January 2010 Bluebook and Greenbook Tables and Charts

## Table of Contents

| Document Section |  |
| :--- | :--- |
| Bluebook | Accessible Material |
| Recent Developments | FOMC20100127bluebook20100121_1.htm |
| Monetary Policy Strategies | FOMC20100127bluebook20100121_2.htm |
| Policy Alternatives | FOMC20100127bluebook20100121_3.htm |
| Long-Run Projections of the Balance Sheet and Monetary Base | FOMC20100127bluebook20100121_4.htm |
| Debt, Bank Credit, and Money Forecasts | FOMC20100127bluebook20100121_5.htm |
| Appendix A: Measures of the Equilibrium Real Rate | FOMC20100127bluebook20100121_6.htm |
| Appendix C: Long-run Projections of the Balance Sheet and Monetary Base | FOMC20100127bluebook20100121_7.htm |
| Greenbook Part 1 | FOMC20100127gbpt120100120_1.htm |
| Domestic Developments | FOMC20100127gbpt120100120 2.htm |
| International Developments | FOMC20100127gbpt220100120_1.htm |
| Greenbook Part 2 | FOMC20100127gbpt220100120 2.htm |
| Domestic Nonfinancial Developments | FOMC20100127gbpt220100120_3.htm |
| Domestic Financial Developments |  |
| International Developments |  |
| Greenbook Supplement |  |
| Supplemental Notes |  |

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

## Recent Developments

## Chart 1

Interest Rate Developments
Figure: Central tendencies of the expected federal funds rate

Line chart, by percent, 2010:Q1 to 2012:Q2. There are two series, "January 21, 2010" and "December 15, 2009". The "January 21, 2010" series begins in 2010:Q1 at about 0.1 percent. It then generally increases to about 0.15 percent in 2010:Q3 and then more rapidly increases to about 2.3 percent by 2012:Q2. The "December 15, 2009" series also begins in 2010:Q1 at about 0.1 percent. It then generally increases to about 0.25 percent in 2010:Q3 and then more rapidly increases to about 2.5 percent by 2012:Q2.

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

## Figure: Implied distribution of federal funds rate six months ahead

Bar chart, $y$-axis is labeled as percentage of distribution, $x$-axis is federal funds rate in percent. There are two series, "Recent: $1 / 21 / 2010$ " and "Last FOMC: $12 / 15 / 2009$ ". The series "Recent: $1 / 21 / 2010$ " starts at the federal funds rate of 0.25 with a distribution of about $75 \%$. The federal funds rate of 0.5 has a distribution of about $15 \%$. The federal funds rate of 0.75 has a distribution of about $7 \%$ and the federal funds rate of 1.00 has a distribution of about $3 \%$. The federal funds rates of 1.25 through 3.5 have a distribution of $0 \%$. The series "Last FOMC: $12 / 15 / 2009$ " starts at the federal funds rate of 0.25 with a distribution of about $63 \%$. The federal funds rate of 0.5 has a distribution of about $7 \%$. The federal funds rate of 0.75 has a distribution of about $20 \%$ and the federal funds rate of 1.00 has a distribution of about $3 \%$. The federal funds rate of 1.25 has a distribution of about $4 \%$. The federal funds rate of 1.5 has a distribution of about $3 \%$. The federal funds rate of 1.75 has a distribution of $0 \%$ and the federal funds rate of 2.00 has a distribution of about $1 \%$. The federal funds rates of 2.25 through 3.5 have a distribution of $0 \%$.

Note. Derived from options on Eurodollar futures contracts, with term premium and other adjustments to estimate the distribution of the federal funds rate.
Source. CME Group.
Figure: Distribution of expected quarter of first rate increase from the Desk's Dealer Survey

Bar chart, by percent, 2010:Q1 to 2012:Q2. There are two series, "Recent: 17 respondents" and "Last FOMC: 16 respondents". The series "Recent: 17 respondents" begins in 2010:Q1 with a 0\% distribution. In 2010:Q2 its distribution is about 17\% and in Q3 it is about 29\%. In 2010:Q4 and 2011:Q1 its distribution is about 17\%. In 2011:Q2 its distribution is about $5 \%$ and in Q3 it is about 12\%. From 2011:Q4 to 2012:Q2 its distribution is 0\%. The series "Last FOMC: 16 respondents" begins in 2010:Q1 with a 0\% distribution. In 2010:Q2 its distribution is about $18 \%$ and in Q3 it is about $31 \%$. In 2010:Q4 its distribution is about 18\% and in 2011:Q1 it is about $13 \%$. In 2011:Q2 and 2011:Q3 its distribution is about $5 \%$. In 2011:Q4 its distribution is $0 \%$ and in 2012:Q1 it is $5 \%$. In $2012: Q 2$ its distribution is $0 \%$.

Source. Federal Reserve Bank of New York.
Figure: Nominal Treasury yields

Line chart, by percent, 2007:Q1 to January 21, 2010. Data are daily. The event "December FOMC" is noted in the chart at the end of 2009:Q4. There are two series, "10-year" and "2-year". The "10-year" series starts in 2007:Q1 at about 4.75\% and fluctuates between about 4.5\% and 5.4\% until 2007:Q3. It then generally decreases to about $3.5 \%$ by the end of $2008: Q 1$. From $2008: Q 1$ to $2008: Q 4$ it fluctuates between $3.5 \%$ and $4.5 \%$. In $2008: Q 4$ it generally decreases to about $2.5 \%$. It then generally increases to about 3.8\% by January 21, 2010. The "2-year" series starts in 2007:Q1 at about 4.75\% and fluctuates between about 4.5\% and 5.1\% until 2007:Q3. It then generally decreases to about $1.3 \%$ by the end of 2008:Q1. It then generally increases to about $3 \%$ by $2008: Q 3$. By the end of $2008: Q 4$ it has generally decreased to about $0.5 \%$. From 2009:Q1 to 2010:Q1 it fluctuates between about $0.5 \%$ and $1.3 \%$, and on January 21,2010 it is about $1 \%$.

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

Figure: Inflation compensation

Line chart, in percent, 2007:Q1 to January 21, 2010. Data are daily. The event "December FOMC" is noted in the chart at the end of 2009:Q4. There is also a horizontal line placed on the chart at $0 \%$. There are two series, "Next 5 years" and " 5 to 10 year forward". The series "Next 5 years" is adjusted for the indexation-lag (carry) effect. It begins in 2007:Q1 at about 2.3\% and fluctuates between 1.8\% and 2.5\% until 2008:Q3. It then generally decreases to about $-1.5 \%$ by the middle of 2008:Q4. Starting in 2008:Q4 it generally increases until it reaches $2 \%$ on January 21, 2010. The series " 5 to 10 year forward" begins in 2007:Q1 at about 2.5\% and fluctuates between $2.5 \%$ and $3.2 \%$ until about 2008:Q4. In 2008:Q4 it increases to about $3.8 \%$ and then decreases to $2 \%$ by the beginning of 2009 Q1. It then generally increases until it reaches about 3.1\% by January 21, 2010.

Figure: 10-year Treasury implied volatility

Line chart, by percent, January 2007 to January 2010. Data are daily. The event "December FOMC" is noted in the chart at the end of $2009:$ Q4. The series begins in January 2007 at about $4.5 \%$ and generally increases to about 10\% by February 2008. In March 2008 it decreases to about $7 \%$ and from March 2008 to August 2008 it fluctuates between about $7 \%$ and $9 \%$. By September 2008 it has generally increased to about $14 \%$. It then generally decreases to about $6 \%$ by April 2009. By May 2009 it's generally increased back up to about 12\%. It generally decreases to about $6.5 \%$ by January $21,2010$.

Note. 10-year Treasury note implied volatility derived from options on futures contracts.
Source. Bloomberg.

## Chart 2

## Asset Market Developments

## Figure: Equity Prices

Line chart, the scale is January 02, 2008=100, from January 02, 2008 to January 21, 2010. Data are daily. The event "December FOMC" is noted in the chart at the end of 2009:Q4. The series "S\&P 500" begins at 100 on January 02, 2008 and fluctuates between 90 and 100 until the middle of $2008: Q 2$. It then generally decreases to about 45 by 2009:Q1. By January 21, 2010 it has generally increased to about 80.

Source. Bloomberg.
Figure: S\&P 500 earnings per share

Line chart, in dollars, 2000:Q1 to 2009:Q3. Data are quarterly, s.a. The series begins at 2000:Q1 at about $\$ 14$. It then generally decreases to about $\$ 10.50$ by 2002:Q1. By 2007:Q3 it has generally increased to about $\$ 24$. It decreases to about $\$ 16$ by 2008:Q1 and increases to about $\$ 19.50$ by 2008:Q2. It remains stable at about $\$ 19.50$ until 2008:Q3 and then decreases to about $\$ 5.50$ by 2009:Q1. By 2009:Q3 it has increased back up to about $\$ 16.50$.

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

Line chart, by percent, 2002:Q1 to January 21, 2010. Data are daily. The event "December FOMC" is noted in the chart at the end of 2009:Q4. The series begins at 2002:Q1 at about 20\% and generally increases to about 45\% by 2002:Q3. It then generally decreases to about 20\% by 2003:Q2. From 2003:Q2 to 2007:Q3 it fluctuates between about $5 \%$ and $25 \%$. It then generally increases to about $80 \%$ by $2008: Q 4$. By January 21,2010 it has generally decreased to about $20 \%$.

Source. Chicago Board Options Exchange.
Figure: Bank ETFs

Line chart, the scale is January 2, $2009=100$, January 2009 to January 2010. Data are daily. The event "December FOMC" is noted in the chart at the end of 2009:Q4. There are two series, "Large banks" and "Regional banks". The series "Large banks" starts on January 2, 2009 at 100 and generally decreases to about 40 by March 2009. It then generally increases to about 95 by May 2009. In May 2009 it decreases to about 85 and then fluctuates between about 75 and 90 until July 2009. It then generally increases to about 100 by August 2009 and then fluctuates between about 93 and 110 until January 2010. On January 21,2010 it's at about 95. The series "Regional banks" starts on January 2, 2009 at 100 and generally decreases to about 50 by March 2009. It generally increases to about 80 by May 2009 and then generally decreases to about 60 by July 2009. It then generally increases to about 80 by August 2009 and then fluctuates between about 65 and 80 until January 2010. On January 21, 2010 it's at about 75.

Note. Large banks ETF includes 24 banks. Small banks ETF includes 51 banks.
Source. Bloomberg.

## Figure: Corporate bond spreads

Line chart, in basis points (bp), 2002:Q1 to 2010:Q1. Data are daily. The event "December FOMC" is noted in the chart at the end of 2009:Q4. There are two series, "10-year BBB" and "10-year high-yield". The series "10-year BBB" begins in 2002:Q1 at 200 bp and then generally increases to about 325 bp by 2002:Q4. By 2004:Q1 it has generally decreased to about 125 bp and it remains relatively stable here until about 2007:Q1. It then generally increases to about 650 bp by $2008: Q 4$. By January 21, 2010 it has generally decreased to about 250 bp. The series "10-year high-yield" begins in 2002:Q1 at about 500 bp and then generally increases to about 850 bp by 2002:Q4. By 2004:Q1 it has generally decreased to about 350 bp and it remains relatively stable here until about $2007: Q 1$. It then generally increases to about 1650 bp by 2008:Q4. By January 21, 2010 it has generally decreased to about 450 bp .

Note. Measured relative to a smoothed nominal off-the-run Treasury yield curve.
Source. Merrill Lynch and staff estimates.

Line chart, January 2007 to January 20, 2010. Data are daily. The event "December FOMC" is noted in the chart at the end of 2009:Q4. There are two series, "Bid-ask spread" measured in basis points (bp) and "Bid price" measured in percent of par. The series "Bid-ask spread" begins in January 2007 at 60 bp and remains relatively stable here until July 2007. It then increases to about 150 bp by August 2007 and generally decreases to about 120 bp by October 2007 . By February 2008 it has generally increased to about 225 bp and by June 2008 it has again generally decreased to about 160 bp. It then generally increases to about 420 bp in January 2009 . By January 20, 2010 it has generally decreased to about 175 bp. The series "Bid price" begins in January 2007 at about $98 \%$ and remains relatively stable here until July 2007 when in decreases to about $95 \%$. It then fluctuates between about $93 \%$ and $96 \%$ from August 2007 to January 2008. In February 2008 it decreases to about $86 \%$. From March 2008 to October 2008 it fluctuates between about $86 \%$ and $89 \%$. It then generally decreases to about $60 \%$ by December 2008 and by January 202010 it has generally increased to about 88\%.

Source. LSTA/LPC Mark-to-Market Pricing.

## Chart 3

## Credit Market Developments

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

Bar chart, in billions of dollars, 2007 to 2009. Data are monthly rate. There are three series, "Bonds", "C\&l loans" and "Commercial paper". Commercial paper and C\&I 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 23, Sum 48. 2008:H1: Bonds 21, C\&l loans 19, Sum 40. 2008:H2: Bonds 11, C\&l loans 9, Commercial paper 2, Sum 22. 2009:Q1: Bonds 49, C\&l loans -15, Commercial paper -12, Sum 22. 2009:Q2: Bonds 33, C\&l loans -20, Commercial paper -13, Sum 0. 2009:Q3: Bonds 21 , C\&l loans -34, Commercial paper -1, Sum -14. October 2009: Bonds 17, Commercial paper 3, C\&l loans -20, Sum 0. November 2009: Bonds 38, C\&l loans -21, Commercial paper -14, Sum 3. December 2009: Bonds 17, Commercial paper 1, C\&l loans -8, Sum 10.

Source. Depository Trust \& Clearing Corporation, Thomson Financial, and Federal Reserve H. 8 release.

## Figure: Selected interest rates

Line chart, by percent, January 2009 to January 2010. Data are business daily except for the 30-year fixed rate mortgage which is weekly. The event "December FOMC" is noted in the chart at the middle of December 2009. There are three series, "30-year fixed rate mortgage", "MBS yield" and "On-the-run 10-yr Treasury". The series "30-year fixed rate mortgage" begins in January 2009 at about $5.0 \%$. It then generally increases to about $5.2 \%$ by the beginning of February and generally decreases to about $4.7 \%$ by the end of April. By June it has generally increased to about $5.5 \%$ and by the beginning of December it has generally decreased to about $4.7 \%$. On January 20, 2010 it has generally increased to about $5.0 \%$. The series "MBS yield" begins in January 2009 at about $4.1 \%$ and generally decreases to about $3.6 \%$ by mid-January. It then generally increases to about $4.5 \%$ by the end of February and generally decreases to about $3.9 \%$ by the end of April. By June it has generally increased to about $5.0 \%$ and by the beginning of December it has generally decreased to about $3.9 \%$. On January 21 , 2010 it has generally increased to about $4.4 \%$. The series "On-the-run 10-yr Treasury" begins in January 2009 at about $2.5 \%$ and generally decreases to about $2.1 \%$ by mid-January. It then generally increases to about $3.0 \%$ by mid-February and generally decreases to about $2.5 \%$ by the mid-March. By June it has generally increased to about $4.0 \%$ and by the beginning of December it has generally decreased to about 3.2\%. On January 21, 2010 it has generally increased to about $3.6 \%$.

Source. Bloomberg.

## Figure: Gross ABS issuance

Bar chart, in billions of dollars, 2006 to 2009. There are three series, "Credit card", "Auto" and "Student loan". Auto ABS include car loans and leases and financing for buyers of motorcycles. Approximate values are: 2006: Credit card 5, Auto 7.5, Student loan 6.5. 2007: Credit card 8, Auto 6, Student loan 5.5. 2008:H1: Credit card 8.5, Auto 5.5, Student loan 4. 2008:H2: Credit card 2, Auto 0.5, Student loan 1. 2009:Q1: Credit card 3, Auto 3, Student loan 0.5. 2009:Q2: Credit card 7.5, Auto 4, Student loan 3. 2009:Q3: Credit card 5.5, Auto 6.5, Student loan 2. October 2009: Credit card 0.25, Auto 4.5, Student loan 1.25. November 2009: Credit card 0.25, Auto 8.5, Student loan 1.75. December 2009: Credit card 3.5, Auto 0.5, Student loans 3.0. The values for December 2009 are the values as of January 15, 2010; there has been no issuance in January.

Source. Inside MBS \&ABS, Merrill Lynch, Bloomberg, and the Federal Reserve.

## Figure: Libor over OIS spreads

Line chart, in basis points (bp), September 2008 to January 2010. Data are daily. The event "December FOMC" is noted on the chart in the middle of December 2009. There are three series, "1-month", "3-month", and "6-month". The series "1-month" begins at about 50 bp in September 2008 and generally increases to about 335 bp by early October. It then generally decreases to about 75 bp in late November 2008. By mid-December it has increased to about 155 bp and by mid-January 2009 it has generally decreased to about 12 bp. From January 2009 to January 2010 it fluctuates between about 5 and 40 bp. On January 20,2010 it is at about 5 bp. The series " 3 -month" begins at about 75 bp in September 2008 and generally increases to about 365 bp by early October. It then generally decreases to about 165 bp in early November 2008. By mid-December 2008 it has increased to about 190 bp and by mid-September 2009 it has generally decreased to about 7 bp. From September 2009 to January 2010 it remains relatively stable and on January 20, 2010 it is at about 6 bp. The series " 6 -month" begins at about 100 bp in September 2008 and generally increases to about 325 bp by early October. It then generally decreases to about 200 bp in early November 2008. By mid-December it has increased to about 220 bp. It then generally decreases and by January 20, 2010 it is at about 20 bp .

Source. British Bankers' Association and Prebon.
Figure: Spreads on 30-day commercial paper

Line chart, in basis points (bp), July 2007 to January 2010. Data are daily. The event "December FOMC" is noted on the chart in the middle of December 2009. There are two series, "ABCP" and "A2/P2". The ABCP spread is the AA ABCP rate minus the AA nonfinancial rate. The A2/P2 spread is the A2/P2 nonfinancial rate minus the AA nonfinancial rate. The series "ABCP" begins at about 10 bp in July 2007 and generally increases to about 140 bp by September 2007. It then generally decreases to about 25 bp by late October 2007 and by December 2007 it has generally increased to about 200 bp. It generally decreases to about 25 bp at the beginning of February 2008. From February to August 2008 it fluctuates between about 25 and 100 bp. It generally increases to about 390 bp in late September 2008 and then generally decreases to about 10 bp by January 20, 2010. The series "A2/P2" begins at about 10 bp in July 2007 and generally increases to about 100 bp by September 2007. It then generally decreases to about 30 bp by early November 2007 and by December 2007 it has generally increased to about 150 bp. It generally decreases to about 30 bp at the beginning of February 2008. From February to August 2008 it fluctuates between about 30 and 120 bp. It generally increases to about 625 bp in early January 2009 and then generally decreases to about 10 bp by January 20, 2010.

Source. Depository Trust \& Clearing Corporation.

## Figure: Usage of TALF and other lending facilities

Line chart, in billions of dollars, January 2007 to January 2010. Data are daily. The event "December FOMC" is noted on the chart in the middle of December 2009. There are two series, "Other facilities" and "TALF". The "Other facilities" includes primary, secondary, and seasonal credit; TAF; PDCF; dollar liquidity swaps; CPFF; and AMLF. It begins at 0 in January 2007 and stays at 0 until late December 2007. It then generally increases to about 250 by September 2008 and then more rapidly increases to about 1500 by November 2009. By January 20, 2010 it has generally decreased to about 100. The "TALF" series also begins in January 2007 at 0 and stays at 0 until March 2009. It then generally increases to about 50 by January 20, 2010.

Source. Federal Reserve.
[Box:] Balance Sheet Developments during the Intermeeting Period

Federal Reserve Balance Sheet
Billions of dollars

|  | Change since last FOMC | $\begin{aligned} & \text { Current } \\ & (1 / 20 / 2010) \end{aligned}$ | Maximum level | Date of maximum level |
| :---: | :---: | :---: | :---: | :---: |
| Total assets | 18 | 2,255 | 2,295 | 01/13/10 |
| Selected assets: |  |  |  |  |
| Liquidity programs for financial firms | -64 | 56 | 1,247 | 11/06/08 |
| Primary, secondary, and seasonal credit | -4 | 16 | 114 | 10/28/08 |
| Term auction credit (TAF) | -47 | 39 | 493 | 03/11/09 |
| Foreign central bank liquidity swaps | -13 | 1 | 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 | -0 | 61 | 351 | 01/23/09 |
| Net portfolio holdings of Commercial Paper Funding Facility LLC (CPFF) | -1 | 13 | 351 | 01/23/09 |
| Term Asset-Backed Securities Loan Facility (TALF) | 1 | 48 | 48 | 12/22/09 |
| Support for specific institutions | 3 | 113 | 118 | 04/02/09 |
| Credit extended to AIG, net | 3 | 23 | 91 | 10/27/08 |
| Preferred interests in AIA Aurora LLC and ALICO Holdings LLC | +0 | 25 | 25 | 01/20/10 |
| 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 ${ }_{-}^{*}$ | 78 | 1,910 | 1,910 | 01/20/10 |
| U.S. Treasury securities | +0 | 777 | 791 | 08/14/07 |
| Agency securities | 5 | 162 | 162 | 01/20/10 |
| Agency mortgage-backed securities*** | 74 | 971 | 971 | 01/20/10 |
| Memo: Term Securities Lending Facility (TSLF) | 0 | 0 | 236 | 10/01/08 |
| Total liabilities | 19 | 2,203 | 2,243 | 01/13/10 |
| Selected liabilities: |  |  |  |  |
| Federal Reserve notes in circulation | -3 | 879 | 890 | 12/29/09 |


| Reserve balances of depository institutions | -74 | 1,063 | 1,169 | $11 / 27 / 09$ |
| :--- | ---: | ---: | ---: | :---: |
| U.S. Treasury, general account | 127 | 170 | 187 | $12 / 31 / 09$ |
| U.S. Treasury, supplementary financing account | -10 | 5 | 559 | $10 / 22 / 08$ |
| Other deposits | -27 | +0 | 53 | $04 / 14 / 09$ |
| Total capital | $\mathbf{- 1}$ | $\mathbf{5 2}$ | $\mathbf{5 5}$ | $\mathbf{1 2 / 0 1 / 0 9}$ |

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

* Par value. Return to table
 Total MBS purchases are about \$1,149 billion. Return to table


## Chart 4 <br> International Financial Indicators

## Figure: Nominal trade-weighted dollar indexes

Line chart, the scale is December 31, $2006=100$, January 2007 through January 21, 2010. Data are daily. The event "December FOMC" is noted in the chart at the end of 2009:Q4. There are three series, "Broad", "Major currencies" and "Other important trading partners". The series "Broad" begins in 2007:Q1 at about 101 and then generally decreases to about 88 by 2008:Q3. By 2009:Q1 it has generally increased to about 107.5 and by the end of 2009:Q4 it's generally decreased to about 96. The series "Major currencies" begins in 2007:Q1 at about 99.5 and then generally decreases to about 85 by 2008:Q1. By 2009:Q1 it has generally increased to about 105.5 and by the end of 2009:Q4 it's generally decreased to about 92 . The series "Other important trading partners" begins in 2007:Q1 at about 100 and then generally decreases to about 91.5 by 2008:Q3. By 2009:Q1 it has generally increased to about 110.5 and by January 21,2010 it's generally decreased to about 100 .

Source. Federal Reserve.

Figure: Nominal 10-year government bond yields

Line chart, in percent, January 2007 through January 21, 2010. Data are daily. The event "December FOMC" is noted in the chart at the end of $2009:$ Q4. There are three series, "UK", "Germany" and "Japan". The "UK" series begins at about 4.75\% in 2007:Q1 and then generally increases to about $5.5 \%$ by the beginning of 2007:Q3. It then generally decreases to about $4.25 \%$ in 2008:Q1. By 2008:Q2 it has generally increased to about $5.25 \%$ and by $2009: Q 1$ it has generally decreased to about $3.0 \%$. From 2009:Q1 to the end of 2009:Q4 it fluctuates between about $2.9 \%$ and $4.0 \%$. It ends at about $4.0 \%$ at the end of 2009 . The "Germany" series begins at about $3.95 \%$ in 2007:Q1 and then generally increases to about 4.7\% by the beginning of 2007:Q3. It then generally decreases to about $3.7 \%$ in $2008: Q 1$. By 2008:Q2 it has generally increased to about 4.7\% and by 2009:Q1 it has generally decreased to about 2.9\%. From 2009:Q1 to the end of 2009:Q4 it fluctuates between about $2.9 \%$ and $3.7 \%$. It ends at about $3.2 \%$ at the end of 2009. The "Japan" series begins at about 1.7\% in 2007:Q1 and then generally increases to about 2.0\% by the beginning of 2007:Q3. It then generally decreases to about 1.25\% in 2008:Q1. By 2008:Q2 it has generally increased to about 1.9\% and by 2009:Q1 it has generally decreased to about 1.2\%. From 2009:Q1 to the end of 2009:Q4 it fluctuates between about 1.2\% and 1.55\%. It ends on January 21,2010 at about 1.3\%.

Source. Bloomberg.
Figure: Stock price indexes: Industrial countries

Line chart, January 2007 through January 21, 2010. Unit is an index, December 31, 2006=100. Data are daily. There are three series, "UK (FTSE-350)", "Euro Area (DJ Euro)", and "Japan (Topix)". The series "UK (FTSE-350)" begins in 2007:Q1 at about 100. From 2007:Q1 to 2007:Q4 it fluctuates between about 97 and 107. It then generally decreases to about 56 in 2009:Q1. By January 21, 2010 it has generally increased to about 85. "Euro Area (DJ Euro)" begins in $2007: Q 1$ at about 100. It generally increases to about 112 by the end of 2007:Q2 and then generally decreases to about 43 by 2009:Q1. It generally increases to about 68 by January 21 , 2010. "Japan (Topix)" begins in 2007:Q1 at about 100 and within the quarter increases to about 108. It then generally decreases to about 42 by $2009: Q 1$. It generally increases to about 57 by January 21, 2010.

## Figure: Stock price indexes: Emerging market economies

Line chart, January 2007 through January 21, 2010. Unit is an index, December 31, 2006=100. Data are daily. There are three series, "Brazil (Bovespa)", "Korea (KOSPI)", and "Mexico (Bolsa)". The series "Brazil (Bovespa)" begins in 2007:Q1 at about 102 and generally increases to about 167 by 2008:Q2. By 2008:Q4 it has generally decreased to about 75. It then generally increases and ends at about 150 on January 21, 2010. The series "Korea (KOSPI)" begins in 2007:Q1 at about 100 and generally increases to about 145 by 2007:Q4. It then generally decreases to about 112 in 2008:Q1 and generally increases to about 135 in 2008:Q2. By 2008:Q4 it has generally decreased to about 65. It then generally increases and ends at about 120 on January 21, 2010. The series "Mexico (Bolsa)" begins in 2007:Q1 at about 100 and generally increases to about 123 by 2007:Q2. It then generally decreases to about 92 in 2008:Q1 and generally increases to about 120 in 2008:Q2. By 2008:Q4 it has generally decreased to about 65. It then generally increases and ends at about 120 on January 21, 2010.

Source. Bloomberg.

Chart 5
Debt and Money

Growth of debt of nonfinancial sectors
Percent, s.a.a.r.

|  | Total | Business | Household | Government |
| :---: | :---: | :---: | :---: | :---: |
| 2007 | 8.7 | 13.4 | 6.6 | 6.1 |
| 2008 | 5.9 | 5.1 | 0.2 | 17.5 |
| H1 | 4.4 | 7.1 | 1.7 | 5.6 |
| H2 | 7.2 | 3.1 | -1.1 | 28.6 |
| 2009 |  |  |  |  |
| Q1 | 4.3 | 0.6 | -1.2 | 17.9 |
| Q2 | 4.5 | -2.1 | -1.6 | 22.0 |
| Q3 | 2.8 | -2.4 | -2.7 | 16.9 |
| Q4p | 2.0 | -0.6 | -2.2 | 9.3 |

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

## Figure: Growth of debt of household sector

Line chart, by percent, 1991 to 2009. Data are quarterly, s.a.a.r. There is a horizontal line at 0\%. There are two series, "Consumer credit" and "Home mortgage". "Consumer credit" begins in 1991:Q1 at about $0 \%$ and decreases to about $-1.5 \%$ by 1991:Q3. It then generally increases to about $17 \%$ by $1994: Q 4$ and generally decreases to about $3 \%$ by 1997:Q1. From 1997:Q1 to 2007:Q3 it fluctuates between about $2.5 \%$ and $12 \%$. It then generally decreases until the end of 2009 . The 2009:Q4 projected value is -5\%. "Home mortgage" begins in 1991:Q1 at about 8\%. From 1991:Q1 to 1998:Q1 it fluctuates between about 3\% and 8.5\%. It then generally increases to about $16 \%$ by 2003:Q2 and then generally decreases until the end of 2009. The 2009:Q4 projected value is about $-1.5 \%$.

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

## Figure: Bank loans

Line chart, the scale is January $2008=100$, January 2007 to January 2009. Data are monthly average. The series begins at about 90.5 in January 2007 and generally increases to about 104.5 by October 2008. It then generally decreases to about 96 in December 2009.

Source. Federal Reserve.

## Figure: Index of supply and demand for bank loans

Line chart, by index, 1991 to 2009. Data are quarterly. There is a horizontal line at the index of 0 . There are two series, "Aggregated supply" and "Aggregated demand". The series "Aggregated supply" begins in 1991:Q1 at about 0.1 and generally decreases to about -0.2 by 1993:Q2. It then generally increases to about 0.4 by 2000:Q4 and generally decreases to about -0.2 by 2004:Q4. By 2008:Q3 it has generally increased to about 0.9 . By 2009:Q4 it has generally decreased to about 0 . The series "Aggregated demand" begins in 1991:Q1 at about -0.2. From 1991:Q1 to 1998:Q4 it fluctuates between about -0.2 and 0.4 . It then generally decreases and by 2000:Q4 it's at about -0.45 . It generally increases to about 0.3 by 2005:Q2 and generally decreases to about -0.2 by $2009: Q 4$.

 2001-November 2001. A vertical line indicates the NBER Peak in December 2007.

Source. Senior Loan Officer Opinion Survey.

## Figure: Growth in unused commitments

Line chart, by percent, 1990 to 2009:Q3. Data are quarterly, n.s.a.a.r. There is a horizontal line at the index of 0 . There are three series, "Credit card lines", "Home equity lines", and "Other" which represents total unused commitments excluding home equity and credit cards. The series "Credit card lines" begins in 1990:Q1 at about $10 \%$ and generally increases to about $25 \%$ by 1991:Q2. It then generally decreases to about 8\% by 1993:Q1 and by 1995:Q1 has generally increased to about $45 \%$. It then generally decreases to about -15\% by 1999:Q2 and then generally increases to about 30\% by 2000:Q3. By 2005:Q1 it has generally decreased to about $-15 \%$ and by 2006:Q2 it has generally increased to about 15\%. It then generally decreases and by 2009:Q1 is at about $-45 \%$ and by $2009: Q 3$ is has increased back up to about $-15 \%$. The series "Home equity lines" begins in 1990:Q1 at about 25\% and generally decreases to about 0\% by 1993:Q1. It then generally increases to about $40 \%$ by 1999:Q3 and then generally decreases to about $-10 \%$ by 2002:Q1. By 2002:Q2 it has increased up to about $50 \%$ and by 2002:Q3 it has decreased down to about $13 \%$. It then generally increases to about $35 \%$ by 2004:Q2 and then generally decreases and is at about $-15 \%$ by $2009: Q 3$. The series "Other" begins in 1990:Q1 at about 0\% and decreases to about 10\% by 1990:Q3. It then generally increases to about 25\% by 1997:Q3. By 2002:Q1 it has generally decreased to about $-10 \%$ and by 2004:Q3 it has generally increased to about 20\%. From 2004:Q3 to 2007:Q3 it fluctuates between about $7 \%$ and $20 \%$. It then generally decreases to about $-35 \%$ by 2008:Q4 and by 2009:Q3 has generally increased to about $-5 \%$.

Note. A vertical line indicates the NBER Peak in December 2007.
Source. Call Report data, adjusted for the effects of merger and failure activity involving large thrift institutions.

Bar chart, by percent, 2007 to 2009. Data are s.a.a.r. The series starts at about $6.2 \%$ in 2007 and increases until it reaches about $11.8 \%$ in $2009: Q 1$. It then decreases to about $1.8 \%$ in 2009:Q3. The preliminary value for 2009:Q4 is about 3.5\%.

Source. Federal Reserve.

## [Box:] Interpretation of the January Senior Loan Officer Opinion Survey

## Figure: Composite tightening index

Line chart, by net percent, 1991 to 2009. Data are quarterly. There is a horizontal line at the index of 0 . The series begins at about $30 \%$ in $1991: Q 1$. It then generally decreases to about $-20 \%$ by 1993 and then generally increases to about $40 \%$ by late 2000 . By late 2004 it has generally decreased to about $-20 \%$ and by late 2008 it has generally increased to about $80 \%$. It then generally decreases and by 2009:Q4 has reached about 0\%.

Note. The index represents the net percentage of core loans on SLOOS respondents' balance sheets that were in categories for which banks reported a tightening of standards. Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. A vertical line indicates the NBER Peak in December 2007.

## Figure: Unanticipated changes in credit standards

Line chart, in standard deviations, 1991 to 2009. Data are quarterly. There is a horizontal line at the index of 0 . There are two series, "Bank-level model" and "VAR". The "Bank-level model" series begins in 1992:Q1 at about 0 and then increases to about 1.2 by late 1992. By late 1993 it has generally decreased to about -0.5 . From late 1993 to early 1998 it fluctuates between about -1.3 and 0.3 . It then increases to about 1.8 in late 1998 and then decreases to about -1.8 at the end of 1998 . It generally increases to about 1.2 by late 2002 and generally decreases to about -1.5 by the end of 2004 . It then generally increases to about 3.4 by early 2008 and then generally decreases to about -0.5 by 2009:Q4. The series "VAR" begins in 1992:Q1 at about 0.2 and then generally increases to about 0.8 by late 1992 . By early 1993 it has generally decreased to about -0.3. From early 1993 to early 1998 it fluctuates between about -1.8 and 1 . It then increases to about 3 in late 1998 and then decreases to about -2.3 at the end of 1998 . From the end of 1998 to early 2007 it fluctuates between about -2.2 to 1.4 . It then generally increases to about 2.8 by mid 2007and then generally decreases to about -1.7 by 2009:Q4.

Note. A shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research (NBER): March 2001-November 2001. A vertical line indicates the NBER Peak in December 2007.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

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

## Monetary Policy Strategies

## Chart 6

Equilibrium Real Federal Funds Rate

## Figure: Short-Run Estimates with Confidence Intervals


#### Abstract

Line chart, by percent, 1990 to 2010. There are five series, "The actual real funds rate based on lagged core inflation", "Greenbook-consistent measure (FRB/US)", "Range of model-based estimates", "70 percent confidence interval" and "90 percent confidence interval". The actual real funds rate series starts at about 4.5\%, decreases to about $0 \%$ by 1992, generally increases to about $4.5 \%$ by 2001, generally decreases to about $-1 \%$ by 2005 , increases to about $3 \%$ by 2007 , decreases to about $-2 \%$ by 2008 and generally increases to about $-1.5 \%$ by early 2010. Greenbook-consistent measure starts at about 4\% in 1997. It generally increases to about $5 \%$ by 2000, generally decreases to about $0 \%$ by 2003, generally increases to about $3 \%$ by 2007 , and decreases to about $-4.5 \%$ by 2009 and increases to about $-1.6 \%$ by early 2010 . The other 3 series closely track each other throughout the chart, with the 70 percent confidence interval being about 1\% both lesser and greater than the Range of model-based estimates, and the 90 Percent confidence interval being about $2 \%$ both lesser and greater than the Range of model-based estimates at any given point. The Range of model-based estimates starts between about $1 \%$ and $3.9 \%$, decreases to between about -0.5 and 2 by 1991 , generally increases to between about $2 \%$ and $5 \%$ by 2000, generally decreases to between about $-0.5 \%$ and $1.5 \%$ by 2003 , increases to between about $0 \%$ and $3 \%$ by 2006 , decreases to between about $-5 \%$ and $-2 \%$ in 2009 and then increases to end at about between about $-2 \%$ and $0.5 \%$.


Short-Run and Medium-Run Measures
Current Estimate Current Estimate as of Previous Bluebook Previous Estimate

| Short-Run Measures |  |  |  |
| :---: | :---: | :---: | :---: |
| Single-equation model | -1.2 | -1.5 | -1.9 |
| Small structural model | -1.1 | -1.3 | -1.4 |
| EDO model | 0.6 | 0.8 | 0.5 |
| FRB/US model | -1.8 | -1.9 | -2.1 |
| Confidence intervals for four model-based estimates |  |  |  |
| 70 percent confidence interval | -2.6 to 0.9 |  |  |
| 90 percent confidence interval | -3.5 to 1.9 |  |  |
| Greenbook-consistent measures |  |  |  |
| EDO model | -2.3 | -2.5 | -3.3 |
| FRB/US model | -1.5 | -1.6 | -1.9 |
| Medium-Run Measures |  |  |  |
| Single-equation model | 1.2 | 1.2 | 1.2 |
| Small structural model | 1.9 | 1.7 | 1.8 |
| Confidence intervals for two model-based estimates |  |  |  |
| 70 percent confidence interval | 0.6 to 2.5 |  |  |
| 90 percent confidence interval | -0.3 to 3.0 |  |  |
| TIPS-based factor model | 2.0 |  | 2.0 |
| Memo |  |  |  |
| Actual real federal funds rate | -1.3 |  | -1.4 |

Note: Appendix A provides background information regarding the construction of these measures and confidence intervals. The actual real federal funds rate shown is based on lagged core inflation as a proxy for inflation expectation. For information regarding alternative measures, see Appendix A.

## Chart 7

Constrained vs. Unconstrained Monetary Policy (2 Percent Inflation Goal)
Figure: Nominal Federal Funds Rate

Line chart, by percent, 2009 to 2014. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained", "Previous Bluebook: Unconstrained". The Current Bluebook: Constrained begins in 2009:Q4 at about 0.3\% and remains relatively stable here until 2012:Q3. It then increases to about $3.8 \%$ by 2014:Q4. The series Current Bluebook: Unconstrained begins in 2009:Q4 at about $0.2 \%$ and decreases to about $-3.7 \%$ by 2011:Q1. It then increases to about $4.5 \%$ by 2014:Q4. The series Previous Bluebook: Unconstrained begins in 2009:Q4 at about $0.2 \%$ and decreases to about $-4 \%$ by 2011:Q1. It then increases to about $5 \%$ by 2014:Q4.

## Figure: Real Federal Funds Rate

Line chart, by percent, 2009 to 2014. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained", "Previous Bluebook: Unconstrained". The Current Bluebook: Constrained begins in 2009:Q4 at about $-1.5 \%$ and remains relatively stable here until 2012:Q3. It then increases to about $1.8 \%$ by 2014:Q4. The series Current Bluebook: Unconstrained begins in 2009:Q4 at about $-1.2 \%$ and decreases to about $-5 \%$ by 2011:Q1. It then increases to about $2.3 \%$ by 2014:Q4. The series Previous Bluebook: Unconstrained begins in 2009:Q4 at about $-1.2 \%$ and decreases to about $-5.5 \%$ by $2011: Q 1$. It then increases to about 3\% by 2014:Q4.

## Figure: Civilian Unemployment Rate

Line chart, by percent, 2009 to 2014. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained", "Previous Bluebook: Unconstrained". The Current Bluebook: Constrained begins at about 10\% and generally decreases to about 4.2\% by 2013:Q4. It then increases to about 4.6\% by 2014:Q4. The Current Bluebook: Unconstrained begins at about 10\% and generally decreases to about 4.2\% by 2013:Q2. It then increases to about 5\% by $2014: Q 4$. The Previous Bluebook: Unconstrained begins at about 10.1\% and generally decreases to about 4\% by 2013:Q4. It then increases to about 4.5\% by 2014:Q4.

## Figure: Core PCE Inflation

Line chart, by percent, 2009 to 2014. Data are four-quarter averages. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained", "Previous Bluebook: Unconstrained". The Current Bluebook: Constrained begins at about 1.5\% in 2009:Q4 and increases to about 1.6\% in 2010:Q1. It then generally decreases to about 1.25\% by 2011:Q3 and then generally increases to about $2.1 \%$ by 2014:Q4. The Current Bluebook: Unconstrained begins at about $1.5 \%$ in 2009:Q4 and increases to about 1.65\% by 2010:Q1. It then generally decreases to about $1.5 \%$ by 2011:Q1 and then generally increases to about $2.15 \%$ by $2014: Q 4$. The Previous Bluebook: Unconstrained begins at about 1.5\% in 2009:Q4 and increases to about 1.7\% by 2010:Q1. It then generally decreases to about 1.5\% by 2011:Q1 and then generally increases to about 2.25\% by 2014:Q4.

## Chart 8

## The Policy Outlook in an Uncertain Environment

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

Line chart, by percent, 2010 to 2014. There are three series, "Current Bluebook", "Previous Bluebook", and "Greenbook assumption". The chart also includes dark and light shading that represent the 70 and 90 percent confidence intervals, respectively. The Current Bluebook begins at about $0 \%$ and remains relatively stable there until 2011:Q3. It then increases to about $4.2 \%$ by 2014:Q4. The Previous Bluebook begins at about $0 \%$ and remains stable there until 2011:Q3. It then increases to about $3.8 \%$ by 2014:Q4. The Greenbook assumption begins at about $0 \%$ and remains stable there until 2011:Q3. It then generally increases to about $4 \%$ by $2014: Q 4$. The confidence intervals closely track the Current Bluebook series throughout the chart, with the 70 percent confidence interval being about $2 \%$ both lesser and greater than the Current Bluebook series, and the 90 Percent confidence interval being about 3\% both lesser and greater than the Current Bluebook series at any given point.

Figure: Information from Financial Markets

Line chart, by percent, 2010 to 2014. There are two series, "Current Bluebook" and "Previous Bluebook". The chart also includes dark and light shading that represent the current 70 and 90 percent confidence intervals, respectively, and dashed lines that represent the previous Bluebook 70 and 90 percent confidence intervals. The Current Bluebook begins at about $0 \%$ and then increases to about $3.9 \%$ by 2014:Q4. The Previous Bluebook begins at about $0 \%$ and then increases to about $3.8 \%$ by 2014:Q4. The other 2 series closely track the Previous Bluebook series throughout the chart. The 70 percent confidence interval begins being about $0.1 \%$ both lesser and greater than the Previous Bluebook series. It then generally increases to about $2 \%$ both lesser and greater than the Current Bluebook series by the end of 2014. The 90 percent confidence interval begins being about $0.2 \%$ both lesser and greater than the Previous Bluebook series. It then generally increases to about $3 \%$ both lesser and greater than the Current Bluebook series by the end of 2014. The previous Bluebook 70 and 90 percent confidence intervals are generally slightly less than or equal to the current Bluebook confidence intervals.

Near-Term Prescriptions of Simple Policy Rules

| Taylor (1993) rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 0 . 3 3}$ | $\mathbf{- 0 . 4 3}$ |
| :---: | :---: | :---: | :---: | :---: |
| Previous Bluebook | 0.13 | 0.13 | -0.30 | -0.46 |
| Taylor (1999) rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 3 . 9 2}$ | $\mathbf{- 3 . 8 4}$ |
| Previous Bluebook | 0.13 | 0.13 | -3.92 | -3.92 |
| Estimated outcome-based rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 0 . 4 8}$ | $\mathbf{- 1 . 0 5}$ |
| Previous Bluebook | 0.13 | 0.13 | -0.38 | -0.98 |
| Estimated forecast-based rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 0 . 4 0}$ | $\mathbf{- 0 . 9 0}$ |
| Previous Bluebook | 0.13 | 0.13 | $\mathbf{- 0 . 3 8}$ | -0.93 |
| First-difference rule | $\mathbf{0 . 3 5}$ | $\mathbf{0 . 6 9}$ | $\mathbf{0 . 3 5}$ | $\mathbf{0 . 6 9}$ |
| Previous Bluebook | 0.39 | 0.67 | 0.39 | 0.67 |

Memo

|  | 2010Q1 | 2010Q2 |
| :--- | :---: | :---: |
| Greenbook assumption | 0.13 | 0.13 |
| Fed funds futures | 0.12 | 0.14 |
| Median expectation of primary dealers | 0.13 | 0.13 |
| Blue Chip forecast (January 1, 2010) | 0.20 | 0.20 |

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

## Policy Alternatives

Table 1: Overview of Alternative Language for the January 26-27, 2010 FOMC Announcement

| December FOMC |  | January Alternatives |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | A | B | c |
| Economic Activity |  |  |  |  |
| Recent Developments | "has continued to pick up" | "has continued to pick up" | "has continued to strengthen" | "is increasing at a solid rate" |
| Labor Markets | "the deterioration... is abating" | "the deterioration... is abating" |  | "the labor market is stabilizing" |
| Financial Markets | "conditions have become more supportive" | --- | "conditions remain supportive" | "conditions have continued to become more supportive" |
| Other <br> Factors | fiscal and monetary stimulus, market forces | "housing activity remains sluggish" | "bank lending continues to contract" | --- |
| Outlook | "likely to remain weak for a time" | further monetary stimulus warranted by prospects for subpar recovery | pace of recovery "likely to be moderate" | sustainable recovery "now under way" |
| Inflation |  |  |  |  |
| Recent Developments | --- | energy prices have risen but core inflation has remained low | energy prices have risen | inflation somewhat elevated by pickup in energy prices |
| Key Factors | substantial resource slack, stable expectations | substantial stable ex | urce slack, ctations | appropriate monetary policy adjustments, stable expectations |
| Outlook | "will remain subdued for some time" | "likely to b for so | subdued time" | "will be at levels consistent with price stability" |
| Forward Guidance on Funds Rate Path |  |  |  |  |
|  | "exceptionally low... for an extended period" | "exceptionally low... | an extended period" | "low...for some time" |
| Agency MBS Purchases |  |  |  |  |
| Amount | \$1.25 trillion | \$1.5 trillion | \$1.25 trillion |  |
| Timing | by the end of the first quarter | by the end of the third quarter | by the end of the first quarter |  |
| Evaluation of Balance Sheet Adjustments |  |  |  |  |
|  | "the timing and overall amounts of its purchases of securities" | "the timing and overall amounts of its purchases of securities" | "its purchases [or holdings] of securities" | "the size and composition of its securities holdings" |

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

Long-Run Projections of the Balance Sheet and Monetary Base

Balance Sheet Projections Summary

|  | Alternative A | Baseline |
| :---: | :---: | :---: |
| Agency Debt Securities |  |  |
| Total purchased | \$175 billion | \$175 billion |
| December 2016 | \$19 billion | \$19 billion |
| Agency MBS |  |  |
| Total purchased | \$1.5 trillion | \$1.25 trillion |
| December 2016 | \$0.87 trillion | \$0.71 trillion |
| Total Assets |  |  |
| Peak month | September 2010 | April 2010 |
| Peak amount | \$2.51 trillion | \$2.36 trillion |
| December 2016 | \$1.54 trillion | \$1.47 trillion |
| Reserve Balances |  |  |
| Peak month | May 2010 | March 2010 |
| Peak amount | \$1.38 trillion | \$1.30 trillion |

## Baseline Scenario (Alternative B)

## Figure: Federal Reserve Assets

Area chart, in billions of dollars, 2006 to 2016. There are eight series, "Treasury securities", "Repurchase agreements", "Other loans and facilities", "Agency debt", "TAF", "SDR and other assets", "Agency MBS", and "Central bank swaps". The bottom layer of the area chart is "Treasury securities" and it starts at between about 0 and 750 in the beginning of 2006. It remains relatively stable until it generally decreases in 2008 to between about 0 and 500 . It then generally increases in 2009 to between about 0 and 750 . In late 2009 it starts generally decreasing and by mid-2016 it is between about 0 and 550 . It then generally increases to between about 0 and 650 by the end of 2016. The next layer is "Agency debt" which starts at between about 500 and 525 in mid-2008. It generally increases to between about 750 and 900 by mid-2009. It then generally decreases to between about 550 and 575 by mid-2016 and generally increases to between about 650 and 675 by the end of 2016 . The third layer is "Repurchase agreements" which starts between about 750 and 775 in the beginning of 2006. It remains relatively stable here until the beginning of 2008 when it generally decreases to between about 500 and 650 . By the end of 2008 it ends at between about 525 and 625 . The fourth layer is "Agency MBS" which starts between about 525 and 550 at the end of 2008. It then increases to between about 900 and 2000 by the beginning of 2010 and then decreases to between about 575 and 1300 in mid-2016. By the end of 2016 it has increased to between about 675 and 1350. The fifth layer is "TAF" which starts between about 800 and 825 at the end of 2007. It generally decreases to between about 600 and 750 by mid-2008 and then generally increases to between about 2100 and 2125 by the beginning of 2010 which is where the series ends. The next layer is "Central banks swaps" which starts at between about 825 and 850 at the end of 2007 . It generally decreases to between about 750 and 800 by mid-2008 and then generally increases to between about 1950 and 2000 by the end of 2009 which is where the series ends. The seventh layer is "Other loans and facilities" which starts at between about 825 and 850 at the beginning of 2008. It remains relatively stable here until the end of 2008 and then generally increases to between about 2000 and 2200 by the beginning of 2010 . It then generally decreases and ends between about 1400 and 1420 in mid-2015. The top layer is "SDR and other assets" which starts between about 775 and 825 at the beginning of 2006. It then generally increases and is between about 2200 and 2300 by the beginning of 2010. It then generally decreases and to between about 1300 and 1400 by mid- 2016 and then increases to between about 1350 and 1450 by the end of 2016 .

Source. Federal Reserve H.4.1 statistical release and staff calculations.

## Figure: Federal Reserve Liabilities and Capital

Area chart, in billions of dollars, 2006 to 2016. There are six series, "Federal Reserve notes", "Deposits, other than reserve balances", "Other liabilities", "Reverse repurchase agreements", "Reserve balances", and "Capital". The bottom layer is "Federal Reserve notes" which starts between about 0 and 750 at the beginning of 2006. It then generally increases to between about 0 and 1250 by the end of 2016. The next layer is "Reverse repurchase agreements" which starts between about 750 and 775. It then generally increases to between about 1250 and 1300 by the end of 2016. The third layer is "Deposits, other than reserve balances" which starts between about 900 and 1500 in mid-2008. It then generally decreases to between about 950 and 1000 by the beginning of 2010 and then generally increases to between about 1200 and 1350 by mid-2015. By the end of 2016 it has tapered off to between about 1300 and 1305. The fourth layer is "Reserve balances" which starts between about 775 and 800. It then generally increases to between about 1000 and 2250 in mid- 2010 and then generally decreases to between about 1250 and 1275 by mid-2016. By the end of 2016 it has increased to between about 1305 and 1325 . The fifth layer is "Other liabilities" which starts between about 800 and 810
in the beginning of 2006. It then generally increases to between about 2250 and 2260 in mid- 2010 and generally decreases to between about 1275 and 1285 by mid2016. By the end of 2016 it has increased to between about 1325 and 1335. The top layer is "Capital" which starts between about 810 and 835 in the beginning of 2006. It then generally increases to between about 2260 and 2310 in mid- 2010 and generally decreases to between about 1285 and 1400 by mid-2016. By the end of 2016 it has increased to between about 1335 and 1450.

Source. Federal Reserve H.4.1 statistical release and staff calculations.

## Alternative A

Figure: Federal Reserve Assets

Area chart, in billions of dollars, 2006 to 2016. There are eight series, "Treasury securities", "Repurchase agreements", "Other loans and facilities", "Agency debt", "TAF", "SDR and other assets", "Agency MBS", and "Central bank swaps". The bottom layer of the area chart is "Treasury securities" and it starts at between about 0 and 750 in the beginning of 2006. It remains relatively stable until it generally decreases in 2008 to between about 0 and 500 . It then generally increases in 2009 to between about 0 and 750 . In late 2009 it starts generally decreasing and by the end of 2016 it is between about 0 and 550 . The next layer is "Agency debt" which starts at between about 500 and 525 in mid-2008. It generally increases to between about 750 and 900 by mid-2009. It then generally decreases to between about 550 and 575 by the end of 2016. The third layer is "Repurchase agreements" which starts between about 750 and 775 in the beginning of 2006 . It remains relatively stable here until the beginning of 2008 when it generally decreases to between about 500 and 650 . By the end of 2008 it ends at between about 525 and 625 . The fourth layer is "Agency MBS" which starts between about 525 and 550 at the end of 2008 . It then increases to between about 900 and 2200 by mid-2010 and then decreases to between about 575 and 1400 by the end of 2016. The fifth layer is "TAF" which starts between about 800 and 825 at the end of 2007 . It generally decreases to between about 600 and 750 by mid-2008 and then generally increases to between about 2100 and 2125 by the beginning of 2010 which is where the series ends. The next layer is "Central banks swaps" which starts at between about 825 and 850 at the end of 2007. It generally decreases to between about 750 and 800 by mid-2008 and then generally increases to between about 1950 and 2000 by the end of 2009 which is where the series ends. The seventh layer is "Other loans and facilities" which starts at between about 825 and 850 at the beginning of 2008 . It remains relatively stable here until the end of 2008 and then generally increases to between about 2000 and 2200 by the beginning of 2010. It then generally decreases and ends between about 1540 and 1550 in mid-2015. The top layer is "SDR and other assets" which starts between about 775 and 825 at the beginning of 2006 . It then generally increases and is between about 2400 and 2500 by the beginning of 2010. It then generally decreases to between about 1450 and 1550 by the end of 2016 .

Source. Federal Reserve H.4.1 statistical release and staff calculations.

## Figure: Federal Reserve Liabilities and Capital

Area chart, in billions of dollars, 2006 to 2016. There are six series, "Federal Reserve notes", "Deposits, other than reserve balances", "Other liabilities", "Reverse repurchase agreements", "Reserve balances", and "Capital". The bottom layer is "Federal Reserve notes" which starts between about 0 and 750 at the beginning of 2006. It then generally increases to between about 0 and 1250 by the end of 2016. The next layer is "Reverse repurchase agreements" which starts between about 750 and 775. It then generally increases to between about 1250 and 1300 by the end of 2016 . The third layer is "Deposits, other than reserve balances" which starts between about 900 and 1500 in mid-2008. It then generally decreases to between about 950 and 1000 by the beginning of 2010 and then generally increases to between about 1250 and 1450 by mid-2016. By the end of 2016 it has tapered off to between about 1275 and 1350 . The fourth layer is "Reserve balances" which starts between about 775 and 800. It then generally increases to between about 1000 and 2400 in mid-2010 and then generally decreases to between about 1360 and 1380 by the end of 2016 . The fifth layer is "Other liabilities" which starts between about 800 and 810 in the beginning of 2006. It then generally increases to between about 2400 and 2410 in mid-2010 and generally decreases to between about 1380 and 1390 by the end of 2016. The top layer is "Capital" which starts between about 810 and 835 in the beginning of 2006. It then generally increases to between about 2410 and 2500 in mid-2010 and generally decreases to between about 1390 and 1525 by the end of 2016.

Source. Federal Reserve H.4.1 statistical release and staff calculations.

Growth Rates for the Monetary Base

| Date | Baseline | Alternative A | Memo: <br> December <br> Baseline |
| ---: | ---: | ---: | ---: |
|  | Percent, annual rate |  |  |
| Monthly |  |  |  |
| Sep-09 | 66.9 | 66.9 | 66.9 |
| Oct-09 | 45.5 | 45.5 | 45.5 |
| Nov-09 | 71.6 | 71.6 | 71.6 |
| Dec-09 | 28.9 | 28.9 | 51.4 |
| Jan-10 | 56.0 | 56.0 | 14.4 |
| Feb-10 | 85.9 | 86.7 | -4.5 |
| Mar-10 | 39.4 | 44.2 | -7.4 |
| Apr-10 | -16.3 | -5.0 | -38.6 |
| May-10 | 0.5 | 15.6 | 4.8 |


| Jun-10 | 13.0 | 28.6 | 20.6 |
| :---: | :---: | :---: | :---: |
| Quarterly |  |  |  |
| Q3 2009 | -2.6 | -2.6 | -2.6 |
| Q4 2009 | 54.0 | 54.0 | 56.8 |
| Q1 2010 | 59.2 | 60.0 | 22.1 |
| Q2 2010 | 13.8 | 24.2 | -11.7 |
| Q3 2010 | -19.1 | -1.6 | -4.4 |
| Q4 2010 | -22.5 | -10.7 | -7.4 |
| Annual - Q4 to Q4 |  |  |  |
| 2009 | 38.9 | 38.9 | 39.7 |
| 2010 | 6.7 | 18.2 | -0.6 |
| 2011 | -8.2 | -7.3 | -9.2 |
| 2012 | -11.2 | -10.8 | -13.1 |
| 2013 | -8.0 | -7.8 | -9.4 |
| 2014 | -10.0 | -9.6 | -11.3 |
| 2015 | -4.4 | -7.8 | 0.0 |
| 2016 | 4.2 | -4.5 | 3.9 |

Note. Not seasonally adjusted. The calculated growth rates of the monetary base presented in the table are based on an approximation for month-average values.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## Last update: January 29, 2016

January 2010 Bluebook Tables and Charts

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

| Greenbook Forecast* |  |  |  |
| :---: | :---: | :---: | :---: |
| Monthly Growth Rates |  |  |  |
|  |  | Jul-09 | -0.8 |
|  |  | Aug-09 | -3.3 |
|  |  | Sep-09 | 5.6 |
|  |  | Oct-09 | 4.1 |
|  |  | Nov-09 | 3.9 |
|  |  | Dec-09 | 2.1 |
|  |  | Jan-10 | -5.2 |
|  |  | Feb-10 | 1.9 |
|  |  | Mar-10 | 2.0 |
|  |  | Apr-10 | 2.8 |
|  |  | May-10 | 3.4 |
|  |  | Jun-10 | 3.6 |
|  |  | Jul-10 | 3.6 |
|  |  | Aug-10 | 3.8 |
|  |  | Sep-10 | 3.9 |
|  |  | Oct-10 | 3.9 |
|  |  | Nov-10 | 4.0 |
|  |  | Dec-10 | 4.0 |
| Quarterly Growth Rates |  |  |  |
|  |  | 2010 Q1 | -0.2 |
|  |  | 2010 Q2 | 2.7 |
|  |  | 2010 Q3 | 3.7 |
|  |  | 2010 Q4 | 3.9 |
| Annual Growth Rates |  |  |  |
|  |  | 2009 | 4.9 |
|  |  | 2010 | 2.6 |
|  |  | 2011 | 4.7 |
| Growth | From | To |  |
| Dec-09 |  | Jun-10 | 1.4 |
| 2009 Q4 |  | Mar-10 | 0.3 |
| 2009 Q4 |  | Jun-10 | 1.6 |

[^0]
## January 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> model <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 | Yields on TIPS (Treasury Inflation-Protected Securities) reflect investors' expectations of the future path of real interest rates. The TIPS-based measure of the <br> Factor <br> 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 <br> 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, <br> nominal yields, and inflation. |


|  | Actual real <br> Proxy used for expected inflation <br> federal funds rate <br> (current value) | Greenbook-consistent <br> measure of the equilibrium <br> real funds rate <br> (current value) | Average actual <br> real funds rate <br> (twelve-quarter <br> average) |
| :--- | ---: | ---: | ---: | ---: |
| Lagged core inflation | -1.3 | -1.5 | -0.6 |
| Lagged headline inflation | -1.2 | -1.8 | -0.8 |
| Projected headline inflation | -1.1 | -1.6 | -0.6 |

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

# Appendix C: Long-run Projections of the Balance Sheet and Monetary Base 

## Individual Balance Sheet Item Profiles

Note. All values are in billions of dollars.

Asset purchases and Federal Reserve liquidity programs and credit facilities

## Figure: Agency Debt

Line chart, 2009 through 2016. There are three series, "December", "Alternative A" and "Baseline". All 3 series are almost exactly the same. The all begin at about 20 in the beginning of 2009. They increase to about 157 by 2010 and decrease to about 20 by the end of 2016 .

## Figure: Agency MBS

Line chart, 2009 through 2016. There are three series, "December", "Alternative A" and "Baseline". The "December" series begins at 0 in 2009 and increases to about 1100 by 2010. It then decreases to about 650 by the end of 2016. The "Alternative $A$ " series begins at 0 and increases to about 1350 by the end of 2010 . It then decreases to about 850 by the end of 2016 . The "Baseline" series begins at about 0 and increases to about 1125 by 2010 . It then decreases to about 700 by the end of 2016.

Figure: Primary and Secondary Credit

Line chart, 2009 through 2016. There are two series, "December" and "Baseline". Both series are exactly the same. They start at about 925 in the beginning of 2009 and generally decreases to about 0 by the end of 2011. They remain stable at 0 until the end of 2016 .

Figure: Credit Extended to AIG

Line chart, 2009 through 2016. There are two series, "December" and "Baseline". "December" begins at about 39 at the beginning of 2009 and increases to about 46 within a few months. It then decreases to about 39 within the next couple months and increases to 45 near the end of 2009 . From the end of 2009 to the beginning of 2001 it fluctuates between about 41 and 45 . It then decreases to about 0 by the end of 2013. It remains stable at 0 until the end of 2016 . "Baseline" begins at about 39 at the beginning of 2009 and increases to about 46 within a few months. It then decreases to about 39 within the next couple months and increases to 46 by the end of 2009. It then generally decreases to about 0 by the end of 2013. It remains stable at 0 until the end of 2016.

## Federal Reserve liabilities

Figure: Reverse Repurchase Agreements

Line chart, 2009 through 2016. There are two series, "December" and "Baseline". The "December" series begins at about 76 in the beginning of 2009 and generally decreases to about 58 towards the end of 2009. It stays relatively stable at 58 until the end of 2016 . The "Baseline" series begins at about 76 in the beginning of 2009 and generally decreases to about 58 towards the end of 2009. It then increases to about 77 with the next month or two and then decreases to about 60 by the beginning of 2010. It stays relatively stable at 60 until the end of 2016.

Figure: SFA

Line chart, 2009 through 2016. There are three series, "December", "Alternative A" and "Baseline". The "December" series begins at about 170 in the beginning of 2009 and increases to about 200 with a month or two. It stays at 200 until late 2009 and then decreases to about 10 by the end of 2009 . It then increases to about 200
by early 2010 and stays at 200 until early 2015. By early 2016 it decreases to 0 where it stays until the end of 2016. The "Alternative A" series begins at about 170 in the beginning of 2009 and increases to about 200 with a month or two. It stays at 200 until late 2009 and then decreases to about 5 by the end of 2009 . It remains stable at 5 until mid-2010 and then increases to about 200 by late 2010. It remains stable at 200 until mid- 2016 and then decreases to 75 by the end of 2016 . The "Baseline" series begins at about 170 in the beginning of 2009 and increases to about 200 with a month or two. It stays at 200 until late 2009 and then decreases to about 5 by the end of 2009. It remains stable at 5 until mid- 2010 and then increases to about 200 by late 2010. It remains stable at 200 until mid- 2015 and then decreases to 0 by the mid-2016. The series remains at 0 until the end of 2016.

Figure: TGA

Line chart, 2009 through 2016. There are two series, "December" and "Baseline". The "December" series begins at about 25 in the beginning of 2009 . From 2009 to the end of 2010 it fluctuates between about 20 and 140. At the end of 2010 it decreases to about 5 and remains stable there until the end of 2016 . The "Baseline" series begins at about 25 in the beginning of 2009. From 2009 to the end of 2010 it fluctuates between about 20 and 185 . At the end of 2010 it decreases to about 5 and remains stable there until the end of 2016.

Figure: Reverse Balances

Line chart, 2009 through 2016. There are three series, "December", "Alternative A", and "Baseline". "December" begins at about 850 and generally increases to about 1175 by the beginning of 2010. It then generally decreases to about 5 in early 2015 and remains stable here until the end of 2016. "Alternative A" begins at about 850 and generally increases to about 1390 by mid-2010. It then generally decreases to about 5 in mid-2016 and remains stable here until the end of 2016. "Baseline" begins at about 850 and generally increases to about 1300 by early 2010. It then generally decreases to about 5 in mid- 2015 and remains stable here until the end of 2016.

Federal Reserve Balance Sheet: End-of-Year Projections -- Baseline Scenario

|  | Dec 31, 2009 | 2010 | End-of-Year |  |  |  |  | 2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2011 | 2012 | 2013 | 2014 | 2015 |  |
|  | \$Billions |  |  |  |  |  |  |  |
| Total assets | 2,237 | 2,249 | 2,079 | 1,870 | 1,757 | 1,610 | 1,520 | 1,465 |
| Selected assets: |  |  |  |  |  |  |  |  |
| Liquidity programs for financial firms | 107 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Primary, secondary, and seasonal credit | 21 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Term auction credit (TAF) | 76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Central bank liquidity swaps | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Primary Dealer Credit Facility (PDCF) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lending through other credit facilities | 62 | 60 | 51 | 17 | 13 | 3 | 0 | 0 |
| Net portfolio holdings of Commercial Paper Funding Facility LLC (CPFF) | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Term Asset-Backed Securities Loan Facility (TALF) | 48 | 60 | 51 | 17 | 13 | 3 | 0 | 0 |
| Support for specific institutions | 112 | 65 | 44 | 25 | 14 | 3 | 2 | 1 |
| Credit extended to AIG | 47 | 24 | 12 | 2 | 0 | 0 | 0 | 0 |
| Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC | 65 | 41 | 32 | 23 | 14 | 3 | 2 | 1 |
| Securities held outright | 1,845 | 2,007 | 1,869 | 1,712 | 1,614 | 1,488 | 1,404 | 1,350 |
| U.S. Treasury securities | 777 | 770 | 748 | 681 | 661 | 615 | 597 | 623 |
| Agency debt securities | 160 | 150 | 108 | 81 | 63 | 42 | 37 | 19 |
| Agency mortgage-backed securities | 908 | 1,087 | 1,013 | 950 | 890 | 831 | 770 | 708 |
| Repurchase agreements | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Net portfolio holdings of TALF LLC | 0 | 1 | 1 | 2 | 2 | 2 | 0 | 0 |
| Total liabilities | 2,186 | 2,190 | 2,011 | 1,792 | 1,667 | 1,506 | 1,401 | 1,328 |
| Selected liabilities |  |  |  |  |  |  |  |  |
| Federal Reserve notes in circulation | 888 | 909 | 938 | 994 | 1,051 | 1,108 | 1,165 | 1,222 |


| Reverse repurchase agreements | 78 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Reserve balances of depository institutions | 977 | 999 | 792 | 516 | 334 | 117 | 25 | 25 |
| U.S. Treasury, general account | 187 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| U.S. Treasury, supplemental financing account | 5 | 200 | 200 | 200 | 200 | 200 | 129 | 0 |
| Total capital | 51 | 59 | 68 | 78 | 90 | 103 | 119 | 136 |

Source. Federal Reserve H.4.1 statistical release and staff calculations.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

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

## Domestic Developments

## Key Background Factors Underlying the Baseline Staff Projection

Note: In each panel, shading represents the projection period, which begins in 2010:Q1, except where noted. In the upper-left panel that reports the federal funds rate, the dashed line is not apparent because the paths of the federal funds rate in the December and current Greenbooks are the same.

## Figure: Federal Funds Rate

Line chart, by percent, 2006 to 2011. Data are quarterly average. The years 2010 and 2011 are shaded to represent the projection period, which begins in 2010 Q1. There are three series, "Current Greenbook", "December Greenbook", and "Market forecast". The "Current Greenbook" begins at about 4.5 at the beginning of 2006. It then increases to about 5.2 by late 2006 and remains relatively stable here until late 2007. It then decreases to about 0.1 by late 2009 and remains stable here until mid-2011 when it increases. It ends at about 0.5 at the end of 2011. The "December Greenbook" follows the path of the "Current Greenbook" exactly. The "Market forecast" begins at about 0.1 in the beginning of 2010 and increases to about 2 by the end of 2011.

## Figure: Long-Term Interest Rates

Line chart, by percent, 2006 to 2011. Data are quarterly average. The years 2010 and 2011 are shaded to represent the projection period, which begins in $2010: Q 1$. There are six series, "BBB corporate yield current Greenbook", "BBB corporate yield December Greenbook", "Conforming mortgage rate current Greenbook", "Conforming mortgage rate December Greenbook", "10-year Treasury yield current Greenbook", and "10-year Treasury yield December Greenbook". The "BBB corporate yield current Greenbook" begins at about 6 in the beginning of 2006. It then generally increases and by late 2008 is at about 9.5 . By early 2010 it has decreased to about 5.8 and remains relatively stable here until the end of 2011. The "BBB corporate yield December Greenbook" follows the "BBB corporate yield current Greenbook" exactly until the end of 2009 where it starts decreasing at a slower pace and then ends at about 6 at the end of 2011 . The "Conforming mortgage rate current Greenbook" begins at about 6.2 in the beginning of 2006 and then generally decreases to about 5 at the end of 2009 . It then increases to about 5.8 by the end of 2011. The "Conforming mortgage rate December Greenbook" follows the "Conforming mortgage rate current Greenbook" exactly until the end of 2009 where it starts increasing at a slower pace and then ends at about 5.6 at the end of 2011 . The " 10 -year Treasury yield current Greenbook" begins at about 4.7 in the beginning of 2006 and then generally decreases to about 3.2 by early 2009. It then generally increases to about 4.3 by the end of 2011. The "10-year Treasury yield December Greenbook" follows the "10-year Treasury yield current Greenbook" exactly until the end of 2009 where it starts increasing at a slower pace and then ends at about 4 at the end of 2011.

## Figure: Equity Prices

Line chart, by ratio scale where 2006:Q1 $=100,2006$ to 2011. Data are quarter-end. The years 2010 and 2011 are shaded to represent the projection period, which begins in 2010:Q1. There are two series, "Dow Jones Total Stock Market Index current Greenbook" and "Dow Jones Total Stock Market Index December Greenbook". "Dow Jones Total Stock Market Index current Greenbook" begins at 100 in the beginning of 2006. It then generally increases to about 118 by late 2007 and decreases to about 61 by early 2009. By the end of 2011 it has increased to about 119. "Dow Jones Total Stock Market Index December Greenbook" follows "Dow Jones Total Stock Market Index current Greenbook" exactly until mid-2009 when it starts increasing at a slower rate than "Dow Jones Total Stock Market Index current Greenbook". By the end of 2011 it is at about 115.

## Figure: House Prices

Line chart, by ratio scale where 2006:Q1=100, 2006 to 2011. Data are quarterly. The years 2009 to 2011 are shaded to represent the projection period, which begins in 2009:Q4. There are two series, "LoanPerformance index current Greenbook" and "LoanPerformance index December Greenbook". The "LoanPerformance index current Greenbook" begins at 100 in the beginning of 2006. It then generally decreases to about 67 by early 2009. By late 2009 it has increased to about 70 and by the end of 2011 it has generally decreased to about 68. "LoanPerformance index December Greenbook" follows "LoanPerformance index current Greenbook" exactly.

## Figure: Crude Oil Prices

Line chart, in dollars per barrel, 2006 to 2011. Data are quarterly average. The years 2010 and 2011 are shaded to represent the projection period, which begins in 2010:Q1. There are two series, "West Texas Intermediate current Greenbook" and "West Texas Intermediate December Greenbook". The "West Texas Intermediate current Greenbook" begins at about 63 in the beginning of 2006. It then increases to about 70 in late 2006 and in early 2007 decreases to about 59 . By early 2008 it has increased to about 125 and by early 2009 it has decreased to about 45. It then increases to about 87 by the end of 2011. "West Texas Intermediate December Greenbook" follows the "West Texas Intermediate current Greenbook" exactly until late 2009 when it starts increasing at a slower rate than "West Texas Intermediate current Greenbook". It ends at about 86 at the end of 2011.

Figure: Broad Real Dollar

Line chart, the scale is $2006: Q 1=100,2006$ to 2011. Data are quarterly average. The years 2010 and 2011 are shaded to represent the projection period, which begins in 2010:Q1. There are two series, "Broad Real Dollar current Greenbook" and "Broad Real Dollar December Greenbook". "Broad Real Dollar current Greenbook" begins at 100 in the beginning of 2006. It then generally decreases to about 87 by mid-2008 and increases to about 98 by early 2009 . By the end of 2011 it has generally decreased to about 85. "Broad Real Dollar December Greenbook" follows "Broad Real Dollar current Greenbook" almost exactly.

## Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

| Measure | 2009:Q4 |  | 2010:Q1 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | December Greenbook | January Greenbook | December Greenbook | January Greenbook |
| Real GDP | 3.8 | 5.3 | 3.6 | 2.8 |
| Private domestic final purchases | 1.2 | 1.9 | 2.6 | 2.5 |
| Personal consumption expenditures | 1.9 | 2.1 | 2.7 | 2.7 |
| Residential investment | 8.1 | 4.0 | 8.7 | 1.3 |
| Nonresidential structures | -25.8 | -22.4 | -10.7 | -13.8 |
| Equipment and software | 5.9 | 12.4 | 5.5 | 8.4 |
| Government outlays for consumption and investment | . 6 | -1.2 | 4.1 | 4.4 |
|  | Contribution to growth (percentage points) |  |  |  |
| Inventory investment | 2.3 | 3.7 | 1.0 | . 3 |
| Net exports | . 4 | . 2 | -. 4 | -. 5 |

## Projections of Real GDP

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

| Measure | 2009:H2 | 2010:H1 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: |
| Real GDP | 3.8 | 3.3 | 3.6 | 4.7 |
| Previous Greenbook | 3.1 | 3.5 | 3.6 | 4.5 |
| Final sales | 1.5 | 2.9 | 3.2 | 4.4 |
| Previous Greenbook | 1.6 | 2.7 | 2.9 | 4.0 |
| Personal consumption expenditures | 2.4 | 2.7 | 2.8 | 3.7 |
| Previous Greenbook | 2.4 | 2.5 | 2.6 | 3.4 |
| Residential investment | 11.2 | 7.1 | 5.4 | 24.8 |
| Previous Greenbook | 13.4 | 13.2 | 9.9 | 20.2 |
| Nonresidential structures | -20.4 | -8.0 | -3.1 | 1.1 |
| Previous Greenbook | -22.4 | -7.8 | -3.8 | 1.1 |
| Equipment and software | 6.8 | 10.7 | 12.9 | 14.4 |
| Previous Greenbook | 4.1 | 6.8 | 10.7 | 14.6 |
| Government purchases | . 7 | 3.5 | 2.5 | 1.3 |
| Previous Greenbook | 1.7 | 3.1 | 1.9 | . 9 |
| Exports | 17.6 | 9.3 | 9.5 | 9.3 |
| Previous Greenbook | 14.5 | 9.0 | 9.3 | 8.9 |
| Imports | 16.5 | 9.6 | 8.8 | 8.3 |
| Previous Greenbook | 13.5 | 8.5 | 8.0 | 7.5 |
|  | Contribution to growth (percentage points) |  |  |  |
| Inventory change | 2.2 | . 4 | . 4 | . 4 |
| Previous Greenbook | 1.5 | . 8 | . 7 | . 5 |
| Net exports | -. 3 | -. 3 | -. 2 | -. 1 |
| Previous Greenbook | -. 3 | -. 2 | -. 1 | -. 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 | 1.7 | 2.0 |
| Previous Greenbook | 1.5 | 2.5 | 2.7 | 2.3 | 2.5 | 1.6 | 1.9 |
| Contributions ${ }^{\underline{1}}$ |  |  |  |  |  |  |  |
| Capital deepening | . 7 | 1.4 | . 7 | . 5 | -. 0 | . 1 | . 6 |
| Previous Greenbook | . 7 | 1.4 | . 7 | . 5 | -. 0 | -. 1 | . 5 |
| Multifactor productivity | . 5 | . 7 | 1.7 | 1.6 | 2.4 | 1.5 | 1.4 |
| Previous Greenbook | . 5 | . 7 | 1.7 | 1.6 | 2.4 | 1.6 | 1.4 |
| Labor composition | . 3 | . 3 | . 3 | . 2 | . 2 | . 1 | . 1 |
| Memo |  |  |  |  |  |  |  |
| Potential GDP | 3.0 | 3.4 | 2.7 | 2.7 | 2.7 | 2.2 | 2.5 |
| Previous Greenbook | 3.0 | 3.4 | 2.7 | 2.7 | 2.7 | 2.1 | 2.4 |

 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 | .9 | 5.1 | .8 | 1.1 |
| Previous Greenbook | .9 | 4.7 | .9 | 1.0 |
| Nonfarm private payroll employment | -2.1 | -4.2 | 2.3 | 3.6 |
| Previous Greenbook | -2.1 | -4.2 | 2.1 | 3.5 |
| Household survey employment | -1.5 | -4.0 | 1.6 | 2.3 |
| Previous Greenbook | -1.5 | -3.9 | 1.4 | 2.2 |
| Labor force participation rate $\mathbf{1}$ | 65.9 | 64.9 | 64.8 | 64.7 |
| Previous Greenbook | 65.9 | 65.0 | 64.9 | 64.8 |
| Civilian unemployment rate ${ }^{1}$ | 6.9 | 10.0 | 9.5 | 8.2 |
| Previous Greenbook | 6.9 | 10.1 | 9.6 | 8.3 |
| Mемо |  |  |  |  |
| GDP gap² | -4.8 | -7.3 | -6.0 | -3.9 |
| Previous Greenbook | -4.8 | -7.6 | -6.2 | -4.2 |

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 | 1.3 | 1.4 | 1.1 |
| Previous Greenbook | 1.7 | 1.3 | 1.3 | 1.2 |
| Food and beverages | 6.8 | -1.6 | 1.6 | .7 |


| Previous Greenbook | 6.8 | -1.6 | 1.3 | . 7 |
| :---: | :---: | :---: | :---: | :---: |
| Energy | -9.1 | 3.3 | 5.6 | 2.8 |
| Previous Greenbook | -9.1 | 2.8 | 4.3 | 3.5 |
| Excluding food and energy | 2.0 | 1.5 | 1.2 | 1.1 |
| Previous Greenbook | 2.0 | 1.5 | 1.2 | 1.1 |
| Consumer price index | 1.5 | 1.5 | 1.7 | 1.3 |
| Previous Greenbook | 1.5 | 1.4 | 1.6 | 1.4 |
| Excluding food and energy | 2.0 | 1.7 | 1.3 | 1.2 |
| Previous Greenbook | 2.0 | 1.8 | 1.3 | 1.2 |
| GDP chain-weighted price index | 1.9 | . 8 | 1.3 | 1.1 |
| Previous Greenbook | 1.9 | . 8 | 1.3 | 1.1 |
| ECI for compensation of private industry workers ${ }^{1}$ | 2.4 | 1.3 | 2.1 | 2.0 |
| Previous Greenbook | 2.4 | 1.2 | 1.8 | 1.9 |
| Compensation per hour, nonfarm business sector | 2.6 | 2.4 | 2.4 | 2.2 |
| Previous Greenbook | 2.6 | 2.4 | 2.0 | 2.0 |
| Prices of core goods imports² | 3.8 | -1.3 | 2.4 | 1.0 |
| Previous Greenbook | 3.8 | -1.4 | 1.9 | 1.0 |

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 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Real GDP | .0 | 3.6 | 4.7 | 4.5 | 3.8 | 3.3 |
| Civilian unemployment rate ${ }^{\underline{1}}$ | 10.0 | 9.5 | 8.2 | 6.1 | 5.3 | 5.2 |
| PCE prices, total | 1.3 | 1.4 | 1.1 | 1.3 | 1.5 | 1.7 |
| Core PCE prices | 1.5 | 1.2 | 1.1 | 1.2 | 1.4 | 1.6 |
| Federal funds rate $^{1}$ | .1 | .1 | .5 | 2.2 | 3.4 | 3.8 |

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

## Alternative Scenarios

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

| Measure and scenario | 2009 | 2010 | 2011 | 2012 | $\begin{gathered} 2013- \\ 14 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Real GDP |  |  |  |  |  |
| Extended Greenbook baseline | 3.8 | 3.6 | 4.7 | 4.5 | 3.6 |
| Stronger recovery | 3.8 | 5.3 | 5.9 | 4.3 | 2.9 |
| Weaker aggregate demand | 3.8 | 1.9 | 4.0 | 4.9 | 4.5 |
| Stronger productivity | 3.8 | 4.1 | 5.7 | 6.0 | 4.1 |
| Lower potential output | 3.9 | 3.1 | 4.1 | 4.1 | 3.6 |
| Impaired credibility | 3.9 | 2.9 | 3.5 | 3.6 | 3.5 |
| Greater disinflation | 3.8 | 3.6 | 4.7 | 5.1 | 4.3 |
| Unemployment rate ${ }^{1}$ |  |  |  |  |  |
| Extended Greenbook baseline | 10.0 | 9.5 | 8.2 | 6.1 | 5.2 |
| Stronger recovery | 10.0 | 9.0 | 7.3 | 5.4 | 5.1 |
|  |  |  |  |  |  |


| Weaker aggregate demand | 10.0 | 10.1 | 9.1 | 6.9 | 5.2 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Stronger productivity | 10.0 | 10.5 | 9.8 | 6.8 | 4.9 |
| Lower potential output | 10.0 | 9.6 | 8.6 | 6.7 | 5.8 |
| Impaired credibility | 10.0 | 9.7 | 8.9 | 7.2 | 6.3 |
| Greater disinflation | 10.0 | 9.5 | 8.2 | 5.9 | 4.5 |
| Core PCE inflation |  |  |  |  |  |
| Extended Greenbook baseline | 1.4 | 1.2 | 1.1 | 1.2 | 1.5 |
| Stronger recovery | 1.4 | 1.2 | 1.1 | 1.2 | 1.6 |
| Weaker aggregate demand | 1.4 | 1.1 | .9 | 1.0 | 1.3 |
| Stronger productivity | 1.4 | 1.0 | .4 | .4 | 1.1 |
| Lower potential output | 1.4 | 1.5 | 1.4 | 1.5 | 1.8 |
| Impaired credibility | 1.4 | 1.6 | 2.1 | 2.3 | 2.5 |
| Greater disinflation | 1.4 | .9 | .3 | .0 | .2 |
| Federal funds rate ${ }^{1}$ |  |  |  |  |  |
| Extended Greenbook baseline | .1 | .1 | .5 | 2.2 | 3.8 |
| Stronger recovery | .1 | .1 | 1.5 | 3.0 | 4.1 |
| Weaker aggregate demand | .1 | .1 | .1 | 1.1 | 3.5 |
| Stronger productivity | .1 | .1 | .1 | .3 | 3.7 |
| Lower potential output | .1 | .1 | 1.0 | 2.5 | 4.3 |
| Impaired credibility | .1 | .1 | 1.6 | 3.1 | 4.7 |
| Greater disinflation | .1 | .1 | .1 | .6 | 2.6 |
|  |  |  |  |  |  |

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 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Real GDP (percent change, Q4 to Q4) |  |  |  |  |  |  |
| Projection | . 0 | 3.6 | 4.7 | 4.5 | 3.8 | 3.3 |
| Confidence interval |  |  |  |  |  |  |
| Greenbook forecast errors | -.2-. 2 | 2.0-5.2 | 3.1-6.4 | - | ... | ... |
| FRB/US stochastic simulations | -.2-. 2 | 2.3-5.2 | 2.9-6.5 | 2.5-6.5 | 1.7-6.0 | 1.1-5.5 |
| Civilian unemployment rate (percent, Q4) |  |  |  |  |  |  |
| Projection | 10.0 | 9.5 | 8.2 | 6.1 | 5.3 | 5.2 |
| Confidence interval |  |  |  |  |  |  |
| Greenbook forecast errors | 10.0-10.0 | 8.9-10.1 | 7.3-9.1 | ... | $\ldots$ | $\ldots$ |
| FRB/US stochastic simulations | 10.0-10.1 | 8.9-10.1 | 7.3-9.0 | 5.1-7.1 | 4.2-6.4 | 4.1-6.3 |
| PCE prices, total (percent change, Q4 to Q4) |  |  |  |  |  |  |
| Projection | 1.3 | 1.4 | 1.1 | 1.3 | 1.5 | 1.7 |
| Confidence interval |  |  |  |  |  |  |
| Greenbook forecast errors | 1.2-1.4 | .4-2.4 | .0-2.2 | ... | ... | ... |
| FRB/US stochastic simulations | 1.2-1.4 | .6-2.3 | .2-2.1 | .2-2.4 | .5-2.7 | .6-2.8 |
| PCE prices excluding food and energy (percent change, Q4 to Q4) |  |  |  |  |  |  |
| Projection | 1.5 | 1.2 | 1.1 | 1.2 | 1.4 | 1.6 |
| Confidence interval |  |  |  |  |  |  |
| Greenbook forecast errors | 1.3-1.6 | .6-1.7 | .2-1.9 | $\ldots$ | $\ldots$ | $\ldots$ |
| FRB/US stochastic simulations | 1.4-1.5 | .6-1.8 | .3-1.8 | .4-2.0 | .7-2.3 | .9-2.5 |


| Federal funds rate (percent, Q4) |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Projection | .1 | .1 | .5 | 2.2 | 3.4 | 3.8 |
| Confidence interval |  |  |  |  |  |  |
| FRB/US stochastic simulations | $.1-.1$ | $.1-.7$ | $.1-2.1$ | $.7-3.9$ | $2.0-5.1$ | $2.4-5.4$ |

Notes: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969-2008 set of model equation residuals.
Intervals derived from Greenbook forecast errors are based on projections made from 1979-2008, except for PCE prices excluding food and energy, where the sample is 1981-2008
... 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, 4-quarter percent change, 2008 to 2014. There is a horizontal line at 0 . There are nine series, "Extended Greenbook baseline", "Stronger recovery", "Weaker aggregate demand", "Stronger productivity", "Lower potential output", "Impaired credibility", "Greater disinflation", "70 percent confidence interval", and "90 percent confidence interval". "Extended Greenbook baseline" begins at about 2.3 at the beginning of 2008. It then decreases to about -3.9 in mid-2009 and generally increases to about 4.8 in early 2012. By the end of 2014 it has generally decreased to about 3.3. "Stronger recovery" begins at about 0 in late 2009 and increases to about 6 by mid-2011. It then decreases and is at about 2.5 at the end of 2014. "Weaker aggregate demand" begins at about 0 in late 2009 and increases to about 2.7 by early 2010. It then decreases to about 2 in late 2010 and then increases to about 5.1 in early 2013. By the end of 2014 it has decreased to about 3.9 . "Stronger productivity" begins at about 0 in late 2009 and generally increases to about 6 in early 2012. It then decreases to about 3.1 by the end of 2014 . "Lower potential output" begins at about 0 in late 2009 and increases to about 3.6 in mid-2010. It then decreases to about 3.2 in late 2010 and increases to about 4.4 by early 2012 . By the end of 2014 it has decreased to about 3.3. "Impaired credibility" begins at about 0 in late 2009 and increases to about 3.5 by mid-2010. It then decreases to about 3 in late 2010 and increases to about 3.7 by mid-2013. By the end of 2014 it has decreased to about 3.3. "Greater disinflation" begins at about 0 in late 2009 and increases to about 4 by mid-2010. It then decreases to about 3.5 in late 2010 and increases to about 5.2 in early 2013 . By the end of 2014 it has decreased to about 3.8. The last two series closely track the "Extended Greenbook baseline" from mid-2010 on, with the 70 percent confidence interval being about 2 percent both lesser and greater than the "Extended Greenbook baseline" and the 90 percent confidence interval being about 3.5 percent both lesser and greater than the "Extended Greenbook baseline".

## Figure: Unemployment Rate

Line chart, by percent, 2008 to 2014. There are nine series, "Extended Greenbook baseline", "Stronger recovery", "Weaker aggregate demand", "Stronger productivity", "Lower potential output", "Impaired credibility", "Greater disinflation", "70 percent confidence interval", and " 90 percent confidence interval". "Extended Greenbook baseline" begins at about 4.95 at the beginning of 2008. It then increases to about 10 in late 2009 and then generally decreases to about 5.25 by the end of 2014. "Stronger recovery" begins at about 10 in late 2009 and decreases to about 4.9 by mid-2013. It then increases and is at about 5.2 at the end of 2014 . "Weaker aggregate demand" begins at about 10 in late 2009 and increases to about 10.2 by early 2010. It then decreases to about 5.25 by the end of 2014 . "Stronger productivity" begins at about 10 in late 2009 and generally increases to about 10.5 in late 2010 . It then decreases to about 4.9 by the early 2014 and by the end of 2014 has increases up to about 4.95. "Lower potential output" begins at about 10 in late 2009 and decreases to about 5.8 by the end of 2014 . "Impaired credibility" begins at about 10 in late 2009 and decreases to about 6.3 by the end of 2014. "Greater disinflation" begins at about 10 in late 2009 and decreases to about 4.5 by the end of 2014. The last two series closely track the "Extended Greenbook baseline" from mid-2010 on. The 70 percent confidence interval begins in mid-2010 at about 1 percent both lesser and greater than the "Extended Greenbook baseline" and by the end of 2014 has increased to about 2 percent both lesser and greater than the "Extended Greenbook baseline". The 90 percent confidence interval begins in mid-2010 at about 1.5 percent both lesser and greater than the "Extended Greenbook baseline" and by the end of 2014 has increased to about 3 percent both lesser and greater than the "Extended Greenbook baseline".

## Figure: PCE Prices excluding Food and Energy

Line chart, 4-quarter percent change, 2008 to 2014. There is a horizontal line at 0 . There are nine series, "Extended Greenbook baseline", "Stronger recovery", "Weaker aggregate demand", "Stronger productivity", "Lower potential output", "Impaired credibility", "Greater disinflation", "70 percent confidence interval", and "90 percent confidence interval". "Extended Greenbook baseline" begins at about 2.4 at the beginning of 2008. It then generally increases to about 2.7 in late 2008 and then decreases to about 1.25 by mid-2009. By late 2009 it has increased to about 1.5 and by late 2011 it has decreased to about 1.1. By the end of 2014 it has increased to about 1.6. "Stronger recovery" begins at about 1.5 in late 2009 and decreases to about 1 by early 2012. It then increases and is at about 1.8 at the end of 2014. "Weaker aggregate demand" begins at about 1.5 in late 2009 and decreases to about 0.75 by early 2012. It then increases to about 1.4 by the end of 2014 . "Stronger productivity" begins at about 1.5 in late 2009 and generally decreases to about 0.25 in mid-2012. It then increases to about 1.3 by the end of 2014 . "Lower potential output" begins at about 1.5 in late 2009 and generally decreases to about 1.3 by early 2012. It then increases to about 1.9 by the end of 2014 . "Impaired credibility" begins at about 1.5 in late 2009 and generally increases to about 2.6 by the end of 2014. "Greater disinflation" begins at about 1.5 in late 2009 and decreases to about -0.01 by the end of 2012. It then increases to about 0.25 by the end of 2014. The last two series closely track the "Extended Greenbook baseline" from early 2010 on. The 70 percent confidence interval begins in early 2010 at about 0.1 percent both lesser and greater than the "Extended Greenbook baseline" and by the end of 2014 has increased to about 0.75 percent both lesser and greater than the "Extended Greenbook baseline". The 90 percent confidence interval begins in early 2010 at about 0.2 percent both lesser and greater than the "Extended Greenbook baseline" and by the end of 2014 has increased to about 1.25 percent both lesser and greater than the "Extended Greenbook baseline".

Figure: Federal Funds Rate

Line chart, by percent, 2008 to 2014. There is a horizontal line at 0 . There are nine series, "Extended Greenbook baseline", "Stronger recovery", "Weaker aggregate demand", "Stronger productivity", "Lower potential output", "Impaired credibility", "Greater disinflation", "70 percent confidence interval", and "90 percent confidence interval". "Extended Greenbook baseline" begins at about 3.2 at the beginning of 2008. It then decreases to about 0.1 in late 2009 and remains stable until mid-2011. It then increases and by the end of 2014 is at 3.8 . "Stronger recovery" begins at about 0.1 in late 2010 and increases to about 4.1 by the end of 2014 . "Weaker aggregate demand" begins at about 0.1 in late 2010 and remains stable here until mid-2012. It then decreases to about 3.5 by the end of 2014 . "Stronger productivity" begins at about 0.1 in late 2010 and remains stable here until mid-2012. It then increases to about 3.75 the end of 2014. "Lower potential output" begins at about 0.1 in late 2010 and increases to about 4.3 by the end of 2014. "Impaired credibility" begins at about 0.1 in late 2010 and increases to about 4.6 by the end of 2014 . "Greater disinflation" begins at about 0.1 in late 2010 and remains stable here until mid-2012. It then increases to about 2.5 by the end of 2014 . The last two series closely track the "Extended Greenbook baseline" from mid-2011 on. The 70 percent confidence interval begins in mid-2011 at about 1 percent both lesser and greater than the "Extended Greenbook baseline" and by the end of 2014 has increased to about 1.5 percent both lesser and greater than the "Extended Greenbook baseline". The 90 percent confidence interval begins in mid-2010 at about 1.5 percent both lesser and greater than the "Extended Greenbook baseline" and by the end of 2014 has increased to about 2.5 percent both lesser and greater than the "Extended Greenbook baseline".

## Evolution of the Staff Forecast

## Figure: Change in Real GDP

Line chart, by percent, Greenbook publication dates from 2008 to 2010. Data are Q4 over Q4. There is a horizontal line at 0 . There are three series, " 2009 ", " 2010 " and "2011". The series "2009" begins on January 23, 2008 at about 2.25 and increases to about 3 on March 13, 2008. It then decreases until it reaches -2.25 on March 12, 2009. By January 20, 2010 it has increased to about 0 where the series then ends. The series " 2010 " begins on September 10, 2008 at about 2.6 . It then decreases to about 2.25 on October 22, 2008 and increases to 2.75 on January 22, 2009. By March 12, 2009 it has decreased to about 1.5 and by January 20 , 2010 it has increased to about 3.5 where the series ends. The series "2011" begins on September 16, 2009 at about 4.5. It then decreases to about 4.3 on October 29,2009 and then increases to about 4.8 on January 20,2010 where the series ends.

## Figure: Unemployment Rate

Line chart, by percent, Greenbook publication dates from 2008 to 2010. Data are from Q4. There are three series, "2009", "2010" and "2011". The series "2009" begins on January 23, 2008 at about 5.2. It then generally increases and by January 20, 2010 is at about 10 where it ends. The series " 2010 " begins on September 10,2008 at about 5.8 and then generally increases to about 9.5 on January 20, 2010. The series "2011" begins on September 16, 2009 at about 8.0 and then increases to about 8.4 on December 9, 2009. It then decreases to about 8.2 on January 20, 2010.

## Figure: Change in PCE Prices excluding Food and Energy

Line chart, by percent, Greenbook publication dates from 2008 to 2010. Data are Q4 over Q4. There are three series, "2009", "2010", and "2011". The series "2009" begins on January 23, 2008 at about 1.9 and increases to about 2.2 by June 18, 2008. It then decreases to about 1.0 on January 22,2009 and generally increases to about 1.5 by January 20, 2010. The series "2010" begins on September 10, 2008 at about 1.9 and generally decreases to about 0.5 by March 12,2009 . It then increases to about 1.2 by January 20, 2010. The series "2011" begins on September 16, 2009 at about 1.0. It then increases and reaches about 1.1 by January 20 , 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 ${ }^{\mathbf{1}}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 12/09/09 | 01/20/10 | 12/09/09 | 01/20/10 | 12/09/09 | 01/20/10 | 12/09/09 | 01/20/10 | 12/09/09 | 01/20/10 |
| Quarterly |  |  |  |  |  |  |  |  |  |  |  |
| 2009: | Q1 | -4.6 | -4.6 | -6.4 | -6.4 | -1.5 | -1.5 | 1.1 | 1.1 | 8.1 | 8.2 |
|  | Q2 | -. 8 | -. 8 | -. 7 | -. 7 | 1.4 | 1.4 | 2.0 | 2.0 | 9.2 | 9.3 |
|  | Q3 | 3.0 | 2.6 | 2.5 | 2.2 | 2.7 | 2.6 | 1.3 | 1.2 | 9.6 | 9.7 |
| Q4 |  | 4.6 | 6.2 | 3.8 | 5.3 | 2.8 | 2.9 | 1.6 | 1.6 | 10.1 | 10.0 |
| 2010: | Q1 | 5.0 | 4.7 | 3.6 | 2.8 | 1.1 | 2.0 | 1.3 | 1.2 | 10.1 | 10.1 |
| Q2 |  | 5.1 | 5.0 | 3.5 | 3.8 | 1.6 | 1.2 | 1.2 | 1.2 | 9.9 | 9.9 |
| Q3 |  | 4.9 | 5.1 | 3.6 | 3.9 | 1.4 | 1.3 | 1.1 | 1.1 | 9.8 | 9.7 |
| Q4 |  | 5.0 | 5.1 | 3.8 | 4.0 | 1.3 | 1.3 | 1.1 | 1.1 | 9.6 | 9.5 |
| 2011: Q1 |  | 5.5 | 5.6 | 4.2 | 4.3 | 1.3 | 1.2 | 1.1 | 1.1 | 9.2 | 9.1 |
|  |  |  |  |  |  |  |  |  |  |  |  |


| Q2 | 5.7 | 5.9 | 4.5 | 4.7 | 1.2 | 1.1 | 1.1 | 1.1 | 9.0 | 8.9 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Q3 | 5.8 | 5.9 | 4.6 | 4.9 | 1.1 | 1.1 | 1.1 | 1.1 | 8.7 | 8.6 |
| Q4 | 5.8 | 6.0 | 4.7 | 5.0 | 1.1 | 1.1 | 1.1 | 1.0 | 8.3 | 8.2 |

Two-quarter²

| 2009: | Q2 | -2.7 | -2.7 | -3.6 | -3.6 | -.1 | -.1 | 1.6 | 1.6 | 2.3 | 2.4 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Q4 | 3.8 | 4.4 | 3.1 | 3.8 | 2.7 | 2.7 | 1.4 | 1.4 | .9 | .7 |
| 2010: | Q2 | 5.0 | 4.8 | 3.5 | 3.3 | 1.4 | 1.6 | 1.2 | 1.2 | -.2 | -.1 |
|  | Q4 | 5.0 | 5.1 | 3.7 | 3.9 | 1.3 | 1.3 | 1.1 | 1.1 | -.3 | -.4 |
| 2011: | Q2 | 5.6 | 5.7 | 4.3 | 4.5 | 1.2 | 1.2 | 1.1 | 1.1 | -.6 | -.6 |
|  | Q4 | 5.8 | 6.0 | 4.7 | 4.9 | 1.1 | 1.1 | 1.1 | 1.0 | -.7 | -.7 |

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 | .5 | .8 | -.3 | .0 | 1.3 | 1.3 | 1.5 | 1.5 | 3.2 | 3.1 |
| 2010:Q4 | 5.0 | 5.0 | 3.6 | 3.6 | 1.3 | 1.4 | 1.2 | 1.2 | -.5 | -.5 |
| 2011:Q4 | 5.7 | 5.8 | 4.5 | 4.7 | 1.2 | 1.1 | 1.1 | 1.1 | -1.3 | -1.3 |

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 | -2.5 | -2.5 | .2 | .2 | 1.5 | 1.5 | 9.3 | 9.3 |
| 2010 | 4.3 | 4.5 | 3.2 | 3.4 | 1.8 | 1.9 | 1.3 | 1.3 | 9.8 | 9.8 |
| 2011 | 5.4 | 5.5 | 4.2 | 4.4 | 1.3 | 1.2 | 1.1 | 1.1 | 8.8 | 8.7 |

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

Changes in Real Gross Domestic Product and Related Items

| 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 | 5.3 | 2.8 | 3.8 | 3.9 | 4.0 | 4.3 | 4.7 | 4.9 | 5.0 | . 0 | 3.6 | 4.7 |
| Previous Greenbook | -6.4 | -. 7 | 2.5 | 3.8 | 3.6 | 3.5 | 3.6 | 3.8 | 4.2 | 4.5 | 4.6 | 4.7 | -. 3 | 3.6 | 4.5 |
| Final sales | -4.1 | . 7 | 1.5 | 1.5 | 2.5 | 3.4 | 3.1 | 3.7 | 3.9 | 4.4 | 4.4 | 4.8 | -. 1 | 3.2 | 4.4 |
| Previous Greenbook | -4.1 | . 7 | 1.7 | 1.5 | 2.6 | 2.9 | 2.9 | 3.3 | 3.6 | 4.1 | 4.2 | 4.2 | -. 1 | 2.9 | 4.0 |
| Priv. dom. final purch. | -7.2 | -2.7 | 2.2 | 1.9 | 2.5 | 3.7 | 3.6 | 4.0 | 4.7 | 5.1 | 5.4 | 5.4 | -1.6 | 3.4 | 5.1 |
| Previous Greenbook | -7.2 | -2.7 | 2.4 | 1.2 | 2.6 | 3.0 | 3.4 | 3.7 | 4.3 | 4.8 | 5.0 | 4.9 | -1.7 | 3.2 | 4.8 |
| Personal cons. expend. | . 6 | -. 9 | 2.8 | 2.1 | 2.7 | 2.7 | 2.9 | 2.9 | 3.3 | 3.6 | 3.9 | 4.0 | 1.1 | 2.8 | 3.7 |
| Previous Greenbook | . 6 | -. 9 | 3.0 | 1.9 | 2.7 | 2.4 | 2.6 | 2.6 | 3.0 | 3.4 | 3.7 | 3.6 | 1.1 | 2.6 | 3.4 |
| Durables | 3.9 | -5.6 | 20.4 | 1.0 | 9.4 | 9.7 | 10.5 | 9.8 | 10.0 | 12.1 | 12.0 | 13.2 | 4.5 | 9.9 | 11.8 |
| Nondurables | 1.9 | -1.9 | 1.5 | 4.1 | 1.8 | 2.7 | 2.8 | 2.9 | 3.1 | 3.5 | 3.5 | 3.6 | 1.4 | 2.6 | 3.4 |
| Services | -. 3 | . 2 | . 8 | 1.6 | 2.1 | 1.7 | 1.8 | 1.8 | 2.3 | 2.4 | 2.7 | 2.7 | . 6 | 1.8 | 2.5 |
| Residential investment | -38.2 | -23.3 | 18.9 | 4.0 | 1.3 | 13.1 | -4.0 | 12.3 | 19.2 | 28.5 | 27.8 | 24.1 | -12.5 | 5.4 | 24.8 |
| Previous Greenbook | -38.2 | -23.3 | 18.9 | 8.1 | 8.7 | 17.8 | 4.3 | 9.1 | 15.4 | 23.0 | 22.0 | 20.7 | -11.6 | 9.9 | 20.2 |
| Business fixed invest. | -39.2 | -9.6 | -5.9 | -. 5 | . 9 | 8.4 | 11.5 | 10.7 | 11.5 | 10.4 | 10.3 | 10.0 | -15.3 | 7.8 | 10.6 |
| Previous Greenbook | -39.2 | -9.6 | -5.5 | -5.8 | . 1 | 4.0 | 9.7 | 10.9 | 11.5 | 10.7 | 10.5 | 9.9 | -16.4 | 6.1 | 10.7 |
| Equipment \& software | -36.4 | -4.9 | 1.5 | 12.4 | 8.4 | 13.2 | 15.7 | 14.4 | 15.3 | 14.4 | 14.3 | 13.7 | -8.8 | 12.9 | 14.4 |
| Previous Greenbook | -36.4 | -4.9 | 2.4 | 5.9 | 5.5 | 8.1 | 14.8 | 14.8 | 15.1 | 14.8 | 14.6 | 13.8 | -10.0 | 10.7 | 14.6 |
| Nonres. structures | -43.6 | -17.3 | -18.4 | -22.4 | -13.8 | -1.8 | 2.0 | 2.2 | 2.6 | . 9 | . 5 | . 3 | -26.3 | -3.1 | 1.1 |
| Previous Greenbook | -43.6 | -17.3 | -18.9 | -25.8 | -10.7 | -4.8 | -1.4 | 2.0 | 3.0 | 1.0 | . 4 | . 1 | -27.2 | -3.8 | 1.1 |


| Net exports ${ }^{\underline{2}}$ | -386 | -330 | -357 | -349 | -363 | -368 | -374 | -369 | -375 | -378 | -385 | -381 | -356 | -368 | -380 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous Greenbook ${ }^{2}$ | -386 | -330 | -358 | -345 | -357 | -357 | -358 | -352 | -356 | -357 | -360 | -356 | -355 | -356 | -357 |
| Exports | -29.9 | -4.1 | 17.8 | 17.3 | 9.8 | 8.8 | 9.4 | 10.0 | 9.7 | 9.3 | 9.3 | 9.1 | -1.9 | 9.5 | 9.3 |
| Imports | -36.4 | -14.7 | 21.3 | 11.8 | 11.0 | 8.2 | 9.0 | 7.0 | 9.2 | 8.2 | 9.1 | 6.6 | -7.4 | 8.8 | 8.3 |
| Gov't. cons. \& invest. | -2.6 | 6.7 | 2.6 | -1.2 | 4.4 | 2.7 | 1.7 | 1.2 | 1.3 | 1.3 | 1.2 | 1.2 | 1.3 | 2.5 | 1.3 |
| Previous Greenbook | -2.6 | 6.7 | 2.8 | . 6 | 4.1 | 2.2 | . 9 | . 6 | 1.0 | 1.0 | 1.0 | . 5 | 1.8 | 1.9 | . 9 |
| Federal | -4.3 | 11.4 | 8.0 | -2.7 | 10.6 | 5.0 | 1.8 | . 1 | 1.0 | 1.0 | 1.0 | 1.0 | 2.9 | 4.3 | 1.0 |
| Defense | -5.1 | 14.0 | 8.4 | -7.8 | 10.6 | 3.4 | 2.9 | 2.0 | . 3 | . 3 | . 3 | . 1 | 1.9 | 4.7 | . 2 |
| Nondefense | -2.5 | 6.1 | 7.0 | 9.2 | 10.7 | 8.3 | -. 2 | -3.7 | 2.6 | 2.6 | 2.6 | 2.6 | 4.8 | 3.6 | 2.6 |
| State \& local | -1.5 | 3.9 | -. 6 | -. 2 | . 5 | 1.1 | 1.6 | 1.9 | 1.5 | 1.5 | 1.3 | 1.4 | . 3 | 1.3 | 1.4 |
| Change in bus. inventories ${ }^{2}$ | -114 | -160 | -139 | -24 | -16 | -2 | 22 | 32 | 45 | 56 | 71 | 79 | -109 | 9 | 63 |
| Previous Greenbook ${ }^{2}$ | -114 | -160 | -137 | -66 | -34 | -15 | 7 | 24 | 42 | 55 | 69 | 85 | -119 | -5 | 63 |
| Nonfarm ${ }^{2}$ | -115 | -163 | -141 | -24 | -20 | -6 | 19 | 29 | 42 | 54 | 70 | 77 | -111 | 5 | 61 |
| Farm ${ }^{2}$ | 0 | 2 | 2 | 0 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 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

(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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Real GDP | 3.8 | 3.1 | 2.7 | 2.4 | 2.5 | -1.9 | . 0 | 3.6 | 4.7 |
| Previous Greenbook | 3.8 | 3.1 | 2.7 | 2.4 | 2.5 | -1.9 | -. 3 | 3.6 | 4.5 |
| Final sales | 3.8 | 2.8 | 2.7 | 2.8 | 2.7 | -1.4 | -. 1 | 3.2 | 4.4 |
| 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 | -1.6 | 3.4 | 5.1 |
| Previous Greenbook | 4.2 | 4.2 | 3.1 | 2.5 | 1.4 | -3.2 | -1.7 | 3.2 | 4.8 |
| Personal cons. expend. | 3.4 | 3.5 | 2.7 | 3.3 | 2.0 | -1.8 | 1.1 | 2.8 | 3.7 |
| Previous Greenbook | 3.4 | 3.5 | 2.7 | 3.3 | 2.0 | -1.8 | 1.1 | 2.6 | 3.4 |
| Durables | 8.9 | 5.5 | 2.1 | 6.3 | 4.6 | -11.8 | 4.5 | 9.9 | 11.8 |
| Nondurables | 3.9 | 3.0 | 3.3 | 3.2 | 1.5 | -2.9 | 1.4 | 2.6 | 3.4 |
| Services | 2.2 | 3.4 | 2.6 | 2.8 | 1.7 | . 3 | . 6 | 1.8 | 2.5 |
| Residential investment | 11.5 | 6.6 | 5.3 | -15.7 | -20.5 | -21.0 | -12.5 | 5.4 | 24.8 |
| Previous Greenbook | 11.5 | 6.6 | 5.3 | -15.7 | -20.5 | -21.0 | -11.6 | 9.9 | 20.2 |
| Business fixed invest. | 5.9 | 7.0 | 4.4 | 7.8 | 7.9 | -6.0 | -15.3 | 7.8 | 10.6 |
| Previous Greenbook | 5.9 | 7.0 | 4.4 | 7.8 | 7.9 | -6.0 | -16.4 | 6.1 | 10.7 |
| Equipment \& software | 7.5 | 8.8 | 6.1 | 6.0 | 3.2 | -10.7 | -8.8 | 12.9 | 14.4 |
| Previous Greenbook | 7.5 | 8.8 | 6.1 | 6.0 | 3.2 | -10.7 | -10.0 | 10.7 | 14.6 |
| Nonres. structures | 1.3 | 1.7 | -. 1 | 13.0 | 18.9 | 3.2 | -26.3 | -3.1 | 1.1 |
| Previous Greenbook | 1.3 | 1.7 | -. 1 | 13.0 | 18.9 | 3.2 | -27.2 | -3.8 | 1.1 |
| Net exports ${ }^{1}$ | -604 | -688 | -723 | -729 | -648 | -494 | -356 | -368 | -380 |
| Previous Greenbook ${ }^{1}$ | -604 | -688 | -723 | -729 | -648 | -494 | -355 | -356 | -357 |
| Exports | 6.2 | 7.1 | 6.7 | 10.2 | 10.2 | -3.4 | -1.9 | 9.5 | 9.3 |
| Imports | 5.1 | 10.9 | 5.2 | 4.1 | . 9 | -6.8 | -7.4 | 8.8 | 8.3 |
| Gov't. cons. \& invest. | 1.6 | . 6 | . 7 | 1.5 | 2.5 | 3.0 | 1.3 | 2.5 | 1.3 |
| Previous Greenbook | 1.6 | . 6 | . 7 | 1.5 | 2.5 | 3.0 | 1.8 | 1.9 | . 9 |


| Federal | 5.7 | 2.3 | 1.2 | 2.2 | 3.4 | 8.9 | 2.9 | 4.3 | 1.0 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Defense | 8.4 | 2.4 | .4 | 4.4 | 2.6 | 9.5 | 1.9 | 4.7 | .2 |
| Nondefense | .7 | 2.3 | 2.6 | -2.3 | 5.2 | 7.5 | 4.8 | 3.6 | 2.6 |
| State \& local | -.5 | -.4 | .4 | 1.2 | 1.9 | -.3 | .3 | 1.3 | 1.4 |
| Change in bus. inventories ${ }^{1}$ | 17 | 66 | 50 | 59 | 19 | -26 | -109 | 9 | 63 |
| Previous Greenbook $^{1}$ | 17 | 66 | 50 | 59 | 19 | -26 | -119 | -5 | 63 |
| Nonfarm $^{1}$ | 17 | 58 | 50 | 63 | 20 | -20 | -111 | 5 | 61 |
| Farm $^{1}$ | 0 | 8 | 0 | -4 | -1 | -5 | 1 | 3 | 3 |

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

Contributions to Changes in Real Gross Domestic Product

| Item | 2009 |  |  |  | 2010 |  |  |  | 2011 |  |  |  | $2009{ }^{\underline{1}} 2010^{1}$ |  | $2011{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| Real GDP | -6.4 | -. 7 | 2.2 | 5.3 | 2.8 | 3.8 | 3.9 | 4.0 | 4.3 | 4.7 | 4.9 | 5.0 | . 0 | 3.6 | 4.7 |
| Previous Greenbook | -6.4 | -. 7 | 2.5 | 3.8 | 3.6 | 3.5 | 3.6 | 3.8 | 4.2 | 4.5 | 4.6 | 4.7 | -. 3 | 3.6 | 4.5 |
| Final sales | -4.1 | . 7 | 1.5 | 1.6 | 2.5 | 3.4 | 3.1 | 3.7 | 3.9 | 4.4 | 4.4 | 4.8 | -. 1 | 3.2 | 4.4 |
| Previous Greenbook | -4.1 | . 7 | 1.7 | 1.5 | 2.6 | 2.9 | 2.9 | 3.3 | 3.6 | 4.1 | 4.2 | 4.2 | -. 1 | 2.9 | 4.0 |
| Priv. dom. final purch. | -6.1 | -2.3 | 1.8 | 1.6 | 2.1 | 3.0 | 3.0 | 3.3 | 3.8 | 4.2 | 4.4 | 4.4 | -1.3 | 2.8 | 4.2 |
| Previous Greenbook | -6.1 | -2.3 | 2.0 | 1.0 | 2.2 | 2.5 | 2.8 | 3.1 | 3.5 | 3.9 | 4.1 | 4.0 | -1.4 | 2.6 | 3.9 |
| Personal cons. expend. | . 4 | -. 6 | 2.0 | 1.6 | 1.9 | 2.0 | 2.1 | 2.0 | 2.3 | 2.6 | 2.8 | 2.8 | . 8 | 2.0 | 2.6 |
| Previous Greenbook | . 4 | -. 6 | 2.1 | 1.4 | 1.9 | 1.7 | 1.8 | 1.9 | 2.1 | 2.4 | 2.6 | 2.5 | . 8 | 1.8 | 2.4 |
| Durables | . 3 | -. 4 | 1.4 | . 1 | . 7 | . 7 | . 8 | . 7 | . 7 | . 9 | . 9 | 1.0 | . 3 | . 7 | . 9 |
| Nondurables | . 3 | -. 3 | . 2 | . 6 | . 3 | . 4 | . 5 | . 5 | . 5 | . 6 | . 6 | . 6 | . 2 | . 4 | . 5 |
| Services | -. 1 | . 1 | . 4 | . 8 | 1.0 | . 8 | . 9 | . 9 | 1.1 | 1.1 | 1.3 | 1.3 | . 3 | . 9 | 1.2 |
| Residential investment | -1.3 | -. 7 | . 4 | . 1 | . 0 | . 3 | -. 1 | . 3 | . 5 | . 7 | . 7 | . 6 | -. 4 | . 1 | . 6 |
| Previous Greenbook | -1.3 | -. 7 | . 4 | . 2 | . 2 | . 4 | . 1 | . 2 | . 4 | . 6 | . 6 | . 6 | -. 3 | . 2 | . 5 |
| Business fixed invest. | -5.3 | -1.0 | -. 6 | . 0 | . 1 | . 8 | 1.0 | 1.0 | 1.1 | 1.0 | 1.0 | 1.0 | -1.7 | . 7 | 1.0 |
| Previous Greenbook | -5.3 | -1.0 | -. 6 | -. 6 | . 0 | . 4 | . 9 | 1.0 | 1.0 | 1.0 | 1.0 | . 9 | -1.8 | . 6 | 1.0 |
| Equipment \& software | -3.0 | -. 3 | . 1 | . 8 | . 5 | . 8 | 1.0 | . 9 | 1.0 | 1.0 | 1.0 | . 9 | -. 6 | . 8 | 1.0 |
| Previous Greenbook | -3.0 | -. 3 | . 2 | . 4 | . 3 | . 5 | . 9 | . 9 | 1.0 | 1.0 | 1.0 | . 9 | -. 7 | . 7 | 1.0 |
| Nonres. structures | -2.3 | -. 7 | -. 7 | -. 8 | -. 4 | . 0 | . 1 | . 1 | . 1 | . 0 | . 0 | . 0 | -1.1 | -. 1 | . 0 |
| Previous Greenbook | -2.3 | -. 7 | -. 7 | -. 9 | -. 3 | -. 1 | . 0 | . 1 | . 1 | . 0 | . 0 | . 0 | -1.1 | -. 1 | . 0 |
| Net exports | 2.6 | 1.7 | -. 8 | . 2 | -. 5 | -. 2 | -. 2 | . 1 | -. 2 | -. 1 | -. 3 | . 1 | 1.0 | -. 2 | -. 1 |
| Previous Greenbook | 2.6 | 1.7 | -. 9 | . 4 | -. 4 | . 0 | -. 1 | . 1 | -. 2 | . 0 | -. 1 | . 1 | 1.0 | -. 1 | -. 1 |
| Exports | -4.0 | -. 5 | 1.8 | 1.8 | 1.1 | 1.0 | 1.1 | 1.2 | 1.2 | 1.1 | 1.1 | 1.1 | -. 2 | 1.1 | 1.1 |
| Imports | 6.6 | 2.1 | -2.6 | -1.6 | -1.6 | -1.2 | -1.3 | -1.0 | -1.4 | -1.2 | -1.4 | -1.0 | 1.2 | -1.3 | -1.3 |
| Gov't. cons. \& invest. | -. 5 | 1.3 | . 6 | -. 2 | . 9 | . 6 | . 4 | . 3 | . 3 | . 3 | . 3 | . 3 | . 3 | . 5 | . 3 |
| Previous Greenbook | -. 5 | 1.3 | . 6 | . 1 | . 8 | . 5 | . 2 | . 1 | . 2 | . 2 | . 2 | . 1 | . 4 | . 4 | . 2 |
| Federal | -. 3 | . 9 | . 6 | -. 2 | . 8 | . 4 | . 2 | . 0 | . 1 | . 1 | . 1 | . 1 | . 2 | . 3 | . 1 |
| Defense | -. 3 | . 7 | . 5 | -. 4 | . 6 | . 2 | . 2 | . 1 | . 0 | . 0 | . 0 | . 0 | . 1 | . 3 | . 0 |
| Nondefense | -. 1 | . 2 | . 2 | . 2 | . 3 | . 2 | . 0 | -. 1 | . 1 | . 1 | . 1 | . 1 | . 1 | . 1 | . 1 |
| State \& local | -. 2 | . 5 | -. 1 | . 0 | . 1 | . 1 | . 2 | . 2 | . 2 | . 2 | . 2 | . 2 | . 0 | . 2 | . 2 |
| Change in bus. inventories | -2.4 | -1.4 | . 7 | 3.7 | . 3 | . 4 | . 8 | . 3 | . 4 | . 4 | . 5 | . 2 | . 1 | . 4 | . 4 |
| Previous Greenbook | -2.4 | -1.4 | . 7 | 2.3 | 1.0 | . 6 | . 7 | . 5 | . 6 | . 4 | . 4 | . 5 | -. 2 | . 7 | . 5 |


| Nonfarm | -2.4 | -1.5 | .7 | 3.7 | .1 | .5 | .8 | .3 | .4 | .4 | .5 | .2 | .1 | .4 | .4 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Farm | .1 | .1 | .0 | .0 | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .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 |  |  | $2009{ }^{1} 2010{ }^{1}$ |  | $2011{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| GDP chain-wt. price index | 1.9 | . 0 | . 4 | . 8 | 1.9 | 1.1 | 1.2 | 1.1 | 1.2 | 1.1 | 1.0 | 1.0 | . 8 | 1.3 | 1.1 |
| Previous Greenbook | 1.9 | . 0 | . 5 | . 7 | 1.3 | 1.5 | 1.3 | 1.1 | 1.3 | 1.1 | 1.1 | 1.0 | . 8 | 1.3 | 1.1 |
| PCE chain-wt. price index | -1.5 | 1.4 | 2.6 | 2.9 | 2.0 | 1.2 | 1.3 | 1.3 | 1.2 | 1.1 | 1.1 | 1.1 | 1.3 | 1.4 | 1.1 |
| Previous Greenbook | -1.5 | 1.4 | 2.7 | 2.8 | 1.1 | 1.6 | 1.4 | 1.3 | 1.3 | 1.2 | 1.1 | 1.1 | 1.3 | 1.3 | 1.2 |
| Energy | -36.7 | -2.0 | 40.6 | 30.5 | 13.1 | . 4 | 4.8 | 4.4 | 3.8 | 2.8 | 2.3 | 2.3 | 3.3 | 5.6 | 2.8 |
| Previous Greenbook | -36.7 | -2.0 | 40.8 | 27.9 | -1.2 | 8.4 | 5.3 | 5.0 | 4.8 | 3.7 | 2.8 | 2.7 | 2.8 | 4.3 | 3.5 |
| Food | -1.1 | -3.6 | -2.1 | . 3 | 2.8 | 1.1 | 1.4 | 1.0 | . 7 | . 7 | . 7 | . 7 | -1.6 | 1.6 | . 7 |
| Previous Greenbook | -1.1 | -3.6 | -2.1 | . 5 | 1.2 | 1.6 | 1.5 | 1.0 | . 7 | . 7 | . 7 | . 7 | -1.6 | 1.3 | . 7 |
| Ex. food \& energy | 1.1 | 2.0 | 1.2 | 1.6 | 1.2 | 1.2 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.5 | 1.2 | 1.1 |
| Previous Greenbook | 1.1 | 2.0 | 1.3 | 1.6 | 1.3 | 1.2 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.5 | 1.2 | 1.1 |
| CPI | -2.4 | 1.3 | 3.6 | 3.4 | 2.4 | 1.3 | 1.5 | 1.5 | 1.4 | 1.3 | 1.3 | 1.3 | 1.5 | 1.7 | 1.3 |
| Previous Greenbook | -2.4 | 1.3 | 3.6 | 3.3 | 1.2 | 1.9 | 1.6 | 1.5 | 1.5 | 1.4 | 1.3 | 1.3 | 1.4 | 1.6 | 1.4 |
| Ex. food \& energy | 1.5 | 2.4 | 1.5 | 1.5 | 1.3 | 1.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.7 | 1.3 | 1.2 |
| Previous Greenbook | 1.5 | 2.4 | 1.5 | 1.7 | 1.4 | 1.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.3 | 1.8 | 1.3 | 1.2 |
| ECI, hourly compensation ${ }^{2}$ | . 7 | . 7 | 1.8 | 1.7 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.3 | 2.1 | 2.0 |
| Previous Greenbook ${ }^{2}$ | . 7 | . 7 | 1.8 | 1.6 | 1.7 | 1.7 | 1.8 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.2 | 1.8 | 1.9 |
| Nonfarm business sector |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour | . 3 | 6.9 | 7.1 | 6.0 | 1.1 | 1.1 | . 6 | . 3 | . 5 | 1.1 | 1.2 | 1.4 | 5.1 | . 8 | 1.1 |
| Previous Greenbook | . 3 | 6.9 | 7.4 | 4.4 | 2.2 | . 9 | . 4 | . 3 | . 5 | 1.0 | 1.1 | 1.2 | 4.7 | . 9 | 1.0 |
| Compensation per hour | -4.7 | 6.9 | 5.4 | 2.5 | 3.0 | 2.2 | 2.2 | 2.2 | 2.8 | 2.2 | 2.0 | 2.0 | 2.4 | 2.4 | 2.2 |
| Previous Greenbook | -4.7 | 6.9 | 5.4 | 2.2 | 1.8 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 2.4 | 2.0 | 2.0 |
| Unit labor costs | -5.0 | . 0 | -1.6 | -3.3 | 1.9 | 1.0 | 1.6 | 1.9 | 2.3 | 1.1 | . 7 | . 5 | -2.5 | 1.6 | 1.2 |
| Previous Greenbook | -5.0 | . 0 | -1.9 | -2.1 | -. 4 | 1.1 | 1.6 | 1.7 | 1.5 | 1.0 | . 8 | . 6 | -2.3 | 1.0 | 1.0 |
| Core goods imports chain-wt. price index ${ }^{3}$ | -9.4 | -2.3 | 1.3 | 5.7 | 4.5 | 2.3 | 1.5 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | -1.3 | 2.4 | 1.0 |
| Previous Greenbook ${ }^{3}$ | -9.4 | -2.3 | 1.2 | 5.4 | 3.5 | 1.7 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | -1.4 | 1.9 | 1.0 |

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 | . 8 | 1.3 | 1.1 |
| Previous Greenbook | 2.1 | 3.2 | 3.5 | 2.9 | 2.7 | 1.9 | . 8 | 1.3 | 1.1 |
| PCE chain-wt. price index | 1.9 | 3.0 | 3.3 | 1.9 | 3.6 | 1.7 | 1.3 | 1.4 | 1.1 |
| Previous Greenbook | 1.9 | 3.0 | 3.3 | 1.9 | 3.6 | 1.7 | 1.3 | 1.3 | 1.2 |
| Energy | 8.6 | 18.6 | 21.5 | -3.7 | 19.7 | -9.1 | 3.3 | 5.6 | 2.8 |
| Previous Greenbook | 8.6 | 18.6 | 21.5 | -3.7 | 19.7 | -9.1 | 2.8 | 4.3 | 3.5 |


| Food | 3.2 | 2.7 | 1.5 | 1.7 | 4.7 | 6.8 | -1.6 | 1.6 | . 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous Greenbook | 3.2 | 2.7 | 1.5 | 1.7 | 4.7 | 6.8 | -1.6 | 1.3 | . 7 |
| Ex. food \& energy | 1.5 | 2.2 | 2.3 | 2.3 | 2.5 | 2.0 | 1.5 | 1.2 | 1.1 |
| Previous Greenbook | 1.5 | 2.2 | 2.3 | 2.3 | 2.5 | 2.0 | 1.5 | 1.2 | 1.1 |
| CPI | 2.0 | 3.4 | 3.8 | 1.9 | 4.0 | 1.5 | 1.5 | 1.7 | 1.3 |
| Previous Greenbook | 2.0 | 3.4 | 3.8 | 1.9 | 4.0 | 1.5 | 1.4 | 1.6 | 1.4 |
| Ex. food \& energy | 1.2 | 2.2 | 2.1 | 2.7 | 2.3 | 2.0 | 1.7 | 1.3 | 1.2 |
| Previous Greenbook | 1.2 | 2.2 | 2.1 | 2.7 | 2.3 | 2.0 | 1.8 | 1.3 | 1.2 |
| ECI, hourly compensation ${ }^{1}$ | 4.0 | 3.7 | 3.0 | 3.2 | 3.0 | 2.4 | 1.3 | 2.1 | 2.0 |
| Previous Greenbook ${ }^{1}$ | 4.0 | 3.8 | 2.9 | 3.2 | 3.0 | 2.4 | 1.2 | 1.8 | 1.9 |
| Nonfarm business sector |  |  |  |  |  |  |  |  |  |
| Output per hour | 5.0 | 1.5 | 1.4 | . 9 | 2.8 | . 9 | 5.1 | . 8 | 1.1 |
| Previous Greenbook | 5.0 | 1.5 | 1.4 | . 9 | 2.8 | . 9 | 4.7 | . 9 | 1.0 |
| Compensation per hour | 5.7 | 3.4 | 3.5 | 4.5 | 3.6 | 2.6 | 2.4 | 2.4 | 2.2 |
| Previous Greenbook | 5.7 | 3.4 | 3.5 | 4.5 | 3.6 | 2.6 | 2.4 | 2.0 | 2.0 |
| Unit labor costs | . 6 | 1.9 | 2.0 | 3.5 | . 7 | 1.6 | -2.5 | 1.6 | 1.2 |
| Previous Greenbook | . 6 | 1.9 | 2.0 | 3.5 | . 7 | 1.6 | -2.3 | 1.0 | 1.0 |
| Core goods imports chain-wt. price index ${ }^{\underline{2}}$ | 1.6 | 3.6 | 2.2 | 2.5 | 3.5 | 3.8 | -1.3 | 2.4 | 1.0 |
| Previous Greenbook ${ }^{2}$ | 1.6 | 3.6 | 2.2 | 2.5 | 3.5 | 3.8 | -1.4 | 1.9 | 1.0 |

1. Private-industry workers. Return to table
2. Core goods imports exclude computers, semiconductors, oil and natural gas. Return to table

Other Macroeconomic Indicators

| 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 ${ }^{\underline{1}}$ | -2.1 | -1.5 | -. 9 | -. 3 | . 0 | . 8 | . 7 | . 9 | 1.1 | 1.0 | 1.1 | 1.1 | -4.8 | 2.5 | 4.2 |
| Unemployment rate ${ }^{3}$ | 8.2 | 9.3 | 9.7 | 10.0 | 10.1 | 9.9 | 9.7 | 9.5 | 9.1 | 8.9 | 8.6 | 8.2 | 10.0 | 9.5 | 8.2 |
| Previous Greenbook ${ }^{3}$ | 8.1 | 9.2 | 9.6 | 10.1 | 10.1 | 9.9 | 9.8 | 9.6 | 9.2 | 9.0 | 8.7 | 8.3 | 10.1 | 9.6 | 8.3 |
| GDP gap ${ }^{4}$ | -7.0 | -7.8 | -7.9 | -7.3 | -7.2 | -6.8 | -6.4 | -6.0 | -5.6 | -5.1 | -4.5 | -3.9 | -7.3 | -6.0 | -3.9 |
| Previous Greenbook ${ }^{4}$ | -7.0 | -7.8 | -7.8 | -7.6 | -7.2 | -6.9 | -6.6 | -6.2 | -5.8 | -5.3 | -4.8 | -4.2 | -7.6 | -6.2 | -4.2 |
| Industrial production ${ }^{5}$ | -19.0 | -10.4 | 6.9 | 7.0 | 5.6 | 4.5 | 5.3 | 5.6 | 6.3 | 6.1 | 6.2 | 6.1 | -4.5 | 5.2 | 6.2 |
| Previous Greenbook ${ }^{5}$ | -19.0 | -10.3 | 5.6 | 7.1 | 6.2 | 5.8 | 4.8 | 5.2 | 5.8 | 5.9 | 6.1 | 6.1 | -4.8 | 5.5 | 6.0 |
| Manufacturing industr. prod. ${ }^{5}$ | -22.0 | -8.8 | 9.0 | 5.7 | 5.2 | 5.5 | 5.7 | 6.2 | 7.0 | 6.9 | 7.0 | 6.9 | -4.8 | 5.6 | 7.0 |
| Previous Greenbook ${ }^{5}$ | -22.0 | -8.7 | 7.7 | 7.1 | 5.5 | 6.4 | 5.1 | 5.7 | 6.5 | 6.6 | 6.8 | 6.8 | -4.8 | 5.7 | 6.6 |
| Capacity utilization rate - mfg. ${ }^{3}$ | 66.7 | 65.4 | 67.1 | 68.3 | 69.3 | 70.5 | 71.7 | 72.9 | 74.3 | 75.6 | 77.0 | 78.4 | 68.3 | 72.9 | 78.4 |
| Previous Greenbook ${ }^{3}$ | 66.7 | 65.4 | 66.9 | 68.3 | 69.4 | 70.8 | 71.9 | 73.1 | 74.4 | 75.6 | 77.0 | 78.4 | 68.3 | 73.1 | 78.4 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Housing starts ${ }^{6}$ | . 5 | . 5 | . 6 | . 6 | . 6 | . 7 | . 7 | . 8 | . 9 | 1.0 | 1.1 | 1.2 | . 6 | . 7 | 1.1 |
| Light motor vehicle sales ${ }^{6}$ | 9.5 | 9.6 | 11.5 | 10.8 | 11.0 | 11.7 | 12.5 | 13.1 | 13.8 | 14.3 | 14.8 | 15.3 | 10.3 | 12.1 | 14.6 |
| Income and saving |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nominal GDP5 | -4.6 | -. 8 | 2.6 | 6.2 | 4.7 | 5.0 | 5.1 | 5.1 | 5.6 | 5.9 | 5.9 | 6.0 | . 8 | 5.0 | 5.8 |
| Real disposable pers. income ${ }^{5}$ | . 2 | 6.2 | -1.4 | . 7 | 2.6 | . 2 | 3.2 | 3.3 | 2.2 | 3.6 | 4.3 | 4.3 | 1.4 | 2.3 | 3.6 |
| Previous Greenbook ${ }^{5}$ | . 2 | 6.2 | -1.3 | -. 1 | 3.4 | -. 2 | 3.2 | 3.2 | 1.4 | 3.9 | 4.4 | 3.7 | 1.2 | 2.4 | 3.3 |
| Personal saving rate ${ }^{3}$ | 3.7 | 5.4 | 4.5 | 4.3 | 4.3 | 3.7 | 3.8 | 4.0 | 3.8 | 3.8 | 3.9 | 4.0 | 4.3 | 4.0 | 4.0 |
| Previous Greenbook ${ }^{3}$ | 3.7 | 5.4 | 4.5 | 4.0 | 4.2 | 3.7 | 3.9 | 4.0 | 3.7 | 3.8 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |


| Corporate profits ${ }^{7}$ | 22.8 | 15.6 | 50.7 | -28.4 | 93.9 | 6.2 | 3.0 | 2.0 | 2.3 | 6.5 | 6.3 | 2.4 | 11.2 | 21.3 | 4.3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profit share of GNP ${ }^{3}$ | 8.3 | 8.6 | 9.5 | 8.6 | 10.0 | 10.0 | 10.0 | 9.9 | 9.8 | 9.8 | 9.8 | 9.8 | 8.6 | 9.9 | 9.8 |
| Net federal saving ${ }^{8}$ | -969 | -1,269 | -1,327 | -1,168 | -1,385 | -1,321 | -1,352 | -1,357 | -1,254 | -1,215 | -1,172 | -1,154 | -1,183 | -1,353 | -1,199 |
| Net state \& local saving ${ }^{8}$ | -37 | -25 | -15 | 3 | 20 | 34 | 47 | 47 | 34 | 25 | -18 | -28 | -18 | 37 | 3 |
| Gross national saving rate ${ }^{3}$ | 11.2 | 10.7 | 10.4 | 10.5 | 10.1 | 10.2 | 10.3 | 10.5 | 11.0 | 11.3 | 11.5 | 11.7 | 10.5 | 10.5 | 11.7 |
| Net national saving rate ${ }^{3}$ | -2.5 | -2.7 | -2.9 | -2.3 | -2.7 | -2.4 | -2.3 | -2.1 | -1.6 | -1.2 | -. 9 | -. 7 | -2.3 | -2.1 | -. 7 |

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 year 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

(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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employment and production |  |  |  |  |  |  |  |  |  |
| Nonfarm payroll employment ${ }^{\underline{1}}$ | -. 1 | 2.0 | 2.4 | 2.1 | 1.2 | -2.3 | -4.8 | 2.5 | 4.2 |
| Unemployment rate ${ }^{\text {² }}$ | 5.8 | 5.4 | 5.0 | 4.5 | 4.8 | 6.9 | 10.0 | 9.5 | 8.2 |
| Previous Greenbook ${ }^{2}$ | 5.8 | 5.4 | 4.9 | 4.4 | 4.8 | 6.9 | 10.1 | 9.6 | 8.3 |
| GDP gap ${ }^{3}$ | -1.6 | -. 8 | -. 3 | -. 3 | -. 4 | -4.8 | -7.3 | -6.0 | -3.9 |
| Previous Greenbook ${ }^{3}$ | -1.6 | -. 8 | -. 3 | -. 3 | -. 4 | -4.8 | -7.6 | -6.2 | -4.2 |
| Industrial production ${ }^{4}$ | 1.6 | 3.0 | 2.6 | 1.8 | 1.8 | -6.7 | -4.5 | 5.2 | 6.2 |
| Previous Greenbook ${ }^{4}$ | 1.6 | 3.0 | 2.6 | 1.8 | 1.8 | -6.7 | -4.8 | 5.5 | 6.0 |
| Manufacturing industr. prod. ${ }^{4}$ | 1.8 | 3.6 | 3.8 | 1.2 | 1.9 | -8.7 | -4.8 | 5.6 | 7.0 |
| Previous Greenbook ${ }^{4}$ | 1.8 | 3.6 | 3.8 | 1.2 | 1.9 | -8.7 | -4.8 | 5.7 | 6.6 |
| Capacity utilization rate - mfg. ${ }^{2}$ | 74.6 | 77.3 | 79.2 | 79.0 | 78.7 | 70.9 | 68.3 | 72.9 | 78.4 |
| Previous Greenbook ${ }^{2}$ | 74.6 | 77.3 | 79.2 | 79.0 | 78.7 | 70.9 | 68.3 | 73.1 | 78.4 |
| Housing starts ${ }^{-1}$ | 1.8 | 2.0 | 2.1 | 1.8 | 1.4 | . 9 | . 6 | . 7 | 1.1 |
| Light motor vehicle sales ${ }^{5}$ | 16.6 | 16.8 | 16.9 | 16.5 | 16.1 | 13.1 | 10.3 | 12.1 | 14.6 |
| Income and saving |  |  |  |  |  |  |  |  |  |
| Nominal GDP4 | 6.0 | 6.4 | 6.3 | 5.4 | 5.3 | . 1 | . 8 | 5.0 | 5.8 |
| Real disposable pers. income ${ }^{4}$ | 3.9 | 3.5 | . 6 | 4.6 | 1.0 | . 3 | 1.4 | 2.3 | 3.6 |
| Previous Greenbook ${ }^{4}$ | 3.9 | 3.5 | . 6 | 4.6 | 1.0 | . 3 | 1.2 | 2.4 | 3.3 |
| Personal saving rate ${ }^{2}$ | 3.6 | 3.6 | 1.5 | 2.5 | 1.5 | 3.8 | 4.3 | 4.0 | 4.0 |
| Previous Greenbook ${ }^{2}$ | 3.6 | 3.6 | 1.5 | 2.5 | 1.5 | 3.8 | 4.0 | 4.0 | 4.0 |
| Corporate profits ${ }^{6}$ | 12.2 | 21.9 | 19.6 | 3.7 | -5.7 | -25.1 | 11.2 | 21.3 | 4.3 |
| Profit share of GNP ${ }^{2}$ | 9.1 | 10.5 | 11.8 | 11.6 | 10.3 | 7.8 | 8.6 | 9.9 | 9.8 |
| Net federal saving ${ }^{7}$ | -376 | -379 | -283 | -204 | -236 | -643 | -1183 | -1353 | -1199 |
|  |  |  |  |  |  |  |  |  |  |


| Net state \& local saving ${ }^{7}$ | -39 | -8 | 26 | 51 | 22 | -40 | -18 | 37 | 3 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |
| Gross national saving rate $^{2}$ | 14.3 | 14.3 | 15.5 | 16.3 | 13.8 | 12.2 | 10.5 | 10.5 | 11.7 |
| Net national saving rate $^{2}$ | 2.5 | 2.7 | 3.5 | 4.2 | 1.6 | -.7 | -2.3 | -2.1 | -.7 |

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

| Item | Fiscal year |  |  |  | 2009 |  |  |  | 2010 |  |  |  | 2011 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 ${ }^{\text {a }}$ | $2009^{\text {a }}$ | 2010 | 2011 | Q1 ${ }^{\text {a }}$ | Q2 ${ }^{\text {a }}$ | Q3 ${ }^{\text {a }}$ | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Unified budget |  |  |  |  | Not seasonally adjusted |  |  |  |  |  |  |  |  |  |  |  |
| Receipts ${ }^{1}$ | 2524 | 2105 | 2201 | 2531 | 442 | 599 | 516 | 488 | 486 | 670 | 557 | 540 | 555 | 800 | 636 | 602 |
| Outlays ${ }^{1}$ | 2983 | 3520 | 3634 | 3740 | 891 | 904 | 845 | 876 | 945 | 924 | 889 | 951 | 952 | 923 | 915 | 931 |
| Surplus/deficit ${ }^{1}$ | -459 | -1416 | -1434 | -1209 | -449 | -305 | -329 | -389 | -459 | -254 | -332 | -411 | -397 | -123 | -279 | -329 |
| Previous Greenbook | -459 | -1417 | -1450 | -1172 | -449 | -305 | -331 | -367 | -493 | -255 | -335 | -362 | -402 | -140 | -268 | -314 |
| On-budget | -642 | -1553 | -1539 | -1364 | -468 | -382 | -318 | -395 | -484 | -330 | -331 | -465 | -409 | -207 | -283 | -390 |
| Off-budget | 183 | 137 | 106 | 155 | 19 | 77 | -11 | 6 | 25 | 76 | -1 | 55 | 12 | 84 | 4 | 61 |
| Means of financing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Borrowing | 768 | 1743 | 1388 | 1229 | 465 | 338 | 379 | 261 | 327 | 277 | 522 | 401 | 387 | 148 | 294 | 319 |
| Cash decrease | -296 | 96 | 25 | 0 | 98 | -49 | 43 | 82 | 159 | -30 | -185 | 15 | 15 | -20 | -10 | 15 |
| Other ${ }^{2}$ | -13 | -424 | 20 | -20 | -114 | 16 | -92 | 45 | -27 | 7 | -5 | -5 | -5 | -5 | -5 | -5 |
| Cash operating balance, end of period | 372 | 275 | 250 | 250 | 269 | 318 | 275 | 194 | 35 | 65 | 250 | 235 | 220 | 240 | 250 | 235 |
| NIPA federal sector |  |  |  |  | Seasonally adjusted annual rates |  |  |  |  |  |  |  |  |  |  |  |
| Receipts | 2534 | 2288 | 2385 | 2566 | 2251 | 2237 | 2215 | 2393 | 2352 | 2383 | 2412 | 2436 | 2566 | 2609 | 2654 | 2696 |
| Expenditures | 3074 | 3348 | 3691 | 3816 | 3220 | 3506 | 3542 | 3560 | 3737 | 3704 | 3763 | 3793 | 3820 | 3824 | 3826 | 3850 |
| Consumption expenditures | 914 | 972 | 1042 | 1085 | 954 | 979 | 1001 | 1001 | 1042 | 1058 | 1066 | 1069 | 1084 | 1091 | 1098 | 1104 |
| Defense | 620 | 658 | 694 | 721 | 643 | 663 | 679 | 670 | 694 | 702 | 708 | 713 | 721 | 724 | 726 | 728 |
| Nondefense | 294 | 314 | 348 | 364 | 311 | 316 | 322 | 331 | 347 | 356 | 358 | 355 | 363 | 367 | 371 | 376 |
| Other spending | 2160 | 2375 | 2649 | 2731 | 2266 | 2527 | 2541 | 2559 | 2695 | 2645 | 2697 | 2724 | 2736 | 2734 | 2728 | 2746 |
| Current account surplus | -540 | -1060 | -1306 | -1250 | -969 | -1269 | -1327 | -1168 | -1385 | -1321 | -1352 | -1357 | -1254 | -1215 | -1172 | -1154 |
| Gross investment | 141 | 158 | 164 | 168 | 152 | 159 | 163 | 159 | 164 | 166 | 167 | 168 | 168 | 168 | 168 | 168 |
| Gross saving less gross investment ${ }^{\underline{3}}$ | -563 | -1095 | -1340 | -1282 | -999 | -1304 | -1364 | -1198 | -1419 | -1356 | -1387 | -1392 | -1287 | -1247 | -1202 | -1182 |
| Fiscal indicators ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| High-employment (HEB) surplus/deficit | -499 | -757 | -914 | -939 | -684 | -914 | -939 | -763 | -981 | -932 | -982 | -1005 | -929 | -917 | -904 | -920 |
| Change in HEB, percent of potential GDP | 1.9 | 1.5 | 0.8 | -0.0 | 1.2 | 1.5 | 0.1 | -1.2 | 1.3 | -0.4 | 0.3 | 0.1 | -0.5 | -0.1 | -0.1 | 0.0 |
| Fiscal impetus (FI), percent of GDP | 0.8 | 1.0 | 1.1 | -0.1 | 0.0 | 0.7 | 0.3 | 0.1 | 0.4 | 0.2 | 0.2 | 0.0 | -0.2 | -0.0 | -0.1 | -0.1 |
| Previous Greenbook | 0.8 | 1.0 | 1.0 | -0.2 | 0.0 | 0.7 | 0.3 | 0.2 | 0.4 | 0.2 | 0.1 | 0.0 | -0.2 | -0.0 | -0.1 | -0.2 |

[^1]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 ${ }^{\underline{1}}$ | Total | Total | Households <br> Home mortgages | Consumer credit | Business | State and local governments | Federal government | Memo: <br> Nominal GDP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year |  |  |  |  |  |  |  |  |
| 2004 | 8.9 | 11.1 | 13.5 | 5.6 | 6.3 | 7.3 | 9.0 | 6.4 |
| 2005 | 9.5 | 11.1 | 13.2 | 4.5 | 8.7 | 10.2 | 7.0 | 6.3 |
| 2006 | 9.0 | 10.0 | 11.0 | 4.1 | 10.5 | 8.3 | 3.9 | 5.4 |
| 2007 | 8.7 | 6.6 | 6.7 | 5.7 | 13.4 | 9.5 | 4.9 | 5.3 |
| 2008 | 5.9 | . 2 | -. 6 | 1.6 | 5.1 | 2.5 | 24.2 | . 1 |
| 2009 | 3.5 | -1.9 | -1.8 | -4.0 | -1.1 | 4.7 | 22.7 | . 8 |
| 2010 | 5.3 | . 2 | -. 1 | . 4 | 1.8 | 4.1 | 19.6 | 5.0 |
| 2011 | 5.2 | 2.0 | . 7 | 7.0 | 3.3 | 4.0 | 12.3 | 5.8 |
| Quarter |  |  |  |  |  |  |  |  |
| 2008: 1 | 5.5 | 3.1 | 2.6 | 4.5 | 7.7 | 3.9 | 8.1 | 1.0 |
| 2 | 3.3 | . 1 | -. 5 | 4.1 | 6.3 | 2.0 | 5.9 | 3.5 |
| 3 | 8.2 | -. 5 | -2.4 | . 6 | 5.2 | 3.9 | 39.2 | 1.4 |
| 4 | 6.1 | -1.9 | -1.9 | -2.9 | 1.0 | . 3 | 37.0 | -5.4 |
| 2009: 1 | 4.3 | -1.2 | -. 2 | -3.4 | . 6 | 4.7 | 22.6 | -4.6 |
| 2 | 4.5 | -1.6 | -1.6 | -4.7 | -2.1 | 4.0 | 28.2 | -. 8 |
| 3 | 2.8 | -2.7 | -3.6 | -3.2 | -2.4 | 5.5 | 20.6 | 2.6 |
| 4 | 2.0 | -2.2 | -1.8 | -4.9 | -. 6 | 4.3 | 12.7 | 6.2 |
| 2010: 1 | 2.8 | -. 6 | -. 5 | -2.7 | . 7 | 3.6 | 11.3 | 4.7 |
| 2 | 5.5 | -. 0 | -. 2 | -. 5 | 1.7 | 4.1 | 20.5 | 5.0 |
| 3 | 7.0 | . 5 | . 0 | 1.4 | 2.2 | 4.2 | 24.4 | 5.1 |
| 4 | 5.7 | 1.0 | . 2 | 3.2 | 2.7 | 4.2 | 16.9 | 5.1 |
| 2011: 1 | 4.8 | 1.5 | . 5 | 4.7 | 3.1 | 4.0 | 12.0 | 5.6 |
| 2 | 5.0 | 1.9 | . 6 | 6.3 | 3.1 | 3.9 | 11.8 | 5.9 |
| 3 | 5.2 | 2.2 | . 7 | 7.6 | 3.4 | 3.9 | 11.6 | 5.9 |
| 4 | 5.3 | 2.5 | . 8 | 8.8 | 3.4 | 3.9 | 11.7 | 6.0 |

Note. Quarterly data are at seasonally adjusted annual rates.

1. Data after 2009:Q3 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 | 1531.0 | 1117.1 | 1775.4 | 1788.8 | 1042.0 | 445.3 | 923.5 | 1847.0 | 2374.8 | 1956.3 | 1668.8 | 1738.0 | 1831.4 | 1917.1 |
| Net equity issuance | -335.1 | -44.6 | -80.0 | -100.0 | 67.5 | -256.7 | -40.0 | -80.0 | -100.0 | -100.0 | -100.0 | -100.0 | -100.0 | -100.0 |
| Net debt issuance | 1866.1 | 1161.7 | 1855.4 | 1888.8 | 974.5 | 702.0 | 963.5 | 1927.0 | 2474.8 | 2056.3 | 1768.8 | 1838.0 | 1931.4 | 2017.1 |
| Borrowing indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt (percent of GDP) ${ }^{\underline{1}}$ | 226.0 | 239.6 | 239.4 | 238.9 | 241.9 | 239.7 | 238.4 | 238.0 | 238.7 | 239.5 | 239.4 | 238.9 | 238.5 | 238.1 |
| Borrowing (percent of GDP) | 12.9 | 8.1 | 12.5 | 12.0 | 6.8 | 4.9 | 6.6 | 13.0 | 16.5 | 13.6 | 11.5 | 11.8 | 12.2 | 12.6 |
| Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing ${ }^{\text {² }}$ | 25.6 | -262.1 | 29.1 | 276.6 | -364.0 | -292.6 | -84.1 | -5.0 | 68.7 | 136.8 | 204.6 | 254.9 | 301.5 | 345.5 |
| Home mortgages | -58.0 | -187.6 | -11.9 | 66.6 | -369.5 | -190.2 | -47.6 | -23.8 | 0.0 | 23.8 | 52.3 | 61.8 | 71.3 | 80.8 |
| Consumer credit | 40.2 | -103.7 | 8.8 | 175.5 | -81.9 | -123.5 | -66.7 | -13.3 | 35.7 | 79.5 | 118.3 | 158.5 | 195.5 | 229.8 |
| Debt/DPI (percent) ${ }^{3}$ | 127.3 | 124.5 | 119.2 | 115.6 | 123.9 | 122.1 | 120.3 | 119.8 | 118.6 | 117.4 | 116.8 | 116.0 | 115.0 | 114.2 |
| Business |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Financing gap ${ }^{4}$ | 232.4 | -123.9 | -63.2 | 40.8 | -200.0 | -104.5 | -101.7 | -85.4 | -42.4 | -23.3 | 7.7 | 27.4 | 50.8 | 77.4 |
| Net equity issuance | -335.1 | -44.6 | -80.0 | -100.0 | 67.5 | -256.7 | -40.0 | -80.0 | -100.0 | -100.0 | -100.0 | -100.0 | -100.0 | -100.0 |
| Credit market borrowing | 545.8 | -126.9 | 202.5 | 367.8 | -272.9 | -64.1 | 77.7 | 185.6 | 243.2 | 303.5 | 344.5 | 354.7 | 384.5 | 387.4 |
| State and local governments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing | 55.5 | 106.3 | 96.7 | 97.7 | 126.6 | 100.9 | 85.7 | 97.7 | 101.7 | 101.7 | 97.7 | 97.7 | 97.7 | 97.7 |
| Current surplus ${ }^{5}$ | 212.7 | 233.4 | 257.2 | 228.8 | 258.0 | 220.0 | 238.6 | 253.6 | 267.6 | 269.2 | 257.7 | 250.2 | 207.7 | 199.6 |


| Federal government |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net borrowing | 1239.2 | 1443.9 | 1527.2 | 1146.8 | 1484.9 | 957.7 | 884.3 | 1648.7 | 2061.2 | 1514.4 | 1122.0 | 1130.8 | 1147.7 | 1186.6 |
| Net borrowing (n.s.a.) | 1239.2 | 1443.9 | 1527.2 | 1146.8 | 378.7 | 261.4 | 327.1 | 277.2 | 522.3 | 400.6 | 386.5 | 147.7 | 293.9 | 318.6 |
| Unified deficit (n.s.a.) | 680.5 | 1471.7 | 1455.6 | 1126.8 | 329.4 | 388.5 | 459.0 | 253.9 | 332.0 | 410.6 | 396.5 | 122.7 | 278.9 | 328.6 |



Note. Data after 2009:Q3 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

## Accessible Material

## January 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 |  |  |  | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | Q3 | 2009:Q4 |  | 2010 |  |  |
|  |  |  |  | Q1 | Q2 | H2 |  |
| Foreign output | -3.6 | 4.4 | 2.9 | 3.4 | 3.5 | 3.8 | 4.1 |
| Previous Greenbook | -3.5 | 4.3 | 3.6 | 3.5 | 3.6 | 3.9 | 4.1 |
| Foreign consumer prices | . 0 | 1.4 | 3.1 | 2.6 | 2.2 | 2.0 | 2.0 |
| Previous Greenbook | . 0 | 1.4 | 2.2 | 2.1 | 2.0 | 1.8 | 1.9 |
|  | Contribution to growth (percentage points) |  |  |  |  |  |  |
| U.S. net exports | 2.1 | -. 8 | . 2 | -. 5 | -. 2 | -. 1 | -. 1 |
| Previous Greenbook | 2.1 | -. 9 | . 4 | -. 4 | . 0 | . 0 | -. 1 |

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

Staff Projections for Foreign GDP Growth by Region
(Percent change from end of previous period, annual rate)

| Indicator | 2009 |  | Projection |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | Q3 | 2009:Q4 | Q1 | 2010 |  | 2011 |
|  |  |  |  |  | Q2 | H2 |  |
| Advanced foreign economies | -4.6 | . 8 | 2.2 | 2.3 | 2.6 | 2.9 | 3.2 |
| Previous Greenbook | -4.6 | . 8 | 2.6 | 2.5 | 2.7 | 3.0 | 3.3 |
| Emerging market economies | -2.2 | 9.1 | 3.9 | 4.7 | 4.7 | 5.0 | 5.2 |
| Previous Greenbook | -2.1 | 9.1 | 5.0 | 4.8 | 4.9 | 5.1 | 5.2 |

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

## Staff Projections of Selected Trade Prices

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

| Trade category | 2009 |  |  | Projection |  |  | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | Q3 | 2009:Q4 | 2010 |  |  |  |
| Imports |  |  |  |  |  |  |  |
| Core goods | -5.9 | 1.3 | 5.7 | 4.5 | 2.3 | 1.3 | 1.0 |
| Previous Greenbook | -5.9 | 1.2 | 5.4 | 3.5 | 1.7 | 1.1 | 1.0 |
| Oil (dollars per barrel) | 53.71 | 66.28 | 72.12 | 76.55 | 76.71 | 79.07 | 82.38 |
| Previous Greenbook | 53.71 | 66.28 | 73.49 | 74.35 | 74.81 | 77.11 | 81.24 |
| Exports |  |  |  |  |  |  |  |
| Core goods | -5.3 | 5.1 | 5.2 | 7.0 | 3.0 | 1.8 | 1.4 |


| Previous Greenbook | -5.3 | 5.2 | 3.7 | 4.2 | 3.2 | 1.7 | 1.3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Note: Prices for core exports exclude computers and semiconductors. Prices for core imports exclude computers, semiconductors, oil, and natural gas. Both prices are on a national income and 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

| Measure | 2009 |  | Projection |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | Q3 | 2009:Q4 | 2010 |  |  | 2011 |
|  |  |  |  | Q1 | Q2 | H2 |  |
| Real exports | -18.1 | 17.8 | 17.3 | 9.8 | 8.8 | 9.7 | 9.3 |
| Previous Greenbook | -18.1 | 17.0 | 12.1 | 8.9 | 9.1 | 9.6 | 8.9 |
| Real imports | -26.3 | 21.3 | 11.8 | 11.0 | 8.2 | 8.0 | 8.3 |
| Previous Greenbook | -26.3 | 20.8 | 6.7 | 9.9 | 7.2 | 7.4 | 7.5 |

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

## Alternative Scenario:

Fiscal Consolidation in the Advanced Foreign Economies

| Indicator and simulation | 2010 |  | 2011 |  | 2012 | 2013-14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | H2 | H1 | H2 |  |  |
| U.S. real GDP |  |  |  |  |  |  |
| Baseline | 3.3 | 3.9 | 4.5 | 4.9 | 4.5 | 3.6 |
| AFE Fiscal Tightening | 2.7 | 3.4 | 4.3 | 4.9 | 4.6 | 3.6 |
| U.S. PCE prices excluding food and energy |  |  |  |  |  |  |
| Baseline | 1.2 | 1.1 | 1.1 | 1.0 | 1.2 | 1.5 |
| AFE Fiscal Tightening | . 8 | . 9 | . 9 | . 9 | 1.1 | 1.4 |
| U.S. federal funds rate (percent) |  |  |  |  |  |  |
| Baseline | . 1 | . 1 | . 1 | . 5 | 2.2 | 3.8 |
| AFE Fiscal Tightening | . 1 | . 1 | . 1 | . 5 | 1.8 | 3.5 |
| U.S. trade balance (percent share of GDP) |  |  |  |  |  |  |
| Baseline | -3.1 | -3.2 | -3.2 | -3.3 | -3.1 | -2.6 |
| AFE Fiscal Tightening | -3.5 | -3.6 | -3.6 | -3.7 | -3.5 | -2.8 |

 period.

## Evolution of the Staff Forecast

Figure: Current Account Balance

Line chart, by percent of GDP, Greenbook publication dates are from 2008 to 2010. There are three series, "2009", "2010", and "2011". The series "2009" begins on January 23, 2008 at about -4.75 and increases to about -4.1 by April 23, 2008. It then decreases to about -4.6 by June 18 , 2008 and then increases to about -3 by December 10, 2008. By March 12, 2009 it has decreased to about -3.6 and then by January 20, 2010 it has generally increased to about -3 . The series "2010" begins on September 10, 2008 at about -3.4 and generally decreases to about -4 by March 12,2009 . It then generally increases to about -3 by September 16 , 2009 and by January 20, 2010 has decreased to about -3.25 . The series " 2011 " begins on September 16, 2009 at about -3.1 and increases to about -3 by October 29 , 2009 . It then decreases to about -3.25 by January 20, 2010.

Figure: Foreign Real GDP

Line chart, by percent change, Greenbook publication dates are from 2008 to 2010 . Data are Q4 over Q4. There is a horizontal line at 0 . There are three series, "2009", "2010", and "2011". The series "2009" begins at about 3.4 on January 23,2008 and generally decreases to about -2.3 by March 12,2009 . It then generally increases to about 0 by January 20, 2010. The series "2010" begins on September 10, 2008 at about 3.5 and generally decreases to about 2.1 by March 12 , 2009 . It then generally increases to about 3.5 by January 20, 2010. The series "2011" begins on September 16, 2009 at about 4 and remains relatively stable here until January 20, 2010.

## Figure: Core Import Prices

Line chart, by percent change, Greenbook publication dates are from 2008 to 2010 . Data are Q 4 over Q4. There is a horizontal line at 0 . There are three series, "2009", "2010", and "2011". The series "2009" begins on January 23, 2008 at about 1.2 and remains relatively stable here until July 30 , 2008. It then decreases to about -4 by March 12, 2009. By June 17, 2009 it has increased up to about -1.5 and it remains relatively stable here until January 20, 2010. The series "2010" begins on September 10, 2008 at about 1.2 and increases to about 1.5 by October 22, 2008. It then decreases to about 1 by April 22,2009 and then increases to about 2.5 by January 20, 2010. The series "2011" begins on September 16, 2009 at about 1 and remains stable here until January $20,2010$.

Note: The Core Import Prices are prices for merchandise imports excluding computers, semiconductors, oil, and natural gas.

Outlook for Foreign Real GDP and Consumer Prices: Selected Countries
(Percent changes)

| Measure and country | Projected |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 |  |  |  | 2010 |  |  |  | 2011 |  |  |  |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| REAL GDP ${ }^{1}$ | Quarterly changes at an annual rate |  |  |  |  |  |  |  |  |  |  |  |
| Total Foreign | -9.1 | 2.4 | 4.4 | 2.9 | 3.4 | 3.5 | 3.7 | 3.9 | 4.0 | 4.0 | 4.1 | 4.1 |
| Advanced Foreign Economies | -7.8 | -1.4 | 0.8 | 2.2 | 2.3 | 2.6 | 2.8 | 2.9 | 3.1 | 3.2 | 3.2 | 3.2 |
| of which: |  |  |  |  |  |  |  |  |  |  |  |  |
| Canada | -6.2 | -3.1 | 0.4 | 3.2 | 3.2 | 3.2 | 3.2 | 3.3 | 3.8 | 3.8 | 3.9 | 3.9 |
| Japan | -11.9 | 2.7 | 1.3 | 1.8 | 1.7 | 2.0 | 2.2 | 2.3 | 2.1 | 2.0 | 1.8 | 1.8 |
| United Kingdom | -9.7 | -2.7 | -0.6 | 2.6 | 1.7 | 2.9 | 3.1 | 3.2 | 3.1 | 3.0 | 3.1 | 3.1 |
| Euro Area² | -9.5 | -0.5 | 1.7 | 1.0 | 1.6 | 1.9 | 2.3 | 2.5 | 2.6 | 2.6 | 2.7 | 2.7 |
| Germany | -13.4 | 1.8 | 2.9 | 0.3 | 1.8 | 2.0 | 2.4 | 2.7 | 2.7 | 2.7 | 3.2 | 3.3 |
| Emerging Market Economies | -10.8 | 7.3 | 9.1 | 3.9 | 4.7 | 4.7 | 4.9 | 5.1 | 5.2 | 5.2 | 5.2 | 5.3 |
| Asia | -3.5 | 15.1 | 9.9 | 4.8 | 6.2 | 5.9 | 5.9 | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 |
| Korea | 0.5 | 11.0 | 13.6 | 3.8 | 3.8 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 |
| China | 6.5 | 18.5 | 9.8 | 10.5 | 9.2 | 8.5 | 8.3 | 8.4 | 8.7 | 8.8 | 8.9 | 8.9 |
| Latin America | -18.4 | 0.2 | 8.8 | 2.8 | 3.3 | 3.6 | 4.0 | 4.1 | 4.3 | 4.3 | 4.4 | 4.4 |
| Mexico | -23.4 | -1.1 | 12.2 | 2.5 | 3.3 | 3.6 | 4.0 | 4.2 | 4.6 | 4.6 | 4.6 | 4.6 |
| Brazil | -3.5 | 4.4 | 5.1 | 6.0 | 5.0 | 5.0 | 5.0 | 4.5 | 4.0 | 4.0 | 4.0 | 4.0 |
| CONSUMER PRICES ${ }^{3}$ | Four-quarter changes |  |  |  |  |  |  |  |  |  |  |  |
| Total Foreign | 1.8 | 0.9 | 0.2 | 1.1 | 2.0 | 2.3 | 2.4 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 |
| Advanced Foreign Economies | 1.0 | 0.0 | -0.8 | 0.2 | 0.8 | 1.0 | 1.2 | 1.0 | 1.0 | 1.0 | 1.1 | 1.2 |
| of which: |  |  |  |  |  |  |  |  |  |  |  |  |
| Canada | 1.2 | 0.1 | -0.9 | 0.8 | 1.4 | 1.7 | 2.1 | 1.6 | 1.7 | 1.8 | 1.8 | 1.8 |
| Japan | -0.1 | -1.0 | -2.2 | -2.0 | -1.6 | -1.5 | -1.4 | -1.3 | -1.2 | -1.1 | -1.0 | -0.9 |
| United Kingdom ${ }^{4}$ | 3.0 | 2.1 | 1.5 | 2.1 | 3.1 | 3.0 | 2.6 | 2.3 | 1.5 | 1.6 | 1.7 | 1.8 |
| Euro Area ${ }^{2}$ | 1.0 | 0.2 | -0.4 | 0.4 | 1.1 | 1.3 | 1.5 | 1.3 | 1.2 | 1.3 | 1.3 | 1.4 |
| Germany | 0.8 | 0.2 | -0.4 | 0.3 | 0.8 | 1.1 | 1.3 | 1.1 | 1.1 | 1.1 | 1.2 | 1.2 |
| Emerging Market Economies | 2.7 | 1.7 | 1.2 | 2.1 | 3.2 | 3.5 | 3.6 | 3.3 | 3.0 | 2.9 | 2.8 | 2.8 |
| Asia | 1.0 | -0.3 | -0.5 | 1.1 | 2.7 | 3.3 | 3.5 | 3.0 | 2.7 | 2.6 | 2.5 | 2.5 |
| Korea | 3.9 | 2.8 | 2.0 | 2.4 | 3.1 | 3.0 | 3.1 | 2.9 | 2.4 | 2.3 | 2.3 | 2.3 |
| China | -0.6 | -1.5 | -1.3 | 0.5 | 2.5 | 3.2 | 3.5 | 2.9 | 2.6 | 2.4 | 2.3 | 2.3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |


| Latin America | 6.3 | 5.9 | 4.9 | 3.9 | 4.1 | 4.0 | 4.1 | 4.3 | 3.9 | 3.4 | 3.4 | 3.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mexico | 6.2 | 6.0 | 5.1 | 4.0 | 4.1 | 3.9 | 3.9 | 4.1 | 3.6 | 3.1 | 3.0 | 3.0 |
| Brazil | 5.9 | 5.3 | 4.3 | 4.2 | 4.2 | 4.0 | 4.3 | 4.5 | 4.3 | 4.3 | 4.3 | 4.3 |

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 | Projected |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 2009 | 2010 | 2011 |
| REAL GDP ${ }^{1}$ |  |  |  |  |  |  |  |  |  |
| Total Foreign | 2.8 | 3.8 | 4.1 | 4.0 | 4.2 | -0.9 | -0.0 | 3.6 | 4.1 |
| Advanced Foreign Economies | 1.7 | 2.6 | 2.8 | 2.5 | 2.5 | -1.6 | -1.6 | 2.7 | 3.2 |
| of which: |  |  |  |  |  |  |  |  |  |
| Canada | 1.5 | 3.7 | 3.1 | 1.9 | 2.8 | -1.0 | -1.5 | 3.2 | 3.8 |
| Japan | 2.4 | 1.1 | 2.8 | 2.0 | 1.7 | -4.4 | -1.7 | 2.0 | 1.9 |
| United Kingdom | 3.2 | 2.4 | 2.4 | 2.8 | 2.4 | -2.1 | -2.7 | 2.7 | 3.1 |
| Euro Area² | 1.2 | 1.8 | 2.1 | 3.5 | 2.2 | -1.8 | -1.9 | 2.1 | 2.7 |
| Germany | 0.1 | 0.2 | 1.6 | 4.3 | 1.6 | -1.8 | -2.3 | 2.2 | 3.0 |
| Emerging Market Economies | 4.5 | 5.6 | 5.9 | 5.9 | 6.5 | 0.0 | 2.0 | 4.9 | 5.2 |
| Asia | 6.9 | 6.0 | 7.7 | 7.2 | 8.2 | 0.5 | 6.3 | 6.1 | 6.1 |
| Korea | 3.7 | 2.6 | 5.2 | 4.6 | 5.7 | -3.4 | 7.1 | 4.2 | 4.4 |
| China | 10.3 | 9.9 | 10.3 | 10.8 | 12.3 | 6.9 | 11.2 | 8.6 | 8.8 |
| Latin America | 1.8 | 5.1 | 4.1 | 4.7 | 4.6 | -0.8 | -2.2 | 3.7 | 4.3 |
| Mexico | 1.2 | 4.5 | 3.6 | 4.0 | 3.7 | -1.7 | -3.4 | 3.8 | 4.6 |
| Brazil | 0.8 | 5.1 | 3.5 | 4.8 | 6.7 | 0.9 | 2.9 | 4.9 | 4.0 |
| CONSUMER PRICES ${ }^{3}$ |  |  |  |  |  |  |  |  |  |
| Total Foreign | 2.1 | 2.8 | 2.3 | 2.1 | 3.7 | 3.3 | 1.1 | 2.2 | 2.0 |
| Advanced Foreign Economies | 1.3 | 1.8 | 1.6 | 1.4 | 2.2 | 2.0 | 0.2 | 1.0 | 1.2 |
| of which: |  |  |  |  |  |  |  |  |  |
| Canada | 1.7 | 2.3 | 2.3 | 1.4 | 2.5 | 1.9 | 0.8 | 1.6 | 1.8 |
| Japan | -0.3 | 0.5 | -1.0 | 0.3 | 0.5 | 1.0 | -2.0 | -1.3 | -0.9 |
| United Kingdom ${ }^{4}$ | 1.3 | 1.4 | 2.1 | 2.7 | 2.1 | 3.8 | 2.1 | 2.3 | 1.8 |
| Euro Area ${ }^{2}$ | 2.0 | 2.3 | 2.3 | 1.8 | 2.9 | 2.3 | 0.4 | 1.3 | 1.4 |
| Germany | 1.1 | 2.1 | 2.2 | 1.3 | 3.1 | 1.7 | 0.3 | 1.1 | 1.2 |
| Emerging Market Economies | 3.1 | 3.9 | 3.0 | 2.9 | 5.1 | 4.6 | 2.1 | 3.3 | 2.8 |
| Asia | 2.3 | 3.1 | 2.6 | 2.4 | 5.5 | 3.7 | 1.1 | 3.0 | 2.5 |
| Korea | 3.5 | 3.4 | 2.5 | 2.1 | 3.4 | 4.5 | 2.4 | 2.9 | 2.3 |
| China | 2.7 | 3.3 | 1.4 | 2.1 | 6.7 | 2.7 | 0.5 | 2.9 | 2.3 |
| Latin America | 4.9 | 5.6 | 3.8 | 4.1 | 4.2 | 6.5 | 3.9 | 4.3 | 3.4 |
| Mexico | 3.9 | 5.3 | 3.1 | 4.1 | 3.8 | 6.2 | 4.0 | 4.1 | 3.0 |
| Brazil | 11.5 | 7.2 | 6.1 | 3.2 | 4.3 | 6.2 | 4.2 | 4.5 | 4.3 |

[^2]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

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 | -0.2 | -0.1 |
| Exports of G\&S | 0.6 | 0.7 | 0.7 | 1.1 | 1.2 | -0.4 | -0.2 | 1.1 | 1.1 |
| Imports of G\&S | -0.7 | -1.6 | -0.8 | -0.7 | -0.2 | 1.2 | 1.2 | -1.3 | -1.3 |
| Percentage change, Q4/Q4 |  |  |  |  |  |  |  |  |  |
| Exports of G\&S | 6.2 | 7.1 | 6.7 | 10.2 | 10.2 | -3.4 | -1.9 | 9.5 | 9.3 |
| Services | 4.3 | 9.1 | 3.6 | 12.0 | 13.0 | -3.5 | -2.0 | 6.8 | 7.4 |
| Computers | 11.3 | 5.8 | 14.2 | 8.4 | 1.3 | -2.4 | 5.2 | 9.5 | 9.5 |
| Semiconductors | 38.3 | -6.0 | 17.6 | 2.1 | 29.1 | -12.7 | 28.2 | 11.0 | 11.0 |
| Core Goods $\underline{1}^{1}$ | 4.8 | 7.2 | 7.2 | 9.9 | 8.4 | -3.1 | -3.1 | 10.8 | 10.2 |
| Imports of G\&S | 5.1 | 10.9 | 5.2 | 4.1 | 0.9 | -6.8 | -7.4 | 8.8 | 8.3 |
| Services | 3.3 | 8.8 | 2.3 | 7.1 | 2.0 | 0.2 | -3.1 | 4.4 | 6.7 |
| Oil | 1.3 | 10.7 | 1.3 | -8.2 | 0.0 | 0.3 | -18.9 | 2.0 | 1.0 |
| Natural Gas | 1.3 | 4.9 | 13.7 | -10.1 | 13.4 | -24.0 | -12.8 | 17.4 | 1.2 |
| Computers | 17.1 | 23.2 | 12.5 | 14.3 | 8.8 | -11.3 | 27.8 | 13.6 | 15.5 |
| Semiconductors | -0.1 | 9.8 | 7.5 | -0.8 | 3.6 | -9.7 | 5.6 | 5.0 | 5.0 |
| Core Goods ${ }^{\text {² }}$ | 5.3 | 10.9 | 5.8 | 5.8 | 0.2 | -9.8 | -8.3 | 11.3 | 9.9 |
| Billions of Chained 2005 Dollars |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -603.9 | -688.0 | -722.7 | -729.2 | -647.7 | -494.3 | -355.9 | -368.2 | -379.7 |
| Exports of G\&S | 1116.8 | 1222.8 | 1305.1 | 1422.0 | 1546.1 | 1629.3 | 1468.0 | 1628.9 | 1783.5 |
| Imports of G\&S | 1720.7 | 1910.8 | 2027.8 | 2151.2 | 2193.8 | 2123.5 | 1823.9 | 1997.1 | 2163.1 |
| Billions of dollars |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE | -521.5 | -631.1 | -748.7 | -803.5 | -726.6 | -706.1 | -422.1 | -479.2 | -502.8 |
| Current Acct as Percent of GDP | -4.7 | -5.3 | -5.9 | -6.0 | -5.2 | -4.9 | -3.0 | -3.2 | -3.2 |
| Net Goods \& Services (BOP) | -495.0 | -610.0 | -715.3 | -760.4 | -701.4 | -695.9 | -379.2 | -470.4 | -500.9 |
| Investment Income, Net | 51.0 | 73.4 | 78.8 | 54.7 | 97.9 | 125.5 | 92.8 | 122.3 | 125.3 |
| Direct, Net | 112.7 | 150.9 | 173.2 | 174.0 | 236.7 | 249.9 | 204.1 | 226.1 | 246.4 |
| Portfolio, Net | -61.7 | -77.5 | -94.4 | -119.4 | -138.8 | -124.3 | -111.2 | -103.8 | -121.1 |
| Other Income \& Transfers, Net | -77.5 | -94.5 | -112.2 | -97.9 | -123.1 | -135.7 | -135.8 | -131.1 | -127.2 |

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

| 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 |


| 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 ${ }^{\underline{1}}$ | 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 ${ }^{\text {² }}$ | 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

Percentage point contribution to GDP growth

| Net Goods \& Services | 2.6 | 1.7 | -0.8 | 0.2 | -0.5 | -0.2 | -0.2 | 0.1 | -0.2 | -0.1 | -0.3 | 0.1 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Exports of G\&S | -4.0 | -0.5 | 1.8 | 1.8 | 1.1 | 1.0 | 1.1 | 1.2 | 1.2 | 1.1 | 1.1 | 1.1 |
| Imports of G\&S | 6.6 | 2.1 | -2.6 | -1.6 | -1.6 | -1.2 | -1.3 | -1.0 | -1.4 | -1.2 | -1.4 | -1.0 |

Percentage change from previous period, s.a.a.r.

| Exports of G\&S | -29.9 | -4.1 | 17.8 | 17.3 | 9.8 | 8.8 | 9.4 | 10.0 | 9.7 | 9.3 | 9.3 | 9.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Services | -13.6 | 0.1 | 5.6 | 1.0 | 5.6 | 6.5 | 7.4 | 7.9 | 7.7 | 7.3 | 7.2 | 7.3 |
| Computers | -14.0 | -10.8 | 26.5 | 26.4 | 9.5 | 9.5 | 9.5 | 9.5 | 9.5 | 9.5 | 9.5 | 9.5 |
| Semiconductors | -17.1 | 27.7 | 45.8 | 74.9 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 |
| Core Goods ${ }^{\underline{1}}$ | -38.3 | -7.2 | 23.8 | 24.6 | 12.0 | 9.9 | 10.4 | 11.0 | 10.6 | 10.2 | 10.2 | 9.8 |
| Imports of G\&S | -36.4 | -14.7 | 21.3 | 11.8 | 11.0 | 8.2 | 9.0 | 7.0 | 9.2 | 8.2 | 9.1 | 6.6 |
| Services | -11.5 | -7.5 | 7.0 | 0.8 | 6.0 | 0.9 | 5.1 | 5.7 | 6.0 | 6.7 | 6.9 | 7.1 |
| Oil | -15.9 | -21.9 | 5.3 | -37.5 | 16.3 | 1.0 | -1.5 | -6.5 | 7.2 | -0.4 | 2.4 | -4.8 |
| Natural Gas | 5.9 | -2.4 | -1.9 | -43.0 | 80.2 | -17.9 | 61.6 | -20.4 | 27.1 | -28.2 | 47.6 | -22.2 |
| Computers | -22.3 | 24.7 | 60.0 | 72.1 | 8.2 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 |
| Semiconductors | -47.8 | 24.7 | 48.8 | 28.3 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Core Goods² | -46.7 | -18.6 | 27.3 | 27.9 | 11.0 | 12.1 | 11.6 | 10.4 | 9.8 | 10.7 | 10.3 | 8.9 |
| Billions of Chained 2005 Dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -386.5 | -330.4 | -357.4 | -349.4 | -362.7 | -367.5 | -373.8 | -368.6 | -374.8 | -377.7 | -385.2 | -380.9 |
| Exports of G\&S | 1434.5 | 1419.5 | 1478.8 | 1539.0 | 1575.4 | 1609.2 | 1645.8 | 1685.3 | 1724.7 | 1763.5 | 1803.1 | 1842.7 |
| Imports of G\&S | 1821.0 | 1749.8 | 1836.2 | 1888.4 | 1938.2 | 1976.7 | 2019.6 | 2053.9 | 2099.5 | 2141.1 | 2188.3 | 2223.6 |
| Billions of dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE | -417.8 | -391.9 | -432.1 | -446.6 | -481.7 | -472.2 | -484.2 | -478.8 | -503.4 | -492.6 | -507.7 | -507.4 |
| Current Account as \% of GDP | -2.9 | -2.8 | -3.0 | -3.1 | -3.3 | -3.2 | -3.2 | -3.2 | -3.3 | -3.2 | -3.2 | -3.2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services (BOP) | -369.6 | -325.0 | -389.5 | -432.5 | -460.5 | -466.0 | -477.4 | -477.7 | -491.6 | -496.4 | -508.0 | -507.5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Investment Income, Net | 80.4 | 73.7 | 101.9 | 115.3 | 120.9 | 121.0 | 123.0 | 124.1 | 126.6 | 127.0 | 126.0 | 121.6 |
| Direct, Net | 204.8 | 190.9 | 205.6 | 215.0 | 220.2 | 224.2 | 227.8 | 232.0 | 237.3 | 243.1 | 249.3 | 255.7 |
| Portfolio, Net | -124.4 | -117.2 | -103.7 | -99.7 | -99.2 | -103.2 | -104.8 | -107.9 | -110.7 | -116.2 | -123.3 | -134.1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other Inc. \& Transfers, Net | -128.6 | -140.7 | -144.5 | -129.3 | -142.1 | -127.2 | -129.7 | -125.2 | -138.4 | -123.1 | -125.6 | -121.4 |

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

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

## Domestic Nonfinancial Developments

Changes in Employment

| Measure and sector | 2009 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Q2 | Q3 | Q4 |  | Nov. | Dec. |
|  | Average monthly change |  |  |  | Monthly change |  |  |
| Nonfarm payroll employment (establishment survey) | -347 | -428 | -199 | -69 | -127 | 4 | -85 |
| Private | -342 | -425 | -171 | -76 | -163 | 0 | -64 |
| Natural resources and mining | -7 | -11 | -5 | -1 | -5 | 4 | -1 |
| Manufacturing | -106 | -140 | -46 | -37 | -48 | -35 | -27 |
| Ex. motor vehicles | -95 | -117 | -55 | -35 | -52 | -31 | -22 |
| Construction | -78 | -80 | -63 | -45 | -56 | -27 | -53 |
| Residential | -27 | -26 | -15 | -12 | -14 | -4 | -19 |
| Nonresidential | -51 | -54 | -48 | -33 | -42 | -23 | -35 |
| Wholesale trade | -19 | -20 | -9 | -12 | -7 | -11 | -18 |
| Retail trade | -35 | -27 | -35 | -21 | -40 | -14 | -10 |
| Financial activities | -26 | -35 | -16 | -3 | -6 | -6 | 4 |
| Temporary help services | -12 | -28 | 5 | 49 | 44 | 55 | 47 |
| Nonbusiness services ${ }^{1}$ | 5 | 19 | 25 | 2 | -20 | 21 | 6 |
| Total government | -5 | -3 | -28 | 6 | 36 | 4 | -21 |
| Federal government | 4 | 3 | 3 | 1 | 17 | -5 | -9 |
| Total employment (household survey) | -450 | -272 | -423 | -325 | -526 | 139 | -589 |
| Memo: |  |  |  |  |  |  |  |
| Aggregate hours of private production workers (percent change) ${ }^{2}$ | -5.0 | -7.8 | -2.5 | -. 5 | -. 4 | . 6 | . 0 |
| Average workweek (hours) ${ }^{\underline{3}}$ | 33.1 | 33.1 | 33.1 | 33.1 | 33.0 | 33.2 | 33.2 |
| Manufacturing (hours) | 39.8 | 39.5 | 39.9 | 40.3 | 40.1 | 40.4 | 40.4 |

1. Nonbusiness services comprises education and health, leisure and hospitality, and "other." Return to table
2. Establishment survey. Annual data are percent changes from Q 4 to Q 4 . 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


#### Abstract

Line chart, 2000 through December 2009. Unit is thousands. Data are three month moving averages. The series begins at about 200 and generally decreases to about negative 300 at the end of 2001. It generally increases to about 300 in early 2004 then generally fluctuates between about 100 and 300 before starting to decline to about 100 at the end of 2007. It generally decreases to about negative 700 by 2009 then generally increases, ending at about negative 100 in December 2009 .


Source: U.S. Department of Labor, Bureau of Labor statistics.
Figure: Aggregate Hours and Workweek of Production and Nonsupervisory Workers

[^3]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

| Rate and group | 2009 | 2009 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Q2 | Q3 | Q4 | Oct. | Nov. | Dec. |
| Civilian unemployment rate |  |  |  |  |  |  |  |
| Total | 9.3 | 9.3 | 9.7 | 10.0 | 10.1 | 10.0 | 10.0 |
| Teenagers | 24.3 | 23.1 | 25.4 | 27.2 | 27.6 | 26.8 | 27.1 |
| 20-24 years old | 14.8 | 14.9 | 15.1 | 15.7 | 15.6 | 15.9 | 15.6 |
| Men, 25 years and older | 8.8 | 8.9 | 9.4 | 9.5 | 9.7 | 9.5 | 9.2 |
| Women, 25 years and older | 6.9 | 6.9 | 7.1 | 7.5 | 7.6 | 7.3 | 7.6 |
| Labor force participation rate |  |  |  |  |  |  |  |
| Total | 65.4 | 65.7 | 65.3 | 64.9 | 65.0 | 64.9 | 64.6 |
| Teenagers | 37.5 | 38.3 | 37.4 | 35.8 | 36.1 | 35.8 | 35.6 |
| 20-24 years old | 73.0 | 73.9 | 72.8 | 71.4 | 71.4 | 71.8 | 71.1 |
| Men, 25 years and older | 74.7 | 74.9 | 74.8 | 74.3 | 74.7 | 74.3 | 73.8 |
| Women, 25 years and older | 59.9 | 60.2 | 59.8 | 59.6 | 59.6 | 59.6 | 59.5 |

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

Line chart, 2001 to 2010. Units are percent of household employment on the left scale and percent of labor force on the right scale. The end of the series is marked as December. There are two series, "Unemployment rate, right scale" and "Persons working part time for economic reasons, left scale." Unemployment rate starts at about 4 in 2001 and generally increases to about 6 in mid-2003. It generally decreases to about 5 in early 2007 then generally increases, ending at about 10 in December of 2010. Persons working part time for economic reasons begins at about 2 and generally increases, ending at about 7 in December of 2010.

Source: U.S. Department of Labor, Bureau of Labor statistics.
Figure: Labor Force Participation Rate

Line chart, 2001 to 2010 . Unit is percent. The end of the series is marked as December. The series starts at about 67 and generally decreases to about 65.5 in late 2004. It generally increases to about 66.5 at the end of 2006 then generally decreases to about 64.5 in December 2010.

Source: U.S. Department of Labor, Bureau of Labor statistics.
Figure: Job Losers Unemployed Less than 5 weeks

Line chart, 2001 to 2010. Unit is percent. The end of the series is marked as December. The series is "Job Losers Unemployed Less than 5 weeks" and there is a thicker line indicating the 3-month moving average. Job Losers Unemployed Less than 5 Weeks and the 3-month moving average begin at about 1.0 and generally increase together to about 1.4 at the end of 2002. They generally decrease together to about 0.8 in early 2007. They generally increase together to about 2.7 at the end of 2008 then generally decrease together ending at about 1.3 in December 2010.

Source: U.S. Department of Labor, Bureau of Labor statistics.
Figure: Layoffs and Initial Claims

Line chart, 2001 to 2010. Units are percent of private employment on the left scale and thousands on the right scale. The end of the series is marked as November. There are two series, "Layoffs and Discharges, left scale" and "Initial Claims, right scale." Layoffs and discharges starts at about 1.75 and generally fluctuates between 1.5 and 2 in 2001. It generally fluctuates between about 1.5 and 2 until the beginning of 2006 . It generally increases to about 1.75 then generally decreases to about 1.5 in late 2007. It generally fluctuates between 1.5 and1.75 in 2008 then generally increases to about 2.25 in early 2009 . It decreases to about 1.75 in mid2009 then increases to about 2.25 in late 2009, then generally decreases, ending at about 1.75 in November 2010.

Note: Data for initial claims are 4-week moving averages.

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: Job Openings

Line Chart, 2000 to 2010. Units are "Index, 1980 equals 100 " on the left scale and "Percent" on the right scale. The end of the series for the right scale is marked as November. The end of the series for the left scale is marked as December. There are two series "Job openings, right scale" (percent of private employment plus job openings), and "Composite Help Wanted Index, left scale" (index of staff composite help-wanted advertising as a percent of payroll employment). Job openings begins at about 4 and generally decreases to about 2.5 at the end of 2003. It generally increases to about 3.5 in early 2007, then generally decreases, ending at about 2 in November of 2010. Composite Help Wanted index begins at about 90 and generally decreases to about 50 in early 2003. It generally increases to about 75 in early 2006 then generally decreases, ending at about 45 in December of 2010.

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. Units are percent. The end of the series for the right scale is marked as November. The end of the series for the left scale is marked as December. There are two series, "Hires, right scale" (percent of private employment), and "Hiring Plans, left scale" (percent planning an increase in employment minus percent planning a reduction; seasonally adjusted by FRB staff; 3-month moving average). Hires begins at about 4.5 and increase to about 4.75 in early 2001 . It generally decreases to about 4 in mid- 2001 then generally increases to about 4.5 in mid-2002. It generally decreases to about 3.75 in early 2003 then generally increases to about 4.75 in early 2005. It generally decreases to about 3.25 in mid- 2009 then generally increases, ending at about 3.5 in November of 2010 . Hiring Plans begins at about 20 and generally decreases to about 5 in late 2001. It generally increases to about 12 in early 2002 then generally decreases to about 5 in early 2003. It generally increases to about 15 in late 2004 and generally remains about constant until 2007. It generally decreases to about -5 in early 2009 then generally increases, ending at about 0 in December of 2010.

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

## Figure: Duration of Unemployment

Line chart, 2000 to 2010. Units are weeks on the left scale and percent of unemployed on the right scale. The end of the series are marked as December. There are two series, "Mean, left scale," and "Long-term unemployed, right scale" (unemployed more than 26 weeks). Mean begins at about 12 and generally increases to about 20 in early 2003. It remains about constant until 2005. It generally decreases to about 15 in late 2006 then remains about constant until the end of 2007 . It generally increases, ending at about 30 in December of 2010. Long-term Unemployed begins at about 12 and generally increases to about 22 in early 2004 . It generally decreases to about 15 in early 2007 then generally increases, ending at about 40 in 2010.

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

## Figure: Insured Unemployment

Line chart, 2000 to 2010. Unit is millions. The end of the first series is marked as December 26 and the end of the second series is marked as January 2 . There are two series, "Incl. Extended and Emergency Benefits," and "Regular State Programs." Incl. Extended and Emergency benefits begins at about 2 and generally increases to about 5 in early 2002. It generally decreases to about 2 in early 2006 and generally increases to about 10 on December 26 , 2010. Regular State Programs begins at about 2 and generally increases to about 3.5 in early 2002. It generally decreases to about 3 in early2005. It remains about constant until 2008 generally increases to about 7 in early 2009. It generally decreases ending at about 5 at the end of the series.

Note: 4-week moving averages.
Source: U.S. Dept. of Labor, Employment and Training Administration.
Figure: Job Availability and Hard-to-Fill Positions

Line chart, 2000 to 2010. Units are percent on the left scale and Index on the right scale. The end of the series are marked as December. There are two series, "Job availability, right scale" (proportion of households believing jobs are plentiful, minus the proportion believing jobs are hard to get, plus 1000, and "Hard to fill, left scale" (percent of small businesses surveyed with at least one hard to fill job opening; seasonally adjusted by FRB staff; 3-month moving average). Job availability begins at about 140 and generally decreases to about 80 in mid-2003. It generally increases to about 110 in mid- 2007 then generally decreases ending at about 50 . Hard to fill begins at about 30 and generally decreases to about 15 in mid-2003. It generally increases to about 25 in early 2006 then generally decreases ending at about 10.

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

## Figure: Expected Labor Market Conditions

Line chart, 2000 to 2010. Units are indexes. The end of the left scale series is marked as December. The end of the right scale series is marked as January
(preliminary). There are two series, "Conference Board, left scale" and "Reuters/Michigan, right scale." Conference Board begins at about 105 and generally decreases to about 85 in early 2001. It generally fluctuates between about 85 and 105 until late 2004. It generally decreases to about 90 in mid-2005. It remains generally constant at about 100 until late 2007 then generally decreases to about 60 in early 2009 . It generally increases, ending at about 95 in December of 2010 . Reuters/Michigan begins at about 95 and generally decreases to about 45 in late 2001. It generally increases to about 90 in early 2002 then generally decreases to about 70 in early 2003. It generally increases to about 110 in mid- 2004 then generally decreases to about 70 in mid-2006. It generally increases to about 85 in early 2007 then generally decreases to about 30 in early 2009. It generally increases, ending at about 90 in January 2010.

Source: Conference Board; 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).

## Hourly Compensation and Unit Labor Costs

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

| Category | $\begin{gathered} \text { 2007:Q3 } \\ \text { to } \\ \text { 2008:Q3 } \end{gathered}$ | $\begin{gathered} \text { 2008:Q3 } \\ \text { to } \\ \text { 2009:Q3 } \end{gathered}$ | $\begin{gathered} 2008 \\ \text { Q4 } \end{gathered}$ | Q1 | 2009 Q2 | Q3 ${ }^{\text {e }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Compensation per hour |  |  |  |  |  |  |
| Nonfarm business | 3.1 | 2.5 | 2.9 | -4.7 | 6.9 | 5.4 |
| Output per hour |  |  |  |  |  |  |
| Nonfarm business | 1.2 | 3.7 | . 8 | . 3 | 6.9 | 7.1 |
| Unit labor costs |  |  |  |  |  |  |
| Nonfarm business | 1.9 | -1.2 | 2.0 | -5.0 | . 0 | -1.6 |

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

## Figure: Compensation per Hour

Line Chart, 1996 to 2009. Units are percent change from year-earlier period. There are two series, "Productivity and costs, note: value for 2009:Q3 is a staff estimate" and "ECI" Productivity and costs begins at about 3 and generally increases to about 7 in late 1998. It generally decreases to about 4 in late 1999 . It generally increases to about 8 in late 2000 then generally decreases to about 3 in early 2002. It generally fluctuates between about 3 and 5 until late 2007. It generally decreases ending at about 2 in 2009:Q3. EClbegins at about 3 and generally increases to about 5 in mid-2000. It generally decreases to about 2 in late 2005 then generally increases to about 3 in late 2007. It generally decreases ending at about 1 in 2009:Q3.

Source: U.S. Dept. of Labor, Bureau of Labor 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 5.5 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 -1.8 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:Q3 it has generally decreased to about -1.

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

## Figure: Average Hourly Earnings

Line chart, 1996 to 2009. Unit is percent change from year earlier period. The end of the series is marked as December. The series begins at about 3 then generally increases to about 4 in mid-1998. It generally remains constant at about 3 until late 2001. It generally decreases to about 1 in late 2003 . It generally increases to about 4 in late 2006 then generally decreases, ending at about 2 in December 2009.

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

## Figure: Markup, Nonfarm Business

Line chart, 1996 to 2009. Unit is ratio. Average, 1968 to present is marked as a horizontal line at about 1.58. The end of the series is marked as Q3. The series begins at about 1.60 and generally decreases to about 1.52 in early 2001. It generally increases, ending at about 1.7 in 2009:Q3.

Selected Components of Industrial Production
(Percent change from preceding comparable period)

| Component | $\begin{gathered} \text { Proportion } \\ 2009 \\ \text { (percent) } \end{gathered}$ | 20091 | 2009 |  | 2009 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q3 |  | Oct. | Nov. <br> thly rat | Dec. |
| Total | 100.0 | -4.5 | 6.9 | 7.0 | . 2 | . 6 | . 6 |
| Previous | 100.0 | … | 6.1 | ... | . 0 | . 8 | ... |
| Manufacturing | 79.0 | -4.8 | 9.0 | 5.7 | -. 1 | . 9 | -. 1 |
| Ex. motor veh. and parts | 74.5 | -4.7 | 5.3 | 4.9 | . 0 | . 9 | -. 1 |
| Mining | 10.6 | -5.8 | 5.8 | 7.5 | . 0 | 1.9 | . 2 |
| Utilities | 10.4 | -1.8 | -5.3 | 15.2 | 2.6 | -2.4 | 5.9 |
| Selected industries |  |  |  |  |  |  |  |
| Energy | 23.9 | -3.2 | -1.6 | 11.5 | 1.4 | -. 9 | 3.1 |
| High technology | 4.2 | -3.7 | 9.2 | 5.5 | . 9 | . 1 | 2.4 |
| Computers | 1.0 | -10.5 | 10.6 | 2.7 | . 4 | . 8 | 1.2 |
| Communications equipment | 1.3 | -5.1 | -12.2 | 1.4 | 1.5 | . 5 | 2.9 |
| Semiconductors ${ }^{2}$ | 1.8 | 1.8 | 31.8 | 10.6 | . 6 | -. 7 | 2.7 |
| Motor vehicles and parts | 4.5 | -7.4 | 123.2 | 22.9 | -2.4 | 1.5 | -. 1 |
| Aircraft and parts | 2.3 | 10.9 | 8.6 | 3.9 | -. 6 | -. 5 | 1.4 |
| Total ex. selected industries³ | 65.1 | -5.7 | 5.2 | 4.9 | . 0 | 1.1 | -. 2 |
| Consumer goods | 20.7 | -1.9 | 2.3 | 4.6 | . 3 | . 4 | -. 2 |
| Durables | 3.5 | -9.6 | 1.9 | . 8 | . 4 | 1.1 | -1.4 |
| Nondurables | 17.1 | -. 4 | 2.4 | 5.3 | . 3 | . 3 | . 0 |
| Business equipment | 6.6 | -12.0 | . 0 | 1.3 | . 6 | -. 7 | . 5 |
| Defense and space equipment | 1.1 | 2.2 | 16.6 | -5.4 | -1.8 | -. 9 | -1.6 |
| Construction supplies | 4.8 | -13.7 | 1.8 | -7.6 | -1.6 | 1.5 | -2.1 |
| Business supplies | 7.3 | -8.5 | 1.2 | 3.2 | . 0 | 1.4 | -. 8 |
| Materials | 24.6 | -5.0 | 11.0 | 9.9 | . 0 | 2.1 | . 2 |
| Durables | 12.4 | -13.0 | 11.3 | 9.2 | . 1 | 1.5 | . 4 |
| Nondurables | 12.2 | 3.1 | 10.8 | 10.5 | -. 1 | 2.6 | . 0 |

[^4]Source: Federal Reserve, G. 17 Statistical Release, "Industrial Production and Capacity Utilization."
(Percent of capacity)

| Sector | $\begin{aligned} & 1972- \\ & 2008 \end{aligned}$ <br> average | $\begin{gathered} \text { 1994- } \\ 95 \\ \text { high } \end{gathered}$ | $\begin{gathered} 2001- \\ 02 \\ \text { low } \end{gathered}$ | Q2 | Q3 | $\begin{aligned} & 2009 \\ & \text { Q4 } \end{aligned}$ | Nov. | Dec. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total industry | 80.9 | 84.9 | 73.5 | 68.7 | 70.1 | 71.5 | 71.5 | 72.0 |
| Manufacturing | 79.6 | 84.5 | 71.4 | 65.4 | 67.1 | 68.3 | 68.5 | 68.6 |
| Mining | 87.6 | 89.1 | 84.9 | 81.8 | 83.2 | 85.0 | 85.5 | 85.7 |
| Utilities | 86.8 | 93.3 | 84.2 | 79.6 | 78.2 | 80.6 | 78.4 | 82.9 |
| Stage-of-process groups |  |  |  |  |  |  |  |  |
| Crude | 86.6 | 89.9 | 81.7 | 79.6 | 82.5 | 85.2 | 85.6 | 86.1 |
| Primary and semifinished | 82.0 | 87.9 | 74.3 | 66.2 | 67.1 | 68.3 | 68.2 | 68.9 |
| Finished | 77.7 | 80.3 | 70.0 | 67.1 | 68.6 | 69.9 | 69.9 | 70.2 |

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

## Indicators of Industrial Activity

## Figure: Utilities Output

Line chart, 2002 to 2010. Unit is an index, 2002 = 100. There are two series, "Electricity" and "Natural gas." The Electricity series ends in January 2010. (Note: January value for electricity generation is based on weekly generation data from the Edison Electrical Institute, EEI) and the Natural gas series ends in December 2009. Electricity begins at about 95 and generally increases to about 115 in late 2008. It generally decreases to about 105 in mid-2009 then generally increases ending at about 115 in January 2009. Natural gas begins at about 90 and generally increases to about 110 in early 2003, then generally decreases to about 100 in early 2004 . It generally increases to about 105 in mid-2005 then generally decreases to about 80 in early 2006. It generally increases to about 110 in early 2007 then generally decreases to about 95 in late 2008. It generally increases to about 105 in early 2009 then generally decreases to about 95 in late 2009 . It generally increases ending at about 110 in December 2009.

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

## Figure: IP Diffusion Index

Line chart, 1997 to 2010. Unit is an index. There is a horizontal line at 50 . The end of the series is marked "December." The series begins at about 60 then generally increases to about 70 in early 1998. It generally decreases to about 30 in early 2001 then generally increases to about 70 in late 2003 . It generally decreases to about 10 in early 2009 then generally increases, ending at about 60 in December 2010.

 NBER (December 2007).

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

## Figure: 3-Month Changes in Month's Supply

Line chart, 2000 to 2010. Unit is a diffusion index. There is a horizontal line at about 50 . The end of the series is marked "December." The series begins at about 40 and generally increases to about 80 in late 2000. It generally decreases to about 10 in early 2002 then generally increases to about 60 in early 2003 . It generally decreases to about 30 at the end of 2003 then generally fluctuates between about 30 and 60 until late 2008. It generally increases to about 90 in early 2009 then generally decreases, ending at about 40 in December 2009.

 line represents the last business cycle peak as defined by the NBER (December 2007).

Source: Staff's flow of goods system.

## Figure: Manufacturing Capacity Utilization

Line chart, 1997 to 2010. Unit is percent. There is a horizontal line at marking about 80 on the scale. The end of the series is marked as "December." The series begins at about 83 and generally decreases to about 73 in late 2001. It generally increases to about 80 in late 2007. It generally decreases, ending about 70 in December 2010.

Figure: Motor Vehicle Assemblies

Line chart, 2002 to 2010. Units are millions of units. The end of the series is marked as January. There are two series, "Autos and light trucks (right scale)" and "Medium and heavy trucks (left scale)." Autos and light trucks starts at about 11 and generally decreases to about 4 in early 2009. It generally increases ending at about 7 in January 2010. Medium and heavy trucks starts at about 0.2 and generally increases to about .55 in mid-2006. It generally decreases ending at about .3 in January 2010.

Note: January values are based on latest industry schedules.
Source: Ward's Communications
Figure: New Orders: ISM, FRB New York, and FRB Philadelphia Surveys

Line chart, 2006 to 2010. Unit is a diffusion index. There is a horizontal line marking 50 on the scale. The series ends are marked December and January. There are three series, "Philadelphia," "New York," and "ISM" Philadelphia begins at about 60 and generally decreases to about 40 in mid-2008. It generally increases to about 50 at the end of 2008 then generally decreases to about 30 in early 2009. It generally increases ending at about 55 in December 2009. New York begins at about 65 and generally decreases to about 25 in early 2009. It generally increases ending at about 60 in January 2010. ISM begins at about 60 and generally decreases to about 20 in late 2008 then generally increases ending at about 70 in December 2009.

Note: The diffusion index equals the percentage of respondents reporting greater levels of new orders plus one half the percentage of respondents reporting that new orders were unchanged
Source: Institute for Supply Management (ISM); Federal Reserve.

## Production of Domestic Light Vehicles

(Millions of units at an annual rate except as noted)

| Item | 2009 |  |  | 2010 |  | 2009 |  | Dec. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q2 | Q3 | Q4 | Q1 | Sept. | Oct. | Nov. |  |
| U.S. production ${ }^{1}$ | 4.4 | 6.4 | 6.9 | 7.3 | 7.2 | 6.8 | 7.1 | 6.9 |
| Autos | 1.9 | 2.5 | 2.8 | 3.0 | 2.8 | 2.9 | 2.7 | 2.8 |
| Light trucks | 2.5 | 3.9 | 4.1 | 4.3 | 4.3 | 4.0 | 4.3 | 4.1 |
| Days' supply $\underline{\underline{2}}^{2}$ | 70 | 50 | 53 | n.a. | 63 | 57 | 55 | 52 |
| Autos | 78 | 46 | 51 | n.a. | 59 | 56 | 54 | 48 |
| Light trucks | 64 | 55 | 55 | n.a. | 66 | 58 | 55 | 55 |
| Inventories ${ }^{3}$ | 1.63 | 1.38 | 1.44 | n.a. | 1.38 | 1.46 | 1.48 | 1.44 |
| Autos | . 82 | . 63 | . 65 | n.a. | . 63 | . 66 | . 67 | . 65 |
| Light trucks | . 81 | . 75 | . 79 | n.a. | . 75 | . 79 | . 81 | . 79 |
| Memo: U.S. production, total motor vehicles ${ }^{4}$ | 4.5 | 6.5 | 7.1 | 7.5 | 7.3 | 7.0 | 7.2 | 7.1 |

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

1. Production rates for the first quarter of 2010 reflect the latest industry schedules. Return to table
2. Quarterly values are calculated with end-of-period stocks and average reported sales. Return to table
3. End-of-period stocks. Return to table
4. Includes medium and heavy trucks. Return to table
n.a. Not available. Return to table

Source: Ward's Communications.
Figure: Inventories of Light Vehicles

Line chart, 1998 to 2010. Unit is millions of units. The end of the series is marked as December. The series begins at about 3 and generally increases to about 3.25 in mid-2000. It generally decreases to about 2.5 in late 2001. It generally increases to about 3.0 in mid-2004 then generally decreases ending at about 1.5 in December 2010.

Source: Ward's Communications. Adjusted using FRB seasonals.
Figure: Day's Supply of Light Vehicles

Line chart, 1998 to 2010. Unit is days. The end of the series is marked as December. The series begins at about 70 and generally increases to about 80 in late 2000 . It generally decreases to about 40 in mid-2005. It generally increases to about 100 in mid-2009 then generally decreases ending at about 50 in December 2010 .

## Indicators of High-Tech Manufacturing Activity

## Figure: High Tech Exports

Line chart, 2002 to 2010. Unit is billions of dollars, annual rate. Data are 3 month moving average. The end of the series is marked as November. The series begins at about 110 and generally increases to about 150 in late 2008. It generally decreases, ending at about 120 in November 2010.

Note: Includes semiconductors and related equipment, communications equipment, and computers and peripherals.
Source: U.S. International Trade Commission.

## Figure: Worldwide Shipments of Personal Computers and of Cell Phones

Line chart, 2002 to 2010. Units are millions of units. The series end is marked as Q4. Note: Q 4 cell phone units are a Gartner forecast. There are two series, "Cell phones (left scale)" and "Personal computers (right scale)." Cell phones begins at about 400 and generally increases to about 1200 in 2010 :Q4. Personal computers starts at about 125 and generally increases to about 325 in 2010:Q4.

Note: FRB seasonals.
Source: IDC (Personal computers); Gartner (cell phones).

## Figure: High Tech Inventories

Line chart, 2002 to 2010 . Unit is billions of dollars. The end of the series is marked as November. The series begins at about 34 and generally decreases to about 23 in late 2004. It generally increases to about 28 in mid-2006 then generally decreases to about 25 in mid-2007. It generally increases to about 28 in late 2008 then generally decreases ending at about 24 in November 2010.

Note: Includes semiconductors and related equipment, communications equipment, computers and peripherals, and magnetic and optical media
Source: U.S. Census Bureau

## Figure: Import Penetration of Computer and peripheral equipment

Line chart, 1998 to 2010. Unit is percent. Data are 3-month moving average. The end of the series is marked as November. The series begins at about 40 and generally increases to about 90 in mid-2008. It generally decreases ending at about 85 in November 2010.

## Source: FRB staff calculation

## Figure: Circuit Board Orders and Shipments

Line chart, 2002 to 2010. Unit is billions of dollars. The end of the series is marked as November. There are two series, "Orders" and "Shipments." Orders begins at about 95 and generally decreases to about 70 in early 2003. It generally increases to about 130 in early 2004. It generally decreases to about 70 at the end of 2004 then generally increases to about 130 in mid-2005. It generally decreases ending at about 85 in November 2009. Shipments begins at about 95 and generally decreases to about 70 in mid-2003 it generally increases to about 120 in early 2006 then generally decreases to about 100 in early 2007 . It generally increases to about 110 in early 2008 then generally decreases ending at about 80 in November 2009.

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

## Figure: MPU shipments and Intel Revenue

Line chart, 2002 to 2010. Unit is billions of dollars, ratio scale. The end of the first series is marked as 2010:Q1. (Note: Q1 Intel revenue is the midpoint of the range given by the company's guidance as of January 14, 2010.) The end of the second series is marked as 2009:Q4. (Note: Q4 MPU shipments are based on October and November.) There are two series, "Intel revenue" and "Worldwide MPU shipments." Intel revenue begins at about 7 and generally increases to about 9.5 in mid- 2005. It generally decreases to about 8.5 in late 2006 then generally increases to about 10.0 in mid-2007. It generally decreases to about 7.5 in early 2009 then generally increases ending at about 10.0 in 2010:Q1. Worldwide MPU shipments begins at about 6.25 and generally increases to about 8.5 in mid-2005. It generally decreases to about 7.0 in early 2006 then generally increases to about 9.0 in early 2007. It generally decreases to about 6.0 at the end of 2008 . It generally increases ending at about 9.25 in 2009:Q4.

Note: FRB seasonals. MPU is a microprocessor unite. MPU shipments are a quarterly sum.
Source: Intel; Semiconductor Industry Association.

## Real Personal Consumption Expenditures

| Category | 2009 |  |  | 2009 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q2 | Q3 | Q4 ${ }^{\text {e }}$ | Oct. ${ }^{\text {e }}$ | Nov. ${ }^{\text {e }}$ | Dec. ${ }^{\text {e }}$ |
|  | Annual rate |  |  | Monthly rate |  |  |
| Total real PCE | -. 9 | 2.8 | n.a. | . 4 | . 3 | n.a. |
| Motor vehicles | -6.3 | 53.7 | -21.7 | 9.8 | 2.0 | 5.3 |
| Goods ex. motor vehicles | -2.8 | 3.8 | 5.6 | . 1 | . 9 | -. 2 |
| Services | . 2 | . 8 | n.a. | . 2 | . 0 | n.a. |
| Ex. energy | . 7 | . 8 | n.a. | . 1 | . 1 | n.a. |
| Memo: |  |  |  |  |  |  |
| Real PCE control ${ }^{1}$ | -2.5 | 3.2 | 5.6 | . 2 | . 8 | -. 3 |
| Nominal retail control ${ }^{2}$ | -2.8 | 1.4 | 5.2 | . 2 | . 8 | -. 3 |

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
n.a. Not available

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

## Figure: Change in Real PCE Goods

Line chart, 1990 to 2009. Unit is percent. There is a horizontal line marking negative 0.0 . The end of the series is marked as December. There is one series, " 6 month moving average." It begins at about negative 0.6 and generally increases to about 0.6 in 1998. It generally decreases to about negative 0.0 in 2001 then generally fluctuates between about negative 0.0 and 0.5 until 2005. It generally decreases to about negative 0.6 in 2009 then generally increases ending at about 0.4 .

There is a second line chart, 2006 to 2010. Unit is percent. There is a horizontal line marking 0 on the scale. The end of the series is marked as December. There are two series, " 6 month moving average" and "Monthly." 6 month moving average starts at about 0.4 and generally decreases to about negative 0.4 in 2008 . It generally increases ending at about 0.4 in 2010. Monthly begins at about 1.2 then generally decreases to about negative 0.4 . It generally fluctuates between negative 0.4 and 0.4 until 2007. It generally decreases to about negative 1.2 hen generally fluctuates between 0.4 and negative 2.0 until 2009 . It generally increases to 2.0 in 2009 then generally decreases to about negative 0.4 . It generally increases to about 2.8 then generally decreases to about negative 2.8 . It generally increases ending at about 0.4 .

[^5]Figure: Change in Real PCE Services

Line chart, 1990 to 2009. Unit is percent. There is a horizontal line marking 0.0 . The end of the series is marked as November. There is one series, " 6 month moving average." The series starts at about 0.4 then generally decreases to about negative 0.1 in early 1991. It generally increases to about 0.25 then generally fluctuates between 0.1 and 0.5 until early 1999. It generally decreases to about 0.1 and generally fluctuates between 0.1 and 0.3 until late 2007 . It generally decreases to about negative 0.1 in early 2008 then generally increases ending at about 0.1 in December 2009.

There is a second line chart, 2006 to 2010 . Unit is percent. There is a horizontal line marking 0.0 . The series end is marked as November. There are two series, " 6 month moving average" and "Monthly." 6 month moving average begins at about negative 0.1 then generally increases to about 0.6 in early 2006 . It generally decreases to about 0.1 then generally fluctuates between 0.4 and negative 0.4 until 2008. It generally increases to about 0.3 and generally decreases to about negative 0.1 in early 2009. It generally fluctuates between 0.1 and negative 0.1 until mid-2009. It generally decreases to about 0.0 in November 2009 . Monthly starts at about 0.2 and generally increases to about 0.3 in early 2007. It generally decreases to about -0.1 in late 2008 then generally increases ending at about 0.1 in November 2009.

[^6]
## Sales of Light Vehicles

| Category | 2009 | 2009 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Q2 | Q3 | Q4 | Oct. | Nov. | Dec. |
| Total | 10.3 | 9.6 | 11.5 | 10.8 | 10.4 | 10.9 | 11.2 |
| Autos | 5.4 | 4.9 | 6.4 | 5.7 | 5.4 | 5.6 | 5.9 |
| Light trucks | 4.9 | 4.7 | 5.1 | 5.2 | 5.0 | 5.3 | 5.3 |
| North American ${ }^{1}$ | 7.6 | 7.1 | 8.4 | 8.2 | 7.9 | 8.3 | 8.6 |
| Autos | 3.6 | 3.2 | 4.2 | 3.9 | 3.7 | 3.8 | 4.1 |
| Light trucks | 4.0 | 3.9 | 4.2 | 4.4 | 4.2 | 4.5 | 4.4 |
| Foreign-produced | 2.7 | 2.4 | 3.1 | 2.6 | 2.6 | 2.6 | 2.6 |
| Autos | 1.8 | 1.6 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 |
| Light trucks | . 9 | . 8 | . 9 | . 8 | . 8 | . 8 | . 8 |
| Memo: |  |  |  |  |  |  |  |
| Detroit Three market share (percent) ${ }^{2}$ | 44.7 | 46.8 | 43.1 | 45.0 | 44.8 | 44.9 | 45.3 |

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.]
[Content redacted.]

## Figure: Car Buying Attitudes

Line chart, 2002 through January 2010. Unit for left scale is percent. Unit for right scale is Index. January 2010 values are preliminary. There are two series, "Appraisal of car-buying conditions (right scale)" and "Good time to buy: low prices (left scale)." Appraisal of car buying conditions begins at about 160 and generally decreases to about 110 in early 2006. It generally increases to about 140 in mid-2007. It generally decreases to about 90 in early 2008 . It generally increases ending at about 120 in January 2010. Good time to buy: low prices begins at about 35 and generally fluctuates between 30 and 40 until mid-2005. It generally increases to about 60 in mid-2005 then generally decreases to about 30 in early 2006. It generally fluctuates between 30 and 45 until 2008 . It generally increases to about 65 in early 2009 . It generally decreases ending at about 80 in January 2010.

Source: Reuters/University of Michigan Surveys of Consumers.

## Figure: Average Value of Incentives on Light Vehicles

Line chart, 2004 to 2010 . Unit is current dollars per vehicle, ratio scale. The end of the series is marked January 10 . The series begins at about 2200 and generally increases to about 3000 at the end of 2004. It generally decreases to about 1100 in mid- 2005 then generally increases to about 1500 in late 2005 . It generally decreases to about 1100 in mid-2006 then generally increases to about 2300 at the end of 2008 . It generally decreases ending at about 1800 in January $10,2010$.

Note: Weekly weighted average of customer cash rebate and the present value of interest rate reduction.
Source: J.D. Power and Associates. Adjusted using FRB seasonals.

## Fundamentals of Household Spending

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

Line chart, 1999 to 2009. Unit for left scale is Index. Unit for right scale is Ratio. The end of the left scale series is marked as January 19. The end of the right scale series is marked as Q3. There are two series, "Ratio of household net worth to DPI (right scale)" and "Total Market Index (left scale)". (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.) Ratio of household net worth to DPI begins at about 5.75 and generally increases to about 6.0 in early 2000. It generally decreases to about 5.0 in early 2003. It generally increases to about 6.5 in mid- 2007 . It generally decreases to about 4.5 in early 2009 then generally increases ending at about 5.0 in 2009:Q3. Total Market Index begins at about 12000 and generally increases to about 14000 in early 2001. It generally decreases to about 7600 in mid- 2002 then generally increases to about 15400 in early 2008 . It generally decreases to about 7600 in early 2009 then generally increases ending at about 12000 on January 19, 2010.

## Figure: Change in Real Disposable Personal Income

Line chart, 1999 to 2009 . Unit is 12 month percent change. There is a horizontal line marking 0 . The end of the series is marked November. The series begins at about 4.5 and generally decreases to about 2 in late 1999. It generally increases to about 6 in late 2000 then generally fluctuates between about 1 and 5 until late 2007 . It generally decreases to about negative 1 in early 2008 then generally increases ending at about 1.5 in November 2009.

Note: 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, 1999 to 2009. Unit is percent. The end of the series is marked as November. The series begins at about 4.5 then generally decreases to about 2 in early 2001. It generally increases to about 5 in mid- 2001 then generally decreases to about 1 at the end of 2001 . It generally fluctuates between about 4 and 3 until late 2004. It generally decreases to about 11 in early 2005 and generally increases to about 3 in mid-2006. It generally increases to about 6 in early 2008 then generally decreases to about 1.5 in late 2008. It generally increases to about 6.5 in mid- 2009 then generally decreases ending at about 5 in November 2009 .

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

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

Line chart, 1999 to 2009. Unit is percent. The end of the series is marked as January 19. There are two series, "Treasury Yield" and "Federal Funds Rate." Treasury yield begins at about 5 and generally increases to about 7 in late 1999. It generally decreases to about 3 in early 2003 then generally fluctuates between about 4 and 5 until early 2006. It generally decreases to about 2 in early 2009. It generally increases ending at about 4 on January 19, 2010. Federal Funds Rate starts at about 5 and generally increases to about 6.5 in early 2001. It generally decreases to about 1 in early 2004 then generally increases to about 5 in late 2007 . It generally decreases ending at about 0 on January 19, 2010.

Source: Federal Reserve Board.

## Figure: Consumer Confidence

Line chart, 1990 to 2010. Unit are indexes. For the left scale, $1985=100$. For the right scale, $1966=100$. The end for the right scale series is marked January (preliminary). The end for the left scale series is marked December. There are two series, "Reuters/Michigan (right scale)" and "Conference Board (left scale)." Reuters/Michigan begins at about 95 and generally decreases to about 65 in late 1990. It generally increases to about 105 in late 2000 . It generally decreases to about 75 in late 2005 then generally increases to about 95 in late 2007. It generally decreases to about 55 in mid-2008 then generally increases ending at about 75 in January 2010. Conference Board begins at about 110 and generally decreases to about 50 in early 1992. It generally increases to about 130 in early 2000 then generally decreases to about 70 in early 2003. It generally increases to about 110 in early 2006 then generally decreases to about 30 in early 2009 . It generally increases ending at about 55 in December 2009.
 peak is the last business cycle peak as defined by the NBER (December 2007).

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

## Indicators of Single-Family Housing

## Figure: New Single Family Home Sales

Line chart, 2002 to 2009 . Units are millions of units (annual rate). There is one series, "Total (left scale)." Total begins at about 0.9 and generally increases to about 1.4 in mid-2005. It generally decreases to end at about 0.4 in November 2009.

Source: For total, Census Bureau; [redacted]

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

Line chart, 2002 to 2009. Unit for left scale is Thousands of Units. Unit for right scale is percent. The end of the left scale series is marked November. The end of the right scale series is marked Q3. There are two series, "Inventories of new homes (left scale)" and "Homeowner vacancy rate (right scale)." Inventories of new homes begins at about 300 and generally increases to about 575 in early 2006. It generally decreases ending at about 250 in November 2009. Homeowner vacancy rate begins at about 1.50 and generally increases to about 2.50 in late 2006. It generally decreases to about 2.4 in early 2007 then generally increases to about 2.5 in mid2008. It generally decreases ending at about 2.25 in 2009:Q3.

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

Line chart, 2002 to 2009. Unit for left scale is Millions of units (annual rate). Unit for right scale is Index (2001 = 100). The end of the series is marked November. There are two series, "Existing home sales (left scale)" and "Pending home sales (right scale)." Existing home sales begins at about 5.25 and generally decreases to about 4.75 in mid-2002. It generally increases to about 6.25 in late 2005. It generally decreases to about 4.0 in late 2008 then generally increases ending at about 6 in November 2009. Pending home sales begins at about 105 and generally increases to about 125 in mid-2005. It generally decreases to about 80 in early 2008 then generally increases to about 115 in late 2009. It generally decreases ending at about 95 in November 2009.

Source: National Association of Realtors.
Figure: Mortgage Rates

Line chart, 2002 to 2010. Data are 30 year conforming fixed rate mortgage. Unit is percent. The end of the series is marked Jan. 13. The series begins at about 7 then generally decreases to about 5 in early 2003. It generally fluctuates between about 6.5 and 5.5 until mid-2005. It generally increases to about 7 in mid-2006 then generally fluctuates between 7 and 6 until late 2008. It generally decreases to about 5 in early 2009 then generally increases to about 5.5 in mid- 2009 . It generally decreases ending at about 5 on January 13, 2010.

Note: Two week moving average.
Source: Federal Home Loan Mortgage Corporation.

## Figure: Prices of Existing Homes

Line chart, 2002 to 2009. Unit is an index, $2000=100$. The end of the first series is marked November. The end of the second and third series are marked October. 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 and 20-city S\&P, Case Shiller monthly price index begin at about 120 and generally increase together to about 190 in early 2006. They generally decrease together to about 120 in early 2009. They generally increase together ending at about 135 . Monthly FHFA purchase only index begins at about 110 and generally increases to about 160 in late 2006. It generally decreases ending at about 140.

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 and Poor's; for LP, LoanPerformance, a division of First American CoreLogic.

## Figure: House Price Expectations

Line chart 2007 to 2010 . Unit is a diffusion index. The ends of the series are marked January (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 60 and generally decreases to about 40 in mid-2008. It generally increases to about 60 in early 2009 then generally decreases ending at about 50 in January 2010. 1 year ahead begins at about 30 and generally decreases to about negative 10 in mid- 2008 . It generally increases to about 0 in late 2008 then generally decreases to about negative 20 in early 2009. It generally increases ending at about 0 in January 2010.

Note: Diffusion index is constructed by subtracting expectations of decrease from expectations of increase.
Source: Reuter's/University of Michigan Surveys of Consumers.

## Private Housing Activity

| Sector | 2009 | 2009 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Q2 | Q3 | Q4 | Oct. | Nov. | Dec. |
| All units |  |  |  |  |  |  |  |
| Starts | . 55 | . 54 | . 59 | . 55 | . 52 | . 58 | . 56 |
| Permits | . 57 | . 53 | . 57 | . 60 | . 55 | . 59 | . 65 |
| Single-family units |  |  |  |  |  |  |  |
| Starts | . 44 | . 43 | . 50 | . 47 | . 47 | . 49 | . 46 |
| Permits | . 44 | . 41 | . 46 | . 48 | . 45 | . 47 | . 51 |
| Adjusted permits ${ }^{\underline{1}}$ | . 44 | . 42 | . 48 | . 49 | . 46 | . 48 | . 52 |
| New homes |  |  |  |  |  |  |  |
| Sales | n.a. | . 37 | . 41 | n.a. | . 40 | . 36 | n.a. |
| Months' supply ${ }^{2}$ | n.a. | 9.44 | 7.71 | n.a. | 7.20 | 7.94 | n.a. |
| Existing homes |  |  |  |  |  |  |  |
| Sales | n.a. | 4.24 | 4.65 | n.a. | 5.32 | 5.77 | n.a. |


| Months' supply ${ }^{2}$ | n.a. | 8.80 | 8.05 | n.a. | 6.68 | 6.20 | n.a. |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Multifamily units | .11 | .12 | .09 | .08 | .05 | .09 | .10 |
| Starts | n.a. | .10 | .07 | n.a. | n.a. | n.a. | n.a. |
| Built for rent | n.a. | .01 | .02 | n.a. | n.a. | n.a. | n.a. |
| Built for sale | .14 | .12 | .11 | .12 | .10 | .12 | .15 |
| Permits |  |  |  |  |  |  |  |
| Condos and co-ops | n.a. | .52 | .64 | n.a. | .77 | .77 | n.a. |
| Existing home sales |  |  |  |  |  |  |  |

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, 1999 to 2010. Unit is millions of units, seasonally adjusted annual rate. The end of the series are marked December. There are three series, "Single family starts," "single family adjusted permits," and "Multifamily starts." Single family starts and single family adjusted permits generally run together. They begin at about 1.4 and generally increase to about 1.8 in early 2005 . The generally decrease to about . 4 in early 2009 then generally increase ending at about . 4 in December 2010. Multifamily starts begins at about .04 and generally fluctuates between .2 and .4 until mid-2008. It generally decreases ending at about 0 in December 2010 .

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

Orders and Shipments of Nondefense Capital Goods

| Category | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q2 | Q3 | Sept. | Oct. | Nov. |
|  | Annual |  |  | thly rat |  |
| Shipments | -13.3 | 3.8 | 3.3 | -1.2 | . 5 |
| Excluding aircraft | -10.1 | 2.2 | . 5 | . 5 | 1.1 |
| Computers and peripherals | -7.2 | . 1 | -. 1 | 4.0 | 1.5 |
| Communications equipment | 4.2 | 33.5 | -2.8 | 4.0 | -2.7 |
| All other categories ${ }^{\underline{1}}$ | -11.6 | -. 2 | . 9 | -. 2 | 1.4 |
| Orders | 12.2 | 28.6 | 4.2 | 2.0 | -3.0 |
| Excluding aircraft | 7.2 | 14.1 | 3.5 | -1.8 | 2.7 |
| Computers and peripherals | 14.2 | 5.5 | 2.2 | . 0 | 6.7 |
| Communications equipment | 35.4 | 31.2 | . 7 | -4.1 | 2.2 |
| All other categories ${ }^{1}$ | 4.1 | 13.4 | 4.0 | -1.7 | 2.3 |
| Memo: |  |  |  |  |  |
| Shipments of complete aircraft ${ }^{\text {² }}$ | 36.8 | 36.4 | 43.0 | 31.6 | 38.0 |

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, 2000 to 2009. Unit is billions of chained (2005) dollars, ratio scale. The end of the series is marked November. There are two series, "Shipments" and "orders." Shipments begins at about 8 and generally increases to about 11 in early 2001 . It generally decreases to about 5 in early 2005 then generally increases to about 6 in early 2006. It remains generally constant until late 2008. It generally decreases ending at about 6 in November 2009. Orders begins at about 6 and generally increases to about 14 in mid-2000. It generally decreases to about 3 in early 2002. It generally increases to about 8 in mid-2003 and generally fluctuates between about 5 and 6 until the end of 2006. It generally increases to about 8 then generally fluctuates between about 6 and 8 until 2009 . It generally decreases ending at about 6 in November 2009.

## Figure: Non High Tech, Non Transportation Equipment

Line chart, 2000 to 2009. Unit is billions of chained (2005) dollars. The end of the series is marked November. There are two series, orders and shipments. Orders and Shipments begin at about 44 and generally decrease together to about 37 in early 2002. They generally increase together until early 2006 where Orders is about 48 and shipments is about 44. They generally decrease together ending at about 36 in November 2009.
 Bureau of Economic Analysis.

Source: Census Bureau.

## Figure: Computers and Peripherals

Line chart, 2000 to 2009. Unit for left scale is $2000=100$. Unit for right scale is Billions of chained (2005) dollars, ratio scale. The end for the left scale series is marked November. The end for the right scale series is marked December. There are two series, "Industrial Production (left scale)" and "Real M3 Shipments (right scale)." Industrial Production begins at about 90 and generally increases to about 240 in mid-2008. It generally decreases ending at about 170 in 2009 . Real M3 Shipments begins at about 8 and generally increases to about 17 in early 2006. It generally decreases to about 12 in mid-2006 then generally increases to about 17 in mid-2007. It generally decreases to about 14 in 2008 then generally increases ending at about 18 in 2009.

Note: Shipments are deflated by the staff price index for computers and peripheral equipment, which is derived from the quality-adjusted price indexes of the Bureau of Economic Analysis.
Source: Census Bureau; FRB Industrial Production.

## Figure: Medium and Heavy Trucks

Line chart, 2000 to 2009. Unit is thousands of units, ratio scale. The end of the series is marked December. 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 at about 400 and generally decreases to about 260 in late 2002 . It generally increases to about 960 in early 2006. It generally decreases to about 260 in early 2007 then generally increases to about 500 in early 2008 . It generally decreases to about 130 in 2009 then generally increases to about 500. It generally decreases ending at about 250 in 2009 . Sales of class $4-8$ trucks begins at about 540 and generally decreases to about 260 in early 2003. It generally increases to about 540 in early 2007 then generally decreases to about 140 in early 2009 . It generally increases ending at about 250.

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

## Fundamentals of Equipment and Software Investment

## Figure: Real Business Output

Line chart, 1990 to 2009. Unit is 4 quarter percent change. There is a horizontal line marking 0 . The end of the series is marked Q3. The series begins at about 3 and generally decreases to about negative 2 in early 1991. It generally increases to about 6 in mid-2000. It generally decreases to about 0 in late 2001 then generally increases to about 4 in early 2004. It generally decreases ending at about negative 4 in 2009.

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

## Figure: User Cost of Capital

Line chart, 1990 to 2009. Unit is 4 quarter percent change. There is a horizontal line marking 0 . The end of the series is marked Q3. There are two series, "Non-hightech" and "High tech." Non-high-tech begins at about negative 1 and generally decreases to about negative 5 in mid-1993. It generally increases to about 15 in early
1995. It generally decreases to about negative 5in late 1995 then generally increases to about 5 in mid-1999. It generally decreases to about negative 10 in early 2003. It generally increases to about 20 in late 2008 then generally decreases ending at about 2 in 2009. High tech begins at about negative 7 and generally decreases to about negative 13 in late 1992. It generally increases to about negative 2 in late 1994 then generally decreases to about negative 10 in mid-1997. It generally increases to about negative 3 in late 1999 then generally decreases to about negative 14 in mid-2003. It generally increases to about 3 in late 2008 then generally decreases, ending at about negative 5 in 2009.

Source: Staff calculation.

## Figure: Corporate Bond Yields

Line chart, 1990 to 2010. Unit is percent. The end of the series is marked January. There are two series, "10-year high yield" and "10-year BBB" 10 year high yield begins at about 14 and generally decreases to about 9 in mid-1997. It generally increases to about 14 in late 2000 then generally decreases to about 8 in early 2007 . It generally increases to about 18 in mid-2008 then generally decreases ending at about 9 in 2010. 10 year BBB begins at about 10 and generally decreases to about 7 in mid-1993. It generally increases to about 8 in early 1994 then decreases to about 6 in mid-1998. It generally increases to about 8 in early 2000 then generally

Note: End of month. January value as of January 15
Source: Merrill Lynch.
Figure: NFIB: Survey on Loan Availability

Line chart, 1990 to 2009. Units are percent. The end of the series is marked December. There are two series, "credit expected to be tighter (right scale)" and "credit more difficult to obtain (left scale)." Credit expected to be tighter begins at about 6 and generally increases to about 12 in late 1991 . It generally decreases to about 0 in early 1999. It generally increases ending at about 14 in 2009. Credit more difficult to obtain begins at about 7 and generally increases to about 12 in early 1991 . It generally decreases to about 0 in mid-1998 then generally increases to about 8 in mid-2001. It generally decreases to about 0 in mid-2002. It generally increases ending at about 14 in 2009.

Note: Of borrowers who sought credit in the past 3 months, the proportion that reported or expected more difficulty in obtaining credit less the proportion that reported or expected more ease in obtaining credit. Seasonally adjusted.

Source: National Federation of Independent Business (NFIB).

## Figure: Surveys of Business Conditions

Line chart, 1990 to 2009. Unit is a diffusion index. The end of the series is marked January. There are two series, "ISM (left scale)" and "Philadelphia Fed (right scale)." ISM begins at about 50 and generally increases to about 60 in mid-1993. It generally decreases to about 45 in early 1995. It generally increases to about 60 in early 1999. It generally decreases to about 45 in early 2003. It generally increases to about 60 in late 2004. It generally decreases to about 30 in early 2008 . It generally increases ending at about 55 in 2009 . Philadelphia Fed begins at about 55 and generally increases to about 70 in late 1993 . It generally decreases to about 30 in late 2000. It generally increases to about 70 in late 2004 then generally decreases to about 30 in early 2008. It generally increases ending at about 60 in 2009.

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

Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001November 2001. The NBER peak is 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, 2000 to 2010. Unit is billions of chained (2005) dollars. The end of the series is marked November. The series begins at about 320 and generally increases to about 360 in late 2000. It generally decreases to about 260 in late 2002 and remains about constant until mid-2005. It generally increases to about 360 in early 2008, and generally decreases ending at about 280 in 2010.

Source: Census Bureau

## Figure: Office, Commercial, Communication, and Other

Line chart, 2000 to 2010. Unit is billions of chained (2005) dollars. The end of the series is marked November. There are four series, "Other," "Commercial," "Office," and "Communication." Other begins at about 85 and generally decreases to about 75 in mid-2005. It generally increases to about 110 in late 2008 , and generally decreases ending at about 80 . Commercial begins at about 80 and generally decreases to about 70 in early 2003 . It generally increases to about 80 in early 2007 , and generally decreases ending at about 35 . Office begins at about 55 and generally increases to about 70 in early 2001. It generally decreases to about 25 in mid- 2005 . It generally increases to about 50 in late 2008, and generally decreases ending at about 30 . Communication begins at about 20 and remains about constant until late 2002. It generally decreases to about 14 in early 2004. It generally increases to about 25 in early 2008, and generally decreases ending at about 15.

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, 2000 to 2010. Unit is billions of chained (2005) dollars. The end of the series is marked November. There are two series, "Manufacturing" and "Power." Manufacturing begins at about 40 and generally increases to about 53 in early 2001. It generally decreases to about 25 in mid-2004. It generally increases to about 70 in early 2009, and generally decreases ending at about 55. Power begins at about 30 and generally increases to about 55 in early 2002 . It generally decreases to about 25 in mid-2004. It generally increases ending at about 65 in 2010.

Source: Census Bureau

Figure: Drilling and Mining Indicators

Line chart, 2000 to 2010. Unit for left scale is Millions of feet. Unit for right scale is Number. The end of the left scale series is marked November. The end of the right scale series is marked January. There are two series, "Footage drilled (left scale)" and "Drilling rigs in operation (right scale)." Footage drilled begins at about 10 and generally increases to about 15 in mid-2001. It generally decreases to about 12 in mid-2002. It generally increases to about 30 in late 2008 , and generally decreases ending at about 17 in 2010. Drilling rigs in operation begins at about 800 and generally increases to about 1300 in mid-2001. It generally decreases to about 800 in early 2002. It generally increases to about 2000 in late 2008, and generally decreases to about 1000 in early 2009. It generally increases ending at about 1200 in 2010.

Note: The January readings for drilling rigs are based on data through January 15, 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, 2000 to 2010. Unit is percent. The end of the series is marked Q4 (preliminary). There are three series, "Office," "Industrial," and "Retail." Office begins at about 9 and generally increases to about 17 in mid-2003. It generally decreases to about 12 in early 2007, and generally increases ending at about 16 in 2010. Industrial begins at about 7 and generally increases to about 12 in early 2004. It generally decreases to about 9 in late 2007. It generally increases ending at about 14 in 2010. Retail begins at about 7 and generally increases to about 9 in early 2003. It remains generally constant until late 2006. It generally increases ending at about 13 in 2010.

Note: Industrial space includes both manufacturing structures and warehouses.

## Source: Torto Wheaton Research.

Figure: Architectural Billings and Nonresidential Construction Employment

Line chart, 2000 to 2010. Unit for left scale is percent. Unit for right scale is diffusion index. The end of the series is marked December. There are two series, "Billings (right scale)" and "Change in employment (left scale)." Billings begins at about 55 and generally decreases to about 42 in early 2002 . It generally increases to about 57 in early 2006 then generally decreases to about 35 in early 2009. It generally increases ending at about 45 in 2010. Change in employment begins in 2001 at about 0 and generally increases to about 1.0 in mid-2006. It generally decreases to about negative 2.0 in early 2009, and generally increases ending at about negative 0.75 in 2010.

Note: Both series are 3-month moving averages. 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 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Sept. | Oct. | Nov. |
| Real inventory investment (chained 2005 dollars) |  |  |  |  |  |  |
| Total nonfarm business | -114.9 | -163.1 | -141.4 | ... | ... | ... |
| Motor vehicles | -63.6 | -48.1 | -4.6 | $\ldots$ | ... | $\ldots$ |
| Nonfarm ex. motor vehicles | -51.3 | -115.1 | -136.9 | $\ldots$ | ... | ... |
| Manufacturing and trade ex. wholesale and retail motor vehicles and parts | -49.3 | -110.9 | -129.3 ${ }^{\text {e }}$ | -166.3 | $-12.1^{\text {e }}$ | n.a. |
| Manufacturing | -28.9 | -39.8 | $-55.3{ }^{\text {e }}$ | -83.8 | $4.3{ }^{\text {e }}$ | n.a. |
| Wholesale trade ex. motor vehicles \& parts | -8.8 | -52.5 | $-51.9^{\text {e }}$ | -51.2 | $-4.8{ }^{\text {e }}$ | n.a. |
| Retail trade ex. motor vehicles \& parts | -11.6 | -18.6 | $-22.1{ }^{\text {e }}$ | -31.2 | $-11.6^{\text {e }}$ | n.a. |
| Book-value inventory investment (current dollars) |  |  |  |  |  |  |
| Manufacturing and trade ex. wholesale and retail motor vehicles and parts | -146.9 | -152.6 | -124.7 | -109.2 | 33.1 | 62.9 |
| Manufacturing | -81.1 | -66.0 | -49.8 | -47.9 | 22.1 | 9.0 |
| Wholesale trade ex. motor vehicles \& parts | -47.3 | -62.9 | -50.7 | -34.5 | 19.8 | 68.5 |
| Retail trade ex. motor vehicles \& parts | -18.6 | -23.7 | -24.2 | -26.8 | -8.8 | -14.5 |

[^7]... 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.

Line chart, 2000 to 2010. Unit is months. The end of the first series is marked as December. The end of the second series is marked November. There are two series, "Staff flow of goods system" and "Census book value data." Staff flow of goods system begins at about 1.75 and generally decreases to about 1.5 in late 2007 . It generally increases to about 1.7 in mid-2009, and generally decreases ending at about 1.6 . Census book value data begins at about 1.35 and generally decreases to about 1.2 in mid-2008. It generally increases to about 1.4 in early 2009, and generally decreases ending at about 1.2.
 and inventories are relative to sales.

Source: Census Bureau; staff calculation.

## Figure: ISM Customers' Inventories: Manufacturing

Line chart, 2000 to 2009 . Unit is index. The end of the series is marked December. 50 on the scale is marked by a horizontal line. The series begins at about 47 and generally increases to about 57 in early 2001. It generally decreases to about 35 in late 2004. It generally increases to about 57 in late 2008 and generally decreases ending at about 35 in 2010.

Note: A number below 50 indicates inventories are too low.
Source: Institute for Supply Management (ISM), Manufacturing ISM report on business.

## Federal Government Indicators

## Figure: Total Real Federal Purchases

Line chart, 2004 to 2009. Unit is percent change, annual rate. The end of the series is marked Q3. 0 on the scale is marked by a horizontal line. There are two series, "Current" and "4-quarter moving average." Current begins at 5 and generally decreases to about negative 5 in late 2004. It generally fluctuates between about 15 negative 5 until early 2009. It generally increases to about 11 in mid-2009, then generally decreases ending at about 9 . 4 -quarter moving average begins at about 7 and generally decreases to about negative 1 in early 2007. It generally increases to about 9 in late 2008 and generally decreases ending at about 5 .

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

## Figure: Real Defense Spending

Line chart, 2004 to 2009. Unit is billions of chained (2005) dollars. The end of the first series is marked December. The end of the second series is marked Q4. There are two series, "Unified (monthly)" and "NIPA (quarterly)." Unified begins at about 525 and generally decreases to about 450 in late 2004 . It generally increases ending at about 650 in 2009. NIPA begins at about 500 and generally increases ending at about 624.

Note: Nominal unified defense spending is seasonally adjusted and deflated by BEA prices. NIPA defense purchases exclude consumption of fixed capital; Q4 is an estimate.
Source: Monthly Treasury Statement; U.S. Department of Commerce, Bureau of Economic Analysis.

## Figure: Unified Budget deficit

Line chart, 2000 to 2009. Unit for left scale is percent of GDP. Unit for right scale is Billions of dollars. The end of the series is marked December. 0 on the scale is marked by a horizontal line. There are two series, "Billions of dollars (right scale)" and "Percent of GDP (left scale)." Billions of dollars begins at about 150 and generally decreases to about negative 450 in mid-2004. It generally increases to about negative 300 in mid-2007 and generally decreases ending at about negative 1500 in 2009. GDP begins at about 2 and generally decreases to about negative 4 in mid-2004. It generally increases to about negative 1 in late 2007 and generally decreases ending at about negative 9 .

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, 2000 to 2009. Unit is percent of GDP. The end of the series is marked December. The series begins at about 37 and generally decreases to about 31 in mid-2001. It generally increases ending at about 54 in 2009.

Source: Monthly Treasury Statement.

## Figure: Unified Outlays and Receipts

Line chart, 2000 to 2009. Unit is percent change from year earlier. The end of the series is marked December. 0 on the scale is marked by a horizontal line. There are two series, "Outlays" and "Receipts." Outlays begins at about 4 and generally increases to about 20 in mid-2002. It generally decreases to about 3 in late 2007, and generally increases to about 19 in late 2009. It generally decreases ending at about 11 . Receipts begins at about 7 and generally decreases to about negative 12 in
mid-2002. It generally increases to about 15 in mid-2005, then generally decreases ending at about negative 16.

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 | Oct.-Dec. 2009 |  |
| :--- | ---: | ---: |
| Outlays | 836 | -3.9 |
| National defense | 181 | 2.1 |
| Major transfers $\boldsymbol{1}$ | 482 | 16.9 |
| Other primary spending | 121 | -46.5 |
| Net interest | 52 | -4.4 |
|  |  | Percent change* |
| Receipts | 488 | -10.9 |
| Individual income and payroll taxes | 396 | -11.6 |
| Corporate income taxes | 34 | -32.6 |
| Other | 58 | 18.2 |
|  |  |  |
| Deficit (-) | -348 | 8.0 |

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, 1998 to 2010. Unit is percent change, annual rate. The end of the series is marked Q3. 0 on the scale is marked by a horizontal line. There are two series, "Spending" and "4 quarter moving average." Spending begins at about 5 and generally decreases to about 0 in early 2000. It generally increases to about 8 in late 2001. It generally decreases to about negative 1 in mid-2004 then generally increases to about 3 in early 2007. It generally decreases to about negative 1 in late 2008. It generally increases to about 4 in early 2009, then generally decreases ending at about negative 1.4 quarter spending average begins at about 6 and generally decreases to about negative 1 in mid-2004. It generally increases to about 2 in mid- 2007 then generally decreases ending at about 0 .

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

## Figure: Net Change in Employment

Bar chart, 1999 to 2009. Unit is thousands of jobs (monthly average). Approximate values are: 1999: 40, 2000: 25, 2001: 45, 2002: 15, 2003: 0, 2004: 11, 2005: 12 , 2006: 19, 2007: 21, 2008:H1: 21, 2008:H2: -1, 2009:H1: -8, 2009:Q3: -30, 2009:Q4: 5.

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

## Figure: Real Construction

Line chart, 1999 to 2010 . Unit is billions of chained (2005) dollars, annual rate. The end of the series is marked Q4. The series begins at about 200 and generally increases to about 240 in early 2002. It generally decreases to about 215 in early 2005, then generally increases to about 230 in mid-2007. It generally decreases to about 220 in early 2009, then generally increases ending at about 230.

Note: Nominal CPIP deflated by BEA prices through Q3 and by a staff projection thereafter. Observation for Q4 is the average of October and November.
Source: Census Bureau, Construction Spending.

## Figure: State Revenues

Line chart, 1999 to 2009. Unit is percent change from year earlier. The end of the series is marked Q3. 0 on the scale is marked by a horizontal line. There are two series, "Individual and corporate income taxes" and "Total revenues." Individual and corporate income taxes begins at about 4 and generally increases to about 20 in mid-2000. It generally decreases to about negative 20 in mid-2002 then generally increases to about 25 in mid-2005. It generally decreases to about negative 25 in early 2009 and generally increases ending at about negative 15. Total revenues begins at about 4 and generally decreases to about negative 10 in mid-2002. It

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

## Figure: Local Revenues

Line chart, 1999 to 2009. Unit is percent change from year earlier. The end of the series is marked Q3. 0 on the scale is marked by a horizontal line. There are two series, "Property taxes" and "Total revenues." Property taxes begins at about 6 and generally increases to about 23 in mid-2002. It generally decreases to about negative 10 in mid-2003 then generally increases to about 15 in late 2003. It generally decreases to about 1 in early 2008 then generally increases to about 10 in late 2008. It generally decreases ending at about 3. Total revenues starts at about 3 and generally increases to about 25 in mid-2002. It generally decreases to about negative 5 in early 2003 then generally increases to about 14 in late 2003. It generally decreases to about negative 1 in early 2009 then generally increases ending at about 1.

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

Price Measures
(Percent change)

| Measures | 12-month change | 3-month change | 1-month change |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Dec. 2008 | Dec. 2009 | Annual rate | Monthly rate |
|  |  | Sept. 2009 | Dec. 2009 | Nov. 2009 |
|  |  |  | Dec. 2009 |  |

CPI

| Total | . 1 | 2.7 | 2.5 | 3.3 | . 4 | . 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Food | 5.9 | -. 5 | -1.1 | 1.2 | . 1 | . 2 |
| Energy | -21.3 | 18.2 | 21.1 | 25.8 | 4.1 | . 2 |
| Ex. food and energy | 1.8 | 1.8 | 1.3 | 1.3 | . 0 | . 1 |
| Core goods | -. 6 | 3.0 | . 9 | 3.2 | . 2 | . 2 |
| Core services | 2.7 | 1.4 | 1.4 | . 6 | . 0 | . 1 |
| Shelter | 1.9 | . 3 | -. 1 | -. 3 | -. 2 | . 1 |
| Other services | 3.7 | 2.9 | 4.0 | 2.6 | . 2 | . 2 |
| Memo: core ex. tobacco | 1.7 | 1.5 | 1.1 | 1.2 | . 0 | . 1 |
| Chained CPI (n.s.a.) ${ }^{1}$ | -. 5 | 2.8 | $\ldots$ | $\ldots$ | ... | ... |
| Ex. food and energy ${ }^{1}$ | 1.3 | 1.5 | ... | $\ldots$ | $\ldots$ | ... |

PCE prices ${ }^{2}$

| Total | .6 | $\mathbf{2 . 2}$ | $\mathbf{1 . 7}$ | $\mathbf{2 . 8}$ | .2 | .1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Food and bev. at home | 6.7 | -1.5 | -2.8 | 2.1 | .1 | .3 |
| Energy | -23.5 | 21.0 | 23.2 | 27.8 | 4.4 | .2 |
| Ex. food and energy | $\mathbf{1 . 8}$ | $\mathbf{1 . 5}$ | $\mathbf{1 . 0}$ | $\mathbf{1 . 5}$ | .0 | .1 |
| Core goods | .0 | 1.4 | .0 | -.9 | -.1 | -.1 |
| Core services | 2.5 | 1.5 | 1.3 | 2.2 | .1 | .1 |
| Housing services | 2.4 | .7 | -.4 | -.6 | -.1 | .0 |
| Other services | 2.5 | 1.8 | 1.9 | 3.1 | .1 | .2 |
| Memo: core ex. tobacco | 1.8 | 1.3 | .9 | 1.4 | .0 | .1 |
|  |  |  |  |  |  | .1 |
| Core market-based | 2.1 | 1.6 | 1.1 | .8 | .0 | .1 |
| Core non-market-based | .2 | 1.1 | .2 | 5.3 | .1 | .2 |


| PPI |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Total finished goods | -.9 | 4.4 | .7 | $\mathbf{9 . 5}$ | $\mathbf{1 . 8}$ | .2 |
| Food | 3.2 | 1.1 | -5.1 | 15.0 | .5 | 1.4 |
| Energy | -20.3 | 20.1 | 8.1 | 36.6 | 6.9 | -.4 |
|  |  |  |  |  |  |  |


| Ex. food and energy | $\mathbf{4 . 5}$ | $\mathbf{. 9}$ | $\mathbf{. 2}$ | $\mathbf{- . 5}$ | $\mathbf{. 5}$ | $\mathbf{. 0}$ |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Core consumer goods | 4.6 | 1.6 | .2 | .4 | .6 | .1 |  |
| Capital equipment | 4.3 | .0 | .0 | -1.5 | .4 | -.1 |  |
|  |  |  |  |  |  |  |  |
| Intermediate materials | -2.3 | 3.0 | 6.9 | 9.0 | 1.4 | .5 |  |
| Ex. food and energy | 2.9 | -.1 | 6.9 | 2.3 | .3 | .5 |  |
| Crude materials | -24.6 | 12.3 | -9.3 | 60.9 | 5.7 | 1.0 |  |
| Ex. food and energy | -24.1 | 28.4 | 58.8 | 20.5 | -.8 | 5.0 |  |

1. Higher-frequency figures are not applicable for data that are not seasonally adjusted (n.s.a.). Return to table
2. PCE prices in December 2009 are staff estimates. Return to table
... Not applicable.
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.

## Consumer Prices

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

## Figure: PCE prices

Line chart, 2000 to 2010. Unit is percent. The end of the series is marked December. 0 on the scale is marked by a horizontal line. There are two series, "Total PCE" and "Core PCE" Total PCE begins at about 2 and generally decreases to about . 5 in early 2002. It generally increases to about 4 in late 2005 then generally decreases to about 2 in mid-2007. It generally increases to about 4.5 in mid- 2008 then generally decreases to about negative 1 in early 2009 . It generally increases ending at about 2. Core PCE begins at about 1.5 and generally increases to about 3 in mid-2002. It generally decreases to about 1.5 in late 2003 then generally increases to about 2.5 in mid-2008. It generally decreases ending at about 1.5.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.
Figure: Measures of Core PCE

Line chart, 2000 to 2010. Unit is percent. The end of the first series is marked as November. The end of the second series is marked as December. There are three series, "PCE excluding food and energy," "Market-based components," and "Trimmed mean." PCE excluding food and energy begins at about 1.5 and generally increases to about 2.5 in mid-2002. It generally decreases to about 1.5 in late 2003 then generally increases to about 2.7 in late 2008 . It generally decreases ending at about 1.5. Market-based components begins at about 1.3 and generally increases to about 2 in mid-2001. It generally decreases to about 1 in late 2003 then generally increases to about 2.7 in early 2007.It generally decreases ending at about 1.5. Trimmed Mean starts at about 2 and generally increases to about 2.5 in late 2001 then generally decreases to about 2 in mid-2003. It generally increases to about 3 in early 2007, the generally decreases ending at about 1.

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, 2001 to 2009. Unit is percent. The end of the CPI and PCE series are marked as December. There are three series, "CPI," "PCE," and "CPI chained." CPI begins at about 2 and generally increases to about 3 in late 2001. It generally decreases to about 1 in late 2003 then generally increases to about 3 in late 2006 . It generally decreases ending at about 2. PCE begins at about 1.5 and generally increases to about 2 in early 2001, then generally decreases to about 1 in late 2001 . It generally increases to about 2.5 in late 2002 then generally decreases to about 1.5 in late 2003. It generally increases to about 2.5 in mid- 2008 then generally decreases ending at about 1.5. CPI chained begins at about 2 and generally decreases to about 1 in late 2003. It generally increases to about 2.5 in early 2006 then generally decreases to about 1.5 in mid-2007. It generally increases to about 2 in late 2008 then generally decreases ending at about 1.5 .

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, 2000 to 2010 . Unit is percent. The end of the series is marked December. 0 on the scale is marked with a horizontal line. There are two series, "Services excluding energy" and "Goods excluding food and energy." Services excluding energy begins at about 2.5 and generally increases to about 3 in mid-2000 then decreases to about 2 in mid-2001. It generally increases to about 3.5 in early 2008 then generally decreases ending at about 1.5 . Goods excluding food and energy begins at about negative 1 then generally decreases to about negative 2.5 in early 2004 . It generally increases to about 0 in late 2006 then generally decreases to about negative 1 in mid-2007. It generally increases ending at about 1.5.

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

Line chart, 2000 to 2010 . Unit is percent. The end of the series is marked December. 0 on the scale is marked by a horizontal line. There are two series, " $3-\mathrm{month}$ change, annual rate" and "Monthly." 3-month change, annual rate begins at about 3 and generally decreases to about negative 2 in mid-2001. It generally increases to about 9 in mid-2005 then generally decreases to about negative 1 in early 2007. It generally increases to about 6 in late 2008 then generally decreases to about negative 9 in early 2009. It generally increases ending at about 2. Monthly starts at about 3 and generally decreases to about 1 in early 2002 . It generally increases to about 3 in late 2005. It generally decreases to about 2 in mid-2006 and generally increases to about 4.5 in mid-2008. It generally decreases to about negative 1 in early 2009 then generally increases ending at about 3.

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

## Figure: PCE excluding Food and Energy

Line chart, 2000 to 2010 . Unit is percent. The end of the series is marked December. 0 on the scale is marked with a horizontal line. There are two series, " 3 -month change, annual rate" and "monthly." 3-month change begins at about 2 then generally decreases to about . 75 in late 2000 . It generally increases to about 2.5 in mid2001. It generally decreases to about negative 1 in late 2001 then generally increases to about 4 in early 2002. It generally decreases to about 1 in early 2003 then generally increases to about 3 in mid-2008. It generally decreases to about . 25 in late 2008, then generally increases to about 3 in mid-1999. It generally decreases ending at about 1.5. Monthly begins at about 2 then generally decreases to about 1 in late 2001. It generally increases to about 3 in late 2008 then generally decreases ending at about 1.5.

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, 2004 to 2010. Unit is cents per gallon. The end of the series is marked January 18. Data are retail price less average spot crude price (regular grade seasonally adjusted by FRB staff, less average spot crude price: 60 percent West Texas Intermediate, 40 percent Maya heavy crude. Includes gasoline taxes.) The series begins at about 100 and generally decreases to about 80 in mid-2005, then generally increases to about 160 in late 2005 . It generally decreases to about 100 in early 2006 then generally increases to about 170 in mid-2007. It generally decreases to about 70 in mid-2008 then generally increases to about 160 in late 2008 . It generally decreases ending at about 100.

## Figure: Gasoline Price Decomposition

Line chart, 2004 to 2010. Unit is cents per gallon. The end of the series is marked as January 18. There are three series, "Retail Price" (regular grade seasonally adjusted by FRB staff), "Rack Price," and "Average spot crude price" ( 60 percent West Texas Intermediate, 40 percent Maya heavy crude). Retail price begins at about 200 and generally increases to about 400 in mid-2008. It generally decreases to about 175 in early 2009 then generally increases ending at about 300 . Rack price begins at about 150 and generally increases to about 350 in mid-2008. It generally decreases to about 100 in early 2009 then generally increases ending at about 225. Average spot crude price begins at about 100 and generally increases to about 325 in mid-2008. It generally decreases to about 60 in early 2009 then generally increases ending at about 200.

## Figure: Gasoline Inventories

Line chart, 2005 to 2010. Unit is millions of barrels. The end of the series is marked as January 8. Data are "Adjusted for ethanol use," Note: 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 200 and generally increases to about 225 in early 2006. It generally decreases to about 210 in late 2006 then generally increases to about 235 in early 2007 . It generally decreases to about 200 in mid-2007 then generally increases to about 240 in early 2008. It generally decreases to about 190 in late 2008 then generally increases to about 220 in early 2009. It generally decreases to about 210 in late 2009 then generally increases ending at about 230. Two curves mark the upper and lower bounds of a shaded region that shows the monthly mean over the preceding five years. The monthly mean is generally cyclical, following about the same pattern each year: ranging about 195 to 205 in Q1, about 205 to 220 around Q2, 205 to 211 by Q3, and about 195 to 211 by Q3 and Q4.


## Figure: Natural Gas Prices

Line chart, 2004 to 2010. Unit is dollars per million BTU. The end of the series is marked with a vertical line at January 19, 2010. Futures price is marked at about 6 from January 19 to the end of the timeline. The series begins at about 6 and general increases to about 15 in early 2006. It generally decreases to about 4 in late 2006. It generally increases to about 14 in early 2007 then generally decreases to about 6 in late 2007. It generally increases to about 14 in mid-2008 then generally decreases to about 2 in late 2009. It generally increases ending at about 6.

Note: National average spot price.
Source: Bloomberg.
Figure: PCE: Food at Home and Core Prices

Line chart, 2004 to 2010 . Unit is 12 month percent change. The end of the series is marked December (staff estimate). 0 on the scale is marked by a horizontal line. There are two series, "Food and Beverages" and "Ex. Food and energy." Food and beverages begins at about 2 and generally increases to about 7 in late 2008 . It generally decreases ending at about negative 2. Ex. Food and energy begins at about 2 and remains about constant until mid-2008 where it generally decreases ending at about 2.

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

## Figure: Spot Prices of Agricultural Commodities

Line chart, 2004 to 2010. Units are dollars per bushel. The end of the series is marked with a vertical line at January 19, 2010. Futures price is marked at about 10, about 6, and about 4 from January 19, 2010 to the end of the timeline. There are three series, "Corn (left scale)," "Soybeans (right scale)," and "Wheat (right scale)." Corn begins at about 4 and generally increases to about 13 in mid- 2008. It generally decreases ending at about 5 . Soybeans begins at about 5 and generally increases to about 14 in mid-2008. It generally decreases to about 8 in early 2009, then generally increases to about 11 in mid-2009. It generally decreases ending at about 8 . Wheat begins at about 4 and generally increases to about 7 in early 2008. It generally decreases ending at about 4.

Source: Commodity Research Bureau.

## Measures of Expected Inflation

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

Line chart, 1973 to 2009. Unit is percent. Data are quarterly. There are two series, "Median, next 5 to 10 years" and "Median, next 12 months." Median, next 5 years begins at about at about 7 in early 1981 then generally decreases to about 4 . There is a break in the series until mid-1989 where it begins again at about 4 . It generally decreases ending at about 3 . Median, next 12 months begins at about 6 in early 1977 and generally increases to about 10 in about 1979 . It generally decreases to about 2 in 1985 then generally increases to about 4 in 1989. It generally decreases to about 1 in 2001 then generally increases to about 5 . It generally decreases ending at about 4.

There is a second line chart that shows Median, next 5 years and Median, next 12 months from 2005 to 2010 . Unit is percent. Data are monthly. The end of the series is marked January. Median, next 5 years begins at about 3 and generally remains about constant to the end of the timeline. Median, next 12 months begins at about 3 and generally increases to about 5 at the end of 2005. It generally decreases to about 3 in mid- 2006 then generally increases to about 5 in mid-2008. It generally decreases to about 1.5 in early 2009 then generally increases ending at about 3.

Source: Reuters/University of Michigan Surveys of Consumers.

## Figure: Inputs to Models of Inflation

Line chart, 1973 to 2009. Unit is percent. Data are quarterly. The end of the series is marked Q4. There are two series, "FRB/U.S. long-run expectations measure for PCE inflation" and "Distributed lag of core PCE inflation." FRB/U.S. long-run expectations measure for PCE inflation begins at about 3 and generally increases to about 8 in 1981. It generally decreases ending at about 2 . Distributed lag of core PCE inflation begins at about 5 and generally increases to about 9 in 1981 . It generally decreases ending at about 2 .

There is a second line chart that shows "FRB/U.S. long-run expectations measure for PCE inflation" and "Distributed lag of core PCE inflation." From 2005 to 2010. Unit is percent. Data are quarterly. "FRB/U.S. long-run expectations measure for PCE inflation" begins at about 2 and remains generally about constant to the end of the timeline. "Distributed lag of core PCE inflation" begins at about 2 then generally increases to about 315 in 2008. It generally decreases ending at about 2.

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/U.S. 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, 2001 to 2009. Unit is percent. Data are quarterly. The end of the series is marked Q4. There are two series, " 5 to 10 years ahead" and "Next 5 years." 5 to 10 years ahead begins at about 2 then generally increases to about 3 in early 2004. It generally decreases to about 2 in mid- 2005 then generally increases ending at about 3 . Next 5 years begins at about 2 and generally increases to about 3 in early 2005. It generally decreases to about negative 1 in late 2008 then generally increases ending at about 2.

There is a second line chart showing " 5 to 10 years ahead" and "Next 5 years" from 2005 to 2010 . Unit is percent. Data are weekly. The end of the series is marked January 19. 5 to 10 years ahead starts at about 2.5 and generally increases to about 3.5 in late 2008. It generally decreases to about 2 in early 2009 , then generally increases ending at about 3 . Next 5 years begins at about 2.5 and generally decreases to about negative 2 in late 2008 . It generally increases ending at about 2 .
 indexation-lag effect.

Source: FRB staff calculations.

## Commodity Price Indexes

## Figure: Journal of Commerce

Line chart, 1991 to 2010. Unit is an index, $2006=100$, ratio scale, . The end of the series is marked January 19. There are two series, "Industrials" and "Metals." Industrials begins at about 60 and generally increases to about 70 in late 1993. It generally decreases to about 50 in late 1998 then generally increases to about 140 in early 2008. It generally decreases to about 60 in late 2008, then generally increases ending at about 120 . Metals begins at about 50 and generally decreases to about 40 in late 1993. It generally increases to about 50 in late 1994, then generally decreases to about 30 in late 1998 . It generally increases to about 50 in early 2000, then generally decreases to about 30 in late 2001. It generally increases to about 140 in early 2008 then generally decreases to about 60 in late 2008 . It generally increases ending at about 140 .

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, 1991 to 2010. Unit is an index, 1967 = 100, ratio scale, . The end of the series is marked January 19. There are two series, "Spot industrials" and "Futures." Spot industrials begins at about 300 and generally increases to about 350 in late 1994. It remains about constant until late 1997, then generally decreases to about 200 in late 2001. It generally increases to about 550 in early 2008. It generally decreases to about 300 in late 2008 then generally increases ending at about 500. Futures begins at about 200 then generally increases to about 250 in early 1996. It generally decreases to about 200 in mid- 1999 then generally increases to about 250 in late 2000. It generally decreases to about 200 in late 2001 then generally increases to about 650 in early 2008 . It generally decreases to about 350 in late 2008 then generally increases ending at about 500 .
 commodities and splits the remaining weight roughly equally among energy commodities, industrial commodities, and precious metals.

Selected Commodity Price Indexes
(Percent change)

| Index | $2008{ }^{1}$ | $\begin{gathered} 12 / 30 / 08 \\ \text { to } \\ 12 / 8 / 09 \text { ? } \end{gathered}$ | $\begin{gathered} 12 / 8 / 09^{2} \\ \text { to } \\ 1 / 19 / 10 \end{gathered}$ | 52-week change to 1/19/10 |
| :---: | :---: | :---: | :---: | :---: |
| JOC industrials | -41.4 | 62.0 | 6.8 | 66.0 |
| JOC metals | -48.2 | 80.5 | 11.8 | 79.3 |
| CRB spot industrials | -35.1 | 47.5 | 3.7 | 47.6 |
| CRB spot foodstuffs | -14.1 | 15.8 | 4.0 | 17.4 |
| CRB futures | -24.7 | 34.5 | 4.0 | 39.1 |

1. From the last week of the preceding year to the last week of the year indicated. Return to table
2. December 8, 2009, is the Tuesday preceding publication of the December Greenbook. Return to table

## Broad Measures of Inflation

(Percent change, Q3 to Q3)

| Measure | 2006 | 2007 | 2009 |  |
| :--- | ---: | ---: | ---: | ---: |
| Product prices |  |  |  |  |
| GDP price index | 3.3 | 2.6 | 2.5 | .6 |
| Less food and energy | 3.3 | 2.6 | 2.7 | .2 |
| Nonfarm business chain price index | 3.0 | 2.1 | 1.9 | .7 |
| Expenditure prices |  |  |  |  |
| Gross domestic purchases price index | 3.4 | 2.6 | 4.0 | -.9 |
| Less food and energy | 3.2 | 2.6 | 2.9 | .2 |
| PCE price index | 2.8 | 2.3 | 4.3 | -.7 |
| Less food and energy | 2.5 | 2.2 | 2.6 | 1.3 |
| PCE price index, market-based components | 2.9 | 2.0 | 4.6 | -.6 |
| Less food and energy | 2.5 | 1.9 | 2.6 | 1.7 |
| CPI |  |  |  |  |
| Less food and energy | 3.3 | 2.3 | 5.2 | -1.6 |


| Chained CPI | 3.1 | 2.0 | 4.5 | -1.6 |
| :--- | ---: | ---: | ---: | ---: |
| Less food and energy | 2.6 | 1.7 | 2.1 | 1.1 |
| Median CPI | 3.0 | 2.9 | 3.2 | 1.7 |
| Trimmed mean CPI | 2.8 | 2.5 | 3.6 | 1.1 |
| Trimmed mean PCE | 2.8 | 2.5 | 2.9 | 1.6 |

Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for median and trimmed mean CPI, Federal Reserve Bank of Cleveland; for all else, U.S. Dept. of Commerce, Bureau of Economic Analysis.

## Surveys of Inflation Expectations

(Percent)

| Period |  | Actual | Reuters/Michigan Survey |  |  |  | Professional forecasters (10 years) ${ }^{4}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | CPI | 1 year ${ }^{\underline{2}}$ |  | 5 to 10 years $^{3}$ |  |  |  |
|  |  |  | Mean | Median | Mean | Median | CPI | PCE |
| 2008: | Q1 | 4.1 | 4.2 | 3.8 | 3.3 | 3.0 | 2.5 | 2.2 |
|  | 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 |
| 2009: | Sept. | -1.3 | 2.8 | 2.2 | 3.2 | 2.8 | $\ldots$ | ... |
|  | Oct. | -. 2 | 3.2 | 2.9 | 3.2 | 2.9 | $\ldots$ | $\ldots$ |
|  | Nov. | 1.8 | 3.1 | 2.7 | 3.2 | 3.0 | 2.3 | 2.1 |
|  | Dec. | 2.7 | 3.0 | 2.5 | 3.0 | 2.7 | $\ldots$ | $\ldots$ |
| 2010: | Jan. | n.a. | 3.3 | 2.8 | 3.2 | 2.8 | $\ldots$ | $\ldots$ |

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
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.

Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for Reuters/Michigan Survey, Reuters/University of Michigan Surveys of Consumers; for professional forecasters, the Federal Reserve Bank of Philadelphia.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## Accessible Material

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

Domestic Financial Developments
Selected Financial Market Quotations
(One-day quotes in percent except as noted)

| Instrument | 2008 | 2009 |  | 2010 | Change to Jan. 19 from selected dates (percentage points) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sept. 12 | Nov. 3 | Dec. 15 | Jan. 19 | 2008 Sept. 12 | 2009 Nov. 3 | 2009 Dec. 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 | . 06 | . 05 | . 06 | -1.40 | . 00 | . 01 |
| 6-month | 1.80 | . 17 | . 17 | . 14 | -1.66 | -. 03 | -. 03 |
| Commercial paper (A1/P1 rates) $\underline{\underline{2}}^{\text {² }}$ |  |  |  |  |  |  |  |
| 1-month | 2.39 | . 16 | . 13 | . 10 | -2.29 | -. 06 | -. 03 |
| 3-month | 2.75 | . 18 | . 20 | . 17 | -2.58 | -. 01 | -. 03 |
| Large negotiable CDs ${ }^{1}$ |  |  |  |  |  |  |  |
| 3-month | 2.79 | . 22 | . 22 | . 20 | -2.59 | -. 02 | -. 02 |
| 6-month | 3.09 | . 32 | . 31 | . 29 | -2.80 | -. 03 | -. 02 |
| Eurodollar deposits ${ }^{\text {3 }}$ |  |  |  |  |  |  |  |
| 1-month | 2.60 | . 30 | . 32 | . 30 | -2.30 | . 00 | -. 02 |
| 3-month | 3.00 | . 45 | . 45 | . 45 | -2.55 | . 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 | . 93 | . 87 | . 91 | -1.33 | -. 02 | . 04 |
| 5-year | 2.97 | 2.37 | 2.33 | 2.46 | -. 51 | . 09 | . 13 |
| 10-year | 3.93 | 3.73 | 3.79 | 3.89 | -. 04 | . 16 | . 10 |
| U.S. Treasury indexed notes 5 |  |  |  |  |  |  |  |
| 5-year | 1.33 | . 70 | . 50 | . 42 | -. 91 | -. 28 | -. 08 |
| 10-year | 1.77 | 1.48 | 1.42 | 1.45 | -. 32 | -. 03 | . 03 |
| Municipal general obligations (Bond Buyer) $\underline{\underline{6}}$ ( $_{\underline{6}}$ | 4.54 | 4.39 | 4.19 | 4.31 | -. 23 | -. 08 | . 12 |
| Private instruments |  |  |  |  |  |  |  |
| 10-year swap | 4.26 | 3.62 | 3.74 | 3.82 | -. 44 | . 20 | . 08 |
| 10-year FNMA? | 4.36 | 4.06 | 4.08 | 4.19 | -. 17 | . 13 | . 11 |
| 10-year AAㅇ | 6.62 | 5.12 | 5.04 | 5.04 | -1.58 | -. 08 | . 00 |
| 10 -year BBB ${ }^{8}$ | 7.22 | 6.25 | 6.09 | 5.75 | -1.47 | -. 50 | -. 34 |
| 10 -year high yield ${ }^{8}$ | 10.66 | 9.48 | 9.29 | 8.62 | -2.04 | -. 86 | -. 67 |
| Home mortgages (FHLMC survey rate) |  |  |  |  |  |  |  |
| 30-year fixed | 5.78 | 4.98 | 4.94 | 5.06 | -. 72 | . 08 | . 12 |
|  |  |  |  |  |  |  |  |


| Stock exchange index | Record high |  | 2009 |  |  | Change to Jan. 19 from selected dates (percent) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level | Date | Nov. 3 | Dec. 15 |  | Record high | 2009 Nov. 3 | 2009 Dec. 15 |
| Dow Jones Industrial | 14,165 | 10-9-07 | 9,772 | 10,452 | 10,725 | -24.28 | 9.76 | 2.62 |
| S\&P 500 Composite | 1,565 | 10-9-07 | 1,045 | 1,108 | 1,150 | -26.51 | 10.03 | 3.82 |
| Nasdaq | 5,049 | 3-10-00 | 2,057 | 2,201 | 2,320 | -54.04 | 12.79 | 5.42 |
| Russell 2000 | 856 | 7-13-07 | 571 | 606 | 649 | -24.14 | 13.76 | 7.07 |
| D.J. Total Stock Index | 15,807 | 10-9-07 | 10,729 | 11,385 | 11,865 | -24.93 | 10.59 | 4.22 |

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.
November 3, 2009, is the day before the November 2009 FOMC monetary policy announcement.
December 15,2009 , is the day before the most recent FOMC monetary policy announcement.

## Policy Expectations and Treasury Yields

Figure: Interest Rates

Line Chart, December 15 to January 15. Unit for left scale is percent, unit for right scale is percent. CPI is marked near December 15, December FOMC is marked near December 16, PCE. and New Home Sales are marked near December 23, Initial Claims is marked near December 30, Kohn Speech is marked near January 3, Pending Home Sales is marked near January 4, FOMC minutes is marked near January 6, employment is marked near January 7, and Consumer Credit is marked near January 8. There are two series, "10-year Treasury yield (left scale)," and "December 2010 Eurodollar (right scale)." 10-year Treasury yield begins at about 3.7 and generally decreases to about 3.5 on December 18. It generally increases to about 3.8 around January 1. It generally decreases ending at about 3.5 . December 2010 Eurodollar begins at about 1.3 and generally decreases to about 1.1 on December 18. It generally increases to about 1.6 around January 1 then generally decreases ending at about 1.1.

Note: 5-minute intervals. 8:00 a.m. to 4:00 p.m. No adjustments for term premiums.
Source: Bloomberg.

## Figure: Implied Federal Funds Rate

Line chart, January 2010 to January 2012. Unit is percent. There are two series, "December 15, 2009" and "January 19, 2010." Both series begin at about 0 and generally increase together ending at about 2.5.

Note: Estimated from federal funds and Eurodollar futures, with an allowance for term premiums and other adjustments.
Source: CME group.
Figure: Treasury yield curve
Line chart, 1 to 20 years ahead. Unit is percent. There are two series, "January 19, 2010" and "December 15, 2009." Both series begin at about 0 and generally increase together ending at about 4.5.

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: 10 year Treasury Implied Volatility

Line chart, January 2007 to January 2010. Unit is percent. Data are daily. The December FOMC meeting is marked on the time series. The series begins at about 4 and generally increases to about 15 in September 2008. It generally decreases to about 6 in February 2009 then generally increases to about 12 in May 2009 . It generally decreases ending at about 6 .

## Figure: Inflation Compensation

Line chart, January 2007 to January 2010. Unit is percent. Data are daily. The December FOMC meeting is marked on the timeline. 0 on the scale is marked with a horizontal line. There are two series, " 5 to 10 years ahead," and "Next 5 years" (adjusted for lagged indexation of Treasury inflated-protected securities). 5 to 10 years ahead begins at about 2.5 and generally increases to about 3.5 in the fourth quarter of 2008 . It generally decreases to about 2 around September 2008 then generally increases, ending at about 3 . Next 5 years begins at about 2.5 and generally remains about constant until May 2008. It generally decreases to about negative 2 in the fourth quarter of 2008 then generally increases ending at about 2.

Note: Estimates based on smoothed nominal and inflation-indexed Treasury yields.
Source: Federal Reserve Board.

## Financial Institutions, Short-Term Funding Markets, and Liquidity Facilities

## Figure: Bank Exchange-Traded Funds

Line chart, January 2009 to January 2010. Unit is an index, January 2, $2009=100$. Data are daily. The December FOMC meeting is marked on the timeline. The end of the time line is marked January 19. There are two series, "Large banks" and "Regional and smaller banks." Large banks begins at about 100 and generally decreases to about 40 in March 2009. It generally increases to about 100 in May 2009 then generally decreases to about 80 in June 2009 . It generally increases to about 110 in September 2009 then generally decreases to about 90 at the time of the December FOMC meeting. It generally increases ending at about 105.

Note: Large banks in ETF includes 24 banks. Small banks ETF includes 51 banks.
Source: Keefe, Bruyette and Woods (KBW) and Bloomberg

## Figure: Senior CDS Spreads for Banking Organizations

Line chart, May 2009 to January 2010. Unit is basis points. Data are daily. The December FOMC meeting is marked in the time series. The series end is marked as January 19. There are two series "Other banks" and "Large bank holding companies." Other banks begins at about 200 and generally decreases ending at about 50. Large Bank holding companies begins at about 275 and generally decreases ending at about 100.

Note: Media spreads for 6 large bank holding companies and 8 other banks.
Source: Markit.

## Figure: Libor over OIS spread

Line chart, October 2008 to January 2010. Unit is basis points. Data are daily. The December 2009 FOMC meeting is marked in the time series. The series end is marked January 20. There are three series, "1-month," " 3 - month," and " 6 month." 1 month begins at about 50 and generally increases to about 325 in October 2008. It generally decreases ending at about 0.3 month begins at about 75 and generally increases to about 35 in October 2008. It generally decreases ending at about 0 . 6 month begins at about 100 and generally increases to about 325 in October 2008. It generally decreases ending at about 0.

Source: British Bankers' Association and Prebon.
Figure: Spreads on 30-day Commercial Paper

Line chart, October 2008 to January 2010. Unit is basis points. Data are daily. The December 2009 FOMC meeting is marked in the time series. The series end is marked January 19. There are two series, "ABCP" and "A2/P2." ABCP begins at about 100 and generally increases to about 400 in October 2008. It generally decreases ending at about 0 . A2/P2 begins at about 100 and generally increases to about 600 in the fourth quarter of 2008 . It generally decreases ending at about 0 .

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: Selected Money Market Rates

Line chart, December 2009 to January 2010. Unit is percent. Data are daily. The December FOMC meeting is marked on the time series. The end of the series is marked as January 20. There are three series, "Fed funds effective," "overnight GC repo," and "overnight Libor." Fed funds effective begins at about 0.15 and remains about constant until the middle of December where it generally decreases to about 0.5 . It generally increases ending at about 0.15 . Overnight GC repo begins at about 0.2 and remains about constant until just after the FOMC meeting then generally decreases to about 0 in the middle of December. It generally increases to about 0.2 then generally decreases to about 0.5 . It generally increases ending at about 0.15 . Overnight Libor begins at about 0.2 and generally remains about constant through the series.

Source: Federal Reserve Board.

Line chart, January 2007 to January 2010. Unit is billions of dollars. Data are daily. The December 2009 FOMC meeting is marked in the time series. The end of the series is marked January 18. There are two series, "Other facilities (left scale)" (includes primary, secondary, and seasonal credit; TAF; PDCF; dollar liquidity swaps; CPFF; and AMLF), and "TALF, right scale." Other facilities begins at about 0 and generally increases to about 1500 in January 2009. It generally decreases ending at about 0 . TALF begins at about 0 and remains about constant until the first quarter of 2009. It then generally increases ending at about 50.

Source: Federal Reserve Board.

## Corporate Yields, Risk Spreads, and Stock Prices

## Figure: Selected Stock Price Indexes

Line chart, July 2008 to January 2009. Unit is an index, December 15, $2009=100$. Data are daily. The December 2009 FOMC meeting is marked on the time series The end of the series is marked January 19. There are two series, "S\&P Financial" and "S\&P 500." S\&P financial begins at about 140 and generally decreases to about 40 in March 2009. It generally increases ending at about 115. S\&P 500 begins at about 115 and generally decreases to about 65 in March 2009 . It generally increases ending at about 110.

Source: Standard and Poor's.

## Figure: Expected Real Equity Return and Long-Run Treasury Yield

Line chart, 1990 to 2010. Unit is percent. Data are monthly. The end of the series is marked January 19. There are two series, "Expected 10 year real equity return" and "Expected real yield on 10 year Treasury" (off-the-run 10-year Treasury yield less Philadelphia Fed 10 year expected inflation). Expected 10 year real equity return begins at about 8 and generally decreases to about 2 in mid-1999. It generally increases to about 12 in late 2009 then generally decreases ending at about 8 . The end of the series is marked with a plus sign which denotes the latest observation using daily interest rates and stock process and latest earnings data from I/B/E/S. Expected real yield on 10 year Treasury begins at about 4 and generally decreases to about 2 in late 1994. It generally increases to about 4 and remains about constant until mid-2000. It generally decreases ending at about 2. The end of the series is marked with a plus sign which denotes the latest observation using daily interest rates and stock process and latest earnings data from I/B/E/S.

Source: Thomson Financial.

## Figure: Implied Volatility on S\&P 500 (VIX)

Line chart, 2007 to 2010. Unit is percent. Data are weekly, Friday. (Latest observation is for most recent business day.) The December 2009 FOMC meeting is marked on the time series. The end of the series is marked January 19. The series begins at about 15 and generally increases to about 85 at the end of 2008 . It generally decreases ending at about 15.

Source: Chicago Board of Exchange.

## Figure: Corporate Bond Yields

Line chart, 2007 to 2010. Unit is percent. Data are daily. The December 2009 FOMC meeting is marked on the time series. The end of the series is marked January 19. There are two series, "10 year high yield" and "10 year BBB." 10 year high yield begins at about 8 and generally increases to about 19 at the end of 2008 . It generally decreases to about 14 in 2009 then generally increases to about 17. It generally decreases ending at about 8 . 10 year BBB begins at about 6 and generally increases to about 9 in 2008. It generally decreases ending at about 5.

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

## Figure: Corporate Bond Spreads

Line chart, 2002 to 2010. Unit is basis points. Data are daily. The December 2009 FOMC meeting is marked on the time series. The end of the series is marked January 19. There are two series, "10 year high yield (left scale)" and "10 year BBB (right scale)." 10 year high yield begins at about 600 then generally increases to about 900 in late 2002. It generally decreases to about 300 in late 2004 then generally increases to about 950 in late 2008. It generally decreases ending at about 250. 10 year BBB begins at about 200 and generally increases to about 300 in late 2002 . It generally decreases to about 100 in late 2004 then generally increases to about 650 in late 2008. It generally decreases ending at about 200.

Note: Spreads over 10 year Treasury yield.
Source: Staff estimates of smoothed corporate yield curves based on Merrill Lynch data and smoothed Treasury yield curve.
Figure: Estimated Median Bid-Asked Spread for Corporate Bonds

Line chart, 2005 to 2010. Unit is basis points. Data are daily. The December 2009 FOMC meeting is marked on the time series. The end of the series is marked January 19. There are two series, "High-yield" and "Investment grade." High yield begins at about 125 and generally increases to about 225 at the end of 2005 . It generally decreases to about 100 and remains about constant until late 2008. It then generally increases to about 400 in early 2009 then generally decreases ending at about 100. Investment grade begins at about 100 and generally decreases to about 50 at the end of 2005. It remains about constant until late 2007 where it generally increases to about 100. In mid-2008 it generally decreases to about 50 then generally increases to about 150 in late 2008 . It generally decreases ending at about 75 .

## Corporate Earnings and Credit Quality

## Figure: Domestic Corporate Profits before Tax

Line chart, 1988 to 2009. Unit is billions of dollars. Data are quarterly profits before tax plus capital consumption adjustment. There are shaded bars marking 1991 and 2001. There is a vertical line marking 2007. The end of the series are marked Q3. There are two series, "Nonfinancial" and "Financial." Nonfinancial begins at about 300 and generally increases to about 600 in 1998. It generally decreases to about 300 in 2001 then generally increases to about 950in 2006. It generally decreases, ending at about 700. Financial begins at about 0 and generally increases to about 500 in 2006. It generally decreases to about 150 in 2008 then generally increases ending at about 400.
 indicates the NBER Peak in December 2007.

Source: Bureau of Economic Analysis

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

Line chart, 2000 to 2010. Unit is percent. Data are monthly. There is a horizontal line marking 0 on the scale. The end of the series is marked mid-January. The series begins at about 0 and generally decreases to about negative 6 in late 2001. It generally increases to about 1 in mid-2004 then generally decreases to about negative 13 in early 2009. (Note: Revision in February 2009 was negative 17.2 percent.) It generally increases to about 3 in early 2010 then generally decreases ending at about 0.5.

Note: Index 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
Source: Thomson Financial.

## Figure: Financial Ratios for Nonfinancial Corporations

Line chart, 1990 to 2008. Unit is ratio. Note: Data are annual through 1999 and quarterly thereafter. The end of the series is marked Q3. There are two series, "Debt over total assets (left scale)" and "Liquid assets over total assets (right scale)." Debt over total assets begins at about . 33 and generally decreases to about . 28 in mid1996. It generally increases to about . 31 in mid-1999 then generally decreases to about .24 in late2005. It generally increases to about .30 in late 2008 then generally decreases ending at about .28. Liquid assets over total assets begins at about .05 and generally increases to about .10 in early 2004 . It generally decreases to about .08 in early 2008 then generally increases ending at about . 10 .

Source: Compustat.

## Figure: Bond ratings Changes of Nonfinancial Companies

Bar chart, 1991 to 2009. Unit is percent of outstandings. Data are annual rate. There are two series, "Upgrades" and "Downgrades." Approximate values for Upgrades are: 1991: 15. 1992: 12. 1993: 13. 1994: 12. 1995: 20. 1996: 15. 1997: 14. 1998: 17. 1999: 16. 2000: 15. 2001: 14. 2002: 5. 2003: 6. 2004: 12. 2005: 13. 2006: 12. 2007: 13. 2008: 5. 2009:H1: 6. 2009:Q3: 7. 2009:Q4: 10. Approximate values for downgrades are: 1991: 25. 1992: 35. 1993: 18. 1994: 10. 1995: 8. 1996: 11. 1997: 10. 1998: 11. 1999: 16. 2000: 20. 2001: 30. 2002: 39. 2003: 18. 2004: 10. 2005: 16. 2006: 17. 2007: 10. 2008: 18. 2009:H1: 30. 2009:Q3: 10. 2009:Q4: 10.

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

## Figure: Selected Default and Delinquency Rates

Line chart, 1990 to 2009. Unit is percent of outstandings. The end of the first series is marked Q3. The end of the second series is marked December. There are two series, "C\&I delinquency rate" and "Bond default rate" (6-month trailing defaults divided by beginning of period outstandings, at an annual rate). C\&I delinquency rate begins at about 5 and generally increases to about 6 in early 1991. It generally decreases to about 2.5 in early 1998 then generally increases to about 4 in mid-2002. It generally decreases to about 1 in early 2006 then generally increases ending at about 4.5 . Bond default rate begins at about 1.5 and generally increases to about 3 in mid-1991. It generally decreases to about 0 in mid-1992 and remains about constant until late 1999. It generally increases to about 4 in mid-2002 then generally decreases to about 0 in late 2006. It generally increases to about 7.5 in late 2008 then generally decreases ending at about . 5 .

Source: For default rate, Moody's Investors Service; for delinquency rate. Call report data

## Figure: Expected Nonfinancial Year-Ahead Defaults

Line chart, 1995 to 2010. Unit is percent of liabilities. Data are monthly. The end of the series is marked January. The series begins at about 0 and generally increases to about 4.5 in mid-2002. It generally decreases to about 0 in late 2007 then generally increases to about 5 in late 2009. It generally decreases ending at about 1.5 .

## Business Finance

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

| Type of security | 2005 | 2006 | 2007 | 2008 | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | H1 | Q3 | Q4 | Dec. |
| Nonfinancial corporations |  |  |  |  |  |  |  |  |
| Stocks ${ }^{1}$ | 4.6 | 4.7 | 5.5 | 3.7 | 5.3 | 5.4 | 5.0 | 4.8 |
| Initial public offerings | 1.7 | 1.8 | 1.6 | . 3 | . 2 | . 6 | 1.6 | 1.5 |
| Seasoned offerings | 2.8 | 2.9 | 3.8 | 3.4 | 5.1 | 4.8 | 3.4 | 3.3 |
| Bonds ${ }^{2}$ | 18.7 | 29.3 | 35.1 | 27.7 | 50.1 | 30.4 | 30.3 | 24.0 |
| Investment grade | 8.7 | 13.1 | 17.5 | 19.5 | 32.6 | 13.4 | 14.3 | 10.0 |
| Speculative grade | 5.2 | 6.2 | 7.5 | 1.8 | 5.3 | 7.4 | 8.2 | 9.7 |
| Other (sold abroad/unrated) | 4.8 | 10.1 | 10.0 | 6.4 | 12.2 | 9.7 | 7.8 | 4.3 |
| Memo |  |  |  |  |  |  |  |  |
| Net issuance of commercial paper ${ }^{3}$ | -. 2 | 2.4 | -. 4 | 1.6 | -12.4 | -. 9 | -2.9 | . 3 |
| Change in C\&l loans at commercial banks ${ }^{3}$ | 10.2 | 11.0 | 21.2 | 12.8 | -17.4 | -33.8 | -20.9 | -22.0 |
| Financial corporations |  |  |  |  |  |  |  |  |
| Stocks ${ }^{1}$ | 5.0 | 5.3 | 8.6 | 13.5 | 15.9 | 5.5 | 19.5 | 53.7 |
| Bonds ${ }^{2}$ | 170.4 | 180.6 | 151.7 | 45.4 | 44.5 | 38.9 | 28.0 | 29.3 |

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; End-of-period basis, seasonally adjusted. Return to table

Source: Depository Trust \& Clearing Corporation; Thomson Financial; Federal Reserve Board.
Figure: Selected Components of Net Debt Financing

Bar chart, 2005 to 2009. Unit is billions of dollars. Data are monthly rate, nonfinancial firms. There are three series, "Commercial paper," "C\&l loans," and "Bonds" Commercial paper and C\&l loans are seasonally adjusted, period end basis, bonds are not. There is also a "Total" series presented as a line chart which sums the total of the other series. Approximate values are: 2005: Bonds 5, C\&l loans: 10, Total, 15. 2006: Bonds, 20, C\&l loans, 10, Commercial Paper, 5, Total, 35. 2007: Bonds 23, C\&I loans 22, Total, 45. 2008: Bonds 20, C\&l loans 15, Commercial paper 5, Total 30. 2009:H1: Bonds 40, C\&l loans negative 20, commercial paper, negative 10, total 10. 2009:Q3: Bonds 20, C\&l loans negative 33, Commercial paper negative 2, total negative 15. 2009:Q4: Bonds: 21, C\&l loans: negative 20, commercial paper negative 1, total, 0.

Source: Depository Trust and Clearing Corporation; Thomson Financial, Federal Reserve Board.

## Figure: Components of Net Equity Issuance

Bar chart, 2005 to 2009. Unit is billions of dollars. Data are monthly rate, nonfinancial firms. There are four series, "Public Issuance," "Private Issuance," "Repurchases," and "Cash mergers." Private issuance was revised back to 2005. There is also a "Total" series presented as a line chart which sums the total of the other series. Approximate values are: 2005: Public Issuance 5, private issuance 10, repurchases negative 25, cash mergers negative 15, total negative 25. 2006: Public Issuance: 5, private issuance: 15 , Repurchases negative 40, cash mergers negative 20, total negative 40. 2007: Public issuance: 5, private issuance 20, repurchases negative 45 , cash mergers 40 , total negative 60. 2008: Public issuance 5, private issuance 20, repurchases negative 30 , cash mergers negative 20 , total negative 35. 2009:H1: Public issuance 5, private issuance 15, repurchases negative 7, cash mergers negative 3 , total 10. 2009:Q3 (estimate): public issuance 3 , private issuance 16, repurchases negative 15, cash mergers negative 2, total 2. 2009:Q4 (estimate): public issuance: 4, private issuance: 16, repurchases negative 10 , cash mergers negative 30 , total negative 20.

Source: Thomson Financial, Investment Benchmark Report; Money Tree Report by Price Waterhouse Coopers, National Venture Capital Association, and Venture Economics.

## Commercial Real Estate

Figure: Commercial Mortgage Debt

Line chart, 2001 to 2009. Unit is percent change, annual rate. Data are quarterly. The end of the series is marked Q3. 0 on the scale is marked by a horizontal line. The series begins at about 9 and generally increases to about 18 in late 2005. It generally decreases to about 9 in early 2007 then generally increases to 18 in late 2007. It generally decreases ending at about negative 3 .

Source: Federal Reserve Board.

Figure: Commercial Real Estate Sales

Line chart, 2001 to 2009. Unit for left scale is Billions of Dollars. Unit for Right scale is percent. The end of the series is marked December. There are two series, "Share of properties sold at nominal loss (right scale)" and "Value of sales (left scale)." Share of properties sold at nominal loss begins at about 5 and generally fluctuates between 5 and 10 until early 2008. It generally increases ending at about 55 . Value of sales begins at about 5 and generally increases to about 80 in early 2007. It generally decreases ending at about 5 .

Note: 3-month moving averages.
Source: Real Capital Analytics.

## Figure: Prices of Commercial Real Estate

Line chart, 1996 to 2010. Unit is an index, 2001:Q1=100. The end of the first series is marked October. The end of the second series is marked Q3. There are two series, "Moody's Index" and "NCREIF TBI." Both series begin at about 75 and generally increase together to about 200 in early 2007 . They generally decrease together with Moody's index ending at about 125 and NCREIF TBI ending at about 100.

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

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

Line chart, 1996 to 2010. Unit is percent. The ends of the first and third series are marked as Q3. The end of the second series is marked as December. There are three series, "At life insurance companies," "CMBS," and "At commercial banks" (excluding farmland). At life insurance companies begins at about 2.5 and generally decreases ending at about 0 . CMBS begins at about 0.5 in late 1998 and generally increases to about 2 in early 2004 . It generally decreases to about 0.5 in late 2007 then generally increases ending at about 6 . At commercial banks begins at about 3.5 and generally decreases to about 1 in mid-2006. It generally increases ending at about 5 .

Note: CMBS are commercial mortgage-backed securities.
Source: Citigroup; Call report data; ACLI.
Figure: Delinquency Rates on Construction Loans at Banks

Line chart, 2007 to 2010. Unit is percent. Data are quarterly. The ends of the series are marked Q 3. There are two series, "Residential Construction" and "Commercial Construction." Residential Construction begins at about 2 and generally increases ending at about 40. Commercial construction begins at about 1 and generally increases ending at about 15.

Note: Data series begin in 2007:Q1
Source: Call report data.

## Figure: Commercial Mortgage CDS Index Prices

Line chart, July 2007 to January 2010. Unit for left scale is CMBX. Unit for right scale is percent. Data are daily, by rating. The December FOMC meeting is marked by a vertical line in 2009. There are three series, "Senior AAA," "Junior AAA," and "BBB-." Senior AAA begins at about 100 and generally decreases to about 60 in October 2008. It generally increases ending at about 80. Junior AAA begins at about 100 and generally decreases to about 20 in October 2008 . It generally increases ending at about 60. BBB- begins at about 100 and generally decreases ending at about 20.

Note: Each index corresponds to pools of mortgages securitized in 2006:H1.
Source: J P Morgan Chase and Company.

## Residential Mortgages

## Figure: Mortgage Rate and MBS Yield

Line chart, January 2007 to January 2009. Unit is percent. Data are weekly. The end of the first series is marked January 13. The end of the second series is marked January 19. The December FOMC meeting is marked by a vertical line in 2009. There are two series, "30-year conforming fixed mortgage rate" and "MBS yield." 20 year conforming fixed mortgage rate begins at about 6.25 and generally increases to about 6.75 in June 2007. It generally decreases to about 6 in April 2008 then generally increases to about 6.5 in October 2008. It generally decreases ending at about 5 . MBS yield begins at about 6 and generally decreases to about 5 in November 2007. It generally increases to about 6.5 in October 2009 then generally decreases to about 4 in March 2009. It generally increases to about 5 then generally decreases ending at about 4.25.

## Figure: Spread of Mortgage Rate to Treasury Yield

Line chart, January 2007 to January 2009. Unit is basis points, data are weekly. The end of the series is marked January 13. The December FOMC meeting is marked by a vertical line in 2009. There is one series, "30-year FRM to 10-year Treasury." The series begins at about 150 and generally increases to about 250 in mid-2008. It generally decreases ending at about 100.

Note: Spread is relative to corresponding off-the-run Treasury yield.
Source: Bloomberg, Freddie Mac.

## Figure: Net Agency MBS Issuance

Line chart, 2003 to 2009. Unit is billions of dollars. 0 on the scale is marked by a horizontal line. The end of the series is marked November. The series begins at about 30 and generally increases to about 50 in late 2003. It generally decreases to about 0 in early 2004 then generally increases to about 60 in late 2007 . It generally decreases to about 20 in early 2009 then generally increases to about 80 in late 2009. It generally decreases ending at about 20 .

Note: 3-month moving average
Source: FHLMC, FNMA, and GNMA.

## Figure: Prices of Existing Homes

Line chart, 2005 to 2009. Unit is an index, with peaks normalized to 100. Data are monthly. The ends of the first and third series are marked as October. The end of the second series is marked November. There are three series, "FHFA price index," "LP price index," and "20-city S\&P Case-Shiller price index." FHFA price index begins at about 90 and generally increases to about 100 in early 2007. It generally decreases ending at about 90 . LP price index and 20-city S\&P Case-Shiller price index begin at about 90 and generally increase together to about 100 in mid-2006. They generally decline to about 65 at the end of 2008 then generally increase together ending at about 70 .

Source: For FHFA, Federal Housing Finance Agency; for LP, LoanPerformace, a division of First American Core Logic; for S\&P Case-Shiller, Standard and Poor's.

## Figure: Delinquencies on Prime Mortgages

Line chart, 2001 to 2009. Unit is percent of loans. Data are monthly. The ends of the series are marked November. There are two series, "Variable Rate" and "Fixed rate." Variable rate begins at about 3 and remains about constant until mid-2006. It generally increases ending at about 15 . Fixed rate begins at about 1 and remains about constant until late 2007. It generally increases ending at about 6.

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, 2001 to 2009. Units for left and right scales are percent of loans. The end of the left scale series is marked November. The end of the right scale series is marked October. There are two series, "FHA (left scale)" and "Subprime (right scale)." FHA begins at about 4 and generally increases ending at about 30 . Subprime begins at about 2 and remains about constant until mid-2007. It generally increases ending at about 45.

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, McDash Analytics; for subprime mortgages, LoanPerformance, a division of First American Core Logic.

## Consumer Credit and Mutual Funds

## Figure: Consumer Credit

Line chart, 2004 to 2010. Unit is percent change, annual rate. Data are 3-month change. The ends of the series are marked November. There are two series, "Revolving" and "Non-revolving." Revolving begins at about 3 and generally increases to about 8 in early 2005. It generally decreases to about 4 in mid-2006 then generally increases to about 8 in late 2007. It generally decreases to about negative 12 in early 2009. It generally increases to about negative 8 in late 2009 then generally decreases ending at about negative 12. Non-revolving begins at about 6 then generally increases to about 8 in late 2005 . It generally decreases ending at about 0 .

Bar chart, 2005 to 2009. Unit is billions of dollars. Data are monthly rate. There are two series, "TALF eligible" and "Non-TALF." Approximate values are: 2005: NonTALF, 20. 2006: Non-TALF, 20. 2007: Non-TALF, 20. 2008:H1, Non-TALF, 18. 2008:H2: Non-TALF, 4. 2009:H1: TALF eligible, 6, Non-TALF, 4. 2009:Q3: TALF Eligible, 12, Non-TALF, 4. 2009:Q4:, TALF Eligible, 3, Non-TALF, 5.

Note: Credit card, auto, and student loan ABS
Source: Inside MBS and ABS; Merrill Lynch; Bloomberg; Federal Reserve Board
Figure: Spread of Consumer Interest Rates to Treasury Yield

Line chart, 2002 to 2010 . Unit is percent. The end of the first series is marked November. The end of the second series is marked January 10. There are two series, "Credit cards" and "New auto loans." Credit cards begins at about 11 and generally decreases to about 7 in late 2005. It generally increases ending at about 14. New auto loans begins at about 4 and remains about constant until mid-2007. It generally increases to about 6 in 2008 then generally decreases ending at about 4.

Note: Spreads are relative to 2-year Treasury yields.
Source: For credit cards, Mintel; for auto loans, PIN.
Figure: Delinquencies on Consumer Loans

Line chart, 1998 to 2010. Unit is percent. The ends of the first and third series are marked as November. The end of the second series is marked Q3. 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 at about 5 and generally decreases to about 4.5 in early 2000. It generally increases to about 5 in early 2002 then generally decreases to about 3 in early 2006. It generally increases ending at about 6 . Nonrevolving consumer loans at commercial banks begins at about 3 and generally decreases to about 2 in early 2006. It generally increases ending at about 4. Auto Loans at captive finance companies begins at about 3 then generally decreases to about 2 in early 1999. It generally increases to about 3 in mid- 2001 then generally decreases to about 2 in mid-2004. It generally increases ending at about 3 .

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

| Net Flows into Mutual Funds (Billions of dollars, monthly rate) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fund type | 2008 |  | 2009 |  |  |  |  | Assets Nov. |
|  | H1 | H2 | H1 | Q3 | Oct. | Nov. | Dec. ${ }^{\text {e }}$ |  |
| Total long-term funds | 11.8 | -49.4 | 23.3 | 47.9 | 40.7 | 36.8 | 26.9 | 7,641 |
| Equity funds | -3.6 | -35.2 | -0.1 | 0.9 | -7.1 | -2.8 | -4.2 | 4,825 |
| Domestic | -5.0 | -20.2 | 0.9 | -3.7 | -14.8 | -8.8 | -8.1 | 3,580 |
| International | 1.3 | -15.1 | -1.0 | 4.6 | 7.8 | 6.0 | 3.9 | 1,245 |
| Hybrid funds | 1.7 | -5.0 | -0.3 | 5.2 | 2.9 | 3.4 | 2.6 | 629 |
| Bond funds | 13.8 | -9.2 | 23.8 | 41.8 | 44.9 | 36.2 | 28.6 | 2,186 |
| High-yield | -0.2 | 0.1 | 2.8 | 1.4 | 0.7 | 0.3 | 1.2 | 182 |
| Other taxable | 11.1 | -7.7 | 16.2 | 31.8 | 39.5 | 31.0 | 22.5 | 1,554 |
| Municipals | 2.9 | -1.6 | 4.8 | 8.7 | 4.8 | 5.0 | 4.8 | 450 |
| Money market funds | 56.1 | 59.6 | -27.3 | -81.1 | -70.9 | -33.7 | -30.7 | 3,327 |

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

## Treasury Finance

Figure: Treasury Auction Amounts

Line chart, 2005 to 2010. Unit is billions of dollars. Data are quarterly. The ends of the third and fourth series are marked Q4. There are four series, "2-year," "3-year," " 5 -year," and "10-year." 2 year begins at about 70 and generally decreases to about 60 in late 2007. It generally increases ending at about 140 . 3 year begins at about 20 and generally decreases to about 0 in late 2007 then generally increases ending at about 120.5 year begins at about 40 and remains about constant until early 2008, then it generally increases ending at about 130. 10 year begins at about 20 and remains about constant until early 2009 . It generally increases to about 60 then decreases to about 40 at the end of 2009. It generally increases ending at about 70 .

Note: No 3-year issuance between 2007:Q3 and 2008:Q3.
Source: U.S. Treasury.
Figure: Foreign Participation in Treasury Auctions

Line chart, 2003 to 2010. Unit is percent of total issue. Data are 6-month moving average. The ends of the series are marked as January 15. The December FOMC meeting is marked by a vertical line in 2009. There are two series, "Indirect bids" and "Actual foreign allotment." Indirect bids begins at about 25 and generally increases to about 45 in late 2004. It generally decreases to about 20 in mid-2008 and generally increases ending at about 50 . Actual foreign allotment begins at about 15 and generally increases to about 25 in late 2004. It generally decreases to about 10 in mid-2008 then generally increases ending at about 30 .

Note: Indirect bids and actual allotment are a percentage of the total amount accepted, including the amount tendered to the Federal Reserve. Moving averages include 2, 5, and 10 year original auctions and reopenings.

Source: Federal Reserve Board.

## Figure: Daily Treasury Market Volume

Line chart, 2004 to 2010 . Unit is billions of dollars. Data are monthly average. The end of the series is marked January. The December FOMC meeting is marked by a vertical line in 2009. The series begins at about 75 and generally increases to about 200 in early 2007. It generally decreases to about 100 in mid- 2007 then generally increases to about 200 in early 2008. It generally decreases to about 75 in late 2008 then generally increases ending at about 100 .

Note: January observation is the month-to-date average.
Source: Bloomberg.

## Figure: Average Absolute Nominal Yield Curve Fitting Error

Line chart, 2001 to 2010. Unit is basis points. Data are daily. The end of the series is marked January 19. The December FOMC meeting is marked by a vertical line in 2009. The series begins at about 2 and remains about constant until mid-2007. It generally increases to about 22 in late 2008 then generally decreases ending at about 2.

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, 2000 to 2010. Unit is basis points. Data are monthly average. The end of the series is marked January. The December FOMC meeting is marked by a vertical line in 2009. There is one series, "10-year note." It begins at about 10 then generally increases to about 25 in early 2002 . It generally decreases to about 10 in mid-2006 then generally increases to about 60 in mid-2008. It generally decreases ending at about 15 .

Note: Computed as the spread of the yield read from an estimated off-the-run yield curve over the on-the-run Treasury yield. January observation is the month-to-date average.
Source: Federal Reserve Board.
Figure: Fails to Deliver of Treasury Securities

Line chart, 2007:Q1 to 2010:Q1. Unit is billions of dollars. Data are weekly. The end of the series is marked January 6. The December FOMC meeting is marked by a vertical line in 2009. The series begins at about 0 and remains about constant until 2008:Q1. It generally increases to about 1000 the generally decreases to about 0 in 2008:Q3. It generally increases to about 2500 in 2009:Q1 then generally decreases ending at about 0 .

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 | 2005 | 2006 | 2007 | 2008 | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | H1 | Q3 | Q4 | Dec. |
| Total | 38.4 | 36.1 | 40.4 | 37.6 | 36.6 | 42.0 | 43.2 | 40.9 |
| Long-term ${ }^{1}$ | 34.2 | 32.5 | 35.5 | 32.6 | 33.0 | 30.7 | 40.2 | 36.2 |
| Refundings ${ }^{\underline{2}}$ | 15.6 | 10.6 | 12.6 | 14.6 | 12.5 | 11.2 | 16.0 | 10.0 |
| New capital | 18.6 | 21.9 | 22.9 | 17.9 | 20.4 | 19.5 | 24.2 | 26.1 |
| Short-term | 4.2 | 3.7 | 4.9 | 5.0 | 3.6 | 11.2 | 3.1 | 4.7 |
| Memo: Long-term taxable | 2.1 | 2.5 | 2.4 | 2.3 | 4.5 | 7.9 | 11.9 | 10.5 |

[^8]2. All issues that include any refunding bonds. Return to table

Source: Thomson Financial.

## Figure: Ratings Changes

Bar chart, 1989 to 2009. Unit is number of ratings changes. Data are annual rate. There are two series, "Upgrades" and "Downgrades." Approximate values are: 1989: Upgrades, 300, Downgrades 200. 1990: Upgrades, 200, Downgrades 200. 1991: Upgrades 300, Downgrades 300. 1992: Upgrades 200, downgrades 200. 1993: upgrades 300, downgrades 150. 1994: upgrades 300, downgrades, 200. 1995: upgrades, 350, downgrades 200. 1996: upgrades 300, downgrades 100. 1997: upgrades, 300, downgrades, 150. 1998: upgrades 700, downgrades, 200. 1999: upgrades 600, downgrades, 100. 2000: upgrades 600, downgrades, 200. 2001: upgrades 650, downgrades, 200. 2002: upgrades, 600, downgrades, 200. 2003: upgrades, 500, downgrades, 300. 2004: upgrades, 500, downgrades, 200. 2005: upgrades, 600, downgrades, 300. 2006: upgrades, 550, downgrades, 200. 2007: upgrades, 700, downgrades, 150. 2008: upgrades, 500, downgrades $250.2009: H 1$, upgrades, 400, downgrades, 500. 2009:Q3, upgrades, 350, downgrades, 600.

Source: Moody's Credit Trends.
Figure: Municipal Bond Yields

Line chart, 2005 to 2010. Unit is percent. Data are weekly. The end of the first series is marked January 14. The end of the second series is marked January 6 . The December FOMC meeting is marked by a vertical line in 2009. There are two series, "20 year general obligation" and "7 day SIFMA swap index" (SIFMA is the Securities Industry and Financial Markets Association). 20 year general obligation begins at about 4.5 and remains about constant until early 2007. It generally increases to about 6 in late 2008 then generally decreases ending at about 4.7 day SIFMA swap index begins at about 1.5 and generally increases to about 4 in mid2007. It generally decreases to about 1.5 in mid-2008. It generally increases to about 8 in late 2008 then generally decreases ending at about 0 .

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

Line chart, 2002 to 2010. Unit of left scale is General Obligation over Treasury. Unit of right scale is Ratio. Data are weekly. The end of the series is marked January 14. The December FOMC meeting is marked by a vertical line in 2009 . There is one series, " 20 year." It begins at about 0.9 and generally fluctuates between 0.9 and 1.0 until early 2006. It generally increases to about 1.9 in late 2008 then generally decreases ending at about 0.9.

Source: Bond Buyer.

## M2 Monetary Aggregate

(Based on seasonally adjusted data)

| Aggregate and components | Percent change (annual rate) ${ }^{\mathbf{1}}$ |  |  |  |  |  | Level (billions of dollars), Dec. (p) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 | 2009 (p) | 2009 |  |  |  |  |
|  |  |  | Q3 | Q4 (p) | Nov. | Dec. (p) |  |
| M2 | 8.5 | 4.9 | 1.6 | 3.4 | 3.9 | 2.1 | 8,524 |
| Components $\underline{\underline{2}}$ |  |  |  |  |  |  |  |
| Currency | 5.8 | 6.9 | 3.8 | 2.0 | -1.3 | . 6 | 862 |
| Liquid deposits ${ }^{3}$ | 6.9 | 17.2 | 14.5 | 18.7 | 18.3 | 14.7 | 5,676 |
| Small time deposits | 12.3 | -16.0 | -23.6 | -31.9 | -30.9 | -30.0 | 1,168 |
| Retail money market funds | 13.0 | -23.0 | -32.2 | -34.8 | -33.3 | -34.9 | 814 |
| Memo: |  |  |  |  |  |  |  |
| Institutional money market funds | 24.9 | -1.9 | -11.0 | -27.6 | -29.9 | -32.2 | 2,220 |
| Monetary base | 70.3 | 41.6 | -1.9 | 62.1 | 51.0 | -. 7 | 2,018 |

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

| Type of credit | 2007 | 2008 | 2009 | Q3 | Oct. | Nov. | Dec. | Level ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2009 |  | 2009 | 2009 | Dec. 2009 |  |  |


| Total | 9.9 | 4.9 | -6.5 | -7.1 | -10.7 | -4.6 | -3.4 | 9,087 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Loans ${ }^{\text {² }}$ |  |  |  |  |  |  |  |  |
| Total | 10.6 | 4.4 | -9.6 | -12.3 | -14.2 | -5.5 | -9.8 | 6,730 |
| Core | 9.5 | 5.0 | -7.6 | -9.5 | -13.1 | -7.2 | -9.6 | 5,983 |
| To businesses |  |  |  |  |  |  |  |  |
| Commercial and industrial | 19.2 | 16.3 | -17.0 | -19.8 | -26.5 | -16.5 | -20.2 | 1,343 |
| Commercial real estate | 9.4 | 6.1 | -4.4 | -5.6 | -9.9 | -8.6 | -9.0 | 1,647 |
| To households |  |  |  |  |  |  |  |  |
| Residential real estate | 5.3 | -3.2 | -5.3 | -7.8 | -11.2 | -. 6 | -1.7 | 2,159 |
| Revolving home equity | 5.6 | 13.0 | . 5 | -4.5 | -5.3 | -5.7 | -6.0 | 602 |
| Closed-end mortgages | 5.3 | -8.0 | -7.4 | -9.1 | -13.4 | 1.3 | -. 1 | 1,558 |
| Consumer | 6.8 | 7.1 | -2.2 | -3.7 | -2.0 | -6.2 | -13.7 | 833 |
| Memo: Originated ${ }^{3}$ | 6.5 | 5.7 | -3.6 | -4.6 | -3.9 | -9.0 | -5.2 | 1,225 |
| Other | 18.5 | . 4 | -22.8 | -33.4 | -22.8 | 8.0 | -11.6 | 747 |
| Securities |  |  |  |  |  |  |  |  |
| Total | 7.7 | 6.8 | 3.9 | 9.5 | -. 5 | -1.8 | 15.2 | 2,358 |
| Treasury and agency | -6.2 | 16.3 | 7.9 | 18.1 | -. 9 | 2.1 | 33.6 | 1,438 |
| Other ${ }^{4}$ | 29.4 | -4.2 | -1.8 | -2.4 | . 0 | -7.6 | -12.7 | 919 |

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
4. Includes private mortgage-backed securities; securities of corporations, state and local governments, and foreign governments; and any trading account securities that are not Treasury or agency securities. Return to table

Source: Federal Reserve Board.

## Figure: C\&I Loans at Commercial Banks

Line chart, 2007 to 2009. Unit is percent change, annual rate. The end of the series is marked December. NBER peak is marked by a vertical line in December 2007. 0 on the scale is marked by a vertical line. There are three series, "Large domestic," "Other," and "Foreign." Large domestic begins at about 10 and generally increases to about 40 in late 2007. It generally decreases ending at about negative 20. Other begins at about 10 and generally increases to about 20 in early 2008 . It generally decreases ending at about negative 5 . Foreign begins at about 10 and generally increases to about 40 in early 2008 . It generally decreases to about 20 in mid- 2008 then generally increases to about 60 in late 2008. It generally decreases ending at about negative 60 .

Note: Three month moving average based on seasonally adjusted data. Large domestic banks include the top 25 domestic banks by assets.
Source: Federal Reserve.
Figure: Composition of Assets at Commercial Banks

Line chart, January 2007 to August 2009. Unit for left scale is Billions of dollars. Unit for right scale is percent. Data are monthly. There is one series, "Total (in billions of dollars)" superimposed over 4 stacked series (in percent), "cash and equivalents," "loans," "Other" (includes loans to banks, trading assets (excluding securities), and other assets not elsewhere classified), and "Securities." Cash and equivalents begins at about 1 percent and remains about constant until October 2009. It generally increases to about 10 percent in August 2009. Loans begins at about 2 percent and generally increases to about 65 percent in August 2009 . Other begins at about 65 percent and generally increases to about 85 percent in August 2009. Securities begins at about 85 percent and increases to about 100 percent in August 2009. Total assets begins at about 10,500 and generally increases to about 11,750 in April 2008. It remains about constant until early October 2008, then generally increases to about 12,500 in late October 2008. It generally decreases ending at about 11,750.

Source: Federal Reserve.

## Appendix: Senior Loan Officer Opinion Survey on Bank Lending Practices

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

Line Chart, 1990 to 2010. Unit is percent. October Survey is marked by a vertical line in 2009. 0 on the scale is marked by a horizontal line. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms." Both series begin at about 60 and generally decrease together to about negative 20 in late 1994. They generally increase to about 60 in late 2000 then generally decrease to about negative 20 in mid- 2005 . They generally increase to about 80 in late 2008 then generally decrease ending at about 0 .

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

Line chart, 1990 to 2010. Unit is percent. October survey is marked by a vertical line in 2009.0 on the scale is marked by a horizontal line. There are two series, "Loans to large and medium sized firms" and "Loans to small firms." Loans to large and medium sized firms begins at about 10 and generally increases to about 60 in early 1991. It generally decreases to about negative 60 in early 1994. It generally increases to about 40 in early 2001 . It generally decreases to negative 70 in early 2005. It generally increases to about 100 in mid-2008 then generally decreases ending at about 10 . Loans to small firms begins at about 20 and generally decreases to about negative 60 in late 1998. It generally increases to about 40 in early 2002 then generally decreases to about negative 60 in early 2005 . It generally increases to about 100 in late 2008 then generally decreases ending at about 10.

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

Line chart, 1990 to 2010. Unit is percent. October survey is marked by a vertical line in 2009. 0 on the scale is marked by a horizontal line. There are two series, "Loans to large and medium sized firms" and "Loans to small firms." Both series begin at about negative 30 and generally increase together to about 40 in mid- 1994. They generally decrease together to about negative 80 in late 2001. They generally increase to about 40 in early 2005 then generally decrease together to about negative 60 in early 2009. They generally increase together ending at about negative 20.

## 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, 1990 to 2010. Unit is percent. October survey is marked by a vertical line in 2009. 0 on the scale is marked by a horizontal line. The series begins at about 70 and generally decreases to about negative 10 in mid-1997. It generally increases to about 40 in late 1998 then generally decreases to about 10 in early 1999 . It generally increases to about 40 in early 2002 then generally decreases to about negative 20 in early 2005. It generally increases 90 in late 2008 then generally decreases ending at about 25.

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

Line chart, 1990 to 2010. Unit is percent. October survey is marked by a vertical line in 2009. 0 on the scale is marked by a horizontal line. The series begins at about 20 in late 1994 then generally increases to about 50 in early 1998. It generally decreases to about negative 60 in late 2001 . It generally increases to about 20 in early 2006 then generally decreases to about negative 70 in early 2009. It generally increases ending at about negative 20.

## Measures of Supply and Demand for Residential Mortgage Loans

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

Line chart, 1990 to 2006. Unit is percent. 0 on the scale is marked by a horizontal line. There is one series, "All Residential." It begins at about 10 and generally increases to about 30 in early 1991. It generally decreases to about negative 10 in early 1994 then generally increases to about 0 in late 1995 . It remains about constant until mid-2002 when it generally increases to about 10. It generally decreases to about negative 5 in mid-2006 then increases ending at about 20.

There is a second line chart showing data from $2007: Q 2$ to $2010: Q 2.0$ on the scale is marked by a horizontal line. There are three series, "Prime," "Nontraditional," and "Subprime." Prime begins at about 18 and generally increases to about 70 in 2006:Q2. It generally decreases ending at about 10. Nontraditional begins at about 45 and generally increases to about 90 in 2009:Q1. It generally decreases ending at about 20 . Subprime begins at about 60 and generally increases to about 100 in 2008:Q4. It generally decreases ending at about 40.

Note: For data starting in 2007:Q2, changes in standards for prime, nontraditional, and subprime mortgage loans are reported separately.

Line chart, 1990 to 2006. Unit is percent. 0 on the scale is marked by a horizontal line. There is one series, "All Residential." The series begins at about negative 60 and generally increases to about 60 in early 1991. It generally decreases to about negative 80 in late 1994 then generally increases to about 60 in early 1995 . It generally decreases to about negative 5 in early 1997 then generally increases to about 60 in mid-1998. It generally decreases to about negative 60 in early 2000 then generally increases to about 40 in mid-2003. It generally decreases ending at about negative 40.

There is a second line chart showing data from 2007:Q2 to $2010: Q 2$. Unit is percent. 0 on the scale is marked by a horizontal line. There are three series, "Prime," "Nontraditional," and "Subprime." Prime begins at about negative 20 and generally decreases to about negative 60 in 2008:Q1. It generally increases to about 40 in 2009:Q2 then generally decreases ending at about negative 5. Nontraditional begins at about negative 20 then generally decreases to about negative 60 in $2008: Q 1$. It generally increases to about negative 30 then generally decreases to about negative 60 in 2008:Q4. It generally increases to about negative 5 in $2009: Q 4$ then generally decreases ending at about negative 5 . Subprime begins at about negative 20 then generally decreases to about negative 80 in $2008: Q 1$. It generally increases to about negative 30 in 2008:Q3 then generally decreases to about negative 100 in 2008:Q4. It generally increases ending at about 0 .

Note: For data starting in 2007:Q2, changes in demand for prime, nontraditional, and subprime mortgage loans are reported separately.

## Measures of Supply and Demand for Consumer Loans

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

Line chart, 1990 to 2010. Unit is percent. October survey is marked by a vertical line in 2009. 0 on the scale is marked by a horizontal line. There are two series, "Credit Card Loans" and "Other Consumer Loans." Credit card loans begins at about 20 in early 1996 and generally increases to about 40 in late 1996 . It generally decreases to about negative 1 in mid-2000 then generally increases to about 20 in early 2001 . It generally decreases to about negative 10 in early 2007 then generally increases to about 60 in early 2008. It generally decreases ending at about 0 . Other consumer loans starts at about 10 in early 1996 then generally increases to about 20 in mid-1996. It generally decreases to about 0 in early 1999 then generally increases to about 20 in mid-2001. It generally decreases to about negative 10 in early 2005 then generally increases to about 60 in early 2008. It generally decreases ending at about 0 .

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

Line chart, 1990 to 2010. Unit is percent. October survey is marked by a vertical line in 2009. 0 on the scale is marked by a horizontal line. The series begins at about 10 and generally decreases to about negative 15 in early 1991. It generally increases to about 30 in early 1994 then generally decreases to about negative 10 in mid1996. It generally increases to about 15 in early 1999 then generally decreases to about negative 10 in early 2002 . It generally increases to about 20 in late 2005 then generally decreases to about negative 60 in late 2008. It generally increases ending at about 10.

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

Line chart, 1990 to 2010. Unit is percent. October survey is marked by a vertical line in 2009.0 on the scale is marked by a horizontal line. The series begins at about negative 30 in late 1991 then generally increases to about 30 in early 1994. It generally decreases to about negative 40 in early 2001 then generally increases to about 30 in mid-2003. It generally decreases ending at about negative 30 .
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

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

## International Developments

Trade in Goods and Services

|  | Annual rate |  |  |  | Monthly rate$2009$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Q2 | Q3 | Q4 ${ }^{\text {e }}$ | Sept. | Oct. | Nov. |
|  | Percent change |  |  |  |  |  |  |
| Nominal BOP |  |  |  |  |  |  |  |
| Exports | -3.4 | -. 8 | 24.8 | 22.4 | 2.8 | 2.7 | . 9 |
| Imports | -7.3 | -9.9 | 37.2 | 24.3 | 5.6 | . 7 | 2.6 |
| Real NIPA |  |  |  |  |  |  |  |
| Exports | -3.4 | -4.1 | 17.8 | $\cdots$ | ... | .. | ... |
| Imports | -6.8 | -14.7 | 21.3 | ... | ... | ... | ... |
|  | Billions of dollars |  |  |  |  |  |  |
| Nominal BOP |  |  |  |  |  |  |  |
| Net exports | -695.9 | -325.0 | -389.5 | -417.6 | -35.7 | -33.2 | -36.4 |
| Goods, net | -840.2 | -461.9 | -528.6 | -561.3 | -47.4 | -45.2 | -48.4 |
| Services, net | 144.3 | 137.0 | 139.0 | 143.8 | 11.7 | 12.0 | 12.0 |

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, 1999 to 2009. Unit is billions of dollars, annual rate. The end of the series is marked November. The series begins at about negative 200 then generally decreases to about negative 800 in late 2006. It generally increases to about negative 300 in late 2008 then generally decreases ending at about negative 400.

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

Bar chart, 1999 to 2009. Unit is percentage points, annual rate. The series begins at about negative 1.5 then generally increases to about -0.1 in late 1999 . It generally decreases to about negative 1.0 in late 2000 then generally increases to about 0.5 in early 2001. It generally decreases to about negative 1.5 in mid- 2004 then generally increases to about 2.5 in early 2008. It generally decreases ending at about -0.75 .

## Figure: Selected Exports

Line chart, 1999 to 2009. Unit is billions of dollars, annual rate. There are four series, "Capital goods, excluding aircraft," "Industrial supplies," "Consumer Goods," and "Aircraft." Capital goods excluding aircraft begins at about 250 and generally increases to about 325 in mid-2000. It generally decreases to about 250 in mid- 2003 then generally increases to about 400 in late 2008. It generally decreases ending at about 325 . Industrial supplies begins at about 125 and generally increases to about 400 in late 2008. It generally decreases ending at about 300 . Consumer goods begins at about 75 and generally increases to about 160 in early 2008 then generally decreases ending at about 150 . Aircraft begins at about 50 and generally increases ending at about 75 .

Figure: Selected Imports

Line chart, 1999 to 2009. Unit is billions of dollars, annual rate. There are four series, "Consumer Goods," "Capital Goods," "Industrial Supplies," and "Oil." Consumer Goods begins at about 225 and generally increases to about 550 in late 2008. It generally decreases ending at about 425. Capital goods begins at about 275 and generally increases to about 360 in mid-2000. It generally decreases to about 300 in late 2001 then generally increases to about 460 in late 2008 . It generally decreases ending at about 400. Industrial supplies begins at about 150 then generally increases to about 350 in mid-2008. It generally decreases ending at about 200 . Oil begins at about 50 and generally increases to about 550 in late 2008. It generally decreases ending at about 275.

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 |  | 2009 |  | 2009 |  | 2009 |  |
|  | Q3 | Q4 ${ }^{\text {e }}$ | Oct. | Nov. | Q3 | Q4 ${ }^{\text {e }}$ | Oct. | Nov. |
| Exports of goods and services | 1570.1 | 1651.5 | 1644.1 | 1658.8 | 84.5 | 81.4 | 43.5 | 14.7 |
| Goods exports | 1055.6 | 1128.6 | 1121.6 | 1135.6 | 71.1 | 73.0 | 38.1 | 13.9 |
| Gold | 14.3 | 14.3 | 16.8 | 11.8 | 2.0 | -. 0 | 1.8 | -5.0 |
| Other goods | 1041.4 | 1114.3 | 1104.9 | 1123.8 | 69.1 | 73.0 | 36.3 | 18.9 |
| Capital goods | 382.2 | 406.8 | 404.7 | 409.0 | 9.1 | 24.6 | 14.6 | 4.3 |
| Aircraft \& parts | 70.4 | 73.2 | 75.8 | 70.6 | -3.0 | 2.8 | 2.3 | -5.2 |
| Computers \& accessories | 37.4 | 40.4 | 39.6 | 41.1 | 1.9 | 3.0 | 3.1 | 1.6 |
| Semiconductors | 38.5 | 43.2 | 41.6 | 44.7 | 3.5 | 4.7 | 3.4 | 3.2 |
| Other capital goods | 235.9 | 250.1 | 247.7 | 252.5 | 6.7 | 14.2 | 5.7 | 4.8 |
| Automotive | 86.4 | 99.4 | 95.1 | 103.7 | 19.7 | 13.0 | 5.0 | 8.6 |
| Ind. supplies (ex. ag., gold) | 283.3 | 300.0 | 300.4 | 299.6 | 33.5 | 16.7 | 3.4 | -. 8 |
| Consumer goods | 150.0 | 160.6 | 164.9 | 156.3 | 5.8 | 10.6 | 11.8 | -8.6 |
| Agricultural | 99.0 | 106.8 | 99.1 | 114.5 | -1.9 | 7.8 | 2.1 | 15.4 |
| All other goods | 40.4 | 40.7 | 40.7 | 40.7 | 3.0 | . 3 | 2.8 | -. 0 |
| Services exports | 514.5 | 522.9 | 522.5 | 523.3 | 13.4 | 8.4 | 5.5 | . 8 |
| Imports of goods and services | 1959.7 | 2069.0 | 2042.4 | 2095.7 | 149.1 | 109.4 | 14.0 | 53.3 |
| Goods imports | 1584.2 | 1689.9 | 1663.8 | 1716.1 | 137.7 | 105.7 | 11.6 | 52.3 |
| Oil | 275.5 | 283.3 | 273.3 | 293.2 | 47.7 | 7.8 | -32.3 | 19.8 |
| Gold | 8.8 | 11.1 | 10.8 | 11.4 | . 4 | 2.3 | 2.4 | . 5 |
| Other goods | 1299.9 | 1395.6 | 1379.6 | 1411.5 | 89.6 | 95.6 | 41.5 | 31.9 |
| Capital goods | 364.2 | 390.7 | 383.4 | 398.0 | 18.6 | 26.5 | 12.5 | 14.6 |
| Aircraft \& parts | 29.1 | 29.9 | 30.6 | 29.2 | -2.3 | . 8 | 1.8 | -1.3 |
| Computers \& accessories | 95.0 | 110.6 | 106.2 | 115.1 | 10.6 | 15.6 | 10.2 | 8.9 |
| Semiconductors | 22.2 | 23.9 | 24.5 | 23.3 | 1.8 | 1.7 | 1.8 | -1.2 |
| Other capital goods | 217.9 | 226.3 | 222.2 | 230.4 | 8.4 | 8.4 | -1.3 | 8.2 |
|  |  |  |  |  |  |  |  |  |
| Automotive | 178.0 | 202.6 | 202.9 | 202.3 | 51.2 | 24.6 | 6.8 | -. 6 |
| Ind. supplies (ex. oil, gold) | 190.5 | 210.7 | 208.5 | 213.0 | 11.8 | 20.3 | 8.2 | 4.6 |
| Consumer goods | 422.6 | 447.4 | 439.2 | 455.5 | 3.5 | 24.7 | 14.6 | 16.3 |
| Foods, feeds, beverages | 81.0 | 82.1 | 83.0 | 81.1 | -. 5 | 1.1 | 2.6 | -1.9 |
| All other goods | 63.6 | 62.1 | 62.6 | 61.6 | 5.1 | -1.5 | -3.1 | -1.0 |


|  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Services imports | 375.5 | 379.1 | 378.6 | 379.6 | 11.3 | 3.7 | 2.4 | 1.0 |
| Memo: | 11.36 | 10.92 | 10.89 | 10.94 | -.26 | -.45 | -1.22 | .05 |
| Oil quantity (mb/d) | 66.25 | 71.02 | 68.69 | 73.34 | 12.55 | 4.73 | -.38 | 4.65 |
| Oil import price (\$/bbl) |  |  |  |  |  |  |  |  |

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.

## Summary of U.S. International Transactions

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

|  | 2007 | 2008 | $\begin{gathered} 2008 \\ \text { Q4 } \end{gathered}$ | Q1 | Q2 | $\begin{gathered} 2009 \\ \text { Q3 } \end{gathered}$ | Oct. | Nov. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Official financial flows | 451.1 | -54.6 | -286.5 | 313.3 | 316.1 | 124.1 | 70.0 | 48.3 |
| 1. Change in foreign official assets in the U.S. (increase, +) | 475.2 | 480.0 | -17.8 | 70.5 | 124.7 | 72.2 | 45.3 | 37.3 |
| a. Long-term Treasury securities | 76.7 | 203.8 | -15.7 | 35.0 | 103.2 | 99.7 | 39.8 | 63.3 |
| b. Short-term Treasury securities | 21.5 | 272.4 | 194.0 | 84.8 | 21.2 | 25.8 | 0.3 | -11.4 |
| c. Long-term agency securities | 171.0 | 66.3 | -95.8 | 0.0 | -3.0 | -29.6 | -3.6 | 3.0 |
| d. Other ${ }^{1}$ | 205.9 | -62.7 | -100.4 | -49.4 | 3.3 | -23.8 | 8.7 | -17.7 |
| 2. Change in U.S. official assets (decrease, +$)^{\underline{2}}$ | -24.1 | -534.6 | -268.7 | 242.8 | 191.4 | 51.9 | 24.7 | 11.0 |
| Private financial flows | 212.5 | 559.7 | 374.8 | -277.9 | -252.8 | -85.8 | ... | ... |
| Banks |  |  |  |  |  |  |  |  |
| 3. Change in net foreign positions of banking offices in the U.S. $\frac{3}{}$ | -81.7 | -7.7 | 318.0 | -277.6 | -196.6 | 36.3 | -1.7 | -44.3 |
| Securities ${ }^{4}$ |  |  |  |  |  |  |  |  |
| 4. Foreign net purchases (+) of U.S. securities | 673.9 | 70.1 | 54.2 | 2.7 | -5.0 | 13.8 | -39.4 | 48.9 |
| a. Treasury securities | 67.1 | 196.1 | 81.3 | 52.7 | -22.4 | -11.7 | -40.0 | 47.0 |
| b. Agency bonds | -8.6 | -186.2 | -21.1 | -49.0 | 2.9 | 6.7 | -4.4 | -0.9 |
| c. Corporate and municipal bonds | 384.7 | 3.1 | -3.1 | -10.9 | -22.5 | -32.3 | -4.3 | -6.3 |
| d. Corporate stocks ${ }^{5}$ | 230.7 | 57.2 | -2.9 | 9.9 | 37.0 | 51.1 | 9.2 | 9.2 |
| 5. U.S. net acquisitions (-) of foreign securities | -366.8 | 46.5 | 58.2 | -33.5 | -91.3 | -48.0 | -24.3 | -3.1 |
| a. Bonds | -218.5 | 46.8 | 23.3 | -32.4 | -54.3 | -21.1 | -19.8 | -5.6 |
| b. Stocks ${ }^{5}$ | -148.3 | -0.4 | 34.9 | -1.1 | -37.0 | -26.9 | -4.4 | 2.5 |

Other flows ${ }^{6}$

| 6. U.S. direct investment (-) abroad | -398.6 | -332.0 | -84.5 | -40.3 | -47.4 | -62.7 | ... | $\ldots$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7. Foreign direct investment in the U.S. | 275.8 | 319.7 | 96.8 | 23.9 | 37.0 | 40.0 | $\ldots$ | $\ldots$ |
| 8. Net derivatives (inflow, +) | 6.2 | -28.9 | -17.7 | 7.2 | 11.3 | 11.5 | ... | ... |
| 9. Foreign acquisitions of U.S. currency | -10.7 | 29.2 | 29.9 | 11.8 | -1.9 | 4.2 | ... | ... |
| 10. Other (inflow, +) ${ }^{\text { }}$ | 114.4 | 462.8 | -80.0 | 27.9 | 41.3 | -80.8 | $\ldots$ | $\ldots$ |
| U.S. current account balance ${ }^{6}$ | -726.6 | -706.1 | -154.9 | -104.5 | -98.0 | -108.0 | ... | ... |
| Capital account balance ${ }^{\text {8 }}$ | -1.9 | 1.0 | -0.7 | -0.7 | -0.7 | -0.7 | ... | ... |
| Statistical discrepancy ${ }^{6}$ | 64.9 | 200.1 | 67.2 | 69.8 | 35.4 | 70.4 | ... | ... |

[^9][^10]
## Foreign Official Financial Inflows (+) through November 2009

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

## Figure: Total

Line chart, 2005 to 2009. The series begins at about 20 and generally increases to about 60 in mid-2006. It generally decreases to about negative 20 in late 2007 then generally increases to about 120 in mid-2008. It generally decreases to about negative 10 in early 2009 then generally increases ending at about 40. The 6-month moving average is also marked. It begins at about 30 and generally increases to about 60 in early 2007 . It generally decreases to about 20 in late 2007 then generally increases to about 60 in mid-2008. It generally decreases to about 10 in early 2009 then generally increases ending at about 40 .

## Figure: Treasury Securities

Line chart, 2005 to 2009. The series begins at about 20 and generally increases to about 30 in early 2006. It generally decreases to about negative 30 in late 2007 then generally increases to about 80 in early 2009. It generally decreases ending at about 50 . The 6 -month moving average is also marked. It begins at about 18 then generally increases to about 20 in early 2006. It generally decreases to about 0 in late 2007 then generally increases ending at about 45 .

## Figure: Long-Term Agency Securities

Line chart, 2005 to 2009. The series begins at about 10 then generally increases to about 35 in early 2007. It generally decreases to about negative 5 in late 2007 then generally increases to about 40 in early 2008. It generally decreases to about negative 40 in late 2008 then generally increases ending at about 5 . The 6 -month moving average is also marked. It begins at about 5 then generally increases to about 25 in mid-2007. It generally decreases to about 5 in late 2007 then generally increases to about 30 in mid-2008. It generally decreases to about negative 20 in late 2008 then generally increases to about 0 in early 2009 . It generally decreases ending at about negative 5 .

Figure: Bank of New York, Daily through January 15, 2010, Foreign Official Balances Held at the Federal Reserve

Line chart, 2007 to 2010. There are three series, "Total Balances, including repo (left scale)," "Treasury Securities (right scale)," and "Agency Securities (right scale)." Total Balances including repo begins at about 1900 and generally increases ending at about 3000 . Treasury securities begins at about 1200 and remains about constant until mid-2008. It generally increases ending at about 2100. Agency securities begins at about 600 and generally increases to about 900 in mid-2008. It generally decreases ending at about 750 .

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 November 2009

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

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

## Figure: Total

decreases to about negative 80 at the end of 2008. It generally increases ending at about 50.6 month moving average is also marked. It begins at about 40 then generally increases to about 90 in mid-2007. It generally decreases ending at about 10.

## Figure: Treasury Securities

Line chart, 2005 to 2009. The series begins at about 10 and increases to about 40 in early 2005 then generally decreases to about negative 40 in early 2006 . It generally increases to about 100 in late 2008 then generally decreases to about negative 40 in early 2009. It generally increases ending at about 50 . 6-month moving average is also marked. It begins at about 0 then generally increases to about 20 in early 2005. It generally decreases to about negative 10 in early 2006 then generally increases to about 20 in late 2008. It generally decreases ending at about 0 .

## Figure: Agency Bonds

Line chart, 2005 to 2009. The series begins at about 10 and remains about constant until early 2007 where it generally decreases to about negative 20 . It generally increases to about 20 in late 2007 then generally decreases to about negative 40 in mid-2008. It generally increases ending at about 0 . 6-month moving average is also marked. It begins at about 20 then generally decreases to about negative 10 in early 2007. It generally increases to about 10 in mid- 2008 then generally decreases to about negative 30 at the end of 2008. It generally increases ending at about 0 .

## Figure: Corporate and Municipal Bonds

Line chart, 2005 to 2009. The series begins at about 20 and generally increases to about 90 in mid-2007. It decreases to about negative 10 in late 2007 then generally increases to about 40 in early 2008. It generally decreases to about negative 20 at the end of 2008 then generally increases to about 40 . It generally decreases ending at about negative 10. 6-month moving average is also marked. It begins at about 20 then generally increases to about 60 in early 2007 . It generally decreases ending at about negative 10.

## Figure: Corporate Stocks

Line chart, 2005 to 2009. The series begins at about 10 and generally increases to about 40 in early 2007. It decreases to about negative 30 in mid- 2007 then generally increases to about 40 in late 2007. It generally decreases to about negative 10 in early 2008 then generally increases ending at about 10 . 6 -month moving average is also marked. It starts at about 10 and generally increases to about 20 in early 2007. It generally decreases to about 0 in late 2008 then generally increases ending at about 20.

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 2009. The series begins at about negative 10 and generally decreases to about negative 60 in early 2007 . It generally increases to about 30 in early 2008 then generally decreases ending at about 0 . 6-Month moving average is marked. It begins at about negative 10 and generally decreases to about negative 40 in early 2007. It generally increases to about 20 in late 2008. It generally decreases ending at about negative 20.

Figure: Bonds

Line chart, 2005 to 2009. The series begins at about 0 and generally increases to about 15 in early 2005. It generally decreases to about negative 40 in early 2007 then generally increases to about 30 in mid-2008. It generally increases ending at about 5 . 6-month moving average is also marked. It begins at about negative 10 then generally decreases to about negative 30 in early 2007. It generally increases to about 20 in late 2008 then decreases ending at about negative 10.

## Figure: Stock Purchases and Swaps

Line chart, 2005 to 2009. The series begins at about negative 10 then generally increases to about 5 in mid-2006. It generally decreases to about negative 30 in late 2006 then generally increases to about 20 in late 2008 then generally decreases ending at about 0.6 -month moving average is also marked. It begins at about negative 10 then generally decreases to about negative 20 in early 2006. It generally increases to about negative 5 in late 2006 then generally decreases to about negative 20 in mid-2007. It generally increases to about 10 in late 2008 then generally decreases ending at about negative 5 .

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

## Prices of U.S. Imports and Exports

## Figure: Merchandise Imports

Line chart, 1999 to 2009. Unit is 12-month percent change. 0 on the scale is marked by a horizontal line. There are two series, "Core goods" and "non-oil goods." Core goods begins at about negative 2 and generally increases to about 2 in early 2000. It generally decreases to about negative 4 in early 2002 . It generally increases to about 8 in mid-2008 then generally decreases to about negative 6 in early 2009. It generally increases ending at about 1 . Non-oil goods begins at about negative 3 then generally increases to about 2 in early 2000. It generally decreases to about negative 6 in early 2002 then generally increases to about 8 in late 2008 . It generally decreases to about negative 8 in early 2009 then generally increases ending at about negative 6 .

## Figure: Categories of Core Imports

Line Chart, 1999 to 2009. Unit is 12-month percent change. 0 on the scale is marked by a horizontal line. There are two series, "Material-Intensive goods" and "Finished goods." Material-intensive goods begins at about negative 3 then generally increases to about 7 in mid-2000. It generally decreases to about negative 10 in early 2002 then generally increases to about 12 in mid-2004. It generally decreases to about 2 in mid- 2006 then generally increases to about 17 in mid-2008. It generally decreases to about negative 18 in early 2009 then generally increases ending at about 2 . Finished goods begins at about 0 and remains about constant until mid-2003. It generally increases to about 2 in mid-2005 then generally decreases to about 0 in early 2006. It generally increases to about 2 in mid-2008 then generally decreases ending at about 0.

## Figure: Oil

Line chart, 1999 to 2009. Unit is dollars per barrel. There are two series, "Spot West Intermediate" and "Import unit value." Both series begin at about 10 and generally increase together to about 135 in mid-2008. They generally decrease together to about 35 in early 2009 then generally increase together ending at about 75.

## Figure: Natural Gas

Line chart 1999 to 2009. Unit for left scale is 2000 equals 100. Unit for right scale is Dollars per million BTU. There are two series, "Import price index (left scale)" and "Spot Henry Hub (right scale)." Import price index begins at about 50 and generally increases to about 225 in early 2001. It generally decreases to about 50 in early 2002 then generally increases to about 275 in early 2006. It generally decreases to about 150 in late 2006 then generally increases to about 300 in late 2009 . It generally decreases ending at about 125. Spot Henry Hub begins at about 2 then generally increases to about 10 in late 2000 . It generally decreases to about 3 in late 2001 then generally increases to about 15 in late 2005. It generally decreases to about 5 in late 2006 then generally increases to about 15 in late 2008 . It generally decreases ending at about 5.

## Figure: Merchandise Exports

Line chart, 1999 to 2009. Unit is 12-month percent change. 0 on the scale is marked by a horizontal line. There are two series, "Core Goods" and "Total Goods." Both series begin at about negative 2 and generally increase together to about 2 in early 2000. They generally decrease together to about negative 2 in early 2002 , then Core goods generally increases to about 14 in mid-2008 and Total Goods increases to about 10 in mid-2008. They both generally decrease together to about negative 10 in mid-2009 and generally increase together ending at about 4.

Source: Bureau of Labor and Statistics; Wall Street Journal; Commodity Research Bureau

## Figure: Categories of Core Exports

Line chart, 1999 to 2009. Unit is 12-month percent change. 0 on the scale is marked by a horizontal line. There are two series, "Material-intensive goods" and "Finished goods." Material-intensive goods begins at about negative 5 and generally increases to about 5 in early 2000 . It generally decreases to about negative 5 in early 2002 then generally increases to about 12 in late 2004. It generally decreases to about 10 in early 2005 and remains about constant until mid-2007. It generally increases to about 25 in early 2008 then generally decreases to about negative 20 in early 2009. It generally increases ending at about 7 .

## Prices of U.S. Imports and Exports

(Percentage change from previous period)

|  | Annual rate |  |  | Monthly rate |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q2 | Q3 | Q4 | Oct. | Nov. | Dec. |
|  | BLS prices |  |  |  |  |  |
| Merchandise imports | 14.9 | 12.0 | 10.9 | . 9 | 1.6 | . 0 |
|  |  |  |  |  |  |  |



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

| Exchange rates* |  |  |
| :--- | ---: | ---: |
| Euro (\$/euro) | 1.4269 | 3.3 |
| Yen (¥/\$) | 91.130 | 3.1 |
| Sterling (\$/£) | 1.6370 | -0.4 |
| Canadian dollar (C\$/\$) | 1.0325 | -2.6 |
| Nominal dollar indexes*^ |  |  |
| Broad index | 101.8 | 0.4 |
| Major Currencies index | 74.1 | 0.8 |
| OITP index | 132.3 | -0.1 |
| Stock market indexes |  |  |
| DJ Euro Stoxx | 279 | 5.0 |
| TOPIX | 950 | 5.9 |
| FTSE 100 | 5513 | 5.6 |
| S\&P 500 | 1150 | 5.3 |

* 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, 2005 to 2009. Unit is an index, January 4, 2005 = 100. Data are weekly. There are three series, "Major currencies index," "Euro," and "Yen." Major currencies index begins at about 100 and generally decreases to about 85 in mid-2008. It generally increases to about 105 in early 2009 then generally decreases ending at about 90 . Euro begins at about 100 and generally increases to about 110 in late 2005. It generally decreases to about 80 in mid-2008 then generally increases to about 110 in early 2009. It generally decreases ending at about 90 . Yen begins at about 100 then generally increases to about 120 in late 2007 then generally decreases to about 95 in early 2008. It generally increases to about 100 in late 2008 then generally decreases to about 85 in early 2009 . It generally increases to about 90 in early 2009 then generally decreases ending at about 90 .

There is a second line chart, September through January 2009. Unit is an index, December 8, $2009=100$. Data are daily. Greenbook is marked by a vertical line in early December. There are three series, "Major currencies index," "Euro," and "Yen." Euro and Major currencies index begin at about 103 and generally decrease together to about 99 in mid-October. They generally increase together to about 100 in early November then generally decrease to about 97 in early December. They generally increase with Major Currencies index ending at about 102 and Euro ending at about 105. Yen begins at about 105 and generally decreases to about 99 in early October. It generally increases to about 103 in late October then generally decreases to about 97 in early December. It generally increases to about 105 in late December then generally decreases ending at about 103.

## Figure: Stock Market Indexes

Line chart, 2005 to 2009. Unit is an index, January 4, 2005 = 100. Data are weekly. There are three series, "DJ Euro Stoxx," "TOPIX," and "S\&P 500." DJ Euro Stoxx begins at about 100 and generally increases to about 160 in mid-2007. It generally decreases to about 70 in early 2009 then generally increases ending at about 100 . TOPIX begins at about 100 then generally increases to about 130 in early 2006. It generally decreases to about 70 in early 2009 then generally increases ending at about 80 . S\&P 500 begins at about 100 then generally increases to about 130 in late 2007 . It generally decreases to about 70 in early 2009 then generally increases ending at about 100.

There is a second line chart, September through January 2009. Unit is an index, December $8,2009=100$. Data are daily. Green book is marked by a vertical line in early December. There are three series, "DJ Euro Stoxx," "TOPIX," and "S\&P 500." DJ Euro Stoxx begins at about 95 and generally increases to about 105 in midOctober. It generally decreases to about 95 in early November then generally increases ending at about 105. TOPIX begins at about 107 then generally decreases to about 90 in late November. It generally increases ending at about 105. S\&P 500 begins at about 90 and generally increases ending at about 105 .

Industrial Countries: Nominal and Real Interest Rates

| Percent |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |


| United States | 0.25 | -0.01 | 3.73 | 0.33 | 1.51 |
| :--- | ---: | ---: | ---: | ---: | ---: |

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

## Figure: Nominal 10-Year Government Bond Yields

Line chart, 2005 to 2009. Unit is percent. Data are weekly. There are three series, "Germany," "Japan," and "United States." Germany begins at about 3.5 and generally increases to about 5 in mid-2008. It generally decreases ending at about 3 . Japan begins at about 1.5 and generally increases to about 2 in mid- 2006 . It generally decreases to about 1.5 in early 2009 and remains about constant until the end of the timeline. United States begins at about 4 and generally increases to about 5 in mid-2007. It generally decreases to about 3 in late 2008 then generally increases ending at about 4.

There is a second line chart, September to January. Unit is percent. Data are daily. Greenbook is marked by a vertical line in early December. There are three series, "Germany," "Japan," and "United States." Germany begins at about 3.2 and remains about constant to the end of the timeline. Japan begins at about 1.2 and remains about constant to the end of the timeline. United States begins at about 3.5 and remains about constant until late November. It generally increases ending at about 4.

Figure: Inflation-Indexed 10-Year Government Bond Yields

Line chart, 2005 to 2009. Unit is percent. Data are weekly. There are three series, "France," "Japan," and "United States." France begins at about 1.5 and generally increases to about 2 in mid-2007. It generally decreases to about 1.5 in early 2008 then generally increases to about 2.5 in late 2008 . It generally decreases ending at about 1. Japan begins at about 1 and generally increases to about 5 in late 2008. It generally decreases ending at about 1.5 . United States begins at about 2 and generally increases to about 3 in mid-2007. It generally decreases to about 1 in early 2008 then generally increases to about 3 in late 2008 . It generally decreases ending at about 1.5.

There is a second line chart, September to January. Unit is percent. Data are daily. Greenbook is marked by a vertical line in early December. There are three series, "France," "Japan," and "United States." France begins at about 1 and generally declines to about . 75 in early October. It generally increases to about 1 and remains about constant until late November. It generally decreases ending at about .75. Japan begins at about 2.25 and generally decreases ending at about 1.5 . United States begins at about 1.75 and generally decreases to about 1.25 in late November. It generally increases ending at about 1.5.

## Measures of Market Volatility

## Figure: Dollar-Euro Options-Implied Volatility

Line chart, 2005 to 2009. Unit is percent, annualized volatility derived from at-the-money options. Data are weekly. There are two series, "1-month" and "3-Month." Both series begin at about 10 and generally remain about constant until mid-2007. They generally increase together until late 2008 where 1-month is about 35 and $3-$ month is about 25 . They generally decrease together ending at about 10.

There is a second line chart, September to January. Unit is percent. Data are daily. Greenbook is marked by a horizontal line in early December. There are two series, "1-month" and " 3 month." 1 month begins at about 14 and generally decreases to about 13 in late September. It generally increases to about 14.5 in early October then generally decreases to about 11 in late November. It generally increases to about 14 in late December then generally decreases ending at about 12 . 3 -month begins at about 14 and generally decreases to about 12 in late November. It generally increases to about 15 in late December then generally decreases ending at about 13.

## Figure: Yen-Dollar Options Implied Volatility

Line chart, 2005 to 2009. Unit is percent, annualized volatility derived from at-the-money options. Data are weekly. There are two series, " 1 month" and " 3 month." The series begin at about 10 and generally increase together until late 2008 where one month is about 40 and 3 month is about 25 . They generally decrease together ending at about 12.

There is a second line chart, September to January. Unit is percent. Data are daily. Greenbook is marked by a vertical line in early December. There are two series, " 1 month" and "3 month." 1 month begins at about 14 and generally decreases to about 13 in late September. It generally increases to about 14.5 in early October then generally decreases to about 11 in late November. It generally increases to about 14 in late November then generally decreases to about 12 in early December. It generally increases to about 14 in late December then generally decreases ending at about 11.5 . 3 month begins at about 14 and generally decreases to about 12.5 in late November. It generally increases to about 15 in late December then generally decreases ending at about 13.

## Figure: Realized Stock Market Volatility

Line chart, 2005 to 2009. Unit is percent, annualized standard deviation of 60-day window of daily returns. Data are weekly. There are three series, "DJ Euro Stoxx," "TOPIX," and "S\&P 500." The three series begin at about 10 and generally increase together to about 70 in late 2008. They generally decrease together ending at about 20.

There is a second line chart, September to January. Unit is percent. Data are daily. Greenbook is marked by a vertical line in early December. There are three series, "DJ Euro Stoxx," "TOPIX," and "S\&P 500." DJ Euro Stoxx begins at about 23 and generally decreases to about 19 in late October. It generally increases to about 22 in mid-December then generally decreases ending at about 19. TOPIX begins at about 19 and generally decreases to about 15 in late November. It generally increases to about 20 in early December then generally decreases ending at about 19. S\&P 500 begins at about 19 and generally decreases to about 15 in late October. It generally increases to about 17 in early November then generally decreases ending at about 15.

## Figure: Realized 10-year bond volatility

Line chart, 2005 to 2009. Unit is percent, annualized standard deviation of 60-day window of daily returns. Data are weekly. There are three series, "Germany,"
"Japan," and "United States." Germany begins at about 4 and generally increases to about 10 in early 2009. It generally decreases ending at about 5 . Japan begins at about 4 and generally increases to about 6 in mid-2008. It generally decreases ending at about 4 . United States begins at about 4 and generally increases to about 16 in late 2008. It generally decreases ending at about 8.

There is a second line chart, September to January. Unit is percent. Data are daily. Greenbook is marked by a vertical line in early December. 0 on the scale is marked by a horizontal line. There are three series, "Germany," "Japan," and "United States." Germany begins at about 6 and remains about constant until late December. It generally decreases ending at about 5 . Japan begins at about 2 and generally remains about constant until the end of the timeline. United States begins at about 10 and generally decreases ending at about 8 .

## Emerging Markets: Exchange Rates and Stock Market Indexes

|  | Exchange value of the dollar |  | Stock market index |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Latest Percent change since |  |  | Percent change since |
|  |  |  | Latest |  |
|  | Dec. Greenbook* |  |  | Dec. Greenbook |
| Mexico | 12.6500 | -1.5 | 32473 | 2.4 |
| Brazil | 1.7767 | 1.5 | 69909 | 3.2 |
| Venezuela | 4.29 | 100.0 | 59699 | 12.3 |
| China | 6.8268 | -0.0 | 3247 | -1.5 |
| Hong Kong | 7.7626 | 0.2 | 21678 | -1.7 |
| Korea | 1129.3 | -1.9 | 1710 | 5.1 |
| Taiwan | 31.83 | -1.2 | 8188 | 5.4 |
| Thailand | 32.89 | -0.8 | 736 | 5.4 |

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


## Figure: Exchange Value of the Dollar

Line chart, 2005 to 2009. Unit is an index, January 4, 2005 = 100. Data are weekly. There are four series, "Mexico," "Brazil," "Korea," and "China." Mexico begins at about 90 and generally remains about constant until mid-2008. It generally increases to about 135 in early 2009 then generally decreases ending at about 120 . Brazil begins at about 90 then generally decreases to about 60 in mid-2008. It generally increases to about 90 in early 2009 then generally decreases ending at about 65. Korea begins at about 120and generally remains about constant until mid-2008. It generally increases to about 150 in early 2009 then generally decreases ending at about 120. China begins at about 90 and generally remains constant until late 2007. It generally decreases ending at about 80 .

There is a second line chart, September to January. Unit is an index, December 8, $2009=100$. Data are daily. Greenbook is marked by a vertical line in early December. There are four series, "Mexico," "Brazil," "Korea," and "China." Mexico begins at about 106 and generally decreases to about 102 in late September. It generally increases to about 107 in early October then generally decreases to about 100 in late October. It generally increases to about 104 in early November then generally decreases to about 97 in early December. It generally increases ending at about 98 . Brazil begins at about 108 and generally decreases to about 97 in early October. It generally increases 102 in late December then generally decreases to about 98 in early January. It generally increases ending at about 102 . Korea begins at about 108 then generally decreases to about 100 in mid-October. It generally increases to about 104 in late October then generally decreases to about 100 in late November. It generally increases to about 194 in December then generally decreases ending at about 98 . China begins at about 100 and generally remains about constant until the end of the timeline.

## Figure: Stock Market Indexes

Line chart, 2005 to 2009. Unit is an index, January 4, 2005 = 100. Data are weekly. There are four series, "Mexico," "Brazil," "Korea," and "Hong Kong." Mexico begins at about 100 and generally increases to about 250 in mid-2007. It generally remains about constant until 2008. It generally increases to about 300 in early 2008 then generally decreases to about 150 in early 2009. It generally increases ending at about 250 . Brazil begins at about 100 then generally increases to about 300 in early 2008. It generally decreases to about 250 in early 2009 then generally increases ending at about 275 . Korea begins at about 100 and generally increases to about 225 in late 2007. It generally decreases to about 125 in late 2008 then generally increases ending at about 200. Hong Kong begins at about 100 and generally increases to about 200 in late 2007. It generally decreases to about 75 in early 2009 then generally increases ending at about 150 .

There is a second line chart, September to January. Unit is an index, December $8,2009=100$. Data are daily. Greenbook is marked by a vertical line in early December. There are four series, "Mexico," "Brazil," "Korea," and "China." Mexico begins at about87 and generally increases to about 100 in late October. It generally decreases to about 87 in early November then generally increases ending at about 100. Brazil begins at about 80 and generally increases to about 100 in late October. It generally decreases to about 87 in early November then generally increases ending at about 100 . Korea begins at about 100 and generally increases to about 105 in late September. It generally decreases to about 95 in early November then generally increases ending at about 105 . China begins at about 87 then generally increases to about 105 in early November. It generally decreases to about 95 in late November then generally increases to about 95 in mid-December. It generally increases to about 103 in late December then generally decreases ending at about 96.

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

Percent

|  | Short-term interest rates* |  | Dollar-denominated bond spreads** |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Latest | Change since Dec. Greenbook | Latest | Change since Dec. Greenbook |
| Mexico | 4.53 | 0.06 | 1.70 | -0.06 |
| Brazil | 9.02 | 0.42 | 2.05 | -0.07 |
| Argentina | 10.69 | 0.00 | 6.79 | -0.88 |
| China | $\cdots$ | $\cdots$ | 0.50 | -0.24 |
| Korea | 2.10 | 0.00 | $\cdots$ | $\ldots$ |
| Taiwan | 1.22 | 0.02 | $\cdots$ | .. |
| Singapore | 0.31 | 0.00 | $\ldots$ | $\ldots$ |
| Hong Kong | 0.06 | 0.01 | $\cdots$ | .. |

* One-month interest rate except 1-week rate for Korea. (No reliable short-term interest rate exists for China.) Return to table
** EMBI+ Spreads or EMBI Global Spreads over similar-maturity U.S. Treasury securities. Return to table
... Not applicable. Korea, Taiwan, and Hong Kong have no outstanding dollar-denominated sovereign bonds. Return to table
Figure: EMBI Plus Spreads

Line chart, 2005 to 2009. Unit is percent. Data are weekly. There are three series, "Overall," "Mexico," and "Brazil." Overall begins at about 4 and generally decreases to about 2 in mid-2007. It generally increases to about 8 in late 2008 then generally decreases ending at about 3.Mexico begins at about 2 and generally remains about constant until mid-2008. It generally increases to about 6 in late 2008 then generally decreases ending at about 2 . Brazil begins at about 4 and generally decreases to about 2 in early 2008. It generally increases to about 5 in late 2008 then generally decreases ending at about 2.

There is a second line chart, September to January. Unit is percent. Data are daily. Greenbook is marked by a vertical line in early December. There are three series, "Overall," "Mexico," and "Brazil." Overall begins at about 3.75 and generally decreases ending at about 2.75 . Mexico begins at about 2.5 and generally decreases ending at about 1.75. Brazil begins at about 2.75 and generally decreases ending at about 2 .

Figure: EMBI Global Spreads

Line chart, 2005 to 2009. Unit is percent. Data are weekly. There are three series, "China," "Malaysia," and "Indonesia." China and Malaysia begin at about 0 and generally remain about constant together until 2007. They generally increase together until late 2008 where China is about 3 and Malaysia is about 4 . They generally decrease together with China ending at about 0 and Malaysia ending at about 1. Indonesia begins at about 2 and generally remains about constant until 2007 . It generally increases to about 10 in late 2008 then generally decreases ending at about 3.

There is a second line chart, September to January. Unit is percent. Data are daily. Greenbook is marked by a vertical line in early December. There are three series, "China," "Malaysia," and "Indonesia." China begins at about 1.5 and generally decreases ending at about .5. Malaysia begins at about 2 and generally decreases ending at about 1.5. Indonesia begins at about 3.5 and generally decreases ending at about 2.5.

## Advanced Foreign Economies

## Figure: Average Real Gross Domestic Product

Line chart, 2000 to 2009. Unit is annualized percent change. Data are quarterly. 0 on the scale is marked by a horizontal line. The series begins around 6 and generally decreases to about negative 1 in late 2001. It generally increases to about 4 in early 2007 then generally decreases to about negative 8 in early 2009 . It generally increases ending at about 1.5.

## Figure: Consumer Prices

Line chart, 2000 to 2009. Unit is 12-month percent change. Data are monthly. 0 on the scale is marked by a horizontal line. There are four series, "Japan," "Euro area," "Canada," and "United Kingdom." Japan begins at about negative 1 and generally increases to about 1 in late 2004. It generally decreases to about negative 2 in late 2005 then generally increases to about 1 in late 2006. It generally decreases to about 0 in late 2007 then generally increases to about 2 in 2008 . It generally decreases ending at about negative 2. Euro area begins at ab 2 and generally remains about constant until mid-2007. It generally increases to about 4 in mid-2008 then generally decreases ending at about 1. Canada begins at about 2.5 and generally decreases to about 1 in late 2001. It generally increases to about 4 in early 2003 then generally decreases to about 2 in early 2004. It generally increases to about 3 in late 2005 then generally decreases to about 1 in mid-2006. It generally increases to about 4 in mid-2008 then generally decreases to about negative 1 in mid-2009 then generally increases ending at about 1 . United Kingdom begins at about 1 then generally increases to about 6 in mid-2008. It generally decreases ending at about 3 .

Source: Haver Analytics.
Figure: Official or Targeted Interest Rates

Line chart, 2000 to 2009. Unit is percent. 0 on the scale is marked with a horizontal line. There are four series, "Japan," "Euro area," "Canada," and "United Kingdom." Japan begins at about 0 then generally increases to about 0.25 in mid-2000. It generally decreases to about 0 in early 2001 then generally remains about constant until mid-2006. It generally increases to about . 5 in late 2008 then generally decreases ending at about . 25 . Euro area begins at about 3 and generally increases to about 5 in early 2001. It generally decreases to about 2 in mid-2003 then remains about constant until late 2005. It generally increases to about 4 then generally decreases ending at about 1. Canada begins at about 5 and generally increases to about 6 in early 2001. It generally decreases to about 2 in early 2002 then generally increases to about3 in mid-2003. It generally decreases to about 2 in mid-2004 then generally increases to about 4 in late 2007 . It generally decreases ending at about .5. United Kingdom begins at about 6 and generally decreases to about 3 in late 2003. It generally increases to about 5.5 in late 2007 then generally decreases ending at about .5.

Source: Bloomberg.

## Japanese Real GDP

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

| Component | $2007{ }^{1}$ | $2008{ }^{1}$ | $2008$ <br> Q4 | $2009$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GDP | 1.7 | -4.4 | -10.2 | -11.9 | 2.7 | 1.3 |
| Total domestic demand | . 3 | -2.0 | -1.4 | -9.0 | -2.7 | -. 2 |
| Consumption | 1.2 | -1.9 | -3.5 | -4.9 | 4.8 | 3.8 |
| Private investment | -4.3 | -5.1 | -19.5 | -28.6 | -19.8 | -13.6 |
| Public investment | -4.2 | -8.6 | 1.7 | 15.5 | 27.5 | -6.3 |
| Government consumption | 2.7 | -. 5 | 4.7 | 2.8 | 1.1 | -. 5 |
| Inventories ${ }^{\underline{2}}$ | . 3 | . 4 | 3.2 | -1.4 | -2.7 | . 3 |
| Exports | 9.5 | -13.4 | -44.9 | -61.7 | 28.8 | 28.6 |
| Imports | 1.5 | . 2 | -6.2 | -47.7 | -13.0 | 13.9 |
| Net exports ${ }^{2}$ | 1.2 | -2.2 | -8.0 | -5.3 | 4.5 | 2.0 |

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, 2000 to 2010. Unit is 2005 equals 100. There are two series, "Industrial production" and "Tertiary services." Industrial production begins at about 100 and generally decreases to about 90 in late 2001. It generally increases to about 110 in early 2008 then generally decreases to about 70 in early 2009 . It generally increases ending at about 89. Tertiary services begins at about 95 and generally increases to about 100 in late 2007. It generally decreases ending at about 95.

Line chart, 2000 to 2010. Unit is 2005 equals 100. There are two series, "Real exports" and "Real imports." Real exports begins at about 80 and generally decreases to about 70 in late 2001. It generally increases to about 130 in mid-2008 then generally decreases to about 80 in early 2009 . It generally increases ending at about 105. Real imports begins at about 90 and generally increases to about 100 in late 2008. It generally decreases ending at about 95 .

Source: Haver Analytics.
Figure: Labor Market

Line chart, 2000 to 2010. Unit for left scale is Ratio. Unit for right scale is percent. There are two series, "Unemployment rate (right scale)" and "Job openings to applications (left scale)." Unemployment rate begins at about 4.75 and generally increases to about 5.5 in early 2003 . It generally decreases to about 3.5 in mid-2007 then generally increases to about 5.75 in early 2009. It generally decreases ending at about 5.25 . Job openings to applications begins at about 0.55 and generally decreases to about 0.5 in early 2002. It generally increases to about 1.05 in mid-2007 then generally decreases ending at about 0.4 .

Source: Haver Analytics.

## Figure: Consumer Price Inflation

Line chart, 2000 to 2010. Unit is percent, 12-month basis, n.s.a. 0 on the scale is marked by a horizontal line. There are two series, "Consumer price inflation" and "core" (excludes all food and energy; staff calculations). Consumer price inflation begins at about negative 1 and generally increases to about 1 in early 2005 . It generally decreases to about negative 1 in late 2005 then generally increases to about 1 in late 2006. It generally decreases to about 0 in 2007 then generally increases to about 2.5 in early 2008. It generally decreases ending at about negative 2 . Core begins at about negative 0.5 and generally decreases to about negative 1 in early 2001. It generally increases to about 0 in mid-2003 then generally decreases to about negative 1 in mid-2004. It generally increases to about 0 in mid- 2008 then generally decreases ending at about negative 1 .

Source: Haver Analytics

Economic Indicators

| Indicator | 2009 |  |  | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q2 | Q3 | Q4 | Sept. | Oct. | Nov. | Dec. |
| Housing starts | -15.7 | -7.2 | n.a. | 3.3 | 9.0 | 4.7 | n.a. |
| Machinery orders ${ }^{1}$ | -4.9 | -. 9 | n.a. | 10.5 | -4.5 | -11.3 | n.a. |
| Household expenditures | 1.0 | . 5 | n.a. | . 6 | . 2 | -. 6 | n.a. |
| New car registrations | 14.6 | 19.4 | 10.9 | 3.3 | 5.2 | 4.5 | . 5 |
| Business sentiment ${ }^{2}$ | -45.0 | -38.0 | -32.0 | $\ldots$ | ... | $\ldots$ | ... |
| Wholesale prices ${ }^{\text {² }}$ | -5.5 | -8.3 | -5.2 | -8.0 | -6.8 | -5.0 | -3.9 |

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 | $2007{ }^{1}$ | $2008{ }^{1}$ | $\begin{gathered} 2008 \\ \text { Q4 } \end{gathered}$ | $2009$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GDP | 2.2 | -1.8 | -7.4 | -9.5 | -. 5 | 1.7 |
| Total domestic demand | 1.8 | -. 4 | -3.0 | -7.5 | -3.0 | 1.4 |
| Consumption | 1.2 | -. 7 | -2.0 | -1.6 | . 2 | -. 6 |
| Investment | 3.1 | -5.8 | -15.1 | -19.9 | -6.3 | -3.3 |
| Government consumption | 2.0 | 2.4 | 2.6 | 2.5 | 2.6 | 2.3 |
| Inventories ${ }^{\text {² }}$ | . 1 | . 6 | . 8 | -2.9 | -2.2 | 2.0 |
| Exports | 4.2 | -6.9 | -25.7 | -30.2 | -4.7 | 13.1 |


| Imports | 3.5 | -4.0 | -17.8 | -26.6 | -10.7 | 12.5 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Net exports ${ }^{2}$ | .3 | -1.4 | -4.5 | -2.1 | 2.6 | .3 |
| Memo: GDP of selected countries |  |  |  |  |  |  |
| France | 2.1 | -1.7 | -5.9 | -5.3 | 1.3 | 1.0 |
| Germany | 1.6 | -1.8 | -9.4 | -13.4 | 1.8 | 2.9 |
| Italy | .1 | -2.9 | -8.0 | -10.4 | -1.9 | 2.3 |

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

Source: Haver Analytics.

## Euro Area

## Figure: Nominal Exports and Imports

Line chart, 2000 to 2010. Unit is billions of U.S. dollars. There are two series, "Exports" and "Imports." Both series begin at about 75 and generally increase together to about 225 in 2008. They generally decrease together to about 140 in early 2009 then generally increase together ending at about 150.

Source: Haver Analytics.

## Figure: Economic Sentiment

Line chart, 2000 to 2010 . Unit is percent balance. 0 on the scale is marked with a horizontal line. There are two series, "Consumer confidence" and "Industrial confidence." Consumer confidence begins at about 2 and generally decreases to about negative 20 in early 2003 . It generally increases to about 0 in early 2007 then generally decreases to about negative 35 in early 2009. It generally increases ending at about negative 15. Industrial confidence begins at about 5 and generally decreases to about negative 20 in late 2001. It generally increases to about 5 in late 2007 then generally decreases to about negative 40 in early 2009 . It generally increases ending at about negative 15.

Source: Haver Analytics.

## Figure: Unemployment Rate

Line chart, 2000 to 2010. Unit is percent. The series begins at about 8.25 and generally decreases to about 7.75 in 2001 . It generally increases to about 9 in early 2005 then generally decreases to about 7 in early 2008. It generally increases ending at about 10.

Source: Haver Analytics.

## Figure: Consumer Price Inflation

Line chart, 2000 to 2010. Unit is percent, 12-month basis, n.s.a. 0 on the scale is marked by a horizontal line. There are two series, "Consumer price inflation" and "core" (excludes all food and energy; staff calculations). Consumer price inflation begins at about 2 and generally fluctuates between about 2 and about 2.5 until late 2007. It generally increases to about 4 then generally decreases to about negative 1 in early 2009. It generally increases ending at about 1 .

Source: Haver Analytics.

Economic Indicators

| Indicator | 2009 |  |  | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Aug. | Sept. | Oct. | Nov. |
| Industrial production ${ }^{1}$ | -8.5 | -1.2 | 2.3 | 1.1 | . 3 | -. 3 | 1.0 |
| Retail sales volume ${ }^{\text {² }}$ | -. 9 | -. 4 | -. 4 | -. 2 | -. 5 | . 3 | -1.1 |
| New car registrations | . 4 | 12.7 | 3.0 | -4.3 | 4.1 | 1.2 | -. 5 |
| Employment | -. 7 | -. 5 | -. 5 | $\ldots$ | ... | $\ldots$ | ... |
| Producer prices ${ }^{3}$ | -2.0 | -5.2 | -7.1 | -6.8 | -7.0 | -6.0 | -3.9 |
| M3 ${ }^{3}$ | 6.5 | 4.7 | 2.8 | 3.0 | 2.0 | . 2 | -. 3 |

[^11]3. Eurostat harmonized definition. Percent change from year earlier. Return to table

## U.K. Real GDP

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

| Component | $2007 \stackrel{1}{=}$ | $2008{ }^{1}$ | $\begin{gathered} 2008 \\ \text { Q4 } \end{gathered}$ | Q1 | $\begin{gathered} 2009 \\ \text { Q2 } \end{gathered}$ | Q3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GDP | 2.4 | -2.1 | -7.0 | -9.7 | -2.7 | -. 6 |
| Total domestic demand | 3.1 | -3.4 | -8.9 | -9.3 | -3.7 | . 3 |
| Consumption | 2.2 | -. 9 | -4.5 | -6.0 | -3.2 | -. 1 |
| Investment | 4.9 | -9.1 | -9.4 | -26.8 | -21.6 | 8.9 |
| Government consumption | 1.2 | 3.3 | 4.5 | -. 2 | 2.6 | 1.3 |
| Inventories ${ }^{\underline{2}}$ | . 6 | -2.1 | -5.5 | -. 7 | 1.5 | -1.2 |
| Exports | 3.4 | -3.6 | -16.8 | -25.1 | -8.5 | 3.2 |
| Imports | 5.6 | -8.1 | -22.1 | -24.2 | -12.2 | 6.0 |
| Net exports ${ }^{2}$ | -. 8 | 1.5 | 2.4 | . 3 | 1.3 | -. 8 |

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, 2000 to 2010. Unit is percent, 12-month basis, n.s.a. 0 on the scale is marked by a horizontal line. There are two series, "Consumer price inflation" and "core" (excludes all food and energy; staff calculations). Consumer price inflation begins at about .5 and generally increases to about 5.5 in mid- 2008 . It generally decreases to about 1 in late 2009 then generally increases ending at about 3 . Core begins at about negative 0.5 then generally increases ending at about 2 .

Source: Haver Analytics.

## Figure: Unemployment Rates

Line chart, 2000 to 2010 . Unit is percent. There are two series, "Labor Force Survey" and "Claimant Count." Labor Force Survey begins at about 5.5 and generally decreases to about 5 in 2005. It generally increases ending at about 8 . Claimant count begins at about 3.5 and generally decreases to about 2.5 in early 2005 then generally increases to about 3 in late 2006. It generally decreases to about 2.5 in early 2008 then generally increases ending at about 5 .

Source: Haver Analytics.

## Figure: Purchasing Managers Survey

Line chart, 2000 to 2010. Unit is 50+ equals expansion. There are two series, "Services" and "Manufacturing." Services begins at about 57 and generally decreases to about 45 in late 2001. It generally increases to about 60 in 2003 then generally decreases to about 55 in late 2005. It generally increases to about 60 in late 2006 then generally decreases to about 40 in late 2008. It generally increases ending at about 57 . Manufacturing begins at about 50 then generally increases to about 57 in late 2004. It generally decreases to about 45 in mid-2005 then generally increases to about 55 in late 2006. It generally decreases to about 35 in early 2009 then generally increases ending at about 53.

Source: Reuters.
Figure: Labor Costs

Line chart, 2000 to 2010. Unit is percent, 12-month basis. There are two series, "Unit wage costs (manufacturing industries)" and "Average earnings (whole economy, including bonuses)." Unit wage costs begins at about negative 1 then generally increases to about 5 in late 2002. It generally decreases to about negative 5 in early 2004 then generally increases to about 5 in late 2006. It generally decreases to about negative 1 in early 2008 then generally increases to about 13 in late 2008 . It generally decreases ending at about 0 . Average earnings begins at about 5 and generally decreases ending at about 2 .

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

| Indicator | 2009 |  |  | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q2 | Q3 | Q4 | Sept. | Oct. | Nov. | Dec. |
| Industrial production | -. 6 | -. 9 | n.a. | 1.3 | . 0 | . 3 | n.a. |
| Producer input prices ${ }^{\underline{1}}$ | -8.9 | -8.7 | 3.7 | -6.2 | . 4 | 4.0 | 6.9 |
| Retail sales volume | . 8 | 1.1 | n.a. | . 4 | . 6 | -. 4 | n.a. |
| Business confidence ${ }^{2}$ | -22.0 | -7.0 | . 3 | -2.0 | 4.0 | 4.0 | -7.0 |
| Consumer confidence ${ }^{2}$ | -19.9 | -14.1 | -8.8 | -10.1 | -8.3 | -8.3 | -9.7 |
| Trade balance ${ }^{3}$ | -12.9 | -12.9 | n.a. | -5.0 | -5.1 | -4.8 | 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 | $2007{ }^{1}$ | $2008{ }^{1}$ | $\begin{gathered} 2008 \\ \text { Q4 } \end{gathered}$ | Q1 | $\begin{gathered} 2009 \\ \text { Q2 } \end{gathered}$ | Q3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GDP | 2.8 | -1.0 | -3.7 | -6.2 | -3.1 | . 4 |
| Total domestic demand | 6.6 | -1.1 | -6.1 | -11.4 | 1.0 | 5.7 |
| Consumption | 5.4 | . 2 | -3.1 | -1.4 | 1.8 | 3.1 |
| Investment | 4.5 | -3.6 | -14.8 | -22.8 | -4.9 | 8.9 |
| Government consumption | 3.7 | 3.1 | 2.5 | 2.2 | 3.3 | 5.0 |
| Inventories ${ }^{\text {² }}$ | 1.7 | -1.1 | -1.2 | -5.5 | . 4 | . 9 |
| Exports | -1.5 | -7.3 | -17.7 | -29.8 | -19.5 | 15.3 |
| Imports | 8.5 | -7.7 | -23.4 | -39.2 | -6.9 | 36.0 |
| Net exports ${ }^{2}$ | -4.2 | . 7 | 2.2 | 4.5 | -4.0 | -5.5 |

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, 2000 to 2010. Unit is percent change from year earlier. 0 on the scale is marked by a horizontal line. The series begins at about 6 and generally decreases to about 0 in mid-2001. It generally increases to about 5 in late 2002 then generally fluctuates between about 2 and about 4 until late 2007. It generally decreases to about negative 4 in mid-2009 then generally increases ending at about negative 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, 2000 to 2010. Unit is 2002 equals 100. There are two series, "Real Exports" and "Real Imports." Real exports begins at about 100 and generally increases to about 110 in late 2007. It generally decreases ending at about 90 . Real imports begins at about 100 and generally increases to about 145 in mid-2008. I generally decreases to about 110 in early 2009 then generally increases ending at about 120.

Figure: Unemployment Rate

Line chart, 2000 to 2010 . Unit is percent. The series begins at about 6.75 and generally increases to about 8 in late 2003 . It generally decreases to about 5.75 in early 2008 then generally increases ending at about 8.5.

Source: Haver

## Figure: Consumer Price Inflation

Line chart, 2000 to 2010 . Unit is percent, 12 -month basis, n.s.a. 0 on the scale is marked by a horizontal line. There are two series, "Consumer price inflation" and "Core." Note: Excludes all food and energy; staff calculations. Consumer price inflation begins at about 2 and generally increases to about 3 in early 2001. It generally decreases to about .75 in late 2001 then generally increases to about 5 in early 2003 . It generally decreases to about 1 in early 2005 then generally increases to about 4 in mid-2005. It generally decreases to about .4 in mid- 2006 then generally increases to about 4 in late 2008. It generally decreases to about negative 1 in mid-2009 then generally increases ending at about 1.25 . Core begins at about 1 and generally increases to about 4 in early 2003 . It generally decreases to about 1 in early 2004 then generally increases to about 3 in early 2007. It generally decreases ending at about 1.

Source: Haver Analytics

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

| Indicator | 2009 |  |  | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q2 | Q3 | Q4 | Sept. | Oct. | Nov. | Dec. |
| Industrial production | -4.6 | -1.4 | n.a. | 1.1 | . 1 | n.a. | n.a. |
| New manufacturing orders | -1.7 | 1.8 | n.a. | 5.6 | -2.8 | 1.2 | n.a. |
| Retail sales | . 5 | 1.4 | n.a. | 1.3 | . 6 | n.a. | n.a. |
| Employment | -. 4 | -. 2 | . 2 | . 2 | -. 3 | . 5 | -. 0 |
| Wholesale sales | . 8 | 2.7 | n.a. | . 1 | . 4 | n.a. | n.a. |
| Ivey PMI¹ | 53.4 | 56.4 | 55.2 | 61.7 | 61.2 | 55.9 | 48.4 |

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

| Indicator | 2008 | 2009 | Q3 | Q4 | 2009 Oct. | Nov. | Dec. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Real GDP ${ }^{1}$ | 6.9 | n.a. | 9.8 | n.a. | $\ldots$ | $\ldots$ | $\ldots$ |
| Industrial production | 1.8 | n.a. | 5.4 | n.a. | -2.9 | 3.4 | n.a. |
| Consumer prices ${ }^{2}$ | 1.2 | n.a. | -1.3 | n.a. | -. 5 | . 6 | n.a. |
| Merch. trade balance ${ }^{3}$ | 298.1 | 196.4 | 99.5 | 228.4 | 183.0 | 241.2 | 261.0 |

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 |  | Q3 | Q4 | Oct. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  | Nov. | Dec. |  |
| 1 |  |  |  |  |  |  |


| Real GDP | 5.9 | n.a. | 15.1 | n.a. | $\ldots$ | $\ldots$ | $\ldots$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Industrial production | 4.4 | n.a. | 5.4 | n.a. | -2.2 | 3.2 | n.a. |
| Consumer prices $^{\underline{2}}$ | 9.7 | n.a. | 11.8 | n.a. | 10.5 | 12.5 | n.a. |
| Wholesale prices $^{2}$ | 6.1 | 7.3 | -.1 | 4.4 | 1.3 | 4.8 | 7.3 |
| Merch. trade balance$^{3}$ | -126.2 | n.a. | -73.8 | n.a. | -85.4 | -103.0 | n.a. |
| Current account $^{4}$ | -31.0 | n.a. | -50.5 | 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
... Not applicable.
Source: CEIC.

## China and India

## Figure: Industrial Production

Line chart, 2004 to 2009. Unit is an index, January $2000=100$. There are two series, "China" and "India." China begins at about 140 and generally increases ending at about 375 . India begins at about 120 and generally increases ending at about 200.

Source: CEIC.
Figure: Consumer Prices

Line Chart, 2003 to 2009. Unit is percent change from last year. 0 on the scale is marked by a horizontal line. There are two series, "China" and "India." China begins at about 0 and generally increases to about 5 in late 2004. It generally decreases to about 1 in mid-2006 then generally increases to about 9 in early 2008 . It generally decreases to about negative 2 in mid-2009 then generally increases ending at about 1.

Source: China Statistic and Consultancy Service Center; CEIC.

## Figure: Merchandise Trade Balances

Line chart, 2003 to 2009. Unit is billions of dollars. Data are 3-month moving average (n.s.a.). 0 on the scale is marked by a horizontal line. There are two series, "China" and "India." China begins at about 0 and generally increases to about 45 in late 2008 then generally decreases to about 8 in mid-2009. It generally increases ending at about 20. India begins at about 00 and generally decreases to about negative 12 in late 2008. It generally increases ending at about negative 8 .

Source: China Statistic and Consultancy Service Center; CEIC.

## Figure: Benchmark Interest Rates

Line chart, 2003 to 2009. Unit is percent. There are two series, "China" and "India." China begins at about 5.25 and generally increases to about 7.5 in late 2008 . It generally decreases ending at about 5.25. India begins at about 5.5 and generally increases to about 7.5 in early 2003 . It generally decreases to about 4.75 in mid2004 then generally increases to about 9 in late 2008. It generally decreases ending at about 4.75.

Source: Bloomberg; CEIC.

## Figure: Gross External Debt

Line chart, 2003 to 2009. Unit is percent of gross domestic product. There are two series, "China" and "India." China begins at about 10 and generally fluctuates between 10 and 11 until mid-2008 where it generally declines to about 5 . It generally increases ending at about 9 . India begins at about 21 and generally decreases to about 15 in mid-2006. It generally increases to about 22 in late 2008 then generally declines ending at about 21.

Source: Bank for International Settlements; Haver Analytics.

## Figure: Short-Term External Debt

Line chart, 2003 to 2009. Unit is percent of Reserves. There are two series, "China" and "India." China begins at about 18 and generally increases to about 21 in mid2004. It generally decreases to about 15 in early 2007 and remains about constant until late 2008. It generally decreases ending at about 10 . India begins at about 7 and generally decreases to about 4 in early 2004. It generally increases to about 21 in early 2009. It generally decreases ending at about 14.

Economic Indicators for Newly Industrialized Economies: Growth

| (Percent change from previous period, seasonally adjusted, except as noted) |
| :--- |
|        2007 $\mathbf{2 0 0 8}$ <br>  Q2 Q3 Sept. Oct. Nov.    <br> Real GDP1         <br> Hong Kong 7.0 -2.6 14.9 1.5 $\ldots$ $\ldots$ $\ldots$  <br> Korea 5.7 -3.4 11.0 13.6 $\ldots$ $\ldots$ $\ldots$  <br> Singapore 5.8 -4.0 21.7 14.2 $\ldots$ $\ldots$ $\ldots$  <br> Taiwan 6.5 -6.3 18.8 8.3 $\ldots$ $\ldots$ $\ldots$  <br> Industrial production         <br> Hong Kong -1.5 -6.6 -.3 -2.6 $\ldots$ $\ldots$ $\ldots$  <br> Korea 7.0 3.0 11.4 7.2 5.7 -3.8 1.4  <br> Singapore 5.9 -4.2 15.2 8.6 -13.4 .3 -8.8  <br> Taiwan 7.8 -1.8 17.3 7.0 7.0 -.1 6.5  |

1. Gross domestic product. Annual rate. Annual data are Q4/Q4. Return to table
... Not applicable.
Source: CEIC.

Economic Indicators for Newly Industrialized Economies: Merchandise Trade Balance

| (Billions of U.S. dollars; seasonally adjusted, annualized) |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: |
|  | 2008 | 2009 |  |  | 2009 |  |  |  |  |  |
|  |  | Q3 | Q4 | Oct. | Nov. | Dec. |  |  |  |  |
| Hong Kong | -25.9 | n.a. | -39.3 | n.a. | -42.1 | -36.6 | n.a. |  |  |  |
| Korea | 5.7 | n.a. | 56.9 | n.a. | 45.6 | 52.7 | n.a. |  |  |  |
| Singapore | 18.4 | 24.1 | 21.7 | 35.7 | 39.0 | 33.9 | 34.1 |  |  |  |
| Taiwan | 4.4 | 20.1 | 24.4 | 6.8 | 21.4 | -11.8 | 10.9 |  |  |  |

Source: CEIC.
n.a. Not available.

Economic Indicators for Newly Industrialized Economies: Consumer Price Inflation

|  | $2008{ }^{\frac{1}{1}} 2009{ }^{1}$ |  | Q3 | Q4 | $2009$ Oct. | Nov. | Dec. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hong Kong | 2.1 | n.a. | -. 9 | n.a. | 2.2 | . 5 | n.a. |
| Korea | 4.1 | 2.8 | 2.0 | 2.4 | 2.0 | 2.4 | 2.8 |
| Singapore | 4.3 | n.a. | -. 4 | n.a. | -. 8 | -. 2 | n.a. |
| Taiwan | 1.3 | -. 2 | -1.3 | -1.2 | -1.9 | -1.6 | -. 2 |

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

Source: CEIC.

Newly Industrialized Economies

Line chart, 2003 to 2009. Unit is an index, January 2000 = 100. There are four series, "Korea," "Singapore," "Hong Kong," and "Taiwan." Korea begins at about 115 and generally increases to about 170 in mid-2008. It generally decreases to about 130 in late 2008 then generally increases ending at about 170 . Singapore begins at about 104 and generally increases to about 185 in mid-2007. It generally decreases to about 110 in early 2009 then generally increases to about 165 in mid-2009. It generally decreases ending at about 125 . Hong Kong begins at about 80 and generally remains constant until early 2005 where it generally increases to about 85 . It generally decreases ending at about 70. Taiwan begins at about 105 and generally increases to about 150 in late 2007. It generally decreases to about 95 in early 2009. It generally increases ending at about 140.

Source: CEIC.

## Figure: Consumer Prices

Line chart, 2003 to 2009. Unit is percent change from year earlier. 0 on the scale is marked by a horizontal line. There are four series, "Korea," "Singapore," "Hong Kong," and "Taiwan." Korea begins at about 4 and generally decreases to about 3 in late 2003. It generally increases to about 5 in mid-2004 then generally decreases to about 3 in mid-2005. It remains about constant until late 2007. It generally increases to about 6 in mid- 2008 then generally decreases ending at about 2 . Singapore begins at about 1 and generally increases to about 2 in early 2004. It generally decreases to about 0 in mid-2005. It generally increases to about 7 in mid-2008 then generally decreases ending at about 0 . Hong Kong begins at about negative 2 then generally decreases to about negative 4 in mid-2003. It generally increases to about 2 in mid-2006. It generally decreases to about 0 in late 2007 then generally increases to about 6 in late 2008. It generally decreases to about negative 2 in mid2009 then generally increases to about 3 in late 2009. It generally decreases ending at about 1 . Taiwan begins at about 1 then generally decreases to about negative 2 in early 2003. It generally increases to about 4 in mid-2004 then generally decreases to about 0 in late 2004. It generally increases to about 4 in mid-2005 then generally decreases to about negative 2 in mid-2006. It generally increases to about 6 in late 2008 then generally decreases to about negative 3 in mid-2009. It generally increases to about negative 1 in mid-2009 then generally decreases to negative 2 in late 2009. It generally increases ending at about 1 .

Source: CEIC; Bank of Korea; Reuters.

## Figure: Merchandise Trade Balances

Line chart, 2003 to 2009. Unit is billions of dollars. Data are 3-month moving average (n.s.a.). 0 on the scale is marked by a horizontal line. There are four series, "Korea," "Singapore," "Hong Kong," and "Taiwan." Korea begins at about 1 and generally increases to about 4 in early 2005. It generally decreases to about 2 in mid2006 then generally increases to about 3 in late 2007. It generally decreases to about negative 1 in mid-2008 then generally increases to about 6 in early 2009 . It generally decreases ending at about 4 . Singapore begins at about 2 and generally increases to about 3 in late 2007 . It generally decreases to about 1 in early 2009 then generally increases ending at about 3 . Hong Kong begins at about negative 1 and generally decreases to about negative 2 in early 2004 . It generally increases to about negative 1 in late 2004 then generally decreases to about negative 3 in mid-2008. It generally increases to about negative 1 in late 2008 then generally decreases ending at about negative 4 . Taiwan begins at about 2 and generally decreases to about negative 1 in early 2005 . It generally increases to about 2 in late 2007. It generally decreases to about 0 in early 2008 then generally increases to about 2 in late 2009. It generally decreases ending at about 1.

Source: CEIC

## Figure: Benchmark Interest Rates

Line chart, 2003 to 2009. Unit is percent. There are three series, "Korea," "Hong Kong," and "Taiwan." Korea begins at about 4 and remains about constant until mid2004. It generally decreases to about 3 in 2005. It generally increases to about 5 in mid-2008 then generally decreases ending at about 2 . Hong Kong begins at about 3 and generally increases to about 7 in late 2007. It generally decreases ending at about 0 . Taiwan begins at about 2 and remains about constant until mid-2004. It generally increases to about 4 in mid-2008 then generally decreases ending at about 1.

Source: Bloomberg.

## Figure: Gross External debt

Line chart, 2003 to 2009. Unit is percent of gross domestic product. There are three series, "Korea," "Hong Kong," and "Taiwan." Korea begins at about 25 and remains about constant until mid-2006. It generally increases ending at about 50. Hong Kong begins at about 210 and generally increases to about 325 in late 2007 . It generally decreases ending at about 300. Taiwan begins at about 20 and remains about constant throughout the timeline.

Source: Bank for International Settlements.

## Figure: Short-term External Debt

Line chart, 2003 to 2009. Unit is percent of reserves. There are three series, "Korea," "Hong Kong," and "Taiwan." Korea begins at about 50 and remains about constant until the beginning of 2006. It generally increases to about 75 in late 2008 then generally decreases ending at about 50 . Hong Kong begins at about 200 and generally increases to about 350 in late 2007. It generally decreases ending at about 225. Taiwan begins at about 25 and remains about constant throughout the timeline.

Source: Bank for International Settlements.
(Percent change from previous period, seasonally adjusted, except as noted)

| Indicator | 2007 | 2008 | Q2 | Q3 | $\begin{aligned} & 2009 \\ & \text { Sept. } \end{aligned}$ | Oct. | Nov. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Real GDP1 |  |  |  |  |  |  |  |
| Indonesia | 5.8 | 5.3 | 4.7 | 7.9 | $\ldots$ | $\ldots$ | $\ldots$ |
| Malaysia | 7.3 | . 2 | 12.5 | 9.9 | $\ldots$ | $\ldots$ | ... |
| Philippines | 6.4 | 2.9 | 7.0 | 4.1 | $\ldots$ | .. | $\ldots$ |
| Thailand | 5.6 | -4.1 | 9.0 | 5.5 | ... | ... | $\ldots$ |
| Industrial production² |  |  |  |  |  |  |  |
| Indonesia ${ }^{3}$ | 5.6 | 3.0 | -. 6 | -. 9 | -5.1 | 4.9 | -. 4 |
| Malaysia | 2.1 | . 7 | 2.0 | 3.4 | -1.7 | 6.3 | -4.6 |
| Philippines | -2.7 | . 3 | 12.4 | 6.0 | 8.4 | . 3 | n.a. |
| Thailand | 8.2 | 5.3 | 9.7 | 4.0 | 10.0 | -. 1 | -. 4 |

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 | 2007 | 2008 |  | 2009 |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  |  |  | Q2 | Q3 | Sept. | Oct. | Nov. |  |
| Indonesia ${ }^{1}$ | 39.6 | 7.9 | 20.7 | 16.2 | 17.5 | 29.8 | 28.8 |  |
| Malaysia | 29.2 | 42.7 | 30.8 | 30.2 | 30.5 | 40.2 | 27.3 |  |
| Philippines | -5.0 | -7.7 | -5.0 | -2.7 | -1.5 | -1.2 | n.a. |  |
| Thailand | 12.8 | .1 | 22.6 | 15.9 | 9.2 | 15.2 | 6.0 |  |

Note: ASEAN is the Association of Southeast Asian Nations.

1. Imports prior to 2008 do not include trade through Indonesia's bonded zone, causing a break in the trade balance in 2008 . Return to table n.a. Not available

Source: CEIC; Bank of Thailand; Philippines Economic Indicators Telegram (PEIT).

## ASEAN-4 Economic Indicators: Consumer Price Inflation

(Non-seasonally adjusted percent change from year earlier except as noted)

| Indicator | $2008{ }^{1}$ | $2009{ }^{1}$ | Q3 | Q4 | 2009 Oct. | Nov. | Dec. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indonesia | 11.1 | 2.8 | 2.8 | 2.6 | 2.6 | 2.4 | 2.8 |
| Malaysia | 4.4 | 1.1 | -2.3 | -. 2 | -1.5 | -. 1 | 1.1 |
| Philippines | 8.0 | 4.4 | . 3 | 3.0 | 1.6 | 2.8 | 4.4 |
| Thailand | . 4 | 3.5 | -2.2 | 1.9 | . 4 | 1.9 | 3.5 |

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, 2003 to 2009. Unit is an index, January 2000 = 100. There are four series, "Indonesia," "Malaysia," "Philippines," and "Thailand." Indonesia begins at about 140 and generally increases to about 175 in late 2004. It generally decreases to about 150 in mid- 2005 then generally increases ending at about 170 . Malaysia begins at about 112 and generally increases to about 160 in late 2007. It generally decreases to about 130 in late 2008 then generally increases ending at about 140 . Philippines begins at about 100 and generally declines to about 50 in late 2008. It generally increases ending at about 80 . Thailand begins at about 125 and generally increases to about 215 in mid-2008 then generally decreases to about 170 in late 2008. It generally increases ending at about 200.

Source: CEIC; Bank of Philippines.

## Figure: Consumer Prices

Line chart, 2003 to 2009. Unit is percent change from year earlier. 0 on the scale is marked by a horizontal line. There are four series, "Indonesia," "Malaysia," "Philippines," and "Thailand." Indonesia begins at about 8 and generally decreases to about 5 in early 2004. It generally increases to about 16 in early 2006 then generally decreases to about 5 in early 2007. It remains about constant until late 2007 then it generally increases to about 12 in late 2008 . It generally decreases ending at about 3. Malaysia begins at about 2 and generally increases to about 4 in early 2006. It generally decreases to about 2 in mid-2007 then generally increases to about 8 in mid-2008. It generally decreases to about negative 3 in mid-2009 then generally increases ending at about 1 . Philippines begins at about 3 and generally increases to about 8 in early 2005. It generally decreases to about 3 in early 2007. It generally increases to about 13 in mid- 2008 then generally decreases to about 0 in mid-2009. It generally increases ending at about 5 . Thailand begins at about 2 and generally increases to about 5 in mid-2006. It generally decreases to about 2 in mid-2007 then generally increases to about 10 in mid-2008. It generally decreases to about negative 5 in mid-2009 then generally increases ending at about 4 .

Source: IMF International Financial Statistics; CEIC.

## Figure: Merchandise Trade Balances

Line chart, 2003 to 2009. Unit is billions of dollars. Data are 3-month moving average (n.s.a.). 0 on the scale is marked with a horizontal line. There are four series, "Indonesia," "Malaysia," "Philippines," and "Thailand." Indonesia begins at about 2 and generally increases to about 2.5 in late 2003 . It generally decreases to about 2 in 2004 then generally increases to about 3.5 in late 2007. It generally decreases to about 1 in late 2008 then generally increases ending at about 2 . Malaysia begins at about 2 and generally increases to about 4.5 in mid-2008. It generally decreases ending at about 3 . Philippines begins at about negative 0.5 and generally fluctuates between 0 and negative 0.5 throughout the timeline, ending at 0 . Thailand begins at about 0 and generally decreases to about negative 1 in mid-2005. It generally increases 1 in mid-2008 then generally decreases to about negative 1.5 in late 2008. It generally increases to about 3 in early 2009 then generally decreases ending at about 1.

Source: CEIC, Philippines Economic Indicators Telegram (PEIT); Bank of Thailand Monthly Statistical Release.

## Figure: Benchmark Interest Rates

Line chart, 2003 to 2009. Unit is percent. There are four series, "Indonesia," "Malaysia," "Philippines," and "Thailand." Indonesia begins at about 13 and generally decreases to about 8 in late 2004. It generally increases to about 13 in late 2005 then generally decreases ending at about 6 . Malaysia begins at about 3 and remains about constant until late 2005. It generally increases to about 4 in early 2006 then remains about constant until late 2008. It generally decreases ending at about 3 . Philippines begins at about 7 and remains about constant until early 2005. It generally increases to about 8 then remains about constant until early 2007 . It generally decreases ending at about 4. Thailand begins at about 2 then generally increases to about 5 in mid-2006. It generally decreases ending at about 2 .

Source: Bloomberg; Haver Analytics.

## Figure: Gross External Debt

Line chart, 2003 to 2009. Unit is percent of gross domestic product. There are four series, "Indonesia," "Malaysia," "Philippines," and "Thailand." Indonesia begins at about 60 and generally decreases to about 25 in late 2008. It generally increases to about 30 in early 2009 then generally decreases ending at about 28 . Malaysia begins at about 45 and generally increases to about 48 in early 2003. It generally decreases to about 30 in late 2007 then generally increases ending at about 44. Philippines begins at about 75 and generally decreases ending at about 35 . Thailand begins at about 40 and generally decreases to about 20 in late 2007 . It generally increases ending at about 25.

Source: CEIC; Bank for International Settlements.

## Figure: Short-Term External Debt

Line chart, 2003 to 2009. Unit is percent of reserves. There are four series, "Indonesia," "Malaysia," "Philippines," and "Thailand." Indonesia begins at about 49 and generally decreases to about 40 in early 2004. It generally increases to about 60 in mid- 2005 then generally decreases to about 15 in mid-2006. It generally increases ending at about 35. Malaysia begins at about 30 and generally decreases to about 20 in mid-2007. It generally increases ending at about 35 . Philippines begins at about 50 and generally decreases to about 45 in early 2004. It generally increases to about 50 in mid-2004 then generally decreases ending at about 11 . Thailand begins at about 29 and generally decreases to about 20 in late 2004 then generally increases to about 30 in late 2006 . It generally declines ending at about 15.

Source: Bank for International Settlements.

## Mexican Economic Indicators

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

| Indicator | 2008 | 2009 | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q3 | Q4 | Oct. | Nov. | Dec. |
| Real GDP1 | -1.7 | n.a. | 12.2 | n.a. | $\ldots$ | ... | $\ldots$ |
| Overall economic activity | 1.0 | n.a. | 2.2 | n.a. | . 1 | n.a. | n.a. |
| Industrial production | -1.0 | n.a. | 1.7 | n.a. | . 9 | 1.0 | n.a. |
| Unemployment rate ${ }^{\text {² }}$ | 4.0 | n.a. | 5.9 | n.a. | 5.8 | 5.7 | n.a. |
| Consumer prices ${ }^{3}$ | 6.5 | 3.6 | 5.1 | 4.0 | 4.5 | 3.9 | 3.6 |
| Merch. trade balance ${ }^{4}$ | -17.3 | n.a. | -7.9 | n.a. | 7.7 | 1.9 | n.a. |
| Merchandise imports ${ }^{4}$ | 308.6 | n.a. | 235.8 | n.a. | 246.2 | 265.0 | n.a. |
| Merchandise exports ${ }^{4}$ | 291.3 | n.a. | 227.9 | n.a. | 253.9 | 266.9 | n.a. |
| Current account ${ }^{5}$ | -15.8 | n.a. | -7.6 | n.a. | ... | $\ldots$ | $\ldots$ |

1. Gross domestic product. Annual rate. Annual data are Q4/Q4. 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.

## Brazilian Economic Indicators

| Indicator | 2008 | 2009 | Q3 | Q4 | $2009$ Oct. | Nov. | Dec. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Real GDP ${ }^{1}$ | . 9 | n.a. | 5.1 | n.a. | ... | ... | $\ldots$ |
| Industrial production | 3.1 | n.a. | 4.8 | n.a. | 2.3 | -. 2 | n.a. |
| Unemployment rate ${ }^{\text {² }}$ | 7.9 | n.a. | 7.9 | n.a. | 7.7 | 7.7 | n.a. |
| Consumer prices ${ }^{3}$ | 5.9 | 4.3 | 4.4 | 4.2 | 4.2 | 4.2 | 4.3 |
| Merch. trade balance ${ }^{4}$ | 25.0 | 25.0 | 21.6 | 14.2 | 14.4 | 18.0 | 10.2 |
| Current account ${ }^{5}$ | -28.2 | -24.3 | -19.7 | -48.9 | -36.2 | -39.2 | -71.4 |

1. Gross domestic product. Annual rate. Annual data are $\mathrm{Q} 4 / \mathrm{Q} 4$. 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.
(Percent change from previous period, seasonally adjusted, except as noted)

| Indicator | 2008 | 2009 | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q3 | Q4 | Oct. | Nov. | Dec. |
| Real GDP ${ }^{1}$ | 3.9 | n.a. | . 2 | n.a. | $\ldots$ | $\ldots$ | $\ldots$ |
| Industrial production | 4.9 | n.a. | 1.2 | n.a. | . 1 | 1.0 | n.a. |
| Unemployment rate ${ }^{2}$ | 7.9 | n.a. | 9.1 | n.a. | $\ldots$ | $\ldots$ | $\ldots$ |
| Consumer prices ${ }^{3}$ | 7.2 | 7.7 | 5.9 | 7.1 | 6.5 | 7.1 | 7.7 |
| Merch. trade balance 4 | 12.6 | n.a. | 12.1 | n.a. | 14.0 | 17.8 | n.a. |
| Current account 5 | 7.1 | n.a. | 4.5 | n.a. | $\cdots$ | $\ldots$ | $\cdots$ |

1. Gross domestic product. Annual rate. Annual data are Q4/Q4. Return to table
2. Percent; not seasonally adjusted. 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, IMF International Financial Statistics database; Ministerio de economia; U.S. State Department.

## Venezuelan Economic Indicators

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

| Indicator | 2008 | 2009 |  |  | 2009 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Q3 | Q4 | Oct. | Nov. | Dec. |  |  |  |
| Real GDP¹ | 3.3 | n.a. | -10.6 | n.a. | $\ldots$ | $\ldots$ | $\ldots$ |
| Consumer prices² | 30.9 | 25.1 | 26.8 | 26.0 | 26.7 | 26.2 | 25.1 |
| Non-oil trade balance³ | -39.2 | n.a. | -26.9 | n.a. | $\ldots$ | $\ldots$ | $\ldots$ |
| Merch. trade balance ${ }^{3}$ | 45.7 | n.a. | 26.7 | n.a. | $\ldots$ | $\ldots$ | $\ldots$ |
| Current account $\underline{4}$ | 37.4 | n.a. | 20.3 | 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: IMF International Financial Statistics database; Bank of Venezuela.

## Latin America

## Figure: Industrial Production

Line chart, 2003 to 2009. Unit is an index, January $2000=100$. There are two series, "Brazil" and "Mexico." Brazil begins at about 109 and generally increases to about 140 in late 2008. It generally decreases to about 110 in early 2009 then generally increases ending at about 135 . Mexico begins at about 99 and generally increases to about 115 in early 2008. It generally decreases ending at about 105.

Source: Fundacion de Investigaciones Economicas Latinoamericanas; Haver Analytics.

## Figure: Consumer Prices

Line chart, 2003 to 2009. Unit is percent change from year earlier. There are two series, "Brazil" and "Mexico." Brazil begins at about 15 and generally increases to about 17 in late 2003. It generally decreases to about 5 in early 2004 then generally increases to about 8 in mid-2005. It generally decreases to about 3 in early 2007 then generally increases to about 5 in late 2008. It generally decreases ending at about 4 . Mexico begins at about 5 and generally decreases to about 3 in late 2005 . It
generally increases to about 6 in late 2008 then generally decreases ending at about 4 .

Source: IMF International Financial Statistics; Getulio Vargas Foundation; Haver Analytics; Bank of Mexico

## Figure: Merchandise Trade Balances

Line chart, 2003 to 2009. Unit is billions of dollars. Data is 3-month moving average (n.s.a.). 0 on the scale is marked by a horizontal line. There are two series, "Brazil" and "Mexico." Brazil begins at about 2 and generally increases to about 4 in early 2006. It generally decreases to about 1 in early 2008 then generally increases to about 3 in mid-2008. It generally decreases to about 1 in late 2008 then generally increases to about 2.5 in early 2009 . It generally decreases ending at about 1. Mexico begins at about 0 and generally decreases to about negative 1.5 in late 2004. It generally increases to about 0 in early 2006 then generally decreases to about 1.5 in mid-2007. It generally increase to about negative 0.5 in late 2007 then generally decreases to about negative 3 in late 2008 . It generally increases ending at about 0 .

Source: IMF International Financial Statistics, Bank of Mexico

## Figure: Benchmark Interest Rates

Line chart, 2003 to 2009. Unit is percent. There are two series, "Brazil" and "Mexico." Brazil begins at about 25 and generally declines to about 16 in mid-2004. It generally increases to about 20 in mid-2005 then generally decreases to about 11 in early 2008. It generally increases to about 14 in late 2008 then generally declines ending at about 9 . Mexico begins at about 9 and generally decreases to about 4 in mid-2003. It generally increases to about 10 in mid-2005 then generally decreases to about 5 in early 2006. It remains about constant until mid- 2008 where it generally increases to about 8 . It generally decreases ending at about 4 .

Source: Bloomberg.

## Figure: Gross External Debt

Line chart, 2003 to 2009. Unit is percent of gross domestic product. There are two series, "Brazil" and "Mexico." Brazil begins at about 185 and generally decreases to about 50 in late 2008. It generally increases to about 60 in early 2009 then generally decreases ending at about 50 . Mexico begins at about 25 and remains about constant throughout the timeline.

Source: Haver Analytics; Bank for International Settlements.

## Figure: Short-term external debt

Line chart, 2003 to 2009. Unit is percent of reserves. There are two series, "Brazil" and "Mexico." Brazil begins at about 80 and generally decreases to about 35 in mid2003. It generally increases to about 40 in late 2003 then generally decreases to about 30 in early 2005. It generally increases to about 35 in late 2005 then generally decreases to about 20 in late 2006. It generally increases to about 30 in early 2007 then generally decreases ending at about 20 . Mexico begins at about 49 and generally decreases to about 40 in late 2003. It generally increases to about 45 in early 2004 then generally decreases to about 35 in late 2006 .it generally increases to about 30 in early 2007 then generally decreases to about 25 in late 2008. It generally increases ending at about 30 .

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

## Accessible Material

January 2010 Greenbook Supplement Tables and Charts

## Supplemental Notes

## The Domestic Financial Economy

## Selected Financial Market Quotations

(One-day quotes in percent except as noted)

| Instrument |  | 2009 |  | 2010 | Change to Jan. 21 from selected dates (percentage points) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sept. 12 | Nov. 3 | Dec. 15 | Jan. 21 | 2008 Sept. 12 | 2009 Nov. 3 | 2009 Dec. 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 | . 06 | . 05 | . 06 | -1.40 | . 00 | . 01 |
| 6-month | 1.80 | . 17 | . 17 | . 14 | -1.66 | -. 03 | -. 03 |
| Commercial paper (A1/P1 rates) $\underline{\underline{2}}^{\text {² }}$ |  |  |  |  |  |  |  |
| 1-month | 2.39 | . 16 | . 13 | . 11 | -2.28 | -. 05 | -. 02 |
| 3-month | 2.75 | . 18 | . 20 | . 16 | -2.59 | -. 02 | -. 04 |
| Large negotiable CDs ${ }^{1}$ |  |  |  |  |  |  |  |
| 3-month | 2.79 | . 22 | . 22 | . 19 | -2.60 | -. 03 | -. 03 |
| 6-month | 3.09 | . 32 | . 31 | . 28 | -2.81 | -. 04 | -. 03 |
| Eurodollar deposits ${ }^{\underline{3}}$ |  |  |  |  |  |  |  |
| 1-month | 2.60 | . 30 | . 32 | . 30 | -2.30 | . 00 | -. 02 |
| 3-month | 3.00 | . 45 | . 45 | . 40 | -2.60 | -. 05 | -. 05 |
| 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 | . 93 | . 87 | . 85 | -1.39 | -. 08 | -. 02 |
| 5-year | 2.97 | 2.37 | 2.33 | 2.37 | -. 60 | . 00 | . 04 |
| 10-year | 3.93 | 3.73 | 3.79 | 3.78 | -. 15 | . 05 | -. 01 |
| U.S. Treasury indexed notes 5 |  |  |  |  |  |  |  |
| 5-year | 1.33 | . 70 | . 50 | . 36 | -. 97 | -. 34 | -. 14 |
| 10-year | 1.77 | 1.48 | 1.42 | 1.35 | -. 42 | -. 13 | -. 07 |
|  |  |  |  |  |  |  |  |
| Municipal general obligations (Bond Buyer) $\underline{6}^{\text {¹ }}$ | 4.54 | 4.39 | 4.19 | 4.30 | -. 24 | -. 09 | . 11 |
| Private instruments |  |  |  |  |  |  |  |
| 10-year swap | 4.26 | 3.62 | 3.74 | 3.74 | -. 52 | . 12 | . 00 |
| 10-year FNMA? | 4.36 | 4.06 | 4.08 | 4.10 | -. 26 | . 04 | . 02 |
| 10-year AAㅇ | 6.62 | 5.12 | 5.04 | 4.95 | -1.67 | -. 17 | -. 09 |
| 10 -year $\mathrm{BBB}^{8}$ | 7.22 | 6.25 | 6.09 | 5.67 | -1.55 | -. 58 | -. 42 |
| 10-year high yield ${ }^{8}$ | 10.66 | 9.48 | 9.29 | 8.62 | -2.04 | -. 86 | -. 67 |
| Home mortgages (FHLMC survey rate) |  |  |  |  |  |  |  |
| 30-year fixed | 5.78 | 4.98 | 4.94 | 4.99 | -. 79 | . 01 | . 05 |


| Stock exchange index | Record high |  | 2009 |  | 2010 | Change to Jan. 21 from selected dates (percent) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level | Date | Nov. 3 | Dec. 15 | Jan. 21 | Record high | 2009 Nov. 3 | 2009 Dec. 15 |
| Dow Jones Industrial | 14,165 | 10-9-07 | 9,772 | 10,452 | 10,390 | -26.65 | 6.32 | -. 59 |
| S\&P 500 Composite | 1,565 | 10-9-07 | 1,045 | 1,108 | 1,116 | -28.67 | 6.80 | . 77 |
| Nasdaq | 5,049 | 3-10-00 | 2,057 | 2,201 | 2,266 | -55.12 | 10.13 | 2.94 |
| Russell 2000 | 856 | 7-13-07 | 571 | 606 | 628 | -26.57 | 10.12 | 3.64 |
| D.J. Total Stock Index | 15,807 | 10-9-07 | 10,729 | 11,385 | 11,540 | -26.99 | 7.56 | 1.36 |

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.
November 3, 2009, is the day before the November 2009 FOMC monetary policy announcement.
December 15, 2009, 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 | 2007 | 2008 | 2009 | $\begin{gathered} \text { Q3 } \\ 2009 \end{gathered}$ | $\begin{aligned} & \text { Oct. } \\ & 2009 \end{aligned}$ | Nov. 2009 | $\begin{aligned} & \text { Dec. } \\ & 2009 \end{aligned}$ | $\begin{gathered} \text { Level }{ }^{1} \\ \text { Dec. } 2009 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 9.9 | 4.9 | -6.5 | -7.1 | -10.9 | -4.6 | -3.2 | 9,088 |
| Loans ${ }^{\text {² }}$ |  |  |  |  |  |  |  |  |
| Total | 10.6 | 4.4 | -9.6 | -12.3 | -14.1 | -5.6 | -9.5 | 6,732 |
| Core | 9.5 | 5.0 | -7.6 | -9.5 | -13.0 | -7.3 | -9.3 | 5,985 |
| To businesses |  |  |  |  |  |  |  |  |
| Commercial and industrial | 19.2 | 16.3 | -17.0 | -19.8 | -26.6 | -16.6 | -20.2 | 1,343 |
| Commercial real estate | 9.4 | 6.1 | -4.3 | -5.6 | -9.4 | -8.7 | -9.0 | 1,648 |
| To households |  |  |  |  |  |  |  |  |
| Residential real estate | 5.3 | -3.2 | -5.3 | -7.8 | -11.1 | -. 7 | -. 8 | 2,161 |
| Revolving home equity | 5.6 | 13.0 | . 5 | -4.5 | -5.3 | -5.9 | -5.8 | 602 |
| Closed-end mortgages | 5.3 | -8.0 | -7.4 | -9.1 | -13.4 | 1.4 | 1.2 | 1,559 |
| Consumer | 6.8 | 7.1 | -2.2 | -3.7 | -2.0 | -6.2 | -13.7 | 833 |
| Memo: Originated ${ }^{3}$ | 6.5 | 5.7 | -3.6 | -4.6 | -3.9 | -9.0 | -5.2 | 1,225 |
| Other | 18.5 | . 4 | -22.8 | -33.4 | -22.8 | 8.2 | -11.8 | 747 |
| Securities |  |  |  |  |  |  |  |  |
| Total | 7.7 | 6.8 | 3.8 | 9.5 | -1.4 | -1.8 | 15.5 | 2,356 |
| Treasury and agency | -6.2 | 16.3 | 8.0 | 18.1 | -. 7 | 2.1 | 33.6 | 1,439 |
| Other ${ }^{4}$ | 29.4 | -4.2 | -2.0 | -2.5 | -2.4 | -7.6 | -11.9 | 918 |

[^12]
[^0]:    * This forecast is consistent with nominal GDP and interest rates in the Greenbook forecast. Actual data through December 31, 2009; projections thereafter. Return to table

[^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
[^2]:    1. Foreign GDP aggregates calculated using shares of U.S. exports. Return to table
[^3]:    Line chart, 2000 through December 2009. Units are "Hours" on the left scale and "2002 equals 100" on the right scale. There are two series, "Aggregate hours, right scale" and "Work week, left scale." Aggregate hours begins at about 102 and generally decreases to about 98 in mid-2003. It generally increases to about 108 at the end of 2007 then generally decreases, ending at about 98 in December 2009. Workweek begins at about 34.5 and generally decreases to about 34 in mid-2004. It

[^4]:    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
[^5]:     peak is the last business cycle peak as defined by the NBER (December 2007).

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

[^6]:     peak is the last business cycle peak as defined by the NBER (December 2007).

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

[^7]:    n.a. Not available.

[^8]:    1. Includes issues for public and private purposes. Return to table
[^9]:     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

[^10]:    
    5. Includes stocks acquired through nonmarket means such as mergers and reincorporations. Return to table
    6. 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
    8. 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.

[^11]:    1. Excludes construction. Return to table
    2. Excludes motor vehicles. Return to table
[^12]:    
     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
