

Accessible Material

June 2009 Bluebook and Greenbook Tables and Charts

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June 2009 Bluebook Tables and Charts[†]

Recent Developments

Chart 1 Financial Institutions

Figure: Bank ETF

Line chart, January 2007 to June 18, 2009. January 3, 2007 = 100. Data are daily. The April 2009 FOMC meeting is marked in the time series. The series begins at about 100 and generally decreases to about 40 by July 2008. It then generally increases to about 68 by late September 2008, and generally decreases to about 15 by March 2009. It then generally increases to end at about 30. It is at about 28 at the time of the April 2009 FOMC meeting.

Note. There are 24 banks included.

Source. Bloomberg, Keefe Bruyette & Woods.

Figure: Bank CDS spreads

Line chart, January 2007 to June 17, 2009. Unit is basis points. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are two series, "Major bank holding companies" and "Other banks". Major bank holding companies begins at about 15 and generally increases to about 205 by March 2008. It then generally decreases to about 65 by May 2008, and generally increases to about 370 by March 2009. It then generally decreases to end at about 200. It is at about 275 at the time of the April 2009 FOMC meeting. Other banks begins at about 15 and generally increases to about 225 by late September 2008. It then generally decreases to about 125 by early June 2009, and generally increases to end at about 175. It is at about 190 at the time of the April 2009 FOMC meeting.

Note. Median spreads for 6 major bank holding companies and 12 other banks.

Source. Markit.

Figure: SCAP Capital Buffer

Bar chart, by billions of dollars. There are two series, "Capital Required" and "Capital Raised". Approximate values: Bank of America: Capital Raised 27, Capital Required 34. Wells Fargo: Capital Raised 8, Capital Required 14. Citi: Capital Raised 0, Capital Required 5. Regions Financial: Capital Raised 1.5, Capital Required 2.5. Sun Trust: Capital Raised 1.5, Capital Required 2. Key: Capital Raised 0.5, Capital Required 1. Morgan Stanley: Capital Raised 7, Capital Required 0. Fifth Third: Capital Raised 0.5, Capital Required 0. PNC: Capital Raised 0.3, Capital Required 0.

Note. Capital Raised source is staff estimates. SCAP Capital Buffer includes new common equity offering, exchange of preferred to common, and asset sales. Morgan Stanley and PNC have raised more capital than required. Chart excludes GMAC.

Figure: Selected FDIC-guaranteed spreads

Line chart, November 2008 to June 28, 2009. Unit is basis points. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are five series, "Citigroup", "GE Capital", "JPMorgan Chase", "Morgan Stanley", and "Wells Fargo". Citigroup, GE Capital, JPMorgan Chase, and Morgan Stanley track closely together throughout the chart. They begin at about 190 and generally decrease to about 70 by early January 2009. They then generally increase to about 95 by March 2009, and generally decrease to end at about 40. Wells Fargo begins at about 195 and generally decreases to about 60 by early January. It then generally increases to about 78 by March 2009, and generally decreases to end at about 25. They are at about 52 at the time of the April 2009 FOMC meeting.

Note. Spreads to comparable-maturity Treasury securities for issues maturing around year-end 2011.

Source. Bloomberg.

Figure: Insurance ETF

Line chart, January 2007 to June 18, 2009. January 3, 2007 = 100. Data are daily. The April 2009 FOMC meeting is marked in the time series. The series begins at about 100 and generally increases to about 108 by May 2007. It then generally decreases to about 25 by March 2009, and generally increases to about 45. It is at about 41 at the time of the April 2009 FOMC meeting.

Note. There are 24 insurance companies included.

Source. Bloomberg, Keefe Bruyette & Woods.

Figure: CDS spreads for insurance companies

Line chart, January 2007 to June 17, 2009. Unit is basis points. Data are daily. The April 2009 FOMC meeting is marked in the time series. The series begins at about 23 and generally increases to about 260 by early April 2009. It then generally decreases to about 150 by early June, and generally increases to end at about 175. It is at about 174 at the time of the April 2009 FOMC meeting.

Note. Median spread for 53 insurance companies.

Source. Markit.

Chart 2 Market Functioning

Figure: Spreads of Libor over OIS

Line chart, January 2007 to June 18, 2009. Unit is basis points. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are three series, "1-month", "3-month", and "6-month". They begin at about 10 and remain about constant until about August 2007. 1-month generally increases to about 95 by September 2007, and generally decreases to about 5 by January 2008. It then generally increases to about 340 by October 2008, and generally decreases to end at about 5. It is at about 25 at the time of the April 2009 FOMC meeting. 3-month generally increases to about 101 by December 2007, and generally decreases to about 40 by January 2008. It then generally increases to about 355 by October 2008, and generally decreases to end at about 45. It is at about 96 at the time of the April 2009 FOMC meeting. 6-month generally increases to about 100 by December 2007, and generally decreases to about 50 by late January 2008. It then generally increases to about 325 by October 2008, and generally decreases to end at about 98. It is at about 145 at the time of the April 2009 FOMC meeting.

Note. Libor quotes are taken at 6:00 a.m., and OIS quotes are observed at the close of business of the previous trading day.

Source. Bloomberg.

Figure: Treasury fails to deliver

Line chart, by billions of dollars, January 2007 to June 3, 2009. Data are weekly. The April 2009 FOMC meeting is marked in the time series. The series begins at about 250 and generally decreases to about 0 by late January 2007. It then generally increases to about 1150 by April 2008, and generally decreases to about 0 by July 2008. It then generally increases to about 2650 by October 2008, and generally decreases to end at about 100. It is at about 50 at the time of the April 2009 FOMC meeting.

Source. FR2004.

Figure: Spreads on 30-day commercial paper

Line chart, July 2007 to June 17, 2009. Unit is basis points. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are two series, "ABCP" and "A2/P2". ABCP begins at about 0 and generally increases to about 200 by December 2008. It then generally decreases to about 25 by late January 2009, and generally increases to about 390 by October 2008. It then generally decreases to end at about 30. It is at about 45 at the time of the April 2009 FOMC meeting. A2/P2 begins at about 10 and generally increases to about 150 by December 2007. It then generally decreases to about 40 by late January 2008, and generally increases to about 610 by January 2009. It then generally decreases to end at about 70. It is at about 65 at the time of the April 2009 FOMC meeting.

Note. 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.

Source. Depository Trust & Clearing Corporation.

Figure: Treasury on-the-run premium

Line chart, 2001 to June 2009. Unit is basis points. Data are monthly averages. The April 2009 FOMC meeting is marked in the time series. There are two series, "10-year note" and "2-year". 10-year note begins at about 14 and generally increases to about 28 by 2002. It then generally decreases to about 6 by 2005, and generally increases to about 60 by early 2009. It then generally decreases to end at about 39. It is at about 42 at the time of the April 2009 FOMC meeting. 2-year begins at about 8 and generally decreases to about -3 by 2003. It then generally increases to about 12 by early 2009, and generally decreases to end at about -2. It is at about 10 at the time of the April 2009 FOMC meeting.

Note. Computed as the spread of the yield read from an estimated off-the-run yield curve over the on-the-run Treasury yield. June observation is the month-to-date average.

Source. Staff estimates.

Figure: On-the-run Treasury market volume and turnover

Line chart, by billions of dollars, 2003 to April 2009. Data are monthly averages. The April 2009 FOMC meeting is marked in the time series. There are two series, "Trading volume" and "Turnover". These two series use two different scales. Trading volume begins at about 85 and generally increases to about 245 by early 2007. It then generally decreases to about 115 by 2007, and generally increases to about 290 by early 2008. It then generally decreases to about 70 by early 2009, and generally increases to end at about 90. It is at about 90 at the time of the April 2009 FOMC meeting. Turnover begins at about 1.2 and generally increases to about 4.6 by early 2007. It then generally decreases to about 2.2 by 2007, and generally increases to about 5.3 by 2007. It then generally decreases to end at about 1. It is at about 1 at the time of the April 2009 FOMC meeting.

Note. Turnover is trading volume divided by total outstanding at the end of the month.

Source. BrokerTec Interdealer Market Data and Bloomberg.

Figure: Pricing in the secondary market for leveraged loans

Line chart, January 2007 to June 18, 2009. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are two series, "Average bid price", which is by percent of par value, and "Average bid-asked spread", which is by basis points. Average bid price begins at about 99 and remains about constant until July 2007. It then generally decreases to about 60 by late December 2008, and generally increases to end at about 75. It is at about 68 at the time of the April 2009 FOMC meeting. Average bid-asked spread begins at about 55 and generally increases to about 230 by February 2008. It then generally decreases to about 155 by June 2008, and generally increases to about 410 by January 2009. It then generally decreases to end at about 260. It is at about 300 at the time of the April 2009 FOMC meeting.

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

[Box:] Balance Sheet Developments During the Intermeeting Period

Federal Reserve Balance Sheet

Billions of dollars

	Change since last FOMC	Current (6/17/2009)	Maximum level	Date of maximum level
Total assets	6	2,074	2,256	12/17/2008
Selected assets:				
Liquidity programs for financial firms	-162	540	1,247	11/06/2008
Primary, secondary, and seasonal credit	-9	37	114	10/28/2008
Term auction credit (TAF)*	-67	337	493	03/11/2009
Foreign central bank liquidity swaps*	-101	149	586	12/04/2008
Primary Dealer Credit Facility (PDCF)	-1	0	156	09/29/2008
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)	15	19	152	10/01/2008
Lending through other credit facilities	-31	157	351	01/23/2009
Net portfolio holdings of Commercial Paper Funding Facility LLC (CPFF)	-50	132	351	01/23/2009
Term Asset-Backed Securities Loan Facility (TALF)	19	25	26	06/09/2009
Support for specific institutions	-13	105	118	04/02/2009
Credit extended to AIG	-3	43	91	10/27/2008
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	-10	62	75	12/30/2008
Securities held outright**	201	1,184	1,184	06/17/2009
U.S. Treasury securities	90	639	791	08/14/2007
Agency debt securities	22	90	90	06/17/2009
Agency mortgage-backed securities***	90	456	456	06/17/2009
Memo: Term Securities Lending Facility (TSLF)	-17	16	236	10/01/2008
Total liabilities	6	2,027	2,213	12/04/2008
Selected liabilities:				
Federal Reserve notes in circulation	4	868	870	05/27/2009
Reserve balances of depository institutions	-69	744	955	05/20/2009
U.S. Treasury, general account	70	133	137	10/23/2008
U.S. Treasury, supplemental financing account	0	200	559	10/22/2008
Other deposits	0	0	53	04/14/2009
Total capital	0	47	47	05/05/2009

* The amount of term auction credit and the amount of foreign central bank liquidity swaps are expected to decline \$54 billion and \$27 billion respectively, on June 18, 2009. [Return to table](#)

** Par value. [Return to table](#)

*** Includes only mortgage-backed security purchases that have already settled. Over the intermeeting period, the Open Market Desk committed to purchase \$172 billion of MBS, on net. [Return to table](#)

Chart 3 Interest Rate Developments

Figure: Expected federal funds rates

Line chart, by percent, 2009 to 2011. There are two series, "June 18, 2009" and "April 28, 2009". June 18, 2009 begins at about 0.2 and generally increases to end at about 2.8. April 28, 2009 begins at about 0.15 and generally increases to end at about 1.9.

Note. Estimates from federal funds and Eurodollar futures, with an allowance for term premiums and other adjustments.

Source. Chicago Mercantile Exchange and Chicago Board of Trade.

Figure: Implied distribution of federal funds rate six months ahead

Bar chart, by percent, 0.00 to 4.00. There are two series, "Recent: 6/18/2009" and "Last FOMC: 4/28/2009". Recent: 6/18/2009 begins at about 0 and generally increases to about 35 by 0.50. It then generally decreases to about 3 by 1.00, and generally increases to about 8 by 1.25. It then generally decreases to end at about 0. Last FOMC: 4/28/2009 begins at about 10 and generally increases to about 65 by 0.25. It then generally decreases to about 0 by 0.75, and generally increases to about 5 by 1.00. It then generally decreases to end at about 0.

Note. Derived from options on Eurodollar futures contracts, with term premium and other adjustments to estimate expectations for the federal funds rate.

Source. Chicago Mercantile Exchange.

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: 14 respondents" and "Last FOMC: 14 respondents". Recent: 14 respondents begins at about 7 and generally increases to about 29 by 2010:Q2. It then generally decreases to about 7 by 2010:Q3, and generally increases to about 21 by 2008:Q4. It then generally decreases to about 0 by 2011:Q3, and generally increases to about 7 by 2012:Q1. It then generally decreases to end at about 0. Last FOMC: 14 respondents begins at about 7 and generally increases to about 21 by 2010:Q2. It then generally decreases to about 7 by 2008:Q4. It then generally increases to about 36 by 2011:Q1, and generally decreases to about 0 by 2011:Q2. It remains at about 0 until 2011:Q4, and then generally increases to end at about 7.

Source. Federal Reserve Bank of New York.

Figure: Nominal Treasury yields

Line chart, by percent, 2007 to June 18, 2009. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are two series, "10-year" and "2-year". 10-year begins at about 4.8 and generally increases to about 5.2 by 2007. It then generally decreases to about 2.7 by late 2008, and generally increases to end at about 4.1. It is at about 3.4 at the time of the April 2009 FOMC meeting. 2-year begins at about 4.9 and generally decreases to about 1.5 by 2008. It then generally increases to about 3 by 2008, and generally decreases to about 0.3 by late 2008. It then generally increases to end at about 1.2. It is at about 0.9 at the time of the April 2009 FOMC meeting.

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

Source. Staff estimates.

Figure: Inflation compensation

Line chart, by percent, 2007 to June 18, 2009. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are two series, "Next 5 years" and "5-to-10 year forward". Next 5 years begins at about 2.3 and remains about constant until early 2008. It then generally increases to about 2.5 by mid-2008, and generally decreases to about -1.5 by late 2008. It then generally increases to end at about 1.5. It is at about 0.5 at the time of the April 2009 FOMC meeting. 5-to-10 year forward begins at about 2.5 and generally increases to about 3.6 by 2008. It then generally decreases to about 2.0 by late 2008, and generally increases to about 3.1 by 2009. It then generally decreases to end at about 2.8. It is at about 2.5 at the time of the April 2009 FOMC meeting.

Note. Estimates based on smoothed nominal and inflation-indexed Treasury yield curves and adjusted for the indexation-lag (carry) effect.

Source. Barclays, PLC.; Bloomberg; Staff estimates.

Figure: Survey measures of inflation expectations

Line chart, by percent, 2002 to June 2009. Data are monthly. There are two series, "Michigan Survey 1-year" and "Michigan Survey 10-year". Michigan Survey 1-year begins at about 2 and generally increases to about 3.1 by 2003. It then generally decreases to about 1.8 by 2003, and generally increases to about 4.5 by late 2005. It then generally decreases to about 2.9 by late 2006, and generally increases to about 5.2 by 2008. It then generally decreases to about 1.6 by early 2009, and generally increases to end at about 3.1. Michigan Survey 10-year begins at about 2.8 and remains about constant until early 2005. It then generally increases to about 3.4 by 2008, generally decreases to about 2.6 by 2009, and generally increases to end at about 3.1.

Source. Reuters/University of Michigan.

[Box:] The Recent Rise in Long-term Nominal Treasury Yields

Figure: 10-year nominal Treasury Yield

Line chart, by percent, March 2009 to June 18, 2009. The March 2009 and April 2009 FOMC meetings are marked in the time series. The series begins at about 3.45 and generally decreases to about 3.0 by March. It then generally increases to about 4.3 by early June, and generally decreases to about 4.0 by mid-June. It then generally increases to end at about 4.25. It is at about 3.0 at the time of the March 2009 FOMC meeting. It is at about 3.5 at the time of the April 2009 FOMC meeting.

Note: Obtained from smoothed yield curve fitted to off-the-run coupon securities. The period from mid-May through June 18, 2009 is shaded grey.

Figure: Long-term interest rate implied volatility

Line chart, March 200 to June 18, 2009. The March 2009 and April 2009 FOMC meetings are marked in the time series. The series begins at about 10.2 and generally increases to about 10.6 by March. It then generally decreases to about 6.7 by April, and generally increases to about 11.6 by early June. It then generally decreases to about 10 by mid-June, and generally increases to end at about 10.7. It is at about 9.4 at the time of the March 2009 FOMC meeting. It is at about 8.4 at the time of the April 2009 FOMC meeting.

Note: Derived from options on 10-year Treasury note futures. The period from mid-May through June 18, 2009 is shaded grey.

[Box:] Interpreting the Rise in Inflation Compensation

Changes over the intermeeting period (in basis points)	5-year	5-year, 5-year forward
Change in inflation expectations	+40	+37
Change in inflation risk premium	+17	+22
Change in residuals	+11	-25
Total change	+68	+34

Chart 4 Asset Market Developments

Figure: Equity prices

Line chart showing Dow Jones Total US Stock Index, 2002 to June 18, 2009. December 31, 2001 = 100. Data are daily. The April 2009 FOMC meeting is marked in the time series. The series begins at about 101 and generally decreases to about 70 by late 2002. It then generally increases to about 147 by late 2007, and generally decreases to about 62 by early 2009. It then generally increases to end at about 90. It is at about 81 at the time of the April 2009 FOMC meeting.

Source: Bloomberg.

Figure: Implied volatility on S&P 500 (VIX)

Line chart, by percent, 2002 to June 18, 2009. Data are weekly, as measured on Fridays or the most recent business day. The April 2009 FOMC meeting is marked in the time series. The series begins at about 20 and generally increases to about 44 by 2002. It then generally decreases to about 8 by late 2006, and generally increases to about 80 by late 2008. It then generally decreases to end at about 29. It is at about 32 at the time of the April 2009 FOMC meeting.

Source: Chicago Board Options Exchange.

Figure: Corporate bond spreads

Line chart, 2002 to June 18, 2009. Unit is basis points. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are two series, "10-year BBB" and "10-year High-Yield". These two series use two different scales. 10-year BBB begins at about 205 and generally increases to about 330 by late 2002. It then generally decreases to about 90 by early 2005, and generally increases to about 655 by late 2008. It then generally decreases to end at about 350. It is at about 1250 at the time of the April 2009 FOMC meeting. 10-year High-Yield begins at about 550 and generally increases to about 800 by 2002. It then generally decreases to about 255 by early 2005, and generally increases to about 1600 by late 2008. It then generally decreases to end at about 750. It is at about 1000 at the time of the April 2009 FOMC meeting.

Note: Measured relative to an estimated off-the-run Treasury yield curve.

Source: Merrill Lynch and staff estimates.

Figure: Residential mortgage rates and spreads

Line chart, January 2007 to June 17, 2009. Data are weekly. The April 2009 FOMC meeting is marked in the time series. There are two series, "FRM rate", which is by percent, and "FRM spread", which is by basis points. FRM rate begins at about 6.2 and generally increases to about 6.75 by June 2007. It then generally decreases to about 5.5 by late January 2008, and generally increases to about 6.6 by July 2008. It then generally decreases to about 4.75 by April 2009, and generally increases to end at about 5.4. It is at about 4.8 at the time of the April 2009 FOMC meeting. FRM spread begins at about 150, and generally increases to about 260 by March 2008. It then generally decreases to about 210 by June 2008, and generally increases to about 300 by late December 2008. It then generally decreases to about 142 by late May 2009, and generally increases to end at about 162. It is at about 177 at the time of the April 2009 FOMC meeting.

Note. FRM spread is relative to 10-year Treasury.

Source. Freddie Mac.

Figure: Gross ABS Issuance

Line chart, by billions of dollars, 2006 to June 2009. Data are monthly rates. There are three series, "Credit card", "Auto", and "Student Loan". Approximate values: 2006: Credit card 5, Auto 8, Student Loan 6.5. 2007: Credit card 8, Auto 6.5, Student Loan 5.5. 2008:H1: Credit card 9, Auto 5, Student Loan 4. 2008:H2: Credit card 1, Auto 1.5, Student Loan 1.5. 2009:Q1: Credit card 0.5, Auto 3.5, Student Loan 0.5. April 2009: Credit card 1, Auto 3.5, Student Loan 5. May 2009: Credit card 5.5, Auto 4.5, Student Loan 3. June 2009: Credit card 10, Auto 5.5.

Note. June 2009 values are actual issuance as of June 16. Auto ABS include car loans and leases and financing for buyers of motorcycles.

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

Figure: AAA ABS spreads

Line chart, January 2007 to May 2009. Data are weekly. The April 2009 FOMC meeting is marked in the time series. There are three series, "2-year credit card", "2-year auto", and "3-year FFELP". 2-year credit card begins at about 0 and generally increases to about 105 by April 2008. It then generally decreases to about 50 by late June 2008, and generally increases to about 550 by December 2008. It then generally decreases to end at about 100. It is at about 225 at the time of the April 2009 FOMC meeting. 2-year auto begins at about 0 and generally increases to about 150 by April 2008. It then generally decreases to about 90 by June 2008, and generally increases to about 450 by November 2008. It then generally decreases to end at about 100. It is at about 180 at the time of the April 2009 FOMC meeting. 3-year FFELP begins at about 0 by June 2007, and generally increases to about 350 by November 2008. It then generally decreases to end at about 100. It is at about 102 at the time of the April 2009 FOMC meeting.

Note. Last observations for 2-year auto and credit card ABS spreads are June 12. Last observation for 3-year FFELP is May 8.

Source. For credit card and auto spreads, trader estimates provided by Citigroup. For FFELP spreads, trader estimates provided by Merrill Lynch.

Chart 5 International Financial Indicators

Figure: Nominal trade-weighted dollar indexes

Line chart, 2006 to June 18, 2009. December 30, 2005 = 100. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are three series, "Broad", "Major Currencies", and "Other Important Trading Partners". Broad begins at about 100 and generally decreases to about 95.5 by 2006. It then generally increases to about 98 by 2006, and generally decreases to about 85 by 2008. It then generally increases to about 103 by 2009, and generally decreases to end at about 93. It is at about 96 at the time of the April 2009 FOMC meeting. Major currencies begins at about 99 and generally decreases to about 94 by 2006. It then generally increases to about 96 by late 2006, and generally decreases to about 81 by 2008. It then generally increases to about 100.2 by 2009, and generally decreases to end at about 88. It is at about 94 at the time of the April 2009 FOMC meeting. Other Important Trading Partners begins at about 100 and generally decreases to about 97.5 by 2006. It then generally increases to about 100 by 2006, and generally decreases to about 88 by 2008. It then generally increases to about 107 by 2009, and generally decreases to end at about 98. It is at about 100 at the time of the April 2009 FOMC meeting.

Source. FRBNY and Bloomberg.

Figure: Stock price indexes: Industrial countries

Line chart, 2006 to June 18, 2009. December 29, 2005 = 100. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are three series, "UK (FTSE-350)", "Euro Area (DJ Euro)", "Japan (Topix)". UK begins at about 100 and generally increases to about 110 by 2006. It then generally decreases to about 98 by 2006, and generally increases to about 120 by 2007. It then generally decreases to about 63 by 2009, and generally increases to end at about 80. It is at about 78 at the time of the April 2009 FOMC meeting. Euro area begins at about 105 and generally increases to about 116 by 2006. It then generally decreases to about 102 by 2006, and generally increases to about 140 by 2007. It then generally decreases to about 55 by 2009, and generally increases to end at about 70. It is at about 68 at the time of the April 2009 FOMC meeting. Japan begins at about 100 and generally increases to about 108 by 2006. It then generally decreases to about 88 by 2006, and generally increases to about 109 by early 2007. It then generally decreases to about 44 by 2009, and generally increases to end at about 57. It is at about 50 at the time of the April 2009 FOMC meeting.

Source. Bloomberg.

Figure: Nominal Ten-year government bond yields

Line chart, by percent, 2006 to June 18, 2009. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are three series, "UK",

"Germany", and "Japan". UK and Germany use the same scale, and Japan uses another. UK begins at about 4.05 and generally increases to about 5.52 by 2007. It then generally decreases to about 4.3 by 2008, and generally increases to about 5.25 by 2008. It then generally decreases to about 2.95 by 2009, and generally increases to end at about 3.8. It is at about 3.5 at the time of the April 2009 FOMC meeting. Germany begins at about 3.4 and generally increases to about 4.1 by 2006. It then generally decreases to about 3.7 by late 2006, and generally increases to about 4.6 by 2007. It then generally decreases to about 3.75 by early 2008, and generally increases to about 4.6 by 2008. It then generally decreases to about 2.9 by early 2009, and generally increases to about 3.5. It is at about 3.2 at the time of the April 2009 FOMC meeting. Japan begins at about 1.45 and generally increases to about 2.0 by 2006. It then generally decreases to about 1.3 by early 2008, and generally increases to about 1.9 by 2008. It then generally decreases to about 1.2 by early 2009, and generally increases to about 1.5.

Source. Bloomberg.

Figure: Stock price indexes: Emerging market economies

Line chart, 2006 to June 18, 2009. December 29, 2005 = 100. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are three series, "Brazil", "Korea", and "Mexico". Brazil begins at about 108 and generally increases to about 125 by 2006. It then generally decreases to about 100 by 2006, and generally increases to about 223 by 2008. It then generally decreases to about 82.5 by late 2008, and generally increases to end at about 151. It is at about 140 at the time of the April 2009 FOMC meeting. Korea begins at about 102 and generally decreases to about 87 by 2006. It then generally increases to about 150 by late 2007, and generally decreases to about 68 by late 2008. It then generally increases to end at about 100. It is at about 100 at the time of the April 2009 FOMC meeting. Mexico begins at about 100 and generally increases to about 124 by 2006. It then generally decreases to about 95 by 2006, and generally increases to about 180 by late 2007. It then generally decreases to about 98 by late 2008, and generally increases to end at about 137. It is at about 127 at the time of the April 2009 FOMC meeting.

Source. Bloomberg.

Chart 6 Debt and Money

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

	Total	Business	Household	Government
2007	8.7	13.5	6.6	6.1
2008	5.9	5.1	0.4	17.5
Q1	5.4	7.5	3.0	6.7
Q2	3.2	6.1	0.4	4.4
Q3	8.3	5.0	0.1	28.6
Q4	6.2	1.5	-2.0	26.7
2009				
Q1	4.1	-0.3	-1.1	18.0
Q2p	5.6	0.9	-1.3	22.1

Source. Flow of Funds.

Figure: Growth of debt of household sector

Line chart, by percent, 1991 to 2009:Q2p. Data are quarterly, s.a.a.r. There are two series, "Consumer credit" and "Home mortgage". Consumer credit begins at about 0 and generally decreases to about -2 by late 1991. It then generally increases to about 16.5 by early 1995, and generally decreases to about 2.8 by 1998. It then generally increases to about 12.5 by late 2000, and generally decreases to about 3 by early 2006. It then generally increases to about 7 by 2007, and generally decreases to end at about -3. Home mortgage begins at about 8 and fluctuates but generally increases to about 15.1 by 2003. It then generally decreases to end at about -1.

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

Figure: Growth of house prices

Line chart, by percent, 1996 to 2008:Q1. Data are s.a.a.r. There are two series, "FHFA purchase-only index", and "S&P Case-Shiller national index". FHFA purchase-only index begins at about 5 and generally increases to about 10 by 2005, and generally decreases to about -13 by early 2009. It then generally increases to end at about -2. S&P Case-Shiller begins at about 3 and generally increases to about 17 by 2005. It then generally decreases to about -23 by early 2008, generally increases to about -13 by 2008, and generally decreases to end at about -25.

Source. Federal Housing Finance Agency (FHFA), Standard & Poor's.

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

Bar chart, by billions of dollars, 2006 to May 2009. Data are monthly rates. There are three series, "Bonds", "Commercial paper", and "C&I loans". There is also a

"Sum" series plotted as a curve which shows the total of the other series. Approximate values are: 2006: Bonds 18, C&I loans 12, Commercial paper 2, Sum 32. 2007: Bonds 27, C&I loans 21, Commercial Bonds -0.5, Sum 47.5. 2008:Q1: Bonds 15, C&I loans 15, Commercial Bonds 3, Sum 33. 2008:Q2: Bonds 30, C&I loans 12, Commercial paper -8, Sum 34. 2008:Q3: Bonds 8, C&I 17, Commercial paper 5, Sum 30. 2008:Q4: Bonds 15, C&I loans 0, Commercial paper 2, Sum 17. 2009:Q1: Bonds 48, C&I loans -10, Commercial paper -12, Sum 26. April 2009: Bonds 15, C&I loans -20, Commercial paper -15, Sum -20. May 2009: Bonds 42, C&I loans -22, Commercial paper 3, Sum 23.

Note. Commercial paper and C&I loans are seasonally adjusted, bonds are not.

Source. Securities Data Company, Depository Trust & Clearing Corporation, and Federal Reserve H.8 release.

Figure: Bank Credit

Line chart, February 2007 to May 2009. January 2008 = 100. Data are monthly averages. The series begins at about 90.5 and generally increases to about 104 by November 2008. It then generally decreases to end at about 100.4.

Source. Federal Reserve.

Figure: Growth of M2

Bar chart, by percent, 2006 to May 2009. Data are s.a.a.r. The series begins at about 5 and generally increases to about 8 by 2008:Q1. It then generally decreases to about 4 by 2008:Q3, and generally increases to about 14.2 by 2008:Q4. It then generally decreases to about -7.5 by April 2009, and generally increases to end at about 9.5.

Source. Federal Reserve.

† Note: Data values for figures are rounded and may not sum to totals. [Return to text](#)

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Monetary Policy Strategies

Chart 7
Equilibrium Real Federal Funds Rate

Figure: Short-Run Estimates with Confidence Intervals

Line chart, by percent, 1990 to 2009. There are five series, "The actual real funds rate based on lagged core inflation", "Range of model-based estimates", "70 Percent confidence interval", "90 Percent confidence interval", and "Greenbook-consistent measure (FRB/US)". The actual real funds rate based on lagged core inflation begins at about 4.4 and generally decreases to about 0 by 1992. It then generally increases to about 5 by late 2000, and generally decreases to about -1 by 2004. It then generally increases to about 3.2 by 2007, and generally decreases to end at about -1.5. Greenbook-consistent measure (FRB/US) begins at about 4.2 by 1997, and generally increases to about 5.5 by 2000. It then generally decreases to about 0 by late 2002, and generally increases to about 3 by early 2007. It then generally decreases to about -4.1 by early 2009, and generally increases to end at about -2.9. The other three series closely track each other throughout the chart, with the 70 percent confidence interval being about 1 percent both lesser and greater than the Range of model-based estimates, and the 90 Percent confidence interval being about 2 percent both lesser and greater than the Range of model-based estimates at any given point. The Range of model-based estimates begins at between about -0.5 and 4, decreases to about -3.4 and 2.2 by early 1991, generally increases to between 2.4 and 4.5 by early 1999, generally decreases to about -1 and 1.4 by late 2001, generally increases to about 1.2 and 3.2 by 2005, and then generally decreases to end at about -5.6 and -1.5.

Short-Run and Medium-Run Measures

	Current Estimate	Previous Bluebook
Short-Run Measures		
Single-equation model	-1.4	-1.7
Small structural model	-3.5	-9.1
EDO model	-3.8	---
FRB/US model	-5.5	-6.7
Confidence intervals for four model-based estimates		
70 percent confidence interval	-5.7 to -1.4	
90 percent confidence interval	-6.7 to -0.1	
Greenbook-consistent measures		
EDO model	-3.9	---
FRB/US model	-2.7	-3.2
Medium-Run Measures		
Single-equation model	1.5	1.5
Small structural model	1.5	1.2
Confidence intervals for two model-based estimates		
70 percent confidence interval	0.6 to 2.4	
90 percent confidence interval	-0.1 to 3.0	
TIPS-based factor model	2.0	2.0
Memo		
Actual real federal funds rate	-1.6	-1.7

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.

[Box:] Measures of the Equilibrium Real Interest Rate from a DSGE Model

Figure: Equilibrium Real Federal Funds Rate from EDO

Line chart, by percent, 1990 to 2009. There are two series, "Actual real federal funds rate" and "EDO model estimate". Actual real federal funds rate begins at about 4.5 and generally decreases to about 0 by 1992. It then generally increases to about 5 by late 2000, and generally decreases to about -1 by 2004. It then generally increases to about 3 by 2007, and generally decreases to end at about -1.8. EDO model estimate begins at about -0.1 and generally decreases to about -3.2 by early 1991. It then generally increases to about 4.1 by 2000, and generally decreases to about -1 by late 2001. It then generally increases to about 3 by late 2005, and generally decreases to end at about 4.

Chart 8 Constrained vs. Unconstrained Monetary Policy (2 Percent Inflation Goal)

Figure: Nominal Federal Funds Rate

Line chart, by percent, 2009 to 2013. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained", and "Previous Bluebook: Unconstrained". Current Bluebook: Constrained begins at about 0.2 and remains about constant until late 2012. It then generally increases to end at about 1.5. Current Bluebook: Unconstrained begins at about 0.1, generally decreases to about -7.8 by 2010, and generally increases to end at about 5. Previous Bluebook: Unconstrained begins at about 0.1, generally decreases to about -7.2 by late 2010, and generally increases to end at about 2.3.

Figure: Real Federal Funds Rate

Line chart, by percent, 2009 to 2013. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained", and "Previous Bluebook: Unconstrained". Current Bluebook: Constrained begins at about -1.7 and generally increases to about -0.8 by 2010. It then remains about constant until about 2012, and then generally decreases to about -1 by early 2013. It then generally increases to end at about 0.1. Current Bluebook: Unconstrained begins at about -1.7 and generally decreases to about -9 by 2010. It then generally increases to end at about 3.2. Previous Bluebook: Unconstrained begins at about -1.7 and generally decreases to about -8.5 by 2010. It then generally increases to end at about -0.8.

Figure: Civilian Unemployment Rate

Line chart, by percent, 2009 to 2013. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained", and "Previous Bluebook: Unconstrained". Current Bluebook: Constrained begins at about 8.2 and generally increases to about 9.9 by late 2009. It then generally decreases to end at about 4. Current Bluebook: Unconstrained begins at about 8.2 and generally increases to about 9.7 by 2009. It then generally decreases to end at about 3.6. Previous Bluebook: Unconstrained begins at about 8.2, generally increases to about 9.1, and generally decreases to end at about 3.7.

Figure: Core PCE Inflation

Line chart, by percent, 2009 to 2013. Data are four-quarter average. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained", and "Previous Bluebook: Unconstrained". Current Bluebook: Constrained begins at about 1.75 and generally increases to about 1.8 by 2009. It then generally decreases to about 0.8 by 2011, and generally increases to end at about 1.4. Current Bluebook: Unconstrained begins at about 1.75 and generally increases to about 1.9 by 2009. It then generally decreases to about 1.3 by 2011, and generally increases to end at about 1.7. Previous Bluebook: Unconstrained begins at about 1.8 and generally increases to about 1.85 by 2009. It then generally decreases to about 1.2 by 2010, and generally increases to end at about 1.55.

Chart 9

The Policy Outlook in an Uncertain Environment

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

Line chart, by percent, 2009 to 2013. There are three series, "Current Bluebook", "Previous Bluebook", and "Greenbook assumption". They begin at about 0.1. Current Bluebook remains about constant until about 2011, and generally increases to end at about 4.2. Previous Bluebook remains about constant until late 2011, and generally increases to end at about 3. Greenbook assumption remains about constant until about early 2012, and generally increases to end at about 4.1.

Note: There is dark and light shading that represents the 70 and 90 percent confidence intervals respectively. The 70 percent interval covers about 2.3 to 6.1 and the 90 percent interval covers about 1.2 to 7.4 by the end of the chart.

Figure: Information from Financial Markets

Line chart, by percent, 2009 to 2013. There are two series, "Current Bluebook", and "Previous Bluebook". Current Bluebook begins at about 0.1 and generally increases to end at about 4. Previous Bluebook begins at about 0.1 and generally increases to end at about 2.9.

Note: There is dark and light shading that represents the 70 and 90 percent confidence intervals respectively. The 90 percent interval covers about 1.5 to 7.4 and the 70 percent interval covers about 2.2 to 5.7. In the previous Bluebook, the 90 percent interval covers about 0.9 to 5.7 and the 70 percent interval covers about 1.4 to 4.2. In this panel, the results labeled as "Previous Bluebook" have been generated using the revised estimation procedure noted in the text.

Near-Term Prescriptions of Simple Policy Rules

	Constrained Policy		Unconstrained Policy	
	2009Q3	2009Q4	2009Q3	2009Q4
Taylor (1993) rule	0.13	0.13	-0.03	-0.12
<i>Previous Bluebook</i>	0.13	0.13	-0.47	-0.66
Taylor (1999) rule	0.13	0.13	-3.21	-3.34
<i>Previous Bluebook</i>	0.13	0.13	-3.87	-4.15
First-difference rule	0.13	0.13	-0.51	-0.90
<i>Previous Bluebook</i>	0.13	0.13	-1.94	-2.56
Estimated outcome-based rule	0.13	0.13	-0.56	-1.26
<i>Previous Bluebook</i>	0.13	0.13	-1.79	-2.59
Estimated forecast-based rule	0.13	0.13	-0.61	-1.46
<i>Previous Bluebook</i>	0.13	0.13	-2.09	-3.02

Memo

	2009Q3	2009Q4
Greenbook assumption	0.13	0.13
Fed funds futures	0.22	0.29
Median expectation of primary dealers	0.13	0.13
Blue Chip forecast (June 1, 2009)	0.20	0.20

Note: In calculating the near-term prescriptions of these simple policy rules, policymakers' long-run inflation objective is assumed to be 2 percent. Appendix B provides further background information.

† Note: Data values for figures are rounded and may not sum to totals. [Return to text](#)

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Policy Alternatives

Table 1: Overview of Alternative Language for the June 23-24, 2009 FOMC Announcement

		April FOMC	Alternative			
			A	B / B'	C	
1. Economic Activity	Outlook	"likely to remain weak for a time"	-----	"likely to remain weak for a time"	recovery "expected to begin later this year"	
	Pace of Recovery	gradual	-----	gradual	gradual	
	Risk Assessment	-----	Recovery could be undermined by higher long rates, absent further monetary stimulus	-----	-----	
2. Inflation	Outlook	"will remain subdued"	"will remain subdued"	"will remain subdued"	"will remain subdued"	
	Rationale	increasing slack here and abroad	substantial slack "likely to persist here and abroad"	recent rise in energy prices; substantial slack "likely to persist here and abroad"	recent rise in energy prices	
	Risk Assessment	some downside risk	still some downside risk	-----	-----	
3. Policy Decision	Forward Guidance on Funds Rate	"for an extended period"	"for an extended period" or "at least through mid-2010"	"for an extended period"	"until late this year"	
	Changes in LSAPs	-----	\$750 billion in Treasuries by end of year	-----	"will taper off gradually" by end of year	
	Evaluation of LSAPs	"timing and overall amounts"	"timing, composition, and amounts", subject to exit strategy	"timing and composition", additional amounts subject to exit strategy	"timing, composition, and overall amounts"	"timing, composition, and overall amounts"
	Adjustments to Programs	-----	"as warranted"	"as warranted"	"as warranted"	

Accessible Material

June 2009 Bluebook Tables and Charts[†]

Long-Run Projections of the Balance Sheet and Monetary Base

Growth Rates for Monetary Base

Date	Baseline	Expanded Purchases	April Baseline
Percent, annual rate			
Monthly			
Jun-09	-52.1	-52.1	60.2
Jul-09	-0.4	-0.4	131.9
Aug-09	99.3	99.3	133.9
Sep-09	97.3	97.3	120.5
Oct-09	103.1	148.3	98.1
Nov-09	95.7	173.1	79.9
Dec-09	102.1	163.8	71.1
Quarterly			
Q2 2009	24.9	24.9	38.4
Q3 2009	22.7	22.7	111.9
Q4 2009	108.2	157.0	107.3
Q1 2010	48.0	78.6	26.2
Q2 2010	-7.1	-6.7	-17.2
Q3 2010	-15.6	-14.0	-17.9
Q4 2010	-19.0	-16.9	-18.8
Annual - period average			
2009	92.5	98.2	120.3
2010	32.5	51.3	34.4
2011	-11.1	-10.0	-14.1
2012	-9.0	-10.0	-14.4
2013	-12.4	-14.2	-25.0
2014	-9.3	-11.2	-19.7
2015	-9.2	-10.3	-14.8
2016	-7.7	-10.2	2.3

Note: Not seasonally adjusted.

Baseline Scenario

Figure: Federal Reserve Assets

Stacked line chart, by billions of dollars, 2006 to 2016. There are nine series, "Treasury securities", "Repurchase agreements", "TALF", "Agency debt", "TAF", "Other loans and facilities", "Agency MBS", "Central bank swaps", and "Other assets". Approximate values of all series are given as of the beginning of each year. 2006: Treasury securities 750, Repurchase agreements 10, Other assets 40. 2007: Treasury securities 750, Repurchase agreements 12, Other assets 40. 2008: Treasury securities 490, Repurchase agreements 300, TAF 200, Central bank swaps 50, Other loans and facilities 25, Other assets 40. 2009: Treasury securities 490, Agency debt 10, Agency MBS 40, TAF 450, Central bank swaps 350, Other loans and facilities 450, Other assets 10. 2010: Repurchase agreements 750, Agency debt 240, Agency MBS 1160, TAF 100, Central bank swaps 5, TALF 100, Other loans and facilities 100, Other assets 40. 2011: Treasury securities 750, Agency debt 150, Agency MBS 1100, TALF 200, Other loans and facilities 25, Other assets 40. 2012: Treasury securities 750, Agency debt 50, Agency MBS 1000, TALF 150, Other loans and facilities 25, Other assets 40. 2013: Treasury securities 650, Agency debt 100, Agency MBS 970, TALF 20, Other loans and facilities 10, Other assets 40. 2014: Treasury securities 550, Agency debt 50, Agency MBS 850, TALF 20, Other loans and facilities 5, Other assets 40. 2015:

Treasury securities 550, Agency debt 20, Agency MBS 900, TALF 5, Other assets 40. 2016: Treasury securities 550, Agency debt 10, Agency MBS 850, Other assets 40.

Figure: Federal Reserve Liabilities and Capital

Stacked line chart, by 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". Approximate values of all series are given as of the beginning of each year. 2006: Federal Reserve notes 750, Reverse repurchase agreements 10, Reserve balances 5, Deposits, other than reserve balances 1, Capital 10. 2007: Federal Reserve notes 750, Reverse repurchase agreements 10, Reserve balances 5, Deposits, other than reserve balances 1, Capital 10. 2008: Federal Reserve notes 750, Reverse repurchase agreements 15, Reserve balances 5, Deposits, other than reserve balances 1, Capital 15. 2009: Federal Reserve notes 850, Reverse repurchase agreements 100, Deposits, other than reserve balances 310, Reserve balances 800, Capital 10. 2010: Federal Reserve notes 900, Reverse repurchase agreements 10, Deposits, other than reserve balances 15, Reserve balances 1600, Capital 10. 2011: Federal Reserve notes 950, Reverse repurchase agreements 10, Reserve balances 1302, Capital 10. 2012: Federal Reserve notes 1000, Reverse repurchase agreements 10, Reserve balances 1100, Capital 10. 2013: Federal Reserve notes 1010, Reverse repurchase agreements 10, Reserve balances 1250, Capital 10. 2014: Federal Reserve notes 1050, Reverse repurchase agreements 10, Reserve balances 450, Capital 15. 2015: Federal Reserve notes 1100, Reverse repurchase agreements 10, Reserve balances 300, Capital 20. 2016: Federal Reserve notes 1200, Reverse repurchase agreements 10, Reserve balances 150, Capital 40.

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

Expanded Purchases Scenario

Figure: Federal Reserve Assets

Stacked line chart, by billions of dollars, 2006 to 2016. There are nine series, "Treasury securities", "Repurchase agreements", "TALF", "Agency debt", "TAF", "Other loans and facilities", "Agency MBS", "Central bank swaps", and "Other assets". Approximate values of all series are given as of the beginning of each year. 2006: Treasury securities 750, Repurchase agreements 15, Other assets 20. 2007: Treasury securities 755, Repurchase agreements 15, Other assets 20. 2008: Treasury securities 700, Repurchase agreements 50, TAF 70, Central bank swaps 5, Other loans and facilities 10, Other assets 20. 2009: Treasury securities 500, Agency debt 5, Agency MBS 150, TAF 450, Central bank swaps 420, Other loans and facilities 500, Other assets 10. 2010: Treasury securities 1200, Agency debt 200, Agency MBS 1200, TAF 100, Central bank swaps 10, TALF 50, Other loans and facilities 55, Other assets 20. 2011: Treasury securities 1150, Agency debt 100, Agency MBS 1150, TALF 120, Other loans and facilities 20, Other assets 25. 2012: Treasury securities 1100, Agency debt 75, Agency MBS 1090, TALF 50, Other loans and facilities 10, Other assets 20. 2013: 980, Agency debt 70, Agency MBS 1090, TALF 15, Other loans and facilities 5, Other assets 20. 2014: Treasury securities 800, Agency debt 8, Agency MBS 1090, TALF 5, Other loans and facilities 2, Other assets 20. 2015: Treasury securities 750, Agency debt 8, Agency MBS 1090, TALF 1, Other assets 20. 2016: Treasury securities 750, Agency debt 5, Agency MBS 1090, Other assets 20.

Figure: Federal Reserve Liabilities and Capital

Stacked line chart, by 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". Approximate values of all series are given as of the beginning of each year. 2006: Federal Reserve notes 750, Reverse repurchase agreements 5, Reserve balances 2, Capital 10. 2007: Federal Reserve notes 750, Reverse repurchase agreements 12, Reserve balances 2, Capital 10. 2008: Federal Reserve notes 750, Reverse repurchase agreements 15, Reserve balances 2, Capital 10. 2009: Federal Reserve notes 880, Reverse repurchase agreements 50, Deposits, other than reserve balances 200, Reserve balances 1050, Capital 10. 2010: Federal Reserve notes 950, Reverse repurchase agreements 10, Deposits, other than reserve balances 15, Reserve balances 2200, Capital 10. 2011: Federal Reserve notes 900, Reserve repurchase agreements 10, Reserve balances 1700, Capital 10. 2012: Federal Reserve notes 1000, Reverse repurchase agreements 10, Reserve balances 1520, Capital 20. 2013: Federal Reserve notes 1020, Reverse repurchase agreements 10, Reserve balances 1000, Capital 15. 2014: Federal Reserve notes 1050, Reverse repurchase agreements 10, Reserve balances 850, Capital 20. 2015: Federal Reserve notes 1100, Reverse repurchase agreements 10, Reserve balances 450, Capital 25. 2016: Federal Reserve notes 1200, Reverse repurchase agreements 10, Reserve balances 260.

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

† Note: Data values for figures are rounded and may not sum to totals. [Return to text](#)

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June 2009 Bluebook Tables and Charts

Bank Credit, Debt, and Money Forecasts

Growth Rates for M2

(percent, annual rate)

Greenbook Forecast*			
Monthly Growth Rates			
	Jul-08	7.0	
	Aug-08	-3.0	
	Sep-08	17.0	
	Oct-08	18.3	
	Nov-08	7.7	
	Dec-08	26.0	
	Jan-09	12.7	
	Feb-09	4.6	
	Mar-09	10.9	
	Apr-09	-7.6	
	May-09	9.3	
	Jun-09	2.8	
	Jul-09	-3.1	
	Aug-09	-1.2	
	Sep-09	-1.0	
	Oct-09	-1.0	
	Nov-09	-0.8	
	Dec-09	-0.5	
Quarterly Growth Rates			
	2008 Q1	8.1	
	2008 Q2	5.4	
	2008 Q3	4.3	
	2008 Q4	14.3	
	2009 Q1	13.2	
	2009 Q2	2.8	
	2009 Q3	0.2	
	2009 Q4	-0.9	
Annual Growth Rates			
	2007	5.8	
	2008	8.3	
	2009	3.8	
	2010	2.2	
Growth	From	To	
	Jun-09	Sep-09	-1.8
	2009 Q1	Sep-09	1.1
	2009 Q1	Dec-09	0.6

* This forecast is consistent with nominal GDP and interest rates in the Greenbook forecast. Actual data through May 2009; projections after. [Return to table](#)

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Appendix A: Measures of the Equilibrium Real Rate

Measure	Description
Single-equation 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 output gap and its lagged values as well as the lagged values of the real federal funds rate.
Small Structural 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 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 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 Model	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 factors, some of which take the form of projected values of the model's exogenous variables.
Greenbook-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 determine the value of the real federal funds rate that closes the output gap conditional on the extended baseline.
TIPS-based Factor Model	Yields on TIPS (Treasury Inflation-Protected Securities) reflect investors' expectations of the future path of real interest rates. The TIPS-based measure of the equilibrium real rate is constructed using the seven-year-ahead instantaneous real forward rate derived from TIPS yields as of the Bluebook publication date. This forward rate is adjusted to remove estimates of the term and liquidity premiums based on a three-factor arbitrage-free term-structure model applied to TIPS yields, nominal yields, and inflation.

Proxy used for expected inflation	Actual real federal funds rate (current value)	Greenbook-consistent measure of the equilibrium real funds rate (current value)	Average actual real funds rate (twelve-quarter average)
Lagged core inflation	-1.6	-2.7	-0.8
Lagged headline inflation	0.0	-2.8	-0.9
Projected headline inflation	-1.8	-2.9	-1.0

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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 and credit facilities

Figure: Temporary Holdings of Longer-term Treasuries

Line chart, December 2008 to December 2016. There are four series, "Baseline", "Expanded purchases", "April baseline", and "April expanded purchases". Baseline begins at about 0 and generally increases to about 300 by late December 2008. It then generally decreases to end at about 80. Expanded purchases begins at about 0 and generally increases to about 750 by December 2009. It then generally decreases to end at about 150. April baseline begins at about 0 and generally increases to about 300 by late December 2008. It then generally decreases to end at about 40. April expanded purchases begins at about 0 and generally increases to about 750 by December 2009. It then generally decreases to end at about 100.

Figure: Agency Debt

Line chart, December 2008 to December 2016. There are two series, "Current" and "April". Current begins at about 20 and generally increases to about 200 by December 2009. It then generally decreases to end at about 25. April begins at about 2- and generally increases to about 200 by December 2009. It then remains about constant until about December 2011, and then generally decreases to end at about 25.

Figure: Agency MBS

Line chart, December 2008 to December 2016. There are two series, "Current" and "April". Current begins at about 0 and generally increases to about 1280 by December 2009. It then generally decreases to end at about 800. April begins at about 0 and generally increases to about 1280 by December 2009. It then generally decreases to end at about 600.

Figure: Primary and Secondary Credit

Line chart, December 2008 to December 2016. There are two series, "Current" and "April". Current begins at about 90 and generally decreases to about 0 by December 2010. It remains about constant until the end. April begins at about 97 and generally decreases to about 0 by December 2011. It remains about constant until the end.

Figure: TAF

Line chart, December 2008 to December 2016. There are two series, "Current" and "April". Current begins at about 420 and generally increases to about 498 by December 2008. It then generally decreases to about 0 by December 2010, and remains about constant until the end. April begins at about 450 and generally decreases to about 0 by December 2011. It then remains about constant until the end.

Figure: Foreign Central Bank Liquidity Swaps

Line chart, December 2008 to December 2016. There are two series, "Current" and "April". Current begins at about 530 and generally decreases to about 0 by December 2010. It then remains about constant until the end. April begins at about 550 and generally decreases to about 0 by December 2010. It then remains about constant until the end.

Figure: Credit Extended to AIG

Line chart, December 2008 to December 2016. There are two series, "Current" and "April". These two series track closely together throughout the chart. Current begins at about 40 and generally increases to about 46 by December 2008. It then generally decreases to about 0 by December 2014, and remains about constant until the end.

Figure: Maiden Lanes

Line chart, December 2008 to December 2016. There are three series, "Maiden Lane LLC", "Maiden Lane II LLC", and "Maiden Lane III LLC". Maiden Lane LLC begins at about 26 and generally decreases to about 0 by December 2015. It then remains about constant until the end. Maiden Lane II LLC begins at about 20 and generally decreases to about 0 by December 2015. It then remains about constant until the end. Maiden Lane III LC begins at about 26 and generally decreases to about 0 by December 2012. It then remains about constant until the end.

Figure: TALF v. 1.0

Line chart, December 2008 to December 2016. There are two series, "Current" and "April". Current begins at about 0 and generally increases to about 125 by December 2010. It then generally decreases to about 0 by December 2013, and remains about constant until the end. April begins at about 0 and generally increases to about 100 by December 2009. It then generally decreases to about 0 by December 2012, and remains constant until the end.

Figure: TALF v 2.0/3.0

Line chart, December 2008 to December 2016. There are two series, "Current" and "April". Current begins at about 0 and generally increases to about 50 by December 2010. It then remains about constant until December 2013, and generally decreases to end at about 0. April begins at about 0 and generally increases to about 400 by December 2010. It then generally decreases to about 0 by December 2013, and remains about constant until the end.

Figure: CPFF

Line chart, December 2008 to December 2016. There are two series, "Current" and "April". Current begins at about 320 and generally decreases to about 0 by December 2010. It then remains about constant until the end. April begins at about 320 and generally decreases to about 0 by December 2010. It then remains about constant until the end.

Figure: AMLF

Line chart, December 2008 to December 2016. There are two series, "Current" and "April". Current begins at about 23 and generally decreases to about 4 by December 2008. It then generally increases to about 25.8 by December 2008, and generally decreases to about 0 by mid-December 2009. It then remains constant until the end. April begins at about 24 and generally decreases to about 0 by December 2008. It remains about constant until the end.

Federal Reserve liabilities and capital

Figure: Federal Reserve Notes

Line chart, December 2008 to December 2016. The series begins at about 850 and generally increases to end at about 1300.

Figure: TGA and SFP

Line chart, December 2008 to December 2016. There are four series, "Current TGA" "April TGA", "Current SFP" and "April SFP". Current TGA begins at about 100 and fluctuates between about 25 and 125 until December 2009. It then generally decreases to about 0 and remains constant until the end. April TGA begins at about 105 and fluctuates between about 25 and 100 until December 2009. It then generally decreases to about 0 and remains about constant until the end. Current SFP begins at about 255 and generally decreases to about 0 by mid-December 2009. It then remains about constant until the end. April SFP begins at about 255 and generally decreases to about 0 by December 2009. It then remains about constant until the end.

Figure: Capital

Line chart, December 2008 to December 2016. There are two series, "Current" and "April". Current begins at about 40 and generally increases to end at about 130. April begins at about 40 and generally increases to about 46 by December 2008. It then remains about constant until the end.

Figure: Reserve Balances

Line chart, December 2008 to December 2016. There are four series, "Baseline", "April baseline", "Expanded purchases" and "April expanded purchases". Baseline begins at about 750 and generally increases to about 1750 by December 2009. It then generally decreases to end at about 0. April baseline begins at about 700 and generally increases to about 2400 by December 2009. It then generally decreases to end at about 0. Expanded purchases begins at about 750 and generally increases to about 2200 by December 2009. It then generally decreases to end at about 0. April extended purchases begins at about 850 and generally increases to about 2800 by December 2009. It then generally decreases to end at about 0.

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

	End-of-Year									
	May 29, 2009	2009	2010	2011	2012	2013	2014	2015	2016	
	\$Billions									
Total assets	2,084	2,837	2,376	2,244	1,965	1,803	1,641	1,547	1,448	
Selected assets:										
Liquidity programs for financial firms	618	251	1	1	1	1	1	1	1	
Primary, secondary, and seasonal credit	42	10	1	1	1	1	1	1	1	
Term auction credit (TAF)	373	200	-	-	-	-	-	-	-	
Foreign central bank liquidity swaps	178	40	-	-	-	-	-	-	-	
Primary Dealer Credit Facility (PDCF)	-	-	-	-	-	-	-	-	-	
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)	26	1	-	-	-	-	-	-	-	
Lending through other credit facilities	160	175	175	175	75	50	25	-	-	
Net portfolio holdings of Commercial Paper Funding Facility (CPFF)	145	50	-	-	-	-	-	-	-	
Term Asset-Backed Securities Loan Facility (TALF)	15	125	175	175	75	50	25	-	-	
Support for specific institutions	106	102	74	49	27	16	3	-	-	
Credit extended to AIG	44	44	30	20	10	5	-	-	-	
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	62	58	44	29	17	11	3	-	-	
Securities held outright	1,114	2,225	2,042	1,935	1,778	1,652	1,528	1,462	1,363	
U.S. Treasury securities	606	775	761	753	676	636	589	583	556	
Agency securities	80	200	164	124	103	73	51	44	23	
Agency mortgage-backed securities	428	1,250	1,117	1,058	999	943	888	835	784	
Memo: TSLF	27	27	-	-	-	-	-	-	-	
Repurchase agreements	0	0	0	0	0	0	0	0	0	
Total liabilities	2,039	2,789	2,321	2,180	1,892	1,719	1,544	1,435	1,319	
Selected liabilities										
Federal Reserve notes in circulation	868	884	915	972	1,040	1,101	1,146	1,192	1,240	
Reserve balances of depository institutions	878	1,726	1,352	1,154	798	564	344	190	25	
U.S. Treasury, general account	15	5	5	5	5	5	5	5	5	
U.S. Treasury, supplemental financing account	200	125	-	-	-	-	-	-	-	
Total capital	46	48	56	64	74	85	97	112	129	

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

† Note: Data values for figures are rounded and may not sum to totals. [Return to text](#)

Last update: April 1, 2015

Accessible Material

June 2009 Greenbook Part 1 Tables and Charts[†]

Domestic Developments

[Box:] Explanations for the Rapid Rise in the Unemployment Rate

Figure: Real GDP and GDI

Bar chart, by percent change, 2005 to 2008 and 2009:Q1. There are two series, "GDP" and "GDI". GDP begins at about 2.8 and decreases to end at about -5.9. GDI begins at about 3.8 and decreases to end at about -3.8.

Note: Annual data are Q4/Q4 percent changes; quarterly data are percent changes at an annual rate.

Figure: Statistical Discrepancy

Line chart, by percent of nominal GDP, 2005 to 2009:Q1. The series begins at about -.3 and generally decreases to about -1.5 by late 2006. It then increases to about 1.4 by late 2008, and decreases to end at about .9.

Key Background Factors Underlying the Baseline Staff Projection

Note: In each panel, shading represents the projection period, which begins in 2009:Q3, except as noted. Q2 quarterly average data are actual through June 16. 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 April and current Greenbooks are the same.

Figure: Federal Funds Rate

Line chart, by percent, 2005 to 2010. Data are quarterly averages. There are three series, "Current Greenbook", "April Greenbook", and "Market forecast". Current Greenbook and April Greenbook track closely together throughout the chart. They begin at about 2.5 and generally increase to about 5.3 by 2006. They then generally decrease to about 0 by 2009, and remain about constant until the end. Market forecast begins at about 0.1 by 2009, and generally increase to end at about 1.7.

Figure: Long-Term Interest Rates

Line chart, by percent, 2005 to 2010. Data are quarterly averages. There are six series, "BBB corporate rate", "Conforming mortgage rate" and "10-year Treasury rate". The April Greenbook is also marked separately for each series. BBB corporate rate and the April Greenbook begin at about 5.4 and generally increase to about 9.4 by late 2008. BBB corporate rate generally decreases to end at about 6.8 and, April Greenbook generally decreases to end at about 7.4. Conforming mortgage rate and April Greenbook begin at about 5.8, generally increase to about 6.6 by 2006, and generally decrease to about 5 by 2009. Conforming mortgage rate generally increases to end at about 5.5 and April Greenbook remains about constant to end at about 5. 10-year Treasury rate and April Greenbook begin at about 4.4, generally increase to about 5.1 by 2006, and generally decrease to about 3.2 by early 2009. 10-year Treasury rate generally increases to end at about 4.1 and April Greenbook generally increases to end at about 3.5.

Figure: Equity Prices

Line chart, 2005 to 2010. 2005:Q1 = 100, ratio scale. Data are quarter-end. There are two series, "Dow Jones Total Stock Market Index" and "April Greenbook". They begin at about 100, generally increase to about 131 by 2007, and then generally decrease to about 70 by early 2009. Dow Jones generally increases to end at about 100, and April Greenbook generally increases to end at about 95.

Note: The projection period begins in 2009:Q2.

Figure: House Prices

Line chart, 2005 to 2010. 2005:Q1 = 100, ratio scale. Data are quarterly. There are two series, "LoanPerformance index" and "April Greenbook". They begin at about 100 and generally increase to about 110 by 2005. They track closely together until about 2009, when they reach about 87. LoanPerformance index generally decreases to end at about 74. April Greenbook generally decreases to end at about 70.6.

Note: The projection period begins in 2009:Q2.

Figure: Crude Oil Prices

Line chart, by dollars per barrel, 2005 to 2010. Data are quarterly averages. There are two series, "West Texas intermediate" and "April Greenbook". They begin at about 30 and generally increase to about 122 by 2008. They then generally decrease to about 44 by early 2009. West Texas intermediate generally increases to end at about 79, and April Greenbook generally increases to end at about 65.

Figure: Broad Real Dollar

Line chart, 2005 to 2010. 2005:Q1 = 100. Data are quarterly averages. There are two series, "Broad Real Dollar" and "April Greenbook". They begin at about 100 and generally increase to about 122 by late 2005. They then generally decrease to about 88 by 2008, and generally increase to about 100 by early 2009. Broad Real Dollar generally decreases to end at about 92.5, and April Greenbook generally decreases to end at about 97.

Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

Measure	2009:Q1		2009:Q2	
	April Greenbook	June Greenbook	April Greenbook	June Greenbook
Real GDP	-6.3	-5.5	-1.5	-1.0
Private domestic final purchases	-5.0	-5.8	-4.0	-2.3
Personal consumption expenditures	1.1	1.6	-.5	-.4
Residential investment	-38.2	-38.0	-27.4	-22.1
Business fixed investment	-30.1	-37.3	-20.8	-10.3
Government outlays for consumption and investment	-5.3	-3.0	6.7	3.7
	Contribution to growth (percentage points)			
Inventory investment	-2.2	-2.4	-.1	-.9
Net exports	1.0	2.1	.6	1.1

Projections of Real GDP

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

Measure	2009		2010
	H1	H2	
Real GDP	-3.3	1.1	3.0
Previous Greenbook	-3.9	.8	2.6
Final sales	-1.6	-.6	2.6
Previous Greenbook	-2.8	-.6	2.4
Personal consumption expenditures	.6	1.1	2.8
Previous Greenbook	.3	.8	2.7
Residential investment	-30.5	-12.2	10.7
Previous Greenbook	-33.0	-.9	11.0
Business fixed investment	-25.0	-12.2	3.0
Previous Greenbook	-25.6	-15.5	3.4
Government purchases	.3	3.1	1.9
Previous Greenbook	.5	4.9	1.9
Exports	-19.0	3.0	4.0
Previous Greenbook	-18.6	-.7	2.3
Imports	-25.3	6.7	5.4
Previous Greenbook	-20.1	4.1	5.1
	Contribution to growth (percentage)		

	points)		
Inventory change	-1.6	1.8	.4
Previous Greenbook	-1.1	1.4	.3
Net exports	1.8	-6	-3
Previous Greenbook	.9	-6	-5

Decomposition of Structural Labor Productivity

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

Measure	1974-95	1996-2000	2001-06	2007	2008	2009	2010
Structural labor productivity	1.5	2.5	2.6	2.1	2.0	1.6	1.6
Previous Greenbook	1.5	2.5	2.6	2.1	1.9	1.6	1.6
<i>Contributions¹</i>							
Capital deepening	.7	1.4	.7	.6	.5	-.2	-.1
Previous Greenbook	.7	1.4	.7	.6	.4	-.3	-.2
Multifactor productivity	.5	.7	1.6	1.2	1.3	1.6	1.5
Previous Greenbook	.5	.7	1.6	1.2	1.3	1.6	1.6
Labor composition	.3	.3	.3	.2	.2	.2	.1
MEMO							
Potential GDP	3.0	3.4	2.7	2.5	2.4	2.0	2.0
Previous Greenbook	3.0	3.4	2.6	2.5	2.5	2.0	2.0

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

1. Percentage points. [Return to table](#)

The Outlook for the Labor Market

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

Measure	2007	2008	2009	2010
Output per hour, nonfarm business	2.6	2.2	2.2	1.4
Previous Greenbook	2.6	2.2	1.3	2.1
Nonfarm private payroll employment	.8	-2.1	-3.9	1.5
Previous Greenbook	.8	-2.1	-3.7	1.2
Household survey employment	.4	-1.5	-3.0	1.0
Previous Greenbook	.4	-1.5	-2.7	1.0
Labor force participation rate ¹	66.0	65.9	65.6	65.3
Previous Greenbook	66.0	65.9	65.3	65.1
Civilian unemployment rate ¹	4.8	6.9	10.0	9.7
Previous Greenbook	4.8	6.9	9.3	9.1
MEMO				
GDP gap ²	-.4	-3.6	-6.5	-5.6
Previous Greenbook	-.4	-3.6	-7.0	-6.4

1. Percent, average for the fourth quarter. [Return to table](#)

2. Actual less potential GDP in the fourth quarter of the year indicated as a percent of potential GDP. A negative number thus indicates that the economy is operating below potential. [Return to table](#)

Inflation Projections

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

Measure	2007	2008	2009	2010
PCE chain-weighted price index	3.5	1.9	1.4	1.1
Previous Greenbook	3.5	1.9	.7	1.0
Food and beverages	4.5	6.3	1.5	1.9
Previous Greenbook	4.5	6.3	1.7	1.2
Energy	19.1	-8.5	1.3	4.5
Previous Greenbook	19.1	-8.5	-8.9	6.1
Excluding food and energy	2.2	1.9	1.4	.8
Previous Greenbook	2.2	1.9	1.2	.7
Consumer price index	4.0	1.5	1.4	1.4
Previous Greenbook	4.0	1.5	.4	1.3
Excluding food and energy	2.3	2.0	1.5	1.0
Previous Greenbook	2.3	2.0	1.3	.9
GDP chain-weighted price index	2.6	2.0	1.3	1.1
Previous Greenbook	2.6	2.0	1.6	.9
ECl for compensation of private industry workers ¹	3.0	2.4	1.4	1.2
Previous Greenbook	3.0	2.4	1.8	1.3
Compensation per hour, nonfarm business sector	3.6	3.9	2.6	1.2
Previous Greenbook	3.6	4.1	2.3	1.3
Prices of core goods imports ²	3.4	3.5	-1.6	1.1
Previous Greenbook	3.4	3.5	-3.3	1.1

1. December to December. [Return to table](#)

2. Core goods imports exclude computers, semiconductors, oil, and natural gas. [Return to table](#)

The Long-Term Outlook

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

Measure	2008	2009	2010	2011	2012	2013
Real GDP	-0.8	-1.1	3.0	4.8	5.3	4.2
Civilian unemployment rate ¹	6.8	10.0	9.7	8.0	6.1	4.9
PCE prices, total	1.9	1.4	1.1	1.2	1.1	1.3
Core PCE prices	1.9	1.4	0.8	0.7	0.9	1.1
Federal funds rate ¹	0.5	0.1	0.1	0.1	2.4	4.1

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	2012-13
	H1	H2			
<i>Real GDP</i>					
Extended Greenbook baseline	-3.3	1.1	3.0	4.8	4.8
False dawn	-3.4	-3.1	1.6	5.2	5.5
Slower recovery	-3.3	-.1	.8	4.3	5.7
Typical recovery	-3.3	5.6	5.0	4.5	3.6
Labor market damage	-3.3	.0	2.1	4.8	5.1

Higher inflation expectations	-3.3	1.1	3.2	5.1	4.6
Deflation	-3.3	1.1	2.9	4.7	4.8
Early liftoff	-3.3	5.6	5.1	4.4	3.5
<i>Unemployment rate¹</i>					
Extended Greenbook baseline	9.3	10.0	9.7	8.0	4.9
False dawn	9.3	10.5	11.0	9.2	5.4
Slower recovery	9.3	10.1	10.6	9.2	5.4
Typical recovery	9.3	9.5	8.3	6.8	4.8
Labor market damage	9.3	10.4	11.2	9.6	5.7
Higher inflation expectations	9.3	10.0	9.7	7.9	4.9
Deflation	9.3	10.0	9.7	8.1	5.0
Early liftoff	9.3	9.5	8.3	6.8	4.9
<i>Core PCE inflation</i>					
Extended Greenbook baseline	1.9	.9	.8	.7	1.0
False dawn	1.8	.9	.6	.5	.9
Slower recovery	1.9	.9	.8	.5	.9
Typical recovery	1.9	.9	1.0	.8	1.2
Labor market damage	1.9	.9	.8	.8	1.1
Higher inflation expectations	1.9	1.1	1.5	1.8	2.3
Deflation	1.9	-.1	.2	-.2	.3
Early liftoff	1.9	1.1	1.6	1.7	2.4
<i>Federal funds rate¹</i>					
Extended Greenbook baseline	.1	.1	.1	.1	4.1
False dawn	.1	.1	.1	.1	3.4
Slower recovery	.1	.1	.1	.1	3.4
Typical recovery	.1	.1	.6	2.0	4.4
Labor market damage	.1	.1	.1	.1	4.7
Higher inflation expectations	.1	.1	.1	1.3	5.8
Deflation	.1	.1	.1	.1	3.1
Early liftoff	.1	.1	1.6	3.3	5.8

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
<i>Real GDP (percent change, Q4 to Q4)</i>					
Projection	-1.1	3.0	4.8	5.3	4.2
Confidence interval					
Greenbook forecast errors	-2.3 - .2	1.3-4.6	...	...	...
FRB/US stochastic simulations	-1.9 - -.2	1.6-4.4	3.3-6.5	3.4-6.8	2.4-6.1
<i>Civilian unemployment rate (percent, Q4)</i>					
Projection	10.0	9.7	8.0	6.1	4.9
Confidence interval					
Greenbook forecast errors	9.5-10.5	8.9-10.4	...	...	...
FRB/US stochastic simulations	9.6-10.3	9.0-10.3	7.2-8.8	5.3-7.0	4.2-5.8
<i>PCE prices, total (percent change, Q4 to Q4)</i>					

Projection	1.4	1.1	1.2	1.1	1.3
Confidence interval					
Greenbook forecast errors	.7-2.2	.0-2.3	...	...	...
FRB/US stochastic simulations	.9-2.0	.3-2.2	.1-2.2	-.1-2.2	.1-2.4
<i>PCE prices excluding food and energy (percent change, Q4 to Q4)</i>					
Projection	1.4	0.8	0.7	0.9	1.1
Confidence interval					
Greenbook forecast errors	.9-1.9	.0-1.5	...	...	...
FRB/US stochastic simulations	1.1-1.7	.1-1.5	-.1-1.5	-.0-1.6	.3-2.0
<i>Federal funds rate (percent, Q4)</i>					
Projection	0.1	0.1	0.1	2.4	4.1
Confidence interval					
FRB/US stochastic simulations	.1-.1	.1-.5	.1-2.3	.8-4.4	2.3-6.1

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, by 4-quarter percent change, 2007 to 2013. There are eight series, "Extended Greenbook baseline", "False dawn", "Slower recovery", "Typical recovery", "Labor market damage", "Higher inflation expectations", "Deflation", and "Early liftoff". They begin at about 1.9 and generally increase to about 2.8 by late 2007. They then generally decrease together until about early 2009, when they reach about -3.4. Extended Greenbook generally increases to about 5.5 by early 2013, and generally decreases to end at about 4.4. False dawn generally decreases to about -4.2 by 2009, generally increases to about 6.1 by early 2013, and generally decreases to end at about 5.4. Slower recovery generally increases to about 6.4 by early 2013, and generally decreases to end at about 5.4. Typical recovery generally increases to about 5.7 by 2010, and generally decreases to end at about 3.1. Labor market damage generally increases to about 5.8 by 2012, and generally decreases to end at about 4.8. Higher inflation expectations generally increases to about 5.3 by 2012, and generally decreases to end at about 4. Deflation generally increases to about 5.5 by early 2013, and generally decreases to end at about 4.3. Early liftoff generally increases to about 5.9 by 2010, and generally decreases to end at about 2.9. There is a 90 percent confidence interval shown, which ranges from about 1.5 to 7.4 and a 70 percent confidence interval, which ranges from about 2.6 to 6.2.

Figure: Unemployment Rate

Line chart, by percent, 2007 to 2013. There are eight series, "Extended Greenbook baseline", "False dawn", "Slower recovery", "Typical recovery", "Labor market damage", "Higher inflation expectations", "Deflation", and "Early liftoff". They begin at about 4.5 and generally increase to about 9.7 by 2009. Extended Greenbook baseline generally increases to about 10.0 by late 2009, and generally decreases to end at about 4.9. False dawn generally increases to about 11.0 by 2010, and generally decreases to end at about 5.4. Slower recovery generally increases to about 10.5 by late 2010, and generally decreases to end at about 5.4. Typical recovery generally decreases to end at about 4.7. Labor market damage generally increases to about 11.1 by 2010, and generally decreases to end at about 5.8. Higher inflation expectations generally increases to about 10.0 by early 2010, and generally decreases to end at about 5.0. Deflation generally increases to about 10.0 by 2010, and generally decreases to end at about 5.0. Early liftoff generally decreases to end at about 4.8. There is a 90 percent confidence interval shown, which ranges from about 3.5 to 6.3 and a 70 percent confidence interval, which ranges from about 4.2 to 5.7.

Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 2007 to 2013. There are eight series, "Extended Greenbook baseline", "False dawn", "Slower recovery", "Typical recovery", "Labor market damage", "Higher inflation expectations", "Deflation", and "Early liftoff". They begin at about 2.3 and generally decrease to about 2.0 by 2007. They then generally increase to about 2.4 by 2008, and generally decrease together until about 2009, when they reach about 1.45. Extended Greenbook baseline generally decreases to about 0.75 by 2011, and generally increases to end at about 1.1. False dawn generally decreases to about 0.5 by 2011, and generally increases to end at about 1.08. Slower recovery generally decreases to about 0.5 by early 2012, and generally increases to end at about 1.08. Typical recovery generally decreases to about 0.8 by early 2012, and generally increases to end at about 1.4. Labor market damage generally decreases to about 0.75 by 2011, and generally increases to end at about 1.25. Higher marker expectations generally decreases to about 1.25, and generally increases to end at about 2.49. Deflation generally decreases to about -0.2 by late 2011, and generally increases to end at about 0.5. Early liftoff generally decreases to about 1.3 and generally increases to end at about 2.6. There is a 90 percent confidence interval shown, which ranges from about -0.05 to 2.5 and a 70 percent confidence interval, which ranges from about 0.45 to 2.

Figure: Federal Funds Rate

Line chart, by percent, 2007 to 2013. There are eight series, "Extended Greenbook baseline", "False dawn", "Slower recovery", "Typical recovery", "Labor market damage", "Higher inflation expectations", "Deflation", and "Early liftoff". They begin at about 5.3 and generally decrease to about 0.1 by 2009. Extended Greenbook baseline remains about constant until about early 2012, and then generally increases to end at about 4.7. False dawn remains about constant until about 2012, and then generally increases to end at about 3.2. Slower recovery remains about constant until about 2012, and then generally increases to about 3.3. Typical recovery remains about constant until 2010, and then generally increases to end at about 4.4. Labor market damage remains about constant until early 2012, and then generally increases to end at about 4.7. Higher inflation expectations remains about constant until 2011 and then generally increases to end at about 5.8. Deflation remains about constant until 2012, and then generally increases to end at about 3.1. Early liftoff remains about constant until early 2010, and then generally increases to end at about 5.8. There is a 90 percent confidence interval shown, which ranges from about 1.2 to 7.2 and a 70 percent confidence interval, which ranges from about 2.2 to 6.

Evolution of the Staff Forecast

Figure: Change in Real GDP

Line chart, by percent, Q4/Q4, January 24, 2007 to June 17, 2009. There are three series, "2008", "2009" and "2010". 2008 begins at about 2.5 and generally decreases to about 0.01 by March 13, 2008. It then generally increases to about 1.5 by September 10, 2009 and generally decreases to end at about -0.8. 2009 begins at about 2.2 by September 12, 2007 and generally increases to about 3.0 by March 13, 2008. It then generally decreases to about -2.3 by March 12, 2009 and generally increases to end at about -1.1. 2010 begins at about 2.7 by September 10, 2008 and generally decreases to about 1.5 by March 12, 2009. It then generally increases to end at about 3.0.

Figure: Unemployment Rate

Line chart, by percent, fourth quarter, January 24, 2007 to June 17, 2009. There are three series, "2008", "2009" and "2010". 2008 begins at about 5.0 and generally increases to end at about 6.9. 2009 begins at about 4.9 by September 12, 2007 and generally increases to end at about 10.0. 2010 begins at about 5.9 by September 10, 2008 and generally increases to end at about 9.7.

Figure: Change in PCE Prices excluding Food and Energy

Line chart, by percent, Q4/Q4, January 24, 2007 to June 17, 2009. There are three series, "2008", "2009", and "2010". 2008 begins at about 2.0 and generally increases to about 2.4 by September 10, 2008. It then generally decreases to end at about 1.9. 2009 begins at about 1.9 by September 12, 2007 and generally increases to about 2.2 by June 18, 2008. It then generally decreases to about 1.0 by January 22, 2009 and generally increases to end at about 1.4. 2010 begins at about 1.8 by September 10, 2008 and generally decreases to about 0.5 by March 12, 2009. It then generally increases to end at about 0.75.

Changes in GDP, Prices, and Unemployment

(Percent, annual rate except as noted)

Interval	Nominal GDP		Real GDP		PCE price index		Core PCE price index		Unemployment rate ¹	
	4/22/09	6/17/09	4/22/09	6/17/09	4/22/09	6/17/09	4/22/09	6/17/09	4/22/09	6/17/09
Quarterly										
2008: Q1	3.5	3.5	.9	.9	3.6	3.6	2.3	2.3	4.9	4.9
Q2	4.1	4.1	2.8	2.8	4.3	4.3	2.2	2.2	5.4	5.4
Q3	3.4	3.4	-5	-5	5.0	5.0	2.4	2.4	6.0	6.0
Q4	-5.8	-5.8	-6.3	-6.3	-4.9	-4.9	.9	.9	6.9	6.9
2009: Q1	-3.1	-3.0	-6.3	-5.5	-9	-1.0	1.7	1.5	8.1	8.1
Q2	-1.0	-1.6	-1.5	-1.0	.8	1.5	1.7	2.3	9.0	9.3
Q3	1.9	2.2	.4	.7	1.6	3.5	.9	1.0	9.2	9.8
Q4	2.3	3.2	1.2	1.6	1.4	1.7	.7	.8	9.3	10.0
2010: Q1	2.9	3.7	1.9	2.3	1.2	1.5	.7	.8	9.3	10.0
Q2	3.5	4.1	2.5	2.8	1.1	1.2	.7	.8	9.2	9.9
Q3	3.9	4.2	3.0	3.2	1.0	.9	.7	.7	9.1	9.8
Q4	4.1	4.3	3.3	3.4	.8	.9	.6	.7	9.1	9.7
Two-quarter²										

2008:	Q2	3.8	3.8	1.8	1.8	3.9	3.9	2.2	2.2	.6	.6
	Q4	-1.3	-1.3	-3.5	-3.5	.0	.0	1.7	1.7	1.5	1.5
2009:	Q2	-2.0	-2.3	-3.9	-3.3	-.1	.3	1.7	1.9	2.1	2.4
	Q4	2.1	2.7	.8	1.1	1.5	2.6	.8	.9	.3	.7
2010:	Q2	3.2	3.9	2.2	2.6	1.1	1.4	.7	.8	-.1	-.1
	Q4	4.0	4.3	3.1	3.3	.9	.9	.6	.7	-.1	-.2
<i>Four-quarter³</i>											
2007:	Q4	4.9	4.9	2.3	2.3	3.5	3.5	2.2	2.2	.4	.4
2008:	Q4	1.2	1.2	-.8	-.8	1.9	1.9	1.9	1.9	2.1	2.1
2009:	Q4	.0	.2	-1.6	-1.1	.7	1.4	1.2	1.4	2.4	3.1
2010:	Q4	3.6	4.1	2.6	3.0	1.0	1.1	.7	.8	-.2	-.3
<i>Annual</i>											
2007		4.8	4.8	2.0	2.0	2.6	2.6	2.2	2.2	4.6	4.6
2008		3.3	3.3	1.1	1.1	3.3	3.3	2.2	2.2	5.8	5.8
2009		-1.0	-1.0	-2.8	-2.5	.1	.5	1.5	1.6	8.9	9.3
2010		2.7	3.3	1.7	2.1	1.2	1.6	.8	.9	9.2	9.9

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

(Percent, annual rate except as noted)

Item	2008				2009				2010				2008 ¹	2009 ¹	2010 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	.9	2.8	-.5	-6.3	-5.5	-1.0	.7	1.6	2.3	2.8	3.2	3.4	-.8	-1.1	3.0
<i>Previous Greenbook</i>	.9	2.8	-.5	-6.3	-6.3	-1.5	.4	1.2	1.9	2.5	3.0	3.3	-.8	-1.6	2.6
Final sales	.9	4.4	-1.3	-6.2	-3.1	-.1	-.4	-.8	1.1	3.2	3.4	2.8	-.7	-1.1	2.6
<i>Previous Greenbook</i>	.9	4.4	-1.3	-6.2	-4.1	-1.4	-.6	-.5	.7	3.0	3.0	2.9	-.7	-1.7	2.4
Priv. dom. final purch.	-.3	.7	-4.1	-7.5	-5.8	-2.3	-1.2	-.5	1.3	2.9	3.7	4.5	-2.8	-2.5	3.1
<i>Previous Greenbook</i>	-.3	.7	-4.1	-7.5	-5.0	-4.0	-1.8	-.5	1.3	2.8	3.6	4.3	-2.8	-2.9	3.0
Personal cons. expend.	.9	1.2	-3.8	-4.3	1.6	-.4	.8	1.4	2.1	2.7	3.1	3.4	-1.5	.8	2.8
<i>Previous Greenbook</i>	.9	1.2	-3.8	-4.3	1.1	-.5	.4	1.2	1.9	2.5	3.0	3.3	-1.5	.5	2.7
Durables	-4.3	-2.8	-14.8	-22.1	9.4	-3.9	-1.6	2.1	7.5	8.0	6.3	6.3	-11.4	1.4	7.0
Nondurables	-.4	3.9	-7.1	-9.4	-.3	-1.9	1.0	1.3	1.7	2.1	2.5	2.9	-3.4	.0	2.3
Services	2.4	.7	-.1	1.5	1.3	.8	1.1	1.3	1.5	2.2	2.8	3.3	1.1	1.1	2.5
Residential investment	-25.1	-13.3	-16.0	-22.8	-38.0	-22.1	-13.3	-11.1	-2.2	12.4	13.6	20.1	-19.4	-21.9	10.7
<i>Previous Greenbook</i>	-25.1	-13.3	-16.0	-22.8	-38.2	-27.4	-1.7	.0	8.2	13.8	11.3	10.7	-19.4	-18.5	11.0
Business fixed invest.	2.4	2.5	-1.7	-21.7	-37.3	-10.3	-12.5	-12.0	-4.6	1.3	6.1	9.7	-5.2	-18.9	3.0
<i>Previous Greenbook</i>	2.4	2.5	-1.7	-21.7	-30.1	-20.8	-17.4	-13.6	-5.3	2.1	6.8	10.8	-5.2	-20.7	3.4
Equipment & software	-.6	-5.0	-7.5	-28.1	-33.6	-13.0	-6.8	-6.1	-.2	6.3	11.4	15.3	-11.0	-15.7	8.0
<i>Previous Greenbook</i>	-.6	-5.0	-7.5	-28.1	-32.4	-13.6	-12.5	-8.9	-1.1	9.2	14.8	19.1	-11.0	-17.4	10.2
Nonres. structures	8.6	18.5	9.7	-9.4	-42.9	-5.7	-21.6	-21.8	-12.6	-7.7	-3.8	-1.2	6.3	-24.2	-6.4
<i>Previous Greenbook</i>	8.6	18.5	9.7	-9.4	-26.4	-31.6	-25.4	-21.5	-13.0	-10.5	-7.9	-5.4	6.3	-26.3	-9.2
Net exports ²	-462	-381	-353	-364	-297	-263	-264	-295	-313	-304	-298	-329	-390	-280	-311
<i>Previous Greenbook</i> ²	-462	-381	-353	-364	-333	-314	-325	-351	-383	-378	-383	-407	-390	-331	-388
Exports	5.1	12.3	3.0	-23.6	-30.6	-5.4	3.6	2.5	3.3	3.7	4.4	4.7	-1.8	-8.6	4.0

Imports	-8	-7.3	-3.5	-17.5	-36.3	-12.3	3.1	10.3	7.4	.6	2.2	11.8	-7.5	-10.7	5.4
Gov't. cons. & invest.	1.9	3.9	5.8	1.3	-3.0	3.7	2.9	3.3	3.4	2.3	1.1	.8	3.2	1.7	1.9
<i>Previous Greenbook</i>	1.9	3.9	5.8	1.3	-5.3	6.7	6.1	3.7	3.1	2.4	1.3	.9	3.2	2.7	1.9
Federal	5.8	6.6	13.8	7.0	-4.3	9.5	6.2	6.5	6.9	4.1	.8	.1	8.2	4.3	2.9
Defense	7.3	7.3	18.0	3.4	-6.8	11.7	6.9	5.1	4.2	3.1	2.0	.9	8.9	4.0	2.6
Nondefense	2.9	5.0	5.1	15.3	1.0	4.9	4.7	9.6	12.9	6.1	-1.7	-1.7	6.9	5.0	3.7
State & local	-3	2.5	1.3	-2.0	-2.2	.3	.8	1.2	1.2	1.2	1.3	1.3	.4	.0	1.2
Change in bus. inventories ²	-10	-51	-30	-26	-94	-127	-95	-27	7	-2	-6	13	-29	-86	3
<i>Previous Greenbook</i> ²	-10	-51	-30	-26	-93	-97	-66	-16	18	4	3	14	-29	-68	10
Nonfarm ²	-18	-55	-33	-31	-102	-134	-103	-34	1	-7	-12	8	-34	-93	-2
Farm ²	6	2	2	4	5	4	4	4	4	3	3	3	4	4	3

1. Change from fourth quarter of previous year to fourth quarter of year indicated. [Return to table](#)

2. Billions of chained (2000) 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	2002	2003	2004	2005	2006	2007	2008	2009	2010
Real GDP	1.9	3.7	3.1	2.7	2.4	2.3	-.8	-1.1	3.0
<i>Previous Greenbook</i>	1.9	3.7	3.1	2.7	2.4	2.3	-.8	-1.6	2.6
Final sales	.8	3.7	2.8	2.7	2.8	2.5	-.7	-1.1	2.6
<i>Previous Greenbook</i>	.8	3.7	2.8	2.7	2.8	2.5	-.7	-1.7	2.4
Priv. dom. final purch.	1.1	4.1	4.3	3.1	2.3	1.4	-2.8	-2.5	3.1
<i>Previous Greenbook</i>	1.1	4.1	4.3	3.1	2.3	1.4	-2.8	-2.9	3.0
Personal cons. expend.	1.9	3.4	3.7	2.6	3.2	2.2	-1.5	.8	2.8
<i>Previous Greenbook</i>	1.9	3.4	3.7	2.6	3.2	2.2	-1.5	.5	2.7
Durables	1.2	8.3	5.6	1.2	6.9	4.2	-11.4	1.4	7.0
Nondurables	2.1	3.9	3.5	3.6	3.2	1.7	-3.4	.0	2.3
Services	1.9	2.2	3.3	2.4	2.6	2.1	1.1	1.1	2.5
Residential investment	7.0	11.7	6.7	5.4	-15.5	-19.0	-19.4	-21.9	10.7
<i>Previous Greenbook</i>	7.0	11.7	6.7	5.4	-15.5	-19.0	-19.4	-18.5	11.0
Business fixed invest.	-6.5	4.9	7.5	4.9	6.5	6.4	-5.2	-18.9	3.0
<i>Previous Greenbook</i>	-6.5	4.9	7.5	4.9	6.5	6.4	-5.2	-20.7	3.4
Equipment & software	-3.4	6.6	9.4	7.0	4.2	2.8	-11.0	-15.7	8.0
<i>Previous Greenbook</i>	-3.4	6.6	9.4	7.0	4.2	2.8	-11.0	-17.4	10.2
Nonres. structures	-14.9	.2	2.3	-.5	12.8	14.5	6.3	-24.2	-6.4
<i>Previous Greenbook</i>	-14.9	.2	2.3	-.5	12.8	14.5	6.3	-26.3	-9.2
Net exports ¹	-471	-519	-594	-617	-616	-547	-390	-280	-311
<i>Previous Greenbook</i> ¹	-471	-519	-594	-617	-616	-547	-390	-331	-388
Exports	3.8	5.8	7.4	7.0	10.1	8.9	-1.8	-8.6	4.0
Imports	9.7	4.8	11.5	4.8	3.8	1.1	-7.5	-10.7	5.4
Gov't. cons. & invest.	4.0	1.7	.7	.6	2.1	2.4	3.2	1.7	1.9
<i>Previous Greenbook</i>	4.0	1.7	.7	.6	2.1	2.4	3.2	2.7	1.9
Federal	7.8	5.5	2.4	1.0	2.9	2.3	8.2	4.3	2.9
Defense	8.4	7.5	2.5	.8	4.1	2.7	8.9	4.0	2.6
Nondefense	6.8	1.9	2.3	1.4	.5	1.5	6.9	5.0	3.7

State & local	2.1	-4	-4	.3	1.6	2.4	.4	.0	1.2
Change in bus. inventories ¹	12	14	54	39	42	-2	-29	-86	3
<i>Previous Greenbook</i> ¹	12	14	54	39	42	-2	-29	-68	10
Nonfarm ¹	15	14	48	39	46	-4	-34	-93	-2
Farm ¹	-2	0	6	0	-3	1	4	4	3

1. Billions of chained (2000) dollars. [Return to table](#)

Contributions to Changes in Real Gross Domestic Product

(Percentage points, annual rate except as noted)

Item	2008				2009				2010				2008 ¹	2009 ¹	2010 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	.9	2.8	-5	-6.3	-5.5	-1.0	.7	1.6	2.3	2.8	3.2	3.4	-8	-1.1	3.0
<i>Previous Greenbook</i>	.9	2.8	-5	-6.3	-6.3	-1.5	.4	1.2	1.9	2.5	3.0	3.3	-8	-1.6	2.6
Final sales	.9	4.3	-1.4	-6.2	-3.1	-1	-4	-8	1.1	3.2	3.4	2.8	-7	-1.1	2.6
<i>Previous Greenbook</i>	.9	4.3	-1.4	-6.2	-4.0	-1.4	-6	-5	.7	2.9	3.0	2.9	-7	-1.7	2.4
Priv. dom. final purch.	-3	.6	-3.5	-6.4	-4.8	-1.9	-1.0	-4	1.1	2.3	3.0	3.7	-2.4	-2.1	2.5
<i>Previous Greenbook</i>	-3	.6	-3.5	-6.4	-4.1	-3.4	-1.5	-4	1.1	2.2	2.9	3.5	-2.4	-2.4	2.4
Personal cons. expend.	.6	.9	-2.8	-3.0	1.2	-3	.6	1.0	1.5	2.0	2.2	2.5	-1.1	.6	2.0
<i>Previous Greenbook</i>	.6	.9	-2.8	-3.0	.9	-3	.3	.8	1.4	1.7	2.1	2.3	-1.1	.4	1.9
Durables	-3	-2	-1.2	-1.7	.6	-3	-1	.1	.5	.5	.4	.4	-9	.1	.5
Nondurables	-1	.8	-1.6	-2.0	.0	-4	.2	.3	.4	.4	.5	.6	-7	.0	.5
Services	1.0	.3	.0	.7	.6	.4	.5	.6	.7	1.0	1.2	1.5	.5	.5	1.1
Residential investment	-1.1	-5	-6	-8	-1.4	-7	-4	-3	-1	.3	.3	.4	-8	-7	.2
<i>Previous Greenbook</i>	-1.1	-5	-6	-8	-1.4	-8	.0	.0	.2	.3	.3	.3	-8	-6	.3
Business fixed invest.	.3	.3	-2	-2.6	-4.7	-1.0	-1.2	-1.1	-4	.1	.5	.8	-6	-2.0	.3
<i>Previous Greenbook</i>	.3	.3	-2	-2.6	-3.6	-2.2	-1.7	-1.3	-5	.2	.5	.9	-6	-2.2	.3
Equipment & software	.0	-4	-6	-2.2	-2.6	-8	-4	-4	.0	.3	.6	.8	-8	-1.0	.4
<i>Previous Greenbook</i>	.0	-4	-6	-2.2	-2.4	-9	-8	-5	-1	.5	.8	1.0	-8	-1.1	.6
Nonres. structures	.3	.6	.4	-4	-2.1	-2	-8	-8	-4	-2	-1	.0	.2	-9	-2
<i>Previous Greenbook</i>	.3	.6	.4	-4	-1.2	-1.3	-1.0	-7	-4	-3	-2	-1	.2	-1.0	-3
Net exports	.8	2.9	1.1	-2	2.1	1.1	.0	-1.1	-7	.3	.2	-1.1	1.1	.7	-3
<i>Previous Greenbook</i>	.8	2.9	1.1	-2	1.0	.6	-4	-9	-1.1	.2	-2	-8	1.1	.1	-5
Exports	.6	1.5	.4	-3.4	-4.2	-6	.4	.3	.4	.4	.5	.5	-2	-1.0	.4
Imports	.1	1.4	.7	3.3	6.4	1.7	-4	-1.4	-1.0	-1	-3	-1.6	1.3	1.7	-8
Gov't. cons. & invest.	.4	.8	1.1	.3	-6	.8	.6	.7	.7	.5	.2	.2	.6	.3	.4
<i>Previous Greenbook</i>	.4	.8	1.1	.3	-1.1	1.3	1.2	.8	.7	.5	.3	.2	.6	.5	.4
Federal	.4	.5	1.0	.5	-3	.7	.5	.5	.6	.3	.1	.0	.6	.3	.2
Defense	.3	.4	.9	.2	-4	.6	.4	.3	.2	.2	.1	.1	.4	.2	.1
Nondefense	.1	.1	.1	.3	.0	.1	.1	.2	.3	.2	.0	.0	.2	.1	.1
State & local	.0	.3	.2	-3	-3	.0	.1	.2	.2	.2	.2	.2	.0	.0	.2
Change in bus. inventories	.0	-1.5	.8	-1	-2.4	-9	1.1	2.4	1.2	-3	-2	.7	-2	.0	.4
<i>Previous Greenbook</i>	.0	-1.5	.8	-1	-2.2	-1	1.0	1.7	1.1	-5	-1	.4	-2	.1	.3
Nonfarm	.2	-1.4	.8	-2	-2.4	-1.1	1.1	2.4	1.2	-3	-2	.7	-1	.0	.4
Farm	-2	-1	.0	.1	.0	.2	.0	.0	.0	.0	.0	.0	-1	.1	.0

1. Change from fourth quarter of previous year to fourth quarter of year indicated. [Return to table](#)

Changes in Prices and Costs

(Percent, annual rate except as noted)

Item	2008				2009				2010				2008 ¹	2009 ¹	2010 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
GDP chain-wt. price index	2.6	1.1	3.9	.5	2.7	-6	1.6	1.6	1.4	1.2	1.0	.8	2.0	1.3	1.1
<i>Previous Greenbook</i>	2.6	1.1	3.9	.5	3.3	.5	1.5	1.1	1.0	1.0	.9	.8	2.0	1.6	.9
PCE chain-wt. price index	3.6	4.3	5.0	-4.9	-1.0	1.5	3.5	1.7	1.5	1.2	.9	.9	1.9	1.4	1.1
<i>Previous Greenbook</i>	3.6	4.3	5.0	-4.9	-.9	.8	1.6	1.4	1.2	1.1	1.0	.8	1.9	.7	1.0
Energy	19.0	27.4	31.7	-65.0	-35.9	-3.3	51.8	12.0	6.9	4.7	3.5	2.8	-8.5	1.3	4.5
<i>Previous Greenbook</i>	19.0	27.4	31.7	-65.0	-36.0	-13.1	12.2	10.5	8.2	6.6	5.2	4.4	-8.5	-8.9	6.1
Food	4.9	6.4	8.5	5.6	.9	-9	2.7	3.3	3.6	2.3	1.1	.7	6.3	1.5	1.9
<i>Previous Greenbook</i>	4.9	6.4	8.5	5.6	.9	1.0	2.5	2.2	1.6	1.3	1.0	.8	6.3	1.7	1.2
Ex. food & energy	2.3	2.2	2.4	.9	1.5	2.3	1.0	.8	.8	.8	.7	.7	1.9	1.4	.8
<i>Previous Greenbook</i>	2.3	2.2	2.4	.9	1.7	1.7	.9	.7	.7	.7	.7	.6	1.9	1.2	.7
CPI	4.5	4.5	6.2	-8.3	-2.4	1.2	4.5	2.3	1.9	1.5	1.2	1.1	1.5	1.4	1.4
<i>Previous Greenbook</i>	4.5	4.5	6.2	-8.3	-2.4	.3	2.1	1.8	1.6	1.4	1.2	1.1	1.5	.4	1.3
Ex. food & energy	2.5	2.0	2.8	.6	1.5	2.3	1.2	1.1	1.0	1.0	.9	.9	2.0	1.5	1.0
<i>Previous Greenbook</i>	2.5	2.0	2.8	.6	1.5	1.5	1.2	1.0	.9	.9	.9	.8	2.0	1.3	.9
ECI, hourly compensation ²	2.7	2.6	2.6	1.9	.7	1.8	1.7	1.5	1.3	1.3	1.2	1.1	2.4	1.4	1.2
<i>Previous Greenbook</i> ²	3.0	2.3	2.6	1.9	2.0	1.9	1.8	1.5	1.4	1.3	1.3	1.2	2.4	1.8	1.3
Nonfarm business sector															
Output per hour	2.6	4.7	2.2	-6	1.9	4.4	1.5	1.1	1.2	1.2	1.6	1.6	2.2	2.2	1.4
<i>Previous Greenbook</i>	2.6	4.7	2.2	-5	-1.0	3.1	1.6	1.6	2.2	2.1	2.0	1.9	2.2	1.3	2.1
Compensation per hour	3.7	1.7	5.7	4.5	4.6	3.2	1.6	1.3	1.3	1.2	1.2	1.2	3.9	2.6	1.2
<i>Previous Greenbook</i>	3.7	1.7	5.7	5.2	3.2	2.9	1.9	1.4	1.4	1.4	1.3	1.3	4.1	2.3	1.3
Unit labor costs	1.1	-2.8	3.5	5.1	2.6	-1.2	.1	.2	.1	.0	-4	-5	1.7	.4	-2
<i>Previous Greenbook</i>	1.1	-2.8	3.5	5.7	4.3	-2	.3	-.3	-.8	-.7	-.7	-.7	1.8	1.0	-.7
Core goods imports chain-wt. price index ³	8.5	10.6	4.6	-8.5	-9.3	-1.0	2.4	1.8	1.4	1.1	.9	.9	3.5	-1.6	1.1
<i>Previous Greenbook</i> ³	8.5	10.6	4.6	-8.5	-9.7	-3.0	-.7	.5	1.0	1.1	1.1	1.0	3.5	-3.3	1.1

1. Change from fourth quarter of previous year to fourth quarter of year indicated. [Return to table](#)

2. Private-industry workers. [Return to table](#)

3. Core goods imports exclude computers, semiconductors, oil, and natural gas. [Return to table](#)

Changes in Prices and Costs

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

Item	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP chain-wt. price index	1.7	2.2	3.2	3.5	2.8	2.6	2.0	1.3	1.1
<i>Previous Greenbook</i>	1.7	2.2	3.2	3.5	2.8	2.6	2.0	1.6	.9
PCE chain-wt. price index	1.8	1.9	3.1	3.3	1.9	3.5	1.9	1.4	1.1
<i>Previous Greenbook</i>	1.8	1.9	3.1	3.3	1.9	3.5	1.9	.7	1.0
Energy	7.7	7.6	18.3	23.1	-4.0	19.1	-8.5	1.3	4.5
<i>Previous Greenbook</i>	7.7	7.6	18.3	23.1	-4.0	19.1	-8.5	-8.9	6.1
Food	1.3	2.6	2.9	2.1	2.3	4.5	6.3	1.5	1.9
<i>Previous Greenbook</i>	1.3	2.6	2.9	2.1	2.3	4.5	6.3	1.7	1.2
Ex. food & energy	1.6	1.4	2.2	2.2	2.3	2.2	1.9	1.4	.8

<i>Previous Greenbook</i>	1.6	1.4	2.2	2.2	2.3	2.2	1.9	1.2	.7
CPI	2.3	2.0	3.4	3.8	1.9	4.0	1.5	1.4	1.4
<i>Previous Greenbook</i>	2.3	2.0	3.4	3.8	1.9	4.0	1.5	.4	1.3
Ex. food & energy	2.1	1.2	2.2	2.1	2.7	2.3	2.0	1.5	1.0
<i>Previous Greenbook</i>	2.1	1.2	2.2	2.1	2.7	2.3	2.0	1.3	.9
ECl, hourly compensation ¹	3.1	4.0	3.8	2.9	3.2	3.0	2.4	1.4	1.2
<i>Previous Greenbook</i> ¹	3.1	4.0	3.8	2.9	3.2	3.0	2.4	1.8	1.3
Nonfarm business sector									
Output per hour	2.9	4.7	1.8	1.5	.6	2.6	2.2	2.2	1.4
<i>Previous Greenbook</i>	2.9	4.7	1.8	1.5	.6	2.6	2.2	1.3	2.1
Compensation per hour	3.2	5.3	3.9	3.6	4.2	3.6	3.9	2.6	1.2
<i>Previous Greenbook</i>	3.2	5.3	3.9	3.6	4.2	3.6	4.1	2.3	1.3
Unit labor costs	.2	.5	2.1	2.1	3.7	.9	1.7	.4	-2
<i>Previous Greenbook</i>	.2	.5	2.1	2.1	3.7	.9	1.8	1.0	-7
Core goods imports chain-wt. price index ²	.1	1.6	3.6	2.2	2.4	3.4	3.5	-1.6	1.1
<i>Previous Greenbook</i> ²	.1	1.6	3.6	2.2	2.4	3.4	3.5	-3.3	1.1

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	2008				2009				2010				2008 ¹	2009 ¹	2010 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
<i>Employment and production</i>															
Nonfarm payroll employment ²	-.1	-.4	-.5	-1.3	-2.1	-1.5	-.7	.0	.3	.7	.3	.5	-2.3	-4.3	1.8
Unemployment rate ³	4.9	5.4	6.0	6.9	8.1	9.3	9.8	10.0	10.0	9.9	9.8	9.7	6.9	10.0	9.7
<i>Previous Greenbook</i> ³	4.9	5.4	6.0	6.9	8.1	9.0	9.2	9.3	9.3	9.2	9.1	9.1	6.9	9.3	9.1
GDP gap ⁴	-.8	-.7	-1.4	-3.6	-5.4	-6.1	-6.4	-6.5	-6.4	-6.2	-5.9	-5.6	-3.6	-6.5	-5.6
<i>Previous Greenbook</i> ⁴	-.8	-.7	-1.4	-3.6	-5.6	-6.4	-6.8	-7.0	-7.0	-6.9	-6.7	-6.4	-3.6	-7.0	-6.4
<i>Industrial production</i>															
Industrial production ⁵	.2	-4.6	-9.0	-13.0	-19.0	-11.5	3.2	2.6	3.8	4.5	4.9	5.3	-6.7	-6.7	4.6
<i>Previous Greenbook</i> ⁵	.2	-4.6	-9.0	-12.7	-20.0	-9.2	.5	2.0	3.9	3.5	4.7	4.4	-6.7	-7.1	4.1
Manufacturing industr. prod. ⁵	-1.2	-5.4	-9.3	-18.1	-22.0	-10.0	4.1	3.0	3.9	4.6	4.8	5.7	-8.7	-6.9	4.7
<i>Previous Greenbook</i> ⁵	-1.2	-5.4	-9.3	-17.7	-22.5	-8.9	1.5	2.5	3.9	3.4	4.4	4.2	-8.6	-7.4	4.0
Capacity utilization rate - mfg. ³	78.1	76.7	74.6	70.9	66.7	65.2	66.1	66.8	67.8	68.9	70.0	71.3	70.9	66.8	71.3
<i>Previous Greenbook</i> ³	78.1	76.7	74.6	71.0	66.7	65.3	65.8	66.5	67.5	68.5	69.7	70.8	71.0	66.5	70.8
<i>Housing and vehicle sales</i>															
Housing starts ⁶	1.1	1.0	.9	.7	.5	.5	.5	.6	.6	.7	.8	.9	.9	.5	.8
Light motor vehicle sales ⁶	15.2	14.1	12.9	10.3	9.5	9.7	10.1	10.5	11.2	12.0	12.5	13.0	13.1	10.0	12.2
<i>Income and saving</i>															
Nominal GDP ⁵	3.5	4.1	3.4	-5.8	-3.0	-1.6	2.2	3.2	3.7	4.1	4.2	4.3	1.2	.2	4.1
Real disposable pers. income ⁵	-.7	10.7	-8.5	2.9	6.5	4.9	-3.7	.9	2.0	1.9	3.2	2.5	.9	2.1	2.4
<i>Previous Greenbook</i> ⁵	-.7	10.7	-8.5	2.7	3.9	6.6	-1.5	1.6	.9	1.5	2.1	2.2	.8	2.6	1.7
Personal saving rate ³	.2	2.5	1.3	3.2	4.4	5.7	4.7	4.7	4.7	4.5	4.6	4.4	3.2	4.7	4.4
<i>Previous Greenbook</i> ³	.2	2.5	1.3	3.2	3.9	5.6	5.1	5.3	5.1	4.9	4.7	4.5	3.2	5.3	4.5
<i>Corporate profits and profit share</i>															
Corporate profits ⁷	-4.3	-14.3	-4.7	-51.5	13.4	-3.5	-2.2	1.5	6.9	6.9	8.2	6.4	-21.5	2.1	7.1
Profit share of GNP ³	11.2	10.6	10.4	8.8	9.2	9.2	9.1	9.0	9.1	9.2	9.2	9.3	8.8	9.0	9.3

Net federal saving ⁸	-331	-650	-544	-576	-826	-1,117	-1,133	-1,152	-1,158	-1,146	-1,166	-1,147	-525	-1,057	-1,154
Net state & local saving ⁸	-52	-67	-104	-97	-73	-83	-43	-37	-45	-45	-31	-27	-80	-59	-37
Gross national saving rate ³	12.4	11.3	11.5	11.9	11.7	10.8	10.2	10.1	9.8	9.8	10.0	10.0	11.9	10.1	10.0
Net national saving rate ³	.0	-1.3	-1.8	-1.1	-1.5	-2.9	-3.7	-3.8	-4.1	-4.1	-4.0	-4.0	-1.1	-3.8	-4.0

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	2002	2003	2004	2005	2006	2007	2008	2009	2010
Employment and production									
Nonfarm payroll employment ¹	-7	-1	2.0	2.4	2.1	1.2	-2.3	-4.3	1.8
Unemployment rate ²	5.8	5.8	5.4	4.9	4.4	4.8	6.9	10.0	9.7
<i>Previous Greenbook</i> ²	5.8	5.8	5.4	4.9	4.4	4.8	6.9	9.3	9.1
GDP gap ³	-2.5	-1.7	-8	-3	-2	-4	-3.6	-6.5	-5.6
<i>Previous Greenbook</i> ³	-2.6	-1.8	-8	-3	-2	-4	-3.6	-7.0	-6.4
Industrial production ⁴	2.5	1.6	3.0	2.6	1.8	1.8	-6.7	-6.7	4.6
<i>Previous Greenbook</i> ⁴	2.5	1.6	3.0	2.6	1.8	1.8	-6.7	-7.1	4.1
Manufacturing industr. prod. ⁴	2.5	1.8	3.6	3.8	1.2	1.9	-8.7	-6.9	4.7
<i>Previous Greenbook</i> ⁴	2.5	1.8	3.6	3.8	1.2	1.9	-8.6	-7.4	4.0
Capacity utilization rate - mfg. ²	73.0	74.6	77.3	79.2	79.0	78.7	70.9	66.8	71.3
<i>Previous Greenbook</i> ²	73.0	74.6	77.3	79.2	79.0	78.7	71.0	66.5	70.8
Housing starts ⁵	1.7	1.8	2.0	2.1	1.8	1.4	.9	.5	.8
Light motor vehicle sales ⁵	16.7	16.6	16.8	16.9	16.5	16.1	13.1	10.0	12.2
Income and saving									
Nominal GDP ⁴	3.6	5.9	6.5	6.3	5.3	4.9	1.2	.2	4.1
Real disposable pers. income ⁴	2.9	3.7	4.1	.9	3.6	1.8	.9	2.1	2.4
<i>Previous Greenbook</i> ⁴	2.9	3.7	4.1	.9	3.6	1.8	.8	2.6	1.7
Personal saving rate ²	1.8	2.2	2.5	.8	.9	.4	3.2	4.7	4.4
<i>Previous Greenbook</i> ²	1.8	2.2	2.5	.8	.9	.4	3.2	5.3	4.5
Corporate profits ⁶	20.6	12.6	20.3	18.8	6.9	-2.0	-21.5	2.1	7.1
Profit share of GNP ²	9.0	9.5	10.8	12.0	12.2	11.3	8.8	9.0	9.3
Net federal saving ⁷	-248	-372	-371	-292	-201	-229	-525	-1057	-1154
Net state & local saving ⁷	-34	-20	2	29	46	10	-80	-59	-37
Gross national saving rate ²	13.6	13.7	13.8	15.0	15.5	13.4	11.9	10.1	10.0
Net national saving rate ²	1.5	1.9	2.1	2.8	3.4	1.2	-1.1	-3.8	-4.0

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				2008				2009				2010			
	2007 ^a	2008 ^a	2009	2010	Q1 ^a	Q2 ^a	Q3 ^a	Q4 ^a	Q1 ^a	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget	Not seasonally adjusted															
Receipts ¹	2568	2524	2154	2297	540	788	590	547	442	614	550	521	503	694	579	566
Outlays ¹	2729	2983	3595	3730	746	761	759	880	891	918	906	936	958	933	902	963
Surplus/deficit ¹	-161	-459	-1441	-1432	-206	27	-169	-332	-449	-304	-356	-416	-455	-239	-323	-397
<i>Previous Greenbook</i>	-162	-455	-1647	-1473	-206	27	-169	-485	-472	-259	-431	-561	-481	-172	-260	-338
On-budget	-342	-642	-1567	-1548	-237	-64	-171	-385	-468	-365	-349	-461	-460	-311	-316	-445
Off-budget	181	183	126	116	31	91	2	53	19	61	-6	45	5	72	-7	48
Means of financing																
Borrowing	206	768	1711	1247	200	-48	526	561	465	324	361	370	275	264	338	387
Cash decrease	-23	-296	101	220	11	-7	-318	5	98	-54	53	86	165	-20	-10	15
Other ²	-23	-13	-371	-35	-5	29	-39	-233	-114	35	-58	-40	15	-5	-5	-5
Cash operating balance, end of period	75	372	270	50	46	53	372	367	269	323	270	185	20	40	50	35
NIPA federal sector	Seasonally adjusted annual rates															
Receipts	2624	2607	2399	2473	2673	2479	2596	2530	2379	2335	2353	2391	2475	2495	2530	2569
Expenditures	2832	3047	3312	3628	3003	3128	3140	3106	3205	3451	3486	3543	3633	3641	3696	3716
Consumption expenditures	842	910	976	1049	898	918	954	957	960	983	1002	1021	1046	1061	1066	1070
Defense	569	624	665	706	614	629	660	657	652	669	683	693	703	711	716	720
Nondefense	273	286	310	343	284	289	295	301	308	314	319	329	343	350	350	350
Other spending	1990	2136	2337	2580	2105	2210	2186	2148	2245	2468	2485	2522	2587	2580	2630	2646
Current account surplus	-209	-440	-913	-1155	-331	-650	-544	-576	-826	-1117	-1133	-1152	-1158	-1146	-1166	-1147
Gross investment	123	134	147	156	129	138	144	150	142	147	150	153	155	157	158	159
Gross saving less gross investment ³	-221	-458	-937	-1182	-344	-671	-569	-605	-846	-1140	-1158	-1178	-1184	-1173	-1192	-1172
Fiscal indicators⁴																
High-employment (HEB) surplus/deficit	-221	-426	-701	-841	-322	-641	-503	-464	-635	-866	-839	-836	-842	-830	-856	-847
Change in HEB, percent of potential GDP	-0.3	1.4	1.7	0.8	0.6	2.2	-1.0	-0.3	1.1	1.5	-0.2	-0.1	-0.0	-0.1	0.1	-0.1
Fiscal impetus (FI), percent of GDP	0.2	0.8	0.8	0.9	0.1	0.5	0.7	-0.3	-0.1	0.7	0.1	0.2	0.4	0.1	0.1	-0.0
<i>Previous Greenbook</i>	0.2	0.8	0.8	0.9	0.1	0.5	0.7	-0.3	-0.2	0.8	0.3	0.2	0.3	0.1	0.1	-0.0

1. Budget receipts, outlays, and surplus/deficit include corresponding social security (OASDI) categories. The OASDI surplus and the Postal Service surplus are excluded from the on-budget surplus and shown separately as off-budget, as classified under current law. [Return to table](#)

2. Other means of financing are checks issued less checks paid, accrued items, and changes in other financial assets and liabilities. [Return to table](#)

3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises. [Return to table](#)

4. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the NAIRU. Quarterly figures for change in HEB and FI are not at annual rates. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionary changes in federal spending and taxes in chained (2000) 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](#)

Change in Debt of the Domestic Nonfinancial Sectors

(Percent)

Period ¹	Total	Households			Business	State and local governments	Federal government	Memo: Nominal GDP	
		Total	Home mortgages	Consumer credit					
<i>Year</i>									
2003	8.1	11.6	14.3	5.2	2.5	8.3	10.9	5.9	
2004	8.9	11.1	13.6	5.5	6.2	7.4	9.0	6.5	
2005	9.5	11.0	13.2	4.3	8.7	10.2	7.0	6.3	
2006	9.0	10.1	11.0	4.5	10.5	8.2	3.9	5.3	
2007	8.7	6.6	6.7	5.5	13.5	9.3	4.9	4.9	
2008	5.9	.4	-5	1.7	5.1	1.8	24.2	1.2	
2009	4.7	-1.2	-9	-2.9	1.1	4.3	23.9	.2	
2010	4.6	.6	.0	2.1	2.1	2.7	16.0	4.1	
<i>Quarter</i>									
2008:	1	5.4	3.0	2.4	4.7	7.5	3.5	8.1	3.5
	2	3.2	.4	-3	3.9	6.1	.9	5.9	4.1
	3	8.3	.1	-2.4	1.4	5.0	3.2	39.2	3.4
	4	6.2	-2.0	-1.7	-3.1	1.5	-4	37.0	-5.8
2009:	1	4.1	-1.1	-0	-3.5	-3	4.9	22.6	-3.0
	2	5.6	-1.3	-1.0	-3.3	.9	6.5	27.3	-1.6
	3	4.3	-1.5	-1.4	-3.0	2.0	2.9	19.7	2.2
	4	4.4	-1.0	-1.0	-1.9	1.9	2.8	18.5	3.2
2010:	1	2.6	-.3	-.5	-.3	1.8	2.7	8.6	3.7
	2	5.4	.3	-.2	1.5	1.9	2.6	19.8	4.1
	3	4.9	.9	.2	3.0	2.1	2.6	15.7	4.2
	4	5.4	1.3	.5	4.3	2.4	2.6	16.6	4.3

Note. Quarterly data are at seasonally adjusted annual rates.

1. Data after 2009:Q1 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	2007	2008	2009	2010	2008		2009				2010			
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<i>Domestic nonfinancial sectors</i>														
<i>Net funds raised</i>														
Total	1707.3	1492.4	1395.0	1474.9	2304.4	1658.8	1070.9	1807.6	1332.7	1368.7	749.5	1746.7	1589.4	1813.9
Net equity issuance	-831.2	-380.8	-179.3	-160.0	-399.6	-386.0	-297.0	-100.0	-160.0	-160.0	-160.0	-160.0	-160.0	-160.0
Net debt issuance	2538.4	1873.2	1574.2	1634.9	2704.0	2044.9	1367.9	1907.6	1492.7	1528.7	909.5	1906.7	1749.4	1973.9
<i>Borrowing indicators</i>														
Debt (percent of GDP) ¹	220.4	228.8	243.4	246.8	227.1	234.7	239.5	243.4	245.1	245.8	245.7	245.7	246.3	246.9
Borrowing (percent of GDP)	18.4	13.1	11.1	11.2	18.8	14.4	9.7	13.6	10.6	10.7	6.3	13.1	11.9	13.3

Households														
Net borrowing ²	854.9	49.5	-168.8	75.2	7.2	-272.1	-151.8	-177.0	-207.3	-138.9	-34.6	34.9	121.1	179.4
Home mortgages	655.7	-51.7	-89.1	0.0	-253.0	-173.9	-5.2	-104.4	-142.4	-104.4	-47.5	-23.7	23.7	47.5
Consumer credit	133.6	44.0	-75.4	53.4	35.4	-81.0	-90.7	-86.0	-77.8	-47.4	-7.5	37.3	75.1	108.6
Debt/DPI (percent) ³	131.3	129.7	125.8	121.7	129.9	130.3	128.1	125.7	125.4	124.2	122.9	121.9	120.9	120.2
Business														
Financing gap ⁴	185.6	180.9	-100.1	-43.5	127.9	108.5	-86.4	-117.1	-120.3	-76.5	-33.0	-56.1	-66.0	-19.0
Net equity issuance	-831.2	-380.8	-179.3	-160.0	-399.6	-386.0	-297.0	-100.0	-160.0	-160.0	-160.0	-160.0	-160.0	-160.0
Credit market borrowing	1260.5	544.1	125.9	233.9	546.7	169.6	-28.3	103.7	219.3	208.8	204.4	215.0	243.2	273.0
State and local governments														
Net borrowing	185.9	40.4	96.4	61.8	71.6	-7.9	108.4	145.8	65.8	65.8	61.8	61.8	61.8	61.8
Current surplus ⁵	246.6	171.9	155.8	184.1	153.1	164.5	137.2	133.0	172.7	180.5	174.3	175.0	190.6	196.4
Federal government														
Net borrowing	237.1	1239.2	1520.2	1264.0	2078.5	2155.2	1439.6	1835.2	1414.9	1393.1	677.9	1595.0	1323.3	1459.8
Net borrowing (n.s.a.)	237.1	1239.2	1520.2	1264.0	526.5	560.9	465.4	323.8	360.7	370.3	275.5	263.8	337.8	386.9
Unified deficit (n.s.a.)	187.9	680.5	1524.0	1413.5	168.9	332.5	448.9	303.9	355.5	415.7	455.0	238.8	322.8	396.9
Depository institutions														
Funds supplied	858.7	415.1	95.9	318.6	546.8	135.8	-533.8	382.6	298.6	236.2	322.0	382.7	438.4	131.3

Note. Data after 2009:Q1 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

† Note: Data values for figures are rounded and may not sum to totals. [Return to text](#)

Last update: April 1, 2015

Accessible Material

June 2009 Greenbook Part 1 Tables and Charts[†]

International Developments

Summary of Staff Projections

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

Indicator	2008		2009		Projection	
	H1	H2	Q1	2009		2010
				Q2	H2	
Foreign output	2.1	-3.9	-8.6	-1.4	1.7	3.1
Previous GB	1.7	-3.5	-7.2	-2.4	.8	2.8
Foreign CPI	5.0	1.7	-1.0	1.5	2.0	1.6
Previous GB	5.0	1.8	-.8	1.5	1.6	1.6
Contribution to growth (percentage points)						
U.S. net exports	1.8	.4	2.1	1.1	-.6	-.3
Previous GB	1.8	.4	1.0	.6	-.6	-.5

Note: Changes for years are 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, excepted as noted)

Trade category	2008		2009		Projection	
	H1	H2	Q1	2009		2010
				Q2	H2	
<i>Imports</i>						
Core goods	9.5	-2.2	-9.3	-1.0	2.1	1.1
Previous GB	9.5	-2.2	-9.7	-3.0	-.1	1.1
Oil (dollars per barrel)	108.66	68.73	41.59	56.60	69.70	73.47
Previous GB	108.65	68.74	43.40	47.32	51.32	58.86
<i>Exports</i>						
Core goods	13.0	-12.0	-12.1	1.0	2.5	1.0
Previous GB	13.0	-12.0	-10.1	-2.3	.7	1.2

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 products.

Staff Projections for Trade in Goods and Services

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

Measure	2008		2009		Projection	
	H1	H2	Q1	2009		2010
				Q2	H2	
Real imports	-4.1	-10.8	-36.3	-12.3	6.7	5.4

Previous GB	-4.1	-10.8	-31.1	-7.2	4.1	5.1
Real exports	8.6	-11.3	-30.6	-5.4	3.0	4.0
Previous GB	8.6	-11.3	-31.4	-3.4	-7	2.3

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

[Box:] Perspectives on the U.S. Current Account Deficit

Figure: Current Account & Trade Balances

Line chart, by percent of GDP, 1997 to 2010. There are three series, "Nominal Trade Balance (ex. Oil)", "Nominal Trade Balance", and "Current Account Balance". Nominal Trade Balance (ex. Oil) begins at about -0.4 and generally decreases to about -3.9 by late 2004. It then generally increases to end at about -1.2. Nominal Trade Balance begins at about -1.5 and generally decreases to about -6.1 by late 2005. It then generally increases to about -2.7 by early 2009, and generally decreases to end at about -3.8. Current Account Balance begins at about -1.8 and generally decreases to about -6.8 by late 2005. It then generally increases to about -2.5 by early 2009, and generally decreases to end at about -4.

Figure: U.S. Saving & Investment

Line chart, by percent of GDP, 1997 to 2010. There are five series, "Investment", "Total Saving", "Private Saving", "Government Saving", and "Current Account". Investment begins at about 20 and generally increases to about 21 by 2000. It then generally decreases to about 18 by late 2001, and generally increases to about 20.2 by late 2005. It then generally decreases to end at about 14.6. Total Saving begins at about 17 and generally increases to about 18 by early 1999. It then generally decreases to about 13 by early 2003, generally increases to about 15.5 by late 2006, and generally decreases to end at about 10. Private Saving begins at about 15.5 and generally decreases to about 13.5 by 2000. It then generally increases to about 17 by early 2009, and generally decreases to end at about 15.2. Government Saving begins at about 1 and generally increases to about 4.8 by early 2000. It then generally decreases to about -2 by 2003, and generally increases to about 1 by late 2006. It then generally decreases to about -6 by 2009, and generally increases to end at about -5.5. Current Account begins at about -2 and generally decreases to about -7 by late 2005. It then generally increases to about -2.5 by early 2009, and generally decreases to end at about -4.5.

Current Account as a Percent of U.S. GDP

	1997	2006	2008	2009	2010
United States	-1.7	-6.0	-4.8	-3.1	-3.8
Advanced Foreign Countries					
Japan	1.2	1.3	1.1	0.5	0.6
Euro Area	0.6	-0.1	-0.9	-0.9	-0.1
Other	0.2	0.3	0.6	0.0	0.0
Developing Countries					
Asia	0.2	2.9	3.4	3.5	3.1
Latin America	-0.8	0.4	-0.2	-0.3	-0.2
Middle East and Africa	0.1	2.2	2.4	0.3	0.9
E. Europe and F.S.U	-0.3	0.0	-0.4	-0.6	-0.4
Statistical Discrepancy	0.5	-1.0	-1.3	0.6	-0.1

Alternative Scenarios:

Dollar Depreciation with Lower Global Risk Premiums

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

Indicator and simulation	2009		2010		2011	2012-13
	H2	H1	H2	H2		
<i>U.S. real GDP</i>						
Baseline	1.1	2.6	3.3	4.8	4.8	4.8
Dollar Depreciation	1.7	3.9	3.9	4.5	4.5	4.6
Lower Global Risk Premiums	2.2	4.5	4.4	4.9	4.9	4.9
<i>U.S. PCE prices excluding food and energy</i>						
Baseline	.9	.8	.7	.7	.7	1.0

Dollar Depreciation	1.3	1.4	.7	.6	.9
Lower Global Risk Premiums	1.5	1.7	1.1	1.0	1.3
<i>U.S. federal funds rate (percent)</i>					
Baseline	.1	.1	.1	.1	4.1
Dollar Depreciation	.1	.1	.1	.2	4.1
Lower Global Risk Premiums	.1	.2	.7	1.6	5.4
<i>U.S. trade balance (percent share of GDP)</i>					
Baseline	-2.9	-3.2	-3.2	-3.4	-3.6
Dollar Depreciation	-2.2	-1.8	-2.2	-3.1	-3.7
Lower Global Risk Premiums	-2.2	-1.8	-2.2	-3.1	-3.7

Note: H1 is Q2/Q4; H2 is Q4/Q2. U.S. real GDP, U.S. PCE prices, and the trade balance are average rates over the period. The federal funds rate is the value for the final quarter of the period.

Evolution of the Staff Forecast

Figure: Current Account Balance

Line chart, by percent of GDP, January 24, 2007 to June 17, 2009. There are three series, "2008", "2009" and "2010". 2008 begins at about -6.7 and generally increases to end at about -4.75. 2009 begins at about -5.3 by September 12, 2007 and generally increases to about -4.1 by April 23, 2008. It then decreases to about -4.5 by June 18, 2008, and generally increases to about -3.0 by December 10, 2008. It then generally decreases to about -3.6 by March 12, 2009 and generally increases to end at about -3.1. 2010 begins at about -3.45 by September 10, 2008 and generally increases to about -3.25 by October 22, 2008. It then generally decreases to about -4.0 by March 12, 2009, and generally increases to end at about -3.8.

Figure: Foreign Real GDP

Line chart, by percent change, Q4/Q4, January 24, 2007 to June 17, 2009. There are three series, "2008", "2009" and "2010". 2008 begins at about 3.5 and generally decreases to end at about -1. 2009 begins at about 3.2 by September 12, 2007 and generally decreases to about -2.3 by March 12, 2009. It then generally increases to end at about -1.7. 2010 begins at about 3.5 by September 10, 2008 and generally decreases to about 2.3 by March 12, 2009. It then generally increases to end at about 3.

Figure: Core Import Prices

Line chart, by percent change, Q4/Q4, January 24, 2007 to June 17, 2009. There are three series, "2008", "2009" and "2010". 2008 begins at about 1 and generally increases to about 7.1 by September 10, 2008. It then generally decreases to end at about 3.5. 2009 begins at about 1 by September 12, 2007 and remains about constant until about July 30, 2008. It then generally decreases to about -4.1 by March 12, 2009 and generally increases to end at about -1.5. 2010 begins at about 1.2 by September 10, 2008 and remains about constant until the end, when it reaches about 1.

Note: Core import 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	2008				Projected							
					2009				2010			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
REAL GDP¹	Quarterly changes at an annual rate											
Total Foreign	3.0	1.1	-0.4	-7.3	-8.6	-1.4	1.5	1.8	2.5	2.9	3.4	3.5
Advanced Foreign Economies	0.9	-0.4	-0.8	-6.0	-7.6	-2.2	-0.1	0.7	1.5	1.7	2.2	2.4
of which:												
Canada	-0.7	0.3	0.4	-3.7	-5.4	-2.8	0.2	1.1	2.1	2.1	2.5	2.7
Japan	1.5	-2.2	-2.9	-13.5	-14.2	0.3	0.4	0.6	1.2	1.4	1.7	1.7
United Kingdom	1.2	-0.1	-2.8	-6.1	-7.3	-0.9	0.4	1.3	1.3	1.3	2.1	2.3
Euro Area ²	2.8	-1.0	-1.4	-6.8	-9.7	-3.0	-1.0	0.0	0.8	1.4	1.9	2.1
Germany	6.2	-2.0	-2.1	-8.6	-14.4	-3.1	-1.1	0.0	0.8	1.4	1.9	2.1

Emerging Market Economies	5.8	3.1	0.1	-8.8	-9.8	-0.4	3.7	3.2	3.8	4.5	4.9	5.0
Asia	7.2	3.1	0.7	-9.6	-2.9	2.4	3.3	4.2	4.9	5.6	6.1	6.2
Korea	4.4	1.7	1.0	-18.8	0.5	1.6	2.1	2.4	3.4	4.3	4.3	4.3
China	10.3	10.9	5.3	1.6	6.5	7.0	7.5	8.0	8.3	8.8	9.2	9.2
Latin America	4.3	2.9	-0.9	-9.1	-17.0	-3.7	4.3	2.1	2.6	3.3	3.5	3.7
Mexico	4.7	1.0	-2.3	-9.8	-21.5	-5.2	5.5	2.0	2.5	3.4	3.7	4.0
Brazil	7.9	6.6	5.6	-13.8	-3.3	2.0	3.0	3.0	3.2	3.2	3.2	3.2
CONSUMER PRICES³	Four-quarter changes											
Total Foreign	4.2	4.7	4.7	3.3	1.8	1.0	0.5	1.1	1.8	1.8	1.7	1.6
Advanced Foreign Economies	2.3	2.7	3.4	2.0	1.0	0.3	-0.1	0.8	1.4	1.4	1.1	1.0
of which:												
Canada	1.9	2.3	3.4	1.9	1.2	0.6	0.1	1.5	2.1	2.0	1.7	1.5
Japan	1.0	1.4	2.2	1.0	-0.1	-0.6	-1.1	-0.2	0.5	0.4	-0.0	-0.5
United Kingdom ⁴	2.4	3.4	4.8	3.8	3.0	2.1	1.1	1.4	1.9	1.6	1.3	1.2
Euro Area ²	3.4	3.6	3.8	2.3	1.0	0.2	0.1	0.6	1.2	1.4	1.1	1.1
Germany	3.1	3.0	3.2	1.7	0.8	0.5	0.3	0.9	1.2	1.3	1.1	1.1
Emerging Market Economies	6.0	6.6	6.0	4.6	2.7	1.6	1.1	1.5	2.2	2.2	2.2	2.3
Asia	6.7	7.1	5.9	3.7	1.0	-0.3	-0.6	0.3	1.5	1.8	1.8	1.9
Korea	3.8	4.8	5.5	4.5	3.9	2.6	1.8	2.0	2.1	2.1	2.1	2.1
China	8.1	7.7	5.1	2.7	-0.6	-1.4	-1.2	-0.3	1.1	1.3	1.4	1.5
Latin America	4.4	5.4	6.0	6.5	6.3	5.9	4.9	4.0	3.7	3.1	3.0	3.0
Mexico	3.9	4.9	5.5	6.2	6.2	5.9	5.0	4.0	3.5	2.7	2.6	2.6
Brazil	4.6	5.5	6.3	6.2	5.9	5.3	4.6	4.6	4.4	4.1	4.0	4.0

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	2002	2003	2004	2005	2006	2007	2008	Projected	
								2009	2010
REAL GDP¹									
Total Foreign	3.1	2.9	3.8	4.0	4.0	4.3	-1.0	-1.8	3.1
Advanced Foreign Economies	2.5	1.8	2.6	2.7	2.6	2.6	-1.6	-2.4	1.9
of which:									
Canada	3.5	1.5	3.7	3.1	1.9	2.8	-1.0	-1.7	2.3
Japan	2.0	2.4	1.0	2.9	2.1	1.9	-4.4	-3.4	1.5
United Kingdom	2.4	3.2	2.3	2.0	3.2	3.2	-2.0	-1.7	1.8
Euro Area ²	1.2	1.2	1.8	2.1	3.4	2.2	-1.7	-3.5	1.6
Germany	0.0	0.2	0.2	1.6	4.1	1.7	-1.8	-4.8	1.5
Emerging Market Economies	3.9	4.5	5.5	5.8	5.9	6.4	-0.1	-1.0	4.5
Asia	6.5	6.9	6.0	7.7	7.2	8.2	0.2	1.7	5.7
Korea	8.0	3.7	2.6	5.2	4.6	5.7	-3.4	1.6	4.1
China	8.6	10.3	9.9	10.3	10.8	12.3	6.9	7.2	8.9
Latin America	1.6	1.8	5.0	4.0	4.6	4.5	-0.8	-3.9	3.3
Mexico	2.0	1.3	4.5	3.5	3.9	3.6	-1.7	-5.4	3.4

Brazil	4.9	1.0	4.7	3.6	4.6	6.0	1.1	1.1	3.2
CONSUMER PRICES³									
Total Foreign	2.5	2.1	2.8	2.3	2.1	3.7	3.3	1.1	1.6
Advanced Foreign Economies	2.1	1.3	1.8	1.6	1.4	2.2	2.0	0.8	1.0
of which:									
Canada	3.8	1.7	2.3	2.3	1.4	2.5	1.9	1.5	1.5
Japan	-0.5	-0.3	0.5	-1.0	0.3	0.5	1.0	-0.2	-0.5
United Kingdom ⁴	1.5	1.3	1.4	2.1	2.7	2.1	3.8	1.4	1.2
Euro Area ²	2.3	2.0	2.3	2.3	1.8	2.9	2.3	0.6	1.1
Germany	1.2	1.1	2.1	2.2	1.3	3.1	1.7	0.9	1.1
Emerging Market Economies	2.9	3.1	3.9	3.0	2.9	5.1	4.6	1.5	2.3
Asia	0.8	2.3	3.1	2.6	2.4	5.5	3.7	0.3	1.9
Korea	3.3	3.5	3.4	2.5	2.1	3.4	4.5	2.0	2.1
China	-0.6	2.7	3.3	1.4	2.1	6.7	2.7	-0.3	1.5
Latin America	6.4	4.9	5.6	3.8	4.1	4.2	6.5	4.0	3.0
Mexico	5.2	3.9	5.3	3.1	4.1	3.8	6.2	4.0	2.6
Brazil	10.7	11.5	7.2	6.1	3.2	4.3	6.2	4.6	4.0

1. Foreign GDP aggregates calculated using shares of U.S. exports. [Return to table](#)

2. Harmonized data for euro area from Eurostat. [Return to table](#)

3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports. [Return to table](#)

4. CPI excluding mortgage interest payments, which is the targeted inflation rate. [Return to table](#)

Outlook for U.S. International Transactions

	2002	2003	2004	2005	2006	2007	2008	Projected	
								2009	2010
NIPA REAL EXPORTS and IMPORTS									
Percentage point contribution to GDP growth, Q4/Q4									
Net Goods & Services	-0.9	-0.1	-0.9	-0.1	0.4	0.8	1.1	0.7	-0.3
Exports of G&S	0.4	0.6	0.7	0.7	1.1	1.0	-0.2	-1.0	0.4
Imports of G&S	-1.3	-0.7	-1.7	-0.8	-0.6	-0.2	1.3	1.7	-0.8
Percentage change, Q4/Q4									
Exports of G&S	3.8	5.8	7.4	7.0	10.1	8.9	-1.8	-8.6	4.0
Services	10.2	3.0	8.3	4.0	11.5	9.3	2.5	-4.9	3.9
Computers	-1.1	11.3	5.8	14.2	8.1	0.9	-2.2	1.8	9.6
Semiconductors	10.1	38.3	-6.0	17.6	2.9	29.3	-13.8	-15.4	11.0
Core Goods ¹	0.6	4.9	8.0	7.4	10.0	8.2	-3.4	-10.7	3.7
Imports of G&S	9.7	4.8	11.5	4.8	3.8	1.1	-7.5	-10.7	5.4
Services	8.8	2.2	9.3	-0.1	8.0	1.8	-1.7	-4.4	3.5
Oil	3.8	1.2	10.8	1.0	-9.2	0.6	-1.1	-15.1	2.2
Natural Gas	19.5	1.3	4.9	13.7	-12.6	12.1	-27.3	5.5	11.3
Computers	13.2	17.0	23.2	12.5	13.8	8.4	-11.6	3.3	15.6
Semiconductors	11.0	-0.1	9.8	7.5	-0.3	3.8	-10.0	-7.2	5.0
Core Goods ²	10.0	5.2	11.4	5.9	5.7	0.1	-9.8	-13.1	6.0
Billions of Chained 2000 Dollars									
Net Goods & Services	-471.3	-518.9	-593.8	-616.6	-615.7	-546.5	-390.2	-279.8	-311.0

Exports of G&S	1013.3	1026.1	1126.1	1205.3	1314.8	1425.9	1514.1	1321.9	1360.5
Imports of G&S	1484.6	1545.0	1719.9	1821.9	1930.5	1972.4	1904.3	1601.8	1671.6
Billions of dollars									
US CURRENT ACCOUNT BALANCE	-459.1	-521.5	-627.3	-732.7	-795.2	-732.4	-688.1	-435.1	-554.3
Current Acct as Percent of GDP	-4.4	-4.8	-5.4	-5.9	-6.0	-5.3	-4.8	-3.1	-3.8
Net Goods & Services (BOP)									
Net Goods & Services (BOP)	-421.6	-495.0	-610.0	-715.3	-760.4	-701.4	-695.9	-413.5	-501.2
Investment Income, Net									
Investment Income, Net	33.0	51.0	73.4	78.8	63.8	88.8	134.8	101.2	72.1
Direct, Net									
Direct, Net	102.4	112.7	150.9	173.2	184.1	233.9	267.9	223.2	206.7
Portfolio, Net									
Portfolio, Net	-69.4	-61.7	-77.5	-94.4	-120.3	-145.1	-133.1	-122.0	-134.6
Other Income & Transfers, Net									
Other Income & Transfers, Net	-70.5	-77.5	-90.6	-96.2	-98.6	-119.7	-127.0	-122.9	-125.1

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

	2005				2006				2007			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NIPA REAL EXPORTS and IMPORTS												
Percentage point contribution to GDP growth												
Net Goods & Services	0.3	0.8	-0.1	-1.3	0.1	0.6	-0.1	1.3	-1.2	1.7	2.0	0.9
Exports of G&S	0.8	0.9	0.0	1.1	1.7	0.6	0.4	1.7	0.1	1.0	2.5	0.5
Imports of G&S	-0.5	-0.1	-0.1	-2.4	-1.6	0.0	-0.5	-0.3	-1.2	0.7	-0.5	0.4
Percentage change from previous period, s.a.a.r.												
Exports of G&S	8.1	8.8	0.4	10.9	16.7	5.5	3.5	15.6	0.6	8.8	23.0	4.4
Services	10.2	-2.8	3.2	5.7	13.4	2.7	3.2	28.6	-2.7	13.3	25.9	2.7
Computers	16.8	27.9	8.3	5.2	12.0	17.5	-7.9	12.7	3.9	-4.0	14.4	-9.2
Semiconductors	-5.2	11.7	30.7	38.0	20.3	16.1	-5.6	-15.0	15.9	23.7	20.5	61.7
Core Goods ¹	7.3	13.8	-2.9	12.4	18.3	5.6	4.8	11.8	1.3	6.6	22.1	3.7
Imports of G&S	3.2	0.6	0.8	15.3	10.3	0.1	3.1	2.0	7.7	-3.7	3.0	-2.3
Services	-5.7	-0.0	-1.0	6.8	17.7	-2.0	-0.3	18.4	4.2	-2.0	6.3	-0.9
Oil	5.1	-27.1	-11.6	53.6	-2.8	-27.1	7.5	-10.6	30.9	-22.3	-13.5	16.5
Natural Gas	58.6	-14.1	111.1	-41.9	-50.7	91.9	26.6	-51.2	70.8	74.2	28.2	-58.6
Computers	3.2	11.6	20.4	15.4	20.7	21.1	19.7	-4.3	34.9	-6.5	-0.2	9.7
Semiconductors	-9.2	7.7	14.0	20.0	0.2	-0.5	17.7	-15.8	1.2	6.7	1.0	6.4
Core Goods ²	4.8	6.1	0.3	12.7	13.7	4.9	1.2	3.2	2.2	-1.1	5.8	-6.0
Billions of Chained 2000 Dollars, s.a.a.r.												
Net Goods & Services	-623.7	-601.3	-603.6	-637.8	-636.0	-619.4	-623.0	-584.2	-618.6	-571.2	-511.8	-484.5
Exports of G&S	1177.9	1203.1	1204.3	1235.7	1284.3	1301.4	1312.6	1361.1	1363.2	1392.2	1466.2	1482.1
Imports of G&S	1801.7	1804.4	1807.9	1873.6	1920.2	1920.9	1935.7	1945.3	1981.8	1963.4	1978.0	1966.5
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-697.6	-715.3	-679.1	-838.8	-793.9	-796.9	-850.9	-739.0	-781.7	-771.3	-705.2	-671.3
Current Account as % of GDP	-5.7	-5.8	-5.4	-6.6	-6.1	-6.1	-6.4	-5.5	-5.8	-5.6	-5.1	-4.8
Net Goods & Services (BOP)												
Net Goods & Services (BOP)	-665.3	-686.9	-724.9	-783.9	-766.5	-764.7	-797.2	-713.1	-712.2	-710.2	-685.9	-697.4

1. Merchandise exports excluding computers and semiconductors. [Return to table](#)

2. Merchandise imports excluding oil, natural gas, computers, and semiconductors. [Return to table](#)

† Note: Data values for figures are rounded and may not sum to totals. [Return to text](#)

Last update: April 1, 2015

Domestic Nonfinancial Developments

Changes in Employment

(Thousands of employees; seasonally adjusted)

Measure and sector	2008				2009		
	2008	Q3	Q4	Q1	Mar.	Apr.	May
	Average monthly change				Monthly change		
Nonfarm payroll employment (establishment survey)	-257	-208	-553	-691	-652	-504	-345
Private	-270	-212	-552	-695	-648	-596	-338
Natural resources and mining	4	8	-2	-12	-17	-12	-10
Manufacturing	-73	-61	-140	-202	-172	-154	-156
Ex. motor vehicles	-58	-43	-121	-176	-156	-127	-126
Construction	-57	-34	-97	-124	-123	-108	-59
Residential	-35	-21	-51	-53	-48	-46	-20
Nonresidential	-22	-12	-45	-71	-75	-61	-40
Wholesale trade	-16	-12	-32	-36	-32	-34	-22
Retail trade	-44	-42	-80	-55	-62	-37	-18
Financial activities	-19	-16	-35	-51	-41	-45	-30
Temporary help services	-44	-40	-70	-73	-57	-55	-7
Nonbusiness services ¹	19	16	-19	-25	-37	-31	46
Total government	14	4	-1	4	-4	92	-7
Federal government	3	2	2	10	12	86	-15
Total employment (household survey)	-246	-236	-564	-817	-861	120	-437
Memo:							
Aggregate hours of private production workers (percent change) ²	-3.3	-2.8	-7.4	-8.9	-1.2	-.3	-.7
Average workweek (hours) ³	33.6	33.6	33.4	33.2	33.1	33.2	33.1
Manufacturing (hours)	40.8	40.8	40.2	39.6	39.4	39.5	39.3

1. Nonbusiness services comprises education and health, leisure and hospitality, and "other." [Return to table](#)

2. Establishment survey. Annual data are percent changes from Q4 to Q4. Quarterly data are percent changes from preceding quarter at an annual rate. Monthly data are percent changes from preceding month. [Return to table](#)

3. Establishment survey. [Return to table](#)

Figure: Changes in Private Payroll Employment

Line chart, by thousands, 1999 to May 2009. Data are 3-month moving averages. The series begins at about 210 and generally increases to about 300 by late 1999. It then generally decreases to about -320 by late 2001, and generally increases to about 300 by 2004. It then generally decreases to about -700 by early 2009, and generally increases to end at about -510.

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

Figure: Aggregate Hours and Workweek of Production and Nonsupervisory Workers

Line chart, 1999 to May 2009. There are two series, "Aggregate hours", an index where 2002 = 100, and "Workweek", which is by hours. These two series use two different scales. Aggregate hours begins at about 100.5 and generally increases to about 104 by late 2000. It then generally decreases to about 98.2 by 2003, and generally increases to about 108 by late 2007. It then generally decreases to end at about 99.6. Workweek begins at about 34.4 and fluctuates but generally

decreases to about 33.55 by early 2003. It then generally increases to about 34.0 by early 2007, and generally decreases to end at about 33.1.

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

Selected Unemployment and Labor Force Participation Rates

(Percent; seasonally adjusted)

Rate and group	2008			2009			
	2008	Q3	Q4	Q1	Mar.	Apr.	May
<i>Civilian unemployment rate</i>							
Total	5.8	6.0	6.9	8.1	8.5	8.9	9.4
Teenagers	18.7	19.7	20.7	21.3	21.7	21.5	22.7
20-24 years old	10.2	10.6	11.3	13.0	14.0	14.7	15.0
Men, 25 years and older	4.8	5.1	6.0	7.4	7.9	8.3	9.0
Women, 25 years and older	4.4	4.5	5.2	6.2	6.5	6.6	7.0
<i>Labor force participation rate</i>							
Total	66.0	66.1	65.9	65.6	65.5	65.8	65.9
Teenagers	40.2	40.3	38.7	38.3	38.0	38.1	38.5
20-24 years old	74.4	74.8	74.1	73.7	74.5	75.0	73.7
Men, 25 years and older	75.4	75.6	75.2	74.6	74.4	74.6	75.1
Women, 25 years and older	60.0	60.0	60.1	60.0	60.0	60.3	60.3

Figure: Unemployment Rate

Line chart, by percent, 2000 to May 2009. The series begins at about 4 and generally increases to about 6.2 by 2003. It then generally decreases to about 4.5 by late 2006, and generally increases to end at about 9.4. It is at about 4.9 at the time of the NBER peak.

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. The NBER peak is the last business cycle peak as defined by the NBER.

Figure: Labor Force Participation Rate

Line chart, by percent, 2000 to May 2009. The series begins at about 67.3 and generally decreases to about 66.2 by early 2005. It then generally increases to about 66.6 by late 2006, and generally decreases to about 65.5 by early 2009. It then generally increases to end at about 66.1. It is at about 66.0 at the time of the NBER peak.

Note: See the note to the immediately preceding figure, "Unemployment Rate."

Figure: Persons Working Part Time for Economic Reasons

Line chart, by percent of household employment, 2000 to May 2009. The series begins at about 2.3 and generally increases to about 3.5 by 2003. It then generally decreases to about 2.75 by 2006, and generally increases to end at about 6.45.

Figure: Job Losers Unemployed Less Than 5 Weeks

Line chart, by percent of household employment, 2000 to May 2009. There are two series, "Job Losers Unemployed Less Than 5 Weeks", and the "3-month moving average" of that series. The two series track very closely together throughout the chart. They begin at about 0.85 and generally increase to about 1.25 by late 2001. They then generally decrease to about 0.85 by 2007, and generally increase to end at about 1.52.

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

Labor Market Indicators

Figure: Unemployment Insurance

Line chart, 1999 to 2009. There are two series, "Insured unemployment", which is by millions, and "Initial claims", which is by thousands. These two series use two different scales. Insured unemployment begins at about 2.25 and generally increases to about 3.75 by 2003. It then generally decreases to about 2.4 by 2007, and generally increases to end at about 6.75 by May 30. Initial claims begins at about 348 and generally decreases to about 255 by 2000. It then generally increases to about 490 by late 2001, and generally decreases to about 275 by early 2006. It then generally increases to about 650 by 2009, and generally decreases to end at about 625 by June 6.

Note: 4-week moving averages.

Source: U.S. Dept. of Labor, Employment and Training Administration.

Figure: Layoffs and Job Cuts

Line chart, 1999 to 2009. There are two series, "Layoffs and discharges", which is by percent of private employment, and "Announced job cuts", which is by thousands. Layoffs and discharges begins at about 1.6 by early 2001 and generally increases to about 2.1 by 2001. It then fluctuates but generally decreases to about 1.3 by early 2006, and generally increases to end at about 2.2 by April. Announced job cuts begins at about 52 and generally decreases to about 5 by late 1999. It then generally increases to about 250 by late 2001, and generally decreases to about 45 by early 2008. It then generally increases to about 225 by early 2009, and generally decreases to end at about 118 by May.

Note: Job cuts seasonally adjusted by FRB staff.

Source: For layoffs and discharges, Job Openings and Labor Turnover Survey; for job cuts, Challenger, Gray and Christmas, Inc.

Figure: Job Openings

Line chart, 1999 to 2009. There are two series, "Job openings", which is by percent of private employment plus job openings, and "Composite Help Wanted Index", an index where 1980 = 100. Job openings begins at about 3.9 by early 2001, and generally decreases to about 2.5 by 2003. It then generally increases to about 3.6 by 2006, and generally decreases to end at about 1.9 by April. Composite Help Wanted Index begins at about 90 and generally decreases to about 48 by 2003. It then generally increases to about 73 by early 2007, and generally decreases to end at about 40 by May.

Note: Composite Help Wanted Index is an index of staff composite help wanted advertising as a percent of private payroll employment.

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

Figure: Job Availability and Hard-to-Fill Positions

Line chart, 1999 to May 2009. There are two series, "Job availability", which is an index, and "Hard-to-fill", which is by percent (3-month moving average). Job availability begins at about 132 and generally increases to about 145 by early 2000. It then generally decreases to about 110 by 2007, and generally decreases to end at about 60. Hard-to-fill begins at about 30 and generally increases to about 33 by late 2000. It then generally decreases to about 16 by 2003, and generally increases to about 27 by 2006. It then generally decreases to end at about 9.5.

Note: Job availability is the proportion of households believing jobs are plentiful, minus the proportion believing jobs are hard to get, plus 100. Hard-to-fill is the percent of small businesses surveyed with at least one "hard-to-fill" job opening; seasonally adjusted by FRB staff.

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

Figure: Net Hiring Plans

Line chart, by percent, 1999 to 2009. There are two series, "Manpower, Inc." and "NFIB net hiring plans". Manpower, Inc. begins at about 21 and generally increases to about 25 by 2000. It then generally decreases to about 7 by early 2002, and generally increases to about 15 by 2002. It then generally decreases to about 7 by 2003, and generally increases to about 21 by early 2005. It then generally decreases to end at about -2 by 2009:Q3. NFIB net hiring plans begins at about 16 and generally decreases to about 5.5 by early 2003. It then generally increases to about 16 by late 2006, and generally decreases to end at about -4.5 by May.

Note: Percent planning an increase in employment minus the percent planning a reduction.

Source: National Federation of Independent Business (NFIB); Manpower, Inc.

Figure: Expected Labor Market Conditions

Line chart, an index, 1999 to 2009. There are two series, "Conference Board" and "Reuters/Michigan". Conference Board begins at about 98 and generally increases to about 108 by 2000. It then generally decreases to about 82 by late 2001, and generally increases to about 107 by early 2002. It then generally decreases to about 60 by early 2009, and generally increases to end at about 95 by May. Reuters/Michigan begins at about 90 and generally increases to about 99 by 1999. It then generally decreases to about 50 by 2001, and generally increases to about 107 by 2004. It then generally decreases to about 37.5 by late 2008, and generally increases to end at about 62 by June.

Note: The proportion of households expecting labor market conditions to improve, minus the proportion expecting conditions to worsen, plus 100. June 2009 value is preliminary.

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

Output per Hour

(Percent change from preceding period at an annual rate; seasonally adjusted)

Sector	2007:Q1	2008:Q1	2008			2009
	to 2008:Q1	to 2009:Q1	Q2	Q3	Q4	Q1
Nonfarm business						
All persons	3.5	2.0 ¹	4.7	2.2	-6	1.9 ¹
All employees ²	2.9	1.7 ¹	4.9	1.6	-2.3	2.7 ¹
Nonfinancial corporations ³	1.9	2.0	8.5	6.4	-4.3	-2.1

1. Staff estimates. [Return to table](#)

2. Assumes that the growth rate of hours of non-employees equals the growth rate of hours of employees. [Return to table](#)

3. All corporations doing business in the United States except banks, stock and commodity brokers, and finance and insurance companies. The sector accounts for about two-thirds of business employment. Nonfinancial corporate output is calculated as an income-side measure. [Return to table](#)

Source: For output, U.S. Dept. of Commerce, Bureau of Economic Analysis; for hours, U.S. Dept. of Labor, Bureau of Labor Statistics.

Selected Components of Industrial Production

(Percent change from preceding comparable period)

Component	Proportion 2008 (percent)	2008 ¹	2008	2009	2009		
			Q4	Q1	Mar.	Apr.	May
			Annual rate		Monthly rate		
Total	100.0	-6.7	-13.0	-19.0	-1.8	-7	-1.1
Previous	100.0	-6.7	-12.9	-19.2	-1.7	-5	...
Manufacturing							
Ex. motor veh. and parts	74.5	-7.8	-16.9	-18.3	-2.0	-6	-6
Ex. high-tech industries	70.3	-7.8	-15.4	-18.0	-2.1	-6	-6
Mining							
Utilities	10.6	.8	3.5	-11.4	-1.9	-3.2	-2.1
Utilities							
Utilities	10.4	.3	12.6	-5.1	-1.1	.7	-1.4
Selected industries							
Energy	23.9	1.3	11.2	-7.1	-1.2	-6	-2.1
High technology							
Computers	4.2	-6.9	-38.1	-23.3	.0	.6	-1.9
Communications equipment	1.0	-11.9	-31.6	-23.6	-1.7	-1.8	-1.5
Semiconductors ²	1.3	10.4	6.2	-3.9	-2.9	.1	-1.4
Motor vehicles and parts	1.8	-15.0	-60.9	-37.3	3.8	2.4	-2.7
Motor vehicles and parts							
Aircraft and parts	4.5	-23.3	-37.4	-68.9	1.4	-1.2	-7.9
Aircraft and parts							
Aircraft and parts	2.3	-13.2	-22.3	69.7	-.3	-1.8	.1
Total ex. selected industries							
Consumer goods	65.1	-8.3	-17.4	-21.2	-2.4	-7	-4
Durables	20.7	-4.2	-8.5	-9.3	-7	-4	.3
Nondurables	3.5	-14.7	-26.7	-25.8	-2.6	.0	-9
Business equipment							
Defense and space equipment	17.1	-1.8	-4.4	-5.8	-4	-5	.5
Business equipment							
Defense and space equipment	6.6	-4.8	-11.8	-23.5	-3.3	-1.7	-1.6
Construction supplies							
Construction supplies	1.1	-2.1	-.2	-4.8	1.1	.2	1.2
Business supplies							
Business supplies	4.8	-11.8	-26.6	-34.5	-2.8	-1.6	-9
Business supplies							
Business supplies	7.3	-9.8	-17.4	-24.6	-2.6	-1.2	-5

Materials	24.6	-11.7	-24.5	-27.0	-3.6	-.4	-.8
Durables	12.4	-11.4	-28.9	-37.5	-4.6	-1.6	-1.5
Nondurables	12.2	-12.0	-19.7	-15.2	-2.7	.6	-.1

1. From fourth quarter of preceding year to fourth quarter of year shown. [Return to table](#)

2. Includes related electronic components. [Return to table](#)

... Not applicable. [Return to table](#)

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

Capacity Utilization

(Percent of capacity)

Sector	1972-2008 average	1994-95 high	2001-02 low	2008		2009		
				Q3	Q4	Q1	Apr.	May
Total industry	80.9	84.9	73.5	76.9	74.2	70.4	69.0	68.3
Manufacturing	79.6	84.5	71.4	74.6	70.9	66.7	65.6	65.0
Mining	87.6	89.1	84.9	89.1	89.6	86.9	82.5	80.8
Utilities	86.8	93.3	84.2	81.5	83.6	82.1	80.6	79.3
<i>Stage-of-process groups</i>								
Crude	86.6	89.9	81.7	85.2	83.8	80.9	78.6	77.7
Primary and semifinished	82.0	87.9	74.3	76.8	73.4	68.4	66.7	65.6
Finished	77.7	80.3	70.0	73.5	71.0	68.4	67.6	67.4

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

Indicators of High-Tech Manufacturing Activity

Figure: Industrial Production in the High-Tech Sector

Line chart, 2002 to May 2009. 2002 = 100, ratio scale. There are three series, "Semiconductors", "Computers", and "Communications equipment". Semiconductors begins at about 90 and generally increases to about 320 by 2008. It then generally decreases to end at about 225. Computers begins at about 101 and generally increases to about 245 by early 2008. It then generally decreases to end at about 150. Communications equipment begins at about 101 and generally increases to about 125 by early 2004. It then generally decreases to about 119 by early 2005, and generally increases to end at about 162.

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

Figure: U.S. Personal Computer and Server Absorption

Line chart, by millions of units, ratio scale, 2002 to 2009:Q1. There are two series, "Servers" and "PCs". These two series use two different scales. Servers begins at about 0.44 and generally increases to about 0.79 by 2008. It then generally decreases to end at about 0.525. PCs begins at about 11.25 and generally increases to about 16.8 by late 2007. It then generally decreases to end at about 15.0.

Note: FRB seasonals.

Source: IDC.

Figure: Capital Expenditures by Selected Telecommunications Service Providers

Line chart, by billions of dollars, ratio scale, 2001 to 2009:Q1. The series begins at about 73 and generally decreases to about 32 by 2003. It then generally increases to about 48 by early 2006, and generally decreases to end at about 33. The annual average is marked in the time series for each year. For 2001, it is marked at about 65, for 2002 it is marked at about 45, for 2003 it is marked at about 36, for 2004 it is marked at about 37, for 2005 it is marked at about 40.5, for 2006 it is marked at about 45, for 2007 it is marked at about 44, for 2008 it is marked at about 41.

Note: FRB seasonals. Includes AT&T, Verizon, Sprint Nextel, and companies related by merger, acquisition, or spinoff.

Source: Securities and Exchange Commission filings.

Figure: Circuit Board Orders and Shipments

Line chart, by billions of dollars, 2002 to April 2009. There are two series, "Orders" and "Shipments". Orders begins at about 97 and generally decreases to about 68 by 2003. It then generally increases to about 129 by 2004, and generally decreases to about 74 by late 2004. It then generally increases to about 133 by 2005, and generally decreases to about 70 by early 2009. It then generally increases to end at about 78. Shipments begins at about 90 and generally increases to about 100 by 2002. It then generally decreases to about 70 by early 2003, and generally increases to about 102 by 2006. It then generally decreases to end at about 70.

Note: U.S. and Canadian shipments of bare and loaded circuit boards.

Source: Institute for Printed Circuits.

Figure: MPU Shipments and Intel Revenue

Line chart, by billions of dollars, ratio scale, 2002 to 2009. There are two series, "Intel revenue" and "Worldwide MPU shipments". Intel revenue begins at about 6.9 and generally decreases to about 6.5 by 2002. It then generally increases to about 9.9 by 2005, and generally decreases to about 8.5 by 2006. It then generally increases to about 10.1 by early 2008, and generally decreases to end at about 7.6 by 2009:Q2. Worldwide MPU shipments begins at about 6.75 and generally decreases to about 5.7 by 2002. It then generally increases to about 8.9 by 2005, and generally decreases to about 7.2 by 2006. It then generally increases to about 9.8 by 2007, and generally decreases to about 6.2 by late 2008. It then generally increases to about 6.6 by 2009:Q1.

Note: FRB seasonals. MPU is a microprocessor unit. Q2 Intel revenue is the company's internal forecast as of April 14, 2009.

Source: Intel; Semiconductor Industry Association.

Figure: Days' Supply: Semiconductors

Line chart, by days, 2002 to May 2009. The series begins at about 64 and generally decreases to about 47.5 by 2008. It then generally increases to about 55 by late 2008, and generally decreases to end at about 47.

Source: Staff's flow-of-goods system.

Indicators of Industrial Activity

Figure: Motor Vehicle Assemblies

Line chart, by millions of units, 2002 to May 2009. There are two series, "Autos and light trucks" and "Medium and heavy trucks". These two series use two different scales. Autos and light trucks begins at about 12 and generally increases to about 12.8 by early 2003. It then generally decreases to about 3.8 by early 2009, and generally increases to end at about 4.1. Medium and heavy trucks begins at about 0.2 and generally increases to about 0.3 by 2002. It then generally decreases to about 0.21 by early 2003, and generally increases to about 0.55 by 2006. It then generally decreases to end at about 0.16.

Source: Ward's Communications.

Figure: IP Diffusion Index

Line chart, 1975 to May 2009. The series begins at about 20 and generally increases to about 80 by 1977. It then fluctuates between 21 and 83 until early 2000, when it is at about 63. It then generally decreases to about 16 by early 2009, and generally increases to end at about 37. It is at about 50 at the time of the NBER peak.

Note: The diffusion index equals the percentage of series that increased relative to three months earlier plus one-half the percentage that were unchanged. Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): November 1973-March 1975, January 1980-July 1980, July 1981-November 1982, July 1990-March 1991, and March 2001-November 2001. A vertical line indicates the NBER Peak in December 2007.

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

Figure: Manufacturing Capacity Utilization

Line chart, by percent, 1972 to May 2009. The series begins at about 82 and generally increases to about 88 by early 1974. It then generally decreases to about 71 by early 1975 and generally increases to about 86 by late 1978. It then generally decreases to about 68 by late 1982, and generally increases to about 85.5 by early 1989. It then generally decreases to about 71 by late 2001, and generally increases to about 79.5 by late 2005. It then generally decreases to end at about 65. It is at about 79 at the time of the NBER peak.

Note: Horizontal line is 1972-2008 average, approximately 79.5. Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): November 1973-March 1975, January 1980-July 1980, July 1981-November 1982, July 1990-March 1991, and March 2001-November 2001. A vertical line indicates the NBER Peak in December 2007.

Source: Federal Reserve.

Figure: Three-Month Changes in Months' Supply

Line chart, a diffusion index, 2000 to May 2009. The series begins at about 40 and generally increases to about 75 by 2000. It then generally decreases to about 10 by 2002, and generally increases to about 66 by early 2005. It then generally decreases to about 22 by early 2007, and generally increases to about 90 by late

2008. It then generally decreases to end at about 35. It is at about 50 at the time of the NBER peak.

Note: The diffusion index equals 50 plus one-half of the share of industries whose month's supply is up relative to three months earlier minus one-half of the share of industries whose month's supply is down relative to three months earlier. 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.

Source: Staff's flow-of-goods system.

Figure: ISM New Orders Diffusion Index and Change in Real Adjusted Durable Goods Orders

Line chart, 2002 to 2009. There are two series, "ISM", which is a diffusion index, and "RADGO", which is by percent. These two series use two different scales. ISM begins at about 55 and generally increases to about 64 by 2002. It then generally decreases to about 48 by early 2003, and generally increases to about 71 by late 2003. It then generally decreases to about 24 by late 2008, and generally increases to end at about 51 by May. RADGO begins at about -1 and generally increases to about 2.5 by late 2003. It then generally decreases to about -2 by early 2004, and generally increases to about 2 by 2005. It then generally decreases to about -5 by 2008, and generally increases to end at about 0.1.

Note: The measure for real adjusted durable goods orders (RADGO) is a 3-month moving average.

Source: Institute for Supply Management (ISM). RADGO is compiled by FRB staff based on data from the Bureau of Labor Statistics and the U.S. Census Bureau.

Figure: New Orders Diffusion Indexes: Empire State and Average of Regional Surveys

Line chart, by diffusion index, 2002 to 2009. There are two series, "Empire State" and "Regional average". Empire State begins at about 57 and generally decreases to about 47 by 2003. It then generally increases to about 70 by 2004, and generally decreases to about 49 by 2005. It then generally increases to about 66 by 2005, and generally decreases to about 28 by 2009. It then generally increases to end at about 48 by June. Regional average begins at about 53 and generally increases to about 58 by 2002. It then generally decreases to about 45 by 2003, and generally increases to about 65 by early 2004. It then generally decreases to about 31 by late 2008, and generally increases to end at about 45 by May.

Note: Regional average includes new orders indexes from the Chicago, Dallas, Kansas City, New York (Empire State), Philadelphia, and Richmond surveys.

[Box:] Recent Developments at Chrysler and General Motors

Selected General Motors and Chrysler Characteristics

	Light vehicle sales ¹		Share of light vehicle production capacity ² (percent)	Total U.S. employment (thousands)	Number of U.S. dealerships, January 1, 2009 ³
	2008	May 2009			
General Motors	3.0	2.1	27.7	92	6,273
Chrysler	1.5	0.9	15.3	38	3,250
Memo: All companies	13.2	9.9	100.0	191	20,453

1. Seasonally adjusted at an annual rate, millions of units. [Return to table](#)

2. FRB estimates, millions of units, 2009 model year. [Return to table](#)

3. Source: *Automotive News*. [Return to table](#)

Sales of Light Vehicles

(Millions of units at an annual rate; FRB seasonals)

Category	2008	2008		2009			
		Q3	Q4	Q1	Mar.	Apr.	May
Total	13.1	12.9	10.3	9.5	9.8	9.3	9.9
Autos	6.7	6.6	5.2	4.8	5.1	4.8	5.0
Light trucks	6.4	6.3	5.1	4.7	4.7	4.5	4.9
North American ¹	9.8	9.7	7.7	6.8	7.1	6.9	7.4
Autos	4.5	4.4	3.6	3.0	3.3	3.2	3.3
Light trucks	5.3	5.3	4.1	3.7	3.8	3.7	4.1
Foreign-produced	3.3	3.2	2.6	2.7	2.8	2.4	2.5
Autos	2.2	2.2	1.7	1.7	1.8	1.6	1.7

Light trucks	1.1	1.0	.9	1.0	1.0	.8	.8
Memo:							
Detroit Three domestic market share (percent) ²	47.6	46.7	47.5	43.7	44.5	46.6	46.8

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. Domestic market share excludes sales of 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 to June 2009. There are two series, "Appraisal of car-buying conditions", which is an index, and "Rates are high/credit is tight", which is by percent. These two series use two different scales. Appraisal of car-buying conditions begins at about 155 and generally decreases to about 110 by 2006. It then generally increases to about 140 by 2007, and generally decreases to about 90 by 2008. It then generally increases to end at about 140. Rates are high/credit is tight begins at about 2 and fluctuates but remains about constant until late 2005. It then generally increases to about 18 by 2008, and generally decreases to end at about 4.

Note: June 2009 values are preliminary.

Source: Reuters/University of Michigan Surveys of Consumers.

Figure: Average Value of Incentives on Light Vehicles

Line chart, by current dollars per vehicle, ratio scale, 2002 to June 2009. The series begins at about 1150 and generally increases to about 2780 by 2004, and generally decreases to about 1180 by 2007. It then generally increases to about 2250 by late 2008, and generally decreases to end at about 2000.

Note: Seasonally adjusted weighted average of customer cash rebate and the present value of interest rate reduction. June figure is preliminary and is based on data through June 7.

Source: J.D. Power and Associates.

Production of Domestic Light Vehicles

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

Item	2008		2009		2009			
	Q4	Q1	Q2	Q3	Feb.	Mar.	Apr.	May
U.S. production ¹	7.1	4.4	4.4	7.1	4.6	4.9	4.9	4.2
Autos	3.3	1.7	1.9	3.2	1.7	2.0	1.9	1.8
Light trucks	3.7	2.8	2.5	3.9	2.9	2.9	3.0	2.4
Days' supply ²	98	93	n.a.	n.a.	101	89	87	73
Autos	98	94	n.a.	n.a.	101	86	86	77
Light trucks	99	92	n.a.	n.a.	101	91	89	70
Inventories ³	2.47	2.04	n.a.	n.a.	2.08	2.04	1.96	1.76
Autos	1.14	0.92	n.a.	n.a.	0.94	0.92	0.88	0.83
Light trucks	1.33	1.12	n.a.	n.a.	1.14	1.12	1.08	0.94
Memo: U.S. production, total motor vehicles ⁴	7.3	4.6	4.6	7.3	4.8	5.1	5.0	4.3

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

1. Production rates for the second and third quarters of 2009 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, by millions of units, 1998 to May 2009. The series begins at about 2.87 and generally decreases to about 2.49 by 1998. It then generally increases to about 3.27 by 2000, and generally decreases to about 2.40 by late 2001. It then generally increases to about 3.40 by 2004, and generally decreases to end at about 1.75.

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

Figure: Days' Supply of Light Vehicles

Line chart, by days, 1998 to May 2009. There are two series, "Using sales in current month" and "Using 3-month moving average of sales". These two series track closely together throughout the series. They begin at about 68 and generally increase to about 70 by 1998. They then generally decrease to about 55 by 1998, and generally increase to about 78 by late 2000. They then generally decrease to about 41 by late 2001, and generally increase to about 81 by 2004. They then generally decrease to about 48 by 2005, and generally increase together to about 99 by early 2008. Using sales in current month generally decreases to end at about 74. Using 3-month moving average of sales generally decreases to end at about 91.

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

Real Personal Consumption Expenditures

(Percent change from preceding comparable period)

Category	2008		2009		2009	
	2008	Q4	Q1	Mar.	Apr.	May
	Annual rate			Monthly rate		
Total real PCE¹	.2	-4.3	1.6	-.3	.0	n.a.
Motor vehicles	-13.3	-37.9	19.1	.3	-1.3	1.3
Goods ex. motor vehicles	-.2	-10.2	.4	-1.0	-.2	.3
Ex. energy	.3	-12.2	-.4	-1.2	.0	.2
Services	1.5	1.5	1.3	.1	.2	n.a.
Ex. energy	1.6	.9	.7	.1	.2	n.a.
Memo:						
Nominal retail control ²	3.1	-21.2	-4.1	-1.1	-.2	.4

1. The values for Q1, March, April, and May are staff estimates based on available data. [Return to table](#)

2. Total sales less outlays at building material and supply stores and automobile and other motor vehicle dealers. [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 showing 6-month moving average, by percent, 1990 to May 2009. The NBER peak is marked in the time series. The series begins at about 0.52 and generally decreases to about -0.7 by early 1991. It then fluctuates between 0.5 and -0.1 until early 2003, and generally increases to about 0.94 by 2003. It then fluctuates but generally decreases to about -1.02 by early 2009, and generally increases to end at about -0.08. It is at about 0.01 at the time of the NBER peak.

There is a second line chart, by percent, 2006 to May 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 0.2 and generally increases to about 0.58 by 2006. It then generally decreases to about -1.0 by early 2009, and generally increases to end at about -0.1. Monthly begins at about 1.65 and generally decreases to about -0.2 by 2006. It then generally increases to about 1.4 by late 2006, and generally decreases to about -2.35 by late 2008. It then generally increases to about 1.4 by early 2009, and generally decreases to about -0.8 by 2009. It then generally increases to end at about 0.4.

Note: 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. The NBER peak is the last business cycle peak as defined by the NBER (December 2007).

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

Figure: Change in Real PCE Services

Line chart showing the 6-month moving average, by percent, 1990 to April 2009. The NBER peak is marked in the time series. The series begins at about 0.2 and generally increases to about 0.38 by 1990. It then generally decreases to about -0.6 by early 1991, and generally increases to about 0.46 by early 2000. It then generally decreases to about 0.05 by 2001, and generally increases to about 0.35 by early 2007. It then generally decreases to about 0.01 by late 2008, and generally increases to end at about 0.11. It is at about 0.19 at the time of the NBER peak.

There is a second line chart, by percent, 2006 to April 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 0.1 and generally increases to about 0.38 by early 2007. It then generally decreases to about 0.01 by 2008, and generally increases to end at about 0.1. Monthly begins at about -0.68 and generally increases to about 0.95 by 2006. It then generally decreases to about -0.12 by 2006, and generally increases to about 0.88 by late 2006. It then generally decreases to about -0.6 by 2007, and fluctuates but generally increases to about 0.58 by late 2007. It then generally decreases to about -0.3 by 2008, and generally increases to end at about 0.2.

Note: 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. The NBER peak is the last business cycle peak as defined by the NBER (December 2007).

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

Fundamentals of Household Spending

Figure: Household Net Worth and Dow Jones Total Market Index

Line chart, 1999 to 2009. There are two series, "Ratio of household net worth to DPI", and "Total Market Index". These two series use two different scales. Ratio of household net worth to DPI begins at about 5.75 and generally increases to about 6.1 by late 1999. It then generally decreases to about 5.0 by 2002, and generally increases to about 6.4 by 2007. It then generally decreases to end at about 4.7 by 2009:Q1. Total Market Index begins at about 11500 and generally increases to about 14800 by 2000, and generally decreases to about 7600 by 2002. It then generally increases to about 15600 by late 2007, and generally decreases to about 7598 by early 2009. It then generally increases to about 9500 by June 16.

Note: For ratio of household net worth to DPI, the value for 2004:Q4 excludes the effect on income of the one-time Microsoft dividend in December 2004.

Source: Federal Reserve Board; U.S. Department of Commerce, Bureau of Economic Analysis; *Wall Street Journal*.

Figure: Change in Real Disposable Personal Income

Line chart, by 12-month percent change, 1999 to April 2009. The series begins at about 4.5 and generally decreases to about 1.5 by late 1999. It then generally increases to about 6 by 2000, and fluctuates but generally decreases to about -1.2 by 2005. It then generally increases to about 6 by 2006, and generally decreases to about 0.4 by early 2008. It then generally increases to about 6 by 2008, and generally decreases to about -0.2 by 2008. It then generally increases to end at about 3.5.

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, by percent, 1999 to April 2009. The series begins at about 4 and generally decreases to about 1 by 2001. It then generally increases to about 4.4 by 2001, and generally decreases to about -0.4 by late 2001. It then generally increases to about 3 by 2002, and generally decreases to about -2.8 by 2005. It then generally increases to about 4.7 by 2008, and generally decreases to about 0.8 by 2008. It then generally increases to end at about 5.8.

Note: The value of December 2004 excludes the effect on income of the one-time Microsoft dividend in that month.

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

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

Line chart, by percent, 1999 to June 16, 2009. There are two series, "Treasury yield" and "Federal funds rate". Treasury yield begins at about 4.8 and generally increases to about 6.8 by early 2000. It then generally decreases to about 3.3 by 2003, and generally increases to about 5.1 by 2006. It then generally decreases to about 2.1 by late 2008, and generally increases to end at about 3.7. Federal funds rate begins at about 4.7 and generally increases to about 6.5 by 2000. It then generally decreases to about 1 by 2003, and generally increases to about 5.2 by 2006. It then generally decreases to end at about 0.1.

Source: Federal Reserve Board.

Figure: Consumer Confidence

Line chart, 1990 to 2009. The NBER peak is marked in the time series. There are two series, "Reuters/Michigan", which is an index 1966 = 100, and "Conference Board", which is an index 1985 = 100. These two series use two different scales. Reuters/Michigan begins at about 93 and generally decreases to about 63 by 1990. It then generally increases to about 110 by early 2000, and generally decreases to about 75 by 2005. It then generally increases to about 97 by early 2007, and generally decreases to about 55 by late 2008. It then generally increases to end at about 68 by June. It is at about 76 at the time of the NBER peak. Conference Board begins at about 108 and generally decreases to about 49 by early 1992. It then generally increases to about 145 by early 2000, and generally decreases to about 62 by early 2003. It then generally increases to about 110 by 2007, and generally decreases to about 26 by early 2009. It then generally increases to end at about 54 by May. It is at about 90 at the time of the NBER peak.

Note: 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. The NBER peak is the last business cycle peak as defined by the NBER (December 2007). June 2009 value is preliminary.

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

Private Housing Activity

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

Sector	2008		2009				
	2008	Q3	Q4	Q1	Mar.	Apr.	May
<i>All units</i>							
Starts	.91	.87	.66	.53	.52	.45	.53
Permits	.91	.86	.64	.53	.51	.50	.52
<i>Single-family units</i>							
Starts	.62	.60	.46	.36	.36	.37	.40
Permits	.58	.55	.42	.36	.36	.38	.41
Adjusted permits ¹	.58	.57	.43	.37	.38	.38	.41
New homes							
Sales	.49	.46	.39	.35	.35	.35	n.a.
Months' supply ²	10.68	10.69	11.25	11.28	10.60	10.13	n.a.
Existing homes							
Sales	4.35	4.43	4.23	4.12	4.08	4.18	n.a.
Months' supply ²	9.98	9.57	9.80	9.70	9.56	9.26	n.a.
<i>Multifamily units</i>							
Starts	.284	.270	.197	.170	.160	.081	.131
Built for rent	.217	.213	.164	.140	n.a.	n.a.	n.a.
Built for sale	.068	.057	.033	.030	n.a.	n.a.	n.a.
Permits	.330	.311	.220	.170	.151	.120	.110
<i>Condos and co-ops</i>							
Existing home sales	.563	.573	.506	.467	.470	.500	n.a.

1. Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas. [Return to table](#)

2. At current sales rate; expressed as the ratio of seasonally adjusted inventories to seasonally adjusted sales. Quarterly and annual figures are averages of monthly figures. [Return to table](#)

n.a. Not available.

Source: Census Bureau.

Figure: Private Housing Starts and Permits

Line chart, by millions of units (seasonally adjusted annual rate), 1999 to May 2009. There are three series, "Single-family starts", "Single-family adjusted permits", and "Multifamily starts". Single-family starts and Single-family adjusted permits begin at about 1.32 and generally decrease to about 1.12 by 2000. They then generally increase to about 1.82 by early 2006, and then generally decrease to end at about .4. Multifamily begins at about .4 and generally decreases to about .3 by late 1999. It then generally increases to about .5 by early 2000, and generally decreases to about .28 by 2003. It then generally increases to about .45 by early 2006, and fluctuates but generally decreases to end at about .12.

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

Source: Census Bureau.

Indicators of Single-Family Housing

Figure: New Single-Family Home Sales

Line chart, by millions of units (annual rate), 2001 to 2009. There are two series, "Total" and "Large homebuilders". These two series use two different scales. Total begins at about 0.92 and generally increases to about 1.4 by 2005. It then generally decreases to end at about 0.35 by April. Large homebuilders begins at about

0.23 and generally increases to about 0.42 by 2005. It then generally decreases to end at about 0.12 by May.

Source: For total, Census Bureau; for large homebuilders, National Association of Home Builders.

Figure: Inventories of New Homes and Months' Supply

Line chart, 2001 to April 2009. There are two series, "Inventories of new homes", which is by thousands of units, and "Months' supply", which is by months. Inventories of new homes begins at about 299 and generally increases to about 570 by 2006. It then generally decreases to end at about 300. Months' supply begins at about 3.8 and generally increases to about 4.2 by 2001. It then generally decreases to about 3.5 by 2003, and generally increases to about 11.2 by early 2009. It then generally decreases to end at about 10.

Note: Months' supply is calculated using the 3-month moving average of sales.

Source: Census Bureau.

Figure: Existing Single-Family Home Sales

Line chart, 2001 to April 2009. There are two series, "Existing home sales", which is by millions of units (annual rate), and "Pending home sales", which has an index (2001=100). These two series use two different scales. Existing home sales begins at about 4.52 and generally increases to about 6.8 by 2005. It then generally decreases to end at about 4.1. Pending home sales begins at about 101 and generally decreases to about 92 by 2001. It then generally increases to about 126 by 2005, and generally decreases to about 80 by early 2009. It then generally increases to end at about 90.

Source: National Association of Realtors.

Figure: Mortgage Rates

Line chart showing 30-year conforming FRM, by percent, 2001 to June 2009. The series begins at about 7.0 and generally decreases to about 6.5 by late 2001. It then generally increases to about 7.1 by 2002, and generally decreases to about 5.2 by 2003. It then generally increases to about 6.75 by 2006, and generally decreases to about 4.8 by 2009. It then generally increases to end at about 5.5.

Note: The June reading is a 2-week moving average of data available through June 10, 2009. FRM is a fixed-rate mortgage.

Source: Federal Home Loan Mortgage Corporation.

Figure: Prices of Existing Homes

Line chart, by percent change from year earlier, 2001 to 2009. There are three series, "Monthly FHFA purchase-only index", "LP price index", and "20-city S&P/Case-Shiller monthly price index". Monthly FHFA purchase-only index begins at about 7 and generally increases to about 9 by early 2005. It then generally decreases to about -9.5 by late 2008, and generally increases to end at about -7 by March. LP price index begins at about 7.5 and generally increases to about 15 by 2005. It then generally decreases to end at about -10 by April. 20-city S&P/Case-Shiller monthly price index begins at about 12.5 and generally decreases to about 7.5 by early 2002. It then generally increases to about 17.5 by 2004, and generally decreases to end at about -19 by March.

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

Figure: House Price Expectations

Line chart, a diffusion index, 2007 to June 2009. There are two series, "5 year ahead" and "1 year ahead". 5 year ahead begins at about 62 and generally decreases to about 41 by 2008. It then generally increases to end at about 61. 1 year ahead begins at about 30 and generally decreases to about -20 by early 2009. It then generally increases to end at about -4.

Note: Diffusion index is constructed by subtracting expectations of decrease from expectations of increase. June 2009 values are preliminary.

Source: Reuters/University of Michigan Surveys of Consumers.

Orders and Shipments of Nondefense Capital Goods

(Percent change; seasonally adjusted current dollars)

Category	2008		2009		
	Q4	Q1	Feb.	Mar.	Apr.
	Annual rate		Monthly rate		
Shipments	-19.8	-28.1	-3.3	-.9	-2.4
Excluding aircraft	-15.5	-35.4	-.2	-1.7	-2.5
Computers and peripherals	-25.3	-.8	1.5	-2.8	-.9
Communications equipment	-16.6	-47.3	-3.7	3.0	-3.5
1					

All other categories_	-14.4	-36.7	-1	-1.9	-2.6
Orders	-49.9	-49.1	4.7	-1.0	-2.8
Excluding aircraft	-36.5	-44.2	4.1	-1.4	-2.4
Computers and peripherals	-20.8	-18.4	11.7	-4.6	-6.1
Communications equipment	-28.7	-58.7	7.0	7.8	-5.1
All other categories ¹	-38.4	-44.7	3.2	-1.9	-1.7
Memo:					
Shipments of complete aircraft ²	26.0	40.1	32.8	37.0	36.7

1. Excludes most terrestrial transportation equipment. [Return to table](#)

2. From Census Bureau, Current Industrial Reports; billions of dollars, annual rate. [Return to table](#)

Source: Census Bureau.

Figure: Communications Equipment

Line chart, by billions of chained (2000) dollars, ratio scale, 2000 to April 2009. There are two series, "Orders" and "Shipments". Shipments begins at about 8.5 and generally increases to about 10 by 2000. It then generally decreases to about 4.7 by early 2003, and generally increases to about 7 by 2006. It then generally decreases to end at about 5. Orders begins at about 9.5 and generally increases to about 14 by 2000. It then generally decreases to about 2.5 by 2002, and generally increases to about 8 by early 2006. It then generally decreases to end at about 5.

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

Source: Census Bureau.

Figure: Non-High-Tech, Nontransportation Equipment

Line chart, by billions of chained (2000) dollars, ratio scale, 2000 to April 2009. There are two series, "Orders" and "Shipments". Orders begins at about 46 and generally decreases to about 36 by early 2002. It then generally increases to about 49 by 2006, and generally decreases to end at about 33. Shipments begins at about 44 and generally decreases to about 38 by late 2001. It then generally increases to about 46 by 2006, and generally decreases to end at about 36.

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

Source: Census Bureau.

Figure: Computers and Peripherals

Line chart, 2000 to 2009. There are two series, "Industrial production", which has an index of 2000 = 100, and "Real M3 shipments", which is by billions of chained (2000) dollars. Industrial production begins at about 98 and generally increases to about 108 by 2001. It then generally decreases to about 97 by early 2003, and generally increases to about 238 by 2008. It then generally decreases to about 168 by May. Real M3 shipments begins at about 8.5 and generally increases to about 15.1 by 2006. It then generally decreases to about 12 by 2006, and generally increases to about 19 by early 2008. It then generally decreases to end at about 18 by April.

Note: Ratio scales. 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, by thousands of units, ratio scale, 2000 to May 2009. 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 270 by late 2001. It then generally increases to about 540 by 2002, and generally decreases to about 255 by 2002. It then generally increases to about 960 by early 2006, and generally decreases to about 290 by early 2007. It then generally increases to about 500 by late 2007, and generally decreases to about 135 by early 2009. It then generally decreases to end at about 180. Sales of class 4-8 trucks begins at about 540 and generally decreases to about 280 by early 2003. It then generally increases to about 550 by early 2007, and generally decreases to end at about 190.

Note: Annual rate, FRB seasonals.

Source: For sales, Ward's Communications; for orders, ACT Research.

Fundamentals of Equipment and Software Investment

Note: In each panel, 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 marks the NBER peak in December 2007, the last business cycle peak as defined by the NBER.

Figure: Real Business Output

Line chart, by 4-quarter percent change, 1990 to 2009:Q1. The series begins at about 2.8 and generally decreases to about -2.1 by 1991. It then generally increases to about 5.5 by early 1998, and generally decreases to about -0.5 by late 2001. It then generally increases to about 5 by 2004, and generally decreases to end at about -4. It is at about 2.5 at the time of the NBER peak.

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

Figure: User Cost of Capital

Line chart, by 4-quarter percent change, 1990 to 2009:Q1. There are two series, "Non-high-tech" and "High-tech". Non-high-tech begins at about -1 and generally increases to about 1 by late 1990. It then generally decreases to about -8 by late 1991, and generally increases to about 14 by late 1994. It then generally decreases to about -11 by early 2003, and generally increases to end at about 16. It is at about 0 at the time of the NBER peak. High-tech begins at about -8 and generally increases to about -6 by late 1990. It then generally decreases to about -12.5 by 1992, and generally increases to about -1 by late 1994. It then generally decreases to about -14 by 2003, and generally increases to end at about 0.5. It is at about -5 at the time of the NBER peak.

Source: Staff calculation.

Figure: Corporate Bond Yields

Line chart, by percent, 1990 to June 2009. There are two series, "10-year high-yield" and "10-year BBB". 10-year high-yield begins at about 14.2 and generally decreases to about 8.8 by late 1996. It then generally increases to about 13.6 by late 2000, and generally decreases to about 7.2 by early 2005. It then generally increases to about 17.9 by early 2009, and generally decreases to end at about 12. It is at about 9.2 at the time of the NBER peak. 10-year BBB begins at about 10.1 and generally decreases to about 7 by 1993. It then generally increases to about 9 by late 1994, and generally decreases to about 5.2 by late 2004. It then generally increases to about 10 by late 2008, and generally decreases to end at about 7.5. It is at about 6.2 at the time of the NBER peak.

Note: End of month. June value as of June 16.

Source: Merrill Lynch.

Figure: NFIB: Survey on Loan Availability

Line chart, by percent, 1990 to May 2009. There are two series, "Credit expected to be tighter" and "Credit more difficult to obtain". These two series use two different scales. Credit expected to be tighter begins at about 8 and generally increases to about 13 by late 1990. It then generally decreases to about 0 by early 1998, and generally increases to about 16 by late 2008. It then generally decreases to end at about 15. It is at about 9 at the time of the NBER peak. Credit more difficult to obtain begins at about 7 and generally increases to about 6 by early 1991. It then generally decreases to about -16 by late 1998, and generally increases to about -3 by 2001. It then generally decreases to about -16 by late 2002, and generally increases to end at about 11. It is at about -4 at the time of the NBER peak.

Note: Of borrowers who sought credit in the past three 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, by diffusion index, 1990 to May 2009. There are two series, "ISM" and "Philadelphia Fed". ISM begins at about 47 and generally decreases to about 40 by early 1991. It then generally increases to about 59 by late 1994, and generally decreases to about 45 by early 1996. It then generally increases to about 56 by 1997, and generally decreases to about 46 by early 1999. It then generally increases to about 56 by late 1999, and generally decreases to about 41 by 2001, and generally increases to about 62 by early 2004. It then generally decreases to about 32 by early 2009, and generally increases to end at about 43. It is at about 50 at the time of the NBER peak. Philadelphia Fed begins at about 53 and generally decreases to about 36 by late 1990. It then fluctuates but generally increases to about 80 by early 1994, and fluctuates but generally decreases to about 44 by late 2000. It then generally increases to about 79 by early 2004, and generally decreases to end at about 49. It is at about 55 at the time of the NBER peak.

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

Nonresidential Construction and Indicators

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

Figure: Total Structures

Line chart, by billions of chained (2000) dollars, 1999 to April 2009. The series begins at about 258 and generally increases to about 288 by 2000. It then generally decreases to about 200 by 2005, and generally increases to about 289 by 2008. It then generally decreases to about 255 by early 2009, and generally increases to end at about 270.

Source: Census Bureau.

Figure: Office, Commercial, Communication, and Other

Line chart, by billions of chained (2000) dollars, 1999 to April 2009. There are four series, "Other", "Commercial", "Office", and "Communication". Other begins at about 70 and generally decreases to about 60 by 2005. It then generally increases to about 87 by 2008, and generally decreases to end at about 80. Commercial begins at about 58 and generally increases to about 65 by early 2000. It then generally decreases to about 50 by early 2003, and generally increases to about 60 by late 2007. It then generally decreases to end at about 44. Office begins at about 48 and generally decreases to about 44 by early 2000. It then generally increases to about 58 by late 2000, and generally decreases to about 27 by 2003. It then generally increases to about 38 by 2008, and generally decreases to end at about 30. Communication begins at about 15 and generally increases to about 22 by late 2000. It then generally decreases to about 11 by early 2004, and generally increases to about 20 by 2007. It then generally decreases to end at about 12.

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

Source: Census Bureau.

Figure: Manufacturing and Power

Line chart, by billions of chained (2000) dollars, 1999 to April 2009. There are two series, "Power" and "Manufacturing". Power begins at about 25 and fluctuates but generally increases to about 35 by 2000. It then generally decreases to about 19 by early 2001, and generally increases to about 42 by late 2001. It then generally decreases to about 17.5 by 2004, and generally increases to end at about 45. Manufacturing begins at about 40.5 and generally decreases to about 33 by late 1999. It then generally increases to about 42.5 by early 2001, and generally decreases to about 18 by early 2003. It then generally increases to end at about 59.

Source: Census Bureau.

Figure: Drilling and Mining Indicators

Line chart, 1999 to 2009. There are two series, "Footage drilled", which is by millions of feet, and "Drilling rigs in operation", which is by number. These two series use two different scales. Footage drilled begins at about 8 and generally increases to about 16 by 2001. It then generally decreases to about 12 by 2002, and generally increases to about 30 by late 2008. It then generally decreases to end at about 16 by April 2009. Drilling rigs in operation begins at about 600 and generally decreases to about 550 by 1999. It then generally increases to about 1230 by 2001, and generally decreases to about 800 by 2002. It then generally increases to about 1950 by late 2008, and decreases to end at about 900 by June 2009.

Note: The June readings for drilling rigs are based on data through June 12, 2009. Both series are seasonally adjusted by FRB staff.

Source: For footage drilled, U.S. Department of Energy, Energy Information Agency; for drilling rigs, Baker Hughes.

Figure: Vacancy Rates

Line chart, by percent, 1999 to 2009:Q1. There are three series, "Office", "Industrial", and "Retail". Office begins at about 10 and generally decreases to about 8 by 2000. It then generally increases to about 16 by 2003, and generally decreases to about 13 by 2006. It then generally increases to end at about 14. Industrial begins at 8 and generally decreases to about 7 by 2000. It then generally increases to about 12 by 2003, and generally decreases to about 9 by 2007. It then generally increases to end at about 12.1. Retail begins at about 9 and generally decreases to about 7 by 2000. It then generally increases to about 8.8 by early 2002, and generally decreases to about 7.5 by early 2006. It then generally increases to end at about 11.5.

Note: Industrial space includes both manufacturing structures and warehouses. 2009:Q1 values are preliminary.

Source: Torto Wheaton Research.

Figure: Architectural Billings and Nonresidential Construction Employment

Line chart, 1999 to 2009. There are two series, "Billings", which is a diffusion index, and "Change in employment", which is by percent. These two series use two different scales. Billings begins at about 55 and generally decreases to about 44 by late 2001. It then generally increases to about 59 by late 2005, and generally decreases to about 34 by early 2009. It then generally increases to end at about 40 by April. Change in employment begins at about 0.0 in 2001 and generally decreases to about -0.8 by early 2002. It then generally increases to about 0.9 by 2006, and generally decreases to about -2.0 by early 2009. It then generally increases to end at about -1.5 by May.

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	2008		2009			
	Q3	Q4	Q1	Feb.	Mar.	Apr.

<i>Real inventory investment (chained 2000 dollars)</i>						
Total nonfarm business	-33.3	-31.1	-99.0	...	...	...
Motor vehicles	8.1	-7.1	-69.3	...	...	...
Nonfarm ex. motor vehicles	-41.3	-23.9	-29.8	...	...	...
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	-16.8	-19.9	-25.0	-34.6	-53.2^e	n.a.
Manufacturing	-25.6	-.7	-11.8	-21.7	-17.8 ^e	n.a.
Wholesale trade ex. motor vehicles & parts	10.4	-.1	-5.4	-5.5	-33.1 ^e	n.a.
Retail trade ex. motor vehicles & parts	-1.6	-19.1	-7.8	-7.4	-2.3 ^e	n.a.
<i>Book-value inventory investment (current dollars)</i>						
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	34.6	-155.9	-143.2	-150.2	-155.3	-128.1
Manufacturing	10.7	-65.2	-77.3	-83.2	-75.1	-60.9
Wholesale trade ex. motor vehicles & parts	18.5	-55.7	-47.3	-48.5	-66.6	-47.8
Retail trade ex. motor vehicles & parts	5.5	-34.9	-18.6	-18.5	-13.6	-19.4

n.a. Not available.

... Not applicable.

^e Staff estimate of real inventory investment based on revised book-value data. [Return to table](#)

Source: For real inventory investment, U.S. Dept. of Commerce, Bureau of Economic Analysis; for book-value data, Census Bureau.

Figure: Inventory Ratios ex. Motor Vehicles

Line chart, by months, 2000 to 2009. There are two series, "Staff flow-of-goods system" and "Census book-value data". Staff flow-of-goods system begins at about 1.76 and generally decreases to about 1.71 by 2000. It then generally increases to about 1.76 by late 2001, and generally decreases to about 1.53 by late 2007. It then generally increases to end at about 1.68 by May. Census book-value data begins at about 1.36 and generally increases to about 1.41 by 2001. It then generally decreases to about 1.18 by 2005, and generally increases to about 1.25 by late 2006. It then generally decreases to about 1.18 by 2008, and generally increases to end at about 1.37 by April.

Note: Flow-of-goods system covers total industry ex. motor vehicles and parts, and inventories are relative to consumption. Census data cover manufacturing and trade ex. motor vehicles and parts, and inventories are relative to sales.

Source: Census Bureau; staff calculation.

Figure: ISM Customers' Inventories: Manufacturing

Line chart, by an index, 2000 to May 2009. The series begins at about 46 and generally increases to about 56 by early 2001. It then generally decreases to about 37 by 2004, and generally increases to about 57.5 by late 2008. It then generally decreases to end at about 46 by May.

Note: A number above 50 indicates inventories are "too high."

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

Federal Government Budget

(Unified basis; adjusted for payment-timing shifts and financial transactions; data from Monthly Treasury Statement)

Figure: Surplus or Deficit (-)

Line chart, by billions of dollars, 1995 to May 2009. Data are 12-month moving sums. The series begins at about -200 and generally increases to about -260 by 2001. It then generally decreases to about -450 by 2004, and generally increases to about -160 by 2007. It then generally decreases to end at about -900. There is a second series (a thin line) that begins at about -500 by 2008, and generally decreases to end at about -1050.

Note: Thin line includes deficit effects of financial transactions related to Troubled Asset Relief Program (TARP) and government-sponsored enterprise equity purchase programs.

Figure: Outlays and Receipts

Line chart, by percent change from year earlier, 1995 to May 2009. Data are 12-month moving sums. There are two series, "Receipts" and "Outlays". Receipts begins at about 8 and generally increases to about 10 by early 1998. It then generally decreases to about 5 by 1999, and generally increases to about 11 by late 2000. It then generally decreases to about -12.5 by 2002, and generally increases to about 15 by 2005. It then generally decreases to end at about -14. Outlays begins at about 3 and generally increases to about 5.5 by 1995. It then generally decreases to about 2 by 1998, and generally increases to about 8 by 2006. It then generally decreases to about 2.5 by 2007, and generally increases to end at about 9.

Recent Federal Outlays and Receipts

(Billions of dollars except as noted; adjusted for payment-timing shifts and financial transactions)

Function or source	Sum of April-May			12 months ending in May		
	2008	2009	Percent change	2008	2009	Percent change
Outlays	514.9	565.9	9.9	2,891.0	3,147.4	8.9
Net interest	38.4	37.7	-1.8	245.9	216.7	-11.9
National defense	101.9	107.1	5.1	600.2	653.0	8.8
Major transfers ¹	298.9	338.2	13.2	1,599.1	1,795.0	12.3
Other	75.7	82.8	9.4	445.8	482.6	8.3
Receipts	528.0	383.5	-27.4	2,572.8	2,223.0	-13.6
Individual income and payroll taxes	425.4	320.9	-24.6	2,009.5	1,821.2	-9.4
Corporate income taxes	48.7	13.1	-73.0	337.5	195.5	-42.1
Other	53.9	49.4	-8.2	225.9	206.2	-8.7
Surplus or deficit (-)	13.1	-182.5	...	-318.1	-924.4	...
Memo:						
Unadjusted surplus or deficit (-)	-6.6	-210.6	...	-332.5	-1,127.3	...

1. Includes Social Security, Medicare, Medicaid, and income security programs. [Return to table](#)

... Not applicable.

State and Local Indicators

Figure: Real Spending on Consumption & Investment

Line chart, by percent change, annual rate, 1998 to 2009:Q1. There are two series, "Spending" and "4-quarter moving average". Spending begins at about 1.5 and generally increases to about 7.5 by 1998. It then generally decreases to about 0 by 2000, and generally increases to about 7.5 by 2001, and generally decreases to about -2.8 by 2001. It then generally increases to about 8.8 by late 2001, and generally decreases to about -2.5 by early 2003. It then generally increases to about 3.5 by early 2007, and generally decreases to end at about -3. 4-quarter moving average begins at about 2 and generally increases to about 6 by early 1999. It then generally decreases to about -0.5 by late 2003, and generally increases to about 2.5 by late 2007. It then generally decreases to end at about -0.1.

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

Figure: Net Change in Employment

Bar chart, by thousands of jobs, monthly average, 1998 to 2009:Q2. The series begins at about 27 and generally increases to about 40 by 1999. It then generally decreases to about 24 by 2000, and generally increases to about 46 by 2001. It then generally decreases to about 0 by 2003, and generally increases to about 23 by 2008. It then generally decreases to about -7 by 2009:Q1, and generally increases to end at about 7.

Note: Q2 is the average of April and May.

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

Figure: Real Construction

Line chart, by billions of chained (2000) dollars, annual rate, 1997 to 2009:Q1. The series begins at about 155 and generally decreases to about 147 by 1998. It then generally increases to about 188 by early 2002, and generally decreases to about 170 by late 2004. It then generally increases to about 188 by 2008, and generally decreases to end at about 174. A projection for April 2009 is indicated by a dot at about 178.

Note: Nominal CPIP deflated by BEA prices through Q1 and by a staff projection thereafter.

Source: Census Bureau, Construction Spending.

Figure: State Revenues

Line chart, by percent change from year earlier, 1998 to 2008:Q4. There are two series, "Individual and corporate income taxes" and "Total revenues". Individual and corporate income taxes begins at about 6 and generally increases to about 19 by 1998. It then generally decreases to about 4.5 by early 1999, and generally increases to about 18 by 2000. It then generally decreases to about -21 by 2002, and generally increases to about 26 by 2005. It then generally decreases to end

at about -5. Total revenues begins at about 5 and generally increases to about 11 by 1998. It then generally decreases to about 4 by early 1999, and generally increases to about 11 by early 2000. It then generally decreases to about -9 by 2002, and generally increases to about 16 by 2005. It then generally decreases to end at about -5.

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

Figure: Local Revenues

Line chart, by percent change from year earlier, 1998 to 2008:Q4. There are two series, "Property taxes" and "Total revenues". Property taxes begins at about 5 and generally decreases to about -2 by 1998. It then generally increases to about 9 by late 1999, and generally decreases to about -0.5 by 2000. It then generally increases to about 22.5 by 2002, and generally decreases to about -8 by 2003. It then generally increases to about 16 by 2005, and fluctuates but generally decreases to end at about 3. Total revenues begins at about 5 and generally decreases to about -3 by 1998. It then generally increases to about 15 by 2002, and generally decreases to about -5 by 2003. It then generally increases to about 13 by 2003, and generally decreases to end at about 3.

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	
	May 2008	May 2009	Annual rate		Monthly rate	
			Feb. 2009	May 2009	Apr. 2009	May 2009
CPI						
Total	4.2	-1.3	-5	-2	.0	.1
Food	5.1	2.7	.0	-2.2	-2	-2
Energy	17.4	-27.3	-17.4	-18.9	-2.4	.2
Ex. food and energy	2.3	1.8	1.5	2.3	.3	.1
Core goods	.1	1.2	1.2	4.4	.5	.2
Core services	3.2	2.1	1.6	1.5	.2	.1
Shelter	2.6	1.5	.6	1.1	.2	.1
Other services	4.0	2.9	2.7	1.7	.1	.1
Memo: core ex. tobacco	2.3	1.6	1.4	1.5	.2	.1
Chained CPI (n.s.a.) ¹	3.6	-1.4	...	...	...	...
Ex. food and energy ¹	2.0	1.4	...	...	...	...
PCE prices²						
Total	3.5	.1	.3	.5	.1	.1
Food and beverages	4.9	3.4	.6	-1.6	-2	-2
Energy	17.5	-27.9	-18.4	-19.2	-2.4	.3
Ex. food and energy	2.2	1.8	1.6	2.3	.3	.1
Core goods	-.2	1.7	1.6	4.5	.5	.1
Core services	3.2	1.9	1.5	1.5	.2	.2
Housing services	2.7	2.0	1.4	1.7	.2	.1
Other services	3.4	1.9	1.6	1.4	.2	.2
Memo: core ex. tobacco	2.2	1.5	1.5	1.3	.1	.1
Core market-based	1.9	1.9	1.7	2.4	.3	.1
Core non-market-based	3.9	1.5	1.3	1.6	.2	.2
PPI						
Total finished goods	7.3	-5.0	-3.4	-2.5	.3	.2
Food	6.5	-2.1	-10.4	-3.2	1.5	-1.6
Energy	20.3	-27.3	-16.7	-10.6	-1	2.9

Ex. food and energy	3.0	3.0	3.1	.0	.1	-.1
Core consumer goods	3.4	3.5	3.4	1.1	.2	-.1
Capital equipment	2.4	2.4	2.6	-1.5	-.1	-.1
Intermediate materials	12.7	-12.5	-18.6	-6.6	-.5	.3
Ex. food and energy	7.5	-5.5	-14.0	-5.6	-.9	-.2
Crude materials	40.9	-41.1	-42.6	27.9	3.0	3.6
Ex. food and energy	31.7	-36.8	-1.1	18.5	-.6	6.7

1. Higher-frequency figures are not applicable for data that are not seasonally adjusted (n.s.a.). [Return to table](#)

2. PCE prices in May 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 May are staff estimates)

Figure: PCE Prices

Line chart, by percent, 2000 to May 2009. There are two series, "Total PCE" and "Core PCE". Total PCE begins at about 2.4 and generally increases to about 3 by 2000. It then generally decreases to about 1 by 2002, and generally increases to about 4 by 2005. It then generally decreases to about 1.5 by late 2006, and generally increases to about 4.5 by 2008. It then generally decreases to end at about 0.1. Core PCE begins at about 1.8 and generally increases to about 2.2 by 2001. It then generally decreases to about 1.2 by 2003, and generally increases to about 2.5 by 2006. It then generally decreases to end at about 1.9.

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

Figure: CPI and PCE ex. Food and Energy

Line chart, by percent, 2000 to May 2009. There are three series, "CPI", "CPI chained" and "PCE". CPI begins at about 2 and generally increases to about 2.8 by late 2001. It then generally decreases to about 1.1 by late 2003, and generally increases to about 3 by 2006. It then generally decreases to end at about 1.9. CPI chained begins at about 1.9 by early 2001, and generally decreases to about 0.7 by late 2003. It then generally increases to about 2.6 by 2006, and generally decreases to end at about 1.3. PCE begins at about 1.7 and generally increases to about 2 by 2000. It then generally decreases to about 1.6 by late 2000, and generally increases to about 2.3 by late 2001. It then generally decreases to about 1.2 by 2003, and generally increases to about 2.5 by 2006. It then generally decreases to end at about 1.9.

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

Figure: PCE excluding Food and Energy

Line chart, by percent, 2000 to May 2009. There are two series, "PCE excluding Food and Energy" and "Market-based components". PCE excluding Food and Energy begins at about 1.7 and generally increases to about 2.1 by 2000. It then generally decreases to about 1.5 by late 2000, and generally increases to about 2.4 by late 2002. It then generally decreases to about 1.3 by 2003, and generally increases to about 2.5 by 2006. It then generally decreases to about 1.7 by early 2009, and generally increases to end at about 1.9. Market-based components begins at about 1.2 and generally increases to about 1.8 by 2001. It then generally decreases to about 1 by late 2003, and generally increases to about 2.2 by early 2007. It then generally decreases to about 1.5 by 2007, and generally increases to about 2.2 by 2008. It then generally decreases to about 1.6 by early 2009, and generally increases to end at about 2.

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

Figure: PCE Goods and Services

Line chart, by percent, 2000 to May 2009. There are two series, "Services ex. energy" and "Goods ex. food and energy". Services ex. energy begins at about 2.9 and generally decreases to about 2.2 by late 2000. It then generally increases to about 3.6 by 2002, and generally decreases to about 2.8 by late 2002. It then generally increases to about 3.4 by early 2007, and generally decreases to end at about 2. Goods ex. food and energy begins at about -0.8 and generally increases to about 0.2 by early 2001. It then generally decreases to about -2.6 by 2003, and generally increases to about 0.2 by early 2005. It then generally decreases to about -1.1 by 2007, and generally increases to end at about 1.8.

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

Figure: PCE excluding Food and Energy

Line chart, by percent, 2000 to May 2009. There are two series, "PCE excluding Food and Energy" and "3-month change, annual rate". PCE excluding Food and Energy begins at about 1.7 and generally increases to about 2 by 2000. It then generally decreases to about 1.5 by late 2000, and generally increases to about 2.6 by late 2002. It then generally decreases to about 1.2 by 2003, and generally increases to about 2.5 by 2006. It then generally decreases to about 1.8 by early 2009, and generally decreases to end at about 2. 3-month change begins at about 2.2 and generally increases to about 2.7 by 2000. It then generally decreases to about 0.6 by 2000, and generally increases to about 3 by 2001. It then generally decreases to about -0.7 by 2001, and generally increases to about 4.2 by late 2001. It then generally decreases to about 0.8 by early 2003, and fluctuates but generally increases to about 3 by 2006. It then fluctuates but generally decreases to about 0.2 by early 2009, and generally increases to end at about 2.2.

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

Figure: CPI excluding Food and Energy

Line chart, by percent, 2000 to May 2009. There are two series, "CPI excluding Food and Energy" and "3-month change, annual rate". CPI excluding Food and Energy begins at about 2 and generally increases to about 2.8 by late 2001. It then generally decreases to about 1.1 by late 2003, and generally increases to about 2.9 by late 2006. It then generally decreases to about 1.7 by early 2009, and generally increases to end at about 1.9. 3-month change begins at about 2.8 and fluctuates but generally decreases to about 0.2 by 2003. It then generally increases to about 3 by early 2005, and generally decreases to about 1 by 2005. It then generally increases to about 3.7 by 2006, and generally decreases to about 0.1 by early 2009. It then generally increases to end at about 2.2.

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

Energy and Food Price Indicators

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

Figure: Total Gasoline Margin

Line chart, by cents per gallon, 2005 to June 15, 2009. Data are retail price less average spot crude price*. The series begins at about 100 and generally decreases to about 72 by 2005. It then generally increases to about 155 by 2005, and generally decreases to about 100 by 2006. It then generally increases to about 160 by 2007, and generally decreases to about 75 by 2008. It then generally increases to about 155 by 2008, and generally decreases to about 65 by 2009. It then generally increases to end at about 84.

* Regular grade seasonally adjusted by FRB staff, less average spot crude price: 60% West Texas intermediate, 40% Maya heavy crude. Includes gasoline taxes. [Return to text](#)

Figure: Gasoline Price Decomposition

Line chart, by cents per gallon, 2005 to June 15, 2009. There are three series, "Retail price", "Rack price", and "Average spot crude price". Retail price begins at about 198 and generally increases to about 300 by 2005. It then generally decreases to about 230 by early 2007, and generally increases to about 405 by 2008. It then generally decreases to about 175 by early 2009, and generally increases to end at about 248. Rack price begins at about 148 and generally increases to about 240 by 2005. It then generally decreases to about 160 by early 2007, and generally increases to about 350 by 2008. It then generally decreases to about 125 by late 2008, and generally increases to end at about 155. Average spot crude price begins at about 100 and generally increases to about 170 by 2006. It then generally decreases to about 110 by early 2007, and generally increases to about 325 by 2008. It then generally decreases to about 75 by late 2008, and generally increases to end at about 195.

Note: Retail price is regular grade seasonally adjusted by FRB staff. Average spot crude price is 60% West Texas intermediate, 40% Maya heavy crude.

Figure: Gasoline Inventories

Line chart, by millions of barrels, 2006 to June 12, 2009. The RBOB component of total motor gasoline inventories is adjusted for ethanol use after 2006, boosting reported stocks; estimated by FRB staff. The series begins at about 197 and generally increases to about 225 by 2006. It then generally decreases to about 209 by late 2006, and generally increases to about 233 by early 2007. It then generally decreases to about 199 by 2007, and generally increases to about 238 by 2008. It then generally decreases to about 194 by 2008, and generally increases to about 218 by early 2009. It then generally decreases to end at about 210.

Note: Bounds are defined as the monthly mean over the preceding five years, plus or minus the standard deviation for each month. The bounds generally track the series throughout the chart, typically being about 20 million barrels wide, with the series typically being toward the center of the bounds. Monthly data through December 2008, weekly data thereafter.

Figure: Natural Gas Prices

Line chart, by dollars per million BTU, 2005 to June 16, 2009. The series begins at about 5.5 and generally increases to about 15.2 by late 2005. It then generally decreases to about 4.2 by 2006, and generally increases to about 11.8 by early 2007. It then generally decreases to about 5 by 2007, and generally increases to about 13.2 by 2008. It then generally decreases to end at about 3.2.

Note: National average spot price.

Source: Bloomberg.

Figure: PCE: Food and Core Prices

Line chart, by 12-month percent change, 2005 to May 2009. There are two series, "Food and beverages" and "Core (ex. food and energy)". Food and beverages begins at about 2.7 and generally decreases to about 1.8 by 2006. It then generally increases to about 6.3 by late 2008, and generally decreases to end at about 3.3. Core begins at about 2.2 and remains about constant until early 2007. It then generally decreases to about 2 by 2007, and generally increases to about 2.3 by 2008. It then generally decreases to end at about 1.9.

Note: May 2009 values are staff estimates.

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

Figure: Spot Agricultural Commodity Prices

Line chart, by dollars per bushel, 2005 to June 16, 2009. There are three series, "Corn", "Soybeans", and "Wheat". There are two different scales, Soybeans and Wheat share one and Corn uses the other. Corn begins at about 2 and generally increases to about 4 by early 2007. It then generally decreases to about 3 by 2007, and generally increases to about 7 by 2008. It then generally decreases to end at about 4. Soybeans begins at about 5.2 and generally increases to about 7 by 2005. It then generally decreases to about 5 by 2006, and generally increases to about 16 by 2008. It then generally decreases to about 8 by late 2008, and generally increases to end at about 12. Wheat begins at about 4 and generally increases to about 13.2 by early 2008. It then generally decreases to end at about 6.5.

Source: Commodity Research Bureau.

Broad Measures of Inflation

(Percent change, Q1 to Q1)

Measure	2006	2007	2008	2009
<i>Product prices</i>				
GDP price index	3.4	2.9	2.3	2.1
Less food and energy	3.2	2.9	2.0	1.7
Nonfarm business chain price index	3.4	2.5	1.7	2.2
<i>Expenditure prices</i>				
Gross domestic purchases price index	3.8	2.7	3.3	.9
Less food and energy	3.0	2.8	2.1	1.9
PCE price index	3.1	2.3	3.5	.8
Less food and energy	2.1	2.3	2.2	1.8
PCE price index, market-based components	2.9	2.1	3.4	.5
Less food and energy	1.6	2.1	1.7	1.7
CPI	3.7	2.4	4.2	-2
Less food and energy	2.1	2.6	2.4	1.7
Chained CPI	3.2	2.2	3.7	-5
Less food and energy	1.9	2.2	2.0	1.3
Median CPI	2.5	3.2	3.0	2.7
Trimmed mean CPI	2.6	2.7	2.8	2.5
Trimmed mean PCE	2.5	2.8	2.6	2.3

Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for all else, U.S. Dept. of Commerce, Bureau of Economic Analysis.

Surveys of Inflation Expectations

(Percent)

Period	Actual CPI inflation ¹	Reuters/Michigan Survey				Professional forecasters (10 years) ⁴	
		1 year ²		5 to 10 years ³		CPI	PCE
		Mean	Median	Mean	Median		
2007: Q3	2.4	4.1	3.2	3.5	3.0	2.4	2.1
Q4	4.0	4.1	3.3	3.3	2.9	2.4	2.1
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	n.a.	3.4	2.9	3.2	2.9	2.5	2.3
2009: Feb.	.2	2.3	1.9	3.5	3.1	2.4	2.2
Mar.	-.4	2.4	2.0	2.9	2.6	...	...
Apr.	-.7	3.1	2.8	3.1	2.8	...	...
May	-1.3	3.2	2.8	3.1	2.9	2.5	2.3
June (p)	n.a.	3.8	3.1	3.4	3.1	...	...

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.

Measures of Expected Inflation

Figure: Survey Measures (Reuters/University of Michigan)

Line chart, by percent, 1978 to 2009:Q2. Data are quarterly. There are two series, "Median, next 5 to 10 years" and "Median, next 12 months". Median, next 12 months begins at about 6 and generally increases to about 10.2 by 1980. It then generally decreases to about 2.5 by 1983, and generally increases to about 4.8 by late 1990. It then generally decreases to about 1 by late 2001, and generally increases to about 5 by 2008. It then generally decreases to end at about 3. Median, next 5 to 10 years begins at about 6.6 by 1981 and generally decreases to about 4.8 by 1985. There is no data from late 1985 to mid-1990, where it begins at about 4.4 by 1990 and generally decreases to end at about 3.

There is a second line chart, by percent, 2005 to June 2009. Data are monthly. There are two series, "Median, next 5 to 10 years" and "Median, next 12 months". Median, next 12 months begins at about 2.9 and generally increases to about 4.6 by late 2005. It then generally decreases to about 3 by early 2007, and generally increases to about 5.2 by 2008. It then generally decreases to about 1.7 by early 2009, and generally increases to end at about 3. Median, next 5 to 10 years begins at about 2.8 and generally increases to about 3.4 by 2008. It then generally decreases to about 2.6 by early 2009, and generally increases to end at about 3.

Note: June 2009 values are preliminary.

Source: Reuters/University of Michigan Surveys of Consumers.

Figure: Inputs to Models of Inflation

Line chart, by percent, 1972 to 2009:Q2. Data are quarterly. There are two series, "FRB/US long-run expectations measure for PCE inflation" and "Distributed lag of core PCE inflation". FRB/US begins at about 3 and generally increases to about 7.8 by 1981. It then generally decreases to end at about 2.1. Distributed lag begins at about 5 and generally decreases to about 3.4 by 1973. It then generally increases to about 8.5 by 1981, and generally decreases to end at about 2.

There is a second line chart, by percent, 2005 to 2009. Data are quarterly. There are two series, "FRB/US long-run expectations measure for PCE inflation" and "Distributed lag of core PCE inflation". FRB/US begins at about 2 and remains about constant until 2007. It then generally increases to end at about 2.2. Distributed lag begins at about 1.9 and generally increases to about 2.4 by 2006. It then generally decreases to end at about 1.9.

Note: The distributed lag of core PCE inflation is derived from one of the reduced-form Phillips curves used by Board staff.

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

Figure: Inflation Compensation from TIPS

Line chart, by percent, 2001 to 2009:Q1. There are two series, "5 to 10 years ahead" and "Next 5 years". 5 to 10 years ahead begins at about 2.1 and generally increases to about 3 by 2004. It then generally decreases to about 2.5 by early 2007, generally increases to about 3 by early 2008, and generally decreases to end at about 2.5. Next 5 years begins at about 1.6 and generally increases to about 1.9 by 2001. It then generally decreases to about 1.1 by late 2002, and generally increases to about 2.8 by early 2005. It then generally decreases to about -0.7 by late 2008, and generally increases to end at about 0.

There is a second line chart, by percent, 2005 to June 16, 2009. Data are weekly. There are two series, "5 to 10 years ahead" and "Next 5 years". 5 to 10 years ahead begins at about 2.6 and generally decreases to about 1.9 by early 2008. It then generally increases to about 2.6 by 2008, and generally decreases to about -1.8 by late 2008. It then generally increases to end at about 1.4. Next 5 years begins at about 2.6 and remains about constant until late 2007. It then generally increases to about 3.4 by late 2008, and generally decreases to about 2.1 by early 2009. It then generally increases to end at about 3.

Note: Based on a comparison of an estimated TIPS (Treasury inflation-protected securities) yield curve with an estimated nominal off-the-run Treasury yield curve, with an adjustment for the indexation-lag effect.

Source: FRB staff calculations.

Commodity Price Indexes

Figure: Journal of Commerce

Line chart, 1991 to June 16, 2009. Ratio scale, 2006 = 100. There are two series, "Industrials" and "Metals". Industrials begins at about 55 and generally decreases to about 45 by early 1993. It then generally increases to about 65 by early 1995, and generally decreases to about 47 by late 2001. It then generally increases to about 138 by 2008, and generally decreases to about 61 by early 2009. It then generally increases to end at about 80. Metals begins at about 45 and generally decreases to about 35 by 1993. It then generally increases to about 55 by early 1995, and generally decreases to about 32 by late 2001. It then generally increases to about 160 by 2008, and generally decreases to about 62 by 2008. It then generally increases to end at about 81.

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 June 16, 2009. Ratio scale, 1967 = 100. There are two series, "Spot industrials" and "Futures". Spot industrials begins at about 300 and generally decreases to about 250 by 1993. It then generally increases to about 350 by 1995, and generally decreases to about 220 by late 2001. It then generally increases to about 555 by early 2008, and generally decreases to about 320 by early 2009. It then generally increases to end at about 440. Futures begins at about 225 and generally decreases to about 200 by 1992. It then generally increases to about 255 by 1996, and generally decreases to about 190 by late 2001. It then generally increases to about 615 by 2008, and generally decreases to about 325 by late 2008. It then generally increases to end at about 445.

Note: The Commodity Research Bureau (CRB) spot industrials index consists entirely of industrial commodities, excluding energy. The CRB futures index gives about a 60 percent weight to food 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	12/30/08 to 4/21/09 ²	4/21/09 ² to 6/16/09	52-week change to 6/16/09
JOC industrials	-41.4	9.3	14.4	-37.8
JOC metals	-48.2	22.7	15.6	-37.7
CRB spot industrials	-34.3	9.4	12.1	-18.8
CRB spot foodstuffs	-14.1	4.7	4.3	-25.5
CRB futures	-24.7	4.6	10.0	-30.4

1. From the last week of the preceding year to the last week of the year indicated. [Return to table](#)

2. April 21, 2009, is the Tuesday preceding publication of the April Greenbook. [Return to table](#)

Hourly Compensation and Unit Labor Costs

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

Category	2007:Q1 to 2008:Q1	2008:Q1 to 2009:Q1 ^e	2008 Q2	2008 Q3	2008 Q4	2009 Q1 ^e
<i>Compensation per hour</i>						
Nonfarm business	3.5	4.1	1.7	5.7	4.5	4.6
<i>Output per hour</i>						
Nonfarm business	3.5	2.0	4.7	2.2	-6	1.9

Unit labor costs						
Nonfarm business	.0	2.1	-2.8	3.5	5.1	2.6

e Staff estimate. [Return to table](#)

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

Figure: Compensation per Hour

Line chart, by percent change from year-earlier period, 1996 to 2009:Q1. There are two series, "Productivity and costs" and "ECI". Productivity and costs begins at about 3.1 and generally increases to about 3.8 by 1996. It then generally decreases to about 2.7 by 1997, and generally increases to about 6.8 by 1998. It then generally decreases to about 3.8 by 1999, and generally increases to about 8 by 2000. It then generally decreases to about 3 by early 2003, and generally increases to about 5.2 by late 2003. It then generally decreases to about 3 by 2006, and generally increases to about 4.7 by 2007. It then generally decreases to about 3.6 by early 2008, and generally increases to end at about 4. ECI begins at about 3.9 and generally increases to about 4 by 1998. It then generally decreases to about 3 by early 1999, and generally increases to about 4.7 by 2000. It then generally decreases to end at about 2.

Note: Productivity and costs value for 2009:Q1 is a staff estimate.

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:Q1. The series begins at about 1 and generally increases to about 4.1 by 1998. It then generally decreases to about 1.2 by 1999, and generally increases to about 5 by 2000. It then generally decreases to about -1.8 by early 2002, and generally increases to about 4.2 by early 2007. It then generally decreases to about 0 by 2008, and generally increases to end at about 2.

Note: Value for 2009:Q1 is a staff estimate.

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

Figure: Average Hourly Earnings

Line chart, by percent change from year-earlier period, 1996 to May 2009. The series begins at about 3.2 and generally increases to about 4.45 by 1998. It then generally decreases to about 1.5 by early 2004, and generally increases to about 4.3 by early 2007. It then generally decreases to end at about 3.02.

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

Figure: Markup, Nonfarm Business

Line chart shows nonfarm business markup from 1996 to 2009:Q1. The markup is the ratio of output price to unit labor costs. The series begins at about 1.62 and generally increases to about 1.64 by 1997. It then generally decreases to about 1.53 by early 2001, and generally increases to about 1.65 by 2006. It then generally decreases to about 1.61 by early 2007, and generally increases to about 1.66 by 2008. It then generally decreases to end at about 1.64. The average markup from 1968 to present is also plotted as a horizontal line, at about 1.574.

Note: Value for 2009:Q1 is a staff estimate.

Source: For output price, U.S. Dept. of Commerce, Bureau of Economic Analysis; for unit labor costs, U.S. Dept. of Labor, Bureau of Labor Statistics.

Change in Employment Cost Index of Hourly Compensation for Private-Industry Workers

Measure	2008				2009
	Mar.	June	Sept.	Dec.	Mar.
	Quarterly change (compound annual rate) ¹				
Total hourly compensation	2.7	2.6	2.6	1.9	.7
Wages and salaries	3.4	3.0	2.6	1.8	.7
Benefits	2.3	1.5	2.3	1.5	.7
	12-month change				
Total hourly compensation	3.2	3.0	2.8	2.4	1.9
Wages and salaries	3.2	3.1	2.9	2.6	2.0
Benefits	3.2	2.6	2.4	2.0	1.6

1. Seasonally adjusted. [Return to table](#)

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

*Change in ECI Benefits (unpublished)**

(Private-industry workers; 12-month change)

Figure: Health Insurance

Line chart, by percent, 1990 to March 2009. The series begins at about 12 and generally decreases to about 0 by early 1996. It then generally increases to about 11 by 2002, and generally decreases to end at about 4.5.

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

Figure: Nonproduction Bonuses

Line chart, by percent, 1990 to March 2009. The series begins at about 14 and generally decreases to about -2 by 1992. It then generally increases to about 10 by early 1994, and generally decreases to about -9 by early 1999. It then generally increases to about 11.5 by 2000, and generally decreases to about -7.5 by late 2002. It then generally increases to about 10 by late 2005, and generally decreases to about -2 by 2006. It then generally increases to about 8 by 2007, and generally decreases to end at about -7.

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

Figure: Retirement and Savings

Line chart, by percent, 1990 to March 2009. The series begins at about 5 and generally decreases to about 2.5 by 1991. It then generally increases to about 10.5 by late 1994, and generally decreases to about 2 by late 2002. It then generally increases to about 26 by early 2005, and generally decreases to about -5 by early 2007. It then generally increases to about 8 by early 2008, and generally decreases to end at about 0.

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

Figure: Workers' Compensation Insurance

Line chart, by percent, 1990 to March 2009. The series begins at about 11 and generally decreases to about -6 by early 1998. It then generally increases to about 13 by early 2003, and generally decreases to end at about -1.

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

* The data on the costs of individual benefits should be interpreted with care because, with the exception of health insurance, they do not meet BLS's standard publication criteria. [Return to text](#)

† Note: Data values for figures are rounded and may not sum to totals. [Return to text](#)

Last update: April 1, 2015

Accessible Material

June 2009 Greenbook Part 2 Tables and Charts[†]

Domestic Financial Developments

Selected Financial Market Quotations

(One-day quotes in percent except as noted)

Instrument	2007		2009		Change to June 16 from selected dates (percentage points)		
	Aug. 6	Mar. 17	Apr. 28	June 16	2007 Aug. 6	2009 Mar. 17	2009 Apr. 28
<i>Short-term</i>							
FOMC intended federal funds rate	5.25	.13	.13	.13	-5.12	.00	.00
Treasury bills ¹							
3-month	4.74	.24	.13	.17	-4.57	-.07	.04
6-month	4.72	.44	.31	.30	-4.42	-.14	-.01
Commercial paper (A1/P1 rates) ²							
1-month	5.26	.44	.31	.30	-4.96	-.14	-.01
3-month	5.29	.66	.55	.31	-4.98	-.35	-.24
Large negotiable CDs ¹							
3-month	5.34	1.08	.80	.35	-4.99	-.73	-.45
6-month	5.27	1.83	1.38	.63	-4.64	-1.20	-.75
Eurodollar deposits ³							
1-month	5.33	1.00	.90	.65	-4.68	-.35	-.25
3-month	5.35	1.65	1.40	1.15	-4.20	-.50	-.25
Bank prime rate	8.25	3.25	3.25	3.25	-5.00	.00	.00
<i>Intermediate- and long-term</i>							
U.S. Treasury ⁴							
2-year	4.49	1.04	.92	1.21	-3.28	.17	.29
5-year	4.52	2.14	2.04	2.68	-1.84	.54	.64
10-year	4.82	3.47	3.38	4.00	-.82	.53	.62
U.S. Treasury indexed notes ⁵							
5-year	2.43	2.04	1.55	1.38	-1.05	-.66	-.17
10-year	2.48	2.26	1.92	2.10	-.38	-.16	.18
Municipal general obligations (Bond Buyer) ⁶	4.51	5.03	4.57	4.86	.35	-.17	.29
Private instruments							
10-year swap	5.44	3.14	3.07	3.99	-1.45	.85	.92
10-year FNMA ⁷	5.34	4.04	3.88	4.39	-.95	.35	.51
10-year AA ⁸	6.12	6.99	6.33	5.98	-.14	-1.01	-.35
10-year BBB ⁸	6.57	9.25	8.49	7.58	1.01	-1.67	-.91
10-year high yield ⁸	9.21	16.41	12.79	12.08	2.87	-4.33	-.71
Home mortgages (FHLMC survey rate)							
30-year fixed	6.59	4.98	4.78	5.59	-1.00	.61	.81

1-year adjustable	5.65	4.91	4.77	5.04	-0.61	.13	.27
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Stock exchange index	Record high		2009			Change to June 16 from selected dates (percent)		
	Level	Date	Mar. 17	Apr. 28	June 16	Record high	2009 Mar. 17	2009 Apr. 28
Dow Jones Industrial	14,165	10-9-07	7,396	8,017	8,505	-39.96	14.99	6.08
S&P 500 Composite	1,565	10-9-07	778	855	912	-41.73	17.20	6.64
Nasdaq	5,049	3-10-00	1,462	1,674	1,796	-64.42	22.85	7.31
Russell 2000	856	7-13-07	404	473	504	-41.14	24.81	6.53
D.J. Total Stock Index	15,807	10-9-07	7,878	8,754	9,339	-40.92	18.55	6.69

1. Secondary market. [Return to table](#)
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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](#)
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8. Derived from smoothed corporate yield curves estimated using Merrill Lynch bond data. [Return to table](#)

NOTES:

August 6, 2007, is the day before the August 2007 FOMC meeting.
 March 17, 2009, is the day before the March 2009 FOMC monetary policy announcement.
 April 28, 2009, is the day before the most recent FOMC monetary policy announcement.

Financial Institutions and Short-Term Funding Markets

Figure: Senior CDS Spreads for Bank Holding Companies

Line chart, July 2007 to June 16, 2009. Unit is basis points. Data are daily. The April 2009 FOMC meeting is marked in the time series. The series begins at about 20 and generally increases to about 205 by March 2008. It then generally decreases to about 75 by May 2008, and generally increases to about 365 by March 2009. It then generally decreases to about 125 by early June 2009, and generally increases to end at about 195. It is at about 275 at the time of the April 2009 FOMC meeting.

Note: Median spreads for 6 bank holding companies: Bank of America, Citigroup, Goldman Sachs, JPMorgan Chase, Morgan Stanley, and Wells Fargo.

Source: Markit.

Figure: S&P Bank Equity Index

Line chart, July 2007 to June 16, 2009. April 28, 2009 = 100, ratio scale. Data are daily. The April 2009 FOMC meeting is marked in the time series. The series begins at about 400 and generally decreases to about 130 by July 2008, and generally increases to about 245 by September 2008. It then generally decreases to about 55 by March 2009, and generally increases to end at about 115. It is at about 100 at the time of the April 2009 FOMC meeting.

Source: Bloomberg.

Figure: Selected Spreads on FDIC-Guaranteed Debt

Line chart, November 2008 to June 16, 2009. Unit is basis points. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are three series, "Citigroup", "JPMorgan Chase", and "Wells Fargo". Citigroup begins at about 195 and generally decreases to about 70 by early January 2009. It then generally increases to about 98 by March 2009, and generally decreases to end at about 40. JPMorgan Chase begins at about 175 and generally increases to about 195 by early December 2008. It then generally decreases to about 73 by late January 2009, and generally increases to about 89 by March 2009. It then generally decreases to end at about 32. Wells Fargo begins at about 195 and generally decreases to about 62 by early January 2009. It then generally increases to about 76 by March 2009, and generally decreases to end at about 30.

Note: Spreads to comparable-maturity Treasury securities for issues maturing around year-end 2011.

Source: Bloomberg.

Figure: S&P Insurance Equity Index

Line chart, July 2007 to June 16, 2009. April 28, 2009 = 100, ratio scale. Data are daily. The April 2009 FOMC meeting is marked in the time series. The series begins at about 350 and generally decreases to about 65 by March 2009. It then generally increases to end at about 110. It is at about 100 at the time of the April 2009 FOMC meeting.

Source: Standard & Poor's.

Figure: Libor over OIS Spread

Line chart, July 2007 to June 17, 2009. Unit is basis points. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are three series, "1-month", "3-month" and "6-month". 1-month begins at about 10 and generally increases to about 95 by early September 2007. It then generally decreases to about 20 by early November 2007, and generally increases to about 100 by October 2008. It then generally decreases to about 15 by January 2008, and generally increases to about 320 by October 2008. It then generally decreases to end at about 10. 3-month begins at about 10 and generally increases to about 95 by early September 2007. It then generally decreases to about 50 by November 2007, and generally increases to about 352 by October 2008. It then generally decreases to end at about 45. 6-month begins at about 10 and generally increases to about 95 by early September 2007. It then generally decreases to about 50 by November 2007, and generally increases to about 340 by October 2008. It then generally decreases to end at about 95.

Source: British Bankers' Association and Prebon.

Figure: Spreads on 30-day Commercial Paper

Line chart, July 2007 to June 16, 2009. Unit is basis points. Data are daily. There are two series, "ABCP" and "A2/P2". These two series track closely together, beginning at about 0 and generally increasing to about 110 by September 2007. They then generally decrease to about 115 by October 2007, and generally increase to about 200 by early December 2007. They then generally decrease to about 30 by January 2008, and generally increase together until they reach about 390 by October 2008. ABCP generally decreases to end at about 10 and is at about 50 at the time of the April 2009 FOMC meeting. A2/P2 generally increases to about 600 by January 2009 and generally decreases to end at about 50. It is at about 60 at the time of the April 2009 FOMC meeting.

Note: 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.

Source: Depository Trust & Clearing Corporation.

Federal Reserve Purchase Programs and Facilities

Figure: Total Federal Reserve Assets

Line chart, by billions of dollars, January 2007 to June 10, 2009. Data are weekly. The April 2009 FOMC meeting is marked in the time series. The series begins at about 890 and remains about constant until June 2008. It then generally increases to about 2250 by December 2008, and generally decreases to about 1840 by February 2009. It then generally increases to end at about 2070. It is at about 2090 at the time of the April 2009 FOMC meeting.

Source: Board of Governors of the Federal Reserve System, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

Figure: Securities Held Outright

Line chart, by billions of dollars, September 2008 to June 15, 2009. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are four series, "Treasury notes and bonds", "Treasury bills", "Agency MBS", and "Agency debt". Treasury notes and bonds begins at about 450 and remains about constant until March 2009. It then generally increases to end at about 610. It is at about 530 at the time of the April 2009 FOMC meeting. Treasury bills begins at about 20 and remains about constant until the end. It is at about 20 at the time of the April 2009 FOMC meeting. Agency MBS begins at about 0 and remains about constant until January 2009. It then generally increases to end at about 450. Agency debt begins at about 0 and generally increases to end at about 95.

Source: Federal Reserve Board.

Figure: Primary Credit

Line chart, by billions of dollars, March 2008 to June 16, 2009. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are two series, "Total" and "Foreign". Total begins at about 0 and generally increases to about 112 by late October 2008. It then generally decreases to end at about 37.5. It is at about 45 at the time of the April 2009 FOMC meeting. Foreign begins at about 0 and generally increases to about 84 by late October 2008. It then generally decreases to end at about 30. It is at about 37 at the time of the April 2009 FOMC meeting.

Source: Federal Reserve Board.

Figure: Term Auction Facility

Line chart, by billions of dollars, December 2007 to June 16, 2009. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are two series, "Total" and "Foreign". Total begins at about 48 and generally increases to about 499 by late February 2009. It then generally decreases to end at about 340. It is at about 400 at the time of the April 2009 FOMC meeting. Foreign begins at about 25 and generally increases to about 100 by June 2008. It then generally decreases to about 80 by September 2008, and generally increases to end at about 200. It is at about 200 at the time of the April 2009 FOMC meeting.

Source: Federal Reserve Board.

Figure: Other Credit Extensions

Line chart, by billions of dollars, September 2008 to June 16, 2009. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are three

series, "CPFF", "PDCF", and "AMLF". CPFF begins at about 0 by October 2008, and generally increases to about 350 by January 2009. It then generally decreases to end at about 125. It is at about 200 at the time of the April 2009 FOMC meeting. PDCF begins at about 48 and generally increases to about 150 by late September 2008. It then generally decreases to end at about 0. It is at about 2 at the time of the April 2009 FOMC meeting. AMLF begins at about 0 and generally increases to about 150 by late September 2008. It then generally decreases to about 0 by April 2009, and generally increases to end at about 20. It is at about 0 at the time of the April 2009 FOMC meeting.

Note: AMLF is the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility; CPFF is the Commercial Paper Funding Facility; PDCF is the Primary Dealer Credit Facility.

Source: Federal Reserve Board.

Policy Expectations and Treasury Yields

Figure: Interest Rates

Line chart, by percent, April 28 to June 17. There are two series, "10-year Treasury yield" and "March 2010 Eurodollar". These two series use two different scales. 10-year Treasury yield begins at about 2.9 and generally increases to about 3.38 by May 7. It then generally decreases to about 3.1 by May 15, and generally increases to about 4.0 by June 10. It then generally decreases to end at about 3.7. March 2010 Eurodollar begins at about 1.32 and generally decreases to about 0.92 by May 20. It then generally increases to about 1.8 by June 9, and generally decreases to end at about 1.35. The FOMC statement is marked in the time series at about the end of April 29. The SCAP results is marked in the time series at about May 8. Retail sales report is marked in the time series at about May 11. CPI report is marked in the time series at about May 15. Employment report is marked in the time series at about June 5.

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, by percent, May 2009 to August 2011. There are two series, "June 16, 2009" and "April 28, 2009". June 16, 2009 begins at about 0.2 and generally increases to end at about 2.6. April 28, 2009 begins at about 0.2 and generally increases to end at about 1.9.

Note: Estimated from federal funds and Eurodollar futures, with an allowance for term premiums and other adjustments.

Source: Chicago Mercantile Exchange; Chicago Board of Trade.

Figure: Treasury Yield Curve

Line chart, by percent, 1 to 20 years ahead. There are two series, "June 16, 2009" and "April 28, 2009". June 16, 2009 begins at about 0.25 and generally increases to end at about 4.5. April 28, 2009 begins at about 0.4 and generally increases to end at about 4.1.

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 Bank of New York.

Figure: 10-Year Treasury Implied Volatility

Line chart, by percent, January 2007 to June 16, 2009. Data are daily. The April 2009 FOMC meeting is marked in the time series. The series begins at about 4.5 and generally decreases to about 3.5 by May 2007. It then generally increases to about 3.1 by March 2008, and generally decreases to about 7 by July 2008. It then generally increases to about 13.5 by September 2008, and generally decreases to about 6.8 by April 2009. It then generally increases to about 11.8 by early June 2009, and generally decreases to end at about 10. It is at about 8 at the time of the April 2009 FOMC meeting.

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

Source: Bloomberg.

Figure: Inflation Compensation

Line chart, by percent, January 2007 to June 16, 2009. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are two series, "5 to 10 years ahead" and "Next 5 years". 5 to 10 years ahead begins at about 2.5 and generally increases to about 3.8 by late September 2008. It then generally decreases to about 2 by January 2009, and generally increases to about 3.1 by late May 2009. It then generally decreases to end at about 2.8. It is at about 2.5 at the time of the April 2009 FOMC meeting. Next 5 years begins at about 2.3 and remains about constant until February 2008. It then generally decreases to about 1.9 by mid-February 2008, and generally increases to about 2.7 by early July 2008. It then generally decreases to about -1.5 by December 2008, and generally increases to end at about 1.2. It is at about 0.6 at the time of the April 2009 FOMC meeting.

Note: Estimates based on smoothed nominal and inflation-indexed Treasury yields. "Next 5 years" is adjusted for lagged indexation of Treasury inflation-protected securities.

Source: Federal Reserve Bank of New York.

Corporate Yields, Risk Spreads, and Stock Prices

Figure: Selected Stock Price Indexes

Line chart, June 2008 to June 16, 2009. April 28, 2009 = 100. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are two series, "S&P Financial" and "S&P 500". S&P Financial begins at about 237.5 and generally decreases to about 168 by July 2008. It then generally increases to about 220 by September 2008, and generally decreases to about 58 by March 2009. It then generally increases to end at about 118. It is at about 102 at the time of the April 2009 FOMC meeting. S&P 500 begins at about 162.5 and generally decreases to about 78 by March 2009. It then generally increases to end at about 105. It is at about 100 at the time of the April 2009 FOMC meeting.

Source: Standard & Poor's.

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

Line chart, by percent, 1990 to June 16, 2009. Data are monthly. There are two series, "Expected 10-year real equity return" and "Expected real yield on 10-year Treasury". Expected 10-year real equity return begins at about 7.6 and generally increases to about 9.5 by late 1990. It then generally decreases to about 2.2 by 2000, and generally increases to about 12 by late 2008. It then generally decreases to end at about 9.5. Expected real yield on 10-year Treasury begins at about 4.2 and generally decreases to about 2 by late 1993. It then generally increases to about 4.4 by early 1995, and generally decreases to about 1 by 2003. It then generally increases to about 2.8 by 2007, and generally decreases to end at about 1.

Note: "Expected real yield on 10-year Treasury" is off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation. There are two marks on the chart, at about 9.2 for "Expected 10-year real equity return" and about 1.5 for "Expected real yield on 10-year Treasury", that denote the latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S.

Source: Thomson Financial.

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

Line chart, by percent, 2002 to June 16, 2009. Data are weekly, as measured on Fridays or the most recent business day. The April 2009 FOMC meeting is marked in the time series. The series begins at about 22 and generally increases to about 40 by 2002. It then generally decreases to about 10 by early 2007, and generally increases to about 78 by late 2008. It then generally decreases to end at about 33. It is at about 35 at the time of the April 2009 FOMC meeting.

Source: Chicago Board of Exchange.

Figure: Corporate Bond Yields

Line chart, by percent, 2002 to June 16, 2009. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are two series, "10-year high-yield" and "10-year BBB". 10-year high-yield begins at about 11 and generally increases to about 12 by 2002. It then generally decreases to about 7 by early 2005, and generally increases to about 19.8 by late 2008. It then generally increases to end at about 12. It is at about 13.8 at the time of the April 2009 FOMC meeting. 10-year BBB begins at about 7.5 and generally decreases to about 5 by 2003. It then generally increases to about 10 by late 2008, and generally decreases to end at about 8. It is at about 8.8 at the time of the April 2009 FOMC meeting.

Note: Yields from smoothed yield curves based on Merrill Lynch bond data.

Figure: Corporate Bond Spreads

Line chart, 2002 to June 16, 2009. Unit is basis points. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are two series, "10-year high-yield" and "10-year BBB". 10-year high-yield begins at about 550 and generally increases to about 900 by 2002. It then generally decreases to about 290 by early 2005, and generally increases to about 1650 by late 2008. It then generally decreases to end at about 800. It is at about 1080 at the time of the April 2009 FOMC meeting. 10-year BBB begins at about 200 and generally increases to about 300 by late 2002. It then generally decreases to about 100 by early 2005, and generally increases to about 650 by late 2008. It then generally decreases to end at about 350. It is at about 480 at the time of the April 2009 FOMC meeting.

Note: Corporate yields from smoothed yield curves based on Merrill Lynch bond data and spreads measured relative to comparable-maturity Treasury securities.

Figure: Estimated Median Bid-Asked Spread for Corporate Bonds

Line chart, 2005 to June 16, 2009. Unit is basis points. Data are daily. The April 2009 FOMC meeting is marked in the time series. There are two series, "High-yield" and "Investment-grade". High-yield begins at about 125 and generally increases to about 225 by late 2005. It then generally decreases to about 100 by early 2007, and generally increases to about 355 by late 2008. It then generally decreases to end at about 150. It is at about 175 at the time of the April 2009 FOMC meeting. Investment-grade begins at about 75 and generally increases to about 102 by 2005. It then generally decreases to about 50 by late 2006, and generally increases to about 150 by 2008. It then generally decreases to end at about 100.

Source: Staff estimate using data from the National Assn. of Securities Dealers' Trade Reporting and Compliance Engine.

Corporate Earnings and Credit Quality

Figure: S&P 500 Earnings Per Share

Line chart, by percent, 1998 to 2009:Q1. Data are change from 4 quarters earlier. There are two series, "All firms" and "Nonfinancial firms". All firms begins at

about 1 and generally decreases to about -7 by 1998. It then generally increases to about 21 by 1999, and generally decreases to about -25 by 2001. It then generally increases to about 28 by early 2004, and generally decreases to about -65 by late 2008. It then generally increases to end at about -32. Nonfinancial firms begins at about -1 and generally increases to about 21 by early 2000. It then generally decreases to about -28 by 2001, and generally increases to about 32 by 2004. It then generally decreases to end at about -31.

Source: Thomson Financial.

Figure: Revisions to Expected S&P 500 Earnings

Line chart, by percent, 2002 to mid-May 2009. Data are monthly. There are two series, "All firms" and "Nonfinancial firms". These two series track closely together, beginning at about -1 and generally increase to about 0.8 by early 2002. They then generally decrease to about -3.5 by late 2002, and generally increase to about 2 by 2004. They then generally decrease to about -17 by early 2009. All firms generally increases to end at about -3.5, and Nonfinancial firms generally increases to end at about -1.

Note: Index is weighted average of the percent change in the consensus forecasts of current-year and following-year earnings per share for fixed sample.

Source: Thomson Financial.

Figure: Financial Ratios for Nonfinancial Corporations

Line chart, by ratios, 1989 to 2009:Q1. There are two series, "Debt over total assets" and "Liquid assets over total assets". There two series use two different scales. Debt over total assets begins at about 3.25 and generally decreases to about 0.275 by 1996. It then generally increases to about 0.305 by 1999, and generally decreases to about 0.245 by late 2005. It then generally increases to end at about 0.298. Liquid assets over total assets begins at about 0.052 and generally decreases to about 0.048 by 1990. It then generally increases to about 0.102 by 2004, and generally decreases to about 0.088 by 2008. It then generally increases to end at about 0.105.

Note: Data are annual through 1999 and quarterly starting in 2000:Q1. 2009:Q1 values are preliminary.

Source: Calculated using Compustat data.

Figure: Bond Ratings Changes of Nonfinancial Companies

Bar chart, by percent of outstandings, 1991 to May 2009. Data are annual rates. There are two series, "Upgrades" and "Downgrades". Upgrades begins at about 12 and generally decreases to about 8 by 1994. It then generally increases to about 20 by early 1995, and generally decreases to about 9 by early 1997. It then generally increases to about 15 by 1998, and generally decreases to about 1 by 2002. It then generally increases to about 10 by 2007, and generally decreases to about 1 by 2008:H2. It then generally increases to about 10 by April 2009, and generally decreases to end at about 5. Downgrades begins at about 26 and generally increases to about 37 by 1992. It then generally decreases to about 8 by 1995, and generally increases to about 39 by 2002. It then generally decreases to about 9 by 2008:H1, and generally increases to about 40 by 2009:Q1. It then generally decreases to end at about 18.

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

Figure: Expected Year-Ahead Defaults

Line chart, by percent of liabilities, 1990 to June 2009. Data are monthly. The series begins at about 0.8 and generally increases to about 1.3 by late 1990. It then generally decreases to about 0.1 by 1997, and generally increases to about 1.6 by 2002. It then generally decreases to about 0.1 by 2007, and generally increases to about 8.7 by 2009. It then generally decreases to end at about 6.8.

Note: Firm-level estimates of default weighted by firm liabilities as a percent of total liabilities, excluding defaulted firms. June 2009 value is an estimate based on data through June 16.

Source: Calculated using Moody's KMV.

Figure: Selected Default and Delinquency Rates

Line chart, by percent of outstandings, 1990 to May 2009. There are two series, "C&I loan delinquency rate" and "Bond default rate". C&I loan delinquency rate begins at about 5 and generally increases to about 6.1 by 1991. It then generally decreases to about 1.7 by late 1997, and generally increases to about 3.9 by 2002. It then generally decreases to about 1.1 by late 2006, and generally increases to end at about 3.1. Bond default rate begins at about 1.7 and generally increases to about 3.2 by early 1991. It then generally decreases to about 0 by early 1994, and generally increases to about 3.8 by early 2003. It then generally decreases to about 0 by early 2008, and generally increases to about 7.2 by early 2009. It then generally decreases to end at about 3.3.

Note: "Bond default rate" is 6-month trailing defaults divided by beginning-of-period outstandings, at an annual rate.

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

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
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	H1	H2	Q1	Apr.	May			
Nonfinancial corporations								
Stocks ¹	4.6	4.7	5.5	3.5	4.0	2.7	4.4	11.1
Initial public offerings	1.7	1.8	1.6	.6	.1	.3	.1	.2
Seasoned offerings	2.8	2.9	3.8	2.9	3.9	2.4	4.3	10.9
Bonds²								
Investment grade	8.7	13.1	17.5	24.9	14.2	42.5	10.2	33.1
Speculative grade	5.2	6.2	7.5	3.1	.4	3.0	5.7	9.9
Other (sold abroad/unrated)	4.8	10.1	10.0	8.0	4.8	11.2	8.6	10.7
Memo								
Net issuance of commercial paper ³	-2	2.4	-4	-5	3.7	-12.7	-15.0	2.0
Change in C&I loans at commercial banks ³	9.6	11.7	21.1	13.0	8.5	-9.1	-20.6	-22.8
Financial corporations								
Stocks ¹	5.0	5.3	8.6	17.2	9.9	.9	13.9	47.8
Bonds ²	170.4	180.6	151.7	66.2	24.6	38.9	42.2	56.1

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](#)

2. Data include regular and 144a private placements. Bond totals reflect gross proceeds rather than par value of original discount bonds. Bonds are categorized according to Moody's bond ratings or to Standard & Poor's if unrated by Moody's. [Return to table](#)

3. 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, by billions of dollars, 2005 to May 2009. Data are monthly rates, nonfinancial firms. There are three series, "Commercial Paper", "C&I loans" and "Bonds". Commercial paper and C&I loans are seasonally adjusted, period-end basis. There is also a "Total" series presented as a line chart which sums the total of the other series. Approximate values are: 2005: Bonds 4, C&I loans 10, Commercial paper 0, Total 14. 2006: Bonds 19, C&I loans 11, Commercial paper 2, Total 32. 2007: Bonds 27, C&I loans 21, Commercial paper 0, Total 48. 2008:H1: Bonds 22, C&I loans 13, Commercial paper 0, Total 35. 2008:H2: Bonds 11, C&I loans 9, Commercial paper 4, Total 24. 2009:Q1: Bonds 49, C&I loans -9, Commercial paper -13, Total 27. April 2009: Bonds 15, C&I loans -20, Commercial paper -16, Total -21. May 2009: Bonds 44, C&I loans -23, Commercial paper 2, Total 23.

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

Figure: Components of Net Equity Issuance

Bar chart, by billions of dollars, 2005 to 2009:Q1. Data are monthly rates, nonfinancial firms. There are four series, "Public issuance", "Private issuance", "Repurchases", and "Cash mergers". There is also a "Total" series presented as a line chart which sums the total of the other series. Approximate values are: 2005: Private issuance 8, Public issuance 4, Repurchases -28, Cash mergers -14, Total -30. 2006: Private issuance 10, Public issuance 5, Repurchases -38, Cash mergers -22, Total -45. 2007: Private issuance 16, Public issuance 4, Repurchases -45, Cash mergers -38, Total -63. 2008:H1: Private issuance 18, Public issuance 3, Repurchases -35, Cash mergers -13, Total -27. 2008:Q3: Private issuance 19, Public issuance 2, Repurchases -31, Cash mergers -19, Total -29. 2008:Q4: Private issuance 19, Public issuance 2.5, Repurchases -19, Cash mergers -16. 2009:Q1: Private issuance 18, Public issuance 2, Repurchases -14, Cash mergers -6, Total 0.

Note: 2009:Q1 values are staff estimates.

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

Commercial Real Estate

Figure: Commercial Mortgage Debt

Line chart, by percent change, annual rate, 2000 to 2009:Q1. Data are quarterly. The series begins at about 11.9 and generally decreases to about 7 by early 2002. It then generally increases to about 16.2 by late 2005, and decreases to end at about 0.

Source: Federal Reserve.

Figure: Sales of Commercial Real Estate

Line chart, by billions of dollars, 2001 to May 2009. There are two series, "3-month moving average" and "Monthly". 3-month moving average begins at about 8 and generally increases to about 71 by 2007. It then generally decreases to end at about 5. Monthly begins at about 8 and generally increases to about 120 by early 2007. It then fluctuates but generally decreases to end at about 2.

Note: May 2009 values are preliminary.

Source: Real Capital Analytics.

Figure: Prices of Commercial Real Estate

Line chart, 1994 to 2009. Index, 2001:Q1=100. There are two series, "NCREIF TPI", data is quarterly, and "Moody's index", data is monthly. NCREIF TPI begins at about 75 and generally increases to about 208 by 2007. It then generally decreases to end at about 153 by 2009:Q1. Moody's index begins at about 100 by early 2001, and generally increases to about 190 by late 2007. It then generally decreases to end at about 150 by March 2009.

Source: NCREIF; MIT Center for Real Estate; Moody's.

Figure: Delinquency Rates on Commercial Mortgages on Existing Properties

Line chart, by percent, 1996 to 2009. There are three series, "At commercial banks", "CMBS", "At life insurance companies". At commercial banks begins at about 3.4 and generally decreases to about 1.3 by 2000. It then generally increases to about 1.8 by late 2001, and generally decreases to about 1 by 2006. It then generally increases to end at about 3.6 by 2009:Q1. CMBS begins at about 0.4 by early 1999, and generally increases to about 1.9 by late 2003. It then generally decreases to about 0.3 by 2007, and generally increases to end at about 2.8 by May 2009. At life insurance companies begins at about 2.2 and generally increases to about 2.6 by 1996. It then generally decreases to end at about 0.1 by 2009:Q1.

Note: CMBS are commercial mortgage-backed securities. "At commercial banks" excludes farmland.

Source: Citigroup; Call Reports; ACLI.

Figure: Delinquency Rates on Construction Loans at Banks

Line chart, by percent, 2007:Q1 to 2009:Q1. Data are quarterly. There are two series, "Residential construction", and "Commercial construction". Residential construction begins at about 2.4 and generally increases to end at about 21. Commercial construction begins at about 2 and generally increases to end at about 12.

Note: Data series begin in 2007: Q1.

Source: Call Reports.

Figure: Commercial Mortgage CDS Index Prices (CMBX)

Line chart, by percent, April 2007 to June 11, 2009. Data are daily, by rating. The April 2009 FOMC meeting is marked in the time series. There are three series, "Senior AAA", "Junior AAA", and "BBB-". Senior AAA begins at about 100 and generally decreases to about 83 by February 2008. It then generally increases to about 95 by May 2008, and generally decreases to about 55 by late October 2008. It then generally increases to end at about 70. It is at about 70 at the time of the April 2009 FOMC meeting. Junior AAA begins at about 99 by December 2007, and generally decreases to about 30 by October 2008. It then generally increases to about 41 by late November 2008, and generally decreases to about 27 by March 2009. It then generally increases to end at about 34. It is at about 29 at the time of the April 2009 FOMC meeting. BBB- begins at about 100 and generally decreases to end at about 10. It is at about 10 at the time of the April 2009 FOMC meeting.

Note: Each index corresponds to pools of mortgages securitized in 2006:H1.

Source: JPMorgan Chase & Co.

Residential Mortgages

Figure: Mortgage Rate and MBS Yield

Line chart, by percent, October 2006 to June 2009. Data are weekly. The April 2009 FOMC meeting is marked in the time series. There are two series, "30-year conforming fixed-rate mortgage rate" and "MBS yield". 30-year conforming fixed-rate mortgage rate begins at about 6.3 and generally decreases to about 6.2 by late April 2007. It then generally increases to about 6.75 by July 2007, and generally decreases to about 5.5 by late January 2008. It then generally increases to about 6.6 by late July 2008, and generally decreases to about 4.8 by April 2009. It then generally increases to end at about 5.55 by June 10. It is at about 4.8 at the time of the April 2009 FOMC meeting. MBS yield begins at about 5.9 and generally increases to about 6.4 by early June 2007. It then generally decreases to about 4.9 by early February 2008, and generally increases to about 6.0 by early August 2008. It then generally decreases to about 3.7 by January 2009, and generally increases to end at about 4.6 by June 16. It is at about 4.0 at the time of the April 2009 FOMC meeting.

Note: For MBS yield, Fannie Mae 30-year current coupon rate.

Source: For mortgage rate, Freddie Mac; for MBS yield, Bloomberg.

Figure: Spread of Mortgage Rate to Treasury Yield

Line chart, October 2006 to June 10, 2009. Unit is basis points. Data are weekly. The April 2009 FOMC meeting is marked in the time series. The series begins at about 168 and generally decreases to about 137 by February 2007. It then generally increases to about 250 by late August 2008, and generally decreases to about 88 by June 2009. It then generally increases to end at about 130. It is at about 131 at the time of the April 2009 FOMC meeting.

Note: Spread is of 30-year conforming fixed mortgage rate relative to the off-the-run 10-year Treasury yield.

Source: Bloomberg; Freddie Mac.

Figure: Agency and Non-Agency MBS Issuance

Bar chart, by billions of dollars, 2002 to April 2009. Data are monthly rates. There are three series, "Non-agency", "GSEs", and "Ginnie Mae". Approximate values are: 2002: Ginnie Mae 15, GSEs 105, Non-agency 30. 2003: Ginnie Mae 18, GSEs 160, Non-agency 42. 2004: Ginnie Mae 10, GSEs 80, Non-agency 60. 2005: Ginnie Mae 8, GSEs 44, Non-agency 97. 2006: Ginnie Mae 8, GSEs 67, Non-agency 80. 2007:H1: Ginnie Mae 8, GSEs 84, Non-agency 78. 2007:H2: Ginnie Mae 10, GSEs 90, Non-agency 25. 2008:H1: Ginnie Mae 15, GSEs 100, Non-agency 0. 2008:Q3: Ginnie Mae 25, GSEs 57, Non-agency 0. 2008:Q4: Ginnie Mae 24, GSEs 46, Non-agency 0. January 2009: Ginnie Mae 25, GSEs 60, Non-agency 0. February 2009: Ginnie Mae 25, GSEs 73, Non-agency 0. March 2009: Ginnie Mae 35, GSEs 130, Non-agency 0. April 2009: Ginnie Mae 35, GSEs 135, Non-agency 0.

Source: For agency issuance, Fannie Mae, Freddie Mac, and Ginnie Mae; for non-agency, Inside Mortgage Finance.

Figure: Mortgage Debt

Line chart, by percent change, annual rate, 2002 to 2009:Q1. Data are quarterly. The series begins at about 12 and generally increases to about 15.5 by 2003. It then generally decreases to about -2 by 2008, and generally increases to end at about 0.

Source: Federal Reserve.

Figure: Prices of Existing Homes

Line chart, by percent change from a year earlier, 2002 to March 2009. Data are monthly. There are three series, "FHFA price index", "LoanPerformance price index" and "20-city S&P/Case-Shiller price index". FHFA price index begins at about 7 and generally increases to about 10 by 2005. It then generally decreases to about -9 by late 2008, and generally increases to end at about -7. LoanPerformance begins at about 8 and generally increases to about 15 by 2005. It then generally decreases to end at about -10. 20-city S&P/Case-Shiller price index begins at about 7.5 and generally increases to about 17 by 2004. It then generally decreases to end at about -19.

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

Figure: Foreclosure Starts

Line chart, by thousands, 2003 to 2009:Q1. Data are quarterly. There are two series, "Subprime" and "Prime". Subprime begins at about 30 and generally increases to about 100 by late 2003. It then generally decreases to about 75 by 2004, and generally increases to about 295 by 2008. It then generally decreases to about 250 by late 2008, and generally increases to end at about 290. Prime begins at about 80 and generally decreases to about 70 by 2006. It then generally increases to end at about 400.

Source: MBA.

Consumer Credit and Household Wealth

Figure: AAA ABS Spreads over Swaps

Line chart, May 2007 to June 12, 2009. Unit is basis points. Data are weekly. The April 2009 FOMC meeting is marked in the time series. There are two series, "2-year credit card" and "2-year auto". 2-year credit card begins at about 0 and generally increases to about 550 by November 2008. It then generally decreases to end at about 100. It is at about 205 at the time of the April 2009 FOMC meeting. 2-year auto begins at about 0 and generally increases to about 450 by October 2008. It then generally decreases to end at about 100. It is at about 150 at the time of the April 2009 FOMC meeting.

Source: For credit cards and auto, Citigroup Global Markets.

Figure: Gross Issuance of Consumer ABS by Type

Bar chart, by billions of dollars, 2005 to June 2009. Data are monthly rates. There are three series, "Student loans", "Credit card", and "Auto". Approximate values are: 2005: Auto 8, Credit card 4, Student loans 7.5. 2006: Auto 7.5, Credit card 4.5, Student loans 7.8. 2007:H1: Auto 7, Credit card 8, Student loans 6. 2007:H2: Auto 6, Credit card 8, Student loans 4. 2008:Q1: Auto 3, Credit card 10, Student loans 4. 2008:Q2: Auto 7, Credit card 7, Student loans 5. 2008:Q3: Auto 1, Credit card 3, Student loans 3. 2008:Q4: Auto 1, Credit card 0, Student loans 0. January 2009: Auto 1.5, Credit card 0, Student loans 0. February 2009: Auto 0.5, Credit card 0, Student loans 0.5. March 2009: Auto 5, Credit card 3, Student loans 2. April 2009: Auto 3, Credit card 1, Student loans 6. May 2009: Auto 3, Credit card 8, Student loans 3. June 2009: Auto 7, Credit card 7.

Note: Auto includes car loans, leases, and financing for buyers of motorcycles, trucks, and other vehicles. June 2009 values are through June 10.

Source: Inside Mortgage Finance; Merrill Lynch; Bloomberg.

Figure: Consumer Loan Rates

Line chart, by percent, 2007 to June 2009. There are three series, "Variable-rate credit cards", "Used auto loans", and "New auto loans". Variable-rate credit cards begins at about 14.8 and generally decreases to end at about 10.9 by June 10. It is at about 10.9 at the time of the April 2009 FOMC meeting. Used auto loans begins at about 11.5 and generally increases to about 12.4 by 2007. It then generally decreases to about 9 by early 2009, and generally increases to about 10.5 by 2009. It then generally decreases to end at about 9.2 by June 7. It is at about 9.6 at the time of the April 2009 FOMC meeting. New auto loans begins at about 8 and fluctuates but generally decreases to about 5.3 by 2008. It then generally increases to about 7.2 by early 2009, and generally decreases to end at about 6 by June 7. It is at about 5.6 at the time of the April 2009 FOMC meeting.

Source: For credit cards, Bankrate, Inc.; for auto loans, PIN.

Figure: Delinquencies on Consumer Loans

Line chart, by percent, 1997 to 2009. 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 5.3 and generally decreases to about 4.6 by 2000. It then generally increases to about 5.4 by early 2003, and generally decreases to about 3.2 by late 2005. It then generally increases to end at about 6.4 in April 2009. Nonrevolving consumer loans at commercial banks begins at about 3 and remains about constant until 2001. It then generally decreases to about 2.1 by late 2005, and generally increases to end at about 3.5 in 2009:Q1. Auto loans at captive finance companies begins at about 3.2 and generally decreases to about 1.9 by 2004. It then generally increases to end at about 3 in April 2009.

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

Net Flows into Mutual Funds

(Billions of dollars, monthly rate)

Fund type	2007	2008		2009			Assets Apr.
		H1	H2	Mar.	Apr.	May ^e	
Total long-term funds	18.6	11.9	-49.9	-11.3	43.2	51.2	5,906
Equity funds	7.7	-3.5	-36.0	-27.1	12.3	13.4	3,708
Domestic	-3.9	-4.9	-20.8	-16.1	9.8	9.2	2,845
International	11.6	1.3	-15.3	-11.0	2.5	4.3	863
Hybrid funds	1.8	1.5	-4.9	-4.0	2.1	2.9	493
Bond funds	9.0	13.9	-8.9	19.9	28.8	34.8	1,705
High-yield	-0.2	-0.2	0.1	3.8	4.1	4.2	136
Other taxable	8.4	11.2	-7.4	12.7	19.6	23.5	1,193
Municipals	0.9	2.9	-1.6	3.5	5.1	7.0	376
Money market funds	62.5	56.1	59.6	-53.4	-42.1	-17.4	3,796

Note: Excludes reinvested dividends.

e Staff estimate. [Return to table](#)

Source: Investment Company Institute.

Treasury Finance

Figure: Treasury Auction Amounts

Line chart, by billions of dollars, 2005:Q1 to 2009:Q3. Data are quarterly. There are four series, "2-year", "3-year", "5-year", and "10-year". 2-year begins at about 74 and generally decreases to about 51 by 2007:Q3. It then generally increases to about 123 by 2009:Q2 and generally decreases to end at about 112.5. 3-year begins at about 24 and generally decreases to about 0 by 2007:Q3. It remains at about a constant 0 until early 2008:Q4, and then generally increases to end at about 105. 5-year begins at about 45 and generally decreases to about 40 by early 2008:Q1. It then generally increases to end at about 124 by 2009:Q2. 10-year begins at about 24 and remains about constant until late 2008:Q1. It then generally increases to end at about 55.

Note: 2009:Q2 values are estimated.

Source: U.S. Treasury Dept.

Figure: Foreign Participation in Treasury Auctions

Line chart, by percent of total issue, 2000 to 2009. Data are 6-month moving average. The April 2009 FOMC meeting is marked in the time series. There are two series, "Indirect bids" and "Actual foreign allotment". Indirect bids begins at about 27 by 2003, and generally increases to about 44 by 2004. It then generally decreases to about 25 by 2008, and generally increases to end at about 33 by June 1. It is at about 33 at the time of the April 2009 FOMC meeting. Actual foreign allotment begins at about 9.5 and generally increases to about 26 by 2004. It then generally decreases to about 15 by 2006, and generally increases to end at

about 20 by April 30. It is at about 20 at the time of the April 2009 FOMC meeting.

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: Average Absolute Nominal Yield Curve Fitting Error

Line chart, 2001 to June 10, 2009. Unit is basis points. Data are daily. The April 2009 FOMC meeting is marked in the time series. The series begins at about 3 and generally increases to about 22.5 by late 2008. It then generally decreases to end at about 4.8. There is a peak in 2001 where the series reaches about 13 and another in 2003 when the series reaches about 6. It is at about 7 at the time of the April 2009 FOMC meeting.

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: Daily Treasury Market Volume

Line chart, by billions of dollars, 2004 to June 2009. Data are monthly averages. The series begins at about 75 and generally increases to about 200 by early 2008. It then generally decreases to about 75 by early 2009, and generally increases to end at about 140.

Note: June observation is the month-to-date average.

Source: Bloomberg.

Figure: Treasury On-the-Run Premium

Line chart showing 10-year note, 2001 to June 2009. Unit is basis points. Data are monthly averages. The April 2009 FOMC meeting is marked in the time series. The series begins at about 14 and generally increases to about 28 by 2002. It then generally decreases to about 6 by 2005, and generally increases to about 60 by early 2009. It then generally decreases to end at about 40. It is at about 45 at the time of the April 2009 FOMC meeting.

Note: Computed as the spread of the yield read from an estimated off-the-run yield curve over the on-the-run Treasury yield. June observation is the month-to-date average.

Source: Federal Reserve Bank of New York.

Figure: Treasury Fails-to-Deliver

Line chart, by billions of dollars, January 2007 to June 3, 2009. Data are weekly. The April 2009 FOMC meeting is marked in the time series. The series begins at about 250 and generally decreases to about 0 by mid-January 2007. It remains about constant until November 2007, and generally increases to about 1150 by April 2008. It then generally decreases to about 0 by May 2008, and generally increases to about 2650 by October 2008. It then generally decreases to end at about 50. It is at about 0 at the time of the April 2009 FOMC meeting.

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	H2	Q1	Apr.	May
Total	38.4	36.1	40.4	41.7	33.1	30.5	39.0	34.3
Long-term ¹	34.2	32.5	35.5	38.1	26.6	28.7	36.1	30.7
Refundings ²	15.6	10.6	12.6	18.0	11.0	10.6	16.9	12.0
New capital	18.6	21.9	22.9	20.1	15.6	18.1	19.2	18.8
Short-term	4.2	3.7	4.9	3.6	6.5	1.8	2.9	3.6
Memo: Long-term taxable	2.1	2.5	2.4	2.7	1.8	1.1	11.0	3.9

1. Includes issues for public and private purposes. [Return to table](#)

2. All issues that include any refunding bonds. [Return to table](#)

Source: Thomson Financial.

Figure: Ratings Changes

Line chart, by number of ratings changes, 1991 to 2009:Q1. Data are annual rates. There are two series, "Upgrades" and "Downgrades". Upgrades begins at about 100 and generally increases to about 400 by 1992. It then generally decreases to about 250 by 1993, and generally increases to about 900 by 2000. It then generally decreases to about 400 by 2002, and generally increases to about 2350 by 2006. It then generally decreases to about 1620 by 2008:H1, and generally increases to end at about 3100. Downgrades begins at about 700 and generally decreases to about 100 by 1997. It then generally increases to about 750 by 2003, and generally decreases to about 350 by 2004. It then generally increases to about 800 by 2005, and generally decreases to about 150 by 2006. It then generally increases to about 1500 by 2007, and generally decreases to about 100 by 2008:H2. It then generally increases to end at about 800.

Note: Recent upgrades reflect S&P's change of rating standard.

Source: S&P's Credit Week Municipal; S&P's Ratings Direct.

Figure: Municipal Bond Yields

Line chart, by percent, 2005 to 2009. Data are weekly. There are two series, "20-year general obligation" and "7-day SIFMA swap index". 20-year general obligation begins at about 4.5 and remains about constant until 2006. It then generally decreases to about 4 by late 2006, and generally increases to about 6 by 2008. It then generally decreases to end at about 4.9 by June 11. 7-day SIFMA swap index begins at about 1.5 and generally increases to about 4 by 2006. It then generally decreases to about 1.2 by 2008, and generally increases to about 8 by 2008. It then generally decreases to end at about 0.2 by June 10.

Note: SIFMA is the Securities Industry and Financial Markets Association.

Source: Municipal Market Advisors; Bond Buyer.

Figure: Municipal Bond Yield Ratio

Line chart showing 20-year, by ratio (General Obligation over Treasury), 1994 to June 11, 2009. Data are weekly. The series begins at about 0.81 and generally increases to about 0.98 by 2005. It then generally decreases to about 0.85 by 2006, and generally increases to about 1.87 by early 2009. It then generally decreases to end at about 1.0.

Source: Bond Buyer.

M2 Monetary Aggregate

(Based on seasonally adjusted data)

Aggregate and components	Percent change (annual rate) ¹						Level (billions of dollars), May (p)
	2007	2008	2008 Q4	2009 Q1	2009 Apr.	2009 May (p)	
M2	5.8	8.3	14.3	13.2	-7.6	9.3	8,328
Components ²							
Currency	2.0	5.8	13.7	15.9	6.5	0.3	850
Liquid deposits ³	4.1	7.0	10.0	20.6	-1.8	25.0	5,186
Small time deposits	4.3	11.3	34.5	1.8	-17.7	-17.3	1,308
Retail money market funds	20.6	12.3	10.0	-7.4	-34.4	-27.7	979
Memo:							
Institutional money market funds	40.2	24.6	8.8	29.9	8.9	13.2	2,538
Monetary base	2.0	70.4	252.0	65.4	77.9	14.0	1,770

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.

Commercial Bank Credit

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

Type of credit	2007	H1 2008	H2 2008	Q1 2009	Apr. 2009	May 2009	Level ¹ May 2009
Total	10.9	4.1	4.6	-6.3	-12.9	1.3	9,462

Loans ²							
Total	11.4	5.8	2.4	-6.3	-11.0	-1.6	7,102
To businesses							
Commercial and industrial	19.5	13.6	13.0	-9.6	-16.9	-15.8	1,503
Commercial real estate	10.6	9.8	2.9	-6	-1.9	-1.9	1,723
To households							
Residential real estate	7.0	-1.0	-4.1	-1.0	-7.5	-6.8	2,158
Revolving home equity	6.5	12.2	12.9	8.4	3.5	-1.6	614
Closed-end mortgages	7.2	-5.0	-9.8	-4.5	-11.8	-8.9	1,545
Consumer	6.6	8.0	7.4	7.3	-15.5	-.1	881
Originated ³	6.0	8.0	4.7	1.8	-5.0	-2.1	1,293
Other	17.2	1.4	-4.4	-36.9	-23.4	38.2	837
Securities							
Total	9.4	-1.2	11.5	-6.2	-18.7	10.2	2,360
Treasury and agency	-5.6	.9	37.7	4.2	-28.0	-3.2	1,365
Other ⁴	30.6	-3.5	-16.0	-20.2	-5.3	28.9	995

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 (FIN 39 and FAS 115), the initial consolidation of certain variable interest entities (FIN 46), and the initial adoption of fair value accounting. 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. [Return to table](#)

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

Source: Federal Reserve.

Figure: Return on Assets

Line chart, by percent (annual rate), 1985 to 2009:Q1. Data are quarterly, s.a. The NBER peak is marked in the time series. There are two series, "Top 25 BHCs" and "Other BHCs". Top 25 BHCs begins at about 0.5 and generally decreases to about -3.9 by 1987. It then generally increases to about 1.1 by late 1988, and generally decreases to about -1.2 by 1989. It then generally increases to about 1.6 by early 2007, and generally decreases to about -0.9 by late 2008. It then generally increases to end at about 0.5. Other BHCs begins at about 0.8 and generally decreases to about 0.1 by 1990. It then generally increases to about 1.5 by early 1998, and generally decreases to about -1.2 by early 2009. It then generally increases to end at about -0.4. Both series are at about 0.5 at the time of the NBER peak.

Note: 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.

Source: Call Reports.

Figure: Growth in Unused Commitments

Line chart, by percent (annual rate), 1990 to 2009:Q1. Data are quarterly. The NBER peak is marked in the time series. The series begins at about 21 and generally decreases to about -2 by late 1990. It then generally increases to about 27 by 1995, and generally decreases to about -9 by late 2003. It then generally increases to about 16 by 2006, and generally decreases to end at about -32. It is at about 0 at the time of the NBER peak.

Note: 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.

Source: Call Reports.

Figure: C&I Loan Rate Spreads^{*}

Line chart showing weighted average, 1997 to 2009:Q2. Unit is basis points. Data are quarterly. The NBER peak is marked in the time series. Weighted average adjusted for changes in nonprice loan characteristics. The series begins at about 152 and generally increases to about 189 by early 2003. It then generally decreases to about 138 by late 2005, and generally increases to end at about 181. It is at about 145 at the time of the NBER peak.

* The spread over market interest rate on an instrument of comparable maturity. [Return to text](#)

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.

Source: Survey of Terms of Business Lending.

† Note: Data values for figures are rounded and may not sum to totals. [Return to text](#)

Last update: April 1, 2015

Accessible Material

June 2009 Greenbook Part 2 Tables and Charts[†]

International Developments

Trade in Goods and Services

	Annual rate				Monthly rate		
	2008	2008		2009	2009		
		Q3	Q4	Q1	Feb.	Mar.	Apr.
	Percent change						
<i>Nominal BOP</i>							
Exports	-3.4	4.3	-38.0	-38.7	1.2	-2.0	-2.3
Imports	-7.3	5.0	-46.2	-54.7	-5.6	-0	-1.4
<i>Real NIPA</i>							
Exports	-1.8	3.0	-23.6	-28.7	...	...	...
Imports	-7.5	-3.5	-17.5	-34.1	...	...	...
	Billions of dollars						
<i>Nominal BOP</i>							
Net exports	-695.9	-743.8	-578.0	-364.8	-26.1	-28.5	-29.2
Goods, net	-840.2	-884.4	-715.3	-496.1	-37.2	-39.2	-40.1
Services, net	144.3	140.6	137.3	131.4	11.1	10.7	10.9

n.a. Not available.

... Not applicable. [Return to table](#)

BOP Balance of payments. [Return to table](#)

NIPA National income and product accounts. [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, by billions of dollars, annual rate, 1999 to April 2009. The series begins at about -210 and generally decreases to about -800 by 2006. It then generally increases to end at about -370. April 2009 is marked at about -350.

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

Bar chart, by percentage points, annual rate, 1999 to early 2009. The series begins at about -1.7 and generally increases to about 0 by late 1999. It then generally decreases to about -1.5 by early 2000, and generally increases to about 0.5 by 2001. It then generally decreases to about -1.5 by late 2002, and generally increases to about 0.5 by 2003. It then generally decreases to about -1.5 by 2004, and generally increases to about 0.8 by 2005. It then generally decreases to about -1.2 by early 2007, and generally increases to about 3.0 by 2008. It then generally decreases to about -0.2 by 2008, and generally increases to end at about 2.2.

Figure: Selected Exports

Line chart, by billions of dollars, annual rate, 1999 to early 2009. There are four series, "Capital goods ex. aircraft", "Industrial supplies", "Consumer goods", and "Aircraft". Capital good begins at about 248 and generally increases to about 325 by 2000. It then generally decreases to about 230 by early 2002, and generally increases to about 395 by 2008. It then generally decreases to end at about 315. Industrial supplies begins at about 125 and generally increases to about 160 by

2000. It then generally decreases to about 140 by late 2001, and generally increases to about 400 by 2008. It then generally decreases to end at about 240. Consumer goods begins at about 75 and generally increases to about 165 by 2008. It then generally decreases to end at about 148. Aircraft begins at about 52 and generally decreases to about 48 by 2003. It then generally increases to end at about 75.

Figure: Selected Imports

Line chart, by billions of dollars, annual rate, 1999 to early 2009. There are four series, "Capital goods", "Consumer goods", "Industrial supplies", and "Oil". Capital goods begins at about 275 and generally increases to about 355 by 2000. It then generally decreases to about 270 by late 2001, and generally increases to about 465 by 2008. It then generally decreases to end at about 365. Consumer goods begins at about 225 and generally increases to about 495 by 2008. It then generally decreases to end at about 425. Industrial supplies begins at about 145 and generally increases to about 195 by early 2001. It then generally decreases to about 150 by late 2001, and generally increases to about 349 by 2008. It then generally decreases to end at about 265. Oil begins at about 45 and generally increases to about 125 by 2000. It then generally decreases to about 78 by late 2001, and generally increases to about 525 by 2008. It then generally decreases to end at about 210.

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			
	2008	2009	2009		2008	2009	2009	
	Q4	Q1	Mar.	Apr.	Q4	Q1	Mar.	Apr.
Exports of goods and services	1696.6	1501.2	1487.2	1453.4	-215.7	-195.4	-29.9	-33.8
Goods exports	1162.3	997.5	990.9	959.7	-189.4	-164.8	-21.4	-31.2
Gold	13.4	13.8	14.0	10.7	-4.3	.4	2.0	-3.3
Other goods	1148.9	983.7	976.9	949.0	-185.0	-165.2	-23.4	-27.9
Capital goods	436.1	393.8	383.2	370.3	-36.2	-42.3	-16.9	-12.9
Aircraft & parts	64.3	79.0	72.4	73.8	-14.2	14.7	-6.5	1.4
Computers & accessories	39.3	36.9	36.3	35.2	-6.1	-2.4	-1.2	-1.1
Semiconductors	44.0	33.4	33.6	34.0	-8.5	-10.6	-1.4	.4
Other capital goods	288.5	244.5	240.8	227.2	-7.4	-44.0	-7.8	-13.6
Automotive	109.1	70.2	72.0	70.0	-18.4	-38.9	.3	-2.0
Ind. supplies (ex. ag., gold)	299.5	240.2	241.7	229.8	-95.0	-59.3	.1	-11.9
Consumer goods	156.1	146.0	148.2	142.5	-11.4	-10.1	-4.9	-5.8
Agricultural	103.0	94.4	95.9	98.6	-22.5	-8.6	1.8	2.7
All other goods	45.1	39.1	35.9	37.9	-1.5	-6.0	-3.8	2.0
Services exports	534.3	503.7	496.3	493.6	-26.3	-30.6	-8.5	-2.6
Imports of goods and services	2274.6	1866.0	1829.6	1803.3	-381.4	-408.6	-.5	-26.2
Goods imports	1877.6	1493.6	1461.6	1440.8	-358.5	-383.9	2.7	-20.7
Oil	341.8	208.9	211.9	216.4	-181.6	-132.9	17.0	4.5
Gold	6.6	7.3	8.8	7.0	-6.0	.7	1.4	-1.8
Other goods	1529.2	1277.5	1240.8	1217.4	-170.8	-251.7	-15.7	-23.4
Capital goods	426.8	366.3	354.7	343.7	-33.9	-60.5	-6.8	-11.0
Aircraft & parts	32.2	30.2	31.4	32.6	-2.1	-2.0	.5	1.2
Computers & accessories	87.7	80.6	81.2	80.5	-13.8	-7.0	-.1	-.7
Semiconductors	23.0	19.0	19.3	19.7	-3.1	-4.0	.6	.3
Other capital goods	284.0	236.5	222.8	211.0	-15.0	-47.5	-7.8	-11.8
Automotive	199.4	129.4	127.4	126.3	-33.1	-70.1	4.7	-1.1

Ind. supplies (ex. oil, gold)	287.7	212.9	193.3	181.9	-59.7	-74.8	-16.1	-11.5
Consumer goods	456.5	423.6	421.8	426.7	-35.6	-32.9	6.7	4.8
Foods, feeds, beverages	88.7	81.7	81.6	80.7	-2.6	-7.1	1.0	-9
All other goods	69.9	63.7	62.0	58.2	-5.9	-6.3	-5.2	-3.8
Services imports	397.0	372.3	368.0	362.5	-23.0	-24.7	-3.2	-5.5
Memo:								
Oil quantity (mb/d)	13.59	13.78	13.52	12.44	1.53	.19	.49	-1.08
Oil import price (\$/bbl)	69.43	41.61	42.90	47.63	-49.14	-27.83	1.96	4.73

1. Change from previous quarter or month. [Return to table](#)

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

Prices of U.S. Imports and Exports

Figure: Merchandise Imports

Line chart, by 12-month percent change, 1999 to 2009. There are two series, "Core goods" and "Non-oil goods". Core goods begins at about -1.8 and generally increases to about 1.8 by 2000. It then generally decreases to about -3.5 by early 2002, and generally increases to about 8.8 by 2008. It then generally decreases to end at about -4.9. Non-oil goods begins at about -2.9 and generally increases to about 2.2 by late 2000. It then generally decreases to about -5.5 by early 2002, and generally increases to about 7.9 by 2008. It then generally decreases to end at about -5.9.

Figure: Categories of Core Imports

Line chart, by 12-month percent change, 1999 to 2009. There are two series, "Material-intensive goods" and "Finished goods". Material-intensive goods begins at about -4.5 and generally increases to about -7 by early 2000. It then generally decreases to about -10 by early 2002, and generally increases to about 19 by 2008. It then generally decreases to end at about -14.5. Finished goods begins at about -1 and generally increases to about 2.5 by 2005. It then generally decreases to about 0 by 2006, and generally increases to about 4 by 2008. It then generally decreases to end at about 0.

Figure: Oil

Line chart, by dollars per barrel, 1999 to 2009. There are two series, "Spot West Texas Intermediate" and "Import unit value". These two series track closely together throughout the chart. They begin at about 11 and generally increase to about 135 by 2008. They then generally decrease to about 40 by early 2009, and generally increase together to end at about 70.

Figure: Natural Gas

Line chart, 1999 to 2009. There are two series, "Import price index", which is 2000=100, and "Spot Henry Hub", which is dollars per million Btu. These two series use two different scales. Import price index begins at about 55 and generally increases to about 218 by early 2001. It then generally decreases to about 55 by early 2002, and generally increases to about 275 by 2005. It then generally decreases to about 115 by 2006, and generally increases to about 280 by 2008. It then generally decreases to end at about 98. Spot Henry Hub begins at about 1.5 and generally increases to about 9.5 by late 2000. It then generally decreases to about 2.5 by late 2001, and generally increases to about 14 by late 2005. It then generally decreases to about 4 by 2006, and generally increases to about 13 by 2008. It then generally decreases to end at about 4.

Figure: Merchandise Exports

Line chart, by 12-month percent change, 1999 to 2009. There are two series, "Core goods" and "Total goods". These two series track closely together throughout the chart. They begin at about -2 and generally increase to about 3 by early 2000. They then generally decrease to about -3 by early 2002, Core goods generally increases to about 14 by 2008 and Total goods generally increases to about 10 by 2008. Core goods generally decreases to end at about -8 and Total goods generally decreases to end at about -6.5.

Figure: Categories of Core Exports

Line chart, by 12-month percent change, 1999 to 2009. There are two series, "Material-intensive goods" and "Finished goods". Material-intensive goods begins at about -6 and generally increases to about 7 by early 2000. It then generally decreases to about -7 by late 2001, and generally increases to about 13 by 2004. It then generally decreases to about 6 by late 2006, and generally increases to about 24.5 by 2008. It then generally decreases to end at about -17.5. Finished goods begins at about 0 and generally increases to end at about 1.5.

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

Prices of U.S. Imports and Exports

(Percentage change from previous period)

	Annual rate			Monthly rate		
	2008	2009		2009		
	Q4	Q1	Q2 ^e	Mar.	Apr.	May
	BLS prices					
Merchandise imports	-47.8	-24.3	8.6	.5	1.1	1.3
Oil	-93.2	-72.6	140.9	11.1	9.8	8.3
Non-oil	-11.9	-10.9	-3.5	-.8	-.2	.2
Core goods ¹	-11.6	-11.3	-1.9	-.6	-.0	.2
Finished goods	-1.0	-1.0	-.5	-.3	.1	.1
Cap. goods ex. comp. & semi.	-.2	-.6	-1.2	-.4	.1	.0
Automotive products	-.6	-.5	-.1	-.2	.0	.3
Consumer goods	-1.6	-1.6	-.3	-.4	.2	.0
Material-intensive goods	-29.4	-30.1	-4.9	-1.1	-.3	.6
Foods, feeds, beverages	-16.9	-9.6	.2	-.6	1.4	.3
Industrial supplies ex. fuels	-32.6	-35.4	-6.8	-1.3	-1.0	.8
Computers	-7.2	-8.3	-3.6	-.9	-.2	.2
Semiconductors	-2.4	-10.9	7.8	.0	2.3	-.3
Natural gas	-69.2	-61.3	-73.9	-15.8	-14.4	-1.4
Merchandise exports	-21.5	-8.8	.7	-.7	.4	.6
Core goods ²	-24.9	-11.0	.5	-.7	.4	.7
Finished goods	1.5	1.6	-.1	-.1	-.1	.2
Cap. goods ex. comp. & semi.	1.7	3.2	1.9	.2	.3	.2
Automotive products	1.1	.5	-.5	.1	-.1	.0
Consumer goods	1.5	-1.2	-4.7	-.7	-.9	.4
Material-intensive goods	-46.1	-24.3	1.3	-1.5	1.1	1.2
Agricultural products	-53.1	-12.4	10.3	-3.5	3.7	3.6
Industrial supplies ex. ag.	-44.5	-28.4	-1.1	-.8	.3	.5
Computers	-8.6	-9.3	-3.2	-1.5	.3	.0
Semiconductors	-13.8	7.4	10.8	.2	1.7	.3
	NIPA prices					
Chain price index						
Imports of goods & services	-37.3	-29.7	n.a	...	...	...
Non-oil merchandise	-9.9	-10.5	n.a	...	...	...
Core goods ¹	-8.5	-9.3	n.a	...	...	...
Exports of goods & services	-23.0	-11.0	n.a	...	...	...
Total merchandise	-26.0	-11.7	n.a	...	...	...
Core goods ²	-27.4	-12.1	n.a	...	...	...

1. Excludes computers, semiconductors, and natural gas. [Return to table](#)

2. Excludes computers and semiconductors. [Return to table](#)

e Estimate based on average of two months. [Return to table](#)

n.a. Not available.

... 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.

Summary of U.S. International Transactions

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

	2007	2008	2008			2009		
			Q2	Q3	Q4	Q1	Mar.	Apr.
Official financial flows	381.9	-135.8	97.6	-117.2	-290.5	304.1	19.5	94.6
1. Change in foreign official assets in the U.S. (increase, +)	406.1	398.8	141.8	109.2	-21.9	61.3	8.7	34.1
a. <u>G-10 countries + ECB</u>	36.8	-8.4	0.3	8.9	-16.0	-7.4	6.2	1.9
b. <u>OPEC</u>	33.0	45.5	16.3	16.1	-3.4	-5.0	5.3	-1.4
c. All other countries	336.3	348.9	125.3	84.2	-15.4	73.7	-2.8	33.6
2. Change in U.S. official assets (decrease, +) ¹	-24.1	-534.6	-44.3	-226.4	-268.7	242.8	10.8	60.5
Private financial flows	392.4	682.3	23.0	264.5	367.4	n.a.	...	...
Banks								
3. Change in net foreign positions of banking offices in the U.S. ²	-81.7	28.3	-91.4	-31.8	311.5	-247.8	-33.0	-9.2
Securities³								
4. Foreign net purchases (+) of U.S. securities	746.9	191.9	83.8	1.3	61.0	-16.3	38.9	-50.6
a. Treasury securities	152.5	305.9	65.1	87.8	90.0	39.2	44.3	-28.4
b. Agency bonds	18.6	-132.2	-32.9	-56.3	-23.6	-47.9	-19.6	-10.5
c. Corporate and municipal bonds	384.7	7.1	52.1	-32.7	-1.8	-13.5	2.2	-14.8
d. Corporate stocks ⁴	191.1	11.0	-0.7	2.6	-3.6	6.0	11.9	3.1
5. U.S. net acquisitions (-) of foreign securities	-292.1	90.1	-34.0	84.1	76.0	-33.1	-3.1	-25.1
a. Bonds	-172.9	86.4	-12.1	70.0	37.0	-31.8	-1.5	-14.8
b. Stock purchases	-107.9	7.3	-19.9	14.1	39.7	0.6	-1.6	-10.3
c. Stock swaps ⁴	-11.3	-3.6	-2.0	0.0	-0.8	-1.9	0.0	0.0
Other flows⁵								
6. U.S. direct investment (-) abroad	-333.3	-317.8	-86.8	-52.4	-85.3	n.a.	...	...
7. Foreign direct investment in the U.S.	237.5	325.3	105.8	57.3	80.6	n.a.	...	...
8. Net derivatives (inflow, +)	6.5	-28.9	-2.4	-4.1	-14.5	n.a.	...	...
9. Foreign acquisitions of U.S. currency	-10.7	35.0	0.2	5.8	29.9	n.a.	...	...
10. Other (inflow, +) ⁶	119.3	358.4	47.9	204.1	-91.7	n.a.	...	...
U.S. current account balance⁵	-731.2	-673.3	-182.2	-181.3	-132.8	n.a.	...	...
Capital account balance⁷	-1.8	-2.6	-0.6	-0.7	-0.6	n.a.	...	...
Statistical discrepancy⁵	-41.3	129.3	62.3	34.7	56.6	n.a.	...	...

Note: Data in lines 1 through 5 differ in timing and coverage from the balance of payments data published by the Department of Commerce. Details may not sum to totals because of rounding.

1. Includes changes in U.S. official reserve assets and in outstanding reciprocal currency swaps with certain foreign central banks. [Return to table](#)

2. Changes in dollar-denominated positions of all depository institutions and bank holding companies plus certain transactions between broker-dealers and unaffiliated foreigners (particularly borrowing and lending under repurchase agreements). Includes changes in custody liabilities other than U.S. Treasury bills. [Return to table](#)

3. Includes commissions on securities transactions and therefore does not match exactly the data on U.S. international transactions published by the Department of Commerce. [Return to table](#)

4. Includes (4d) or represents (5c) stocks acquired through nonmarket means such as mergers and reincorporations. [Return to table](#)

5. Quarterly data; seasonally adjusted. [Return to table](#)

6. Transactions by nonbanking concerns and other banking and official transactions not shown elsewhere plus amounts resulting from adjustments made by the Department of Commerce and revisions (in lines 1 through 5 and 8) since publication of the quarterly data in the Survey of Current Business. [Return to table](#)

7. Seasonally adjusted; consists of transactions in nonproduced nonfinancial assets and capital transfers. [Return to table](#)

G-10 Group of Ten (Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, United Kingdom, United States). [Return to table](#)

ECB European Central Bank. [Return to table](#)

OPEC Organization of the Petroleum Exporting Countries. [Return to table](#)

n.a. Not available.

... Not applicable.

Source: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Treasury International Capital reports with staff adjustments.

Foreign Official Financial Inflows (+) through April 2009

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

Figure: Total

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 15 and generally decreases to about 5 by 2005. It then generally increases to about 35 by 2005, and generally decreases to about 5 by 2005. It then generally increases to about 62 by 2006, and generally decreases to about -30 by 2007. It then generally increases to about 100 by early 2008, and generally decreases to about -12 by 2008. It then generally increases to end at about 32. 6-month moving average begins at about 28 and generally decreases to about 19 by 2005. It then generally increases to about 50 by 2007, and generally decreases to about 15 by 2007. It then generally increases to about 52 by 2008, and generally decreases to end at about 12.

Figure: Treasury Securities

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 10 and generally fluctuates between -10 and 30. It then generally increases to about 32 by early 2006, and generally decreases to about -38 by 2007. It then generally increases to about 80 by 2008, and generally decreases to end at about 28. 6-month moving average begins at about 15 and generally decreases to about 7 by 2005. It then generally increases to about 20 by 2006, and generally decreases to about -5 by late 2007. It then generally increases to about 55 by early 2009, and generally decreases to end at about 40.

Figure: Agency Securities

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 7 and generally decreases to about -1 by 2005. It then generally increases to about 35 by early 2007, and generally decreases to about -3 by 2007. It then generally increases to about 35 by early 2008, and generally decreases to about -41 by 2008. It then generally increases to about 6 by early 2009, generally decreases to about -10 by 2009, and generally increases to end at about -5. 6-month moving average begins at about 6 and generally increases to about 28 by 2007. It then generally decreases 5 by late 2007, and generally increases to about 29 by 2008. It then generally decreases to about -20 by late 2008, and generally increases to end at about -12.

Figure: Foreign Official Balances Held at the Federal Reserve Bank of New York, Daily through June 15, 2009

Line chart, 2007 to 2009. There are two series, "Treasury securities" and "Agency securities". Treasury securities begins at about 1140 and generally increases to end at about 1880. Agency securities begins at about 600 and generally increases to about 990 by 2008. It then generally decreases to end at about 800.

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

Private Securities Flows through April 2009

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

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

Figure: Total

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 45 and generally decreases to about 10 by 2005. It then generally increases to about 76 by 2005, and generally decreases to about 1 by 2006. It then generally increases to about 150 by 2007, and generally decreases to about 2 by 2007. It then generally increases to about 108 by late 2007, and generally decreases to about -85 by early 2009. It then generally increases to about 40 by 2009, and generally decreases to end at about -55. 6-month moving average begins at about 40 and generally increases to about 58 by late 2005. It then generally decreases to about 40 by 2006, and generally increases to about 90 by 2007. It then generally decreases to end at about -10.

Figure: Treasury Securities

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 12 and generally increases to about 42 by 2005. It then generally decreases to about -20 by 2005, and generally increases to about 39 by late 2005. It then generally decreases to about -40 by 2006, and generally increases to about 95 by late 2008. It then generally decreases to about -40 by early 2009, and generally increases to about 42 by 2009. It then generally decreases to end at about -28. 6-month moving average begins at about 0 and generally increases to about 18 by 2005. It then generally decreases to about -12 by 2006, and generally increases to about 32 by late 2008. It then generally decreases to end at about 0.

Figure: Agency Bonds

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 10 and fluctuates but generally decreases to about -20 by 2007. It then generally increases to about 18 by late 2007, and generally decreases to about -40 by 2008. It then generally increases to about 6 by 2008, and generally decreases to end at about -10. 6-month moving average begins at about 9 and generally decreases to about -8 by early 2007. It then generally increases to about 8 by late 2007, and generally decreases to about -21 by 2008. It then generally increases to end at about -10.

Figure: Corporate and Municipal Bonds

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 12 and generally increases to about 86 by 2007. It then generally decreases to about -8 by 2007, and generally increases to about 40 by 2008. It then generally decreases to about -20 by late 2008, and generally increases to about 35 by early 2009. It then generally decreases to end at about -15. 6-month moving average begins at about 25 and generally increases to about 60 by early 2007. It then generally decreases to about -12 by late 2008, and generally increases to end at about -1.

Figure: Corporate Stocks

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 12 and generally increases to about 24 by early 2006. It then generally decreases to about -10 by late 2006, and generally increases to about 42 by 2007. It then generally decreases to about -40 by 2007, and generally increases to about 32 by late 2007. It then generally decreases to about -12 by early 2008, and generally increases to about 12 by 2008. It then generally decreases to about -5 by late 2008, and generally increases to end at about 2. 6-month moving average begins at about 10 and generally decreases to about 5 by 2005. It then generally increases to about 25 by 2007, and generally decreases to end at about 0.

Source: U.S. Treasury International Capital reports with staff adjustments.

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

Figure: Total

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about -10 and generally decreases to about -60 by late 2006. It then generally increases to about 32 by 2008, and generally decreases to about -30 by early 2009. It then generally increases to about -1 by 2009, and generally decreases to end at about -25. 6-month moving average begins at about -15 and generally decreases to about -40 by 2007. It then generally increases to about 28 by early 2009, and generally decreases to end at about -3.

Figure: Bonds

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about -3 and generally decreases to about -12 by 2005. It then generally increases to about 12 by 2005, and generally decreases to about -39 by early 2007. It then generally increases to about 37 by 2008, and generally decreases to about -29 by late 2008. It then generally increases to about -2 by 2009, and generally decreases to end at about -15. 6-month moving average begins at about -10 and generally increases to about -4 by late 2005. It then generally decreases to about -24 by late 2006, and generally increases to about 20 by late 2008. It then generally decreases to end at about -4.

Figure: Stock Purchases & Swaps

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about -10 and generally decreases to about -24 by late 2005. It then generally increases to about 5 by 2006, and generally decreases to about -37 by late 2006. It then generally increases to about 20 by 2008, and generally decreases to end at about -10. 6-month moving average begins at about -5 and generally decreases to about -20 by late 2005. It then generally increases to about -4 by late 2006, and generally decreases to about -20 by early 2007. It then generally increases to about 8 by late 2008, and generally decreases to end at about 1.

Source: U.S. Treasury International Capital reports with staff adjustments.

Exchange Value of the Dollar and Stock Market Indexes

	Latest	Percent change since April Greenbook
<i>Exchange rates*</i>		
Euro (\$/euro)	1.3878	-6.2
Yen (¥/\$)	95.9	-2.3
Sterling (\$/£)	1.6288	-11.0
Canadian dollar (C\$/)\$)	1.1378	-8.0
<i>Nominal dollar indexes*</i>		
Broad index	105.6	-4.1
Major currencies index	77.5	-6.8
OITP index	136.3	-1.7
<i>Stock market indexes</i>		
DJ Euro Stoxx	222.0	4.4
TOPIX	923.0	11.2
FTSE 100	4280.7	6.2
S&P 500	912.0	8.1

* Positive percent change denotes appreciation of U.S. dollar. [Return to table](#)

Figure: Exchange Value of the Dollar

Line chart, 2004 to 2009. January 2, 2004 = 100. Data are weekly. There are three series, "Major currencies index", "Euro", and "Yen". Major currencies index begins at about 100 and generally increases to about 107 by 2004. It then generally decreases to about 94 by late 2004, and generally increases to about 103 by late 2005. It then generally decreases to about 82 by 2008, and generally increases to about 102 by 2009. It then generally decreases to end at about 91. Euro begins at about 100 and generally increases to about 107 by 2004. It then generally decreases to about 95 by late 2004, and generally increases to about 107 by late 2005. It then generally decreases to about 80 by 2008, and generally increases to about 101 by 2009. It then generally decreases to end at about 91. Yen begins at about 100 and generally increases to about 107 by 2004. It then generally decreases to about 98 by late 2004, and generally increases to about 115 by 2007. It then generally decreases to about 82 by late 2008, and generally increases to end at about 90.

There is a second line chart, February to June 2009. April 22, 2009 = 100. Data are daily. The April 2009 Greenbook is marked in the time series. There are three series, "Major currencies index", "Euro", and "Yen". Major currencies index begins at about 99 and generally increases to about 104 by early March. It then generally decreases to about 90 by early June, and generally increases to end at about 93. Euro begins at about 101.8 and generally increases to about 104 by February. It then generally decreases to about 95 by March, and generally increases to about 101 by April. It then generally decreases to about 91 by early June, and generally increases to end at about 94. Yen begins at about 92 and generally increases to about 103 by April. It then generally decreases to about 96 by late May, and generally increases to about 100 by June. It then generally decreases to end at about 98. They are at about 100 at the time of the April 2009 Greenbook.

Figure: Stock Market Indexes

Line chart, 2004 to 2009. January 2, 2004 = 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 175 by 2007. It then generally decreases to about 70 by 2009, and generally increases to end at about 95. TOPIX begins at about 100 and generally increases to about 165 by 2006. It then generally decreases to about 70 by 2009, and generally increases to end at about 94. S&P 500 begins at about 100 and generally increases to about 135 by 2007. It then generally decreases to about 65 by 2009, and generally increases to end at about 85.

There is a second line chart, February to June 2009. April 22, 2009 = 100. Data are daily. The April 2009 Greenbook is marked in the time series. There are three series, "DJ Euro Stoxx", "TOPIX", and "S&P 500". DJ Euro Stoxx begins at about 95 and generally increases to about 102 by February. It then generally decreases to about 79 by March, and generally increases to about 110 by early June. It then generally decreases to end at about 105. TOPIX begins at about 93 and generally decreases to about 86 by March. It then generally increases to about 114 by June, and generally decreases to end at about 110. S&P 500 begins at about 97 and generally increases to about 102 by February. It then generally decreases to about 80 by March, and generally increases to about 110 by June. It then generally decreases to end at about 108. They are at about 100 at the time of the April 2009 Greenbook.

Industrial Countries: Nominal and Real Interest Rates

Percent

	3-month <u>Libor</u>		10-year nominal		10-year indexed	
	Latest	Change since Apr. Greenbook	Latest	Change since Apr. Greenbook	Latest	Change since Apr. Greenbook
Germany	1.24	-0.17	3.50	0.29	1.49	0.09
Japan	0.49	-0.07	1.47	0.05	3.43	0.30
United Kingdom	1.25	-0.25	3.84	0.40	1.21	0.08
Canada	0.63	-0.38	3.46	0.56	...	...
United States	0.61	-0.49	3.67	0.73	2.08	0.15

... Not applicable.

Libor London interbank offered rate. [Return to table](#)

Figure: Nominal 10-Year Government Bond Yields

Line chart, by percent, 2004 to 2009. Data are weekly. There are three series, "Germany", "Japan", and "United States". Germany begins at about 4.2 and generally decreases to about 3.9 by 2004. It then generally increases to about 4.5 by 2004, and generally decreases to about 3 by 2005. It then generally increases to about 4.7 by 2008, and generally decreases to about 3 by early 2009. It then generally increases to end at about 3.5. Japan begins at about 1.4 and generally increases to about 1.9 by 2004. It then generally decreases to about 1.23 by 2005, and generally increases to about 2 by 2007. It then generally decreases to about 1.2 by late 2008, and generally increases to end at about 1.5. United States begins at about 4.1 and generally decreases to about 3.8 by 2004. It then generally increases to about 5.1 by 2007, and generally decreases to about 2.2 by late 2008. It then generally increases to end at about 3.7.

There is a second line chart, February to June 2009. Data are daily. The April 2009 Greenbook is marked in the time series. There are three series, "Germany", "Japan", and "United States". Germany begins at about 3.3 and generally decreases to about 2.9 by March. It then generally increases to about 3.7 by early June, and generally decreases to about 3.5. It is at about 3.2 at the time of the April Greenbook. Japan begins at about 1.3 and generally increases to end at about 1.5. It is at about 1.4 at the time of the April Greenbook. United States begins at about 2.8 and generally increases to about 3 by early March. It then generally decreases to about 2.5 by March, and generally increases to about 4 by June. It then generally decreases to end at about 3.7. It is at about 2.9 at the time of the April Greenbook.

Figure: Inflation-Indexed 10-Year Government Bond Yields

Line chart, by percent, 2004 to 2009. Data are weekly. There are three series, "France", "Japan", and "United States". France begins at about 2 and generally decreases to about 1 by 2005. It then generally increases to about 2.4 by 2007, and generally decreases to about 1.2 by early 2008. It then generally increases to about 2.9 by late 2008, and generally decreases to end at about 1.3. Japan first issued inflation-indexed debt in March 2004. Japan begins at about 1 and generally decreases to about 0.2 by 2005. It then generally increases to about 5 by late 2008, and generally decreases to end at about 3.5. United States begins at about 2 and generally increases to about 2.8 by 2007. It then generally decreases to about 1.2 by early 2008, and generally increases to about 3.4 by late 2008. It then generally decreases to end at about 2.

There is a second line chart, February to June 2009. Data are daily. The April 2009 Greenbook is marked in the time series. There are three series, "France", "Japan", and "United States". France begins at about 1.6 and generally increases to about 2 by late February. It then generally decreases to about 1.1 by May, and generally increases to end at about 1.5. It is at about 1.3 at the time of the April Greenbook. Japan begins at about 3 and generally increases to about 4 by late February. It then generally decreases to about 3.1 by April, and generally increases to end at about 3.5. It is at about 3.1 at the time of the April Greenbook. United States begins at about 2 and generally decreases to about 1.9 by February. It then generally increases to about 2.5 by March, and generally decreases to about 1.77 by March. It then generally increases to end at about 2. It is at about 1.9 at the time of the April Greenbook.

Measures of Market Volatility

Figure: Dollar-Euro Options-Implied Volatility

Line chart, by percent, 2004 to 2009. Data are weekly. There are two series, "1-month" and "3-month". These two series track closely together throughout the chart. They begin at about 11 and generally decrease to about 5 by 2007. They then generally increase to about 27 by 2008, and generally decrease to end at about 14.

There is a second line chart, February to June 2009. Data are daily. The April 2009 Greenbook is marked in the time series. There are two series, "1-month" and "3-month". These two series track closely together throughout the chart. They begin at about 20 and generally decrease to about 13 by May. They then generally increase to about 16 by early June, and generally decrease to end at about 14. They are at about 13.5 at the time of the April Greenbook.

Note: Volatility derived from at-the-money options.

Figure: Yen-Dollar Options-Implied Volatility

Line chart, by percent, 2004 to 2009. Data are weekly. There are two series, "1-month" and "3-month". These two series track closely together throughout the chart. They begin at about 9 and generally increase to about 10.5 by 2004. They then generally decrease to about 7 by 2007, and generally increase to about 34 by 2008. They then generally decrease to end at about 15.

There is a second line chart, February to June 2009. Data are daily. The April 2009 Greenbook is marked in the time series. There are two series, "1-month" and "3-month". These two series track closely together throughout the chart. They begin at about 21 and generally decrease to about 16 by February. 1-month generally increases to about 21 by March and 3-month generally increases to about 19 by March. They then generally decrease to about 12 by May, and generally increase to end at about 15. They are at about 15 at the time of the April Greenbook.

Note: Volatility derived from at-the-money options.

Figure: Realized Stock Market Volatility

Line chart, by percent, 2004 to 2009. Data are weekly. There are three series, "DJ Euro Stoxx", "TOPIX", and "S&P 500". DJ Euro Stoxx begins at about 10 and generally increases to about 20 by 2006. It then generally decreases to about 10 by late 2006, and generally increases to about 60 by late 2008. It then generally decreases to end at about 30. TOPIX begins at about 22 and generally decreases to about 10 by 2005. It then generally increases to about 38 by 2008, and generally decreases to about 22 by 2008. It then generally increases to about 66 by late 2008, and generally decreases to end at about 28. S&P 500 begins at about 10 and remains about constant until late 2007. It then generally increases to about 72 by late 2008, and generally decreases to end at about 29.

There is a second line chart, February to June 2009. Data are daily. The April 2009 Greenbook is marked in the time series. There are three series, "DJ Euro Stoxx", "TOPIX", and "S&P 500". DJ Euro Stoxx begins at about 40 and generally decreases to about 28 by early March. It then generally increases to about 36 by early April, and generally decreases to end at about 28. It is at about 35.5 at the time of the April Greenbook. TOPIX begins at about 36 and generally decreases to about 27 by March. It then generally increases to about 32 by early April, and generally decreases to end at about 25. It is at about 29 at the time of the April Greenbook. S&P 500 begins at about 52.5 and generally decreases to about 34 by late February. It then generally increases to about 41 by April, and generally decreases to end at about 28. It is at about 41 at the time of the April Greenbook.

Note: Volatility is annualized standard deviation of 60-day window of daily returns.

Figure: Realized 10-Year Bond Volatility

Line chart, by percent, 2004 to 2009. Data are weekly. There are three series, "Germany", "Japan", and "United States". Germany begins at about 5 and remains about constant until 2006. It then generally decreases to about 3 by early 2007, and generally increases to end at about 8. Japan begins at about 5.5 and generally decreases to about 3.7 by early 2005. It then generally increases to about 5.8 by 2005, and generally decreases to about 3 by 2007. It then generally increases to about 6 by 2008, and generally decreases to end at about 3.8. United States begins at about 8 and generally decreases to about 4 by 2006. It then generally increases to about 16 by late 2008, and generally decreases to end at about 12.

There is a second line chart, February to June 2009. Data are daily. The April 2009 Greenbook is marked in the time series. There are three series, "Germany", "Japan", and "United States". Germany begins at about 8.8 and remains about constant until mid-March. It then generally increases to about 10 by late March, and generally decreases to end at about 8. It is at about 9 at the time of the April Greenbook. Japan begins at about 4 and generally decreases to end at about 3. It is at about 3 at the time of the April Greenbook. United States begins at about 14.8 and generally decreases to about 12 by March. It then generally increases to about 15.5 by March, and generally decreases to about 13 by May. It then generally increases to about 15 by June and generally decreases to end at about 12. It is at about 14.8 at the time of the April Greenbook.

Note: Volatility is annualized standard deviation of 60-day window of daily returns.

Emerging Markets: Exchange Rates and Stock Market Indexes

	Exchange value of the dollar		Stock market index	
	Latest	Percent change since	Latest	Percent change since
		Apr. Greenbook*		Apr. Greenbook
Mexico	13.4605	2.5	24225	14.2
Brazil	1.9761	-10.4	51206	15.2
Venezuela	2.14	-0.0	43476	-2.0
China	6.8374	0.1	2810	14.2
Hong Kong	7.7504	0.0	18085	21.5
Korea	1265.2	-6.0	1391	2.6
Taiwan	32.89	-2.8	6890	17.1
Thailand	34.14	-4.0	586	27.3

* Positive percent change denotes appreciation of U.S. dollar. [Return to table](#)

Figure: Exchange Value of the Dollar

Line chart, 2004 to 2009. January 2, 2004 = 100. Data are weekly. There are four series, "Mexico", "Brazil", "Korea", and "China". Mexico begins at about 100 and generally decreases to about 92 by early 2006. It then generally increases to about 102 by 2006, and generally decreases to about 89 by 2008. It then generally increases to about 140 by 2009, and generally decreases to end at about 120. Brazil begins at about 98 and generally increases to about 109 by 2004. It then generally decreases to about 55 by 2008, and generally increases to about 82 by late 2008. It then generally decreases to end at about 68. Korea begins at about 98 and generally decreases to about 79 by 2006. It then generally increases to about 132 by 2009, and generally decreases to end at about 105. China begins at about 100 and remains about constant until mid-2005. It then generally decreases to end at about 80.

There is a second line chart, February to June 2009. April 22, 2009 = 100. Data are daily. The April 2009 Greenbook is marked in the time series. There are four series, "Mexico", "Brazil", "Korea", and "China". Mexico begins at about 111 and generally decreases to about 107 by February. It then generally increases to about 118 by late February, and generally decreases to about 99 by April. It then generally increases to about 107 by late April, and generally decreases to about 98 by May. It then generally increases to about 105 by June, and generally decreases to end at about 100. Brazil begins at about 105 and generally decreases to about 100.5. It then generally increases to about 111 by early March, and generally decreases to end at about 90. Korea begins at about 103 and generally increases to about 117 by late February. It then generally decreases to end at about 94. China begins at about 100 and remains constant until the end. They are all at about 100 at the time of the April Greenbook.

Figure: Stock Market Indexes

Line chart, 2004 to 2009. January 2, 2004 = 100. Data are weekly. There are four series, "Mexico", "Brazil", "Korea", and "Hong Kong". Mexico begins at about 100 and generally increases to about 370 by 2007. It then generally decreases to about 180 by 2009, and generally increases to end at about 280. Brazil begins at about 100 and generally increases to about 330 by 2008. It then generally decreases to about 150 by late 2008, and generally increases to end at about 250. Korea begins at about 100 and generally increases to about 255 by late 2007. It then generally decreases to about 120 by late 2008, and generally increases to end at about 178. Hong Kong begins at about 100 and generally increases to about 240 by late 2007. It then generally decreases to about 98 by 2009, and generally increases to end at about 145.

There is a second line chart, February to June 2009. April 22, 2009 = 100. Data are daily. The April 2009 Greenbook is marked in the time series. There are four series, "Mexico", "Brazil", "Korea", and "Hong Kong". Mexico begins at about 93 and generally decreases to about 80 by early March. It then generally increases to about 120 by June, and generally decreases to end at about 115. Brazil begins at about 92 and generally decreases to about 80 by March. It then generally increases to about 122 by late May, and generally decreases to end at about 115. Korea begins at about 88 and generally decreases to about 75 by early March. It then generally increases to about 105 by May, and generally decreases to end at about 103. It is at about 98 at the time of the April Greenbook. Hong Kong begins at about 85 and generally increases to about 95 by February. It then generally decreases to about 78 by March, and generally increases to about 125 by June. It then generally decreases to end at about 121. Mexico, Brazil, and Hong Kong are at about 100 at the time of the April Greenbook.

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

Percent

	Short-term interest rates*		Dollar-denominated bond spreads**	
	Latest	Change since Apr. Greenbook	Latest	Change since Apr. Greenbook
Mexico	5.01	-0.83	2.45	-0.89
Brazil	9.43	-1.65	2.86	-1.03
Argentina	13.13	0.00	11.01	-6.33
China	...	...	0.93	-0.87
Korea	2.10	-0.00	...	...
Taiwan	1.09	0.01	...	...
Singapore	0.31	0.00	...	...
Hong Kong	0.10	-0.18	...	...

* 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+ Spreads

Line chart, by percent, 2004 to 2009. Data are weekly. There are three series, "Overall", "Mexico", and "Brazil". Overall begins at about 3.9 and generally increases to about 5.5 by 2004. It then generally decreases to about 1.5 by 2007, and generally increases to about 7.8 by 2008. It then generally decreases to end at about 4. Mexico begins at about 2 and generally decreases to about 0.9 by 2007. It then generally increases to about 5.8 by late 2008, and generally decreases to end at about 2.2. Brazil begins at about 4.1 and generally increases to about 7.5 by 2004. It then generally decreases to about 1.2 by 2007, and generally increases to

about 5.8 by 2008. It then generally decreases to end at about 2.5.

There is a second line chart, February to June 2009. Data are daily. The April 2009 Greenbook is marked in the time series. There are three series, "Overall", "Mexico", and "Brazil". Overall begins at about 6.4 and generally increases to about 7 by February. It then generally decreases to end at about 4.4. It is at about 5.5 at the time of the April Greenbook. Mexico begins at about 3.9 and generally decreases to about 2 by early June. It then generally increases to end at about 2.5. It is at about 3.2 by the time of the April Greenbook. Brazil begins at about 4.2 and generally increases to about 4.6 by early March. It then generally decreases to end at about 2.9. It is at about 4 at the time of the April Greenbook.

Figure: EMBI Global Spreads

Line chart, by percent, 2004 to 2009. Data are weekly. There are three series, "China", "Malaysia", and "Indonesia". China begins at about 0.5 and remains about constant until mid-2007. It then generally increases to about 3 by late 2008, and generally decreases to end at about 1. Malaysia begins at about 1.2 and generally decreases to about 1 by 2005. It then generally increases to about 4.8 by late 2008, and generally decreases to end at about 2. Indonesia begins in May 2004 at about 4 and generally decreases to about 2 by early 2005. It then generally increases to about 3 by 2005, and generally decreases to about 1.8 by 2007. It then generally increases to about 10.2 by late 2008, and generally decreases to end at about 4.

There is a second line chart, February to June 2009. Data are daily. The April 2009 Greenbook is marked in the time series. There are three series, "China", "Malaysia", and "Indonesia". China begins at about 1.5 and generally increases to about 2.5 by March. It then generally decreases to about 0.5 by June, and generally increases to end at about 1. It is at about 1.5 at the time of the April Greenbook. Malaysia begins at about 3.6 and generally decreases to end at about 2. It is at about 3 at the time of the April Greenbook. Indonesia begins at about 8 and generally increases to about 8.7 by early March. It then generally decreases to about 3.5 by June. It then generally increases to end at about 4. It is at about 6.2 at the time of the April Greenbook.

Advanced Foreign Economies

Figure: Average Real Gross Domestic Product

Line chart, by annualized percent change, s.a., 1999 to 2009. Data are quarterly. The series begins at about 3.5 and generally increases to about 5.5 by early 2000. It then generally decreases to about -0.5 by 2001, and generally increases to about 3.5 by 2003. It then generally decreases 1.2 by 2005, and generally increases to about 3.5 by early 2007. It then generally decreases to end at about -7.8.

Note: Chain weighted by moving bilateral shares in U.S. merchandise exports.

Source: FRB staff calculations.

Figure: Consumer Prices

Line chart, by 12-month percent change, s.a., 1999 to 2009. Data are monthly. There are four series, "Japan", "Euro area", "Canada", and "United Kingdom". Japan begins at about 0.2 and generally decreases to about -1.7 by early 2002. It then generally increases to about 0.9 by late 2004, and generally decreases to about -1.4 by late 2005. It then generally increases to about 2.4 by 2008, and generally decreases to end at about -0.1. Euro area begins at about 0.8 and generally increases to about 3.1 by 2001. It then generally decreases to about 1.6 by early 2004, and generally increases to about 4 by 2008. It then generally decreases to end at about 0. Canada begins at about 1 and generally increases to about 3.9 by 2001. It then generally decreases to about 0.7 by late 2001, and generally increases to about 4.6 by early 2003. It then generally decreases to about 0.6 by early 2004, and generally increases to about 3.3 by 2005. It then generally decreases to about 0.7 by 2006, and generally increases to about 3.5 by 2008. It then generally decreases to end at about 0. United Kingdom begins at about 1.5 and generally decreases to about 0.5 by 2000. It then generally increases to about 3 by 2007, and generally decreases to about 1.8 by 2007. It then generally increases to about 5.2 by 2008, and generally decreases to end at about 2.1.

Source: Haver Analytics.

Figure: Official or Targeted Interest Rates

Line chart, by percent, 1999 to 2009. There are four series, "Japan", "Euro area", "Canada", and "United Kingdom". Japan begins at about 0.1 and generally decreases to about 0 by early 2001. It remains constant until mid-2006, and generally increases to about 0.5 by early 2007. It then generally decreases to end at about 0.1. Euro area begins at about 3 and generally decreases to about 2.4 by 1999. It then generally increases to about 4.7 by late 2000, and generally decreases to about 2 by 2003. It remains about constant until late 2005, and generally increases to about 4.2 by 2008. It then generally decreases to end at about 1. Canada begins at about 5 and generally decreases to about 4.5 by 1999. It then generally increases to about 5.7 by 2000, and generally decreases to about 2 by early 2002. It then generally increases to about 3.3 by 2003, and generally decreases to about 2 by 2004. It then generally increases to about 4.5 by 2007, and generally decreases to about 0.2. United Kingdom begins at about 6.2 and generally decreases to about 5 by 1999. It then generally increases to about 6 by 2000, and generally decreases to about 3.5 by 2003. It then generally increases to about 5.7 by 2007, and generally decreases to end at about 0.5.

Source: Bloomberg.

Japanese Real GDP

(Percent change from previous period except as noted, s.a.a.r.)

Component	2007 ¹ - 2008 ¹		2008			2009
			Q2	Q3	Q4	Q1
GDP	1.9	-4.4	-2.2	-2.9	-13.5	-14.2
Total domestic demand	0.5	-1.8	-4.4	-2.7	-1.3	-8.8
Consumption	0.2	-0.2	-3.8	0.5	-3.1	-4.2
Private investment	-1.7	-8.6	-10.5	-12.0	-17.3	-29.3
Public investment	-4.4	-5.0	-2.9	3.9	-0.3	0.3
Government consumption	3.3	0.2	-3.5	-0.6	6.5	0.1
Inventories ²	0.4	0.1	0.6	-0.6	2.3	-0.6
Exports	10.1	-12.5	-3.2	4.0	-47.1	-70.0
Imports	1.7	2.8	-15.7	6.3	13.1	-47.8
Net Exports ²	1.3	-2.3	1.3	-0.0	-10.5	-7.8

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 2009. 2005=100. There are two series, "Industrial production" and "Tertiary services". Industrial production begins at about 94 and generally increases to about 103 by late 2000. It then generally decreases to about 87 by late 2001, and generally increases to about 110 by late 2007. It then generally decreases to about 68 by early 2009, and generally increases to end at about 75. Tertiary services begins at about 92 and generally increases to about 104 by early 2008. It then generally decreases to end at about 95.

Source: Haver Analytics.

Figure: Real Trade

Line chart, 1999 to 2009. 2005=100. There are two series, "Real exports" and "Real imports". Real exports begins at about 70 and generally increases to about 82 by 2000. It then generally decreases to about 65 by early 2002, and generally increases to about 134 by early 2008. It then generally decreases to about 77 by early 2009, and generally increases to end at about 83. Real imports begins at about 77 and generally increases to about 90 by 2000. It then generally decreases to about 81 by late 2001, and generally increases to about 110 by early 2007. It then generally decreases to end at about 83.

Source: Haver Analytics.

Figure: Labor Market

Line chart, 1999 to 2009. There are two series, "Unemployment rate", which is by percent, and "Job openings to applications", which is a ratio. These two series use two different scales. Unemployment rate begins at about 4.8 and generally decreases to about 4.6 by 1999. It then generally increases to about 5.5 by 2002, and generally decreases to about 3.55 by 2007. It then generally increases to end at about 5.0. Job openings to applications begins at about 0.47 and generally increases to about 0.65 by early 2001. It then generally decreases to about 0.5 by early 2002, and generally increases to about 1.08 by early 2007. It then generally decreases to end at about 0.45.

Source: Haver Analytics.

Figure: Consumer Price Inflation

Line chart, by percent, 12-month basis, n.s.a., 1999 to 2009. There are two series, "Consumer price inflation" and "Core". Consumer price inflation begins at about -0.1 and generally increases to about 0.5 by 1999. It then generally decreases to about -1.8 by early 2002, and generally increases to about 0.9 by late 2004. It then generally decreases to about -1.2 by late 2005, and generally increases to about 2.3 by 2008. It then generally decreases to end at about -0.1. Core begins at about 0 and generally decreases to about -1.1 by 2001. It then generally increases to about 2003, and generally decreases to about -0.9 by 2004. It then generally increases to about 0.1 by 2008, and generally decreases to end at about -0.4.

Note: Core excludes all food and energy, staff calculations.

Source: Haver Analytics.

Economic Indicators

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

Indicator	2008		2009		2009		
	Q3	Q4	Q1	Feb.	Mar.	Apr.	May
Housing starts	-1.6	-8.3	-10.6	-9.5	2.6	-12.3	n.a.
Machinery orders ¹	-8.9	-15.1	-9.9	0.6	-1.3	-5.4	n.a.
Household expenditures	-0.3	-1.4	-1.8	-1.4	0.6	0.7	n.a.
New car registrations	-2.6	-14.6	-12.7	-6.3	-3.0	11.3	3.3
Business sentiment ²	-14.0	-24.0	-46.0	...	...	...	...
Wholesale prices ³	7.3	2.6	-1.8	-1.8	-2.5	-4.0	-5.4

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, s.a.a.r.)

Component	2007 ¹		2008			2009
	Q3	Q4	Q2	Q3	Q4	Q1
GDP	2.2	-1.7	-1.0	-1.4	-6.8	-9.7
Total domestic demand	2.0	-0.3	-1.9	1.5	-2.9	-8.1
Consumption	1.2	-0.6	-1.2	0.2	-1.6	-1.9
Investment	3.4	-5.5	-5.2	-3.8	-16.1	-15.7
Government consumption	2.0	2.1	3.3	2.0	1.5	0.1
Inventories ²	0.2	0.7	-0.7	1.6	1.2	-3.7
Exports	3.9	-6.5	-1.2	-2.3	-25.9	-28.8
Imports	3.5	-3.7	-3.2	4.3	-18.9	-25.7
Net Exports ²	0.2	-1.3	0.9	-2.9	-4.0	-1.7
Memo: GDP of selected countries						
France	2.2	-1.7	-1.6	-0.7	-5.7	-4.7
Germany	1.7	-1.8	-2.0	-2.1	-8.6	-14.4
Italy	0.2	-3.0	-2.2	-3.1	-8.3	-10.1

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, by billions of U.S. dollars, 1999 to 2009. There are two series, "Exports" and "Imports". These two series track closely together throughout the chart. They begin at about 70 and generally increase to about 220 by early 2008. They then generally decrease to end at about 135.

Source: Haver Analytics.

Figure: Economic Sentiment

Line chart, by percent balance, 1999 to 2009. There are two series, "Consumer confidence" and "Industrial confidence". Consumer confidence begins at about -5 and generally increases to about 1 by 2000. It then generally decreases to about -22 by 2003, and generally increases to about -1 by 2007. It then generally decreases to end at about -32. Industrial confidence begins at about -7 and generally increases to about 6 by 2000. It then generally decreases to about -18 by

late 2001, and generally increases to about 7 by 2007. It then generally decreases to about -38 by early 2009, and generally increases to end at about -34.

Source: Haver Analytics.

Figure: Unemployment Rate

Line chart, by percent, 1999 to 2009. The series begins at about 9.1 and generally decreases to about 7.8 by early 2001. It then generally increases to about 9.0 by 2005, and generally decreases to about 7.15 by early 2008. It then generally increases to end at about 9.2.

Source: Haver Analytics.

Figure: Consumer Price Inflation

Line chart, by percent, 12-month basis, n.s.a., 1999 to 2009. There are two series, "Consumer price inflation" and "Core". Consumer price inflation begins at about 1 and generally increases to about 3.2 by 2001. It then generally decreases to about 1.5 by early 2004, and generally increases to about 2.5 by late 2005. It then generally decreases to about 1.5 by 2006, and generally increases to about 4 by 2008. It then generally decreases to end at about 0. Core begins at about 1 and generally decreases to about 0.8 by 2000. It then generally increases to about 2.6 by early 2002, and generally decreases to about 1.3 by early 2006. It then generally increases to end at about 1.6.

Note: Core excludes all food and energy, staff calculations.

Source: Haver Analytics.

Economic Indicators

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

Indicator	2008		2009		2009		
	Q3	Q4	Q1	Jan.	Feb.	Mar.	Apr.
Industrial production ¹	-2.9	-6.4	-7.7	-2.7	-2.6	-1.4	-1.5
Retail sales volume ²	-0.6	-0.8	-0.9	-0.4	-0.5	-0.1	0.2
New car registrations	-5.1	-6.7	1.2	-3.2	9.9	4.0	-0.3
Employment	-0.2	-0.4	-0.8	...	...	...	...
Producer prices ³	6.9	2.6	-1.9	-1.0	-1.8	-3.0	-4.2
M3 ³	10.0	9.2	6.4	6.8	6.7	5.9	5.7

1. Excludes construction. [Return to table](#)

2. Excludes motor vehicles. [Return to table](#)

3. Eurostat harmonized definition. Percent change from year earlier. [Return to table](#)

n.a. Not available.

... Not applicable.

M3 Manufacturers' shipments, inventories, and orders. [Return to table](#)

Source: Haver Analytics.

U.K. Real GDP

(Percent change from previous period except as noted, s.a.a.r.)

Component	2007 ¹	2008 ¹	2008			2009
			Q2	Q3	Q4	Q1
GDP	3.2	-2.0	-0.1	-2.8	-6.1	-7.3
Total domestic demand	3.7	-2.9	-0.1	-3.1	-8.5	-7.6
Consumption	3.7	-0.8	-1.4	-0.8	-3.8	-4.9
Investment	4.4	-8.0	-2.3	-10.8	-5.4	-14.2
Government consumption	1.5	4.4	4.5	2.8	5.4	1.2
Inventories ²	0.3	-2.0	0.1	-1.2	-6.4	-2.3
Exports	3.5	-4.4	-6.0	0.8	-14.9	-22.1
Imports	5.6	-7.6	-5.6	-0.6	-21.5	-21.5
Net Exports ²	-0.7	1.1	0.1	0.4	2.8	0.4

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, by percent, 12-month basis, n.s.a., 1999 to 2009. There are two series, "Consumer price inflation" and "Core". Consumer price inflation begins at about 1.2 and generally decreases to about 0.5 by 2000. It then generally increases to about 3.1 by early 2007, and generally decreases to about 1.7 by 2007. It then generally increases to about 5.5 by 2008, and generally decreases to end at about 2.1. Core begins at about 0.7 and generally decreases to about -0.5 by 2000. It then generally increases to about 1.3 by 2001, and generally decreases to about 0.5 by 2006. It then generally increases to about 1.8 by 2008, generally decreases to about 0.6 by late 2008. It then generally increases to end at about 1.4.

Note: Core excludes all food and energy, staff calculations.

Source: Haver Analytics.

Figure: Unemployment Rates

Line chart, by percent, 1999 to 2009. There are two series, "Labor force survey" and "Claimant count". Labor force survey begins at about 5.8 and generally decreases to about 4.6 by 2004. It then generally increases to end at about 7.2. Claimant count begins at about 4.1 and generally decreases to about 2.3 by early 2008. It then generally increases to end at about 4.8.

Source: Haver Analytics.

Figure: Purchasing Managers Survey

Line chart, 1999 to 2009. 50+ = expansion. There are two series, "Services" and "Manufacturing". Services begins at about 57.5 and generally increases to about 60 by 1999. It then generally decreases to about 46 by late 2001, and generally increases to about 57.5 by 2002. It then generally decreases to about 49 by early 2003, and generally increases to about 61 by late 2006. It then generally decreases to about 40 by late 2008, and generally increases to end at about 52. Manufacturing begins at about 52.5 and generally increases to about 56 by late 1999. It then generally decreases to about 45 by late 2001, and generally increases to about 56 by 2004. It then generally decreases to about 46 by 2005, and generally increases to about 56 by early 2007. It then generally decreases to about 35 by late 2008, and generally increases to end at about 45.

Source: Reuters.

Figure: Labor Costs

Line chart, by percent, 12-month basis, 1999 to 2009. There are two series, "Unit wage costs" and "Average earnings". Unit wage costs begins at about -0.05 and generally decreases to about -4 by late 1999. It then generally increases to about 1 by 2000, and generally decreases to about -4 by early 2001. It then generally increases to about 5 by 2002, and generally decreases to about -5.5 by 2003. It then generally increases to about 3 by 2006, and generally decreases to about -2 by early 2008. It then generally increases to about 12.5 by early 2009, and generally decreases to end at about 9. Average earnings begins at about 5 and generally increases to about 6 by late 1999. It then generally decreases to about 2.5 by late 2001, and generally increases to about 5.5 by early 2008. It then generally decreases to about -1.5 by early 2009, and generally increases to end at about 3.

Note: Unit wage costs are for manufacturing industries. Average earnings is for whole economy, including bonuses.

Source: Haver Analytics.

Economic Indicators

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

Indicator	2008		2009		2009		
	Q3	Q4	Q1	Feb.	Mar.	Apr.	May
Producer input prices ¹	28.1	9.0	0.6	0.7	-0.5	-5.8	-9.4
Industrial production	-1.9	-4.6	-5.3	-0.7	-0.2	0.2	n.a.
Business confidence ²	-12.0	-38.3	-45.0	-44.0	-48.0	-32.0	-17.0
Consumer confidence ²	-24.2	-27.4	-31.5	-31.5	-28.0	-21.8	-22.1
Trade balance ³	-24.3	-11.9	-11.2	-3.4	-3.8	-4.4	n.a.
Current account ³	-15.4	-12.0	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.

... Not applicable.

Source: Haver Analytics; FRB staff calculations.

Canadian Real GDP

(Percent change from previous period except as noted, s.a.a.r.)

Component	2007 ¹	2008 ¹	2008			2009
			Q2	Q3	Q4	Q1
GDP	2.8	-1.0	0.3	0.4	-3.7	-5.4
Total domestic demand	6.6	-1.1	2.9	0.6	-6.1	-9.9
Consumption	5.4	0.2	1.1	0.6	-3.1	-1.6
Investment	4.5	-3.6	-0.2	0.6	-14.8	-20.6
Government consumption	3.7	3.1	4.6	-0.0	2.5	1.2
Inventories ²	1.7	-1.1	1.3	0.1	-1.2	-4.3
Exports	-1.5	-7.3	-4.1	-4.1	-17.7	-30.4
Imports	8.5	-7.7	3.0	-3.4	-23.4	-37.8
Net Exports ²	-4.2	0.7	-2.4	-0.4	2.2	3.6

1. Q4/Q4. [Return to table](#)

2. Percentage point contribution to GDP growth. [Return to table](#)

Source: Haver Analytics.

Canada

Figure: Real Gross Domestic Product by Industry

Line chart, by percent change from year earlier, 1999 to 2009. The series begins at about 6.4 and generally decreases to about 0.1 by 2001. It then generally increases to about 4.3 by 2004, and generally decreases to about 1.9 by late 2006. It then generally increases to about 3 by 2007, and generally decreases to end at about -2.2.

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, 1999 to 2009. 2002 = 100. There are two series, "Real exports" and "Real imports". Real exports begins at about 94 and generally increases to about 105 by 2000. It then generally decreases to about 92 by 2003, and generally increases to about 114 by late 2006. It then generally decreases to about 79 by early 2009, and generally increases to end at about 85. Real imports begins at about 95 and generally increases to about 105 by 2000. It then generally decreases to about 93 by late 2001, and generally increases to about 144 by 2008. It then generally decreases to end at about 108.

Source: Haver Analytics.

Figure: Unemployment Rate

Line chart, by percent, 1999 to 2009. The series begins at about 7.55 and generally decreases to about 6.75 by early 2000. It then generally increases to about 8.0 by late 2001, and generally decreases to about 5.8 by early 2008. It then generally increases to end at about 8.4.

Source: Haver Analytics.

Figure: Consumer Price Inflation

Line chart, by percent, 12-month basis, n.s.a., 1999 to 2009. There are two series, "Consumer price inflation" and "Core". Consumer price inflation begins at about 1.8 and generally increases to about 4.1 by 2001. It then generally decreases to about 0.5 by late 2001, and generally increases to about 4.8 by early 2003. It then generally decreases to about 0.5 by early 2004, and generally increases to about 3.2 by 2005. It then generally decreases to about 0.5 by 2006, and generally increases to about 3.5 by 2008. It then generally decreases to end at about 0.3. Core begins at about 1.5 and generally increases to about 1.7 by 1999. It then generally decreases to about 1.2 by 2000, and generally increases to about 4.2 by early 2003. It then generally decreases to about 1 by 2004, and generally

increases to about 2.4 by 2007. It then generally decreases to end at about 1.

Note: Core excludes all food and energy, staff calculations.

Source: Haver Analytics.

Economic Indicators

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

Indicator	2008		2009		2009		
	Q3	Q4	Q1	Feb.	Mar.	Apr.	May
Industrial production	0.0	-2.9	-4.4	-0.5	-1.3	n.a.	n.a.
New manufacturing orders	-1.2	-9.0	-12.9	7.7	-3.0	-3.2	n.a.
Retail sales	-0.3	-1.7	-1.0	-0.4	0.7	n.a.	n.a.
Employment	-0.0	0.1	-1.4	-0.5	-0.4	0.2	-0.2
Wholesale sales	-0.7	-7.6	-7.2	-0.2	-1.1	0.5	n.a.
Ivey PMI ¹	59.3	43.8	41.5	45.2	43.2	53.7	48.4

1. PMI Purchasing managers index. Not seasonally adjusted. 50+ indicates expansion. [Return to table](#)

n.a. Not available.

... Not applicable.

Source: Haver Analytics; Bank for International Settlements.

Chinese Economic Indicators

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

Indicator	2007	2008		2009			
		2008	Q4	Q1	Mar.	Apr.	May
Real GDP ¹	12.3	6.9	1.6	6.5	...	...	...
Industrial production	19.5	1.8	-5.3	7.8	5.8	-.2	1.4
Consumer prices ²	6.5	1.2	2.5	-6	-1.2	-1.5	-1.4
Merch. trade balance ³	262.7	295.8	422.6	324.7	294.0	177.7	192.1

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, annual rate. 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	2007	2008	2008		2009		
			Q4	Q1	Mar.	Apr.	May
Real GDP ¹	9.3	5.8	1.0	7.8	...	...	...
Industrial production	9.9	4.4	-1.6	1.1	.2	1.7	n.a.
Consumer prices ²	5.5	9.7	10.2	9.0	7.1	7.7	n.a.
Wholesale prices ²	3.8	6.2	8.6	3.2	1.2	.6	.4
Merch. trade balance ³	-69.7	-115.8	-113.1	-68.1	-60.7	-55.3	n.a.
Current account ⁴	-11.3	-38.0	-58.6	n.a.	...	...	...

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, annual rate. [Return to table](#)

4. Billions of U.S. dollars, not seasonally adjusted, annual rate. [Return to table](#)

n.a. Not available.

... Not applicable.

Source: CEIC.

China and India

Figure: Industrial Production

Line chart, 2003 to 2009. January 2000 = 100. There are two series, "China" and "India". China begins at about 138 and generally increases to about 326 by 2008. It then generally decreases to about 300 by late 2008, and generally increases to end at about 337.5. India begins at about 119 and generally increases to end at about 176.

Source: CEIC.

Figure: Consumer Prices

Line chart, by percent change from year earlier, 2003 to 2009. There are two series, "China" and "India". China begins at about 0.4 and generally increases to about 5.2 by 2004. It then generally decreases to about 1 by early 2006, and generally increases to about 8.9 by early 2008. It then generally decreases to about -2 by early 2009, and generally increases to end at about -1.5. India begins at about 3.4 and generally increases to about 5 by 2003. It then generally decreases to about 2.2 by 2004, and generally increases to about 10.5 by late 2008. It then generally decreases to end at about 7.6.

Source: China Statistic and Consultancy Service Center; CEIC.

Figure: Merchandise Trade Balances

Line chart, by billions of dollars, 2003 to 2009. Data are 3-month moving averages (n.s.a.). There are two series, "China" and "India". China begins at about 1 and generally increases to about 4 by late 2003. It then generally decreases to about 0 by early 2004, and generally increases to about 43 by early 2009. It then generally decreases to end at about 18. India begins at about -1 and generally decreases to about -11 by 2008. It then generally increases to end at about -5.

Source: China Statistic and Consultancy Service Center; CEIC.

Figure: Benchmark Interest Rates

Line chart, by percent, 2003 to 2009. There are two series, "China" and "India". China begins at about 5.3 and remains about constant until late 2004. It then generally increases to about 7.5 by late 2007, and generally decreases to end at about 5.3. India begins at about 5.5 and generally increases to about 7.5 by 2003. It then generally decreases to about 4.5 by 2004, and generally increases to about 9 by 2008. It then generally decreases to end at about 4.8.

Source: Bloomberg; CEIC.

Figure: Gross External Debt

Line chart, by percent of Gross Domestic Product, 2003 to late 2008. The "India" series begins at about 21 and generally decreases to about 17 by 2006. It then generally increases to end at about 22.

Source: Bank for International Settlements; Haver Analytics.

Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to late 2008. The "India" series begins at about 6 and generally increases to about 7.5 by 2003. It then generally decreases to about 4 by early 2004, and generally increases to end at about 19.

Source: Bank for International Settlements; CEIC.

Economic Indicators for Newly Industrialized Economies: Growth

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

2007		2008		2009		
	2008	Q4	Q1	Feb.	Mar.	Apr.

<i>Real GDP¹</i>							
Hong Kong	7.1	-2.7	-7.4	-16.1	...	...	...
Korea	5.7	-3.4	-18.8	.5	...	...	...
Singapore	5.8	-4.0	-16.4	-14.6	...	...	...
Taiwan	6.5	-8.5	-23.2	-4.2	...	...	...
<i>Industrial production</i>							
Hong Kong	-1.5	-6.6	-3.2	-2.8	...	...	...
Korea	7.0	3.0	-11.9	-2.7	7.1	4.9	2.6
Singapore	5.9	-4.2	-7.3	-7.8	13.4	-17.6	30.0
Taiwan	7.8	-1.8	-20.4	-8.0	3.2	9.3	6.8

1. Gross domestic product. Annual rate. Annual data are Q4/Q4. [Return to table](#)

n.a. Not available.

... Not applicable.

Source: CEIC; Reuters.

Economic Indicators for Newly Industrialized Economies: Merchandise Trade Balance

(Billions of U.S. dollars; seasonally adjusted annual rate)

	2007	2008	2008		2009		
			Q4	Q1	Mar.	Apr.	May
Hong Kong	-23.5	-25.9	-21.7	-19.9	-14.7	-15.7	n.a.
Korea	28.2	6.0	11.2	38.8	79.6	83.8	n.a.
Singapore	36.2	18.4	12.6	11.6	26.3	33.6	n.a.
Taiwan	16.8	4.4	9.4	28.5	35.0	21.8	30.3

n.a. Not available.

... Not applicable.

Source: CEIC.

Economic Indicators for Newly Industrialized Economies: Consumer Price Inflation

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

	2007 ¹	2008 ¹	2008		2009		
			Q4	Q1	Mar.	Apr.	May
Hong Kong	3.8	2.1	2.3	1.7	1.2	.6	n.a.
Korea	3.6	4.1	4.5	3.9	3.9	3.6	2.7
Singapore	4.4	4.3	5.4	2.1	1.6	-.7	n.a.
Taiwan	3.3	1.3	1.9	.0	-.1	-.5	-.1

1. Dec./Dec. [Return to table](#)

n.a. Not available.

... Not applicable.

Source: CEIC.

Newly Industrialized Economies

Figure: Industrial Production

Line chart, 2003 to 2009. January 2000 = 100. There are four series, "Korea", "Singapore", "Hong Kong", and "Taiwan". Korea begins at about 114 and generally decreases to about 112 by 2003. It then generally increases to about 172 by early 2008, and generally decreases to about 133 by late 2008. It then generally

increases to end at about 155. Singapore begins at about 102 and generally decreases to about 90 by 2003. It then generally increases to about 130 by late 2004, and generally decreases to about 103 by early 2005. It then generally increases to about 180 by 2007, and generally decreases to about 111 by 2009. It then generally increases to end at about 144. Hong Kong begins at about 78 and generally increases to about 85 by 2005. It then generally decreases to end at about 72. Taiwan begins at about 103 and generally increases to about 150 by early 2008. It then generally decreases to about 95 by early 2009, and generally increases to end at about 115.

Source: CEIC.

Figure: Consumer Prices

Line chart, by percent change from year earlier, 2003 to 2009. There are four series, "Korea", "Singapore", "Hong Kong", and "Taiwan". Korea begins at about 3.8 and generally increases to about 4.5 by 2003. It then generally decreases to about 2 by 2005, and generally increases to about 6 by 2008. It then generally decreases to end at about 2.8. Singapore begins at about 0.3 and generally increases to about 2.2 by 2004. It then generally decreases to about 0 by 2005, and generally increases to about 7.5 by early 2008. It then generally decreases to end at about 0. Hong Kong begins at about -1, and generally decreases to about -4 by 2003. It then generally increases to about 2.8 by 2006, and generally decreases to about 1 by early 2007. It then generally increases to about 6.5 by 2008, and generally decreases to end at about 0.8. Taiwan begins at about 1 and generally decreases to about -2.2 by 2003. It then generally increases to about 3.8 by 2004, and generally decreases to about -1.2 by 2006. It then generally increases to about 6.4 by 2008, and generally decreases to about -2 by early 2009. It then generally increases to end at about 0.

Source: CEIC; Bank of Korea; Reuters.

Figure: Merchandise Trade Balances

Line chart, by billions of dollars, 2003 to 2009. Data are 3-month moving averages (n.s.a.). There are four series, "Korea", "Singapore", "Hong Kong", and "Taiwan". Korea begins at about 0.9 and generally decreases to about 0.7 by 2003. It then generally increases to about 3.5 by early 2005, and generally decreases to about 1.7 by early 2006. It then generally increases to about 3 by 2007, and generally decreases to about -1 by late 2008. It then generally increases to end at about 5.8. Singapore begins at about 1.6 and generally increases to about 3.2 by late 2006. It then generally decreases to about 0.7 by early 2009, and generally increases to end at about 2. Hong Kong begins at about -0.5 and generally decreases to about -1.9 by 2004. It then generally increases to about -0.5 by late 2004, and generally decreases to about -3 by 2008. It then generally increases to about -0.4 by early 2009, and generally decreases to end at about -2.

Source: CEIC.

Figure: Benchmark Interest Rates

Line chart, by percent, 2003 to 2009. There are three series, "Korea", "Hong Kong", and "Taiwan". Korea begins at about 4.3 and generally decreases to about 3.2 by late 2004. It then generally increases to about 5.2 by 2008, and generally decreases to end at about 2. Hong Kong begins at about 2.8 and generally decreases to about 2.5 by 2003. It then generally increases to about 6.8 by 2006, and generally decreases to end at about 0.5. Taiwan begins at about 1.5 and generally decreases to about 1.2 by 2003. It then generally increases to about 3.6 by 2008, and generally decreases to end at about 1.2.

Source: Bloomberg.

Figure: Gross External Debt

Line chart, by percent of Gross Domestic Product, 2003 to late 2008. There are three series, "Korea", "Hong Kong", and "Taiwan". Korea begins at about 25 and remains about constant until 2006. It then generally increases to end at about 50. Hong Kong begins at about 215 and generally increases to about 325 by late 2007. It then generally decreases to end at about 310. Taiwan begins at about 18 and generally increases to about 28 by 2006. It then generally decreases to end at about 25.

Source: Bank for International Settlements.

Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to late 2008. There are three series, "Korea", "Hong Kong", and "Taiwan". Korea begins at about 45 and generally decreases to about 25 by late 2004. It then generally increases to end at about 75. Hong Kong begins at about 195 and generally increases to about 355 by late 2007. It then generally decreases to end at about 260. Taiwan begins at about 20 and remains about constant until 2006. It then generally increases to end at about 30.

Source: Bank for International Settlements.

ASEAN-4 ¹ Economic Indicators: Growth

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

Indicator	2007	2008		2009		
		2008	Q4	Q1	Feb.	Mar.	Apr.
Real GDP ²						

Indonesia	5.7	4.9	-3.3	6.2	...	...	...
Malaysia	7.2	.1	-9.8	-17.3	...	...	...
Philippines	6.4	2.9	1.1	-8.9	...	...	...
Thailand	5.9	-4.2	-22.1	-7.3	...	...	...
<i>Industrial production</i> ³							
Indonesia ⁴	5.6	3.0	-6	1.9	6.7	-6	n.a.
Malaysia	2.1	.5	-7.3	-4.5	2.9	-3.2	3.9
Philippines	-2.7	.3	-8.4	-16.0	5.8	2.2	n.a.
Thailand	8.2	5.3	-10.3	-9.6	2.6	1.6	7.7

1. Association of Southeast Asian Nations. [Return to text](#)

2. Gross domestic product. Annual rate. Annual data are Q4/Q4. [Return to table](#)

3. Annual data are annual averages. [Return to table](#)

4. Staff estimate. [Return to table](#)

n.a. Not available.

... Not applicable.

Source: CEIC.

ASEAN-4 ¹ Economic Indicators: Merchandise Trade Balance

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

Indicator	2007	2008		2009			
		2008	Q4	Q1	Feb.	Mar.	Apr.
Indonesia	39.6	32.4	25.9	29.9	29.6	38.8	46.0
Malaysia	29.2	42.7	34.4	38.1	46.7	38.7	28.1
Philippines	-5.0	-7.7	-4.8	-8.7	-10.1	-5.6	n.a.
Thailand	11.6	.2	-10.4	32.6	51.5	18.9	21.0

1. Association of Southeast Asian Nations. [Return to text](#)

n.a. Not available.

... Not applicable.

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

ASEAN-4 ¹ Economic Indicators: Consumer Price Inflation

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

Indicator	2007 ²	2008 ²	2008		2009		
			Q4	Q1	Mar.	Apr.	May
Indonesia	5.8	11.1	11.4	8.6	7.9	7.3	6.0
Malaysia	2.4	4.4	5.9	3.7	3.5	3.0	n.a.
Philippines	3.9	8.0	9.7	6.9	6.4	4.8	3.3
Thailand	3.2	.4	2.1	-2	-2	-9	-3.3

1. Association of Southeast Asian Nations. [Return to text](#)

2. Dec./Dec. [Return to table](#)

n.a. Not available.

... Not applicable.

Source: CEIC; IMF International Financial Statistics database.

Figure: Industrial Production

Line chart, 2003 to 2009. January 2000 = 100. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand". Indonesia begins at about 138 and generally increases to about 165 by late 2004. It then generally decreases to about 137.5 by late 2005, and generally increases to end at about 169. Malaysia begins at about 111 and generally increases to about 167 by early 2008. It then generally decreases to end at about 137.5. Philippines begins at about 100 and generally decreases to about 77 by early 2007. It then generally increases to about 97 by late 2007, and generally decreases to about 67.5 by early 2009. It then generally increases to end at about 70. Thailand begins at about 130 and generally increases to about 212.5 by early 2008. It then generally decreases to about 167.5 by early 2009, and generally increases to end at about 186.

Source: CEIC; Bank of Philippines.

Figure: Consumer Prices

Line chart, by percent change from year earlier, 2003 to 2009. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand". Indonesia begins at about 8 and generally decreases to about 4.5 by early 2004. It then generally increases to about 18 by late 2005, and generally decreases to about 5.1 by late 2006. It then generally increases to about 7 by 2008, and generally decreases to end at about 6. Malaysia begins at about 1.8 and generally decreases to about 0.5 by 2003. It then generally increases to about 4.8 by early 2006, and generally decreases to about 1.5 by early 2007. It then generally increases to about 8.8 by 2008, and generally decreases to end at about 2.8. Philippines begins at about 2.5 and generally increases to about 8.5 by late 2004. It then generally decreases to about 2.5 by 2007, and generally increases to about 12.5 by 2008. It then generally decreases to end at about 3. Thailand begins at about 2.2 and generally increases to about 6 by 2005. It then generally decreases to about 0.8 by 2007, and generally increases to about 9.6 by 2008. It then generally decreases to end at about -4.

Source: IMF International Financial Statistics; CEIC.

Figure: Merchandise Trade Balances

Line chart, by billions of dollars, 2003 to 2009. Data are 3-month moving averages (n.s.a.). There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand". Indonesia begins at about 2 and generally increases to about 2.4 by 2003. It then generally decreases to about 1.7 by 2004, and generally increases to about 3.8 by late 2006. It then generally decreases to about 2 by early 2009, and generally increases to end at about 3.1. Malaysia begins at about 1.6 and generally increases to about 2.7 by 2006. It then generally decreases to about 2 by 2007, and generally increases to about 4.4 by 2008. It then generally decreases to about 2.8 by early 2009 and generally increases to end at about 3.1. Philippines begins at about -0.4 and generally increases to about -0.1 by early 2005. It then generally decreases to about -1 by early 2008, and generally increases to about -0.3 by late 2008. It then generally decreases to end at about -0.8.

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

Figure: Benchmark Interest Rates

Line chart, by percent, 2003 to 2009. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand". Indonesia begins at about 12.5 and generally decreases to about 7.5 by early 2004. It then generally increases to about 12.5 by late 2005, and generally decreases to about 7.6 by early 2008. It then generally increases to about 9.5 by 2008, and generally decreases to end at about 7.5. Malaysia begins at about 2.8 and remains about constant until 2005. It then generally increases to about 3 by 2006, and then remains about constant until late 2008. It then generally decreases to end at about 2.2. Philippines begins at about 7.5 and generally decreases to about 7 by 2003. It then generally increases to about 7.5 by late 2005, and generally decreases to end at about 4. Thailand begins at about 2 and generally decreases to about 1.7 by 2003. It then generally increases to about 5 by 2006, and generally decreases to end at about 1.6.

Source: Bloomberg; Haver Analytics.

Figure: Gross External Debt

Line chart, by percent of Gross Domestic Product, 2003 to 2009. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand". Indonesia begins at about 58 and generally decreases to about 25 by 2008. It then generally increases to end at about 32. Malaysia begins at about 44 and generally increases to about 49 by 2003. It then generally decreases to about 30 by late 2007, and generally increases to end at about 37.5 by 2008. Philippines begins at about 75 and generally decreases to end at about 30.2. Thailand begins at about 44 and generally decreases to about 17 by late 2007. It then generally increases to end at about 28.5 by 2008.

Source: CEIC; Bank for International Settlements.

Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to 2008. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand". Indonesia begins at about 49 and generally decreases to about 37 by early 2004. It then generally increases to about 62 by 2005, and generally decreases to about 16 by 2006. It then generally increases to end at about 41. Malaysia begins at about 30 and generally increases to about 33 by 2003. It then generally decreases to about 20 by early 2007, and generally increases to end at about 34. Philippines begins at about 48 and generally decreases to about 45 by late 2003. It then generally increases to about 57 by early 2004, and generally decreases to about 20 by early 2008. It then generally increases to about 27 by 2008, and generally decreases to end at about 20. Thailand begins at about 27 and generally decreases to about 20 by late 2004. It then generally increases to about 30 by early 2006, and generally decreases to end at about 19.

Source: Bank for International Settlements.

Note: ASEAN is the Association of Southeast Asian Nations.

Mexican Economic Indicators

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

Indicator	2007	2008	2008		2009		
			Q4	Q1	Mar.	Apr.	May
Real GDP ¹	3.6	-1.7	-9.8	-21.5	...	...	...
Overall economic activity	3.1	1.0	-2.3	-5.3	-1.5	n.a.	n.a.
Industrial production	2.4	-1.0	-3.1	-5.1	-2.1	n.a.	n.a.
Unemployment rate ²	3.7	4.0	4.5	4.7	4.6	5.3	n.a.
Consumer prices ³	3.8	6.5	6.2	6.2	6.0	6.2	6.0
Merch. trade balance ⁴	-10.1	-17.3	-22.9	-12.0	-10.6	-2.8	n.a.
Merchandise imports ⁴	281.9	308.6	272.2	228.0	224.8	216.7	n.a.
Merchandise exports ⁴	271.9	291.3	249.3	216.0	214.2	213.9	n.a.
Current account ⁵	-8.2	-15.6	-26.4	-4.3	...	...	...

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, annual rate. [Return to table](#)

5. Billions of U.S. dollars, not seasonally adjusted, annual rate. [Return to table](#)

n.a. Not available.

... Not applicable.

Source: Haver Analytics; Bank of Mexico.

Brazilian Economic Indicators

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

Indicator	2007	2008	2008		2009		
			Q4	Q1	Mar.	Apr.	May
Real GDP ¹	6.0	1.1	-13.8	-3.3	...	...	...
Industrial production	6.0	3.1	-9.5	-7.8	.9	1.1	n.a.
Unemployment rate ²	9.3	7.9	7.8	8.5	8.6	8.4	n.a.
Consumer prices ³	4.5	5.9	6.2	5.8	5.6	5.5	5.2
Merch. trade balance ⁴	40.0	24.8	20.2	21.1	26.4	47.4	32.0
Current account ⁵	1.6	-28.2	-21.2	-20.1	-19.7	1.7	n.a.

1. Gross domestic product. Annual rate. Annual data are Q4/Q4. [Return to table](#)

2. Percent. [Return to table](#)

3. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec. Price index is IPCA. [Return to table](#)

4. Billions of U.S. dollars, annual rate. [Return to table](#)

5. Billions of U.S. dollars, not seasonally adjusted, annual rate. [Return to table](#)

n.a. Not available.

... Not applicable.

Source: Haver Analytics; IMF International Financial Statistics database; Instituto Brasileiro de Geografia e Estatística.

Latin America

Figure: Industrial Production

Line chart, 2003 to 2009. January 2000 = 100. There are two series, "Brazil" and "Mexico". Brazil begins at about 108 and generally decreases to about 105 by 2003. It then generally increases to about 142 by 2008, and generally decreases to about 115 by late 2008. It then generally increases to end at about 120. Mexico begins at about 97 and generally increases to about 115 by late 2007. It then generally decreases to end at about 100.

Source: Fundacion de Investigaciones Economicas Latinoamericanas; Haver Analytics.

Figure: Consumer Prices

Line chart, by percent change from year earlier, 2003 to 2009. There are two series, "Brazil" and "Mexico". Brazil begins at about 14.9 and generally increases to about 17 by 2003. It then generally decreases to about 5 by 2004, and generally increases to about 7.8 by 2005. It then generally decreases to about 2.8 by late 2006, and generally increases to end at about 5.5. Mexico begins at about 5 and generally increases to about 5.4 by 2003. It then generally decreases to about 2.8 by late 2005, and generally increases to end at about 6.

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

Figure: Merchandise Trade Balances

Line chart, by billions of dollars, 2003 to 2009. Data are 3-month moving averages (n.s.a.). There are two series, "Brazil" and "Mexico". Brazil begins at about 1.6 and generally increases to about 4.3 by early 2006. It then generally decreases to about 1.2 by late 2008, and generally increases to end at about 3. Mexico begins at about -0.2 and generally decreases to about -1.3 by early 2005. It then generally increases to about 0.3 by early 2006, and generally decreases to about -1.5 by 2007. It then generally increases to about 0 by 2007, and generally decreases to about -2 by late 2008. It then generally increases to end at about -0.8.

Source: IMF International Financial Statistics, Bank of Mexico.

Figure: Benchmark Interest Rates

Line chart, by percent, 2003 to 2009. There are two series, "Brazil" and "Mexico". Brazil begins at about 25.5 and generally increases to about 26 by 2003. It then generally decreases to about 15.8 by 2004, and generally increases to about 20 by 2005. It then generally decreases to about 11 by 2007, and generally increases to about 14 by 2008. It then generally decreases to end at about 10. Mexico begins at about 9.5 and generally decreases to about 4 by 2003. It then generally increases to about 10 by 2005, and generally decreases to end at about 5.

Source: Bloomberg.

Figure: Gross External Debt

Line chart, by percent of Gross Domestic Product, 2003 to late 2008. There are two series, "Brazil" and "Mexico". Brazil begins at about 187.5 and generally decreases to about 48 by 2008. It then generally increases to end at about 67.5. Mexico begins at about 25 and generally decreases to about 19 by early 2007. It then generally increases to end at about 24.

Source: Haver Analytics; Bank for International Settlements.

Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to late 2008. There are two series, "Brazil" and "Mexico". Brazil begins at about 81 and generally decreases to about 24 by late 2006. It then generally increases to about 32 by early 2007, and generally decreases to end at about 20. Mexico begins at about 47 and generally decreases to about 24 by 2006. It then generally increases to about 32 by early 2007, and generally decreases to end at about 25.

Source: Bank for International Settlements.

† Note: Data values for figures are rounded and may not sum to totals. [Return to text](#)

Last update: April 1, 2015

Accessible Material

June 2009 Greenbook Supplement Tables and Charts[†]

Supplemental Notes

The Domestic Financial Economy

Commercial Bank Credit

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

Type of credit	2007	H1 2008	H2 2008	Q1 2009	Apr. 2009	May 2009	Level ¹ May 2009
Total	10.9	4.1	4.6	-6.3	-12.9	1.3	9,461
Loans²							
Total	11.4	5.8	2.4	-6.3	-11.1	-1.7	7,101
To businesses							
Commercial and industrial	19.5	13.6	13.0	-9.6	-16.9	-15.6	1,503
Commercial real estate	10.6	9.8	2.9	-.9	-1.9	-2.2	1,722
To households							
Residential real estate	7.0	-1.0	-4.1	-.8	-7.5	-6.8	2,159
Revolving home equity	6.5	12.2	12.9	8.4	3.5	-1.8	613
Closed-end mortgages	7.2	-5.0	-9.8	-4.2	-11.8	-8.8	1,546
Consumer	6.6	8.0	7.4	7.3	-15.6	-.4	881
Originated ³	6.0	8.0	4.7	1.8	-5.1	-2.2	1,293
Other	17.2	1.4	-4.5	-36.9	-23.7	37.6	836
Securities							
Total	9.4	-1.2	11.5	-6.2	-18.7	10.2	2,360
Treasury and agency	-5.6	.9	37.7	4.1	-27.7	-3.6	1,365
Other ⁴	30.6	-3.5	-16.0	-20.3	-5.9	29.7	995

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 (FIN 39 and FAS 115), the initial consolidation of certain variable interest entities (FIN 46), and the initial adoption of fair value accounting. 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. [Return to table](#)

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

Source: Federal Reserve.

Figure: Return on Assets

Line chart, by percent (annual rate), 1985 to 2009:Q1. Data are quarterly, s.a. The NBER peak is marked in the time series. There are two series, "Top 25 BHCs" and "Other BHCs". Top 25 BHCs begins at about 0.5 and generally decreases to about -3.9 by 1987. It then generally increases to about 1.1 by late 1988, and generally decreases to about -1.2 by 1989. It then generally increases to about 1.6 by early 2007, and generally decreases to about -0.9 by late 2008. It then generally increases to end at about 0.5. Other BHCs begins at about 0.8 and generally decreases to about 0.1 by 1990. It then generally increases to about 1.5 by early 1998, and generally decreases to about -1.2 by early 2009. It then generally increases to end at about -0.4. Both series are at about 0.5 at the time of the NBER peak.

Note: 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.

Source: Call Reports.

Figure: Growth in Unused Commitments

Line chart, by percent (annual rate), 1990 to 2009:Q1. Data are quarterly. The NBER peak is marked in the time series. The series begins at about 21 and generally decreases to about -2 by late 1990. It then generally increases to about 27 by 1995, and generally decreases to about -9 by late 2003. It then generally increases to about 16 by 2006, and generally decreases to end at about -32. It is at about 0 at the time of the NBER peak.

Note: 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.

Source: Call Reports.

Figure: C&I Loan Rate Spreads*

Line chart showing weighted average, 1997 to 2009:Q2. Unit is basis points. Data are quarterly. The NBER peak is marked in the time series. Weighted average adjusted for changes in non-price loan characteristics. The series begins at about 152 and generally increases to about 189 by early 2003. It then generally decreases to about 138 by late 2005, and generally increases to end at about 182. It is at about 145 at the time of the NBER peak.

* The spread over market interest rate on an instrument of comparable maturity. [Return to text](#)

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.

Source: Survey of Terms of Business Lending.

Selected Financial Market Quotations

(One-day quotes in percent except as noted)

Instrument	2007		2009		Change to June 18 from selected dates (percentage points)		
	Aug. 6	Mar. 17	Apr. 28	June 18	2007 Aug. 6	2009 Mar. 17	2009 Apr. 28
<i>Short-term</i>							
FOMC intended federal funds rate	5.25	.13	.13	.13	-5.12	.00	.00
Treasury bills ¹							
3-month	4.74	.24	.13	.18	-4.56	-.06	.05
6-month	4.72	.44	.31	.33	-4.39	-.11	.02
Commercial paper (A1/P1 rates) ²							
1-month	5.26	.44	.31	.26	-5.00	-.18	-.05
3-month	5.29	.66	.55	.40	-4.89	-.26	-.15
Large negotiable CDs ¹							
3-month	5.34	1.08	.80	.36	-4.98	-.72	-.44
6-month	5.27	1.83	1.38	.65	-4.62	-1.18	-.73
Eurodollar deposits ³							
1-month	5.33	1.00	.90	.65	-4.68	-.35	-.25
3-month	5.35	1.65	1.40	1.15	-4.20	-.50	-.25
Bank prime rate	8.25	3.25	3.25	3.25	-5.00	.00	.00
<i>Intermediate- and long-term</i>							
U.S. Treasury ⁴							
2-year	4.49	1.04	.92	1.27	-3.22	.23	.35
5-year	4.52	2.14	2.04	2.84	-1.68	.70	.80
10-year	4.82	3.47	3.38	4.18	-.64	.71	.80
U.S. Treasury indexed notes ⁵							
5-year	2.43	2.04	1.55	1.54	-.89	-.50	-.01
10-year	2.48	2.26	1.92	2.17	-.31	-.09	.25
	6						

Municipal general obligations (Bond Buyer)	4.51	5.03	4.57	4.86	.35	-1.17	.29
Private instruments							
10-year swap	5.44	3.14	3.07	3.98	-1.46	.84	.91
10-year FNMA ⁷	5.34	4.04	3.88	4.56	-.78	.52	.68
10-year AA ⁸	6.12	6.99	6.33	6.12	.00	-.87	-.21
10-year BBB ⁸	6.57	9.25	8.49	7.71	1.14	-1.54	-.78
10-year high yield ⁸	9.21	16.41	12.79	12.15	2.94	-4.26	-.64
Home mortgages (FHLMC survey rate)							
30-year fixed	6.59	4.98	4.78	5.38	-1.21	.40	.60
1-year adjustable	5.65	4.91	4.77	4.95	-.70	.04	.18

Stock exchange index	Record high		2009			Change to June 18 from selected dates (percent)		
	Level	Date	Mar. 17	Apr. 28	June 18	Record high	2009 Mar. 17	2009 Apr. 28
Dow Jones Industrial	14,165	10-9-07	7,396	8,017	8,556	-39.60	15.68	6.72
S&P 500 Composite	1,565	10-9-07	778	855	918	-41.32	18.02	7.39
Nasdaq	5,049	3-10-00	1,462	1,674	1,808	-64.19	23.64	8.00
Russell 2000	856	7-13-07	404	473	509	-40.47	26.24	7.75
D.J. Total Stock Index	15,807	10-9-07	7,878	8,754	9,393	-40.57	19.24	7.31

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:

August 6, 2007, is the day before the August 2007 FOMC meeting.

March 17, 2009, is the day before the March 2009 FOMC monetary policy announcement.

April 28, 2009, is the day before the most recent FOMC monetary policy announcement.

The International Economy

U.S. Current Account

(Billions of dollars, seasonally adjusted annual rate)

Period	Goods and services, net	Investment income, net	Other income and transfers, net	Current account balance
<i>Annual</i>				
2007	-701.4	97.9	-123.1	-726.6
2008	-695.9	125.6	-135.7	-706.1
<i>Quarterly</i>				
2008: Q2	-731.4	112.3	-131.8	-750.9
Q3	-743.8	143.7	-136.7	-736.7
Q4	-578.0	92.1	-133.6	-619.5
2009: Q1	-364.8	84.3	-125.5	-406.0
<i>Change</i>				
Q2-Q1	-0.8	-41.7	8.8	-33.7
Q3-Q2	-12.4	31.4	-4.9	14.2
Q4-Q3	165.8	-51.6	3.1	117.2

Q1-Q4	213.2	-7.8	8.1	213.5
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Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Summary of U.S. International Transactions

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

	2007	2008	2008			2009		
			Q2	Q3	Q4	Q1	Mar.	Apr.
Official financial flows	451.1	-54.6	138.0	-108.9	-286.5	313.6	22.7	97.8
1. Change in foreign official assets in the U.S. (increase, +)	475.2	479.9	182.3	117.5	-17.9	70.8	11.9	37.3
a. G-10 countries + ECB	36.8	-8.4	0.3	8.9	-16.0	-7.4	6.2	1.9
b. OPEC	33.0	45.5	16.3	16.1	-3.4	-5.0	5.3	-1.4
c. All other countries	405.5	430.0	165.8	92.5	-11.4	83.2	0.4	36.8
2. Change in U.S. official assets (decrease, +) ¹	-24.1	-534.6	-44.3	-226.4	-268.7	242.8	10.8	60.5
Private financial flows	212.5	559.7	-31.0	252.0	374.9	-266.5	...	...
Banks								
3. Change in net foreign positions of banking offices in the U.S. ²	-81.7	28.3	-91.4	-31.8	311.5	-247.8	-33.0	-9.2
Securities³								
4. Foreign net purchases (+) of U.S. securities	673.9	71.1	40.0	-23.9	52.7	0.5	44.5	-49.1
a. Treasury securities	67.1	197.0	18.3	79.1	81.6	55.4	49.7	-23.0
b. Agency bonds	-8.6	-185.0	-52.7	-70.1	-21.5	-45.2	-18.7	-13.7
c. Corporate and municipal bonds	384.7	2.5	52.1	-35.4	-3.8	-15.6	1.5	-15.5
d. Corporate stocks ⁴	230.7	56.6	22.1	2.6	-3.6	6.0	11.9	3.1
5. U.S. net acquisitions (-) of foreign securities	-366.2	64.0	-40.3	79.6	72.1	-33.1	-3.1	-25.1
a. Bonds	-218.5	64.2	-18.4	65.5	37.0	-31.8	-1.5	-14.8
b. Stock purchases	-136.4	3.4	-19.9	14.1	35.8	0.6	-1.6	-10.3
c. Stock swaps ⁴	-11.3	-3.6	-2.0	0.0	-0.8	-1.9	0.0	0.0
Other flows⁵								
6. U.S. direct investment (-) abroad	-398.6	-332.0	-103.6	-54.1	-84.5	-24.0	...	...
7. Foreign direct investment in the U.S.	275.8	319.7	100.7	62.8	96.8	35.3	...	...
8. Net derivatives (inflow, +)	6.2	-28.9	-2.4	-4.1	-14.5	n.a.	...	...
9. Foreign acquisitions of U.S. currency	-10.7	29.2	0.2	5.8	29.9	11.8	...	...
10. Other (inflow, +) ⁶	113.8	408.2	65.8	217.7	-89.1	-9.2	...	...
U.S. current account balance⁵	-726.6	-706.1	-187.7	-184.2	-154.9	-101.5	...	...
Capital account balance⁷	-1.9	1.0	-0.7	3.0	-0.7	-0.7	...	...
Statistical discrepancy⁵	64.9	200.1	81.4	38.1	67.2	55.1	...	...

Note: Data in lines 1 through 5 differ in timing and coverage from the balance of payments data published by the Department of Commerce. Details may not sum to totals because of rounding.

1. Includes changes in U.S. official reserve assets and in outstanding reciprocal currency swaps with certain foreign central banks. [Return to table](#)

2. Changes in dollar-denominated positions of all depository institutions and bank holding companies plus certain transactions between broker-dealers and unaffiliated foreigners (particularly borrowing and lending under repurchase agreements). Includes changes in custody liabilities other than U.S. Treasury bills. [Return to table](#)

3. Includes commissions on securities transactions and therefore does not match exactly the data on U.S. international transactions published by the Department of Commerce. [Return to table](#)

4. Includes (4d) or represents (5c) stocks acquired through nonmarket means such as mergers and reincorporations. [Return to table](#)

5. Quarterly data; seasonally adjusted. [Return to table](#)

6. Transactions by nonbanking concerns and other banking and official transactions not shown elsewhere plus amounts resulting from adjustments made by the Department of Commerce and revisions (in lines 1 through 5 and 8) since publication of the quarterly data in the Survey of Current Business. [Return to table](#)

7. Seasonally adjusted; consists of transactions in nonproduced nonfinancial assets and capital transfers. [Return to table](#)

G-10 Group of Ten (Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, United Kingdom, United States). [Return to table](#)

ECB European Central Bank. [Return to table](#)

OPEC Organization of the Petroleum Exporting Countries. [Return to table](#)

... Not applicable. [Return to table](#)

Source: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Treasury International Capital reports with staff adjustments.

† Note: Data values for figures are rounded and may not sum to totals. [Return to text](#)

Last update: April 1, 2015
