Dec./Dec. Return to table
n.a. Not available

Source: CEIC.

## Newly Industrialized Economies

## Figure: Industrial Production

Line chart, by scale where January $2000=100,2003$ to 2010. There are four series, "Korea", "Singapore", "Hong Kong", and "Taiwan". "Korea" begins in 2003 at about 116 and generally increases to about 175 by early 2008. It then generally decreases to about 133 by late 2008 and then generally increases to about 185 by early 2010. "Singapore" begins in 2003 at about 102 and generally increases to about 181 by 2007. It then generally decreases to about 115 by early 2009 and then generally increases to about 160 by early 2010. "Hong Kong" begins in 2003 at about 80 and remains relatively stable here until mid-2005. In mid-2005 it increases to about 85 and then it generally decreases to about 70 by early 2010. "Taiwan" begins in 2003 at about 103 and generally increases to about 150 early 2008 . It then generally decreases to about 95 by early 2009 and then generally increases to about 157 by early 2010 .

Source. CEIC.

## Figure: Consumer Prices

Line chart, by percent change from year earlier, 2003 to 2010. There is a horizontal line at zero. There are four series, "Korea", "Singapore", "Hong Kong", and "Taiwan". "Korea" begins in early 2003 at about 3.8. From early 2003 to late 2004 it fluctuates between about 2.8 and 5.0 . It then generally decreases to about 1.9 by mid-2005. From mid-2005 to mid-2007 it fluctuates between about 1.9 and 2.5 . It then generally increases to about 6.0 by 2008 and then generally decreases to about 1.5 by early 2009. By early 2010 it has generally increased to about 2.4 . "Singapore" begins in 2003 at about 0.5 and generally increases to about 2.5 by 2004 . It then generally decreases to about -0.1 by early 2005 and then generally increases to about 1.7 by late 2005. By early 2007 it has generally decreased to about -0.7 and by 2008 it has generally increased to about 7.5. It then generally decreases to about -0.7 by early 2010 . "Hong Kong" begins in early 2003 at about -1.6 and generally decreases to about -4.2 by mid-2003. It then generally increases to about 6.0 by 2008 and then generally decreases to about -1.5 by late 2009 . By early 2010 it has generally increased to about 1.2. "Taiwan" begins in 2003 at about 1.0 and generally increases to about 4.0 by 2004 . It then generally decreases to about -0.5 by early 2005 and then generally increases to about 3.9 by mid-2005. By 2006 it has generally decreased to about -1.5 and by early 2007 it has generally increased to about 2.3. It then generally decreases to about -0.8 by mid-2007 and then generally increases to about 6.4 by 2008. By 2009 it has generally decreased to about -2.8 and by early 2010 it has generally increased to about 2.7.

Source. CEIC; Bank of Korea; Reuters.

## Figure: Merchandise Trade Balances

Line chart, by billions of dollars, 2003 to 2010. Data are 3-month moving average (n.s.a.). There is a horizontal line at zero. There are four series, "Korea", "Singapore", "Hong Kong", and "Taiwan". "Korea" begins in 2003 at about 1.0 and generally increases to about 3.6 by early 2005. It then generally decreases to about 1.9 by early 2006 . From early 2006 to late 2007 it fluctuates between about 1.8 and 3.2 . It then generally decreases to about -1.3 by 2008 and then generally increases to about 6.2 by mid-2009. By early 2010 it has generally decreased to about 4.0. "Singapore" begins in 2003 at about 1.7 and generally increases to about 3.5 by early 2006. It then generally decreases to about 2.3 by mid- 2006 and then generally increases to about 3.6 by late 2006 . By early 2009 it has generally decreased to about 0.8 and by early 2010 it has generally increased to about 2.5. "Hong Kong" begins in 2003 at about -0.5 and generally decreases to about -3.2 by mid-2008. It then generally increases to about -0.5 by late 2008 and then generally decreases to about -4.0 by early 2010. "Taiwan" begins in 2003 at about 1.5 and generally decreases to about -0.5 by late 2004. It then generally increases to about 2.0 by early 2006. From early 2006 to late 2007 it fluctuates between about 0.2 and 2.2. It then generally decreases to about -0.3 by 2008 and then generally increases to about 2.5 by early 2009. By early 2010 it has generally decreased to about 0.5.

Source. CEIC.

## Figure: Benchmark Interest Rates

Line chart, by percent, 2003 to 2010. There are three series, "Korea", "Hong Kong", and "Taiwan". "Korea" begins in 2003 at about 4.25 and generally decreases to about 3.25 by late 2004 where it remains constant at until late 2005. It then generally increases to about 5.25 by late 2008 . By early 2009 it has generally decreased to about 2.0 where it remains constant until early 2010. "Hong Kong" begins in early 2003 at about 2.75 and decreases to about 2.5 by mid-2003. It remains constant at 2.5 until mid- 2004 and then generally increases to about 6.75 by early 2006. It remains constant at 6.75 until late 2007 and then generally decreases to about 0.5 by late 2008 where it remains until early 2010. "Taiwan" begins in early 2003 at about 1.65 and generally decreases to about 1.40 by mid-2003. It remains constant at 1.40 until late 2004 and then generally increases to about 3.60 by late 2008. It then generally decreases to about 1.20 by early 2009 and remains constant here until early 2010.

## Figure: Gross External Debt

Line chart, by percent of gross domestic product, 2003 to 2009. There are three series, "Korea", "Hong Kong", and "Taiwan". "Korea" begins in 2003 at about 25 and remains relatively stable here until 2006. It then generally increases to about 45 by late 2009. "Hong Kong" begins in 2003 at about 215 and generally increases to about 255 by late 2004. It then generally decreases to about 230 by early 2005 and then generally increases to about 330 by 2007 . By late 2009 it has generally decreased to about 310. "Taiwan" begins in 2003 at about 20 and generally increases to about 25 by 2004. It remains relatively stable at 25 until late 2009

Source. Bank for International Settlements.

Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to 2009. There are three series, "Korea", "Hong Kong", and "Taiwan". "Korea" begins in 2003 at about 45 and generally decreases to about 27 by 2004. It then generally increases to about 80 by 2008 and then generally decreases to about 55 by late 2009 . "Hong Kong" begins in 2003 at about 195 and generally increases to about 253 by 2004. It then generally decreases to about 225 by 2005 and then generally increases to about 360 by 2007 . By late 2009 it has generally decreased to about 213. "Taiwan" begins in 2003 at about 20 and generally increases to about 25 by 2004 . It remains relatively stable here at 25 until 2008 and then it decreases to about 15 by late 2009.

Source. Bank for International Settlements

## ASEAN-4 Economic Indicators: Growth

| Indicator | 20082009 |  | 2009 |  |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q3 | Q4 | Dec. | Jan. | Feb. |
| Real GDP1 |  |  |  |  |  |  |  |
| Indonesia | 5.4 | 5.2 | 7.7 | 4.3 | ... | $\ldots$ | ... |
| Malaysia | . 2 | 4.5 | 9.9 | 16.4 | ... | $\ldots$ | ... |
| Philippines | 2.6 | 1.8 | 3.1 | 3.5 | ... | ... |  |
| Thailand | -4.1 | 6.0 | 6.9 | 15.3 | ... | ... |  |
| Industrial production² |  |  |  |  |  |  |  |
| Indonesia ${ }^{\text {3 }}$ | 3.0 | 1.5 | . 3 | 3.3 | . 0 | 1.9 | n.a. |
| Malaysia | . 7 | -7.7 | 2.5 | 2.6 | 2.2 | 3.4 | -4.2 |
| Philippines | . 3 | -12.9 | 4.7 | 8.7 | 3.2 | 1.8 | n.a. |
| Thailand | 5.3 | -5.1 | 3.7 | 9.5 | 10.8 | -5.2 | 3.3 |

Note: ASEAN is the Association of Southeast Asian Nations.

1. Gross domestic product. Annual rate. Annual data are $\mathrm{Q} 4 / \mathrm{Q} 4$. Return to table
2. Annual data are annual averages. Return to table
3. Staff estimate. Return to table
n.a. Not available
... Not applicable.
Source: CEIC

## ASEAN-4 Economic Indicators: Merchandise Trade Balance

(Billions of U.S. dollars; seasonally adjusted, annualized)

| Indicator | 2008 | 2009 | 2009 |  |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q3 | Q4 | Dec. | Jan. | Feb. |
| Indonesia¹ ${ }^{1}$ | 7.9 | 19.7 | 16.2 | 27.0 | 21.6 | 22.4 | 17.7 |
| Malaysia | 42.7 | 33.6 | 29.2 | 38.9 | 40.1 | 42.5 | 44.6 |
| Philippines | -7.7 | -4.7 | -3.6 | -2.4 | -5.8 | -9.4 | n.a. |
| Thailand | . 1 | 19.4 | 15.9 | 5.0 | -6.3 | 14.3 | 6.7 |

# ASEAN-4 Economic Indicators: Consumer Price Inflation 

| Indicator | $2008{ }^{1} 2009{ }^{1}$ |  |  | 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q4 | Q1 | Jan. | Feb. | Mar. |
| Indonesia | 11.1 | 2.8 | 2.6 | 3.7 | 3.7 | 3.8 | 3.4 |
| Malaysia | 4.4 | 1.1 | -. 2 | n.a. | 1.3 | 1.2 | n.a. |
| Philippines | 8.0 | 4.4 | 3.0 | 4.3 | 4.3 | 4.2 | 4.4 |
| Thailand | . 4 | 3.5 | 1.9 | 3.7 | 4.1 | 3.7 | 3.4 |

Note: ASEAN is the Association of Southeast Asian Nations.

1. Dec./Dec. Return to table
n.a. Not available.

Source: CEIC; Haver Analytics; IMF International Financial Statistics database.

## ASEAN-4

## Figure: Industrial Production

Line chart, by scale where January $2000=100$, 2003 to 2010. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand". "Indonesia" begins in early 2003 at about 140. From early 2003 to late 2005 it fluctuates between about 135 and 170 . By late 2005 it is at about 137 and it generally increases to about 172 by early 2010. "Malaysia" begins in 2003 at about 110 and generally increases to about 163 by late 2007. It then generally decreases to about 135 by early 2009 and then generally increases to about 145 by early 2010. "Philippines" begins in 2003 at about 100 and generally decreases to about 60 by early 2009 . It then generally increases to about 87 by early 2010. "Thailand" begins in 2003 at about 132 and generally increases to about 215 by early 2008. It then generally decreases to about 153 by late 2008 and then generally increases to about 224 by early 2010.

Source. CEIC; Bank of Philippines.

## Figure: Consumer Prices

Line chart, by percent change from year earlier, 2003 to 2010. There is a horizontal line at zero. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand". "Indonesia" begins in 2003 at about 8.5 and generally decreases to about 4.5 by 2004 . It then generally increases to about 18 by 2005 and then generally decreases to about 5 by late 2006. By 2008 it has generally increased to about 12 and by early 2010 it has generally decreased to about 2.5. "Malaysia" begins in 2003 at about 1.5 and generally increases to about 5 by 2006. It then generally decreases to about 1.5 by 2007 and then generally increases to about 8.5 by 2008 . By 2009 it has generally decreased to about -2.5 and by early 2010 it has generally increased to about 1.5. "Philippines" begins in 2003 at about 2.75 and generally increases to about 8.5 by 2004. It then generally decreases to about 2 by 2007 and then generally increases to about 12.5 by 2008 . By 2009 it has generally decreased to about 0 and by early 2010 it has generally increased to about 4.3. "Thailand" begins in 2003 at about 2.25 and generally increases to about 7 by 2005 . It then generally decreases to about 1 by 2007 and then generally increases to about 9.5 by 2008 . By 2009 it has generally decreased to about -4.8 and by early 2010 it has generally increased to about 3.0.

Source. IMF International Financial Statistics; CEIC.

## Figure: Merchandise Trade Balances

Line chart, by billions of dollars, 2003 to 2010. Data are 3-month moving average (n.s.a.).There is a horizontal line at zero. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand". "Indonesia" begins in early 2003 at about 2.0 and generally increases to about 2.5 by mid-2003. It then generally decreases to about 1.7 by 2004 and then generally increases to about 3.8 by late 2006. It then generally decreases to about 0.4 by late 2008 and then generally increases to about 1.7 by early 2010. "Malaysia" begins in 2003 at about 1.6 and generally increases to about 4.4 by 2008. It then generally decreases to about 2.4 by 2009 and then generally increases to about 3.5 by early 2010. "Philippines" begins in early 2003 at about -0.4 . From early 2003 to mid- 2007 it fluctuates between about -0.7 and -0.1 . It then generally decreases to about -1 by 2008 and then generally increases to about -0.4 by early 2010. "Thailand" begins in 2003 at about 0.2 and generally decreases to about -1.2 by 2005. It then generally increases to about 1.3 by early 2008 and then generally decreases to about -1.5 by late 2008 . By 2009 it has generally increased to about 2.9 and by early 2010 it has generally decreased to about 0.4.

Line chart, by percent, 2003 to early 2010. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand". "Indonesia" begins in 2003 at about 12.5 and generally decreases to about 7.5 by 2004. It then generally increases to about 12.5 by late 2005 and then generally decreases to about 8 by early 2008 . By late 2008 it has generally increased to about 9.5 and by early 2010 it has generally decreased to about 6.5 . "Malaysia" begins in 2003 at about 2.75 and remains constant here until late 2005. It then generally increases to about 3.5 by early 2006 and remains constant here until late 2008. It then generally decreases to about 2 by early 2009 and remains constant here until early 2010 when it increases to about 2.25 . "Philippines" begins in early 2003 at about 7.25 and generally decreases to about 7.0 by mid-2003. It remains constant here at 7.0 until early 2005 and then generally increases to about 7.5 by late 2005. It remains constant at 7.5 until mid- 2007 and then generally decreases to about 5.0 by early 2008. By late 2008 it has generally increased to about 6.0 and by early 2010 it has generally decreased to about 4.0 .
"Thailand" begins in early 2003 at about 1.75 and generally decreases to about 1.25 by mid-2003. It then generally increases to about 5.0 by 2006 and then generally decreases to about 3.25 by mid-2007. By late 2008 it has generally increased to about 3.75 and by early 2010 it has generally decreased to about 1.25 .

Source. Bloomberg; Haver Analytics
Figure: Gross External Debt

Line chart, by percent of gross domestic product, 2003 to 2009. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand". "Indonesia" begins in 2003 at about 57 and generally decreases to about 25 by mid-2008. It then generally increases to about 33 by early 2009 and then generally decreases to about 27 by late 2009. "Malaysia" begins in 2003 at about 44 and generally decreases to about 30 by late 2007. It then generally increases to about 44 by early 2009 and then generally decreases to about 39 by late 2009. "Philippines" begins in 2003 at about 75 and generally decreases to about 31 by late 2007 . It then generally increases to about 37 by early 2009 and then generally decreases to about 28 by late 2009 . "Thailand" begins in 2003 at about 41 and generally decreases to about 20 by late 2007. It then generally increases to about 25 by late 2009.

Note. ASEAN is the Association of Southeast Asian Nations.
Source. CEIC; Bank for International Settlements.
Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to 2009. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand". "Indonesia" begins in 2003 at about 49 and generally decreases to about 38 by early 2004. It then generally increases to about 63 by 2005 and then generally decreases to about 15 by 2006 . By late 2009 it has generally increased to about 37. "Malaysia" begins in 2003 at about 30 and generally decreases to about 20 by early 2007 . It then generally increases to about 33 by late 2009. "Philippines" begins in early 2003 at about 49 and generally decreases to about 44 by late 2003. It then generally increases to about 58 by 2004 and then generally decreases to about 13 by late 2009. "Thailand" begins in 2003 at about 28 and generally decreases to about 20 by 2004 . It then generally increases to about 31 by 2006 and then generally decreases to about 16 by late 2009.

Source. Bank for International Settlements

## Mexican Economic Indicators

(Percent change from previous period, seasonally adjusted, except as noted)

| Indicator | 2008 | 2009 | 2009 | 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q4 | Q1 | Jan. | Feb. | Mar. |
| Real GDP ${ }^{1}$ | -1.2 | -2.4 | 8.4 | n.a. | ... | ... | $\ldots$ |
| Overall economic activity | 1.3 | -6.4 | 1.9 | n.a. | -. 8 | n.a. | n.a. |
| Industrial production | -. 9 | -7.0 | 2.4 | n.a. | -. 1 | . 5 | n.a. |
| Unemployment rate ${ }^{\text {² }}$ | 4.0 | 5.5 | 5.6 | n.a. | 5.5 | 5.2 | n.a. |
| Consumer prices ${ }^{3}$ | 6.5 | 3.6 | 4.0 | 4.8 | 4.5 | 4.8 | 5.0 |
| Merch. trade balance ${ }^{4}$ | -17.3 | -4.7 | 1.9 | n.a. | -3.0 | -2.4 | n.a. |
| Merchandise imports ${ }^{4}$ | 308.6 | 234.4 | 259.7 | n.a. | 273.3 | 279.4 | n.a. |
| Merchandise exports ${ }^{4}$ | 291.3 | 229.7 | 261.5 | n.a. | 270.3 | 277.0 | n.a. |
| Current account ${ }^{5}$ | -15.8 | -5.2 | -2.8 | n.a. | ... | ... | $\ldots$ |

[^17]
## Brazilian Economic Indicators

(Percent change from previous period, seasonally adjusted, except as noted)

| Indicator | 2008 | 2009 | 2009 | 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q4 | Q1 | Jan. | Feb. | Mar. |
| Real GDP¹ | . 8 | 4.3 | 8.4 | n.a. | $\ldots$ | ... | ... |
| Industrial production | 3.1 | -7.4 | 3.9 | n.a. | 1.2 | 1.5 | n.a. |
| Unemployment rate ${ }^{\text {² }}$ | 7.9 | 8.1 | 7.7 | n.a. | 7.5 | 7.2 | n.a. |
| Consumer prices ${ }^{3}$ | 5.9 | 4.3 | 4.2 | 4.9 | 4.6 | 4.8 | 5.2 |
| Merch. trade balance ${ }^{4}$ | 25.0 | 25.3 | 15.8 | 14.3 | 13.7 | 11.3 | 17.8 |
| Current account $\underline{5}$ | -28.2 | -24.3 | -48.9 | n.a. | -46.1 | -39.0 | n.a. |

[^18]
## Latin America

## Figure: Industrial Production

Line chart, by scale where January $2000=100,2003$ to 2010. There are two series, "Brazil" and "Mexico". "Brazil" begins in 2003 at about 107 and generally increases to about 143 by mid-2008. It then generally decreases to about 112 by late 2008 and then generally increases to about 138 by early 2010 . "Mexico" begins in 2003 at about 98 and generally increases to about 115 by 2007. It then generally decreases to about 100 by mid- 2009 and then generally increases to about 108 by early 2010.

Source. Fundacion de Investigaciones Economicas Latinoamericanas; Haver Analytics.

## Figure: Consumer Prices

Line chart, by percent change from year earlier, 2003 to 2010. There are two series, "Brazil" and "Mexico". "Brazil" begins in early 2003 at about 14.7 and generally increases to about 17.5 by mid-2003. It then generally decreases to about 5 by 2004 and then generally increases to about 8.3 by 2005 . By 2007 it has generally decreased to about 2.7 and by 2008 it has generally increased to about 6 . It then generally decreases to about 5 by early 2010. "Mexico" begins in early 2003 at about 5.1 and generally decreases to about 3.8 by late 2003. It then generally increases to about 5.5 by late 2004 and then generally decreases to about 2.6 by late 2005 . By late 2006 it has generally increased to about 4.5 and by early 2008 it has generally decreased to about 3.7. It then generally increases to about 6.5 by late 2008 and then generally decreases to about 3 by late 2009. By early 2010 it has generally increased to about 5.0.

Source. IMF International Financial Statistics; Getulio Vargas Foundation; Haver Analytics; Bank of Mexico.
Figure: Merchandise Trade Balances

Line chart, by billions of dollars, 2003 to 2010. Data are 3-month moving average (n.s.a.). There is a horizontal line at zero. There are two series, "Brazil" and "Mexico". "Brazil" begins in 2003 at about 1.6 and generally increases to about 4.2 by 2006. It then generally decreases to about 1.3 by early 2008 and then generally increases to about 2.9 by mid-2008. By early 2009 it has generally decreased to about 1.3 and by mid-2009 it has generally increased to about 3.5 . It then generally decreases to about 0.8 by early 2010. "Mexico" begins in 2003 at about -0.3 and generally decreases to about -1.6 by early 2005. It then generally increases to about 0.1 by early 2006 and then generally decreases to about -1.3 by mid-2007. By late 2007 it has generally increased to about -0.4 and by late 2008 it has generally decreased to about -2.7. It then generally increases to about -0.1 by early 2010.

Source. IMF International Financial Statistics, Bank of Mexico.

## Figure: Benchmark Interest Rates

Line chart, by percent, 2003 to 2010. There are two series, "Brazil" and "Mexico". "Brazil" begins in 2003 at about 25.5 and generally decreases to about 16 by 2004 . It then generally increases to about 20 by 2005 and then generally decreases to about 11 by 2007 . By 2008 it has generally increased to about 14 and by early 2010 it
has generally decreased to about 8.5. "Mexico" begins in early 2003 at about 9 and generally decreases to about 4 by mid-2003. It then generally increases to about 10 by 2005 and then generally decreases to about 7 by 2006. By 2008 it has generally increased to about 8 and by early 2010 it has generally decreased to about 4.5 .

Source. Bloomberg

## Figure: Gross External Debt

Line chart, by percent of gross domestic product, 2003 to 2009. There are two series, "Brazil" and "Mexico". "Brazil" begins in 2003 at about 188 and generally decreases to about 40 by late 2009. "Mexico" begins in 2003 at about 25 and generally decreases to about 17 by 2008 . It then generally increases to about 21 by late 2009.

Source. Haver Analytics; Bank for International Settlements.

## Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to 2009. There are two series, "Brazil" and "Mexico". "Brazil" begins in early 2003 at about 81 and generally decreases to about 36 by mid-2003. It then generally increases to about 41 by late 2003 and then generally decreases to about 17 by late 2009 . "Mexico" begins in 2003 at about 47 and generally decreases to about 25 by 2006. It then generally increases to about 33 by early 2007. From early 2007 to late 2009 it fluctuates between about 24 and 33. By late 2009 it is at about 28.

Source. Bank for International Settlements.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## Last update: January 29, 2016

## April 2010 Greenbook Supplement Tables and Charts ${ }^{ \pm}$

## Supplemental Notes

## The Domestic Nonfinancial Economy

## Private Housing Activity

| Sector | 2009 | 2009 |  | 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Q3 | Q4 | Q1 | Jan. | Feb. | Mar. |
| All units |  |  |  |  |  |  |  |
| Starts | . 55 | . 59 | . 56 | . 62 | . 61 | . 62 | . 63 |
| Permits | . 57 | . 57 | . 60 | . 65 | . 62 | . 64 | . 69 |
| Single-family units |  |  |  |  |  |  |  |
| Starts | . 45 | . 50 | . 48 | . 53 | . 51 | . 54 | . 53 |
| Permits | . 44 | . 46 | . 47 | . 52 | . 50 | . 51 | . 54 |
| Adjusted permits ${ }^{1}$ | . 44 | . 48 | . 49 | . 53 | . 52 | . 52 | . 56 |
| New homes |  |  |  |  |  |  |  |
| Sales | . 38 | . 41 | . 37 | . 36 | . 34 | . 32 | . 41 |
| Months' supply ${ }^{2}$ | 9.11 | 7.72 | 7.65 | 7.84 | 8.24 | 8.63 | 6.66 |
| Existing homes |  |  |  |  |  |  |  |
| Sales | 4.57 | 4.65 | 5.23 | 4.49 | 4.43 | 4.36 | 4.68 |
| Months' supply ${ }^{2}$ | 8.34 | 8.06 | 6.90 | 8.27 | 8.22 | 8.47 | 8.11 |
| Multifamily units |  |  |  |  |  |  |  |
| Starts | . 11 | . 09 | . 08 | . 09 | . 10 | . 08 | . 10 |
| Built for rent | . 09 | . 08 | . 06 | n.a. | n.a. | n.a. | n.a. |
| Built for sale | . 02 | . 01 | . 02 | n.a. | n.a. | n.a. | n.a. |
| Permits | . 14 | . 11 | . 12 | . 13 | . 12 | . 12 | . 14 |
| Condos and co-ops |  |  |  |  |  |  |  |
| Existing home sales | . 59 | . 63 | . 73 | . 65 | . 62 | . 65 | . 67 |

[^19]Figure: Private Housing Starts and Permits

Line chart, 1999 to 2010. Unit is millions of units, seasonally adjusted annual rate. The end of the series are labeled March. There are three series, "Single-family Starts," "Single-family adjusted permits," and "Multifamily starts." Single-family starts and single-family adjusted permits begin at about 1.5 and fluctuate but generally increase together to about 1.8 in early 2006. They generally decrease together to about .3 in early 2009 then generally increase together ending at about . 6 . Multifamily starts begins at about 4 and fluctuates but remains about constant until mid-2008. It generally decreases ending at about .1.

Note. Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas.
Source. Census Bureau.

Line chart, 2002 to 2010. Unit is millions of units (annual rate). There is one series, "Total (left scale)". Total begins at about . 9 and fluctuates but generally increases to about 1.4 in mid-2005. It fluctuates but generally decreases to about 0.3 in early 2009, and then generally increases ending at about 0.4 in March 2010 .

Source: For total, Census Bureau; [redacted].

Figure: Inventories of New Homes and Homeowner Vacancy Rate

Line chart, 2002 to 2010. Unit for left scale is thousands of units. Unit for right scale is percent. The end of the left scale series is labeled March. The end of the right scale series is labeled Q4. There are two series, "Inventories of new homes (left scale)" and "Homeowner Vacancy Rate (right scale)." Inventory of new homes begins at about 315 and generally increases to about 550 in mid-2006. It generally decreases ending at about 225. Homeowner Vacancy Rate begins at about 1.50 and generally increases to about 2.50 in early 2007. It generally decreases to about 2.3 in early 2007 then generally increases to about 2.50 in early 2008 . It generally decreases ending at about 2.25.

Note. Homeowner vacancy rate is seasonally adjusted by Board staff.
Source. Census Bureau.

## Figure: Existing Single-Family Home Sales

Line chart, 2001 to 2010. Unit for left scale is millions of units (annual rate). Unit for right scale is index, 2001 equals 100 . The end of the left scale series is labeled February. The end of the right scale series is labeled March. There are two series, "Pending home sales (left scale)" and "Existing Home Sales (right scale)." Pending home sales begins at about 5.5 and fluctuates but generally increases to about 6.5 in mid-2005. It generally decreases to about 4.5 in late 2008 then generally increases to about 5.75 in late 2009. It generally decreases ending at about 5.0. Existing home sales begins at about 100 and generally decreases to about 85 in late 2002. It generally increases to about 125 in late 2005 then fluctuates but generally decreases to about 70 in late 2008 . It generally increases to about 110 in late 2009 then generally decreases ending at about 85 .

Source. National Association of Realtors.

Figure: Mortgage Rates

Line chart, 2002 to 2010. Unit is percent. The end of the series is marked April 21. There is one series, "30 year conforming fixed-rate mortgage." The series begins at about 7.0 and generally decreases to about 5.25 in mid-2003. It fluctuates but generally increases to about 6.75 in mid-2006. It generally decreases to about 6.0 in late 2006 then generally increases to about 6.75 in mid-2007. It generally decreases to about 5.5 in early 2008 then generally increases to about 6.5 in late 2008 . It fluctuates but generally decreases ending at about 5.0.

Note. 2-week moving average.
Source. Federal Home Loan Mortgage Corporation.

## Figure: Price of Existing Homes

Line chart, 2002 to 2010. Unit is index, 2000 equals 100. There are three series, "LP Price Index," "Monthly FHFA purchase-only index," and "20-city S\&P/Case-Shiller monthly price index." LP Price index begins at about 120 and generally increases to about 185 in early 2006. It generally decreases to about 130 in early 2009 then generally increases ending at about 135 in February 2010. Monthly FHFA purchase-only index begins at about 110 and generally increases to about 160 in mid-2007. It generally decreases ending at about 140 in January 2010. 20-city S\&P/Case-Shiller Monthly Price Index begins at about 120 and generally increases to about 190 in early 2006. It generally decreases to about 130 in early 2009 then generally increases ending at about 135 in February 2010.

Note. LP and S\&P/Case-Shiller are seasonally adjusted by Board staff. FHFA is re-indexed to 2000.
Source. For FHFA, Federal Housing Finance Agency. For S\&P Case-Shiller, Standard \& Poor's. For LP, Loan Performance, a division of First American Core logic.

## Figure: House Price Expectations

Line chart, 2007 to 2010. Unit is diffusion index. The end of the series are marked April (preliminary). 0 on the scale is marked by a horizontal line. There are two series, " 5 years ahead" and "1 year ahead." 5 years ahead begins at about 65 and fluctuates but generally decreases ending at about 50 . 1 year ahead begins at about 30 and fluctuates but generally decreases to about negative 20 in early 2009. It fluctuates but generally increases ending at about 0 .

Note. Diffusion index is constructed by subtracting expectations of decrease from expectations of increase.
Source. Thomson Reuters/University of Michigan Surveys of Consumers.


[^20]Figure: Communications Equipment

Line chart, 2000 to 2010. Unit is billions of chained (2005) dollars, ratio scale. The end of the timeline is labeled March. There are two series, "Shipments" and "Orders." Shipments begins at about 8.5 and generally increases to about 11 in early 2001. It generally decreases to about 5 in early 2003 then generally increases to about 7 in early 2006. It remains about constant until late 2008 then generally decreases ending at about 6 . Orders begins at about 8.5 and generally increases to about 11 in mid-2000 then generally decreases to about 3 in mid-2002. It generally increases to about 7 and remains about constant until late 2005 . It generally increases to about 90 in late 2005 then generally decreases ending at about 5.

Note. Shipments and orders are deflated by a price index that is derived from the quality-adjust price indexes of the Bureau of Economic Analysis and uses the producer price index for communications equipment for monthly interpolation.

Source. Census Bureau

Figure: Non-High-Tech, Nontransportation Equipment

Line chart, 2000 to 2010. Unit is billions of chained (2005) dollars, ratio scale. The end of the timeline is labeled March. There are two series, "Shipments" and "Orders." Shipments begins at about 44 and fluctuates but generally decreases to about 36 in late 2001. It fluctuates but generally increases to about 46 in early 2007. It generally decreases ending at about 37. Orders begins at about 46 And generally decreases to about 36 in early 2002. It fluctuates but generally increases to about 48 in late 2006. It generally decreases to about 23 in early 2009 then generally increases ending at about 37 .

Note. Shipments and orders are deflated buy the staff price indexes for the individual equipment types included in this category. Indexes are derived from the quality-adjusted price indexes of the Bureau of Economic Analysis.

Source. Census Bureau.

Figure: Computers and Peripherals

Line chart, 2000 to 2010. Unit for left scale is 2000 equals 1 . Unit for right scale is billions of chained (2005) dollars, ratio scale. The end of the timeline is labeled March. There are two series, "Industrial production (left scale)," and "Real M3 shipments (right scale). Industrial production begins at about 95 and generally increases to about 230 in early 2008. It generally decreases to about 160 in early 2009 then generally increases ending at about 180 . Real M3 shipments begins at about 8 and generally increases to about 18 in early 2007. It generally decreases to about 13.5 in late 2008 then generally increases ending at about 19.

Source. Census Bureau; FRB Industrial Production.

Figure: Shipments Diffusion Index

Line chart, 2000 to 2010. Unit is diffusion index. The end of the timeline is labeled March. 50 on the scale is marked by a horizontal line. The series begins at about 50 and generally increases to about 70 in early 2000. It generally decreases to about 20 in early 2001 then fluctuates but generally increases to about 80 in late 2005 . It fluctuates but generally decreases to about 15 in early 2009 then generally increases ending at about 70 .

Note. 3-month moving average. The diffusion index equals the percentage of 26 nontransportation equipment categories that experienced an increase in shipments relative to 3 months prior
Source. Census Bureau.

Price Measures
(Percent change)

| Measures | 12-month change | 3-month change | 1-month change |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Mar. 2009 | Mar. 2010 | Annual rate | Monthly rate |
|  |  |  | Dec. 2009 | Mar. 2010 | Feb. 2010 Mar. 2010

CPI

| Total | -. 4 | 2.3 | 2.5 | . 9 | . 0 | . 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Food | 4.4 | . 2 | 1.0 | 2.3 | . 1 | . 2 |
| Energy | -23.0 | 18.3 | 15.3 | 9.2 | -. 5 | . 0 |
| Ex. food and energy | 1.8 | 1.1 | 1.3 | -. 2 | . 1 | . 0 |
| Core goods | . 4 | 1.9 | 2.9 | -. 1 | -. 1 | -. 1 |
| Core services | 2.3 | . 8 | . 7 | -. 2 | . 1 | . 1 |
| Shelter | 1.5 | -. 7 | -. 6 | -2.3 | . 0 | -. 1 |
| Other services | 3.5 | 2.8 | 2.6 | 2.5 | . 3 | . 3 |
| Memo: Trimmed mean | 2.3 | 1.0 | 1.2 | . 6 | . 0 | . 0 |
| Chained CPI (n.s.a.) ${ }^{1}$ | -. 1 | 2.5 | $\ldots$ | ... | $\ldots$ | $\ldots$ |
| Ex. food and energy ${ }^{1}$ | 1.7 | . 8 | $\ldots$ | $\ldots$ | $\ldots$ | ... |

## PCE prices $\underline{2}$

| Total | $\mathbf{. 2}$ | $\mathbf{2 . 0}$ | $\mathbf{2 . 5}$ | $\mathbf{1 . 1}$ | . $\mathbf{0}$ | . $\mathbf{1}$ |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Food and bev. at home | 4.6 | -.5 | 1.4 | 2.3 | .1 | .3 |
| Energy | -24.8 | 18.6 | 16.1 | 9.0 | -.6 | .0 |
| Ex. food and energy | $\mathbf{1 . 7}$ | $\mathbf{1 . 3}$ | $\mathbf{1 . 8}$ | . $\mathbf{5}$ | .0 | . $\mathbf{1}$ |
| Core goods | .7 | .3 | -.7 | -.9 | -.1 | .0 |
| Core services | 2.0 | 1.7 | 2.6 | .9 | .1 | .1 |
| Housing services | 2.4 | .0 | -.4 | -.6 | .0 | -.1 |
| Other services | 1.9 | 2.2 | 3.5 | 1.4 | .1 | .2 |
| Memo: Trimmed mean | 2.3 | $\ldots$ | 1.4 | $\ldots$ | .0 | ... |
|  |  |  |  |  |  |  |
| Core market-based | 2.1 | 1.1 | 1.0 | .4 | .1 | .1 |
| Core non-market-based | -.9 | 2.5 | 6.4 | .7 | -.1 | .1 |


| PPI |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Total finished goods | $\mathbf{- 3 . 4}$ | $\mathbf{6 . 0}$ | $\mathbf{9 . 6}$ | $\mathbf{6 . 2}$ | $\mathbf{- . 6}$ | .7 |
| Food | -1.3 | 6.8 | 13.7 | 13.3 | .4 | 2.4 |
| Energy | -25.0 | 22.9 | 37.7 | 11.9 | -2.9 | .7 |
| Ex. food and energy | $\mathbf{3 . 8}$ | .9 | .0 | $\mathbf{1 . 9}$ | .1 | .1 |
| Core consumer goods | 4.2 | 1.4 | .7 | 2.9 | .2 | .1 |
| Capital equipment | 3.4 | .2 | -.8 | .8 | -.1 | .0 |
|  |  |  |  |  |  |  |
| Intermediate materials | -8.9 | 7.7 | 9.8 | 9.8 | .1 | .6 |
| Ex. food and energy | -1.8 | 4.0 | 3.7 | 8.9 | .9 | .7 |
|  |  |  |  |  |  |  |


| Crude materials | -38.9 | 33.4 | 59.4 | 42.0 | -3.5 | 3.2 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Ex. food and energy | -32.9 | 44.5 | 25.2 | 59.1 | -.6 | 6.0 |

1. Higher-frequency figures are not applicable for data that are not seasonally adjusted (n.s.a.). Return to table
2. PCE prices in March 2010 are staff estimates. Return to table
. Not applicable. Return to table
Source: For consumer price index (CPI) and producer price index (PPI), U.S. Dept. of Labor, Bureau of Labor Statistics; for personal consumption expenditures (PCE), U.S. Dept. of Commerce, Bureau of Economic Analysis; for trimmed mean CPI, Federal Reserve Bank of Cleveland; for trimmed mean PCE, Federal Reserve Bank of Dallas.

## The Domestic Financial Economy

## Selected Financial Market Quotations

(One-day quotes in percent except as noted)

| Instrument | $2008$ <br> Sept. 12 | $\text { Jan. } 26$ | $2010$ <br> Mar. 15 | Apr. 22 | Change to Apr. 22 from selected dates (percentage points) |  | centage points) 2010 Mar. 15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Short-term |  |  |  |  |  |  |  |
| FOMC intended federal funds rate | 2.00 | . 13 | . 13 | . 13 | -1.87 | . 00 | . 00 |
| Treasury bills ${ }^{\underline{1}}$ |  |  |  |  |  |  |  |
| 3-month | 1.46 | . 07 | . 17 | . 16 | -1.30 | . 09 | -. 01 |
| 6-month | 1.80 | . 14 | . 24 | . 24 | -1.56 | . 10 | . 00 |
| Commercial paper (A1/P1 rates) ${ }^{2}$ |  |  |  |  |  |  |  |
| 1-month | 2.39 | . 14 | . 21 | . 23 | -2.16 | . 09 | . 02 |
| 3-month | 2.75 | . 20 | . 20 | . 28 | -2.47 | . 08 | . 08 |
| Large negotiable CDs ${ }^{1}$ |  |  |  |  |  |  |  |
| 3-month | 2.79 | . 20 | . 23 | . 31 | -2.48 | . 11 | . 08 |
| 6-month | 3.09 | . 29 | . 34 | . 43 | -2.66 | . 14 | . 09 |
| Eurodollar deposits ${ }^{\text {3 }}$ |  |  |  |  |  |  |  |
| 1-month | 2.60 | . 28 | . 28 | . 30 | -2.30 | . 02 | . 02 |
| 3-month | 3.00 | . 40 | . 40 | . 40 | -2.60 | . 00 | . 00 |
|  |  |  |  |  |  |  |  |
| Bank prime rate | 5.00 | 3.25 | 3.25 | 3.25 | -1.75 | . 00 | . 00 |
| Intermediate- and long-term |  |  |  |  |  |  |  |
| U.S. Treasury ${ }^{4}$ |  |  |  |  |  |  |  |
| 2-year | 2.24 | . 85 | . 95 | 1.04 | -1.20 | . 19 | . 09 |
| 5-year | 2.97 | 2.38 | 2.42 | 2.57 | -. 40 | . 19 | . 15 |
| 10-year | 3.93 | 3.80 | 3.84 | 3.89 | -. 04 | . 09 | . 05 |
| U.S. Treasury indexed notes ${ }^{5}$ |  |  |  |  |  |  |  |
| 5-year | 1.33 | . 38 | . 56 | . 65 | -. 68 | . 27 | . 09 |
| 10-year | 1.77 | 1.37 | 1.56 | 1.51 | -. 26 | . 14 | -. 05 |
|  |  |  |  |  |  |  |  |
| Municipal general obligations (Bond Buyer) | 4.54 | 4.30 | 4.33 | 4.37 | -. 17 | . 07 | . 04 |
| Private instruments |  |  |  |  |  |  |  |
| 10-year swap | 4.26 | 3.72 | 3.77 | 3.73 | -. 53 | . 01 | -. 04 |
| 10-year FNMA? | 4.36 | 4.14 | 4.18 | 4.26 | -. 10 | . 12 | . 08 |
| 10-year AAㅇ | 6.62 | 5.04 | 5.02 | 4.90 | -1.72 | -. 14 | -. 12 |
| 10 -year BBB $^{8}$ | 7.22 | 5.74 | 5.72 | 5.55 | -1.67 | -. 19 | -. 17 |
| 10-year high yield ${ }^{8}$ | 10.66 | 8.76 | 8.64 | 8.30 | -2.36 | -. 46 | -. 34 |
| Home mortgages (FHLMC survey rate) |  |  |  |  |  |  |  |


| 30-year fixed | 5.78 | 4.98 | 4.96 | 5.07 | -.71 | .09 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1-year adjustable | 5.03 | 4.29 | 4.12 | 4.22 | -.81 | -.07 |  |


| Stock exchange index | Record high |  | 2010 |  |  | Change to Apr. 22 from selected dates (percent) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level | Date | Jan. 26 | Mar. 15 | Apr. 22 | Record high | 2010 Jan. 26 | 2010 Mar. 15 |
| Dow Jones Industrial | 14,165 | 10-9-07 | 10,194 | 10,642 | 11,134 | -21.39 | 9.22 | 4.62 |
| S\&P 500 Composite | 1,565 | 10-9-07 | 1,092 | 1,151 | 1,209 | -22.78 | 10.67 | 5.06 |
| Nasdaq | 5,049 | 3-10-00 | 2,204 | 2,362 | 2,519 | -50.10 | 14.31 | 6.64 |
| Russell 2000 | 856 | 7-13-07 | 612 | 674 | 734 | -14.19 | 19.95 | 8.88 |
| D.J. Total Stock Index | 15,807 | 10-9-07 | 11,282 | 11,980 | 12,649 | -19.97 | 12.12 | 5.59 |

1. Secondary market. Return to table
2. Financial commercial paper. Return to table
3. Bid rates for Eurodollar deposits collected around 9:30 a.m. eastern time. Return to table
4. Derived from a smoothed Treasury yield curve estimated using off-the-run securities. Return to table
5. Derived from a smoothed Treasury yield curve estimated using all outstanding securities and adjusted for the carry effect. Return to table
6. Most recent Thursday quote. Return to table
7. Constant-maturity yields estimated from Fannie Mae domestic noncallable coupon securities. Return to table
8. Derived from smoothed corporate yield curves estimated using Merrill Lynch bond data. Return to table

NOTES:
September 12, 2008, is the last business day before Lehman Brothers Holdings filed for bankruptcy.
January 26,2010 , is the day before the January 2010 FOMC monetary policy announcement.
March 15,2010 , is the day before the most recent FOMC monetary policy announcement.

## Commercial Bank Credit

(Percent change, annual rate, except as noted; seasonally adjusted)

| Type of credit | 2008 | 2009 | $\begin{aligned} & \text { H1 } \\ & 2009 \end{aligned}$ | $\begin{gathered} \text { Q3 } \\ 2009 \end{gathered}$ | $\begin{gathered} \text { Q4 } \\ 2009 \end{gathered}$ | $\begin{aligned} & \text { Q1 } \\ & 2010 \end{aligned}$ | Mar. <br> 2010 | Levelㅗ Mar. 2010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 4.2 | -7.1 | -5.5 | -8.7 | -9.3 | -6.8 | -5.3 | 9,308 |
| Loans ${ }^{2}$ |  |  |  |  |  |  |  |  |
| Total | 4.2 | -10.2 | -7.5 | -14.4 | -12.7 | -10.1 | -6.3 | 6,983 |
| Core | 4.6 | -8.3 | -4.6 | -12.4 | -12.5 | -11.5 | -9.1 | 6,201 |
| To businesses |  |  |  |  |  |  |  |  |
| Commercial and industrial | 14.6 | -18.6 | -14.7 | -26.2 | -23.8 | -20.6 | -17.9 | 1,284 |
| Commercial real estate | 6.4 | -4.4 | -1.4 | -6.1 | -8.9 | -9.5 | -8.0 | 1,609 |
| To households |  |  |  |  |  |  |  |  |
| Residential real estate | -3.9 | -6.2 | -1.7 | -11.3 | -10.4 | -6.6 | -6.1 | 2,120 |
| Revolving home equity | 12.8 | . 5 | 6.0 | -4.9 | -4.8 | -3.3 | -2.0 | 605 |
| Closed-end mortgages | -8.8 | -8.5 | -4.5 | -13.7 | -12.5 | -7.9 | -7.9 | 1,515 |
| Consumer | 7.2 | -3.7 | -. 6 | -5.6 | -8.1 | -12.8 | -6.1 | 1,187 |
| Memo: Originated ${ }^{3}$ | 7.1 | -3.9 | -. 9 | -5.7 | -8.1 | -12.5 | -6.1 | 1,212 |
| Other | 1.6 | -23.4 | -28.1 | -30.3 | -14.3 | 1.8 | 16.6 | 783 |
| Securities |  |  |  |  |  |  |  |  |
| Total | 4.1 | 4.1 | 1.8 | 10.7 | 1.9 | 3.6 | -2.4 | 2,325 |
| Treasury and agency | 16.2 | 9.2 | 1.9 | 23.9 | 8.4 | 8.5 | 4.3 | 1,463 |
| Other ${ }^{4}$ | -9.5 | -3.3 | 1.6 | -8.3 | -8.1 | -4.5 | -13.6 | 862 |

Note: Yearly annual rates are Q4 to Q4; quarterly and monthly annual rates use corresponding average levels. Data have been adjusted to remove the effects of mark-to-market accounting rules (FAS 115) and the initial consolidation of certain variable interest entities (FIN 46) and off-balance-sheet vehicles (FAS 166 and 167). Data also account for the effects of nonbank structure activity of $\$ 5$ billion or more.

1. Billions of dollars. Pro rata averages of weekly (Wednesday) levels. Return to table
2. Excludes interbank loans. Return to table
 securities. Return to table

Source: Federal Reserve Board.

## Figure: Loans and Leases in Bank Credit

Line chart, 2007 to 2010. Unit is billions of dollars. Data are monthly, SA. NBER peak is marked by a vertical line at the end of 2007 . The end of the timeline is labeled March 31. The series begins at about 7000 and generally increases to about 8100 in late 2008. It generally decreases to about 7000 in early 2010 then generally increases ending at about 7400 .

Note. Data for March 31, 2010 reflect banks adoptions of FAS 166/167.
Source. Federal Reserve

## Figure: Survey Measures of Standards and Demand for Loans

Line chart, 1990 to 2010. Unit is net percent. Data are quarterly. 0 on the scale is marked by a horizontal line. The end of the series is labeled Q2. There are shaded bars marking 1990:Q2 to 1991:Q1 and Q2 to 2001:Q4. There are two series, "Standards" and "Demands." Standards begins at about 30 in early 1991 and generally decreases to about negative 20 in late 1993. It fluctuates but generally increases to about 40 in early 2002 then generally decreases to about negative 20 in late 2006 . It generally increases to about 85 in late 2008 then generally decreases ending at about negative 20. Demands begins at about negative 20 and fluctuates but generally increases to about 35 in early 1994. It generally decreases to about ne gative 50 in mid- 2001 then fluctuates but generally increases to about 30 in late 2005. It fluctuates but generally decreases to about negative 60 in late 2008 then generally increases ending at about negative 20.

[^21]Source. Senior Loan Officer Opinion Survey.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## Last update: January 29, 2016


[^0]:    * Includes closed-end residential mortgages and revolving home equity lines of credit. Return to table

[^1]:    * Seasonally adjusted. Forecasts are consistent with nominal GDP and interest rates in the Greenbook forecast. Return to table

[^2]:    1. Level, except for two-quarter and four-quarter intervals. Return to table
    2. Percent change from two quarters earlier; for unemployment rate, change is in percentage points. Return to table
    3. Percent change from four quarters earlier; for unemployment rate, change is in percentage points. Return to table
[^3]:    1. Private-industry workers. Return to table
    2. Core goods imports exclude computers, semiconductors, oil and natural gas. Return to table
[^4]:    
    
    
     unavailable.

[^5]:    Line chart, by thousands, 2000 to 2010. Data are 3-month moving average. There is a horizontal line at zero. The series begins in $2000: \mathrm{Q} 1$ at about 240 and generally decreases to about -325 by 2001:Q4. It then generally increases to about 300 by 2004:Q2. From 2004:Q2 to 2006:Q1 it fluctuates between about 150 and 300 . It then generally decreases to about -770 by 2009:Q1 and by March 2010 it has generally increased to about 50 .

[^6]:     Reuters/Michigan series was a preliminary value.

[^7]:    1. Durables excluding motor vehicles, nondurables excluding gasoline, and food services. Return to table
    2. Total sales less outlays at building material and supply stores, automobile and other motor vehicle dealers, and gasoline stations. Return to table
    e Staff estimate. Return to table
[^8]:     being about 15 million barrels wide, with the series typically being toward the center of the bounds. Monthly data through December 2009 , weekly data thereafter.

[^9]:    1. Percent change from the same period in the preceding year. Return to table
    2. Responses to the question, By about what percent do you expect prices to go up, on average, during the next 12 months? Return to table
[^10]:    1. From the last week of the preceding year to the last week of the year indicated. Return to table
[^11]:    

[^12]:    

[^13]:    Line chart, in billions of dollars, annual rate, 1999 to 2010. There are four series, "Capital goods excluding aircraft", "Industrial supplies", "Consumer goods", and "Aircraft". "Capital goods excluding aircraft" begins in 1999 at about 245 and increases to about 325 by 2000. It then decreases to about 230 by 2002 and then generally increases to about 390 by 2008. By 2009 it has decreased to about 300 and by early 2010 it has increased to about 345 . "Industrial supplies" begins in 1999

[^14]:    * One-month interest rate except 1-week rate for Korea. (No reliable short-term interest rate exists for China.) Return to table

[^15]:    1. Q4/Q4. Return to table
    2. Percentage point contribution to GDP growth. Return to table
[^16]:    Source: CEIC.

[^17]:    1. Gross domestic product. Annual rate. Annual data are $\mathrm{Q} 4 / \mathrm{Q} 4$. Return to table
    2. Percent; counts as unemployed those working 1 hour a week or less. Return to table
    3. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec. Return to table
    4. Billions of U.S. dollars, annualized. Return to table
    5. Billions of U.S. dollars, not seasonally adjusted, annualized. Return to table
    n.a. Not available.
    ... Not applicable.
    Source: Haver Analytics; Bank of Mexico.
[^18]:    1. Gross domestic product. Annual rate. Annual data are Q4/Q4. Return to table
    2. Percent. Return to table
    3. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec. Price index is IPCA. Return to table
    4. Billions of U.S. dollars, annualized. Return to table
    5. Billions of U.S. dollars, not seasonally adjusted, annualized. Return to table
    n.a. Not available.
    ... Not applicable.
    Source: Haver Analytics; IMF International Financial Statistics database; Intituto Brasileiro de Geografia e Estatistica.
[^19]:    1. Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas. Return to table
    
    n.a. Not available. Return to table

    Source: Census Bureau.

[^20]:    1. Excludes most terrestrial transportation equipment. Return to table
    2. From Census Bureau, Current Industrial Reports; billions of dollars, annual rate. Return to table
    n.a. Not available.

    Source: Census Bureau.

[^21]:    
     1990-March 1991, and March 2001-November 2001. A vertical line indicates the NBER Peak in December 2007.

