Accessible Material

December 2009 Bluebook and Greenbook Tables and Charts

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Accessible Material

December 2009 Bluebook Tables and Charts†

Recent Developments

Chart 1
Interest Rate Developments

Figure: Central tendencies of the expected federal funds rate

A line chart over late 2009 to early 2012. Unit is percent. There are four curves that plot the Mean and Mode as of "Recent: 12/10/2009" and "Last FOMC: 11/3/2009". All four curves begin at about 0.1 and increase, more gradually at first. The recent mean increases smoothly to end at about 2.0, whereas the last FOMC mean increases smoothly to end at about 2.5. The recent mode increases smoothly to end at about 1.0, whereas the last FOMC mode increases smoothly to end at about 1.4.

Note. Mean is estimated from federal funds and Eurodollar futures. Mode is estimated from distribution of federal funds rate implied by interest-rate caps. Both include an allowance for term premiums and other adjustments.

Source. CME Group.

Figure: Implied distribution of federal funds rate six months ahead

A bar chart shows two distributions, one for "Recent: 12/10/2009" and one for "Last FOMC: 11/3/2009", over federal funds rates from 0.25 to 3.50 percent. Approximate recent values are as follows. 0.25: 75%. 0.50: 15%. 0.75: 7.5%. 1.00: 2.5%. Last FOMC values are approximately as follows. 0.25: 63%. 0.50: 7.5%. 0.75: 21%. 1.00: 1.5%. 1.25: 3%. 1.50: 1.5%. 2.00: 1%.

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

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

A bar chart shows two distributions, one for "Recent: 16 respondents" and one for "Last FOMC: 18 respondents", over 2010:Q1 through 2012:Q2. Approximate recent values are as follows: 2010:Q2: 18.75%. 2010:Q3: 31.25%. 2010:Q4: 18.75%. 2011:Q1: 12.5%. 2011:Q2: 6.25%. 2011:Q3: 6.25%. 2012:Q1: 6.25%. Approximate last FOMC values are as follows. 2010:Q2: 22.2%. 2010:Q3: 22.2%. 2010:Q4: 11.1%. 2011:Q1: 27.8%. 2011:Q3: 5.6%. 2012:Q1: 11.1%.

Source. Federal Reserve Bank of New York.

Figure: Nominal Treasury yields

A line chart shows two curves over 2007 through December 10, 2009. Data are daily. Unit is percent. The November FOMC meeting date is marked with a vertical line. The 2-year curve begins at about 4.8, and with some fluctuation increases to about 5.1 by mid-2007, decreases to about 1.3 by early 2008, increases to about 3.0 by mid-2008, decreases to about 0.4 by late 2008, and ends at about 0.75. This value is about 0.25 lower since the November FOMC meeting. The 10-year curve begins at about 4.75, and with some fluctuation increases to about 5.3 by mid-2007, decreases to about 3.5 by early 2008, increases to about 4.7 by late 2008, decreases to about 2.6 by year-end, and increases to end at about 3.7. This value is roughly unchanged from the November FOMC meeting.

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

Source. Staff estimates.

Figure: Inflation compensation

A line chart shows two curves over 2007 through December 10, 2009. Data are daily. Unit is percent. The November FOMC meeting date is marked with a vertical line. The "Next 5 years" curve begins at about 2.3, and with some fluctuation increases to about 2.5 by mid-2008, decreases to about -1.6 by late 2008, and increases to end at about 1.7. This value is roughly unchanged from the November FOMC meeting. The "5-to-10 year forward" curve begins at about 2.5, fluctuates between about 2.5 and 3.2 through late 2008, increases to about 3.6 and decreases to about 2.0 near year-end, and then increases to end at about 3.0. This value is roughly unchanged from the November 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., and staff estimates.

Figure: 10-Year Treasury Implied Volatility

A line chart shows one curve over January 2007 through December 10, 2009. Data are daily. Unit is percent. The November FOMC meeting date is marked with a vertical line. The curve begins at about 4.5 and fluctuates widely but generally increases to about 14 by September 2008, and then decreases to end at about 6.

This value is about 1.5 lower since the November FOMC meeting.

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

Source: Bloomberg.

Chart 2
Asset Market Developments

Figure: Equity Prices

A line chart shows one curve over 2008 through December 10, 2009. Data are daily. Unit is an index, January 2, 2008 = 100. The November FOMC meeting date is marked with a vertical line. The S&P 500 curve begins at about 100, and fluctuates but generally decreases to about 60 by late 2008. It remains near that level through about January 2009, decreases to about 50 in 2009:Q1, and increases to end at about 75. This value is about 5 higher since the November FOMC meeting.

Source. Bloomberg.

Figure: S&P 500 earnings per share

A line chart shows one curve over 2000 through 2009:Q3. Data are quarterly (s.a.). Unit is dollars. The curve begins at about 14, dips to about 11 by 2002, increases to about 24 by 2007, fluctuates and decreases to about 6 by 2009, and increases to end at an estimated value of about 17.

Source. Thomson Financial.

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

A line chart shows one curve over 2002 through December 10, 2009. Data are daily. Unit is percent. The November FOMC meeting date is marked with a vertical line. The curve begins at about 20, fluctuates but increases to about 45 by mid-2002, and decreases to about 5 by 2007. It increases and fluctuates between about 10 and 30 through mid-2008, increases to about 80 by year-end, and decreases to end at about 20. This value is about 10 less since the November FOMC meeting.

Source. Chicago Board Options Exchange.

Figure: Bank ETFs

A line chart shows two curves over January 2009 through December 9, 2009. Data are daily. Unit is an index, January 2, 2009 = 100. The November FOMC meeting date is marked with a vertical line. The "Large banks" curve begins at 100, fluctuates and generally decreases to nearly 40 by March, and increases to end at about 97. This value is about 5 more since the November FOMC meeting. The "Regional banks" curve begins at 100, and fluctuates and generally decreases to nearly 50 by March. The curve fluctuates between about 50 and 80 for the remainder of the period, and generally increases to end at about 72. This value is about 4 more since the November FOMC meeting.

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

Source. Bloomberg.

Figure: Corporate bond spreads

A line chart shows two curves over 2002 through December 10, 2009. Data are daily. Unit is basis points. The November FOMC meeting date is marked with a vertical line. The two curves are plotted relative to different scales, and fluctuate roughly in parallel throughout the chart. The "10-year BBB" curve begins at about 200, increases to about 300 by late 2002, decreases to about 100 by early 2005, increases to about 300 by early 2008, and increases further to about 650 by 2009. It then generally decreases to end at about 250. This value is roughly unchanged from the November FOMC meeting. The "10-year High-Yield" curve begins at about 500, increases to about 750 by late 2002, decreases to nearly 250 by early 2005, and remains near that level through mid-2007. It then increases to about 1650 by the end of 2008, and decreases to end at about 550. This value is roughly unchanged from the November FOMC meeting.

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

Source. Merrill Lynch and staff estimates.

Figure: Secondary loan market pricing

A line chart shows two curves over January 2007 through December 9, 2009. Data are daily. The November FOMC meeting date is marked with a vertical line. The two curves are plotted relative to different scales, and fluctuate roughly in opposition throughout the chart. The bid-ask spread curve (basis points) begins at about 60, and generally increases in rough steps, reaching a peak of about 410 by January 2009. It then decreases to end at about 180. This value is roughly unchanged from the November FOMC meeting. The bid price curve (percent of par) begins at about 100, and generally decreases in rough steps, reaching a low of about 60 and December 2008. It then generally increases to end at about 85. This value is roughly unchanged from the November FOMC meeting.

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

Chart 3
Credit Market Developments

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

A stacked bar chart over 2007 through November 2009. Unit is billions of dollars, monthly rate. The chart plots three series, "C&I loans", "Commercial paper", and "Bonds". The sum of the three series is also plotted as a curve. Approximate values are as follows. 2007: C&I loans: 22; bonds: 25; sum: 47. 2008:H1: C&I loans: 17; bonds: 21; sum: 38. 2008:H2: C&I loans: 9; commercial paper: 4; bonds: 11; sum: 24. 2009:Q1: C&I loans: -15; commercial paper: -12; bonds: 47; sum: 20. 2009:Q2: C&I loans: -21; commercial paper: -13; bonds: 34; sum: 0. 2009:Q3: C&I loans: -36; commercial paper: -1; bonds: 22; sum: -15. October 2009: C&I loans: -22; commercial paper: 4; bonds: 14; sum: -5. November 2009: C&I loans: -19; commercial paper: -14; bonds: 37; sum: 4.

Note. CP and C&I loans are seasonally adjusted; bonds are not.

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

Figure: Select interest rates

A line chart shows three curves over January through December 2009. Unit is percent. The November FOMC meeting date is marked with a vertical line. The "30-year fixed rate mortgage" curve begins at about 5.0 and remains near that level throughout the period. It increases to about 5.6 in June, and decreases to end at about 4.8 on December 9. This value is about 2.5 less since the November FOMC meeting. The "MBS yield" curve begins at about 4.2 and fluctuates between about 3.7 and 5.0 throughout the period. It increases to about 5.0 in June, and decreases to end at about 4.25 on December 10. This value is about 2 less since the November FOMC meeting. The "On-the-run 10-year Treasury" curve begins at about 2.4, increases to about 3.9 by June, and fluctuates between that value and about 3.25 for the remainder of the period, ending at about 3.5. This value is roughly unchanged from the November FOMC meeting.

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

Source. Bloomberg.

Figure: Gross ABS issuance

A stacked bar chart over 2006 through December 2009 (actual issuance as of October 23, 2009). Unit is billions of dollars. The chart plots three series, "Credit Card", "Auto", and "Student Loan". Approximate values are as follows. 2006: credit card: 5; auto: 8; student loan: 6.5; total: 19.5. 2007: credit card: 7.5; auto: 7; student loan: 5; total: 19.5. 2008:H1: credit card: 8; auto: 5.5; student loan: 4.5; total: 18. 2008:H2: credit card: 1.5; auto: 1; student loan: 1; total: 3.5. 2009:Q1: credit card: 2; auto: 3; student loan: 1; total: 6. 2009:Q2: credit card: 7.5; auto: 4; student loan: 2.5; total: 14. 2009:Q3: credit card: 6; auto: 6; student loan: 2; total: 14. October 2009: credit card: 0; auto: 5; student loan: 1; total: 6. November 2009: credit card: 0.5; auto: 8.5; student loan: 1.5; total: 10.5. December 2009: credit card: 1; auto: 0.9; student loan: 0.6; total: 2.5.

Note. 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: Libor over OIS spreads

A line chart shows three curves over September 2008 through December 9, 2009. Data are daily. Unit is basis points. The November FOMC meeting date is marked with a vertical line. The "1-month" and "3-month" curves are nearly identical. They begin at about 80, generally increase to about 360 by October 2008, decrease to about 90 by January 2009, and decrease further to end at about 10. This value is roughly unchanged from the November FOMC meeting. The "6-month" curve begins at about 100, generally increases to about 320 by October 2008, decreases to about 125 by January 2009, and decreases on net to end at about 25. This value is about 5 less since the November FOMC meeting.

Source. British Bankers' Association and Prebon.

Figure: Spreads on 30-day commercial paper

A line chart shows two curves over July 2007 through December 9, 2009. Data are daily. Unit is basis points. The November FOMC meeting date is marked with a vertical line. The "ABCP" curve begins at about 0, fluctuates between about 0 and 200 through January 2008, and then fluctuates more narrowly between about 50 and 100 through September 2008. The curve then generally increases to about 400 by October 2008, generally decreases to about 50 by January 2009, and then decreases on net to end near 0. This value is roughly unchanged from the November FOMC meeting. The "A2/P2" curve follows a similar pattern at first. It begins near 0, fluctuates between about 0 and 150 through January 2008, generally increases to about 100 by April 2008, and fluctuates near 75 through September 2008. The curve then increases sharply to about 400 before the end of the month, and continues to increase to about 625 by January 2009. It then decreases sharply to about 200 and January, generally decreases to about 50 by May 2009, and continues to decrease to end near 0. This value is roughly unchanged from the November 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: Usage of TALF and other lending facilities

A line chart shows two curves over January 2007 through December 2009. Data are daily. Unit is billions of dollars. The two curves use two different scales. The November FOMC meeting date is marked with a vertical line. The "TALF" curve begins at 0, and remains at that level until March 2009. It then increases in small steps to about 45 by September 2009, and remains near that level for the rest of the period. The "Other facilities" curve begins at 0, and remains near that level through December 2007. It then generally increases to about 250 by May 2008 and remains near that level through September. The curve then increases rapidly to nearly 1500 by November, fluctuates near that level until January 2009, and then decreases almost evenly to end at about 150. This value is about 50 less since the November FOMC meeting.

Note. "Other facilities" includes primary, secondary, and seasonal credit; TAF; PDCF; dollar liquidity swaps; CPFF; and AMLF.

Source. Federal Reserve.

[Box:] Balance Sheet Developments during the Intermeeting Period

Federal Reserve Balance Sheet
Billions of dollars

	Change since last FOMC	Current (12/9/2009)	Maximum level	Date of maximum level
Total assets	**21**	**2,190**	**2,256**	**12/17/08**
Selected assets:				
Liquidity programs for financial firms	-72	122	1,247	11/06/08
Primary, secondary, and seasonal credit	-3	19	114	10/28/08
Term auction credit (TAF)	-53	86	493	03/11/09
Foreign central bank liquidity swaps	-15	17	586	12/04/08
Primary Dealer Credit Facility (PDCF)	0	0	156	09/29/08
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)	0	0	152	10/01/08
Lending through other credit facilities	+0	58	351	01/23/09
Net portfolio holdings of Commercial Paper Funding Facility LLC (CPFF)	-1	14	351	01/23/09
Term Asset-Backed Securities Loan Facility (TALF)	1	44	45	11/26/09
Support for specific institutions	1	111	118	04/02/09
Credit extended to AIG, net	-23	21	91	10/27/08
Preferred interests in AIA Aurora LLC and ALICO Holdings LLC	25	25	25	12/09/09
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	-1	65	75	12/30/08
Securities held outright*	89	1,787	1,787	11/24/09
U.S. Treasury securities	+0	777	791	08/14/07
Agency securities	9	156	156	12/09/09
Agency mortgage-backed securities**	80	854	856	11/24/09
Memo: Term Securities Lending Facility (TSLF)	0	0	236	10/01/08
Total liabilities	**23**	**2,137**	**2,213**	**12/04/08**
Selected liabilities:				
Federal Reserve notes in circulation	7	883	883	12/09/09
Reserve balances of depository institutions	41	1,107	1,169	11/27/09
U.S. Treasury, general account	-25	55	137	10/23/08
U.S. Treasury, supplementary financing account	0	15	559	10/22/08
Other deposits	1	2	53	04/14/09
Total capital	**-2**	**52**	**55**	**12/01/09**

+0 (-0) denotes positive (negative) value rounded to zero. 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 an additional $113 billion of MBS, on net. Total MBS purchases are about $1,071 billion. Return to table

Chart 4
International Financial Indicators

Figure: Nominal trade-weighted dollar indexes

A line chart shows three curves from 2007 through December 10, 2009. Data are daily. Unit is an index, December 31, 2006 = 100. The November FOMC meeting date is marked with a vertical line. The "Broad" curve begins at about 100, generally decreases to about 90 by early 2008, fluctuates near that level through mid-2008, generally increases to about 107.5 by early 2009, and generally decreases to end at about 95. This value is roughly unchanged from the November FOMC meeting. The "Major Currencies" curve begins at about 100, generally decreases to about 85 by early 2008, generally increases to about 106 by early 2009, and generally decreases to end at about 90. This value is about one greater since the November FOMC meeting. The "Other Important Trading Partners" curve begins at about 100, generally decreases to about 92 by mid-2008, generally increases to about 111 by early 2009, and generally decreases to end at about 100. This value is roughly unchanged from the November FOMC meeting.

Source. FRBNY and Bloomberg.

Figure: Nominal 10-year government bond yields

A line chart shows three curves from 2007 through December 10, 2009. Data are daily. Unit is percent. The November FOMC meeting date is marked with a vertical line. The "UK" and "Germany" curves are plotted on a scale of about 2.0 to 6.5, and the "Japan" curve is plotted on a scale of about 0.5 to 3.0, which causes the plotted curves to intersect frequently. The UK curve begins at about 4.75, generally increases to about 5.5 by mid-2007, decreases to about 4.3 by early 2008, increases to about 5.25 by mid-2008, decreases to about 3.0 by early 2009, and increases on net to end at about 3.75. This value is about 0.1 less since the November FOMC meeting. The Germany curve begins at about 4.0, generally increases to about 4.7 by mid-2007, decreases to about 3.7 by early 2008, increases to about 4.7 by mid-2008, decreases to about 3.0 by 2009, and increases on net to end at about 3.25. This value is about 0.15 less since the November FOMC meeting. The Japan curve begins at about 1.7, generally increases to about 1.9 by mid-2007, decreases to about 1.25 by early 2008, increases to about 1.9 by mid-2008, and decreases on net to end at about 1.3. This value is about 0.15 less since the November FOMC meeting.

Source. Bloomberg.

Figure: Stock price indexes: Industrial countries

A line chart shows three curves from 2007 through December 10, 2009. Data are daily. Unit is an index, December 31, 2006 = 100. The November FOMC meeting date is marked with a vertical line. The "UK (FTSE-350)" curve begins at about 100, generally increases to about 108 by mid-2007, decreases to about 55 by early 2009, and increases on net to end at about 83. This value is about 3 greater since the November FOMC meeting. The "Euro Area (DJ Euro)" curve begins at about 100, generally increases to about 112 by early 2007, decreases to about 42 by early 2009, and increases on net to end at about 67. This value is about 3 greater since the November FOMC meeting. The "Japan (Topix)" curve begins at about 100, generally increases to about 108 by early 2007, decreases to about 42 by early 2009, increases to about 58 by 2009:Q3, and decreases on net to end at about 53. This value is roughly unchanged from the November FOMC meeting.

Source. Bloomberg.

Figure: Stock price indexes: Emerging market economies

A line chart shows three curves from 2007 through December 10, 2009. Data are daily. Unit is an index, December 31, 2006 = 100. The November FOMC meeting date is marked with a vertical line. The "Brazil (Bovespa)" curve begins at about 100, generally increases to about 160 by mid-2008, decreases to about 70 by late 2008, and increases to end at about 150. This value is about 20 greater since the November FOMC meeting. The "Korea (KOSPI)" curve begins at about 100, generally increases to about 140 by late 2007, decreases to about 65 by late 2008, and increases to end at about 115. This value is about 5 greater since the November FOMC meeting. The "Mexico (Bolsa)" curve begins at about 100, fluctuates between about 100 and 125 through mid-2008, generally decreases to about 65 by late 2008 and early 2009, and increases to end at about 120. This value is about 10 greater since the November FOMC meeting.

Source. Bloomberg.

Chart 5
Debt and Money

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

	Total	Business	Household	Government
2007	8.7	13.4	6.7	6.1
2008	5.9	5.2	0.3	17.5
H1	4.4	7.1	1.7	5.6
H2	7.2	3.1	-1.1	28.6
2009				

Q1	4.3	0.5	-1.2	17.9
Q2	4.5	-2.2	-1.6	22.0
Q3	2.8	-2.6	-2.6	16.9
Q4p	1.7	-0.7	-1.9	9.3

Source. Flow of Funds.

p Projected. Return to table

Figure: Growth of debt of household sector

A line chart shows two curves over 1991 through 2009:Q3. Data are quarterly, s.a.a.r. Unit is percent. The "Home mortgage" curve begins at about 8, fluctuates but generally decreases to about 5 by 1996, generally increases to about 16 by 2003, and then generally decreases to end at about -3.5. The "Consumer credit" curve begins at about 0, generally increases to about 17 by late 1994, decreases and fluctuates between about 2 and 14 through 2001, and then decreases again and fluctuates between about 3 and 8 through 2008. The curve then generally decreases to end at about -3.5.

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

Figure: Bank credit

A line chart shows one curve over February 2007 through November 2009. Data are monthly averages. Unit is an index, January 2008 = 100. The series begins at about 92, generally increases to about 105.5 by November 2008, and a decreases to end at about 97.5 (estimated).

Source. Federal Reserve.

Figure: C&I loan rate spread

A line chart shows one curve over mid-1997 through 2009:Q4. Data are quarterly. Unit is basis points. The NBER peak is plotted as a vertical line in December 2007. The curve begins at about 155, generally increases to nearly 190 by late 2002, generally decreases to about 145 by 2006, remains near that level through mid-2008, and then increases quickly to end at about 215. It is about 145 at the time of the NBER peak.

Note. Weighted-average spread over market interest rates on comparable-maturity instruments, adjusted for changes in nonprice loan characteristics. The NBER peak is the last business cycle peak as defined by the NBER.

Source. Survey of Terms of Business Lending.

Figure: Growth in Unused Commitments

A line chart shows three curves over 1990 through 2009:Q3. Data are quarterly, n.s.a.a.r. Unit is percent. The NBER peak is plotted as a vertical line in December 2007. The "Credit Card Lines" curve begins at about 10, fluctuates between 10 and 25 through 1993, generally increases to about 40 by 1995, generally decreases to about -12 by 1999, fluctuates between that level and about 25 through 2006, and generally decreases to end at about -15. It is about 5 at the time of the NBER peak. The "Home Equity Lines of Credit" curve begins at about 25, fluctuates between about 2 and 25 through 1999, fluctuates widely around 20 through 2002, increases to about 35 by 2004, and decreases to end at about -15. It is about 0 at the time of the NBER peak. The "Other" curve begins at about 0, generally increases to about 22 by 1997, decreases to about -10 by 2002, generally increases to about 20 by 2004, fluctuates around 15 through 2007, decreases to about -38 by late 2008, and ends at about -5. It is about -10 at the time of the NBER peak.

Note. "Other" is total unused commitments excluding home equity and credit cards. The NBER peak is the last business cycle peak as defined by the NBER.

Source. Call Report data, adjusted for the effects of merger and failure activity involving large thrift institutions.

Figure: Growth of M2

A bar chart shows growth of M2 from 2007 through November 2009. Data are s.a.a.r. Unit is percent. Approximate values are as follows: 2007: 6. 2008:H1: 7. 2008:H2: 9.5. 2009:Q1: 12.5. 2009:Q2: 2.5. 2009:Q3: 0. October 2009: 4. November 2009: 4.5 (estimated).

Source. Federal Reserve.

[Box:] Commercial Bank Loan Growth and Bank Health

Figure: "Weak" banks

A line chart shows two curves over 1988 through 2009:Q3. Data are quarterly. Unit is percent. "Weak" banks are classified according to CAMELS ratings at the beginning of the quarter. The "Share of banks that are weak" curve begins at about 26, decreases to about 21 by 1990, increases to about 23 by 1992, decreases to about 4 by 1998, increases to about 8 by 2003, decreases to about 5 by 2007, and increases to end at about 21. It is about 7 by the NBER peak. The "Share of loans held by weak banks" curve begins at about 20, decreases to about 17 by 1990, increases rapidly to about 45 by 1992, decreases rapidly to about 2 by 1995, fluctuates between about 1 and 4 through 2008, and then increases rapidly to end at about 42. It is about 1 by 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.

Figure: Growth in loans at domestic banks

A line chart shows two curves over 1988 through 2009:Q3. Data are quarterly. Unit is four-quarter percent change. Banks are classified according to CAMELS ratings at the beginning of the quarter. The "Strong banks" curve begins at about 7.5, increases to about 8.5 by late 1989, decreases to about -0.5 by 1991, crosses back into positive range by 1992, generally increases to about 12 by 1995, generally decreases to about 4 by 1998, generally increases to about 10 by 2000, generally decreases to about 1 by 2002, generally increases to about 12 by the NBER peak, and decreases to end at about -6. The "Weak banks" curve begins at about -3, generally increases to about -1 by late 1989, decreases to about -10 by 1991, swings into positive territory by 1994, fluctuates between about -0.5 and +5 through late 1997, decreases to about -11 by late 1998, generally increases to about 10 by 2000, generally decreases to about -11 by late 2002, increases to about 3 by late 2003, increases again to about 6 by 2006, and generally decreases to end at about -15. It is about 2.5 by 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.

Figure: Growth in loans at domestic banks

A bar and line chart shows three series over 1988 through 2009:Q3. Data are quarterly. Unit is four-quarter percent change. The "All domestic banks" curve begins at about 3.5, increases to about 4.5 by mid-1989, decreases to about -5 by mid-1991, increases to about 11 by mid-1995, generally decreases to about 4 by late 1997, generally increases to about 10 by late 2000, decreases to about 0.5 by early 2002, generally increases to about 12 by late 2007, and decreases to end at about -9.5. The "Strong banks" series remains almost entirely in positive range, and tracks fairly closely with the "All domestic banks" curve. The "Weak banks" series is about 0 or slightly negative throughout most of the period. In late 1990, the values for strong banks and weak banks decrease nearly in parallel. Both series reach low points in mid-1991, with strong banks dipping slightly into negative territory, and weak banks reaching about -5. The series then increase roughly in parallel through late 1993. Also, both series decrease in 2008, with strong banks ending at about -3.5 in 2009:Q3, and with weak banks ending at about -6 in 2009:Q3.

Figure: Net fraction tightening standards

A bar chart plots two series over 2009:Q1 through 2009:Q3. Data are quarterly. Unit is percent. The "Strong banks" series begins at about 57, decreases to about 35 by Q2, and decreases again to about 27 by Q3. The "Weak banks" series begins at about 49, decreases to about 48 by Q2, and decreases again to about 20 by Q3.

Figure: Net fraction reporting strengthened demand

A bar chart plots two series over 2009:Q1 through 2009:Q3. Data are quarterly. Unit is percent. The "Strong banks" series begins at about -32, decreases to about -38 by Q2, and increases to about -20 by Q3. The "Weak banks" series begins at about -58, increases to about -37 by Q2, and increases again to about -26 by Q3.

† Note: Data values for figures are rounded and may not sum to totals. Return to text

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December 2009 Bluebook Tables and Charts†

Monetary Policy Strategies

Chart 6
Equilibrium Real Federal Funds Rate

Figure: Short-Run Estimates with Confidence Intervals

A line chart plots two series and three ranges over 1990 through 2009. Unit is percent. "The actual real funds rate based on lagged core inflation" curve begins at about 4.5, decreases to about 0 by late 1992, generally increases to about 4.5 by mid-2000, decreases to about -1 by mid-2004, increases to about 3 by mid-2007, and generally decreases to end at about -1.5. The "Green book-consistent measure (FRB/US)" begins at about 4 in 1997, generally increases to about 5.5 by mid-2000, generally decreases to about 0 by mid-2003, generally increases to about 3 by mid-2007, decreases to about -4 by early 2009, and increases to end at -2. The "Range of model-based estimates" begins at about 1 to4, generally narrows that increases to about 2 to 4.5 by 2000, decreases to about -0.5 to 2 by 2003, narrows to about 1 to 2 by early 2008, decreases to about -5.5 to -1.5 by early 2009, and increases to end at about -2 to 0.5. The "70 Percent confidence interval" follows a similar pattern, but is wider by about 0 to 1 percent above and below. The "90 Percent confidence interval" also follows a similar pattern, and is about 1 percent wider than the 70 percent confidence interval above and below. The two curves fluctuate up and down across these ranges, but remain within the 90 percent confidence interval throughout the period.

Short-Run and Medium-Run Measures

	Current Estimate	*Previous Bluebook*
Short-Run Measures		
Single-equation model	-1.9	*-1.7*
Small structural model	-1.4	*-1.2*
EDO model	0.5	*0.4*
FRB/US model	-2.1	*-2.0*
Confidence intervals for four model-based estimates		
70 percent confidence interval	-3.0 to 0.6	
90 percent confidence interval	-3.9 to 1.8	
Greenbook-consistent measures		
EDO model	-3.3	*-3.7*
FRB/US model	-1.9	*-2.0*
Medium-Run Measures		
Single-equation model	1.2	*1.3*
Small structural model	1.8	*1.9*
Confidence intervals for two model-based estimates		
70 percent confidence interval	0.6 to 2.5	
90 percent confidence interval	-0.2 to 3.0	
TIPS-based factor model	2.0	*2.0*
Memo		
Actual real federal funds rate	-1.4	*-1.2*

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

Chart 7
Constrained vs. Unconstrained Monetary Policy (2 Percent Inflation Goal)

Figure: Nominal Federal Funds Rate

A line chart plots three series over 2009:Q2 through 2014:Q4. Unit is percent. All three curves begin at about 0.2. The "Current Bluebook: Constrained" curve remains near the same level through mid-2012, and then increases steadily to end at about 4.5. The "Current Bluebook: Unconstrained" curve begins to decrease in 2009:Q4, reaches about -4 by 2011:Q1, and then increases to end at just over 5. The "Previous Bluebook: Unconstrained" curve begins to decrease in 2009:Q3, reaches about -5.5 by 2010:Q4, and then increases to end at about 5.5.

Figure: Real Federal Funds Rate

A line chart plots three series over 2009:Q2 through 2014:Q4. Unit is percent. All three curves begin at about -1.5. The "Current Bluebook: Constrained" curve increases to about -1 by 2011, remains near that level through mid-2012, and then increases steadily to end at about 2.5. The "Current Bluebook: Unconstrained" curve follows the first curve until 2009:Q4, decreases to about -5.5 by 2011, and then generally increases to end at about 3. The "Previous Bluebook: Unconstrained" curve follows the first curve until 2009:Q3, decreases to nearly -7 by late 2010, and then generally increases to end at just over 3.

Figure: Civilian Unemployment Rate

A line chart plots three series over 2009:Q2 through 2014:Q4. Unit is percent. All three curves begin at about 9.25. The "Current Bluebook: Constrained" curve increases to just over 10 by late 2009, decreases to about 3.75 by 2014:Q1, and increases to end at about 4. The "Current Bluebook: Unconstrained" curve follows the first curve until 2010:Q1, decreases to about four by late 2013, and increases to end at about 4.5. The "Previous Bluebook: Unconstrained" curve follows the first curve until 2009:Q4, decreases to about 4 by mid-2013, and increases to end at about 4.6.

Figure: Core PCE Inflation

A line chart plots three series over 2009:Q2 through 2014:Q4. Unit is percent. All three curves begin at about 1.65. The "Current Bluebook: Constrained" curve decreases to about 1.3 by 2009:Q3, increases to about 1.6 by 2010:Q1, decreases to about 1.2 by mid-2011, and then increases to end at about 2.0. The "Current Bluebook: Unconstrained" curve follows the first curve until late 2009, increases to about 1.7 by 2010:Q1, generally decreases to about 1.5 by 2011, and increases to end at about 2.1. The "Previous Bluebook: Unconstrained" curve follows the first curve until 2009:Q3, increases to about 1.7 by 2010:Q1, decreases to nearly 1.5 by mid-2010, and then generally increases to end at about 2.2.

Chart 8

The Policy Outlook in an Uncertain Environment

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

A line chart plots three series over 2009:Q4 through 2014:Q4. Unit is percent. The chart also includes dark and light shading that represent the 70 and 90 percent confidence intervals, respectively. The "Current Bluebook" curve begins near 0, begins to increase in mid-2011, reaches just over 4 by early 2014, and decreases slightly to end at 4. The "Previous Bluebook" curve begins near 0, begins to increase in early 2012, reaches about 4.2 by mid-2014, and decreases slightly to end just over 4. The "Green book assumption" curve begins near 0, begins to increase in mid-2011, and levels off to end at about 3.8. The upper and lower bounds of the 70 percent confidence interval begin near 0, and end at about 2.7 to 5.7. The upper and lower bounds of the 90 percent confidence interval begin near 0, and end at about 1.6 to 6.7.

Figure: Information from Financial Markets

A line chart plots two series over 2009:Q4 through 2014:Q4. Unit is percent. The chart also includes dark and light shading that represent the current 70 and 90 percent confidence intervals, respectively, and dashed lines that represent the previous Bluebook 70 and 90 percent confidence intervals. Both curves and all the confidence intervals begin near 0. The "Current Bluebook" curve increases to end at about 3.6. The "Previous Bluebook" curve increases to end at about 3.8. The current 70 percent confidence interval ends at about 1.5 to 5.5. The current 90 percent confidence interval ends at about 0.95 to 7.3. The previous Bluebook 70 and 90 percent confidence intervals increase more quickly than the current confidence intervals at first, but end at nearly the same values as the current intervals.

Near-Term Prescriptions of Simple Policy Rules

	Constrained Policy		Unconstrained Policy	
	2010Q1	2010Q2	2010Q1	2010Q2
Taylor (1993) rule	**0.13**	**0.13**	**-0.30**	**-0.46**
Previous Bluebook	*0.13*	*0.13*	*-0.56*	*-0.80*
Taylor (1999) rule	**0.13**	**0.13**	**-3.92**	**-3.92**
Previous Bluebook	*0.13*	*0.13*	*-4.23*	*-4.35*
Estimated outcome-based rule	**0.13**	**0.13**	**-0.38**	**-0.98**

Previous Bluebook	*0.13*	*0.13*	*-1.34*	*-1.97*
Estimated forecast-based rule	**0.13**	**0.13**	**-0.38**	**-0.93**
Previous Bluebook	*0.13*	*0.13*	*-1.34*	*-1.89*
First-difference rule	**0.39**	**0.67**	**0.39**	**0.67**
Previous Bluebook	*0.25*	*0.45*	*0.23*	*0.43*

Memo

	2010Q1	2010Q2
Greenbook assumption	0.13	0.13
Fed funds futures	0.14	0.19
Median expectation of primary dealers	0.13	0.13
Blue Chip forecast (December 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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December 2009 Bluebook Tables and Charts

Policy Alternatives

Table 1: Overview of Alternative Language for the December 15-16, 2009 FOMC Announcement

	November FOMC	December Alternatives		
		A	B	C
Forward Guidance on Funds Rate Path				
	"exceptionally low levels of the federal funds rate for an extended period"	"this exceptionally low range for the federal funds rate for an extended period"	"exceptionally low levels of the federal funds rate for an extended period"	"low levels of the federal funds rate for some time"
Agency MBS Purchases				
Total Amount	"a total of" $1.25 trillion	"a total of" $1.5 trillion	$1.25 trillion	"cap" at $1.1 trillion
Pace	pace will "gradually slow"		"is gradually slowing"	
Completion	by the end of the first quarter of 2010	through the second quarter of 2010	by the end of the first quarter of 2010	by the end of January 2010
Agency Debt Purchases				
Total Amount	"about" $175 billion	$175 billion	"about" $175 billion	"cap" at $160 billion
Pace	pace will "gradually slow"		"is gradually slowing"	
Completion	by the end of the first quarter of 2010	by the first quarter of 2010	by the end of the first quarter of 2010	by the end of January 2010
Evaluation of LSAP Timing and Overall Amounts				
	timing and amounts of all LSAPs will continue to be evaluated	timing and amounts of all LSAPs will continue to be evaluated		
Liquidity Facilities				
	adjustments as warranted	adjustments as warranted	expire on February 1	

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Long-Run Projections of the Balance Sheet and Monetary Base

Balance Sheet Projections Summary

	Alternative A	Alternative B	Alternative C
Agency Debt Securities			
Total Purchased	$175 billion	$175 billion	$160 billion
December 2016	$20 billion	$20 billion	$15 billion
Agency MBS			
Total Purchased	$1.5 trillion	$1.25 trillion	$1.1 trillion
December 2016	$0.8 trillion	$0.7 trillion	$0.6 trillion
Total Assets			
Peak month	September 2010	June 2010	December 2009
Peak amount	$2.5 trillion	$2.4 trillion	$2.2 trillion
December 2016	$1.5 trillion	$1.5 trillion	$1.5 trillion
Reserve Balances			
Peak month	September 2010	December 2009	December 2009
Peak amount	$1.3 trillion	$1.2 trillion	$1.1 trillion

Baseline Scenario

Figure: Federal Reserve Assets

A stacked line chart plots eight series over 2006 through 2016. Unit is billions of dollars. Total assets begin at about 750 and steadily increase to about 850 by mid-2008, then increase rapidly to about 2,250 by the end of that year. The total fluctuates between about 1,800 and 2,300 until mid-2010, steadily decreases to about 1,400 by early 2016, and ends at about 1,450. The "Treasury securities" curve begins at about 700, remains near that level through late 2007, decreases to about 500 by mid-2008, remains near that level through early 2009, increases to about 700 by later that year, steadily decreases to about 600 by early 2016, and ends at about 700. The "Repurchase agreements" curve begins at about 25, remains near that level through 2007, increases to about 100 by mid-2008, and decreases to about 0 by the end of that year. The "Other loans and facilities" curve begins near 0 in early 2008, increases to about 50 by mid-2008, increases rapidly to about 700 by later that year, and then gradually tapers back to near 0 by the end of the period. The "Agency debt" curve begins at about 0 in mid-2008, increases to about 200 by early 2010, and then gradually tapers to about 20 by the end of the period. The "TAF" curve begins at 0 in late 2007, increases to about 400 by late 2008, and tapers to about 0 by mid-2010. The "SDR and other assets" curve begins at about 50, remains at about that level through early 2009, and ends at about 100. The "Agency MBS" curve begins at about 0 in mid-2008, increases to about 1,100 by mid-2010, and steadily decreases to end at about 600. The "Central bank swaps" curve begins at about 0 in late 2007, increases to about 550 by late 2008, and tapers to about 0 by early 2010.

Figure: Federal Reserve Liabilities and Capital

A stacked line chart plots six series over 2006 through 2016. Unit is billions of dollars. Total liabilities and capital begin at about 750 and steadily increase to about 850 by mid-2008, then increase rapidly to about 2,250 by the end of that year. The total fluctuates between about 1,800 and 2,300 until mid-2010, steadily decreases to about 1,400 by early 2016, and ends at about 1,450. The "Federal Reserve notes" curve begins at about 750 and gradually increases to end at about 1,200. The "Reverse repurchase agreements" curve begins at about 25, increases to about 100 by late 2008, and gradually decreases to end at about 75. The "Deposits, other than reserve balances" curve begins near 0 in mid-2008, increases to about 700 later that year, decreases and fluctuates between about 50 and 300 through mid-2010, maintains a level of about 200 through early 2015, and decreases to about 0 by early 2016. The "Reserve balances" curve begins at about 20, remains near that level through mid-2008, increases to about 1,000 by mid-2010, tapers back to about 20 by early 2015, and remains near that level for the remainder the period. The "Other liabilities" curve begins at about 20 and remains near that level throughout the period. The "Capital" curve begins at about 30, remains near that level through early 2009, and gradually increases to end at about 150.

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

Alternative A

Figure: Federal Reserve Assets

A stacked line chart plots eight series over 2006 through 2016. Unit is billions of dollars. This chart appears similar to the Federal Reserve Assets chart in the Baseline Scenario, with the following apparent differences: The "Treasury securities" curve, rather than increasing to about 700 in 2016, continues to decrease gradually to end at about 550. The "Agency MBS" curve, rather than increasing to about 1,100 in 2010, increases to about 1,300 by late 2010, and gradually decreases to end at about 750 rather than 600. Total assets climb to about 2,550 in 2010, but then gradually decrease to about 1,450, approximately the same level as in the Baseline Scenario.

Figure: Federal Reserve Liabilities and Capital

A stacked line chart plots six series over 2006 through 2016. Unit is billions of dollars. This chart appears similar to the Federal Reserve Liabilities and Capital chart in the Baseline Scenario, with the following apparent differences: the "Reserve balances" curve, rather than increasing to about 1,000 in mid-2010, increases to about 1,250 by late 2010, and tapers to about 20 by early 2016 rather than early 2015. The "Deposits, other than reserve balances" curve maintains a level of about 200 through early 2016 rather than early 2015, and decreases to end at about 20. Total liabilities and capital climb to about 2,550 in 2010, but then gradually decrease to about 1,450, approximately the same level as in the Baseline Scenario.

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

Alternative C

Figure: Federal Reserve Assets

A stacked line chart plots eight series over 2006 through 2016. Unit is billions of dollars. This chart appears similar to the Federal Reserve Assets chart in the Baseline Scenario, with the following apparent differences: The "Treasury securities" curve begins to increase in late 2015 rather than early 2016. It reaches about 600 by late 2015, and increases to end at about 750. The "Agency MBS" curve, rather than increasing to about 1,100 in 2010, increases to about 1,000 in the same timeframe, and gradually decreases to end at about 550 rather than 600. Total assets climb to about 2,250 in late 2009, but then gradually decrease to about 1,450, approximately the same level as in the Baseline Scenario.

Figure: Federal Reserve Liabilities and Capital

A stacked line chart plots six series over 2006 through 2016. Unit is billions of dollars. This chart appears similar to the Federal Reserve Liabilities and Capital chart in the Baseline Scenario, with the following apparent differences: the "Reserve balances" curve, rather than increasing to about 1,000 in mid-2010, reaches a peak in late 2009, and tapers to about 20 by mid-2014 rather than early 2015. The "Deposits, other than reserve balances" curve maintains a level of about 200 through mid-2014 rather than early 2015, and decreases to end at about 0 by mid-2015. Total liabilities and capital climb to about 2,250 in late 2009, but then gradually decrease to about 1,450, approximately the same level as in the Baseline Scenario.

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

Growth Rates for the Monetary Base

Date	Baseline	Alternative A	Alternative C	*Memo:* October baseline
	Percent, annual rate			
Monthly				
Sep-09	66.9	66.9	66.9	66.9
Oct-09	45.5	45.5	45.5	88.4
Nov-09	71.6	71.6	71.6	94.9
Dec-09	51.0	58.5	41.8	16.0
Jan-10	14.0	28.3	-3.5	-8.1
Feb-10	-4.5	9.8	-24.8	-10.3
Mar-10	-7.4	6.9	-27.0	-14.1
Apr-10	-38.6	-23.1	-52.0	-9.9
May-10	4.8	18.8	-5.9	10.4

Jun-10	20.6	33.3	10.1	8.9
Quarterly				
Q3 2009	-2.6	-2.6	-2.6	-2.5
Q4 2009	56.8	57.7	55.6	73.7
Q1 2010	21.9	33.6	6.9	6.9
Q2 2010	-11.7	2.7	-26.0	-4.3
Q3 2010	-4.4	10.2	-9.7	-2.4
Q4 2010	-7.4	-0.1	-6.6	-10.1
Annual - Q4 to Q4				
2009	39.7	40.0	39.4	45.0
2010	-0.6	11.9	-8.7	-2.5
2011	-9.2	-9.6	-9.0	-9.9
2012	-13.1	-12.6	-13.4	-13.1
2013	-9.4	-9.2	-9.6	-9.6
2014	-11.3	-10.8	-7.0	-10.8
2015	-0.1	-8.9	4.2	0.6
2016	3.9	-0.1	3.9	3.8

Note. Not seasonally adjusted. The calculated growth rates of the monetary base presented in the table are based on an approximation for month-average values.

† Note: Data values for figures are rounded and may not sum to totals. Return to text

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Debt, Bank Credit, and Money Forecasts

Growth Rates for M2

(percent, annual rate)

			Greenbook Forecast*
Monthly Growth Rates			
		Apr-09	-7.7
		May-09	10.2
		Jun-09	4.6
		Jul-09	-2.5
		Aug-09	-7.4
		Sep-09	4.0
		Oct-09	3.9
		Nov-09	4.6
		Dec-09	2.1
		Jan-10	1.8
		Feb-10	1.9
		Mar-10	2.0
		Apr-10	2.2
		May-10	2.3
		Jun-10	2.5
		Jul-10	2.6
		Aug-10	2.9
		Sep-10	3.0
		Oct-10	3.2
		Nov-10	3.4
		Dec-10	3.7
Quarterly Growth Rates			
		2009 Q2	2.7
		2009 Q3	0.1
		2009 Q4	2.6
		2010 Q1	2.2
		2010 Q2	2.2
		2010 Q3	2.7
		2010 Q4	3.2
Annual Growth Rates			
		2008	8.3
		2009	4.5
		2010	2.6
		2011	4.6
Growth	From	To	
	Oct-09	Mar-10	2.5

2008 Q4	2009 Q4	4.5
2009 Q4	2010 Q4	2.6

* This forecast is consistent with nominal GDP and interest rates in the Greenbook forecast. Actual data through November 30, 2009; projections thereafter. 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	-1.4	-1.9	-0.6
Lagged headline inflation	-1.2	-2.1	-0.8
Projected headline inflation	-1.2	-2	-0.7

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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 programs and credit facilities

Figure: Agency Debt

A line chart plots three series over 2009 through 2016. All of the curves begin at about 25. The "October" curve increases to about 175 by early 2010, and gradually decreases to end at about 30. The "Alternative A" curve is shown in the chart key, but is not plotted in the chart. The "Baseline" curve increases to about 175 by early 2010, and gradually decreases to end at about 25. The "Alternative C" curve increases to about 155 by late 2009, and gradually decreases to and at about 20.

Figure: Agency MBS

A line chart plots four series over 2009 through 2016. All of the curves begin at 0. The "October" curve increases to about 1,100 by mid-2010, and decreases steadily to end at about 650. The "Alternative A" curve increases to about 1,325 by late 2010, and decreases steadily to end at about 800. The "Baseline" curve is nearly identical to the October curve. The "Alternative C" curve increases to about 975 by early 2010, and decreases steadily to end at about 575.

Figure: Primary and Secondary Credit

A line chart plots two series over 2009 through 2016. The "October" curve begins at about 90, decreases to about 0 by 2012, and remains at that level for the remainder of the period. The "Baseline" curve is nearly identical to the October curve, except that it is slightly lower than the October curve from late 2009 through mid-2010.

Figure: TALF

A line chart plots two series over 2009 through 2016. The "October" curve begins at about 0, increases to about 95 by mid-2010, and decreases to 0 by the end of 2015. The "Baseline" curve begins at about 0, increases to just over 60 by early 2010, decreases to 0 by early 2015, and stays at that level for the remainder the period.

Federal Reserve liabilities and capital

Figure: Reverse Repurchase Agreements

A line chart plots two series over 2009 through 2016. The "October" curve begins at about 77, generally decreases to about 65 by late 2009, and stays at that level for the remainder of the period. The "Baseline" curve generally decreases to about 58 by early 2010, and stays at that level for the remainder of the period.

Figure: SFA

A line chart plots four series over 2009 through 2016. All of the curves begin at about 170 and track one another through mid-2014. They increase to about 200 in early 2009, stay at that level through midyear, decrease to about 20 in late 2009, increase back to 200 by early 2010, and stay at that level through mid-2014. The "October" curve begins to decrease in early 2015, reaches about 0 by early 2016, and stays at that level for the remainder of the period. The "Alternative A" curve begins to decrease in early 2016, and reaches about 20 by the end of that year. The "Baseline" curve tracks the October curve closely, except that it begins to decrease slightly later in 2015, and reaches 0 slightly later in 2016. The "Alternative C" curve begins to decrease in mid-2014, reaches 0 in late 2015, and stays at that level for the remainder of the period.

Figure: TGA

A line chart plots two series over 2009 through 2016. Both curves begin at about 25. The "October" curve fluctuates between about 15 and 135 through late 2010, decreases to about five before the end of the year, and stays at that level for the remainder of the period. The "Baseline" curve tracks the October curve through late 2009, but continues to fluctuate more widely through mid-2010. It then decreases to about five before the end of the year, and stays at that level for the remainder of the period.

Figure: Reserve Balances

A line chart plots four series over 2009 through 2016. All of the curves begin at about 850, fluctuate between about 650 and 900 through late 2009, and increase to about 1100 before the end of that year. The "October" curve increases to about 1,150 in early 2010, decreases to about 0 by early 2015, and stays at that level for the remainder of the period. The "Alternative A" curve increases to about 1,275 by late 2010, decreases to about 0 by early 2016, and stays at that level for the remainder of the period. The "Baseline" curve tracks the October curve closely. The "Alternative C" curve increases to about 1,150 in early 2010, generally decreases to about 0 by mid-2014, and stays at that level for the remainder of the period.

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

		End-of-Year							
	Nov 30, 2009	2009	2010	2011	2012	2013	2014	2015	2016
	$Billions								
Total assets	2,207	2,262	2,224	2,047	1,819	1,699	1,551	1,461	1,460
Selected assets:									
Liquidity programs for financial firms	144	126	5	1	1	1	1	1	1
Primary, secondary, and seasonal credit	20	21	5	1	1	1	1	1	1
Term auction credit (TAF)	101	89	0	0	0	0	0	0	0
Central bank liquidity swaps	23	16	0	0	0	0	0	0	0
Primary Dealer Credit Facility (PDCF)	0	0	0	0	0	0	0	0	0
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)	0	0	0	0	0	0	0	0	0
Lending through other credit facilities	59	62	61	55	21	15	4	0	0
Net portfolio holdings of Commercial Paper Funding Facility LLC (CPFF)	15	15	0	0	0	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	44	47	61	55	21	15	4	0	0
Support for specific institutions	111	105	87	64	29	14	3	2	1
Credit extended to AIG	45	40	46	32	6	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	65	65	41	32	23	14	3	2	1
Securities held outright	1,784	1,866	1,964	1,818	1,658	1,559	1,433	1,350	1,350
U.S. Treasury securities	777	775	768	746	679	659	613	595	673
Agency debt securities	155	164	150	107	81	63	43	38	20
Agency mortgage-backed securities	852	927	1,046	965	898	837	777	717	657
Repurchase agreements	0	0	0	0	0	0	0	0	0
Total liabilities	2,153	2,208	2,162	1,976	1,737	1,605	1,443	1,337	1,318
Selected liabilities									
Federal Reserve notes in circulation	883	882	907	936	994	1,060	1,115	1,164	1,213
Reverse repurchase agreements	58	63	58	58	58	58	58	58	58
Reserve balances of depository institutions	1,082	1,163	976	761	464	266	48	25	25
U.S. Treasury, general account	99	68	5	5	5	5	5	5	5
U.S. Treasury, supplemental financing account	15	15	200	200	200	200	200	68	0

Total capital	54	54	62	71	82	94	108	124	143

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

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Domestic Developments

Key Background Factors Underlying the Baseline Staff Projection

Note: In each panel, shading represents the projection period, which begins in 2009:Q4.

Figure: Federal Funds Rate

Line chart, by percent, 2006 to 2011. Data are quarterly averages. There are three series, "Current Greenbook", "October Greenbook", and "Market forecast". These three series track closely together throughout the chart. They begin at about 4.5 and generally increase to about 5.3 by mid-2006. It then generally decreases to about 0.1 by late 2009. Current Greenbook remains about constant until 2011, and generally increases to end at about 0.5. October Greenbook remains about constant until the end at about 0.1. Market forecast remains about constant until 2010, and generally increases to end at about 1.8.

Figure: Long-Term Interest Rates

Line chart, by percent, 2006 to 2011. Data are quarterly averages. There are six series, "BBB corporate rate", "Conforming mortgage rate" and "10-year Treasury rate". The October Greenbook is also marked separately for each series. BBB corporate rate and the October Greenbook begin at about 6 and generally increase to about 9.4 by late 2008. They track closely together, generally decreasing until they reach about 6.7. BBB corporate yield generally decreases to end at about 6. October Greenbook generally decreases to end at about 6.1. Conforming mortgage rate and the October Greenbook begin at about 6.2 and generally increase to about 6.6 by 2006. They generally decrease to about 5 by 2009, and generally increase to end at about 5.6. 10-year Treasury yield and the October Greenbook begin at about 4.7 and generally increase to about 5.2 by 2006. They then generally decrease to about 3.3 by early 2009, and generally increase to end at about 4.1.

Figure: Equity Prices

Line chart, 2006 to 2011. 2006:Q1 = 100, ratio scale. Data are quarter-end. There are two series, "Dow Jones Total Stock Market Index" and "October Greenbook". They begin at about 100 and generally decrease to about 98 by 2006. They then generally increase to about 117 by mid-2007, and generally decrease to about 62. Dow Jones Total Stock Market Index generally increases to end at about 114 and October Greenbook generally increases to end at about 110.

Figure: House Prices

Line chart, 2006 to 2011. 2006:Q1 = 100, ratio scale. Data are quarterly. There are two series, "LoanPerformance index" and "October Greenbook". They begin at about 100 and track closely together until they reach about 80 by 2008. LoanPerformance index generally decreases to about 83 by early 2009, and generally increases to about 70 by 2009. It then generally decreases to end at about 68. October Greenbook generally decreases to about 69 by early 2009, and generally increases to about 72 by 2009. It then generally decreases to end at about 69.

Figure: Crude Oil Prices

Line chart, by dollars per barrel, 2006 to 2011. Data are quarterly averages. There are two series, "West Texas Intermediate" and "October Greenbook". They begin at about 63 and generally increase to about 70 by 2006. They then generally decrease to about 58 by early 2007, and generally increase to about 125 by 2008. They then generally decrease to about 44 by early 2009, and generally increase to end at about 87.

Figure: Broad Real Dollar

Line chart, 2006 to 2011. 2006:Q1 = 100. Data are quarterly averages. There are two series, "Broad Real Dollar" and "October Greenbook". They begin at about 100 and generally decrease to about 87 by 2008. They generally increase to about 98 by early 2009. Broad Real Dollar generally decreases to end at about 85.5. October Greenbook generally decreases to end at about 87.

Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

	2009:Q3	2009:Q4

Measure	October Greenbook	December Greenbook	October Greenbook	December Greenbook
Real GDP	**3.4**	**2.5**	**2.8**	**3.8**
Private domestic final purchases	3.0	2.4	-.1	1.2
Personal consumption expenditures	3.4	3.0	.7	1.9
Residential investment	20.9	18.9	.1	8.1
Nonresidential structures	-12.3	-18.9	-23.3	-25.8
Equipment and software	1.1	2.4	3.5	5.9
Government outlays for consumption and investment	2.3	2.8	1.8	.6
	Contribution to growth (percentage points)			
Inventory investment	.9	.7	2.3	2.3
Net exports	-.6	-.9	.1	.4

Projections of Real GDP

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

Measure	2009:H2	2010:H1	2010	2011
Real GDP	**3.1**	**3.5**	**3.6**	**4.5**
Previous Greenbook	3.1	3.2	3.4	4.4
Final sales	1.6	2.7	2.9	4.0
Previous Greenbook	1.4	2.7	2.7	3.9
Personal consumption expenditures	2.4	2.5	2.6	3.4
Previous Greenbook	2.0	2.4	2.3	3.4
Residential investment	13.4	13.2	9.9	20.2
Previous Greenbook	10.0	9.5	10.0	22.6
Nonresidential structures	-22.4	-7.8	-3.8	1.1
Previous Greenbook	-18.0	-6.9	-3.2	0.3
Equipment and software	4.1	6.8	10.7	14.6
Previous Greenbook	2.3	8.2	10.0	13.6
Government purchases	1.7	3.1	1.9	.9
Previous Greenbook	2.1	2.6	1.7	.9
Exports	14.5	9.0	9.3	8.9
Previous Greenbook	12.2	8.4	8.7	8.8
Imports	13.5	8.5	8.0	7.5
Previous Greenbook	11.3	6.4	7.0	7.7
	Contribution to growth (percentage points)			
Inventory change	1.5	.8	.7	.5
Previous Greenbook	1.7	.4	.7	.5
Net exports	-.3	-.2	-.1	-.1
Previous Greenbook	-.2	.0	-.0	-.1

Decomposition of Structural Labor Productivity

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

Measure	1974-95	1996-2000	2001-07	2008	2009	2010	2011
Structural labor productivity	**1.5**	**2.5**	**2.7**	**2.3**	**2.5**	**1.6**	**1.9**
Previous Greenbook	1.5	2.5	2.8	2.3	2.5	1.6	1.9
Contributions[1]							

Capital deepening	.7	1.4	.7	.5	-.0	-.1	.5
Previous Greenbook	.7	1.4	.7	.5	-.0	-.1	.5
Multifactor productivity	.5	.7	1.7	1.6	2.4	1.6	1.4
Previous Greenbook	.5	.7	1.6	1.6	2.4	1.6	1.4
Labor composition	.3	.3	.3	.2	.2	.1	.1
MEMO							
Potential GDP	3.0	3.4	2.7	2.7	2.7	2.1	2.4
Previous Greenbook	3.0	3.4	2.8	2.7	2.7	2.1	2.4

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

1. Percentage points. Return to table

The Outlook for the Labor Market

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

Measure	2008	2009	2010	2011
Output per hour, nonfarm business	.9	4.7	.9	1.0
Previous Greenbook	.9	4.6	1.1	.8
Nonfarm private payroll employment	-2.1	-4.2	2.1	3.5
Previous Greenbook	-2.1	-4.4	1.8	3.4
Household survey employment	-1.5	-3.9	1.4	2.2
Previous Greenbook	-1.5	-3.7	1.6	2.4
Labor force participation rate[1]	65.9	65.0	64.9	64.8
Previous Greenbook	65.9	65.2	65.1	65.0
Civilian unemployment rate[1]	6.9	10.1	9.6	8.3
Previous Greenbook	6.9	10.1	9.5	8.2
MEMO				
GDP gap[2]	-4.8	-7.6	-6.2	-4.2
Previous Greenbook	-4.8	-7.6	-6.4	-4.5

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	2008	2009	2010	2011
PCE chain-weighted price index	1.7	1.3	1.3	1.2
Previous Greenbook	1.7	1.1	1.4	1.0
Food and beverages	6.8	-1.6	1.3	.7
Previous Greenbook	6.8	-1.9	1.3	.7
Energy	-9.1	2.8	4.3	3.5
Previous Greenbook	-9.1	1.3	7.7	2.4
Excluding food and energy	2.0	1.5	1.2	1.1
Previous Greenbook	2.0	1.4	1.1	1.0
Consumer price index	1.5	1.4	1.6	1.4
Previous Greenbook	1.5	1.3	1.7	1.2
Excluding food and energy	2.0	1.8	1.3	1.2

Previous Greenbook	2.0	1.7	1.2	1.1
GDP chain-weighted price index	1.9	.8	1.3	1.1
Previous Greenbook	1.9	.7	1.3	1.1
ECI for compensation of private industry workers[1]	2.4	1.2	1.8	1.9
Previous Greenbook	2.4	1.2	1.8	2.0
Compensation per hour, nonfarm business sector	2.6	2.4	2.0	2.0
Previous Greenbook	2.6	-.2	1.8	2.1
Prices of core goods imports[2]	3.8	-1.4	1.9	1.0
Previous Greenbook	3.8	-1.7	1.5	1.0

1. December to December. Return to table

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

The Long-Term Outlook

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

Measure	2009	2010	2011	2012	2013	2014
Real GDP	-.3	3.6	4.5	4.7	4.7	3.2
Civilian unemployment rate[1]	10.1	9.6	8.3	6.2	5.0	4.8
PCE prices, total	1.3	1.3	1.2	1.2	1.5	1.7
Core PCE prices	1.5	1.2	1.1	1.1	1.4	1.6
Federal funds rate[1]	.1	.1	.5	2.1	3.5	3.8

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

Alternative Scenarios

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

Measure and scenario	2009 H2	2010	2011	2012	2013-14
Real GDP					
Extended Greenbook baseline	3.1	3.6	4.5	4.7	3.9
Stronger recovery	3.1	5.3	5.8	4.4	3.2
Weaker aggregate demand	3.1	1.8	4.1	5.2	4.5
Jobless recovery	3.1	4.1	5.5	6.2	4.4
Weaker productivity	3.1	3.3	3.6	3.6	4.1
Labor market damage	2.9	2.8	3.9	4.5	4.2
Higher inflation expectations	3.1	3.7	4.6	4.2	3.5
Greater disinflation	3.1	3.7	4.5	5.2	4.8
Unemployment rate[1]					
Extended Greenbook baseline	10.1	9.6	8.3	6.2	4.8
Stronger recovery	10.1	9.1	7.3	5.4	4.7
Weaker aggregate demand	10.1	10.2	9.2	6.8	4.9
Jobless recovery	10.1	10.6	9.9	7.0	4.5
Weaker productivity	10.1	9.0	7.4	6.2	5.0
Labor market damage	10.1	10.4	9.5	7.3	5.2
Higher inflation expectations	10.1	9.6	8.2	6.3	5.2
Greater disinflation	10.1	9.6	8.3	6.0	4.0
Core PCE inflation					

Extended Greenbook baseline	1.4	1.2	1.1	1.1	1.5
Stronger recovery	1.4	1.2	1.1	1.1	1.7
Weaker aggregate demand	1.4	1.1	.8	.9	1.3
Jobless recovery	1.4	1.0	.4	.3	1.1
Weaker productivity	1.4	1.3	1.4	1.4	1.6
Labor market damage	1.4	1.4	1.2	1.2	1.5
Higher inflation expectations	1.4	1.4	2.0	2.2	2.7
Greater disinflation	1.4	.5	-.1	-.5	-.1
Federal funds rate[1]					
Extended Greenbook baseline	.1	.1	.5	2.1	3.8
Stronger recovery	.1	.1	1.5	3.0	4.2
Weaker aggregate demand	.1	.1	.1	1.1	3.5
Jobless recovery	.1	.1	.1	.1	3.7
Weaker productivity	.1	.2	1.8	2.5	3.7
Labor market damage	.1	.2	.7	2.0	3.6
Higher inflation expectations	.1	.1	1.7	3.5	5.0
Greater disinflation	.1	.1	.1	.1	2.4

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

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

Measure	2009	2010	2011	2012	2013	2014
Real GDP (percent change, Q4 to Q4)						
Projection	-.3	3.6	4.5	4.7	4.7	3.2
Confidence interval						
Greenbook forecast errors	-.8-2	1.9-5.3	3.1-5.9	...	...	...
FRB/US stochastic simulations	-.6-.0	2.3-5.2	2.7-6.3	2.6-6.8	2.5-7.0	.9-5.5
Civilian unemployment rate (percent, Q4)						
Projection	10.1	9.6	8.3	6.2	5.0	4.8
Confidence interval						
Greenbook forecast errors	10.0-10.2	8.9-10.3	7.3-9.3	...	...	...
FRB/US stochastic simulations	10.0-10.2	9.0-10.2	7.5-9.1	5.2-7.2	3.8-6.1	3.6-5.9
PCE prices, total (percent change, Q4 to Q4)						
Projection	1.3	1.3	1.2	1.2	1.5	1.7
Confidence interval						
Greenbook forecast errors	1.1-1.6	.1-2.6	.0-2.4	...	...	...
FRB/US stochastic simulations	1.2-1.5	.5-2.2	.2-2.2	.2-2.3	.5-2.6	.6-2.8
PCE prices excluding food and energy (percent change, Q4 to Q4)						
Projection	1.5	1.2	1.1	1.1	1.4	1.6
Confidence interval						
Greenbook forecast errors	1.3-1.7	.5-1.8	.1-2.0	...	...	...
FRB/US stochastic simulations	1.4-1.6	.6-1.8	.3-1.8	.4-2.0	.7-2.3	.9-2.5
Federal funds rate (percent, Q4)						
Projection	.1	.1	.5	2.1	3.5	3.8
Confidence interval						
FRB/US stochastic simulations	.1-.1	.1-.8	.1-2.1	.5-3.8	2.1-5.2	2.4-5.5

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, 2008 to 2014. . There are eight series, "Extended Greenbook baseline", "Stronger recovery", "Weaker aggregate demand", "Jobless recovery", "Weaker productivity", "Labor market damage", "Higher inflation expectations", and "Greater disinflation". They begin at about 2.3 and generally decrease to about -3.9 by 2009. They generally increase together until they reach about 1.9. Extended Greenbook baseline generally increases to about 4.9 by early 2013, and generally decreases to end at about 3.3. Stronger recovery generally increases to about 6 by 2011 and generally decreases to end at about 2.4. Weaker aggregate demand generally increases to about 5.5 by early 2013, and generally decreases to end at about 3.8. Jobless recovery generally increases to about 6.5 by early 2013, and generally decreases to end at about 3. Weaker productivity generally increases to about 4.6 by 2013, and generally decreases to end at about 3.6. Labor market damage generally increases to about 5 by late 2013 and generally decreases to end at about 3.6. Higher inflation expectations generally increases to about 4.7 by 2011, and generally decreases to end at about 2.9. Greater disinflation generally increases to about 5.8 by late 2013, and generally decreases to end at about 4. There is a 90 percent confidence interval shown, which ranges from about -0.3 to 7.1 and a 70 percent confidence interval, which ranges from about 1 to 5.6.

Figure: Unemployment Rate

Line chart, by percent, 2008 to 2014. There are eight series, "Extended Greenbook baseline", "Stronger recovery", "Weaker aggregate demand", "Jobless recovery", "Weaker productivity", "Labor market damage", "Higher inflation expectations", and "Greater disinflation". They begin at about 4.95 and generally increase to about 10.15 by late 2009. Extended Greenbook baseline generally decreases to end at about 4.8. Stronger recovery generally decreases to about 4.5 by early 2014, and generally increases to end at about 4.6. Weaker aggregate demand generally increases to about 10.2 by 2010, and generally decreases to end at about 4.88. Jobless recovery generally increases to about 10.5 by late 2010, and generally decreases to end at about 4.48. Weaker productivity generally decreases to end at about 5.0. Labor market damage generally increases to about 10.5 by 2010, and generally decreases to end at about 5.2. Higher inflation expectations generally decreases to end at about 5.2. Greater disinflation generally decreases to end at about 4.0. There is a 90 percent confidence interval shown, which ranges from about 2.8 to 6.5 and a 70 percent confidence interval, which ranges from about 3.6 to 5.8.

Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 2008 to 2014. There are eight series, "Extended Greenbook baseline", "Stronger recovery", "Weaker aggregate demand", "Jobless recovery", "Weaker productivity", "Labor market damage", "Higher inflation expectations", and "Greater disinflation". They begin at about 2.4 and generally increase to about 2.6 by 2008. They then generally decrease to about 1.3 by 2009, and generally increase together until they reach about 1.5 by late 2009. Extended Greenbook baseline generally decreases to about 1.08 by 2011, and generally increases to end at about 1.6. Stronger recovery generally decreases to about 1.08 by 2011, and generally increases to end at about 1.8. Weaker aggregate demand generally decreases to about 0.8 by early 2012, and generally increases to end at about 1.4. Jobless recovery generally decreases to about 0.25 by 2012, and generally increases to end at about 1.38. Weaker productivity generally decreases to about 1.25 by late 2010, and generally increases to end at about 1.7. Labor market damage generally decreases to about 1.2 by 2012, and generally increases to end at about 1.6. Higher inflation expectations generally decreases to about 1.5 by mid-2010, and generally increases to end at about 2.78. Greater disinflation generally decreases to about -0.45 by 2012, and generally increases to end at about 0.07. There is a 90 percent confidence interval shown, which ranges from about 1.4 to 6.5 and a 70 percent confidence interval, which ranges from about 2.4 to 5.5.

Figure: Federal Funds Rate

Line chart, by percent, 2008 to 2014. There are eight series, "Extended Greenbook baseline", "Stronger recovery", "Weaker aggregate demand", "Jobless recovery", "Weaker productivity", "Labor market damage", "Higher inflation expectations", and "Greater disinflation". They begin at about 3.2 and generally decrease to about 0.1 by late 2009. Extended Greenbook baseline remains about constant until mid-2011, and generally increases to end at about 3.8. Stronger recovery generally remains about constant until late 2010, and generally increases to end at about 4.3. Weaker aggregate demand remains about constant until 2012, and generally increases to end at about 3.5. Jobless recovery remains about constant until late 2012, and generally increases to end at about 3.8. Weaker productivity remains about constant until 2010, and generally increases to end at about 3.7. Labor market damage generally increases to end at about 3.7. Higher inflation expectations remains about constant until early 2011, and generally increases to end at about 5. Greater disinflation remains about constant until late 2012, and generally increases to end at about 2.4. There is a 90 percent confidence interval shown, which ranges from about 1.4 to 6.5 and a 70 percent confidence interval, which ranges from about 2.5 to 5.5.

Evolution of the Staff Forecast

Figure: Change in Real GDP

Line chart, by percent, Q4/Q4, January 23, 2008 to December 9, 2009. There are three series, "2009", "2010" and "2011". 2009 begins at about 2.25 and generally increases to about 3.0 by March 13, 2008. It then generally decreases to about -2.25 by March 12, 2009, and generally increases to end at about -2.5. 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 3.7. 2011 begins at about 4.5 by September 16, 2009 and remains about constant until the end.

Figure: Unemployment Rate

Line chart, by percent, fourth quarter, January 23, 2008 to December 9, 2009. There are three series, "2009", "2010" and "2011". 2009 begins at about 5.2 and generally increases to end at about 10.1. 2010 begins at about 5.9 by September 10, 2008 and generally increases to end at about 9.6. 2011 begins at about 7.9 by September 16, 2009 and generally increases to end at about 8.25.

Figure: Change in PCE Prices excluding Food and Energy

Line chart, by percent, Q4/Q4, January 23, 2009 to December 9, 2010. There are three series, "2009", "2010", and "2011". 2009 begins at about 1.9 and generally increases to about 2.2 by June 18, 2009. It then generally decreases to about 1.0 by January 22, 2010, and generally increases to end at about 1.5. 2010 begins at about 1.8 by September 10, 2009, and generally decreases to about 0.5 by March 12, 2010. It then generally increases to end at about 1.25. 2011 begins at about 1.0 by September 16, 2010 and generally increases to end at about 1.1.

Note: Because the core PCE price index was redefined as part of the comprehensive revisions to the NIPA, projections prior to the August 2009 Greenbook are not strictly comparable with more recent projections.

Changes in GDP, Prices, and Unemployment

(Percent, annual rate except as noted)

Interval		Nominal GDP		Real GDP		PCE price index		Core PCE price index		Unemployment rate[1]	
		10/29/09	12/09/09	10/29/09	12/09/09	10/29/09	12/09/09	10/29/09	12/09/09	10/29/09	12/09/09
Quarterly											
2009:	Q1	-4.6	-4.6	-6.4	-6.4	-1.5	-1.5	1.1	1.1	8.1	8.1
	Q2	-.8	-.8	-.7	-.7	1.4	1.4	2.0	2.0	9.2	9.2
	Q3	4.2	3.0	3.4	2.5	2.8	2.7	1.4	1.3	9.6	9.6
	Q4	3.1	4.6	2.8	3.8	2.0	2.8	1.2	1.6	10.1	10.1
2010:	Q1	5.0	5.0	3.2	3.6	1.8	1.1	1.0	1.3	10.1	10.1
	Q2	4.5	5.1	3.2	3.5	1.5	1.6	1.1	1.2	9.9	9.9
	Q3	4.7	4.9	3.5	3.6	1.3	1.4	1.1	1.1	9.7	9.8
	Q4	5.0	5.0	3.9	3.8	1.2	1.3	1.1	1.1	9.5	9.6
2011:	Q1	5.4	5.5	4.2	4.2	1.1	1.3	1.0	1.1	9.2	9.2
	Q2	5.5	5.7	4.4	4.5	1.0	1.2	1.0	1.1	8.9	9.0
	Q3	5.6	5.8	4.5	4.6	1.0	1.1	1.0	1.1	8.6	8.7
	Q4	5.5	5.8	4.5	4.7	1.0	1.1	1.0	1.1	8.2	8.3
Two-quarter[2]											
2009:	Q2	-2.7	-2.7	-3.6	-3.6	-.1	-.1	1.6	1.6	2.3	2.3
	Q4	3.7	3.8	3.1	3.1	2.4	2.7	1.3	1.4	.9	.9
2010:	Q2	4.7	5.0	3.2	3.5	1.6	1.4	1.0	1.2	-.2	-.2
	Q4	4.9	5.0	3.7	3.7	1.3	1.3	1.1	1.1	-.4	-.3
2011:	Q2	5.5	5.6	4.3	4.3	1.1	1.2	1.0	1.1	-.6	-.6
	Q4	5.6	5.8	4.5	4.7	1.0	1.1	1.0	1.1	-.7	-.7
Four-quarter[3]											
2008:Q4		.1	.1	-1.9	-1.9	1.7	1.7	2.0	2.0	2.1	2.1
2009:Q4		.4	.5	-.3	-.3	1.1	1.3	1.4	1.5	3.2	3.2
2010:Q4		4.8	5.0	3.4	3.6	1.4	1.3	1.1	1.2	-.6	-.5
2011:Q4		5.5	5.7	4.4	4.5	1.0	1.2	1.0	1.1	-1.3	-1.3
Annual											
2008		2.6	2.6	.4	.4	3.3	3.3	2.4	2.4	5.8	5.8

2009	-1.3	-1.3	-2.5	-2.5	.2	.2	1.5	1.5	9.2	9.3
2010	4.1	4.3	3.0	3.2	1.8	1.8	1.2	1.3	9.8	9.8
2011	5.3	5.4	4.1	4.2	1.1	1.3	1.0	1.1	8.7	8.8

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	2009				2010				2011				2009 [1]	2010 [1]	2011 [1]
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	-6.4	-.7	2.5	3.8	3.6	3.5	3.6	3.8	4.2	4.5	4.6	4.7	-.3	3.6	4.5
Previous Greenbook	-6.4	-.7	3.4	2.8	3.2	3.2	3.5	3.9	4.2	4.4	4.5	4.5	-.3	3.4	4.4
Final sales	-4.1	.7	1.7	1.5	2.6	2.9	2.9	3.3	3.6	4.1	4.2	4.2	-.1	2.9	4.0
Previous Greenbook	-4.1	.7	2.4	.4	2.5	3.0	2.5	3.0	3.4	3.9	4.2	4.3	-.2	2.7	3.9
Priv. dom. final purch.	-7.2	-2.7	2.4	1.2	2.6	3.0	3.4	3.7	4.3	4.8	5.0	4.9	-1.7	3.2	4.8
Previous Greenbook	-7.2	-2.7	3.0	-.1	2.4	2.9	2.9	3.5	4.1	4.5	5.0	5.0	-1.9	2.9	4.7
Personal cons. expend.	.6	-.9	3.0	1.9	2.7	2.4	2.6	2.6	3.0	3.4	3.7	3.6	1.1	2.6	3.4
Previous Greenbook	.6	-.9	3.4	.7	2.4	2.3	2.1	2.4	3.0	3.3	3.6	3.6	.9	2.3	3.4
Durables	3.9	-5.6	20.1	-2.3	9.5	7.6	9.4	9.1	9.1	11.8	12.1	11.9	3.6	8.9	11.2
Nondurables	1.9	-1.9	1.7	3.8	2.4	2.4	2.4	2.4	3.0	3.2	3.3	3.3	1.3	2.4	3.2
Services	-.3	.2	1.0	2.0	1.8	1.6	1.6	1.7	2.0	2.1	2.5	2.4	.7	1.7	2.3
Residential investment	-38.2	-23.3	18.9	8.1	8.7	17.8	4.3	9.1	15.4	23.0	22.0	20.7	-11.6	9.9	20.2
Previous Greenbook	-38.2	-23.3	20.9	.1	9.3	9.7	8.1	13.1	15.5	22.4	24.1	28.7	-13.0	10.0	22.6
Business fixed invest.	-39.2	-9.6	-5.5	-5.8	.1	4.0	9.7	10.9	11.5	10.7	10.5	9.9	-16.4	6.1	10.7
Previous Greenbook	-39.2	-9.6	-3.8	-6.4	.9	5.5	7.2	9.4	9.8	9.0	10.4	9.0	-16.1	5.7	9.5
Equipment & software	-36.4	-4.9	2.4	5.9	5.5	8.1	14.8	14.8	15.1	14.8	14.6	13.8	-10.0	10.7	14.6
Previous Greenbook	-36.4	-4.9	1.1	3.5	6.2	10.3	10.9	12.7	13.5	12.9	15.0	12.9	-10.8	10.0	13.6
Nonres. structures	-43.6	-17.3	-18.9	-25.8	-10.7	-4.8	-1.4	2.0	3.0	1.0	.4	.1	-27.2	-3.8	1.1
Previous Greenbook	-43.6	-17.3	-12.3	-23.3	-9.4	-4.3	-.8	2.3	1.7	.2	-.4	-.3	-25.1	-3.2	.3
Net exports[2]	-386	-330	-358	-345	-357	-357	-358	-352	-356	-357	-360	-356	-355	-356	-357
Previous Greenbook[2]	-386	-330	-348	-343	-346	-340	-341	-341	-348	-348	-351	-350	-352	-342	-349
Exports	-29.9	-4.1	17.0	12.1	8.9	9.1	9.4	9.8	9.4	8.9	8.8	8.5	-3.1	9.3	8.9
Imports	-36.4	-14.7	20.8	6.7	9.9	7.2	7.9	6.8	8.5	7.3	8.0	6.3	-8.6	8.0	7.5
Gov't. cons. & invest.	-2.6	6.7	2.8	.6	4.1	2.2	.9	.6	1.0	1.0	1.0	.5	1.8	1.9	.9
Previous Greenbook	-2.6	6.7	2.3	1.8	3.0	2.1	1.0	.6	1.0	1.0	1.0	.5	2.0	1.7	.9
Federal	-4.3	11.4	8.3	.9	9.1	3.6	.6	-.4	1.3	1.1	1.2	.5	3.9	3.2	1.0
Defense	-5.1	14.0	8.9	-3.1	8.7	2.4	1.9	.3	.6	.3	.5	-.5	3.4	3.3	.2
Nondefense	-2.5	6.1	6.9	9.8	10.0	6.3	-2.1	-1.9	2.6	2.6	2.6	2.6	5.0	3.0	2.6
State & local	-1.5	3.9	-.5	.5	.9	1.2	1.2	1.3	.9	.9	.9	.5	.6	1.1	.8
Change in bus. inventories[2]	-114	-160	-137	-66	-34	-15	7	24	42	55	69	85	-119	-5	63
Previous Greenbook[2]	-114	-160	-131	-60	-36	-30	0	29	55	70	80	89	-116	-9	73
Nonfarm[2]	-115	-163	-140	-71	-39	-19	3	20	39	52	66	83	-122	-9	60
Farm[2]	0	2	3	4	4	3	3	3	3	3	3	3	2	3	3

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

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

Changes in Real Gross Domestic Product and Related Items

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

Item	2003	2004	2005	2006	2007	2008	2009	2010	2011
Real GDP	3.8	3.1	2.7	2.4	2.5	-1.9	-.3	3.6	4.5
Previous Greenbook	3.8	3.1	2.7	2.4	2.5	-1.9	-.3	3.4	4.4
Final sales	3.8	2.8	2.7	2.8	2.7	-1.4	-.1	2.9	4.0
Previous Greenbook	3.8	2.8	2.7	2.8	2.7	-1.4	-.2	2.7	3.9
Priv. dom. final purch.	4.2	4.2	3.1	2.5	1.4	-3.2	-1.7	3.2	4.8
Previous Greenbook	4.2	4.2	3.1	2.5	1.4	-3.2	-1.9	2.9	4.7
Personal cons. expend.	3.4	3.5	2.7	3.3	2.0	-1.8	1.1	2.6	3.4
Previous Greenbook	3.4	3.5	2.7	3.3	2.0	-1.8	.9	2.3	3.4
Durables	8.9	5.5	2.1	6.3	4.6	-11.8	3.6	8.9	11.2
Nondurables	3.9	3.0	3.3	3.2	1.5	-2.9	1.3	2.4	3.2
Services	2.2	3.4	2.6	2.8	1.7	.3	.7	1.7	2.3
Residential investment	11.5	6.6	5.3	-15.7	-20.5	-21.0	-11.6	9.9	20.2
Previous Greenbook	11.5	6.6	5.3	-15.7	-20.5	-21.0	-13.0	10.0	22.6
Business fixed invest.	5.9	7.0	4.4	7.8	7.9	-6.0	-16.4	6.1	10.7
Previous Greenbook	5.9	7.0	4.4	7.8	7.9	-6.0	-16.1	5.7	9.5
Equipment & software	7.5	8.8	6.1	6.0	3.2	-10.7	-10.0	10.7	14.6
Previous Greenbook	7.5	8.8	6.1	6.0	3.2	-10.7	-10.8	10.0	13.6
Nonres. structures	1.3	1.7	-.1	13.0	18.9	3.2	-27.2	-3.8	1.1
Previous Greenbook	1.3	1.7	-.1	13.0	18.9	3.2	-25.1	-3.2	.3
Net exports[1]	-604	-688	-723	-729	-648	-494	-355	-356	-357
Previous Greenbook[1]	-604	-688	-723	-729	-648	-494	-352	-342	-349
Exports	6.2	7.1	6.7	10.2	10.2	-3.4	-3.1	9.3	8.9
Imports	5.1	10.9	5.2	4.1	.9	-6.8	-8.6	8.0	7.5
Gov't. cons. & invest.	1.6	.6	.7	1.5	2.5	3.0	1.8	1.9	.9
Previous Greenbook	1.6	.6	.7	1.5	2.5	3.0	2.0	1.7	.9
Federal	5.7	2.3	1.2	2.2	3.4	8.9	3.9	3.2	1.0
Defense	8.4	2.4	.4	4.4	2.6	9.5	3.4	3.3	.2
Nondefense	.7	2.3	2.6	-2.3	5.2	7.5	5.0	3.0	2.6
State & local	-.5	-.4	.4	1.2	1.9	-.3	.6	1.1	.8
Change in bus. inventories[1]	17	66	50	59	19	-26	-119	-5	63
Previous Greenbook[1]	17	66	50	59	19	-26	-116	-9	73
Nonfarm[1]	17	58	50	63	20	-20	-122	-9	60
Farm[1]	0	8	0	-4	-1	-5	2	3	3

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

Contributions to Changes in Real Gross Domestic Product

(Percentage points, annual rate except as noted)

Item	2009				2010				2011				2009[1]	2010[1]	2011[1]
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			

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

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

Changes in Prices and Costs

(Percent, annual rate except as noted)

Item	2009				2010				2011				2009 [1]	2010 [1]	2011 [1]
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
GDP chain-wt. price index	1.9	.0	.5	.7	1.3	1.5	1.3	1.1	1.3	1.1	1.1	1.0	.8	1.3	1.1
Previous Greenbook	1.9	.0	.8	.3	1.7	1.3	1.2	1.1	1.2	1.1	1.0	1.0	.7	1.3	1.1
PCE chain-wt. price index	-1.5	1.4	2.7	2.8	1.1	1.6	1.4	1.3	1.3	1.2	1.1	1.1	1.3	1.3	1.2
Previous Greenbook	-1.5	1.4	2.8	2.0	1.8	1.5	1.3	1.2	1.1	1.0	1.0	1.0	1.1	1.4	1.0
Energy	-36.7	-2.0	40.8	27.9	-1.2	8.4	5.3	5.0	4.8	3.7	2.8	2.7	2.8	4.3	3.5
Previous Greenbook	-36.7	-2.0	41.1	20.3	15.2	7.8	4.5	3.7	3.2	2.3	2.1	2.0	1.3	7.7	2.4
Food	-1.1	-3.6	-2.1	.5	1.2	1.6	1.5	1.0	.7	.7	.7	.7	-1.6	1.3	.7

Previous Greenbook	-1.1	-3.6	-2.1	-.8	1.3	1.5	1.5	1.0	.7	.7	.7	.7	-1.9	1.3	.7
Ex. food & energy	1.1	2.0	1.3	1.6	1.3	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.5	1.2	1.1
Previous Greenbook	1.1	2.0	1.4	1.2	1.0	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.4	1.1	1.0
CPI	-2.4	1.3	3.6	3.3	1.2	1.9	1.6	1.5	1.5	1.4	1.3	1.3	1.4	1.6	1.4
Previous Greenbook	-2.4	1.3	3.6	2.6	2.3	1.8	1.5	1.4	1.3	1.2	1.2	1.2	1.3	1.7	1.2
Ex. food & energy	1.5	2.4	1.5	1.7	1.4	1.3	1.2	1.2	1.2	1.2	1.2	1.3	1.8	1.3	1.2
Previous Greenbook	1.5	2.4	1.5	1.5	1.2	1.1	1.2	1.2	1.1	1.1	1.1	1.2	1.7	1.2	1.1
ECI, hourly compensation[2]	.7	.7	1.8	1.6	1.7	1.7	1.8	1.9	1.9	1.9	1.9	1.9	1.2	1.8	1.9
Previous Greenbook[2]	.7	.7	1.7	1.6	1.7	1.7	1.8	1.9	2.0	2.0	2.1	2.1	1.2	1.8	2.0
Nonfarm business sector															
Output per hour	.3	6.9	7.4	4.4	2.2	.9	.4	.3	.5	1.0	1.1	1.2	4.7	.9	1.0
Previous Greenbook	.3	7.0	7.2	4.2	2.4	.8	.6	.7	.7	.8	.9	.9	4.6	1.1	.8
Compensation per hour	-4.7	6.9	5.4	2.2	1.8	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.4	2.0	2.0
Previous Greenbook	-4.7	.4	1.9	1.6	1.6	1.7	1.8	1.9	2.0	2.0	2.1	2.1	-.2	1.8	2.1
Unit labor costs	-5.0	.0	-1.9	-2.1	-.4	1.1	1.6	1.7	1.5	1.0	.8	.6	-2.3	1.0	1.0
Previous Greenbook	-5.0	-6.2	-5.0	-2.5	-.8	.9	1.2	1.3	1.3	1.2	1.2	1.2	-4.7	.7	1.2
Core goods imports chain-wt. price index[3]	-9.4	-2.3	1.2	5.4	3.5	1.7	1.2	1.1	1.0	1.0	1.0	1.0	-1.4	1.9	1.0
Previous Greenbook[3]	-9.4	-2.3	1.0	4.4	2.6	1.4	1.0	1.0	1.0	1.0	1.0	1.0	-1.7	1.5	1.0

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

2. Private-industry workers. Return to table

3. Core goods imports exclude computers, semiconductors, oil, and natural gas. Return to table

Changes in Prices and Costs

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

Item	2003	2004	2005	2006	2007	2008	2009	2010	2011
GDP chain-wt. price index	2.1	3.2	3.5	2.9	2.7	1.9	.8	1.3	1.1
Previous Greenbook	2.1	3.2	3.5	2.9	2.7	1.9	.7	1.3	1.1
PCE chain-wt. price index	1.9	3.0	3.3	1.9	3.6	1.7	1.3	1.3	1.2
Previous Greenbook	1.9	3.0	3.3	1.9	3.6	1.7	1.1	1.4	1.0
Energy	8.6	18.6	21.5	-3.7	19.7	-9.1	2.8	4.3	3.5
Previous Greenbook	8.6	18.6	21.5	-3.7	19.7	-9.1	1.3	7.7	2.4
Food	3.2	2.7	1.5	1.7	4.7	6.8	-1.6	1.3	.7
Previous Greenbook	3.2	2.7	1.5	1.7	4.7	6.8	-1.9	1.3	.7
Ex. food & energy	1.5	2.2	2.3	2.3	2.5	2.0	1.5	1.2	1.1
Previous Greenbook	1.5	2.2	2.3	2.3	2.5	2.0	1.4	1.1	1.0
CPI	2.0	3.4	3.8	1.9	4.0	1.5	1.4	1.6	1.4
Previous Greenbook	2.0	3.4	3.8	1.9	4.0	1.5	1.3	1.7	1.2
Ex. food & energy	1.2	2.2	2.1	2.7	2.3	2.0	1.8	1.3	1.2
Previous Greenbook	1.2	2.2	2.1	2.7	2.3	2.0	1.7	1.2	1.1
ECI, hourly compensation[1]	4.0	3.8	2.9	3.2	3.0	2.4	1.2	1.8	1.9
Previous Greenbook[1]	4.0	3.8	2.9	3.2	3.0	2.4	1.2	1.8	2.0
Nonfarm business sector									
Output per hour	5.0	1.5	1.4	.9	2.8	.9	4.7	.9	1.0
Previous Greenbook	5.0	1.5	1.4	.9	2.8	.9	4.6	1.1	.8
Compensation per hour	5.7	3.4	3.5	4.5	3.6	2.6	2.4	2.0	2.0
Previous Greenbook	5.7	3.4	3.5	4.5	3.6	2.6	-.2	1.8	2.1
Unit labor costs	.6	1.9	2.0	3.5	.7	1.6	-2.3	1.0	1.0

Previous Greenbook	.6	1.9	2.0	3.5	.7	1.6	-4.7	.7	1.2
Core goods imports chain-wt. price index[2]	1.6	3.6	2.2	2.5	3.5	3.8	-1.4	1.9	1.0
Previous Greenbook[2]	1.6	3.6	2.2	2.5	3.5	3.8	-1.7	1.5	1.0

1. Private-industry workers. Return to table

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

Other Macroeconomic Indicators

Item	2009				2010				2011				2009[1]	2010[1]	2011[1]
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Employment and production															
Nonfarm payroll employment[2]	-2.1	-1.5	-.9	-.3	.1	.8	.6	.8	1.0	.9	1.0	1.0	-4.7	2.3	4.0
Unemployment rate[3]	8.1	9.2	9.6	10.1	10.1	9.9	9.8	9.6	9.2	9.0	8.7	8.3	10.1	9.6	8.3
Previous Greenbook[3]	8.1	9.2	9.6	10.1	10.1	9.9	9.7	9.5	9.2	8.9	8.6	8.2	10.1	9.5	8.2
GDP gap[4]	-7.0	-7.8	-7.8	-7.6	-7.2	-6.9	-6.6	-6.2	-5.8	-5.3	-4.8	-4.2	-7.6	-6.2	-4.2
Previous Greenbook[4]	-7.0	-7.8	-7.6	-7.6	-7.3	-7.1	-6.8	-6.4	-6.0	-5.5	-5.0	-4.5	-7.6	-6.4	-4.5
Industrial production[5]	-19.0	-10.3	5.6	7.1	6.2	5.8	4.8	5.2	5.8	5.9	6.1	6.1	-4.8	5.5	6.0
Previous Greenbook[5]	-19.0	-10.3	5.2	6.4	3.9	4.5	5.0	6.3	5.9	5.5	7.2	8.2	-5.0	4.9	6.7
Manufacturing industr. prod.[5]	-22.0	-8.7	7.7	7.1	5.5	6.4	5.1	5.7	6.5	6.6	6.8	6.8	-4.8	5.7	6.6
Previous Greenbook[5]	-22.0	-8.7	7.1	6.2	3.7	4.9	5.2	7.0	6.6	6.1	8.2	9.3	-5.2	5.2	7.5
Capacity utilization rate - mfg.[3]	66.7	65.4	66.9	68.3	69.4	70.8	71.9	73.1	74.4	75.6	77.0	78.4	68.3	73.1	78.4
Previous Greenbook[3]	66.7	65.4	66.8	68.1	69.0	70.1	71.3	72.8	74.2	75.4	77.1	79.0	68.1	72.8	79.0
Housing starts[6]	.5	.5	.6	.6	.7	.8	.8	.9	1.0	1.1	1.2	1.3	.6	.8	1.1
Light motor vehicle sales[6]	9.5	9.6	11.5	10.7	11.2	11.8	12.5	13.2	13.8	14.3	14.8	15.3	10.3	12.2	14.5
Income and saving															
Nominal GDP[5]	-4.6	-.8	3.0	4.6	5.0	5.1	4.9	5.0	5.5	5.7	5.8	5.8	.5	5.0	5.7
Real disposable pers. income[5]	.2	6.2	-1.3	-.1	3.4	-.2	3.2	3.2	1.4	3.9	4.4	3.7	1.2	2.4	3.3
Previous Greenbook[5]	.2	3.8	-3.5	-.1	3.6	.3	3.2	3.7	1.0	4.1	4.4	4.3	.1	2.7	3.4
Personal saving rate[3]	3.7	5.4	4.5	4.0	4.2	3.7	3.9	4.0	3.7	3.8	4.0	4.0	4.0	4.0	4.0
Previous Greenbook[3]	3.7	4.9	3.3	3.3	3.6	3.2	3.4	3.7	3.3	3.5	3.7	3.8	3.3	3.7	3.8
Corporate profits[7]	22.8	15.6	37.6	-21.6	101.3	15.6	10.9	7.6	-1.8	6.8	7.2	10.7	11.2	29.1	5.6
Profit share of GNP[3]	8.3	8.6	9.2	8.6	10.1	10.4	10.5	10.6	10.4	10.4	10.4	10.6	8.6	10.6	10.6
Net federal saving[8]	-969	-1,269	-1,347	-1,213	-1,439	-1,366	-1,380	-1,375	-1,261	-1,225	-1,218	-1,198	-1,199	-1,390	-1,225
Net state & local saving[8]	-37	-25	-18	4	35	42	48	51	3	-1	-8	-12	-19	44	-5
Gross national saving rate[3]	11.2	10.7	10.1	10.4	10.2	10.5	10.8	11.2	11.4	11.8	12.1	12.4	10.4	11.2	12.4
Net national saving rate[3]	-2.5	-2.7	-3.0	-2.5	-2.6	-2.2	-1.8	-1.3	-1.2	-.7	-.4	.0	-2.5	-1.3	.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	2003	2004	2005	2006	2007	2008	2009	2010	2011
Employment and production									
Nonfarm payroll employment[1]	-.1	2.0	2.4	2.1	1.2	-2.3	-4.7	2.3	4.0
Unemployment rate[2]	5.8	5.4	4.9	4.4	4.8	6.9	10.1	9.6	8.3
Previous Greenbook[2]	5.8	5.4	4.9	4.4	4.8	6.9	10.1	9.5	8.2
GDP gap[3]	-1.6	-.8	-.3	-.3	-.4	-4.8	-7.6	-6.2	-4.2
Previous Greenbook[3]	-1.6	-.7	-.3	-.3	-.4	-4.8	-7.6	-6.4	-4.5
Industrial production[4]	1.6	3.0	2.6	1.8	1.8	-6.7	-4.8	5.5	6.0
Previous Greenbook[4]	1.6	3.0	2.6	1.8	1.8	-6.7	-5.0	4.9	6.7
Manufacturing industr. prod.[4]	1.8	3.6	3.8	1.2	1.9	-8.7	-4.8	5.7	6.6
Previous Greenbook[4]	1.8	3.6	3.8	1.2	1.9	-8.7	-5.2	5.2	7.5
Capacity utilization rate - mfg.[2]	74.6	77.3	79.2	79.0	78.7	70.9	68.3	73.1	78.4
Previous Greenbook[2]	74.6	77.3	79.2	79.0	78.7	70.9	68.1	72.8	79.0
Housing starts[5]	1.8	2.0	2.1	1.8	1.4	.9	.6	.8	1.1
Light motor vehicle sales[5]	16.6	16.8	16.9	16.5	16.1	13.1	10.3	12.2	14.5
Income and saving									
Nominal GDP[4]	6.0	6.4	6.3	5.4	5.3	.1	.5	5.0	5.7
Real disposable pers. income[4]	3.9	3.5	.6	4.6	1.0	.3	1.2	2.4	3.3
Previous Greenbook[4]	3.9	3.5	.6	4.6	1.0	.3	.1	2.7	3.4
Personal saving rate[2]	3.6	3.6	1.5	2.5	1.5	3.8	4.0	4.0	4.0
Previous Greenbook[2]	3.6	3.6	1.5	2.5	1.5	3.8	3.3	3.7	3.8
Corporate profits[6]	12.2	21.9	19.6	3.7	-5.7	-25.1	11.2	29.1	5.6
Profit share of GNP[2]	9.1	10.5	11.8	11.6	10.3	7.8	8.6	10.6	10.6
Net federal saving[7]	-376	-379	-283	-204	-236	-643	-1199	-1390	-1225
Net state & local saving[7]	-39	-8	26	51	22	-40	-19	44	-5
Gross national saving rate[2]	14.3	14.3	15.5	16.3	13.8	12.2	10.4	11.2	12.4
Net national saving rate[2]	2.5	2.7	3.5	4.2	1.6	-.7	-2.5	-1.3	.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				2009				2010				2011			
	2008[a]	2009[a]	2010	2011	Q1[a]	Q2[a]	Q3[a]	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget					Not seasonally adjusted											
Receipts[1]	2524	2105	2213	2502	442	599	516	499	484	669	560	563	533	767	640	614
Outlays[1]	2983	3522	3663	3674	891	904	847	867	977	924	895	925	936	906	908	928
Surplus/deficit[1]	-459	-1417	-1450	-1172	-449	-305	-331	-367	-493	-255	-335	-362	-402	-140	-268	-314
Previous Greenbook	*-459*	*-1417*	*-1454*	*-1187*	*-449*	*-305*	*-331*	*-378*	*-494*	*-251*	*-332*	*-359*	*-406*	*-147*	*-275*	*-319*
On-budget	-642	-1554	-1555	-1312	-468	-382	-320	-412	-485	-329	-330	-415	-410	-219	-268	-365
Off-budget	183	137	105	140	19	77	-11	44	-8	74	-5	52	8	80	-1	51
Means of financing																
Borrowing	768	1743	1503	1192	465	338	379	213	679	281	331	352	392	165	283	304
Cash decrease	-296	96	25	0	98	-49	43	190	-145	-29	10	15	15	-20	-10	15
Other[2]	-13	-423	-78	-20	-114	16	-90	-36	-41	3	-5	-5	-5	-5	-5	-5
Cash operating balance, end of period	372	275	250	250	269	318	275	85	230	260	250	235	220	240	250	235
NIPA federal sector					Seasonally adjusted annual rates											
Receipts	2534	2286	2353	2531	2251	2237	2208	2371	2311	2347	2381	2418	2525	2567	2612	2658
Expenditures	3074	3351	3702	3800	3220	3506	3555	3584	3750	3714	3762	3793	3786	3792	3831	3856
Consumption expenditures	914	973	1045	1084	954	979	1002	1009	1047	1060	1064	1067	1082	1089	1096	1102
Defense	620	659	699	722	643	663	680	678	700	706	711	713	722	725	727	729
Nondefense	294	314	346	362	311	316	322	331	347	354	353	353	361	365	369	373
Other spending	2160	2378	2657	2717	2266	2527	2553	2575	2703	2654	2697	2727	2704	2703	2734	2754
Current account surplus	-540	-1065	-1350	-1270	-969	-1269	-1347	-1213	-1439	-1366	-1380	-1375	-1261	-1225	-1218	-1198
Gross investment	141	159	166	168	152	159	164	162	166	167	168	168	168	168	169	168
Gross saving less gross investment[3]	-563	-1100	-1386	-1303	-999	-1304	-1384	-1247	-1476	-1403	-1417	-1410	-1294	-1257	-1249	-1226
Fiscal indicators[4]																
High-employment (HEB) surplus/deficit	-489	-703	-863	-869	-638	-844	-870	-710	-942	-883	-915	-928	-845	-838	-865	-881
Change in HEB, percent of potential GDP	1.8	1.3	0.9	-0.1	1.1	1.3	0.1	-1.1	1.4	-0.4	0.2	0.0	-0.6	-0.1	0.1	0.1
Fiscal impetus (FI), percent of GDP	0.8	1.0	1.0	-0.2	0.0	0.7	0.3	0.2	0.4	0.2	0.1	0.0	-0.2	-0.0	-0.1	-0.2
Previous Greenbook	*0.8*	*1.0*	*1.0*	*-0.2*	*0.0*	*0.7*	*0.3*	*0.3*	*0.3*	*0.2*	*0.1*	*0.0*	*-0.2*	*-0.0*	*-0.1*	*-0.2*

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

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

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

4. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the NAIRU. Quarterly figures for change in HEB and FI are not at annual rates. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionary changes in federal spending and taxes in chained (2005) dollars, scaled by real GDP. The annual FI estimates are on a calendar year basis. Also, for FI and the change in HEB, positive values indicate aggregate demand stimulus. Return to table

a--Actual Return to table

Change in Debt of the Domestic Nonfinancial Sectors

(Percent)

Period[1]	Total	Households			Business	State and local governments	Federal government	Memo: Nominal GDP
		Total	Home mortgages	Consumer credit				
Year								
2004	8.9	11.1	13.5	5.6	6.3	7.4	9.0	6.4
2005	9.5	11.1	13.2	4.5	8.8	10.2	7.0	6.3
2006	9.0	10.0	11.0	4.1	10.5	8.2	3.9	5.4
2007	8.7	6.7	6.7	5.7	13.4	9.3	4.9	5.3

2008		5.9	.3	-.6	1.6	5.2	2.0	24.2	.1
2009		3.3	-1.8	-1.8	-3.7	-1.3	5.0	21.9	.5
2010		5.8	.4	-.1	1.4	1.9	4.8	21.2	5.0
2011		5.2	2.1	.6	7.4	3.2	4.5	12.2	5.7
Quarter									
2008:	1	5.5	3.1	2.6	4.5	7.8	3.6	8.1	1.0
	2	3.3	.2	-.5	4.1	6.4	1.1	5.9	3.5
	3	8.2	-.4	-2.4	.6	5.2	3.3	39.2	1.4
	4	6.1	-1.8	-1.9	-2.9	1.0	-.2	37.0	-5.4
2009:	1	4.3	-1.2	-.2	-3.4	.5	4.4	22.6	-4.6
	2	4.5	-1.6	-1.6	-4.7	-2.2	3.6	28.2	-.8
	3	2.8	-2.6	-3.6	-3.2	-2.6	5.1	20.6	3.0
	4	1.7	-1.9	-1.8	-3.5	-.7	6.7	10.1	4.6
2010:	1	7.0	-.3	-.5	-1.0	.7	4.7	29.5	5.0
	2	5.6	.1	-.2	.5	1.5	4.6	20.0	5.1
	3	4.9	.7	.0	2.3	2.4	4.7	14.8	4.9
	4	5.2	1.1	.2	3.9	2.8	4.7	14.6	5.0
2011:	1	4.9	1.6	.5	5.3	3.0	4.5	12.2	5.5
	2	5.2	1.9	.6	6.7	3.3	4.4	12.4	5.7
	3	5.0	2.3	.6	8.0	3.2	4.4	11.1	5.8
	4	5.1	2.5	.7	8.9	3.3	4.3	11.0	5.8

Note. Quarterly data are at seasonally adjusted annual rates.

1. Data after 2009:Q2 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4. Return to table

2.6.3 FOF

Flow of Funds Projections: Highlights

(Billions of dollars at seasonally adjusted annual rates except as noted)

Category	2008	2009	2010	2011	2009		2010				2011			
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Domestic nonfinancial sectors														
Net funds raised														
Total	1535.3	1097.2	1942.5	1802.4	1056.9	377.3	2421.2	1885.6	1662.0	1801.2	1705.0	1850.5	1794.3	1859.9
Net equity issuance	-335.1	-24.5	-75.0	-100.0	91.3	-200.0	-20.0	-80.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0
Net debt issuance	1870.4	1121.7	2017.5	1902.4	965.6	577.3	2441.2	1965.6	1762.0	1901.2	1805.0	1950.5	1894.3	1959.9
Borrowing indicators														
Debt (percent of GDP)[1]	225.9	239.5	240.2	240.4	241.5	240.2	239.9	240.6	240.9	241.0	240.8	240.5	240.2	239.9
Borrowing (percent of GDP)	13.0	7.9	13.6	12.1	6.8	4.0	16.7	13.3	11.8	12.6	11.8	12.5	12.0	12.3
Households														
Net borrowing[2]	37.0	-245.9	56.0	283.7	-351.3	-257.6	-42.4	19.8	91.2	155.2	214.8	263.0	309.4	347.5
Home mortgages	-58.1	-187.7	-11.9	61.8	-369.9	-190.2	-47.6	-23.8	0.0	23.8	47.6	57.1	66.6	76.1
Consumer credit	40.2	-94.9	35.7	187.6	-81.6	-88.5	-25.0	11.6	58.2	97.9	133.2	171.8	208.4	236.9
Debt/DPI (percent)[3]	127.5	124.8	119.9	116.6	124.1	122.6	120.9	120.5	119.3	118.3	117.9	116.9	116.0	115.3
Business														
Financing gap[4]	232.4	-144.5	-155.7	-49.3	-194.3	-192.6	-168.0	-173.2	-151.6	-130.0	-82.4	-57.4	-35.1	-22.5
Net equity issuance	-335.1	-24.5	-75.0	-100.0	91.3	-200.0	-20.0	-80.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0

Credit market borrowing	551.0	-140.3	206.8	365.2	-283.9	-81.1	82.6	170.6	262.3	311.5	335.9	379.1	371.0	374.7
State and local governments														
Net borrowing	43.3	112.4	111.7	109.7	115.9	153.7	109.7	109.7	113.7	113.7	109.7	109.7	109.7	109.7
Current surplus[5]	212.7	221.8	265.0	222.1	208.9	222.3	254.3	262.1	269.6	274.1	227.9	224.8	219.3	216.5
Federal government														
Net borrowing	1239.2	1395.0	1643.1	1143.9	1484.9	762.3	2291.3	1665.5	1294.8	1320.8	1144.6	1198.7	1104.2	1128.0
Net borrowing (n.s.a.)	1239.2	1395.0	1643.1	1143.9	378.7	212.6	678.8	281.4	330.7	352.2	392.2	164.7	283.1	304.0
Unified deficit (n.s.a.)	680.5	1451.8	1445.3	1123.9	330.8	367.2	492.8	255.0	335.3	362.2	402.2	139.7	268.1	314.0
Depository institutions														
Funds supplied	409.1	-461.7	346.9	358.4	-1090.5	247.2	68.3	277.9	-459.1	1500.4	336.1	210.2	521.8	365.7

Note. Data after 2009:Q3 are staff projections.

1. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP. Return to table

2. Includes change in liabilities not shown in home mortgages and consumer credit. Return to table

3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income. Return to table

4. For corporations, excess of capital expenditures over U.S. internal funds. Return to table

5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers. Return to table

n.s.a. Not seasonally adjusted. Return to table

2.6.4 FOF

† Note: Data values for figures are rounded and may not sum to totals. Return to text

Last update: April 1, 2015

Accessible Material

December 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	2009 H1	2009 Q3	Projection 2009:Q4	Projection 2010 H1	Projection 2010 H2	Projection 2011
Foreign output	-3.5	4.3	3.6	3.6	3.9	4.1
Previous Greenbook	-3.6	4.4	3.6	3.4	3.8	4.1
Foreign CPI	.0	1.4	2.2	2.0	1.8	1.9
Previous Greenbook	.0	1.5	2.0	1.7	1.7	1.8
	Contribution to growth (percentage points)					
U.S. net exports	2.1	-.9	.4	-.2	.0	-.1
Previous Greenbook	2.1	-.6	.1	.0	.0	-.1

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

Staff Projections for Foreign GDP Growth by Region

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

Indicator	2009 H1	2009 Q3	Projection 2009:Q4	Projection 2010 H1	Projection 2010 H2	Projection 2011
Advanced foreign economies	-4.7	.8	2.6	2.6	3.0	3.3
Previous Greenbook	-4.8	1.8	2.5	2.4	2.8	3.2
Emerging market economies	-2.1	9.1	5.0	4.9	5.1	5.2
Previous Greenbook	-2.1	7.7	5.0	4.7	5.1	5.2

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

Staff Projections of Selected Trade Prices

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

Trade category	2009 H1	2009 Q3	Projection 2009:Q4	Projection 2010 H1	Projection 2010 H2	Projection 2011
Imports						
Core goods	-5.9	1.2	5.4	2.6	1.1	1.0
Previous Greenbook	-5.9	1.0	4.4	2.0	1.0	1.0
Oil (dollars per barrel)	53.71	66.28	73.49	74.81	77.11	81.24
Previous Greenbook	53.71	65.34	74.10	77.12	79.11	81.49
Exports						
Core goods	-5.3	5.2	3.7	3.7	1.7	1.3

Previous Greenbook	-5.3	5.3	4.5	2.7	1.5	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 multiquarter 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	2009		Projection			
				2010		
	H1	Q3	2009:Q4	H1	H2	2011
Real exports	-18.1	17.0	12.1	9.0	9.6	8.9
Previous Greenbook	-18.1	14.7	9.6	8.4	9.1	8.8
Real imports	-26.3	20.8	6.7	8.5	7.4	7.5
Previous Greenbook	-26.3	16.3	6.4	6.4	7.6	7.7

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

Alternative Scenario:
Lower AFE Demand and Lower AFE TFP

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

Indicator and simulation	2010		2011		2012	2013-14
	H1	H2	H1	H2		
U.S. real GDP						
Baseline	3.5	3.7	4.3	4.7	4.7	3.9
Lower AFE demand	3.4	3.4	4.1	4.6	4.3	3.5
Lower AFE TFP	3.6	3.8	4.3	4.7	4.7	3.9
U.S. PCE prices (excluding food and energy)						
Baseline	1.2	1.1	1.1	1.1	1.2	1.5
Lower AFE demand	1.1	.9	1.0	1.0	1.1	1.4
Lower AFE TFP	1.3	1.1	1.1	1.1	1.2	1.5
U.S. federal funds rate (percent)						
Baseline	.1	.1	.5	.5	2.1	3.8
Lower AFE demand	.1	.1	.5	.5	1.7	3.5
Lower AFE TFP	.1	.1	.5	.5	2.1	3.8
U.S. trade balance (percent share of GDP)						
Baseline	-3.1	-3.0	-3.0	-3.0	-2.8	-2.6
Lower AFE demand	-3.2	-3.2	-3.2	-3.2	-3.1	-2.8
Lower AFE TFP	-2.9	-2.8	-2.9	-2.8	-2.7	-2.5

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

Evolution of the Staff Forecast

Figure: Current Account Balance

Line chart, by percent of GDP, January 23, 2009 to December 9, 2009. There are three series, "2009", "2010" and "2011". 2009 begins at about -4.75 and generally increases to end at about -3.0. 2010 begins at about -3.6 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 -3.2. 2011 begins at about -3.15 by September 16, 2009 and remains about constant until the end.

Figure: Foreign Real GDP

Line chart, by percent change, Q4/Q4, January 23, 2008 to December 9, 2009. There are three series, "2009", "2010", and "2011". 2009 begins at about 3.4 and generally increases to about 3.6 by March 13, 2008. It then generally decreases to end at about -2.2 by March 12, 2009, and generally increases to end at about 0.2. 2010 begins at about 3.6 and generally decreases to about 2.4 by March 12, 2009. It then generally increases to end at about 3.7. 2011 begins at about 4.1 by September 16, 2009, and remains about constant until the end.

Figure: Core Import Prices

Line chart, by percent change, Q4/Q4, January 23, 2008 to December 9, 2009. There are three series, "2009", "2010", and "2011". 2009 begins at about 1.4 and generally decreases to about -4.1 by March 12, 2009. It then generally increases to end at about -1.4. 2010 begins at about 1.3 by September 10, 2008 and generally decreases to about 1 by April 22, 2009. It then generally increases to end at about 1.9. 2011 begins at about 1 by September 2009 and remains about constant until the end.

Note: Core Import Prices is 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	2009				Projected 2010				2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
REAL GDP[1]	Quarterly changes at an annual rate											
Total Foreign	-9.1	2.4	4.3	3.6	3.5	3.6	3.8	3.9	4.0	4.1	4.1	4.2
Advanced Foreign Economies	-7.8	-1.4	0.8	2.6	2.5	2.7	2.9	3.0	3.2	3.2	3.3	3.4
of which:												
Canada	-6.2	-3.1	0.4	3.2	3.2	3.2	3.2	3.3	3.8	3.8	3.9	3.9
Japan	-11.9	2.7	1.3	2.4	2.0	2.1	2.4	2.4	2.2	2.0	1.9	1.8
United Kingdom	-9.6	-2.3	-1.2	2.9	2.7	3.2	3.5	3.5	3.3	3.3	3.4	3.2
Euro Area[2]	-9.4	-0.6	1.5	1.7	1.8	2.0	2.3	2.6	2.7	2.8	3.0	3.1
Germany	-13.4	1.8	2.9	2.5	2.3	2.2	2.4	2.7	2.8	3.0	3.5	3.6
Emerging Market Economies	-10.8	7.5	9.1	5.0	4.8	4.9	5.0	5.1	5.1	5.2	5.2	5.2
Asia	-3.5	15.1	9.9	5.5	5.9	5.9	5.9	6.1	6.1	6.1	6.1	6.1
Korea	0.5	11.0	13.6	3.8	3.8	4.4	4.4	4.4	4.4	4.4	4.4	4.4
China	6.5	18.5	9.8	10.0	9.0	8.3	8.3	8.6	8.8	8.9	8.9	8.9
Latin America	-18.4	0.6	9.0	4.8	3.9	4.1	4.2	4.2	4.2	4.2	4.3	4.3
Mexico	-23.4	-1.1	12.2	5.2	4.0	4.2	4.3	4.4	4.5	4.5	4.5	4.5
Brazil	-3.8	7.8	6.0	6.0	5.0	5.0	5.0	4.5	4.0	4.0	4.0	4.0
CONSUMER PRICES[3]	Four-quarter changes											
Total Foreign	1.8	0.9	0.2	0.9	1.7	1.9	2.0	1.9	1.9	1.8	1.9	1.9
Advanced Foreign Economies	1.0	0.0	-0.8	-0.1	0.5	0.8	1.0	1.0	1.0	1.1	1.2	1.2
of which:												
Canada	1.2	0.1	-0.9	0.3	0.9	1.2	1.6	1.6	1.7	1.7	1.8	1.8
Japan	-0.1	-1.0	-2.2	-1.8	-1.3	-1.0	-0.8	-0.7	-0.7	-0.6	-0.6	-0.6
United Kingdom[4]	3.0	2.1	1.5	1.8	2.5	2.3	1.8	1.7	1.2	1.4	1.6	1.8
Euro Area[2]	1.0	0.2	-0.4	0.2	0.8	1.0	1.2	1.2	1.2	1.3	1.3	1.3
Germany	0.8	0.2	-0.4	0.1	0.4	0.7	0.9	1.0	1.1	1.2	1.2	1.2
Emerging Market Economies	2.7	1.7	1.2	1.8	2.8	3.0	3.0	2.8	2.7	2.6	2.6	2.6
Asia	1.0	-0.3	-0.5	0.8	2.0	2.4	2.4	2.1	2.1	2.2	2.2	2.2
Korea	3.9	2.8	2.0	2.3	2.6	2.5	2.5	2.4	2.2	2.3	2.3	2.3

China	-0.6	-1.5	-1.3	-0.0	1.5	1.9	2.0	1.7	1.7	1.8	1.9	1.9
Latin America	6.3	5.9	4.9	4.1	4.3	4.2	4.3	4.3	3.8	3.4	3.4	3.4
Mexico	6.2	6.0	5.1	4.2	4.4	4.3	4.2	4.3	3.6	3.1	3.0	3.0
Brazil	5.9	5.3	4.3	4.1	3.8	3.4	3.5	3.7	3.7	3.7	3.7	3.7

1. Foreign GDP aggregates calculated using shares of U.S. exports. Return to table

2. Harmonized data for euro area from Eurostat. Return to table

3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports. Return to table

4. CPI excluding mortgage interest payments, which is the targeted inflation rate. Return to table

Outlook for Foreign Real GDP and Consumer Prices: Selected Countries

(Percent, Q4 to Q4)

Measure and country	2003	2004	2005	2006	2007	2008	Projected		
							2009	2010	2011
REAL GDP[1]									
Total Foreign	2.8	3.8	4.1	4.0	4.2	-0.9	0.2	3.7	4.1
Advanced Foreign Economies	1.8	2.6	2.8	2.5	2.5	-1.6	-1.5	2.8	3.3
of which:									
Canada	1.5	3.7	3.1	1.9	2.8	-1.0	-1.5	3.3	3.8
Japan	2.4	1.1	2.8	2.0	1.7	-4.4	-1.5	2.2	2.0
United Kingdom	3.2	2.4	2.4	2.8	2.4	-2.0	-2.7	3.2	3.3
Euro Area[2]	1.2	1.8	2.2	3.5	2.1	-1.8	-1.8	2.2	2.9
Germany	0.1	0.2	1.6	4.3	1.6	-1.8	-1.8	2.4	3.2
Emerging Market Economies	4.5	5.5	5.9	5.9	6.4	0.0	2.4	5.0	5.2
Asia	6.9	6.0	7.7	7.2	8.2	0.5	6.5	5.9	6.1
Korea	3.7	2.6	5.2	4.6	5.7	-3.4	7.1	4.2	4.4
China	10.3	9.9	10.3	10.8	12.3	6.9	11.1	8.5	8.9
Latin America	1.8	5.0	4.1	4.7	4.5	-0.8	-1.6	4.1	4.3
Mexico	1.2	4.5	3.6	4.0	3.7	-1.7	-2.7	4.2	4.5
Brazil	1.0	4.7	3.7	4.6	6.1	1.2	3.9	4.9	4.0
CONSUMER PRICES[3]									
Total Foreign	2.1	2.8	2.3	2.1	3.7	3.3	0.9	1.9	1.9
Advanced Foreign Economies	1.3	1.8	1.6	1.4	2.2	2.0	-0.1	1.0	1.2
of which:									
Canada	1.7	2.3	2.3	1.4	2.5	1.9	0.3	1.6	1.8
Japan	-0.3	0.5	-1.0	0.3	0.5	1.0	-1.8	-0.7	-0.6
United Kingdom[4]	1.3	1.4	2.1	2.7	2.1	3.8	1.8	1.7	1.8
Euro Area[2]	2.0	2.3	2.3	1.8	2.9	2.3	0.2	1.2	1.3
Germany	1.1	2.1	2.2	1.3	3.1	1.7	0.1	1.0	1.2
Emerging Market Economies	3.1	3.9	3.0	2.9	5.1	4.6	1.8	2.8	2.6
Asia	2.3	3.1	2.6	2.4	5.5	3.7	0.8	2.1	2.2
Korea	3.5	3.4	2.5	2.1	3.4	4.5	2.3	2.4	2.3
China	2.7	3.3	1.4	2.1	6.7	2.7	-0.0	1.7	1.9
Latin America	4.9	5.6	3.8	4.1	4.2	6.5	4.1	4.3	3.4
Mexico	3.9	5.3	3.1	4.1	3.8	6.2	4.2	4.3	3.0
Brazil	11.5	7.2	6.1	3.2	4.3	6.2	4.1	3.7	3.7

1. Foreign GDP aggregates calculated using shares of U.S. exports. Return to table

2. Harmonized data for euro area from Eurostat. Return to table

3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports. Return to table

4. CPI excluding mortgage interest payments, which is the targeted inflation rate. Return to table

Outlook for U.S. International Transactions

	2003	2004	2005	2006	2007	2008	Projected 2009	2010	2011
NIPA REAL EXPORTS and IMPORTS									
Percentage point contribution to GDP growth, Q4/Q4									
Net Goods & Services	-0.1	-0.9	-0.2	0.4	1.0	0.7	1.0	-0.1	-0.1
Exports of G&S	0.6	0.7	0.7	1.1	1.2	-0.4	-0.4	1.1	1.1
Imports of G&S	-0.7	-1.6	-0.8	-0.7	-0.2	1.2	1.4	-1.2	-1.1
Percentage change, Q4/Q4									
Exports of G&S	6.2	7.1	6.7	10.2	10.2	-3.4	-3.1	9.3	8.9
Services	4.3	9.1	3.6	12.0	13.0	-3.5	-1.2	6.6	6.1
Computers	11.3	5.8	14.2	8.4	1.3	-2.4	3.0	9.5	9.5
Semiconductors	38.3	-6.0	17.6	2.1	29.1	-12.7	15.1	11.0	11.0
Core Goods[1]	4.8	7.2	7.2	9.9	8.4	-3.1	-5.0	10.7	10.3
Imports of G&S	5.1	10.9	5.2	4.1	0.9	-6.8	-8.6	8.0	7.5
Services	3.3	8.8	2.3	7.1	2.0	0.2	-3.3	4.0	6.0
Oil	1.3	10.7	1.3	-8.2	0.0	0.3	-14.1	-2.0	-0.5
Natural Gas	1.3	4.9	13.7	-10.1	13.4	-24.0	3.9	-0.2	0.1
Computers	17.1	23.2	12.5	14.3	8.8	-11.3	15.0	15.5	15.5
Semiconductors	-0.1	9.8	7.5	-0.8	3.6	-9.7	5.0	5.0	5.0
Core Goods[2]	5.3	10.9	5.8	5.8	0.2	-9.8	-10.6	11.3	9.4
Billions of Chained 2005 Dollars									
Net Goods & Services	-603.9	-688.0	-722.7	-729.2	-647.7	-494.3	-355.1	-356.2	-357.1
Exports of G&S	1116.8	1222.8	1305.1	1422.0	1546.1	1629.3	1462.4	1604.9	1753.0
Imports of G&S	1720.7	1910.8	2027.8	2151.2	2193.8	2123.5	1817.5	1961.0	2110.2
Billions of dollars									
US CURRENT ACCOUNT BALANCE	-521.5	-631.1	-748.7	-803.5	-726.6	-706.1	-430.5	-476.7	-480.8
Current Acct as Percent of GDP	-4.7	-5.3	-5.9	-6.0	-5.2	-4.9	-3.0	-3.2	-3.1
Net Goods & Services (BOP)	-495.0	-610.0	-715.3	-760.4	-701.4	-695.9	-384.3	-454.3	-466.2
Investment Income, Net	51.0	73.4	78.8	54.7	97.9	125.5	86.6	108.4	116.2
Direct, Net	112.7	150.9	173.2	174.0	236.7	249.9	206.5	229.5	252.0
Portfolio, Net	-61.7	-77.5	-94.4	-119.4	-138.8	-124.3	-119.8	-121.1	-135.8
Other Income & Transfers,Net	-77.5	-94.5	-112.2	-97.9	-123.1	-135.7	-132.8	-130.8	-130.8

1. Merchandise exports excluding computers and semiconductors. Return to table

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

Outlook for U.S. International Transactions

	2006				2007				2008			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NIPA REAL EXPORTS and IMPORTS												
Percentage point contribution to GDP growth												
Net Goods & Services	0.4	0.0	-0.7	1.9	-0.3	0.7	1.4	2.2	0.4	2.4	-0.1	0.5
Exports of G&S	1.6	0.7	0.1	1.8	0.4	0.6	2.0	1.6	-0.0	1.5	-0.5	-2.7
Imports of G&S	-1.2	-0.7	-0.8	0.1	-0.7	0.1	-0.6	0.6	0.4	0.9	0.4	3.1
Percentage change from previous period, s.a.a.r.												
Exports of G&S	16.5	6.9	0.6	17.8	3.5	5.2	18.5	14.5	-0.1	12.1	-3.6	-19.5
Services	13.6	5.6	1.5	29.1	4.7	2.8	27.2	19.2	-9.0	7.8	-7.7	-4.3
Computers	18.1	8.9	-9.6	19.0	11.6	-15.4	11.5	0.0	8.7	33.5	1.3	-38.3
Semiconductors	22.1	19.5	-14.2	-13.3	23.7	26.3	4.7	69.9	15.0	-3.8	6.5	-50.7
Core Goods[1]	17.6	6.7	1.6	14.5	1.5	6.4	15.4	10.8	3.5	14.3	-2.2	-23.7
Imports of G&S	7.8	4.5	4.9	-0.5	4.3	-0.5	3.7	-3.6	-2.5	-5.0	-2.2	-16.7
Services	16.1	1.8	1.3	10.0	0.4	2.1	8.6	-2.9	3.0	-7.1	6.1	-0.9
Oil	-20.8	5.0	22.1	-30.1	0.8	14.7	-3.4	-10.4	-1.5	-9.3	2.7	10.3
Natural Gas	-50.2	80.0	26.1	-42.2	52.8	54.0	36.5	-48.5	-5.0	-38.2	12.2	-49.5
Computers	24.8	13.0	17.3	3.1	39.0	-15.4	-2.2	21.6	12.7	8.6	-15.9	-39.9
Semiconductors	2.4	-2.8	17.4	-17.3	7.3	2.6	-0.4	4.9	5.6	8.9	-6.3	-38.2
Core Goods[2]	14.0	3.1	0.6	5.8	3.1	-3.6	4.1	-2.5	-5.1	-3.2	-5.1	-24.2
Billions of Chained 2005 Dollars, s.a.a.r.												
Net Goods & Services	-732.6	-732.8	-756.5	-694.9	-705.0	-683.4	-638.4	-564.0	-550.9	-476.0	-479.2	-470.9
Exports of G&S	1388.8	1412.1	1414.1	1473.2	1485.9	1504.8	1569.9	1624.0	1623.4	1670.4	1655.2	1568.0
Imports of G&S	2121.3	2144.9	2170.5	2168.1	2190.8	2188.1	2208.3	2188.0	2174.3	2146.5	2134.4	2038.9
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-794.6	-808.3	-859.2	-752.1	-796.4	-762.1	-686.5	-661.3	-717.2	-750.9	-736.7	-619.5
Current Account as % of GDP	-6.0	-6.1	-6.4	-5.5	-5.8	-5.4	-4.8	-4.6	-5.0	-5.2	-5.1	-4.3
Net Goods & Services (BOP)	-766.5	-764.7	-797.2	-713.1	-712.2	-710.2	-685.9	-697.4	-730.6	-731.4	-743.8	-578.0
Investment Income, Net	62.4	57.7	44.0	54.6	45.8	58.2	120.7	167.0	154.0	112.3	143.7	92.1
Direct, Net	173.9	175.2	163.1	183.9	186.7	204.4	252.7	303.0	284.6	241.9	268.0	205.1
Portfolio, Net	-111.5	-117.5	-119.1	-129.3	-140.9	-146.2	-132.0	-136.0	-130.6	-129.6	-124.2	-113.0
Other Inc. & Transfers, Net	-90.5	-101.3	-106.0	-93.6	-130.0	-110.1	-121.3	-130.9	-140.6	-131.8	-136.7	-133.6

1. Merchandise exports excluding computers and semiconductors. Return to table

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

Outlook for U.S. International Transactions

	Projected											
	2009				2010				2011			
	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	2.6	1.7	-0.9	0.4	-0.4	-0.0	-0.1	0.1	-0.2	-0.0	-0.1	0.1
Exports of G&S	-4.0	-0.5	1.7	1.3	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.0

Imports of G&S	6.6	2.1	-2.6	-0.9	-1.4	-1.0	-1.1	-1.0	-1.3	-1.1	-1.2	-1.0
Percentage change from previous period, s.a.a.r.												
Exports of G&S	-29.9	-4.1	17.0	12.1	8.9	9.1	9.4	9.8	9.4	8.9	8.8	8.5
Services	-13.6	0.1	3.8	6.2	6.0	6.4	6.9	7.1	6.6	6.0	5.9	5.8
Computers	-14.0	-10.8	25.2	17.0	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
Semiconductors	-17.1	27.7	41.8	17.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Core Goods[1]	-38.3	-7.2	23.8	15.0	10.4	10.4	10.7	11.2	10.8	10.4	10.3	9.8
Imports of G&S	-36.4	-14.7	20.8	6.7	9.9	7.2	7.9	6.8	8.5	7.3	8.0	6.3
Services	-11.5	-7.5	3.0	3.5	6.6	0.0	4.3	5.0	5.6	5.9	6.3	6.4
Oil	-15.9	-21.9	5.5	-21.3	-2.3	-1.2	-1.8	-2.6	4.6	-0.8	-1.1	-4.4
Natural Gas	5.9	-2.4	-1.5	14.4	37.0	-31.8	41.5	-25.0	23.9	-28.9	46.8	-22.5
Computers	-22.3	24.7	59.7	12.9	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
Semiconductors	-47.8	24.7	50.9	23.9	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Core Goods[2]	-46.7	-18.6	28.0	15.0	13.4	11.8	10.4	9.6	9.6	9.8	9.5	8.5
Billions of Chained 2005 Dollars, s.a.a.r.												
Net Goods & Services	-386.5	-330.4	-358.0	-345.5	-357.2	-356.9	-358.0	-352.5	-356.5	-356.5	-359.8	-355.7
Exports of G&S	1434.5	1419.5	1476.4	1519.0	1551.7	1585.7	1621.9	1660.3	1697.8	1734.5	1771.6	1808.2
Imports of G&S	1821.0	1749.8	1834.4	1864.5	1908.9	1942.6	1979.8	2012.8	2054.3	2091.0	2131.4	2163.9
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-417.8	-395.2	-441.4	-467.4	-495.6	-473.4	-473.1	-464.5	-485.9	-471.0	-482.9	-483.4
Current Account as % of GDP	-2.9	-2.8	-3.1	-3.2	-3.4	-3.2	-3.2	-3.1	-3.2	-3.0	-3.1	-3.0
Net Goods & Services (BOP)	-369.6	-332.0	-396.7	-438.9	-456.5	-453.0	-454.4	-453.3	-463.8	-464.6	-469.4	-467.0
Investment Income, Net	80.4	72.8	95.3	98.0	101.3	105.9	111.2	115.4	118.3	119.9	116.4	110.1
Direct, Net	204.8	196.8	211.2	213.1	220.5	226.5	232.1	239.1	245.9	251.9	254.2	256.1
Portfolio, Net	-124.4	-124.0	-115.9	-115.1	-119.2	-120.6	-120.8	-123.8	-127.6	-132.0	-137.8	-146.1
Other Inc. & Transfers, Net	-128.6	-135.9	-140.0	-126.5	-140.4	-126.3	-129.9	-126.5	-140.4	-126.3	-129.9	-126.5

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

December 2009 Greenbook Part 2 Tables and Charts†

Domestic Nonfinancial Developments

Changes in Employment

(Thousands of employees; seasonally adjusted)

Measure and sector	2008	2009 Q1	2009 Q2	2009 Q3	2009 Sept.	2009 Oct.	2009 Nov.
	Average monthly change				Monthly change		
Nonfarm payroll employment (establishment survey)	-257	-691	-428	-199	-139	-111	-11
Private	-270	-695	-425	-171	-100	-157	-18
Natural resources and mining	4	-12	-11	-5	-1	-6	-1
Manufacturing	-73	-202	-140	-46	-41	-51	-41
Ex. motor vehicles	-58	-176	-117	-55	-40	-56	-35
Construction	-57	-124	-80	-63	-53	-56	-27
Residential	-35	-53	-26	-15	-6	-9	-3
Nonresidential	-22	-71	-54	-48	-46	-47	-24
Wholesale trade	-16	-36	-20	-9	-7	-3	-12
Retail trade	-44	-55	-27	-35	-40	-44	-15
Financial activities	-19	-51	-35	-16	-11	-10	-10
Temporary help services	-44	-73	-28	5	17	44	52
Nonbusiness services[1]	19	-25	19	25	39	-11	26
Total government	14	4	-3	-28	-39	46	7
Federal government	3	10	3	3	2	17	1
Total employment (household survey)	-246	-817	-230	-444	-785	-589	227
Memo:							
Aggregate hours of private production workers (percent change)[2]	-3.3	-8.9	-7.8	-2.5	-.1	-.4	.6
Average workweek (hours)[3]	33.6	33.2	33.1	33.1	33.1	33.0	33.2
Manufacturing (hours)	40.8	39.6	39.5	39.9	40.0	40.1	40.4

1. Nonbusiness services comprises education and health, leisure and hospitality, and "other." Return to table

2. Establishment survey. Annual data are percent changes from 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, 2000 to November 2009. Data are 3-month moving averages. The series begins at about 200 and generally decreases to about -300 by late 2001. It then generally increases to about 325 by early 2004. It then fluctuates between about 0 and 300 until early 2008. It then decreases to about -700 by early 2009 and increases to end at about -80. It is at about 100 at the time of the last business cycle peak.

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

Figure: Aggregate Hours and Workweek of Production and Nonsupervisory Workers

Line chart, 2000 to November 2010. There are two series, "Aggregate hours", which is an index where 2002=100, and "Workweek", which is by hours. Aggregate hours begins at about 103. It generally increases to about 104 by late 2000, then generally decreases to about 98 by mid-2003. It then generally increases to about 107.5 by late 2007, and generally decreases to end at about 99. Workweek begins at about 34.4, and generally decreases to about 33.7 by early 2003. It remains about constant until early 2008. It then generally decreases to end at about 33.2.

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

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

Selected Unemployment and Labor Force Participation Rates

(Percent; seasonally adjusted)

Rate and group	2008	2009					
		Q1	Q2	Q3	Sept.	Oct.	Nov.
Civilian unemployment rate							
Total	5.8	8.1	9.2	9.6	9.8	10.2	10.0
Teenagers	18.7	21.3	22.7	25.1	25.9	27.6	26.7
20-24 years old	10.2	13.0	15.0	15.1	14.9	15.6	16.0
Men, 25 years and older	4.8	7.4	8.8	9.4	9.7	9.7	9.6
Women, 25 years and older	4.4	6.2	6.9	7.1	7.3	7.6	7.3
Labor force participation rate							
Total	66.0	65.6	65.8	65.4	65.2	65.1	65.0
Teenagers	40.2	38.3	38.4	37.5	36.9	36.2	35.8
20-24 years old	74.4	73.7	74.1	72.9	72.3	71.5	71.8
Men, 25 years and older	75.4	74.6	74.9	74.9	74.8	74.7	74.4
Women, 25 years and older	60.0	60.0	60.3	59.9	59.7	59.7	59.6

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

Line chart, 2001 to November 2009. There are two series, "Unemployment rate", by percent of labor force, and "Persons working part time for economic reasons", which is by percent of household employment. Unemployment rate begins at about 4.25 and generally increases to about 6.5 by early 2003. It then generally decreases to about 4.5 by mid-2007. It then generally increases to end at about 10. It is at about 5 at the time of the last business cycle peak. Persons working part time for economic reasons starts at about 2.4 and generally increases to about 3.5 by early 2003. It then generally decreases to about 2.8 by late 2006, and then generally increases to end at about 6.5. It is at about 3 at the time of the last business cycle peak.

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

Figure: Labor Force Participation Rate

Line chart, 2001 to November 2009, by percent. The series begins at about 67.3 and generally decreases to about 65.8 by early 2005. It then generally increases to about 66.3 by late 2006, and then generally decreases to end at about 65. It is at about 66 at the time of the last business cycle peak.

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

Figure: Job Losers Unemployed Less Than 5 Weeks

Line chart, 2001 to November 2009, by percent of household employment. The 3-month moving average of the series is also shown and tracks very closely to the series throughout the chart. The series begins at about 0.9 and generally increases to about 1.3 by late 2001. It then generally decreases to about 0.8 by early 2007, and then generally increases to about 1.6 by late 2008. It then generally decreases to end at about 1.35. The series is at about 0.95 at the time of the last business cycle peak.

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

Figure: Layoffs and Initial Claims

Line chart, 2001 to late 2009. There are two series, "Layoffs and discharges", which is by percent of private employment, and "Initial Claims", which is in thousands. Layoffs and discharges begins at about 1.75 and fluctuates between about 2.1 and 1.4 until late 2001. It then remains about constant until early 2005. It then decreases to about 1.3 by late 2005, and then generally increases to about 2.3 by mid-2009. It then decreases to end at about 1.8 in October. Initial claims begins at about 330 and generally increases to about 430 by early 2003. It then generally decreases to about 290 by early 2006, then generally increases to about 665 by early 2009, then generally decreases to end at about 480 on November 28. Layoffs and discharges are at about 1.4 and Initial claims are at about 340 at the time of the last business cycle peak.

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

Source: For layoffs and discharges, Job Openings and Labor Turnover Survey; for initial claims, U.S. Dept. of Labor, Employment and Training Administration.

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

Labor Market Indicators

Figure: Job Openings

Line chart, 2000 to late 2009. There are two series, "Job openings", by percent of private employment plus job openings, and "Composite Help Wanted Index" as an index where 1980=100. Note that index of staff composite help wanted advertising expressed as a percent of payroll employment. Job openings begins in late 200 at about 3.9, and generally decreases to about 2.4 by early 2003. It then generally increases to about 3.5 by early 2007, and generally decreases to end in October at about 2.0. Composite Help Wanted Index starts at about 92 in early 2000, generally decreases to about 50 by early 2003, then generally increases to about 75 by late 2006, then generally decreases to end at about 40 in November. At the time of the last business cycle peak, Job openings is about 3.3 and Composite Help Wanted Index is about 65.

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

Figure: Hires and Hiring Plans

Line chart, 2000 to late 2009. There are two series, "Hires", by percent of private employment, and "Hiring plans", by percent. Hiring plans is a 3-month moving average and represents the percent planning an increase in employment minus percent planning a reductions and is seasonally adjusted by FRB staff. Hires begins in late 200 at about 4.5, and generally increases to about 4.8 by early 2001. It then generally decreases to about 3.9 by late 2002, and generally increases to about 4.7 by early 2005. It then generally decreases to end at about 3.5 by October. Hiring plans begins in early 2000 at about 20, then generally decreases to about 6 by early 2003. It then generally increases to about 16 by early 2004, and remains about constant until mid-2007. It then generally decreases to end at about 2.8 by November. At the time of the last business cycle peak, Hires is at about 4.2 and Hiring plans is at about 10.

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

Figure: Duration of Unemployment

Line chart, 2000 to November 2009. There are two series, "Mean", by weeks, and "Long-term unemployed", by percent of unemployed. Long-term unemployed is defined as being unemployed more than 26 weeks. Mean begins at about 13 and remains about constant until early 2001. It then generally increases to about 20 by mid-2004. It then generally decreases to about 17 by late 2007, and generally increases to end at about 28. Long-term unemployed begins at about 12 and remains about constant until early 2001. It then generally increases to about 22 by early 2004, then generally decreases to about 16 by late 2006, then generally increases to end at about 38. At the time of the last business cycle peak, Mean is at about 17 and Long-term unemployed is at about 17.

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

Figure: Insured Unemployment

Line chart, 2000 to November 2009, in Millions. There are two series, "Regular state programs" and "Incl. extended and emergency benefits". Both series are 4-week moving averages. Both series begin at about 2 and generally increases to about 3.5 by early 2002. Regular state programs stays about constant until early 2004, but Incl. extended and emergency benefits rises as high as 5 during that period before rejoining Regular state programs in early 2004. Both series then generally decrease to about 2.5 by mid-2006, and generally increases to about 3 by early 2008. From there, Regular state programs increases to about 6.8 by mid-2009 and decreases to end at about 5.5 on November 21. Incl. extended and emergency benefits generally increases to end at about 10 on November 14. At the time of the last business cycle peak, both series are at about 2.7.

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

Figure: Job Availability and Hard-to-Fill Positions

Line chart, 2000 to November 2009. There are two series, "Job availability", an Index, and "Hard-to-fill", by percent. 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, and is a 3-month moving average seasonally adjusted by FRB staff. Job availability begins at about 140 and remains about constant until early 2001. It then generally decreases to about 75 by 2003, and generally increases to about 110 by late 2006. It then generally decreases to end at about 55. Hard-to-fill begins at about 32 and increases to about 34 by late 2000. It then generally decreases to about 17 by 2003, and generally increases to about 26 by 2006. It then generally decreases to end at about 7. At the time of the last business cycle peak, Job availability is at about 100 and Hard-to-fill is at about 21.

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

Figure: Expected Labor Market Conditions

Line chart, by index, 2000 to November 2009. There are two series, "Conference Board" and "Reuters/Michigan". Conference Board begins at about 107 and generally decreases to about 85 by early 2001. It then increases to about 95 by mid-2001 and decreases back to about 85 by late 2001. It then increases to about

108 by mid-2002 and decreases to about 85 by late 2002. It then increases to about 100 by 2004 and remains about constant until 2007. It then generally decreases to about 60 by early 2009 and increases to end at about 90. Reuters begins at about 95 and generally decreases to about 50 by late 2001. It then generally increases to about 105 by 2005, and generally decreases to about 40 by late 2008. It then generally increases to about 90 by late 2009 and decreases to end at about 75. At the time of the last business cycle peak, Conference Board is at about 90 and Reuters is at about 65.

Note: The proportion of households expecting labor market conditions to improve, minus the proportion expecting conditions to worsen, plus 100.

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

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

Output per Hour

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

Sector	2007:Q3 to 2008:Q3	2008:Q3 to 2009:Q3 [1]	2008 Q4	2009 Q1	2009 Q2	2009 Q3 [1]
Nonfarm business						
All persons	1.2	3.8	.8	.3	6.9	7.4
All employees[2]	.8	3.7	-1.0	1.1	7.7	7.2

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

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]	2009 Q2	2009 Q3	2009 Aug.	2009 Sept.	2009 Oct.
			Annual rate		Monthly rate		
Total	**100.0**	**-6.7**	**-10.3**	**5.6**	**1.3**	**.6**	**.1**
Previous	100.0	-6.7	-10.3	5.2	1.2	.7	...
Manufacturing	79.0	-8.7	-8.7	7.7	1.4	.8	-.1
Ex. motor veh. and parts	74.5	-7.8	-8.6	4.1	1.2	.4	-.1
Ex. high-tech industries	70.3	-7.8	-9.0	4.0	1.2	.4	-.1
Mining	10.6	.8	-21.6	4.2	1.1	.6	-.2
Utilities	10.4	.3	-11.2	-6.6	.8	-.2	1.6
Selected industries							
Energy	23.9	1.3	-14.4	-2.5	.6	.7	.5
High technology	4.2	-6.9	-1.3	5.4	-.3	.1	.6
Computers	1.0	-11.9	-25.1	-17.8	-1.4	-1.4	-1.2
Communications equipment	1.3	10.4	-4.5	-6.7	-.9	-2.3	.9
Semiconductors[2]	1.8	-15.0	19.0	34.0	.8	3.1	1.2
Motor vehicles and parts	4.5	-23.3	-10.4	116.8	6.3	8.1	-1.7
Aircraft and parts	2.3	-13.2	-18.6	2.9	-.7	2.0	-.6
Total ex. selected industries	65.1	-8.3	-9.0	4.2	1.4	.2	.0

Consumer goods	20.7	-4.2	-4.8	2.5	1.6	.4	.4
Durables	3.5	-14.7	-12.7	2.9	-.2	.4	-.7
Nondurables	17.1	-1.8	-3.3	2.4	2.0	.4	.6
Business equipment	6.6	-4.8	-22.5	-.7	1.5	-.8	-.4
Defense and space equipment	1.1	-2.1	3.8	16.6	1.4	1.5	-.6
Construction supplies	4.8	-11.8	-10.5	2.9	.7	-1.1	-1.2
Business supplies	7.3	-9.8	-10.6	-.5	.7	-.5	-.3
Materials	24.6	-11.7	-8.4	8.5	1.6	.6	.1
Durables	12.4	-11.4	-23.9	8.4	1.4	.9	.2
Nondurables	12.2	-12.0	8.1	8.6	1.7	.3	.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	2009				
				Q1	Q2	Q3	Sept.	Oct.
Total industry	**80.9**	**84.9**	**73.5**	**70.4**	**68.7**	**69.9**	**70.5**	**70.7**
Manufacturing	79.6	84.5	71.4	66.7	65.4	66.9	67.6	67.6
Mining	87.6	89.1	84.9	86.8	81.8	82.9	83.6	83.5
Utilities	86.8	93.3	84.2	82.4	79.6	77.9	77.9	79.0
Stage-of-process groups								
Crude	86.6	89.9	81.7	80.9	79.6	81.7	83.0	83.1
Primary and semifinished	82.0	87.9	74.3	68.4	66.2	66.9	67.3	67.4
Finished	77.7	80.3	70.0	68.4	67.1	68.5	69.4	69.5

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

Indicators of Industrial Activity

Figure: Weekly Production Index excluding Motor Vehicles

Line and bar chart, October 2008 to November 2009, as an index. There are two series, "Weekly index" and "Monthly aggregate of weekly index", which both track very closely throughout the chart. They begin at about 17.5 and generally decrease to about 16 by June 2009. They then generally increase to end at about 16.9.

Note: One index point equals 1 percent of 2002 total industrial output.

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

Figure: IP Diffusion Index

Line chart, 1997 to October 2010, as an index. The series begins at about 60 and generally increases to about 70 by the end of 1997. It then decreases to about 50 by early 1998, and fluctuates between about 30 and 65 until late 2007 when it is at 50. It then generally decreases to about 15 by late 2008 and generally increases to end at about 60. At the time of the last business cycle peak, the series is at about 50.

Note: The diffusion index equals the percentage of series that increased relative to 3 months earlier plus one-half the percentage that were unchanged. The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research (NBER): March 2001-November 2001. The vertical line represents the last business cycle peak as defined by the

NBER (December 2007).

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

Figure: Motor Vehicle Assemblies

Line chart, 2002 to November 2009, in millions of units. The November values are based on latest industry schedules. There are two series, "Autos and light trucks", and "Medium and heavy trucks". Autos and light trucks begin at about 11.5 and generally decrease to about 4 by late 2008. They then generally increase to end at about 7. Medium and heavy trucks begins at about 0.2 and generally increase to about 0.3 by late 203, then decrease to about 0.22 by early 2003, then generally increase to about 0.55 by mid-2006, then generally decrease to end at about 0.2.

Source: Ward's Communications.

Figure: Manufacturing Capacity Utilization

Line chart, 1997 to October 2009, as percent. The series begins at about 83 and remains about constant until early 1998. It then generally decreases to about 72 by late 2001, and generally increases to about 79 by early 2006. It remains about constant until early 2008, then generally decreases to about 65 by mid-2009, and increases to end at about 67. At the time of the last business cycle peak, the series is at about 79.

Note: Horizontal line is 1972-2008 average, approximately 77. The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research (NBER): March 2001-November 2001. The vertical line represents the last business cycle peak as defined by the NBER (December 2007).

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

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

Line chart, 2002 to November 2009. There are two series, "ISM", which is a diffusion index, and "RADGO", which is by percent. The measure for real adjusted durable goods orders (RADGO) is a 3-month moving average. Both series track closely throughout the chart. ISM begins at about 55, and increases to about 60 by mid-2002. It then generally decreases to about 47 by early 2003, and increases to about 70 by late 3003. It then generally decreases to about 22 by late 2008 and generally increases to end at about 60. RADGO begins at about -1 and generally increases to about 2 by late 2003. It then generally decreases to about -2.3 by early 2004, and generally increases to about 2.2 by mid-2005. It then generally decreases to about -5 by late 2008 and increases to about 2 by early 2009, and then decreases to end at about -0.5. At the time of the last business cycle peak, ISM is at about 50 and RADGO is at about 0.

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

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: Manufacturing Investment

Line chart, 1970 to 2010. There are two series, "Real investment", which is by percent change, and "Capital spending plans", which is a diffusion index. Both series track each other closely throughout the chart. Real investment begins at about -8 and generally increases to about 20 by 1974. It fluctuates widely between about 22 and -20 until about 1990, when it is at about 0. It then generally increases to about 10 by 1998, then generally decreases to about -12 by 2002, then generally increases to about 9 by 2005, and generally decreases to end at about -20. Capital spending plans begins at about 49 and generally increases to about 70 by 1974. It fluctuates between about 70 and 38 until 1983. Between 1983 and 2003 it fluctuates more narrowly, between about 60 and 45. In 2003 it is at about 0 and increases to about 65 by 2007, then decreases to about 30 by 2009 and increases to end at about 60.

Note: Manufacturing investment data are from the Annual Survey of Manufacturers; values for 2007-09 are staff estimates. The ISM series is a diffusion index that equals the percentage of respondents reporting plans to increase investment plus one-half the percentage reporting no plans to change investment.

Source: Institute for Supply Management.

Production of Domestic Light Vehicles

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

Item	2009			2010	2009			
	Q2	Q3	Q4	Q1	Aug.	Sept.	Oct.	Nov.
U.S. production[1]	4.5	6.4	7.0	7.4	6.3	7.1	6.8	6.9
Autos	1.9	2.5	2.9	3.1	2.5	2.8	2.9	2.8
Light trucks	2.5	3.8	4.2	4.3	3.8	4.3	3.9	4.1
Days' supply[2]	70	50	n.a.	n.a.	36	63	57	55
Autos	78	46	n.a.	n.a.	32	59	56	54
Light trucks	64	55	n.a.	n.a.	40	66	58	55
Inventories[3]	1.63	1.38	n.a.	n.a.	1.20	1.38	1.46	1.48
Autos	.82	.63	n.a.	n.a.	.56	.63	.66	.67
Light trucks	.81	.75	n.a.	n.a.	.64	.75	.79	.81

Memo: U.S. production, total motor vehicles[4]	4.6	6.5	7.2	7.6	6.5	7.3	7.0	7.1

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

1. Production rates for November and the fourth quarter of 2009 and the first quarter of 2010 reflect the latest industry schedules. Return to table

2. Quarterly values are calculated with end-of-period stocks and average reported sales. Return to table

3. End-of-period stocks. Return to table

4. Includes medium and heavy trucks. Return to table

n.a. Not available. Return to table

Source: Ward's Communications.

Figure: Inventories of Light Vehicles

Line chart, 1998 to November 2009, in millions of units. The series begins at about 2.9 and generally decreases to about 2.5 by mid-1998. It then generally increases to about 3.4 by late 2000, then generally decreases to about 2.4 by late 2001, then generally increases to about 3.4 by late 2004, then generally decreases to about 1.1 by mid-2009, then increases to end at about 1.4.

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

Figure: Days' Supply of Light Vehicles

Line chart, 1998 to November 2009. In days. The series begins at about 70 and generally increases to about 100 by early 2009, except for late 2001 when it dips to about 40 and mid-2005 when it dips to about 45. In decreases in early 2009 to about 33 by late 2009, then generally increases to end at about 55.

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

Indicators of High-Tech Manufacturing Activity

Figure: Industrial Production in the High-Tech Sector

Line chart, 2002-October 2009, as ratio scale 2002=100. There are three series, "Semiconductors", "Computers", and "Communications equipment". Semiconductors begins at about 90 and generally increases to about 320 by late 2008. It then generally decreases to about 225 by early 2009 and generally increases to end at about 260. Computers begins at about 105 and generally increases to about 240 by early 2008 then decreases to end at about 155. Communications equipment starts at about 110 and generally increases to about 175 by early 2008 and generally decreases to end at about 165.

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

Figure: U.S. Personal Computer and Server Absorption

Line chart, 2002 to 2009, by millions of units, ratio scale. There are two series, "Servers" and "PCs". Servers begins at about 0.43 and generally increases to about 0.80 by mid-2008, then decreases to about 0.52 by early 2009 and then increases to end at about 0.56 in Q3. PCs begins at about 11.2 and generally increases to end at about 17 in Q4.

Note: FRB seasonals. PC and server units represent the most recent U.S. data available from IDC. Q4 PC units are from the PC forecast data release.

Source: IDC.

Figure: MPU Shipments and Intel Revenue

Line chart, 2002 to 2009, in billions of dollars, ratio scale. There are two series, "Intel revenue" and "Worldwide MPU shipments". Intel revenue begins at about 6.8 and decreases to about 6.6 by late 2002. It then generally increases to about 10 by mid-2005, decreases to about 8.5 by mid-2006, and increases to about 10.5 by early 2008. It then decreases to about 7.7 by early 2009 and increases to end at about 9.8 in Q4. Worldwide MPU shipments starts at about 6 and increases to about 6.4 by early 2002. It then decreases to about 5.7 by late 2002 and generally increases to about 9 by mid-2005. It then generally decreases to about 7.1 by mid-2006 and then generally increases to about 9.4 by mid-2007. It remains about constant until late 2008 and then decreases to about 5.7 by early 2009. It then generally increases to end at about 9.0 in October.

Note: FRB seasonals. MPU is a microprocessor unit. Q4 Intel revenue is the midpoint of the range given by the company's guidance as of November 12, 2009. MPU shipments are a 3-month sum.

Source: Intel; Semiconductor Industry Association.

Figure: Circuit Board Orders and Shipments

Line chart, 2002 to October 2009, in billions of dollars. There are two series, "Orders" and "Shipments". The two series track very closely except for 2004 to mid-2006, when Orders fluctuates widely between 130 and 70. The series both start at about 90 and increase to about 100 by early 2002. They then generally decrease to about 70 by early 2003, then generally increase to about 110 by mid-2006. They then decrease to about 95 by early 2007, then generally increase to about 110 by mid-2008, then generally decrease to about 70 by mid-2009, then generally increase to end at about 85.

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

Source: Institute for Printed Circuits.

Figure: FRB Chip Inventory Index

Line chart, 2002 to 2009:Q3. As index 2006=100. The series begins at about 118 and increases to about 135 by mid-2002. It then decreases to about 95 by mid-2003, and generally increase to about 135 by late 2006. It then decreases to about 108 by early 2008 and increases to about 142 by early 2008. It then decreases to end at about 105.

Note: The staff's chip inventory index is a sales-weighted chain-type index constructed from financial data for 10 major chip manufacturers.

Source: Financial reports.

Figure: Capital Expenditures by Selected Telecommunications Service Providers

Line chart, 2001 to 2009:Q3, in billions of dollars, ratio scale. The series begins at about 73 and generally decreases to about 33 by mid-2003. It then generally increases to about 47 by early 2006 and remains about constant until early 2008. It then generally decreases to end at about 34. The following approximate annual averages are noted in the chart: 2001: 66. 2002: 44. 2003" 37. 2004: 38. 2005: 41. 2006: 44. 2007: 43. 2008: 41. 2009 guidance is about 37.

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

Source: Securities and Exchange Commission filings.

Real Personal Consumption Expenditures

(Percent change from preceding comparable period)

Category	2009 Q1	2009 Q2	2009 Q3	2009 Aug.	2009 Sept.	2009 Oct.
	Annual rate			Monthly rate		
Total real PCE	**.6**	**-.9**	**2.9**	**1.0**	**-.7**	**.4**
Motor vehicles	9.6	-6.3	53.7	20.1	-29.8	8.9
Goods ex. motor vehicles	-2.8	-5.9	3.0	1.1	.5	.1
Services	-.3	.2	1.0	.1	.2	.3
Ex. energy	-.2	.7	1.1	.1	.1	.2
Memo:						
Real PCE control[1]	1.3	-2.5	3.0	.8	.5	.4
Nominal retail control [2]	2.2	-2.8	1.1	.5	.4	.5

1. Durables excluding motor vehicles, nondurables excluding gasoline, and food services. Return to table

2. Total sales less outlays at building material and supply stores, automobile and other motor vehicle dealers, and gasoline stations. Return to table

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

Figure: Change in Real PCE Goods

Line chart, 1990 to October 2009, by percent as a 6-month moving average. The series begins at about -0.55 and generally increases to about 0.75 by 1998. It then generally decreases to about -0.6 by late 2008 and generally increases to end at about 0.1. At the time of the last business cycle peak, the series is at about 0.2. There is a second chart with detailed information showing monthly and 6-month moving average data from 2006 to October 2009. The 6-month moving average series starts at about 0.4 and generally decreases to about -0.4 by late 2008, then generally increases to end at about 0. The monthly series begins at about 1.3 and fluctuates widely between about 1.2 and -1.8 until late 2008. Between late 2008 and the end it fluctuates between -2.7 and 2.7. It ends at about 0.5.

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 PCS Services

Line chart, 1990 to October 2009, by percent as a 6-month moving average. The series begins at about 0.38 and decreases to about -0.05 by late 1990. It then generally increases to about 0.45 by 1991 and generally decreases to about 0.15 by 1994. It then generally increases to about 0.5 by 1999, then decreases to about 0.1 by 2001, then generally increases to about 0.35 by 2004, then generally decreases to about -0.1 by 2008, then generally increases to end at about 0.1. At the time of the last business cycle peak, the series is at about 0.05. There is a second chart with detailed information showing the monthly and 6-moving average data from 2006 to October 2009. The monthly data fluctuates widely throughout the chart from about 0.55 the about -0.35. It has a decreasing trend until late 2008 when it begins to generally increase. It ends at about 0.25. The 6-month moving average starts at about 0.15 and generally increases to about 0.25 by mid-2007. It then generally decreases to about -0.15 by late 2008 and increases to end at about 0.1.

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.

Sales of Light Vehicles

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

Category	2008	2009					
		Q1	Q2	Q3	Sept.	Oct.	Nov.
Total	13.1	9.5	9.6	11.5	9.2	10.4	10.9
Autos	6.7	4.8	4.9	6.4	5.0	5.4	5.6
Light trucks	6.4	4.7	4.7	5.1	4.2	5.0	5.3
North American[1]	9.8	6.8	7.1	8.4	6.7	7.9	8.3
Autos	4.5	3.1	3.2	4.2	3.3	3.7	3.8
Light trucks	5.3	3.7	3.9	4.2	3.5	4.2	4.5
Foreign-produced	3.3	2.7	2.4	3.1	2.5	2.6	2.6
Autos	2.2	1.7	1.6	2.1	1.7	1.8	1.8
Light trucks	1.1	1.0	.8	.9	.8	.8	.8
Memo:							
Detroit Three market share (percent)[2]	48.3	44.1	46.8	43.1	43.7	44.8	44.9

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

1. Excludes some vehicles produced in Canada that are classified as imports by the industry. Return to table

2. Includes domestic and foreign brands affiliated with the Detroit Three. Return to table

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

[Content redacted.]

[Content redacted.]

Figure: Car-Buying Attitudes

Line chart, 2002 to November 2009. There are two series, "Appraisal of car-buying conditions", which is an index, and "Good time to buy: low prices", which is by percent. The appraisal index begins at about 150 and remains about constant until 2003. It then generally decreases to about 90 by mid-2008, and generally increases to about 140 by mid-2009. It then generally decreases to end at about 125. Good time to buy starts at about 35 and fluctuates between about 28 and 40 until 2005. It then increases to about 55 by mid-2005 and generally decreases to about 35 by mid-2006. It then generally increases to about 45 by late 2006 and generally decreases to about 33 by mid-2008. It then generally increases to about 65 by mid-2009 and generally decreases to end at about 50.

Source: Reuters/University of Michigan Surveys of Consumers.

Figure: Average Value of Incentives on Light Vehicles

Line chart, 2004 to November 29, 2009, in current dollars per vehicle, ratio scale. The series begins at about 2200 and generally increases to about 3000 by late 2004. It then generally decreases to about 1100 by mid-2005, and generally increases to about 1700 by late 2005. It then generally decreases to about 1050 by late 2006 and generally increases to about 2400 by late 2008. It then generally decreases to end at about 1850.

Note: Weekly weighted average of customer cash rebate and the present value of interest rate reduction.

Source: J.D. Power and Associates. Adjusted using FRB seasonals.

Fundamentals of Household Spending

Figure: Household Net Worth and Dow Jones Total Market Index

Line chart, 1999 to late 2009. There are two series, "Ratio of household net worth to DPI", as a ratio, and "Total Market Index", as an index. The value of the ratio of household net worth for 2004:Q4 excludes the effect on income of the one-time Microsoft dividend in December 2004. Ratio of household net worth to DPI begins at about 5.8 and generally increases to about 6.1 by late 1999. It then generally decreases to about 5 by 2002, and generally increases to about 6.5 by 2006. It then generally decreases to about 4.5 by early 2009 and generally increases to end at about 4.8 in Q3. Total Market Index begins at about 11,500 and generally increases to about 14,000 by 2000. It then generally decreases to about 7800 by 2002 and generally increases to about 15,000 by late 2007. It then generally decreases to about 7500 by late 2008 and generally increases to end at about 10,500 on December 8.

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, 1999 to October 2009 as 12-month percent change. The series begins at about 4.4 and decreases to about 2 by late 1999. It then increases to about 6 by late 2000. From there it fluctuates between about 5 and -1.3 until mid-2009 with a decreasing trend over that period. In mid-2009 it increases to end at about 2.3.

Note: Values for December 2004 and December 2005 exclude the effect on income of the one-time Microsoft dividend in December 2004.

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

Figure: Personal Saving Rate

Line chart, 1999 to October 2009, by percent. The series begins at about 4.5 and decreases to about 2 by late 1999. It then generally increases to about 4 by 2004, with a spike to about 5 in mid-2001 before decreasing to about 1 in late 2001. From 2004 it generally decreases to about 0.8 by 2005, then generally increases to about 2.8 by 2006, then decreases to about 0.8 by early 2007. It then generally increases to about 6.5 by early 2009 and generally decreases to end at about 4.5.

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

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

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

Line chart, 1999 to December 8, 2009, by percent. There are two series, "Treasury yield" and "Federal funds rate". Treasury yield begins at about 4.75 and generally increases to about 6.75 by 2000. It then generally decreases to about 3.5 by 2003, then generally increases to about 5 by 2007. It then generally decreases to about 2 by early 2009 and generally increases to end at about 3.25. Federal funds rate begins at about 4.75 and increases to about 6.5 by 2000. It then decreases to 1 by 2003 and then increases to about 5.25 by 2007. It then generally decreases to about 0 by late 2008 and remains constant to the end.

Source: Federal Reserve Board.

Figure: Consumer Confidence

Line chart, 1990 to November 2009. There are two series, both of which are an index. "Conference Board" is indexed at 1985=100 and "Reuters/Michigan" is indexed at 1966=100. Conference Board begins at about 108 and generally decreases to about 50 by 1992. It then generally increases to about 140 by 2000, and generally decreases to about 70 by 2003. It then generally increases to about 100 by late 2007 and generally decreases to about 25 by early 2009. It then generally increases to end at about 50. Reuters/Michigan begins at about 90 and generally decreases to about 60 by late 1990. It then generally increases to about 110 by 2000 and generally decreases to about 85 by late 2001. It then generally increases to about 95 by early 2007 and generally decreases to about 55 by early 2009. It then generally increases to end at about 67. At the time of the last business cycle peak, Conference Board is at about 90 and Reuters is at about 75.

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

Indicators of Single-Family Housing

Figure: Market for New Single-Family Homes

Line chart, 2001 to October 2009, by millions of units at an annual rate. The series, "Sales (left scale)", begins at about 0.95 and generally increases to about 1.4 by late 2005. It then generally decreases to end at about 0.4.

Source: For sales, Census Bureau; [redacted]

Figure: Inventories of New Homes and Homeowner Vacancy Rate

Line chart, 2001 to late 2009. There are two series, "Inventories of new homes", which is in thousands of units, and "Homeowner vacancy rate", which is by percent. Inventories of new homes begins at about 300 and generally increases to about 575 by 2006. It then generally decreases to end in October at about 250. Homeowner vacancy rate begins at about 1.3 and increases to about 1.6 by late 2001. It then fluctuates between about 1.55 and 1.65 until early 2004. Then it generally increases to about 2.55 by early 2008, and then it decreases to end in Q3 at about 2.2.

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

Source: Census Bureau.

Figure: Existing Single-Family Home Sales

Line chart, 2001 to October 2009. There are two series, "Existing home sales", by millions of units at an annual rate, and "Pending home sales", an index where 2001=100. The two series track closely throughout the chart. Existing home sales begins at about 4.6 and generally increase to about 6.3 by 2005. Then they generally decrease to about 4.2 by late 2008, and then generally increase to end at about 5.3. Pending home sales begin at about 100 and generally decrease to about 93 by late 2001, then generally increase to about 125 by 2005, then generally decrease to about 80 by late 2008, then generally increase to end at about 115.

Source: National Association of Realtors.

Figure: Mortgage Rates

Line chart, 2001 to December 2, 2009, by percent. The series, 30-year conforming fixed rate mortgage, begins at about 7 in 2001 and decreases to about 6.5 by 2002. It then generally increases to about 7.2 by mid-2002, then generally decreases to about 5.25 by mid-2003. It then fluctuates between about 5.5 and 6.5 with a slight upward trend until 2006. It then decreases to about 6 by early 2007 and generally increases to about 6.6 by mid-2007. It then generally decreases to about 5.6 by late 2007, generally increases to about 6.5 by mid-2008, and generally decreases to end at about 4.7.

Note: 2-week moving average.

Source: Federal Home Loan Mortgage Corporation.

Figure: Prices of Existing Homes

Line chart, 2001 to 2009, as an index where 2000=100. There are three series, "LP price index", "Monthly FHFA purchase-only index", and "20-city S&P/Case-Shiller monthly price index". The LP price index and the 20-city S&P index track closely throughout the chart, with the 20-city index being about 3-5 points higher at any given time. The 20-city index begins at about 108 and increases to about 195 by 2006. It then generally decreases to end at about 135 in September (the LP index ends in October). The Monthly FHFA purchase-only index begins at about 107 and generally increases to about 155 by 2007, then generally decreases to end at about 140 in September.

Note: LP and S&P/Case-Shiller are seasonally adjusted by Board staff. FHFA is re-indexed to 2000.

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

Figure: House Price Expectations

Line chart, 2007 to November 2009, as a diffusion index. There are two series, "5 years ahead" and "1 year ahead". The 5 years ahead series begins at about 62 and generally decreases to about 45 by mid-2008. It remains about constant until mid-2009 and then generally increases to end at about 55. The 1 year ahead series begins at about 25 and generally decreases to about -20 by early 2009. It then generally increases to end at about 5.

Note: Diffusion index is constructed by subtracting expectations of decrease from expectations of increase.

Source: Reuters/University of Michigan Surveys of Consumers.

Private Housing Activity

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

Sector	2008	2009					
		Q1	Q2	Q3	Aug.	Sept.	Oct.
All units							
Starts	.91	.53	.54	.59	.58	.59	.53
Permits	.91	.53	.53	.57	.58	.58	.55
Single-family units							
Starts	.62	.36	.43	.50	.48	.51	.48
Permits	.58	.36	.41	.46	.46	.45	.45

Adjusted permits[1]	.58	.37	.42	.48	.47	.48	.46
New homes							
Sales	.49	.34	.37	.41	.42	.41	.43
Months' supply[2]	10.68	11.61	9.44	7.56	7.55	7.41	6.67
Existing homes							
Sales	4.35	4.12	4.24	4.65	4.47	4.86	5.33
Months' supply[2]	9.98	9.68	8.78	8.05	8.60	7.51	6.68
Multifamily units							
Starts	.28	.17	.12	.09	.10	.08	.05
Built for rent	.22	.14	.10	.07	n.a.	n.a.	n.a.
Built for sale	.07	.03	.01	.02	n.a.	n.a.	n.a.
Permits	.33	.17	.12	.11	.12	.12	.10
Condos and co-ops							
Existing home sales	.56	.47	.52	.64	.62	.68	.77

1. Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas. Return to table

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

n.a. Not available.

Source: Census Bureau.

Figure: Private Housing Starts and Permits

Line chart, 1999 to October 2009, in millions of units at a seasonally adjusted annual rate. There are three series, "Single-family starts" and "Single-family adjusted permits", which track very closely throughout the chart, and "Multifamily starts". The single-family series both begin at about 1.35 and generally decrease to about 1.1 by 2000. They then generally increase to about 1.8 by early 2006, then generally decrease to end at about 0.45. Multifamily begins at about 0.4 and remains about constant until mid-2008. It then generally decreases to end at about 0.05.

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

Source: Census Bureau.

Orders and Shipments of Nondefense Capital Goods

(Percent change; seasonally adjusted current dollars)

Category	2009				
	Q2	Q3	Aug.	Sept.	Oct.
	Annual rate		Monthly rate		
Shipments	-17.5	.4	-2.6	2.7	-1.8
Excluding aircraft	-14.4	-1.3	-2.2	.3	-.3
Computers and peripherals	-8.1	-7.9	-4.6	-2.1	-1.7
Communications equipment	-3.5	28.9	-4.6	-2.4	3.9
All other categories[1]	-15.9	-3.1	-1.7	.7	-.6
Orders	13.3	23.3	-7.8	3.4	.7
Excluding aircraft	3.8	12.1	-1.0	2.9	-3.4
Computers and peripherals	13.0	-2.7	-3.1	.3	-7.2
Communications equipment	48.2	41.4	-4.4	-4.9	-3.1
All other categories[1]	-.6	11.0	-.4	4.0	-3.0
Memo:					
Shipments of complete aircraft[2]	36.8	36.4	33.8	43.0	31.6

1. Excludes most terrestrial transportation equipment. Return to table

2. From Census Bureau, Current Industrial Reports; billions of dollars, annual rate. Return to table

Source: Census Bureau.

Figure: Communications Equipment

Line chart, 2000 to October 2009, in billions of chained (2005) dollars, ratio scale. There are two series, "Shipments" and "Orders". Shipments begins at about 9 and generally increases to about 10.5 by 2001. It then generally decreases to about 5 by early 2003, and generally increases to about 7 by late 2005. It then generally decreases to about 5 by early 2009 and increases to end at about 6. Orders begins at about 10 and generally increases to about 14 by late 2000. It then generally decreases to about 2.5 by late 2002, and generally increases to about 8 by early 2006. It then generally decreases to end at about 6.

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, 2000 to October 2009, in billions of chained (2005) dollars, ratio scale. There are two series, "Orders" and "Shipments", which track closely throughout the chart. They begin at about 45 and generally decrease to about 38 by late 2001, with Orders being slightly lower. They then increase to about 48 by 2006 with Orders being slightly higher. They then generally decrease to about 33 by early 2009 with Orders being slightly lower. They then increase 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 October 2009. There are two series, "Industrial production", which is an index where 2000=100, and "Real M3 shipments", in billions of chained (2005) dollars, ratio scale. Industrial production begins at about 100 and generally increases to about 110 by 2001. It then generally decreases to about 100 by 2002, and generally increases to about 235 by early 2008. It then decreases to end at about 150. Real M3 shipments begins at about 8.5 and generally increases to about 10.5 by 2001. It remains about constant until 2003 and then generally increases to about 16 by early 2006. It then decreases to about 12.8 by late 2006 and then generally increases to about 17 by early 2008. It then generally decreases to end at about 15.

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

Source: Census Bureau; FRB Industrial Production.

Figure: Medium and Heavy Trucks

Line chart, 2000 to October 2009, in thousands of units, ratio scale. There are two series, "Net new orders of class 5-8 trucks", and "Sales of class 4-8 trucks." Net new orders begins at about 400 and generally decreases to about 300 by late 2001. It then generally increases to about 540 by early 2002, then generally decreases to about 260 by late 2002. It then generally increases to about 960 by early 2006 and generally decreases to about 300 by early 2007. It then generally increases to about 500 by late 2007 and generally decreases to about 140 by early 2009. It then generally increases to end at about 450. Sales begins at about 540 and generally decreases to about 300 by early 2003. It then generally increases to about 540 by late 2006, and then generally decreases to about 180 by early 2009. It then generally increases to end at about 200.

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 indicates the NBER Peak in December 2007. The NBER peak is the last business cycle peak as defined by the NBER.

Figure: Real Business Output

Line chart, 1990 to 2009:Q3, as a 4-quarter percent change. The series begins at about 2.5 and decreases to about -2.1 in early 1991. It then generally increases to about 6 by 2000, and decreases to about 0 by late 2001. It then generally increases to about 5.5 by 2004, generally decreases to about 2 around the time of the last business cycle peak, and further decreases to about -5.5 by early 2009. It increases to end at about -3.8.

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

Figure: User Cost of Capital

Line chart, 1990 to 2009:Q3, by 4-quarter percent change. There are two series, "Non-high-tech" and "High-tech". The two series track each other closely throughout the chart. High-tech begins at about -7 and increases to about -6 by late 1990. It then decreases to about -12 by late 1992, and increases to about -2 by 1994. It then generally decreases to about -10 by 1997, generally increases to about -3 by 1999, and decreases to about -13 by late 2001. It then increases to about -8 by 2002, decreases to about -13 by 2003, and generally increases to about 2 by late 2007. It decrease to end at about -5.5. At the time of the last business cycle peak, High-tech is at about -5. Non-high-tech is generally about 5 percent higher at any given point, except in 1994 and 2009, when it's about 15 percent higher.

Source: Staff calculation.

Figure: Corporate Bond Yields

Line chart, 1990 to December 2009, by percent. There are two series, "10-year-high-yield" and "10-year BBB". The two series track each other closely throughout the chart. 10-year BBB begins at about 10 and generally decreases to about 7 by 1993. It then generally increases to about 9 by 1994 and generally decreases to about 6.5 by 1998. It then generally increases to about 8.5 by 2000 and generally decreases to about 6 by 2003. It remains about constant until 2005, then generally increases to about 10 by 2008. It then decreases to end at about 6. At the time of the last business cycle peak, 10-year BBB is at about 6.5. 10-year high-yield is generally about 2-4 percent higher than 10-year BBB at any given point, except in late 2008 when it's about 8 percent higher.

Note: Values are end of month. December value as of December 8.

Source: Merrill Lynch.

Figure: NFIB: Survey on Loan Availability

Line chart, 1990 to November 2009, by percent. There are two series, "Credit expected to be tighter" and "Credit more difficult to obtain". Credit expected to be tighter begins at about 7 and generally increases to about 12 by late 1990. It then generally decreases to about 0 by 1997, and generally increases to end at about 16. Credit more difficult to obtain begins at about 7.5 and generally increases to about 12 by late 1990. It then generally decreases to about 0 by 1998, and generally increases to about 6 by 2000. It generally decreases to about 0 by late 2002, and then generally increases to end at about 15. At the time of the last business cycle peak, Credit expected to be tighter is at about 8 and Credit more difficult to obtain is at about 6.

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

Source: National Federation of Independent Business (NFIB).

Figure: Surveys of Business Conditions

Line chart, 1990 to November 2009, as diffusion index. There are two series, "ISM" and "Philadelphia Fed". ISM begins at about 48 and increases to about 50 by mid-1990. It then generally decreases to about 40 by early 1991. It then generally increases to about 59 by 1994. From 1994 to 2004 it fluctuates between about 62 and 40, with a low of 40 in 2001 and a high of 62 in 2004. It then generally decreases to about 30 by late 2008 and generally increases to end at about 55. Philadelphia Fed begins at about 38 and generally increases to about 45 by mid-1990, then generally decreases to about 25 by late 1990. It then generally increases to about 70 by 1994, and fluctuates widely but generally decreases to about 35 by 2001. It then generally increases to about 68 by 2004 and generally decreases to about 30 by 2008. It generally increases to end at about 57. At the time of the last business cycle peak, ISM is at about 48 and Philadelphia Fed is at about 48.

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 Q3 and by staff projection thereafter)

Figure: Total Structures

Line chart, 1999 to October 2009, in billions of chained (2005) dollars. The series begins at about 320 in 1999, remains about constant until early 2000, then generally increases to about 365 by late 2000. It then generally decreases to about 250 by mid-2005, then generally increases to about 360 by mid-2008, and generally decreases to end at about 285.

Source: Census Bureau.

Figure: Office, Commercial, Communication, and Other

Line chart, 1999 to October 2009. In billions of chained (2005) dollars. There are four series, "Communication", "Office", "Commercial", and "Other". Communication begins at about 18 and remains about constant to the end. Office begins at about 60 and generally decreases to about 55 by 2000, generally increases to about 70 by 2001, generally decreases to about 35 by 2003, remains about constant until 2005, generally increases to about 45 by 2008, and generally decreases to end at about 27. Commercial begins at about 75 and generally increases to about 80 by 2000, generally decreases to about 65 by 2002, remains about constant until 2007, generally increases to about 80 by mid-2007, and generally decreases to end at about 38. Other begins at about 88 and generally decreases to about 75 by 2005, generally increases to about 110 by late 2008, and generally decreases to end at about 85.

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, 1999 to October 2009, by billions of chained 2005 dollars. There are two series, "Manufacturing" and "Power". Manufacturing begins at about 50, generally decreases to about 41 by 2000, generally increases to about 53 by 2001, generally decreases to about 23 by 2003, generally increases to about 68 by mid-2009, and decreases to end at about 54. Power begins at about 33, increases to about 38 by early 1999, decreases to about 22 by mid-1999, then fluctuates widely but generally increases to about 55 by late 2001. It then generally decreases to about 32 by late 2002, generally increases to about 47 by mid-2003, generally decreases to about 22 by mid-2004, and generally increases to end at about 63.

Source: Census Bureau.

Figure: Drilling and Mining Indicators

Line chart, 1999 to late 2009. There are two series, "Footage drilled", by millions of feet, and "Drilling rigs in operation", by number. The two series track each other closely throughout the chart. Footage drilled begins at about 9 and generally increases to about 17 by mid-2001. It then generally decreases to about 13 by 2002 and generally increases to about 31 by 2008. It then generally decreases to end at about 13 in October. Drilling rigs in operation begins at about 560 in 1999, increases to about 1200 by 2001, decreases to about 80 by 2002, and generally increases to about 2000 by late 2008. It then decreases to about 900 by mid-2009 and increases to end in December at about 1100.

Note: The December readings for drilling rigs are based on data through December 4, 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, 1999 to 2009:Q3, by percent. There are three series, "Office", "Retail", and "Industrial". Office begins at about 9.5 and generally decreases to about 8.5 by 2000. It increases to about 17 by 2003 and decreases to about 13 by 2007. It increases to end at about 16.5. Retail begins at about 8.5 and decreases to about 7.5 by early 2001. It increases to about 8.5 by 2002, decreases to about 7.5 by 2005, and generally increases to end at about 12. Industrial begins at about 8, decreases to about 7 by 2000, increases to about 11 by 2003, decreases to about 9 by 2007, and increases to end at about 14.

Note: Industrial space includes both manufacturing structures and warehouses.

Source: Torto Wheaton Research.

Figure: Architectural Billings and Nonresidential Construction Employment

Line chart, 1999 to late 2009. There are two series, "Billings", which is a diffusion index, and "Change in employment", which is by percent. Billings begins at about 53 and generally increases to about 55 by early 2000. It generally decreases to about 43 by late 2001, generally increases to about 57 by late 2005, generally decreases to about 50 by 2006, increases to about 58 by 2007, generally decreases to about 34 by early 2009, and generally increases to end at about 44 in October. Change in employment begins at about 0 in 2001. It generally decreases to about -0.8 by early 2002, generally increases to about 0.8 by 2006, generally decreases to about -2.0 by early 2009, and generally increases to end at about -1.3 in November.

Note: Both series are 3-month moving averages. Employment consists of industrial, commercial, and specialty trade construction.

Source: For billings, American Institute of Architects; for employment, U.S. Department of Labor, Bureau of Labor Statistics.

Nonfarm Inventory Investment

(Billions of dollars; seasonally adjusted annual rate)

Measure and sector	2009					
	Q1	Q2	Q3	Aug.	Sept.	Oct.
Real inventory investment (chained 2005 dollars)						
Total nonfarm business	**-114.9**	**-163.1**	**-143.6**e	**...**	**...**	**...**
Motor vehicles	-63.6	-48.1	-4.3	...	...	...
Nonfarm ex. motor vehicles	-51.3	-115.1	-139.3e	...	...	...
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	**-49.3**	**-110.9**	**-127.1**	**-114.7**	**-160.8**e	**n.a.**
Manufacturing	-28.9	-39.8	-54.5	-46.6	-82.0e	n.a.
Wholesale trade ex. motor vehicles & parts	-8.8	-52.5	-51.9	-52.7	-51.1e	n.a.
Retail trade ex. motor vehicles & parts	-11.6	-18.6	-20.7	-15.4	-27.7	n.a.
Book-value inventory investment (current dollars)						
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	**-143.2**	**-150.2**	**-135.3**	**-136.4**	**-130.9**	**n.a.**

Manufacturing	-77.3	-63.6	-62.2	-56.4	-74.9	21.1
Wholesale trade ex. motor vehicles & parts	-47.3	-62.9	-50.7	-54.1	-34.5	8.9
Retail trade ex. motor vehicles & parts	-18.6	-23.7	-22.4	-25.9	-21.5	n.a.

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, 2000 to 2009, in months. There are two series, "Staff flow-of-goods system" and "Census book-value data". Staff flow-of-goods system begins at about 1.75 and generally decreases to about 1.53 by early 2008. It then generally increases to about 1.68 by early 2009 and decreases to end at about 1.6 in October. Census book-value data begins at about 1.37 and generally increases to about 1.4 by mid-2001. It then generally decreases to about 1.2 by late 2005, generally increases to about 1.25 by late 2006, generally decreases to about 1.2 by mid-2008, increases to about 1.38 by early 2009, and generally decreases to end at about 1.26 in September.

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 charts, 2000 to November 2009, as an index. The series begins at about 47 and generally increases to about 57 by 2001. It then generally decreases to about 39 by 2002, generally increases to about 46 by late 2002, generally decreases to about 37 by mid-2004, and fluctuates widely but generally increases to about 57 by late 2008. It then generally decreases to end at about 37.

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

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

Federal Government Indicators

Figure: Total Real Federal Purchases

Line chart, 2004 to 2009:Q3, by percent change, annual rate. There are two series, "Current", and "4-quarter moving average". Current begins at about 5 and generally decreases to about -5 by late 2004. Throughout 2005 and early 2006 it fluctuates widely, reaching a low of about -7 and high of about 13, and generally decreasing to about -5 by early 2007. It then generally increases to about 14 by mid-2008, generally decreases to about -5 by early 2009, increases to about 12 by mid-2009 and decreases to end at about 8. The 4-quarter moving average begins at about 8 and generally decreases to about 2 by early 2005. It then generally increases to about 4 by early 2006, decreases to about -2 by early 2007, increases to about 8 by late 2008 and decreases to end at about 5.

Note: NIPA measure.

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

Figure: Real Defense Spending

Line chart, 2004 to 2009, in billions of chained (2005) dollars. There are two series, "Unified", which is monthly, and NIPA, which is quarterly. The two series track together very closely throughout the chart, with the monthly series generally varying about 25 billion more or less than the quarterly series at any given time, except for late 2004 when it's about 100 less. The quarterly series begins at about 505 and generally increases to end at about 640 in Q3. The monthly series ends in October at about 620.

Note: Nominal unified defense spending is seasonally adjusted and deflated by BEA prices. NIPA defense purchases exclude consumption of fixed capital.

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

Figure: Unified Budget Deficit

Line chart, 2000 to October 2008. There are two series which track very closely throughout the chart, "Billions of dollars" and "Percent of GDP". Billions of dollars begins at about 150 and increases to about 280 by 2001. It then decreases to about -400 by 2004 and increases to about -200 by 2007. It decreases to end at about -1400. Percent of GDP begins at about 1.8 and increases to about 2.4 by 2001. It decreases to about -4 by 2004, increases to about -1.5 by 2007, and decreases to end at about -10.

Note: Adjusted for payment-timing shifts; cumulative deficit over the previous 12 months.

Source: Monthly Treasury Statement.

Figure: Unified Outlays and Receipts

Line chart, 2000 to October 2009, by percent change from year earlier. There are two series, "Outlays" and "Receipts". Outlays begins at about 4 and increases to about 10 by 2002. It generally decreases to about 7 by 2003 and remains about constant until 2006. It generally decreases to about 3 by late 2007, generally increases to about 18 by early 2009, and decreases to end at about 15. Receipts begins at about 6 and generally increases to about 12 by late 2000, generally decreases to about -12 by early 2002, generally increases to about 15 by 2005, and generally decreases to end at about -19.

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

Source: Monthly Treasury Statement.

Figure: Federal Debt Held by the Public

Line chart, as percent of GDP, 2000 to October 2009. The series begins at about 37 and generally decreases to about 32 by 2001. It then generally increases to about 36 by early 2005 and remains about constant until 2008. It then generally increases to about 53 by mid-2009 and decreases to end at about 51.

Source: Monthly Treasury Statement.

Recent Unified Federal Outlays and Receipts

Function or source	October 2009	
	Bilions of dollars	Percent change*
Outlays	291	-3.2
National defense	67	2.0
Major transfers[1]	164	15.9
Other primary spending	42	-43.8
Net interest	18	-5.6
Receipts	135	-17.9
Individual income and payroll taxes	122	-17.4
Corporate income taxes	-5	…
Other	17	5.1
Deficit (-)	-156	…

Note: Adjusted for payment-timing shifts.

* Relative to same year-earlier period. Return to table

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

… Not applicable.

Source: Monthly Treasury Statement.

State and Local Indicators

Figure: Real Spending on Consumption and Investment

Line chart, 1999 to 2009:Q3, by percent change, annual rate. There are two series, "spending", and "4-quarter moving average." Spending begins at about 5 and decreases to about 2.8 by early 1999. It increases to about 5.5 by late 1999 and decreases to about 0 by early 2000. It increases to about 9 in early 2001, decreases to about -3 in mid-2001, and increases to about 9 by late 2001. It decreases to about -1 by early 2003, increases to about 2 by mid-2003 and generally decreases to about -2 by mid-2004. It then generally increases to about 3 by early 2007 and decreases to about -2 by late 2008. It increases to about 4 by early 2009 and decreases to end at about 0. 4-quarter moving average begins at about 6 and generally decreases to about 2 by late 2000. It generally increases to about 4 by early 2002, decreases to about -0.5 by mid-2005, increases to about 2 by 2007, and generally decreases to end at about 0.

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

Figure: Net Change in Employment

Bar chart, 1999 to 2009:Q4, in thousands of job, monthly averages. Approximate values are as following: 1999: 40; 2000: 23; 2001: 45; 2002: 18; 2003: -2; 2004: 12; 2005: 14; 2006: 18; 2007: 22; 2008:H1: 22; 2008:H2: -2; 2009:H1: -8; 2009:Q3: -32; 2009:Q4: 18.

Note: Q4 is the average of October and November.

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

Figure: Real Construction

Line chart, billions of chained (2005) dollars, annual rate, 1999 to October 2009. The series begins at about 202 and increases to about 218 by early 2000. It decreases to about 209 by mid-2000 and generally increases to about 237 by early 2002. It generally decreases to about 215 by late 2004 and generally increases to about 232 by 2007. It generally decreases to about 217 by early 2009 and increases to end at about 233.

Note: Nominal CPIP deflated by BEA prices through Q3 and by a staff projection thereafter.

Source: Census Bureau, Construction Spending.

Figure: State Revenues

Line chart, 1999 to 2009:Q3, percent change from year earlier. There are two series, "Individual and corporate income taxes", and "Total revenues". Total revenues begins at about 4 and generally increases to about 12 by 2000. It decreases to about -10 by 2002 and increases to about 15 by 2005. It generally decreases to about -17 by 2009 and increases to end at about -11. Individual and corporate income taxes is about 5 percent higher in 2000, 10 percent lower in 2002, 10 percent higher in 2005, and 5 percent lower in 2009. Other than that the two series track very closely.

Source: Census Bureau, *Quarterly Summary of State and Local Government Tax Revenue* through Q2; Q3 is a preliminary estimate from the Rockefeller Institute of Government.

Figure: Local Revenues

Line chart, 1999 to 2009:Q2, percent change from year earlier. There are two series, "Property taxes" and "Total revenues". The two series track very closely with minor differences, notably Property taxes being slightly higher in 2002 and slightly lower in 2003. Total revenues begins at about 3 and decreases to about 1 by mid-1999. It increases to about 10 by late 1999 and generally decreases to about 3 by 2000. It generally increases to about 9 by late 2000 and decreases to about 4 by 2001. It generally increases to about 15 by 2002, decreases to about-5 by 2003, increases to about 14 by late 2003, and fluctuates but 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	
			Annual rate		Monthly rate	
	Oct. 2008	Oct. 2009	July 2009	Oct. 2009	Sept. 2009	Oct. 2009
CPI						
Total	**3.7**	**-.2**	**3.4**	**3.6**	**.2**	**.3**
Food	6.3	-.6	-1.8	.2	-.1	.1
Energy	11.5	-14.0	32.5	30.1	.6	1.5
Ex. food and energy	**2.2**	**1.7**	**1.7**	**1.7**	**.2**	**.2**
Core goods	.1	2.3	2.9	1.8	.3	.4
Core services	3.0	1.5	1.3	1.6	.1	.1
Shelter	2.2	.6	-.1	.8	.1	.0
Other services	4.2	2.7	2.9	3.4	.3	.2
Memo: core ex. tobacco	2.2	1.4	1.6	1.6	.2	.2
Chained CPI (n.s.a.) [1]	3.2	-.5	...	...	...	...
Ex. food and energy [1]	1.8	1.3	...	...	...	...
PCE prices						
Total	**3.2**	**.2**	**2.5**	**2.9**	**.1**	**.3**
Food and bev. at home	7.0	-1.6	-2.8	-.7	-.4	.1
Energy	12.5	-14.4	37.2	34.0	.8	1.6
Ex. food and energy	**2.3**	**1.4**	**1.3**	**1.7**	**.1**	**.2**
Core goods	.4	1.3	.4	.2	.3	.0
Core services	2.9	1.5	1.7	2.1	.1	.3

Housing services	2.7	1.2	.6	-.4	-.1	.0
Other services	3.0	1.6	2.0	2.9	.1	.4
Memo: core ex. tobacco	2.2	1.2	1.2	1.6	.1	.2
Core market-based	2.4	1.6	1.1	1.2	.1	.1
Core non-market-based	1.3	.5	2.6	4.1	.2	.8
PPI						
Total finished goods	**5.2**	**-1.9**	**3.6**	**6.0**	**-.6**	**.3**
Food	6.5	-2.7	-7.7	7.8	-.1	1.6
Energy	5.5	-9.4	25.6	31.4	-2.4	1.6
Ex. food and energy	**4.7**	**.7**	**1.2**	**-1.8**	**-.1**	**-.6**
Core consumer goods	4.9	1.2	1.8	-1.7	-.1	-.5
Capital equipment	4.2	.1	.3	-2.0	-.1	-.7
Intermediate materials	9.8	-7.5	5.6	9.7	.2	.3
Ex. food and energy	9.0	-5.6	.7	5.5	.9	-.2
Crude materials	.1	-14.1	17.4	31.5	-2.1	5.4
Ex. food and energy	-5.5	-1.6	50.6	48.6	3.6	.5

1. Higher-frequency figures are not applicable for data that are not seasonally adjusted (n.s.a.). 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)

Figure: PCE Prices

Line chart, 2000 to October 2009, by percent as 12-month change. There are two series, "Total PCE" and "Core PCE". Total PCE begins at about 2.3 and increases to about 3 by mid-2000. It then decreases to about 2.4 by late 200 and remains about constant until early 2001. It then generally decreases to about 0.8 by late 2001 and generally increases to about 4 by 2005. It then generally decreases to about 1.5 by 2006, generally increases to about 4.6 by 2008, and generally decreases to about -0.9 by mid-2009. It increases to end at about 0.2, Core PCE begins at about 1.7 and remains about constant until late 2003. It then generally increases to about 2.5 by mid-2008 and generally decreases to end at about 1.4.

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

Figure: Measures of Core PCE

Line chart, 2000 to October 2009, by percent as 12-month change. There are three series, "PCE excluding food and energy", "Market-based components", and "Trimmed mean." Trimmed mean begins at about 2 and generally increases to about 2.7 by mid-2001. It decreases to about 1.9 by 2003 and generally increases to about 3 by early 2007. It decreases to about 2.5 by mid-2007 and generally increases to about 2.8 by mid-2008. It decreases to end at about 1.4. The other two series track each other closely throughout the chart, with PCE excluding food and energy generally being about 0.1 to 0.3 percent higher, except from late 2008 to the end when it is slightly lower, and mid-2002 when it is about 1 percent higher. Market-based components begins at about 1.4 and generally increases to about 1.9 by mid-2001. It generally decreases to about 1.2 by late 2003, and generally increases to about 2.4 by early 2007. It decreases to about 1.7 by mid-2007, and increases to about 2.5 by mid-2008. It generally decreases to end at about 1.7.

Source: For trimmed mean, Federal Reserve Bank of Dallas; for all else, U.S. Dept. of Commerce, Bureau of Economic Analysis.

Figure: CPI and PCE ex. Food and Energy

Line chart, 2000 to October 2009, by percent as 12-month change. There are three series, "CPI", "PCE", and "CPI chained". CPI begins at about 2 and generally increases to about 2.8 by late 2001. It generally decreases to about 1.2 by late 2003. It generally increases to about 3 by mid-2006. It generally decreases to end at about 1.8. PCE begins at about 1.7 and generally increases to about 2 by mid-2001. It decreases to about 1.3 by late 2001 and generally increases to about 1.9 by 2002. It generally decreases to about 1.4 by late 2003 and generally increases to about 2.5 by 2006. It remains about constant until early 2008 and generally decreases to end at about 1.3. Chained CPI begins at about 1.8 in late 2000. It generally increases to about 2.4 in 2002 and generally decreases to about 0.8 by late 2003. It generally increases to about 2.2 by early 2005 and generally decreases to about 1.7 by late 2005. It generally increases to about 2.5 by 2006 and generally decreases to about 1.7 by mid-2007. It generally increases to about 2 by 2008 and generally decreases to end at about 1.3.

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 Goods and Services

Line chart, 2000 to October 2009, by percent as 12-month change. There are two series, "Services ex. energy" and "Goods ex. food and energy." Services begins at about 2.7 and generally increases to about 3 by mid-2001. It decreases to about 2 in late 2001 and generally increases to about 4 by mid-2002. It decreases to about 3.1 by late 2002 and generally increases to about 3.6 by mid-2008. It decreases to end at about 1.2. Goods begins at about -1 and increases to about 0 in early 2000. It decreases to about -0.6 by late 2000 and increases to about 0 by early 2001. It generally decreases to about -2.4 by mid-2003, generally increases to about 0.2 by 2004 and remains about constant until 2006. It then generally decreases to about -1 by 2007 and generally increases to end at about 1.3.

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

Figure: Total PCE

Line chart, 2000 to October 2009, by percent as 12-month change. There are two series, "Total PCE" and "3-month change, annual rate". The series track closely throughout the chart with Total PCE typically deviating from its 3-month average by about 0-2 percent at any given time, except for mid-2005 when it's about 5 percent higher, and late 2008 when it's about 10 percent lower. The 3-month change, annual rate begins at about 2.8 and remains about constant until early 2001. It generally decreases to about 1 by early 2002 and generally increases to about 3.3 by mid-2005. It generally decreases to about 2.5 by mid-2006 and generally increases to about 4.5 by late 2008. It decreases to about -0.8 by early 2009 and increases to end at about 0.1.

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

Figure: PCE excluding Food and Energy

Line chart, 2000 to October 2009, by percent as 12-month change. There are two series, "PCE excluding Food and Energy" and "3-month change, annual rate". The series track closely throughout the chart with PCE excluding Food and Energy typically deviating from its 3-month average by about 0.2 to 1 percent, except for mid-2001 when it's about 2.5 percent lower and late 2001 when it's about 2.5 percent higher, and late 2008 when it's about 1.5 percent lower. The 3-month change, annual rate begins at about 1.8 and generally increases to about 2.8 by 2002. It generally decreases to about 1.5 by late 2003. It generally increases to about 2.7 by mid-2008 and generally decreases to end at about 1.3.

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

Energy and Food Price Indicators

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

Figure: Total Gasoline Margin

Line chart, 2005 to December 7, 2009, in cents per gallon. Series is retail price less average spot crude price, which is Regular grade seasonally adjusted by FRB staff, less average spot crude price: 60% West Texas Intermediate, 40% Maya heavy crude. Includes gasoline taxes. The series begins at about 100 and generally decreases to about 80 by mid-2005. It then generally increases to about 155 by late 2005 and decreases to about 100 by early 2006. It generally increases to about 135 by mid-2006 and decreases to about 95 by late 2006. It generally increases to about 165 by mid-2007 and generally decreases to about 75 by mid-2008. It increases to about 155 by late 2008 and generally decreases to about 78 by early 2009. It generally increases to about 130 by about March 2009 and decreases to about 75 by May. It generally increases to end at about 103.

Figure: Gasoline Price Decomposition

Line chart, 2005 to December 7, 2009, in cents per gallon. There are three series, "Average spot crude price", which is 60% West Texas Intermediate, 40% Maya heavy crude, "Rack price", and "Retail price", which is regular grade seasonally adjusted by FRB staff. Retail price is generally about 50 cents higher than Rack price which in turn is about 50 cents higher than the Average spot crude price at any given time. The Retail price begins at about 199 and generally increases to about 300 by late 2005. It decreases to about 240 by December 2005 and generally increases to about 300 by mid-2006. It decreases to about 240 by late 2006 and generally increases to about 400 by mid-2008. It generally decreases to about 190 by late 2008 and generally increases to end at about 275.

Figure: Gasoline Inventories

Line chart, 2006 to December 4, 2009, in millions of barrels. The chart also shows upper and lower bounds of the series, which are defined as the monthly mean over the preceding five years, plus or minus the standard deviation for each month. Monthly data through June 2009, weekly data thereafter. The bounds are typically about 10 million barrels wide, or about 5 million barrels both above and below the actual series at any given time. The series begins at about 196 and increases to about 225 by early 2006. It generally decreases to about 210 by late 2006, increases to about 233 by early 2007, and generally decreases to about 200 by mid-2007. It increases to about 242 by early 2008 and decreases to about 194 by late 2008. In increases to about 223 by early 2009 and generally decreases to about 208 by mid-2009. It generally increases to end at about 221.

Note: The RBOB component of total motor gasoline inventories is adjusted for ethanol use after 2006, boosting reported stocks; estimated by FRB staff.

Figure: Natural Gas Prices

Line chart, 2005 to December 8, 2009, in dollars per million BTU. The series begins at about 5.9 and generally increases to about 6.4 by mid-2005. It continues to increase to about 14 by mid-late 2005 and decreases to about 8.5 by late 2005. It increases to about 15.5 by December 2005 and generally decreases to about 4 by late 2006. It increases to about 12 by early 2007 and decreases to about 5 by mid-2007. It increases to about 13.5 by mid-2008 and generally decreases to about 2.2 by mid-2009. It increases to end at about 5. The futures price is shown from the end of December 2009 through 2010. It begins at about 5 and increases to about 5.9.

Note: National average spot price.

Source: Bloomberg.

Figure: PCE: Food at Home and Core Prices

Line chart, 2005 to October 2009, 12-month percent change. There are two series, "Food and beverages" and "Ex. food and energy". Food and beverages starts at about 2 and fluctuates between about 1 and 2.8 until late 2006 when it is at about 1.4. It then generally increases to about 7 by late 2008 and decreases to end at about -1.8. Ex. food and energy begins at about 2.2 and remains about constant until mid-2008. It then decreases to end at about 1.5.

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

Figure: Spot Prices of Agricultural Commodities

Line chart, 2005 to December 8, 2010, in dollars per bushel. There are three series, "Corn", "Soybeans", and "Wheat". Corn begins at about 2 and generally increases to about 3.5 by late 2006. It generally decreases to about 3 by mid-2007, generally increases to about 7 by mid-2008 and generally decreases to about 3 by late 2008. It remains about constant to the end. Soybeans begins at about 4.5 and generally increases to about 6 by mid-2005. It decreases to about 4.5 by late 2005 and remains about constant until late 2006. It generally increases to about 16 by mid-2008 and generally decreases to about 8 by late 2008. It generally increases to about 12 by mid-2009 and generally decreases to about 9 by autumn 2009. It generally increases to end at about 10.2. Wheat begins at about 4 and generally increases to about 13 by early 2008. It generally decreases to about 4.3 by mid-2009 and generally increases to end at about 5.2.

Source: Commodity Research Bureau.

Measures of Expected Inflation

Figure: Survey Measures (Reuters/University of Michigan)

Line chart, 1971 to 2009:Q3, by percent. Data are quarterly. There are two series, "Median, next 12 months" and "Median, next 5 to 10 years". Next 12 months begins in 1977 at about 6 and increases to about 10.5 by 1979. It then generally decreases to about 2.5 by 1982 and fluctuates but remains about constant until 2001. It then decreases to about 1.4 by late 2001 and increases to about 5 by 2008. It generally decreases to end at about 2.8. Next 5 to 10 years begins in 1980 at about 6.5 and decreases to about 5 by 1985. There is a gap in the series until 1989, when it begins again at about 4. It generally decreases to end at about 3.

There is a second, more detailed line chart showing the same series from 2005 to November 2010 where data are monthly. Next 12 months begins at about 3 and remains about constant to the end except for late 2005 when it reaches 4.75, late 2006 when it reaches about 4, mid-2008 when it reaches about 5.25, and late 2008 when it decreases to about 1.75. Next 5 to 10 years begins at about 2.8 and remains about constant to the end.

Source: Reuters/University of Michigan Surveys of Consumers.

Figure: Inputs to Models of Inflation

Line chart, 1971 to 2009:Q4, by percent. Data are quarterly. There are two series, "Distributed lag of core PCE inflation" and "FRB/US long-run expectations measure for PCE inflation." The FRB/US measure begins at about 3.3 and generally increases to about 7.8 by 1981. It then decreases to about 2 by 1998 and remains about constant to the end. Distributed lag begins at about 4.8 and decreases to about 3.8 by 1973. It generally increases to about 7.8 by 1976, decreases to about 6.5 by 1978, generally increases to about 9 by 1981, generally decreases to about 1.8 by 2001, and generally increases to end at about 2.

There is a second, more detailed chart of the same two series from 2005 to 2010. FRB/US begins at about 2, remains constant until 2007, increases to about 2.4 by early 2009, and decreases to end at about 2.1. Distributed lag begins at about 2, generally increases to about 2.5 by 2008, and generally decreases to end at about 1.8.

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, 2001 to 2009:Q3, by percent. Data are quarterly. There are two series, "5 to 10 years ahead" and "Next 5 years". 5 to 10 years ahead begins at about

2.2 and generally increases to about 3 by 2004. It decrease to about 2.5 by 2005 and generally increases to end at about 3. Next 5 years begins at about 1.8 and generally decreases to about 1.2 by 2002, it generally increases to about 2.5 by late 2004, decreases to about 2 by mid-2008, further decreases to about -0.8 by late 2008, and increases to end at about 1.

There is a second, more detailed chart showing the same 2 series from 2005 to December 8, 2010, which contains weekly data. 5 to 10 years ahead begins at about 2.8 and remains about constant until 2007. It generally increases to about 3.5 by late 2008, decreases to about 2.1 by early 2009, and increases to end at about 3.2. Next 5 years begins at about 2.5, generally decreases to about 2 by mid-2008, further decreases to about -1.6 by late 2008, and generally increases to end at about 1.8.

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 December 8, 2009, as ratio scale where 2006=100. There are two series, "Industrials" and "Metals". Industrials begins at about 55, remains about constant until 1993, generally increases to about 70 by 1994, generally decreases to about 50 by 1999, generally increases to about 60 by 2000, and generally decreases to about 45 by late 2001. It generally increases to about 130 by mid-2008, decreases to about 60 by late 2008, and generally increases to end at about 105. Metals begins at about 45 and generally decreases to about 40 by 1993. It generally increases to about 50 by 1994 and generally decreases to about 35 by 1999. It generally increases to about 45 by late 1999 and generally decreases to about 32 by late 2001. It generally increases to about 160 by 2008 and decreases to about 60 by late 2008. It generally increases to end at about 105.

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 December 8, 2009, as a ration scale where 1967=100. There are two series, "Spot Industrials" and "Futures". Spot industrials begins at about 300 and generally decreases to about 260 by 1993. It generally increases to about 360 by 1995 and generally decreases to about 220 by late 2001. It generally increases to about 550 by mid-2008, decreases to about 310 by late 2008, and generally increases to end at about 480. Futures begins at about 220 and generally increases to about 250 by 1996. It generally decreases to about 190 by 1999, generally increases to about 230 by 2001, generally decreases to about 190 by late 2001, generally increases to about 620 by early 2008, decreases to about 350 by late 2008, and generally increases to end at about 475.

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 10/27/09 [2]	10/27/09 [2] to 12/8/09	52-week change to 12/8/09
JOC industrials	-41.4	49.4	8.4	64.1
JOC metals	-48.2	79.1	.8	70.8
CRB spot industrials	-35.1	36.8	7.5	51.0
CRB spot foodstuffs	-14.1	11.7	3.7	22.6
CRB futures	-24.7	29.5	3.8	41.9

1. From the last week of the preceding year to the last week of the year indicated. Return to table

2. October 27, 2009, is the Tuesday preceding publication of the October Greenbook. Return to table

Broad Measures of Inflation

(Percent change, Q3 to Q3)

Measure	2006	2007	2008	2009
Product prices				
GDP price index	3.3	2.6	2.5	.6
Less food and energy	3.3	2.6	2.7	.3

Nonfarm business chain price index	3.0	2.1	1.9	.7
Expenditure prices				
Gross domestic purchases price index	3.4	2.6	4.0	-.9
Less food and energy	3.2	2.6	2.9	.2
PCE price index	2.8	2.3	4.3	-.7
Less food and energy	2.5	2.2	2.6	1.3
PCE price index, market-based components	2.9	2.0	4.6	-.6
Less food and energy	2.5	1.9	2.6	1.7
CPI	3.3	2.3	5.2	-1.6
Less food and energy	2.8	2.1	2.5	1.5
Chained CPI	3.1	2.0	4.5	-1.6
Less food and energy	2.6	1.7	2.1	1.1
Median CPI	3.0	2.9	3.2	1.7
Trimmed mean CPI	2.8	2.5	3.6	1.1
Trimmed mean PCE	2.8	2.5	2.9	1.6

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

Surveys of Inflation Expectations

(Percent)

Period		Actual CPI inflation[1]	Reuters/Michigan Survey 1 year[2]		Reuters/Michigan Survey 5 to 10 years[3]		Professional forecasters (10 years)[4]	
			Mean	Median	Mean	Median	CPI	PCE
2008:	Q1	4.1	4.2	3.8	3.3	3.0	2.5	2.2
	Q2	4.4	6.4	5.0	3.8	3.3	2.5	2.2
	Q3	5.3	5.4	4.7	3.6	3.1	2.5	2.2
	Q4	1.6	3.0	2.8	2.9	2.8	2.5	2.2
2009:	Q1	.0	2.4	2.0	3.3	2.9	2.4	2.2
	Q2	-1.2	3.4	2.9	3.1	2.9	2.5	2.3
	Q3	-1.6	3.1	2.6	3.2	2.9	2.5	2.2
	Q4	n.a.	n.a.	n.a.	n.a.	n.a.	2.3	2.1
2009:	July	-2.1	3.6	2.9	3.4	3.0	…	…
	Aug.	-1.5	3.0	2.8	3.1	2.8	2.5	2.2
	Sept.	-1.3	2.8	2.2	3.2	2.8	…	…
	Oct.	-.2	3.2	2.9	3.2	2.9	…	…
	Nov.	n.a.	3.1	2.7	3.2	3.0	2.3	2.1

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.

Hourly Compensation and Unit Labor Costs

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

Category	2007:Q3 to 2008:Q3	2008:Q3 to 2009:Q3 e	2009 Q1	Q2	Q3 e
Compensation per hour					
Nonfarm business	3.1	2.5	-4.7	6.9	5.4
Output per hour					
Nonfarm business	1.2	3.8	.3	6.9	7.3
Unit labor costs					
Nonfarm business	1.9	-1.2	-5.0	.0	-1.8

e Staff estimate. Return to table

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

Figure: Compensation per Hour

Line chart, 1996 to 2009:Q3, by percent as percent change from year-earlier period. There are two series, "ECI" and "Productivity and costs". The 2009:Q3 value for Productivity and costs is a staff estimate. ECI begins at about 3 and generally increases to about 4 by 1998, decreases to about 3 by 1999, generally increases to about 4.5 by 2000, and generally decreases to end at about 1.1. Productivity and costs begins at about 3, increases to about 3.7 by late 1996, decreases to about 2.8 by 1997, increases to about 7 by 1998, decreases to about 3 by 1999, increases to about 8.7 by 2000, generally decreases to about 2.9 by late 2001, generally increases to about 6 by 2003, decreases to about 3 by 2004, increases to about 4.8 by late 2004, generally decreases to about 2.8 by 2006, increases to about 4.8 by 2007, generally decreases to about 1 by late 2008 and increases to end at about 2.7.

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

Figure: Unit Labor Costs

Line chart, 1996 to 2009:Q3, by percent as percent change from year-earlier period. The series begins at about 1 and generally increases to about 2.9 by 1998. It decreases to about 0.7 by 1999 and increases to about 4.7 by early 2000. It generally decreases to about -3.5 by late 2001 and generally increases to about 2 by 2003. It decreases to about -1 by late 2003 and generally increases to about 4 by early 2007. It decreases to about 0 by 2008, increases to about 2 by late 2008, and generally decreases to end at about -2.2.

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

Figure: Average Hourly Earnings

Line chart, 1996 to November 2009, by percent as percent change from year-earlier period. The series begins at about 3.2, decreases to about 2.9 by early 1996, then generally increases to about 4.3 by early 1998. It generally decreases to about 3.6 by 1999 and generally increases to about 4.3 by late 2000. It generally decreases to about 2.6 by early 2002 and generally increases to about 3.4 by late 2002. It generally decreases to about 1.5 by early 2004 and generally increases to about 4.3 by 2006. It generally decreases to end at about 2.2.

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

Figure: Markup, Nonfarm Business

Line chart, 1996 to 2009:Q3, by ratio. The average ratio from 1968 to the present is marked in the chart at about 1.57. The series begins at about 1.61 and generally increases to about 1.63 by 1997. It generally decreases to about 1.53 by 2001, and generally increases to end at about 1.7.

Note: The markup is the ratio of output price to unit labor costs. Value for 2009:Q4 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 Sept.	Dec.	2009 Mar.	June	Sept.
	Quarterly change (compound annual rate) [1]				
Total hourly compensation	**2.6**	**1.9**	**.7**	**.7**	**1.8**
Wages and salaries	2.6	1.8	.7	.7	1.8
Benefits	2.3	1.5	.7	.7	1.1

	12-month change				
Total hourly compensation	**2.8**	**2.4**	**1.9**	**1.5**	**1.2**
Wages and salaries	2.9	2.6	2.0	1.6	1.4
Benefits	2.4	2.0	1.6	1.3	1.1

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, 1990 to September 2009, by percent. Data are private-industry workers, 12-month change. The series begins at about 12 and generally decreases to about 0 in early 1996. It generally increases to about 12 by 2002 and generally decreases to end at about 5.

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

Figure: Nonproduction Bonuses

Line chart, 1990 to September 2009, by percent. Data are private-industry workers, 12-month change. The series begins at about 14 and generally decreases to about -2 by 1992. It generally increases to about 10 by 1994, and generally decreases to about -3 by 1996. It generally increase to about 7 by 1998. Between 1998 and 2006 it fluctuates widely, between about -8 and 12. In 2006 it's at about -2 and it increases to about 8 by 2007. It remains about constant until late 2008 and decreases to end at about -8.

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

Figure: Retirement and Savings

Line chart, 1990 to September 2009, by percent. Data are private-industry workers, 12-month change. The series begins at about 5 and generally increases to about 12 by 1995. It generally decreases to about 2 by 2002. It increases to about 27 by 2004. It generally decreases to about -5 by 2007. It increases to about 8 by early 2008 and decreases to end at about -2.

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

Figure: Workers' Compensation Insurance

Line chart, 1990 to September 2009, by percent. Data are private-industry workers, 12-month change. The series begins at about 12 and generally decreases to about -7 by 1998. It increases to about 13 by 2002, and generally decreases to about -2 by 2007. It remains about constant to the end.

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

December 2009 Greenbook Part 2 Tables and Charts†

Domestic Financial Developments

Selected Financial Market Quotations

(One-day quotes in percent except as noted)

Instrument	2008 Sept. 12	2009 Sept. 22	2009 Nov. 3	2009 Dec. 8	Change to Dec. 8 from selected dates (percentage points) 2008 Sept. 12	2009 Sept. 22	2009 Nov. 3
Short-term							
FOMC intended federal funds rate	2.00	.13	.13	.13	-1.87	.00	.00
Treasury bills[1]							
3-month	1.46	.11	.06	.03	-1.43	-.08	-.03
6-month	1.80	.20	.17	.15	-1.65	-.05	-.02
Commercial paper (A1/P1 rates)[2]							
1-month	2.39	.18	.16	.13	-2.26	-.05	-.03
3-month	2.75	.21	.18	.20	-2.55	-.01	.02
Large negotiable CDs[1]							
3-month	2.79	.25	.22	.22	-2.57	-.03	.00
6-month	3.09	.35	.32	.30	-2.79	-.05	-.02
Eurodollar deposits[3]							
1-month	2.60	.40	.30	.32	-2.28	-.08	.02
3-month	3.00	.55	.45	.45	-2.55	-.10	.00
Bank prime rate	5.00	3.25	3.25	3.25	-1.75	.00	.00
Intermediate- and long-term							
U.S. Treasury[4]							
2-year	2.24	.99	.93	.71	-1.53	-.28	-.22
5-year	2.97	2.44	2.37	2.12	-.85	-.32	-.25
10-year	3.93	3.74	3.73	3.61	-.32	-.13	-.12
U.S. Treasury indexed notes[5]							
5-year	1.33	1.11	.70	.41	-.92	-.70	-.29
10-year	1.77	1.69	1.48	1.33	-.44	-.36	-.15
Municipal general obligations (Bond Buyer)[6]	4.54	4.20	4.39	4.24	-.30	.04	-.15
Private instruments							
10-year swap	4.26	3.67	3.62	3.52	-.74	-.15	-.10
10-year FNMA[7]	4.36	4.12	4.06	3.85	-.51	-.27	-.21
10-year AA[8]	6.62	5.11	5.12	4.96	-1.66	-.15	-.16
10-year BBB[8]	7.22	6.36	6.25	6.00	-1.22	-.36	-.25
10-year high yield[8]	10.66	9.90	9.48	9.42	-1.24	-.48	-.06
Home mortgages (FHLMC survey rate)							
30-year fixed	5.78	5.04	4.98	4.71	-1.07	-.33	-.27

1-year adjustable	5.03	4.52	4.47	4.25	-.78	-.27	-.22

Stock exchange index	Record high		2009			Change to Dec. 8 from selected dates (percent)		
	Level	Date	Sept. 22	Nov. 3	Dec. 8	Record high	2009 Sept. 22	2009 Nov. 3
Dow Jones Industrial	14,165	10-9-07	9,830	9,772	10,286	-27.38	4.64	5.26
S&P 500 Composite	1,565	10-9-07	1,072	1,045	1,092	-30.23	1.89	4.45
Nasdaq	5,049	3-10-00	2,146	2,057	2,173	-56.96	1.24	5.62
Russell 2000	856	7-13-07	621	571	598	-30.16	-3.70	4.75
D.J. Total Stock Index	15,807	10-9-07	11,083	10,729	11,207	-29.10	1.12	4.46

1. Secondary market. Return to table

2. Financial commercial paper. Return to table

3. Bid rates for Eurodollar deposits collected around 9:30 a.m. eastern time. Return to table

4. Derived from a smoothed Treasury yield curve estimated using off-the-run securities. Return to table

5. Derived from a smoothed Treasury yield curve estimated using all outstanding securities and adjusted for the carry effect. Return to table

6. Most recent Thursday quote. Return to table

7. Constant-maturity yields estimated from Fannie Mae domestic noncallable coupon securities. Return to table

8. Derived from smoothed corporate yield curves estimated using Merrill Lynch bond data. Return to table

NOTES:
September 12, 2008, is the last business day before Lehman Brothers Holdings filed for bankruptcy.
September 22, 2009, is the day before the September 2009 FOMC monetary policy announcement.
November 3, 2009, is the day before the most recent FOMC monetary policy announcement.

Policy Expectations and Treasury Yields

Figure: Interest Rates

Line chart, November 3 to December 7, by percent. There are two series, "10-year Treasury yield" and "June 2010 Eurodollar". 10-year Treasury begins at about 3.4 and generally increases to about 3.55 by November 5. It generally decreases to about 3.25 by November 27. It generally increases to about 3.6 by December 4, and generally decreases to end at about 3.45. June 2010 Eurodollar begins at about 0.75 and generally decreases to about 0.50 by November 19. It generally increases to about 0.70 by December 4, and generally decreases to end at about 0.60. There are 4 events marked on the timeline: FOMC Statement (November 4), when 10-year Treasury is at about 3.5 and Eurodollar is at about 0.75. Employment Report (November 6), when 10-year Treasury is at about 3.5 and Eurodollar is at about 0.60. Chairman's speech (November 16), when Treasury is at about 3.4 and Eurodollar is at about 0.50, and Employment Report (December 4), when Treasury is at about 3.5 and Eurodollar is at about 0.60.

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

Source: Bloomberg.

Figure: Implied Federal Funds Rate

Line chart, January 2010 to January 2011, by percent. There are two series, "November 3, 2009" and "December 8, 2009". November 3 begins at about 0.1 and increases to end at about 2.5. December 8 begins at about 0.1 and increases to end at about 2.

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

Source: CME Group.

Figure: Treasury Yield Curve

Line chart, 1 to 20 years ahead, by percent. There are two series, "November 3, 2009" and "December 8, 2009", which track very closely throughout the chart, with the November series being about 0.1 percent higher at any given time. The December 8, 2009 series begins at about 0.1 and increases to about 3.6 at 10 years ahead, and continues to increase to about 4.4 by 20 years ahead.

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

Source: Federal Reserve Board.

Figure: 10-Year Treasury Implied Volatility

Line chart, January 2007 to December 8, 2009, by percent. Data are daily. The series begins at about 4 and generally increases to about 10 by January 2008. It decreases to about 7.5 by March 2008 and remains about constant until August 2008. It increases to about 14 by September 2008 and generally decreases to about 7 by March 2009. It increases to about 12 by May 2009 and generally decreases to end at about 6. The November 2009 FOMC meeting is marked in the timeline, when the series is at about 7.

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

Source: Bloomberg.

Figure: Inflation Compensation

Line chart, January 2007 to December 8, 2009, by percent. Data are daily. There are two series, "5 to 10 years ahead" and "Next 5 years". Next 5 years is adjusted for lagged indexation of Treasury inflation-protected securities. 5 to 10 years ahead begins at about 2.5 and generally increases to about 2.7 by September 2008. It then increases to about 3.7 by October 2008 and decreases to about 2.3 by November 2008. It then generally increases to end at about 3. Next 5 years begins at about 2.4 and generally decreases to about 2 by March 2008. It generally increase to about 2.7 by May 2008 and generally decreases to about -1.7 by October 2008. It generally increases to end at about 1.8. The November 2009 FOMC meeting is marked in the time series when 5 to 10 years ahead is at about 3 and Next 5 years is at about 1.7.

Note: Estimates based on smoothed nominal and inflation-indexed Treasury yields.

Source: Federal Reserve Board.

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

Figure: Bank Exchange-Traded Funds

Line chart, January 2008 to December 8, 2009, where January 2, 2009=100. Data are daily. There are two series, "Large banks" and "Regional and smaller banks". Large banks begins at about 190 and generally decreases to about 173 by February 2008. It increases to about 215 by March 2008 and generally decreases to about 105 by June 2008. It generally increases to about 180 by September and generally decreases to about 40 by February 2009. It generally increases to about 110 by September 2009 and generally decreases to end at about 98. Regional and smaller banks begins at about 120 and fluctuates but remains about constant until May. It then decreases to about 80 by June 2008 and increases to about 140 by September. It generally decreases to about 50 by February 2009, generally increases to about 80 by August 2009, decreases to about 70 by October and increases to end at about 78. The November 2009 FOMC meeting is marked in the timeline when Large banks is at about 95 and Regional and smaller banks is at about 70.

Note: Large bank ETF consists of 24 banks; regional and smaller bank ETF consists of 51 banks.

Source: Keefe, Bruyette & Woods (KBW) and Bloomberg.

Figure: Senior CDS Spreads for Banking Organizations

Line chart, January 2008 to December 8, 2009. In basis points. Data are daily. There are two series, "Large bank holding companies" and "Other banks". Large bank holding companies begins at about 50 and generally increases to about 220 by March 2008. It generally decreases to about 70 by May and generally increases to about 160 by June. It decreases to about 120 by July and generally increases to about 290 by September. It then fluctuates widely between about 290 and 125 until January 2009 when it's at about 200. From there it generally increases to about 370 by March and generally decreases to about 130 by May. It increases to about 200 by June and generally decreases to end at about 110. Other banks begins at about 50 and generally increases to about 125 by March. It decreases to about 95 by May and generally increases to about 210 by January 2009. It generally decreases to end at about 100. The November 2009 FOMC meeting is marked in the timeline when both series are at about 120.

Note: Median spreads for 6 large bank holding companies and 10 other banks.

Source: Markit.

Figure: Libor over OIS Spread

Line chart, July 2007 to December 9, 2009. In basis point, data are daily. There are three series, "1-month", "3-month", and "6-month". 1-month begins at about 10 and generally increases to about 95 by September. It decreases to about 25 by November and increases to about 120 by December. It decreases to about 20 by January 2008 and generally increases to about 90 by April. It decreases to about 40 by May and remains about constant until September. It increases to about 325 by October and decreases to about 80 by November. It increases to about 165 by December and decreases to about 30 by January 2009. It generally increases to about 35 by March and decreases to about 10 by May. It remains about constant to the end. 3-month and 6-month begin at about 10 and generally increase to about 90 by September and generally decreases to about 50 by November. They generally increase to about 110 and December and generally decrease to about 45 by January 2008. From there they split. 3-month generally increases to about 80 by September and continues to increase to about 370 by October. It generally decreases to end at about 10. 6-month generally increases to about 100 by September 2008 and continues to increase to about 340 by October. It generally decreases to about 130 by January 2009, generally increases to about 170 by March 2009 and decreases to end at about 30. The November 2009 FOMC meeting is marked in the timeline when 6-month is at about 35 and the other series are at about 10.

Source: British Bankers' Association and Prebon.

Figure: Spreads on 30-day Commercial Paper

Line chart, July 2007 to December 8, 2009. In basis points, daily data. There are two series, "ABCP" and "A2/P2". ABCP begins at about 10 and increases to about 130 by September. It decreases to about 20 by late October and increases to about 200 by December. It decreases to about 40 by January 2008 and increases to about 100 by April 2008. It decreases to about 60 by May and remains about constant until September. It generally increases to about 400 by October and decreases to about 70 by November. It generally increases to about 150 by December and decreases to end at about 10. A2/P2 tracks very closely to ABCP until October 2008. It then continues to increase to about 610 by January 2009 and decreases to end at about 10. From May 2008 to September 2008 it's about 20 points higher than ABCP. The November 2009 FOMC meeting is marked in the timeline when both series are at about 10.

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: Usage of TALF and Other Lending Facilities

Line chart, January 2007 to December 7, 2009, in billions of dollars. Data are daily. There are two series, "TALF" and "Other facilities", which includes primary, secondary, and seasonal credit; TAF; PDCF; dollar liquidity swaps; CPFF; and AMLF. TALF begins at 0 and remains constant until March 2009. It then increases to end at about 45. Other facilities begins at 0 and remains constant until November 2007. It then generally increases to about 210 by May 2008 and remains about constant until September. It increases to about 1550 by December 2008 and generally decreases to end at about 170. The November 2009 FOMC meeting is marked in the timeline when TALF is at about 40 and Other facilities is at about 200.

Source: Federal Reserve Board.

Figure: Expected Year-End Premiums in Libor

Bar chart, 2006 to 2009, in basis points. There are two series, "1-month" and "2-month". Approximate values are: 2006: 1-month 100, 2-month 25; 2007: 1-month 1200, 2-month 500; 2008: 1-month 1400, 2-month 650; 2009: 1-month 20, 2-month 0.

Note: Premiums measured from the change in Libor rates when these contracts first rolled forward to settle past the year-end.

Source: Bloomberg and staff estimates.

Corporate Yields, Risk Spreads, and Stock Prices

Figure: Selected Stock Price Indexes

Line chart, July 2008 to December 8, 2009. Daily data, November 3, 2009=100. There are two series, "S&P 500" and "S&P Financial". S&P 500 begins at about 120 and remains about constant until August. It then generally decreases to about 65 by March 2009. It generally increases to end at about 105. S&P Financial begins at about 140, decreases to about 120 by late July and increases to about 155 by August. It fluctuates but remains about constant until September, then generally decreases to about 45 by March 2009. It generally increases to end at about 100. The November 2009 FOMC meeting is marked in the timeline when both series are at about 100.

Source: Standard & Poor's.

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

Line chart, 1990 to December 8, 2009. By percent, data are monthly. December 8 is the latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S. There are two series, "Expected 10-year real equity return" and "Expected real yield on 10-year Treasury". Expected real equity return begins at about 7.8 and generally increases to about 9.5 by 1991. It generally decreases to about 7.5 by 1992 and generally increases to about 8.5 by 1995. It generally decreases to about 2.2 by 1999 and generally increases to about 7 by 2002. It generally decreases to about 5 by 2003 and generally increases to about 12 by 2008. It generally decreases to end at about 8.5. Expect real Treasury begins at about 4.3 and generally decreases to about 2.2 by 1993. It generally increases to about 4.5 by 1994 and fluctuates between about 4.2 and 3.2 until about 2000. It then generally decreases to about 1 by 2003 and generally increases to about 2.8 by 2007. It generally decreases to end at about 1.7.

Note: Expected real yield on 10-year Treasury is off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation.

Source: Thomson Financial.

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

Line chart, 2007 to December 8, 2009, by percent. Data are weekly as of Friday. The latest observation is for most recent business day. The series begins at about 12 and generally increases to about 31 by early 2008. It generally decreases to about 18 by mid-2008 and generally increases to about 81 by late 2008. It generally decreases to end at about 22. The November 2009 FOMC meeting is marked in the timeline when the series is at about 25.

Source: Chicago Board of Exchange.

Figure: Corporate Bond Yields

Line chart, 2007 to December 8, 2009, by percent. Data are daily. There are two series, "10-year high-yield" and "10-year BBB". 10-year high-yield begins at about 8.5 and generally decreases to about 8 by mid-2007. It generally increases to about 11 by mid-late 2008 and further increases to about 20 by very late 2008. It generally decreases to about 13.5 by early 2009, increases to about 17 by early-mid 2009 and generally decreases to end at about 9.2. 10-year BBB begins at about 6.5 and generally increases to about 7 by mid-late 2008. It further increases to about 9.5 by late 2008 and generally decreases to end at about 5.7. The November 2009 FOMC meeting is marked in the timeline, when 10-year high-yield is at about 9.2 and 10-year BBB is at about 6.

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

Figure: Corporate Bond Spreads

Line chart, 2002 to December 8, 2009, by basis points, data are daily. There are two series, "10-year high-yield" and "10-year BBB". 10-year high-yield begins at about 570 and generally increases to about 900 by mid-2002. It generally decreases to about 380 by early 2004 and remains about constant until mid-2007. It increases to about 1660 by late 2008 and generally decreases to end at about 600. 10-year BBB begins at about 100 and generally increases to about 2000 by late 2002. It generally decreases to about 100 by early 2005, then generally increases to about 650 by late 2008. It generally decreases to end at about 250. The November 2009 FOMC meeting is marked in the timeline when high-yield is at about 600 and BBB is at about 260.

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 December 8, 2009, by basis points, data are daily. There are two series, "High-yield" and "Investment-grade". High-yield begins at about 125 and generally increases to about 240 by late 2005. It generally decreases to about 120 by early 2006 and remains about constant until mid-2008. It then fluctuates widely until mid-2009, as high as about 360 and as low as about 120. By mid-2009 it's at about 120 and in generally decreases to end at about 95. Investment-grade begins at about 80 and generally increases to about 120 by early 2005. It generally decreases to about 60 by late 2005 and remains about constant until early 2007. It then generally increases to about 150 by late 2008 and generally decreases to end at about 85. The November 2009 FOMC meeting is marked in the timeline, when High-yield is at about 100 and Investment-grade is at about 88.

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, 2000 to 2008:Q3, in dollars per share. Data are quarterly. The series begins at about 14 and generally decreases to about 10.5 by late 2001. It increases to about 24 by early 2007, decreases to about 16 by late 2007, increases to about 19.5 by early 2008, decreases to about 5.5 by late 2008 and increase to end at about 17. 2009:Q3 value is an estimate.

Note: Data are seasonally adjusted by Board staff.

Source: Thomson Financial.

Figure: Revisions to Expected S&P 500 Earnings

Line chart, 2000 to mid-November 2009, by percent, data are monthly. The series begins at about 0 and increases to about 1 by mid-2000. It generally decreases to about -6 by late 2001, increases to about 0.7 by early 2002, decreases to about -3 by late 2002, generally increases to about 2 by early 2004, generally decreases to about -3 by late 2008 and further decreases to about -13 by early 2009, then generally increases to end at about 2.8.

Note: Index is a weighted average of the percent change in the consensus forecasts of current-year and following-year earnings per share for a fixed sample. The revision in Feb. 2009 was -17.2%.

Source: Thomson Financial.

Figure: Financial Ratios for Nonfinancial Corporations

Line chart, 1989 to 2009:Q3, as ratio. There are two series, "Debt over total assets" and "Liquid assets over total assets". Debt over total assets begins at about .33 and generally decreases to about .28 by 1996. It increases to about .31 by 1999, decreases to about .285 by 2000, and increases to .31 by early 2002. It generally decreases to about .245 by 2006 and increases to about .3 by late 2008. It decreases to end at about .28. Liquid assets over total assets begins at about .05 and generally increases to about .1 by 2004. It generally decreases to about .088 by 2008 and increases to end at about .105.

Note: Data are annual through 1999 and quarterly thereafter. 2009:Q3 values are preliminary.

Source: Compustat.

Figure: Bond Ratings Changes of Nonfinancial Companies

Bar chart, 1990 to 2009, by percent of outstandings, annual rate. There are two series, "Upgrades" and "Downgrades". Approximate values for each are: Upgrades: 15 in 1991; 10 in 1992; 12 in 1993; 10 in 1994; 20 in 1995; 14 in 1996; 13 in 1997; 18 in 1998; 15 in 1999; 10 in 2000; 8 in 2001; 3 in 2002; 5 in 2003; 10 in 2004; 10 in 2005; 10 in 2006; 12 in 2007; 5 in 2008; 8 in 2009:H1; 9 in 2009:Q3; 17 in 2009:Q4 (estimate). Downgrades: 28 in 1991; 38 in 1992; 17 in 1993; 12 in 1994; 8 in 1995; 12 in 1996, 1997, and 1998. 18 in 1999; 21 in 2000; 33 in 2001; 39 in 2002; 18 in 2003; 12 in 2004; 16 in 2005; 17 in 2006; 10 in 2007; 17 in 2008; 29 in 2009:H1; 9 in 2009:Q3; 10 in 2009:Q4 (estimate).

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

Figure: Selected Default and Delinquency Rates

Line chart, 1990 to 2009, by percent of outstandings. There are two series, "C&I loan delinquency rate" and "Bond default rate". C&I loan delinquency rate begins at about 5 in 1990 and increases to about 6 by 1991. It then decreases to about 1.5 by 1997, and generally increases to about 4 by 2002. It decreases to about 1.3 by 2007 and increases to end at about 4.5 in 2009:Q3. Bond default rate begins in 1990 at about 1.5 and increases to about 3.3 by 1991. It generally decreases to about 0 by 1993 and remains about constant until 1998. It generally increases to about 4 by 2002, generally decreases to about 0.3 by 2004, generally increases to about 1.3 by 2005 and decreases to about 0 by 2006. It remains about 0 until 2008 and increases to about 7.4 by early 2009. It generally decreases to end at about 2 in October 2009. Bond default rate is the 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 data.

Figure: Expected Nonfinancial Year-Ahead Defaults

Line chart, 1994 to November 2009, by percent of liabilities. Data are monthly. The series begins at about 0.3 and decreases to about 0.2 by early 1998. It generally increases to about 4.5 by late 2002 and generally decreases to about 0.3 by 2007. It generally increases to about 5 by late 2008 and decreases to end at about 1.9.

Note: Firm-level estimates of default weighted by firm liabilities as a percent of total liabilities, excluding defaulted firms.

Source: Calculated using firm-level data from Moody's KMV.

Business Finance

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

Type of security	2005	2006	2007	2008	2009			
					H1	Q3	Oct.	Nov. p
Nonfinancial corporations								
Stocks[1]	4.6	4.7	5.5	3.7	5.3	5.4	4.7	5.0
Initial public offerings	1.7	1.8	1.6	.3	.2	.6	1.8	1.5
Seasoned offerings	2.8	2.9	3.8	3.4	5.1	4.8	2.9	3.5
Bonds[2]	18.7	29.3	35.1	27.7	50.1	30.4	21.4	45.8
Investment grade	8.7	13.1	17.5	19.5	32.6	13.4	4.7	28.3
Speculative grade	5.2	6.2	7.5	1.8	5.3	7.4	6.7	8.3
Other (sold abroad/unrated)	4.8	10.1	10.0	6.4	12.2	9.7	10.0	9.2
Memo								
Net issuance of commercial paper[3]	-.2	2.4	-.4	1.6	-12.4	-.9	4.2	-13.2
Change in C&I loans at commercial banks[3]	10.2	11.1	21.2	12.8	-17.7	-34.6	-22.2	-19.5
Financial corporations								
Stocks[1]	5.0	5.3	8.6	13.5	15.9	5.5	2.7	2.1
Bonds[2]	170.4	180.6	151.7	45.4	44.5	38.9	31.0	23.7

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. For all nonfinancial firms; End-of-period basis, seasonally adjusted. Return to table

p Forecast based on preliminary data. Return to table

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

Figure: Selected Components of Net Debt Financing

Line and bar chart, 2005 to 2009, in billions of dollars. Monthly rate, nonfinancial firms. There are four series, "Commercial paper", "C&I loans", "Bonds", and "total". Total is a sum of the three other series and is expressed as a line chart. Approximate values for each period are: 2005: Bonds 8, C&I loans 10, Total 18. 2006: Bonds 18, C&I loans 10, Commercial paper 2, Total 30. 2007: Bonds 27, C&I loans 22, Commercial paper -2, Total 47. 2008: Bonds 18, C&I loans 12, Commercial paper 1, Total 31. 2009:H1: Bonds 40, C&I loans -18, Commercial paper -12, Total 10. 2009:Q3: Bonds 21, C&I loans -35, Commercial paper -1, Total -15. 2009:Q4 (estimate): Bonds 25, C&I loans -21, Commercial paper -5, Total -1. Commercial paper and C&I loans are seasonally adjusted, period-end basis.

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

Figure: Components of Net Equity Issuance

Line and bar chart, in billions of dollars. Monthly rate, nonfinancial firms. There are five series, "Public issuance", "Private issuance" (revised back to 2005), "Repurchases", "Cash mergers", and "Total", which is the only series expressed as a line chart and is the sum of the other series. Approximate values for each period are: 2005: Private issuance 12, Public issuance 4, Repurchases -25, Cash mergers -17, Total 26. 2006: Private issuance 17, Public issuance 3, Repurchases -38, Cash mergers -22, Total -40. 2007: Private issuance 19, Public issuance 5, Repurchases -45, Cash mergers -35, Total -56. 2008: Private issuance 21, Public issuance 3, Repurchases -27, Cash mergers -17, Total -20. 2009:Q1: Private issuance 18, Public issuance 2, Repurchases -12, Cash mergers -6, Total 2. 2009:Q2: Private issuance 17, Public issuance 7, Repurchases -10, Cash mergers -8, Total 6. 2009:Q3 (estimate): Private issuance 15, Public issuance 4, Repurchases -11, Cash mergers -7, Total 1.

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, 2001 to 2009:Q3, by percent change, annual rate. Data are quarterly. The series begins at 9 and generally increases to about 12 by late 2001. It decreases to about 7.5 by early 2002 and generally increases to about 18 by late 2005. It decreases to about 9 by early 2007, increases to about 17 by mid-2007, and decreases to end at about -3. The 2009:Q3 value is an estimate.

Source: Federal Reserve Board.

Figure: Commercial Real Estate Sales

Line chart, 2001 to November 2009. There are two series, "Share of properties sold at nominal loss", which is by percent, and "Value of sales", which is in billions of dollars. Value of sales begins at about 5 and generally increases to about 75 by early 2007. It generally decreases to end at about 5. Share of properties sold at nominal loss begins at about 5 and generally increases to about 15 by late 2001. It generally decreases to about 10 by early 2002 and remains about constant until early 2007. It increases to about 15 by early 2007, decreases to about 10 by mid-2007, and generally increases to end at about 48.

Note: 3-month moving averages.

Source: Real Capital Analytics.

Figure: Prices of Commercial Real Estate

Line chart, 1996 to 2009, as index, 2001:Q1=100. There are two series, "Moody's index" and "NCREIF TBI". The series track very closely throughout the chart. They begins at about 75 and generally increase to about 200 by 2007. Moody's decreases to end at about 100 in September 2009 and NCREIF TBI decreases to end at about 130 in Q3.

Note: NCREIF TBI series re-weighted by staff to exclude multifamily.

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

Figure: Delinquency Rates on Commercial Mortgages on Existing Properties

Line chart, 1996 to 2009, by percent. There are three series, "At commercial banks (excluding farmland)", "CMBS", and "At life insurance companies". At commercial banks begins at about 3.4 and generally decreases to about 1.5 by 2000. It increases to about 1.9 by late 2001 and generally decreases to about 1 by 2006. It increases to end at about 4.7 in 2009:Q3. CMBS begins in late 1998 at about 0.5. It increases to about 2 by late 2003. It decreases to about 0.4 by 2007 and increases to end at about 4.8 in October 2009. At life insurance companies begins at about 2.3 and increases to about 2.5 in early 1996. It decreases to about 0 by 2006 and remains about constant until 2008. It increases to end at about 0.3 in 2009:Q3.

Note: CMBS are commercial mortgage-backed securities.

Source: Citigroup; Call Report data; ACLI.

Figure: Delinquency Rates on Construction Loans at Banks

Line chart, 2007 to 2009:Q3, by percent. Data are quarterly. There are two series, "Residential construction" and "Commercial construction". Residential begins at about 2.5 and increases to end at about 28. Commercial begins at about 2 and increases to end at about 15.

Note: Data series begin in 2007:Q1.

Source: Call Report data.

Figure: Commercial Mortgage CDS Index Prices

Line chart, April 2007 to December 2, 2009, by percent. Data are daily, by rating. There are three series, "Senior AAA", "Junior AAA", and "BBB-". Senior AAA begins at about 100 and generally decreases to about 85 by March 2008. It generally increases to about 95 by May 2008 and generally decreases to about 55 by

December 2008. It generally increases to end at about 80. Junior AAA starts at about 100 in January 2008. It decreases to about 65 by March 2008 and increases to about 85 by May 2008. It generally decreases to about 35 by November 2008, generally increases to about 40 by January 2009, decreases to about 28 by April 28 and generally increases to about 60 by September. It decreases to about 47 by November and generally increases to end at about 53. BBB- begins at about 100 and generally decreases to about 85 by July 2007. It increases to and remains at about 90 until October, then decreases to about 65 by November. It increases to about 70 December, then decreases to about 30 by March 2008. It increases to about 45 by June and generally decreases to about 10 by April 2009. It generally increases to end at about 15. The November 2009 FOMC meeting is marked in the timeline when Senior AAA is at about 80, Junior AAA is at about 48, and BBB- is at about 15.

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, October 2006 to December 2009, by percent. Data are weekly. There are two series, "30-year conforming fixed mortgage rate" and "MBS yield". The two series track closely with MBS yield being about 0.5 to 1 percent lower at any given time. 30-year conforming fixed mortgage rate begins at about 6.4 and remains about constant until May 2007. It increases to about 6.8 by July, and generally decreases to about 5.5 by January 2008. It generally increases to about 6.6 by June 2008, decreases to about 5.8 by August, increases to about 6.4 by October, generally decreases to about 4.8 by April 2009, increases to about 5.5 by June, and decreases to end at about 4.7 on December 2. MBS yield ends at about 4.2 on December 8. The November 2009 FOMC meeting is marked in the timeline, when 30-year is at about 4.9 and MBS is at about 4.4.

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

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

Figure: Spread of Mortgage Rate to Treasury Yield

Line chart, October 2006 to December 2, 2009, by basis points. Data are weekly. There are two series, "30-yr FRM to 10-yr Treasury" and "5/1 ARM to 2-yr Treasury". 30-yr FRM begins at about 160 and remains about constant until May 2007. It generally increases to about 250 by August 2008 and generally decreases to end at about 120. 5/1 ARM begins at about 140 and generally decreases to about 120 by May 2007. It generally increases to about 400 by March 2007, decreases to about 300 by June, generally increases to about 530 by November 2008 and generally decreases to end at about 350. The November 2009 FOMC meeting is marked in the timeline, when 30-yr is at about 350 and 5/1 ARM is at about 120.

Note: Spreads are relative to corresponding off-the-run Treasury yields.

Source: Bloomberg; Freddie Mac.

Figure: Net Agency MBS Issuance

Line chart, 2003 to October 2009, in billions of dollars. The series begins at about 30 and fluctuates between about 50 and -5 until early 2005, when it is at about 0. It then generally increases to about 70 by late 2007, generally decreases to about 18 by early 2009, increases to about 83 by mid-2009 and decreases to end at about 39.

Note: 3-month moving average

Source: FHLMC, FNMA, and GNMA.

Figure: Prices of Existing Homes

Line chart, 2002 to 2009, by percent change from a year earlier. Data are monthly. There are three series, "FHFA price index", "LP price index", and "20-city S&P/Case-Shiller price index". FHFA begins at about 7 and generally increases to about 9 by early 2006. It generally decreases to about -9 by late 2009 and increases to end at about -3 in September. LP begins at about 9 and generally increases to about 18 by 2005 and generally decreases to about -22 by early 2009. It increases to end at about -7. 20-city begins at about 7 and increases to about 12 by early 2003. It decreases to about 10 by mid-2003 and increases to about 17 by early 2004. It decreases to about -19 by early 2009 and increases to end at about -7.

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

Figure: Delinquencies on Prime Mortgages

Line chart, 2001 to October 2009, by percent of loans. Data are monthly. There are two series, "Variable-rate" and "Fixed-rate". Variable-rate begins at about 2.5 and generally decreases to about 1 by 2005. It increases to end at about 15. Fixed-rate begins at about 1 and remains about constant until 2007. It increases to end at about 5.

Note: Percent of loans 90 or more days past due or in foreclosure. Prime includes near-prime mortgages.

Source: McDash Analytics.

Figure: Delinquencies on Subprime and FHA-Backed Mortgages

Line chart, 2001 to 2009, by percent of loans. Data are monthly. There are two series, "FHA" and "Subprime". FHA begins at about 4.3 and increases to about 4.8 by mid-2001. It decreases to about 3 by late 2003 and generally increases to end at about 8. Subprime begins at about 7 and remains about constant until mid-2003. It decreases to about 5 by early 2005 and increases to end at about 33.

Note: Percent of loans 90 or more days past due or in foreclosure. For subprime mortgages, rates are for securitized loans.

Source: For FHA-backed mortgages, McDash Analytics; for subprime mortgages, LoanPerformance, a division of First American CoreLogic.

Consumer Credit and Mutual Funds

Figure: Consumer Credit

Line chart, 2004 to October 2009, by percent change, annual rate. Data are 3-month change. There are two series, "Revolving" and "Nonrevolving". Revolving begins at about 3 and generally decreases to about 1 by mid-2004. It generally increases to about 8 by late 2004. It generally decreases to about 2.5 by early 2005 and generally increases to about 10 by mid-2007. It generally decreases to about -12 by early 2009, increases to about -6 by mid-2009 and decreases to end at about -10. Nonrevolving begins at about 7 and fluctuates but generally decreases to about 3 by late 2005. It remains about constant until late 2006 and generally increases to about 6 by 2007. It generally decreases to about -3 by early 2009 and increases to end at about 2.

Source: Federal Reserve Board.

Figure: Gross Consumer ABS Issuance

Bar chart, 2005 to November 2009, in billions of dollars, monthly rate. There are two series, "TALF eligible" and "Non-TALF." The approximate values for Non-TALF are 2005-2007: 19, 2008:H1: 18, 2008:H2: 3, 2009:Q1: 4, 2009:Q2: 5, 2009:Q3: 4, October 2009: 3, November 2009: 8. Approximate values for TALF eligible are: 2009:Q1: 3, 2009:Q2: 10, 2009:Q3: 11, October 2009: 3, November 2009: 3.

Note: Credit card, auto, and student loan ABS.

Source: Inside MBS & ABS; Merrill Lynch; Bloomberg; Federal Reserve Board.

Figure: Consumer Interest Rates

Line chart, 2007 to 2009, by percent. There are three series, "Credit cards", "Used auto loans", and "New auto loans". Credit cards starts at about 13.5 and generally decreases to about 11.5 by late 2008. It generally increases to end at about 14 in October. Used auto loans starts at about 11. 5 and generally decreases to end at about 8.5 on November 29. New auto loans starts at about 8 and generally decrease to end at about 4 on November 29.

Source: For credit cards, Mintel; for auto loans, Federal Reserve Board.

Figure: Delinquencies on Consumer Loans

Line chart, 1997 to 2009, by percent. 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 begins at about 5.25 and generally decreases to about 4.75 by 2000. It generally increases to about 5.5 by 2003. It decreases to about 3.25 by late 2005, and generally increases to about 6.3 by early 2003. It generally decreases to end at about 6.1 in October. Nonrevolving loans begins at about 3 and generally decreases to about 2.2 by early 2006. It generally increases to end at about 3.8 in Q3. Auto loans begins at about 3.2 and generally decreases to about 2.3 by 1999. It increases to about 3 by 2001 and generally decreases to about 2 by 2004. It generally increases to end at about 3.2 in September.

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

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

Fund type	2008		2009					Assets
	H1	H2	Q1	Q2	Q3	Oct.	Nov.[e]	Oct.
Total long-term funds	**11.8**	**-49.0**	**0.5**	**46.1**	**47.9**	**40.9**	**33.4**	**7,327**
Equity funds	**-3.6**	**-35.1**	**-14.4**	**14.2**	**0.9**	**-7.1**	**-5.2**	**4,596**
Domestic	-5.0	-20.1	-7.8	9.7	-3.7	-14.8	-10.0	3,408
International	1.3	-15.1	-6.5	4.4	4.6	7.8	4.8	1,188
Hybrid funds	**1.7**	**-4.8**	**-2.9**	**2.3**	**5.2**	**2.9**	**2.5**	**605**
Bond funds	**13.8**	**-9.1**	**17.8**	**29.7**	**41.8**	**45.0**	**36.1**	**2,126**
High-yield	-0.2	0.1	2.7	2.9	1.4	0.7	0.8	180
Other taxable	11.1	-7.6	11.2	21.1	31.8	39.6	30.3	1,503
Municipals	2.9	-1.6	3.9	5.7	8.7	4.8	5.1	444

Money market funds	**56.1**	**59.6**	**0.1**	**-54.6**	**-81.8**	**-71.8**	**-34.6**	**3,357**

Note: Excludes reinvested dividends.

e Staff estimate. Return to table

Source: Investment Company Institute.

Treasury Finance

Figure: Treasury Auction Amounts

Line chart, 2005 to 2009:Q4, in billions of dollars. Data are quarterly. There are four series, "2-year", "3-year", "5-year", "10-year". 2-year begins at about 75 and generally decreases to about 58 by late 2007. It increases to end at about 130. 3-year begins at about 20 and remains about constant until late 2006. It decreases to 0 by late 2007 and remains at about 0 until late 2008. It increases to end at about 110. 5-year begins at about 45 and remains about constant until late 2007. It increases to end at about 118. 10-year begins at about 20 in early 2005 and remains about constant until late 2007. It increases to about 60 by mid-2009 and decreases to end at about 43.

Note: No 3-year issuance between Q3 2007 and Q3 2008.

Source: U.S. Treasury.

Figure: Foreign Participation in Treasury Auctions

Line chart, 2003 to 2009, by percent of total issue. Data are 6-month moving averages. There are two series, "Indirect bids" and "Actual foreign allotment". Indirect bids begins at about 27 in mid-2003 and generally increases to about 45 by late 2004. It generally decreases to about 32 by mid-2005, increases to about 38 by early 2006, decreases to about 28 by late 2006, increases to about 33 by early 2007, generally decreases to about 24 by early 2008, and generally increases to end at about 47 on November 30. Actual foreign allotment begins at about 14 and generally increases to about 27 by 2004. It generally decreases to about 15 by late 2006, increases to about 18 by early 2007, decreases to about 15 by mid-2008, and increases to end at about 28 on October 15. The November 2009 FOMC meeting is marked in the timeline when Indirect bids is at about 45.

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

Source: Federal Reserve Board.

Figure: Daily Treasury Market Volume

Line chart, 2004 to December 2009, in billions of dollars. Data are monthly averages. The series begins at about 75 and generally increases to about 175 by early 2007. It fluctuates between about 100 and 200 with a slight upward trend until late 2008 when it's at about 190. It then decreases to about 75 by very late 2008. It generally increases to end at about 120. The November 2009 FOMC meeting is marked in the timeline when the series is at about 125.

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

Source: Bloomberg.

Figure: Average Absolute Nominal Yield Curve Fitting Error

Line chart, 2001 to December 8, 2009, in basis points. Data are daily. The series begins at about 2.5 and generally decreases to about 1 by early 2005, except for late 2001 when it spikes to about 13 and mid-2003 when it spikes to about 7. From early 2005 to mid-2007 it remains about constant. It then generally increases to about 24 by late 2008 and decreases to end at about 3. The November 2009 FOMC meeting is marked in the timeline when the series is at about 3.

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

Source: Federal Reserve Board.

Figure: Treasury On-the-Run Premium

Line chart, 2001 to December 2009, in basis points. Data are monthly averages. The series, 10-year note, begins at about 13 and generally increases to about 29 by early 2002. It generally decreases to about 5 by early 2007, generally increases to about 61 by late 2008, and decreases to end at about 21. The November 2009 FOMC meeting is marked in the timeline when the series is at about 23.

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

Source: Federal Reserve Board.

Figure: Fails-to-Deliver of Treasury Securities

Line chart, 2007:Q1 to November 25, 2009, in billions of dollars. Data are weekly. The series begins at about 300 and decreases to about 0 by early 2007:Q1. It remains about constant until 2007:Q4. It fluctuates widely but generally increases to about 1200 by the end of 2008:Q1. It generally decreases to about 0 by 2008:Q3. It increases to about 2800 by 2009:Q1, then generally decreases to about 0 by 2009:Q3. It remains about 0 to the end. The November 2009 FOMC meeting is marked in the timeline when the series is at about 0.

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

State and Local Government Finance

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

Type of security	2005	2006	2007	2008	2009			
					H1	Q3	Oct.	Nov.
Total	38.4	36.1	40.4	37.6	36.5	41.9	48.7	39.7
Long-term[1]	34.2	32.5	35.5	32.5	32.9	30.6	45.8	38.2
Refundings[2]	15.6	10.6	12.6	14.6	12.5	11.1	22.7	14.5
New capital	18.6	21.9	22.9	17.9	20.4	19.5	23.1	23.7
Short-term	4.2	3.7	4.9	5.0	3.6	11.2	2.9	1.5
Memo: Long-term taxable	2.1	2.5	2.4	2.3	4.5	7.9	15.9	9.0

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

Bar chart, 1989 to 2009:Q3, by number of ratings changes, annual rate. There are two series, "Upgrades" and "Downgrades". Upgrades begins at about 250 and remains about constant until 1997. It increases to about 750 in 1998 and remains about constant until 2007. It decreases to about 400 by 2009:Q1 and generally increases to end at about 450. Downgrades begins at about 200 and remains about constant, fluctuating between about 100 and 300, until 2008. It generally increases to end at about 600.

Source: Moody's Credit Trends.

Figure: Municipal Bond Yields

Line chart, 2005 to 2009, by percent. Data are weekly. There are two series, "20-year general obligation" and "7-day SIFMA (Securities Industry and Financial Markets Association) swap index". 20-year general obligation begins at about 4.5 and remains about constant until late 2008. It increases to about 6 in late 2008 and generally decreases to end at about 4.3 on December 3. 7-day SIFMA begins at about 1.5 and generally increases to about 3.9 by late 2007. It generally decreases to about 1.3 by mid-2008. It spikes to about 8 in late 2008 and generally decreases to end at about 0.2 on November 25. The November 2009 FOMC meeting is marked in the timeline when 20-year obligation is at about 4.4 and SIFMA is at about 0.3.

Source: Municipal Market Advisors; Bond Buyer.

Figure: Municipal Bond Yield Ratio

Line chart, 2002 to December 3, 2009, as a ratio. Data are weekly. The series, 20-year, begins at about 0.9 and generally increases to about 1.0 by mid-2003. It generally decreases to about 0.9 by late 2003, remains about constant through 2004, and generally increases to about 0.95 by mid-2005. It generally decreases to about 0.85 by mid-2007, then fluctuates but generally increases to about 1.88 by late 2008. It generally decreases to end at about 1. The November 2009 FOMC meeting is marked in the timeline when the series is 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), Nov. (e)
	2007	2008	2009				
			H1	Q3	Oct.	Nov. (e)	
M2	5.9	8.3	7.7	.1	3.9	4.6	8,392
Components[2]							

Currency	2.0	5.8	11.6	3.4	.6	-5.0	859
Liquid deposits[3]	4.3	6.9	16.9	12.7	23.0	19.8	5,600
Small time deposits	4.3	11.7	-8.3	-26.5	-43.0	-33.4	1,102
Retail money market funds	20.2	13.1	-15.8	-33.0	-46.9	-34.2	826
Memo:							
Institutional money market funds	40.2	24.7	18.4	-9.6	-41.2	-38.2	2,266
Monetary base	2.0	70.4	46.7	-2.2	90.1	49.4	2,016

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

e Estimate. Return to table

Source: Federal Reserve Board.

Commercial Bank Credit

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

Type of credit	2007	2008	H2 2008	H1 2009	Q3 2009	Oct. 2009	Nov. 2009[e]	Level[1] Nov. 2009[e]
Total	9.9	5.0	4.8	-5.5	-7.3	-12.0	-4.3	9,107
Loans[2]								
Total	10.6	4.4	3.0	-7.4	-12.9	-15.5	-5.0	6,773
Core	9.5	5.0	3.2	-4.7	-9.7	-14.4	-7.3	6,017
To businesses								
Commercial and industrial	19.0	16.3	14.1	-14.1	-20.0	-28.7	-15.7	1,362
Commercial real estate	9.4	6.0	3.2	-1.6	-5.5	-11.6	-10.2	1,654
To households								
Residential real estate	5.3	-3.3	-5.5	-2.0	-8.2	-11.8	-.1	2,159
Revolving home equity	5.6	13.0	12.9	6.5	-5.2	-5.1	-6.7	604
Closed-end mortgages	5.3	-8.0	-11.2	-5.1	-9.3	-14.4	2.6	1,556
Consumer	6.8	7.1	7.6	.0	-3.4	-2.7	-6.1	843
Memo: Originated[3]	6.5	5.6	4.5	-1.7	-4.3	-3.8	-12.4	1,228
Other	18.7	.8	1.7	-25.4	-37.0	-25.0	13.0	756
Securities								
Total	7.6	6.9	11.1	.7	10.7	-1.5	-2.1	2,334
Treasury and agency	-5.5	16.4	31.4	.5	20.5	.8	5.1	1,412
Other[4]	28.0	-4.1	-12.0	1.0	-3.0	-5.0	-13.0	922

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

1. Billions of dollars. Pro rata averages of weekly (Wednesday) levels. Return to table

2. Excludes interbank loans. Return to table

3. Includes an estimate of outstanding loans securitized by commercial banks that retained recourse or servicing rights. Return to table

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

e Estimate. Return to table

Source: Federal Reserve Board.

Figure: Total Loans at Commercial Banks

Line chart, June 2007 to November 2009, in trillions of dollars. Data are monthly. There are two series, "Large" (top 25 domestic commercial banks ranked by assets as of the last Call Report) and "Small" (all other domestic commercial banks). Small begins at about 2.2 and increases to about 2.5 by February 2009. It decreases to end at about 2.4. Large begins at about 4 and increases to about 4.3 by February 2008. It remains about constant until about September 2008, then generally decreases to end at about 3.8. At the time of the last business cycle peak, Large is at about 4.2 and Small is at about 2.4.

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

Source: Federal Reserve Board.

Figure: Change in Unused Commitments

Line chart, 1991 to 2009:Q3, by percent. Data are quarterly. The series begins at about 22 and decreases to about -2 by late 1991. It generally increases to about 27 by 1996, generally decreases to about -3 by 1999, generally increases to about 18 by 2000, generally decreases to about -8 by 2004, generally increases to about 16 by 2006, generally decreases to about -34 by late 2008 and increases to end at about -12. At the time of the last business cycle peak, the series is at about -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: Call Report data, adjusted for the effects of merger and failure activity involving large thrift institutions.

Figure: C&I Loan Rate Spreads

Line chart, 1997 to 2009:Q4, by basis points. Data are quarterly. The series begins at about 155 and generally increases to about 190 by 2003. It generally decreases to about 137 by late 2008 and increases to end at about 215. At the time of the last business cycle peak, the series is at about 144.

Note: The spread over market interest rate on an instrument of comparable maturity, adjusted for changes in nonprice loan characteristics. A shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research (NBER): March 2001-November 2001. The NBER peak is the last business cycle peak as defined by the NBER (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

December 2009 Greenbook Part 2 Tables and Charts†

International Developments

Trade in Goods and Services

	2008	Annual rate 2009 Q1	Q2	Q3	Monthly rate 2009 July	Aug.	Sept.
	Percent change						
Nominal BOP							
Exports	-3.4	-40.7	-4.6	24.1	2.5	.2	2.9
Imports	-7.3	-55.4	-11.4	36.6	4.9	-.4	5.8
Real NIPA							
Exports	-3.4	-29.9	-4.1	17.0	...	...	...
Imports	-6.8	-36.4	-14.7	20.8	...	...	...
	Billions of dollars						
Nominal BOP							
Net exports	-695.9	-369.6	-332.0	-396.7	-31.9	-30.8	-36.5
Goods, net	-840.2	-496.1	-461.9	-529.5	-42.8	-42.0	-47.6
Services, net	144.3	126.5	129.9	132.8	10.9	11.2	11.1

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, 1999 to September 2009, in billions of dollars, annual rate. The series begins at about -210 and generally decreases to about -800 by mid-2006. It increases to about -680 by 2007 and decreases to about -750 by late 2008. It increases to about -320 by early 2009 and decreases to end at about -400.

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

Bar chart, 1999 to 2009, by percentage points, annual rate. Approximate values are: 1999:Q1 -1.6; 1999:Q2 -1.2; 1999:Q3 -.8; 1999:Q4 -.2; 2000:Q1 -1.5; 2000:Q2 -.5; 2000:Q3 -.9; 2000:Q4 -.3; 2001:Q1 .3; 2001:Q2 .4; 2001:Q3 -.8; 2001:Q4 -.5; 2002:Q1 -.7; 2002:Q2 -.8; 2002:Q3 -.6; 2002:Q4 -1.3; 2003:Q1 .4; 2003:Q2 -.9; 2003:Q3 .5; 2003:Q4 -.3; 2004:Q1 -.5; 2004:Q2 -1.7; 2004:Q3 -.5; 2004:Q4 -.6; 2005:Q1 .4; 2005:Q2 .2; 2005:Q3 -.4; 2005:Q4 -.7; 2006:Q1 .5; 2006:Q2 0; 2006:Q3 -.7; 2006:Q4 1.9; 2007:Q1 .6; 2007:Q2 1.4; 2007:Q3 2.3; 2007:Q4 2.3; 2008:Q1 .4; 2008:Q2 2.4; 2008:Q3 -.1; 2008:Q4 .5; 2009:Q1 2.7; 2009:Q2 1.7; 2009:Q3 -.8.

Figure: Selected Exports

Line chart, 1999 to 2009, by billions of dollars, annual rate. There are four series, "Capital goods ex. aircraft", "Industrial supplies", "Consumer goods", and "Aircraft." Capital goods begins at about 245 and increases to about 300 by 2000. It decreases to about 235 by early 2002 and generally increases to about 390 by 2008. It generally decreases to end at about 315. Industrial supplies begins at about 130 and increases to about 170 by 2000. It decreases to about 140 by early

2002. It generally increases to about 4000 by 2008, decreases to about 240 by late 2008, and increases to end at about 280. Consumer goods begins at about 80 and generally increases to about 175 by 2008. It decreases to about 145 by early 2009 and increases to end at about 150. Aircraft begins at about 60 and decreases to about 50 by early 1999. It remains about constant until 2004. It increases to about 80 by late 2008, and decreases to end at about 70.

Figure: Selected Imports

Line chart, 1999 to 2009, in billions of dollars, annual rate. There are four series, "Consumer goods", "Capital goods", "Industrial supplies", and "Oil". Consumer goods begins at about 230 and increases to about 295 by 2000. It decreases to about 280 by late 2001. It increases to about 490 by 2008, and decreases to end at about 425. Capital goods begins at about 280 and increases to about 365 by 2000, decreases to about 280 by 2001, increases to about 470 by 2008, decreases to about 340 by early 2009 and increases to end at about 360. Industrial supplies begins at about 140, increases to about 190 by 2001, decreases to about 155 by early 2002, generally increases to about 350 by early 2008, decreases to about 180 by early 2009 and increases to end at about 190. Oil begins at about 40, increases to about 130 by 2000, decreases to about 80 by early 2002, generally increases to about 340 by 2006, decreases to about 275 by late 2006, increases to about 530 by early 2008, decreases to about 210 by late 2008, and increases to end at about 275.

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

U.S. Exports and Imports of Goods and Services

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

	Levels				Change[1]			
	2009		2009		2009		2009	
	Q2	Q3	Aug.	Sept.	Q2	Q3	Aug.	Sept.
Exports of goods and services	**1471.3**	**1553.0**	**1539.6**	**1583.5**	**-17.5**	**81.7**	**3.6**	**43.9**
Goods exports	984.5	1055.8	1042.2	1084.1	-13.0	71.3	1.0	41.9
Gold	12.3	14.3	15.2	15.0	-1.5	2.0	2.4	-.2
Other goods	972.2	1041.5	1027.0	1069.1	-11.4	69.3	-1.4	42.1
Capital goods	373.1	382.2	370.4	390.2	-20.7	9.1	-15.7	19.8
Aircraft & parts	73.4	70.4	61.6	73.6	-5.6	-3.0	-14.3	11.9
Computers & accessories	35.5	37.4	36.7	36.5	-1.4	1.9	-2.5	-.2
Semiconductors	35.0	38.5	38.8	38.2	1.6	3.5	.2	-.6
Other capital goods	229.2	235.9	233.3	242.0	-15.3	6.7	.8	8.7
Automotive	66.7	86.4	87.5	90.1	-3.4	19.7	5.9	2.6
Ind. supplies (ex. ag., gold)	249.8	283.3	280.5	297.1	9.6	33.5	8.1	16.6
Consumer goods	144.2	150.0	147.6	153.1	-1.8	5.8	-1.7	5.5
Agricultural	101.0	99.0	101.3	97.0	6.6	-1.9	2.4	-4.2
All other goods	37.4	40.5	39.8	41.6	-1.7	3.1	8.4	1.8
Services exports	486.7	497.2	497.4	499.4	-4.6	10.5	2.6	2.0
Imports of goods and services	**1803.3**	**1949.7**	**1909.8**	**2021.1**	**-55.1**	**146.4**	**-8.4**	**111.4**
Goods imports	1446.5	1585.3	1546.2	1655.4	-47.2	138.8	-8.1	109.3
Oil	227.8	275.6	253.2	306.0	18.9	47.8	-14.5	52.8
Gold	8.4	8.8	7.8	8.6	1.1	.4	-2.4	.8
Other goods	1210.3	1300.9	1285.3	1340.9	-67.2	90.6	8.8	55.6
Capital goods	345.6	364.0	360.6	370.1	-20.7	18.3	-.5	9.5
Aircraft & parts	31.4	29.0	25.0	28.5	1.2	-2.4	-8.6	3.5
Computers & accessories	84.4	95.0	94.1	96.0	3.8	10.6	-.8	1.8
Semiconductors	20.4	22.2	22.8	22.6	1.4	1.8	1.6	-.2
Other capital goods	209.4	217.7	218.7	223.0	-27.1	8.3	7.3	4.3
Automotive	126.8	178.2	176.6	196.9	-2.6	51.4	15.4	20.4

Ind. supplies (ex. oil, gold)	178.7	190.7	189.0	200.9	-34.2	12.0	6.7	11.9
Consumer goods	419.1	423.1	418.1	426.1	-4.4	4.0	-7.1	8.0
Foods, feeds, beverages	81.5	81.2	80.6	81.0	-.2	-.3	-1.3	.4
All other goods	58.6	63.7	60.4	65.9	-5.1	5.1	-4.4	5.5
Services imports	356.8	364.4	363.6	365.7	-8.0	7.6	-.3	2.1
Memo:								
Oil quantity (mb/d)	11.62	11.37	10.42	12.13	-2.16	-.25	-1.16	1.71
Oil import price ($/bbl)	53.70	66.25	66.52	69.07	12.10	12.55	3.26	2.55

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, 1999 to 2009, by 12-month percent change. There are two series, "Core goods", and "Non-oil goods". Both series track closely together throughout the chart. They begin at about -2 and generally increase to about 2 by 2000. They generally decrease to about -4 by early 2002 with Non-oil goods being about 1 percent lower. They generally increase to about 4 by 2004, decrease to about 1 by 2006, and increase to about 9 by 2008. They decrease to about -6 by mid-2009, with Non-oil goods being slightly lower, and they increase to end at about -3.4.

Figure: Categories of Core Imports

Line chart, 1999 to 2009, by 12-month percent change. There are two series, "Material-intensive goods" and "Finished goods". Material-intensive goods begins at about -4 and generally increases to about 7 by early 2000. It generally decrease to about -10 by early 2002, increases to about 12 by 2004, decreases to about 4 by 2005, increases to about 11 by 2006, generally decreases to about 5 by 2007, increases to about 19 by 2009, decreases to about -17 by mid-2009, and increases to end at about -9. Finished Goods begins at about 0 and ends at about 0, rising briefly to about 2 in 2005 and 4 in 2008.

Figure: Oil

Line chart, 1999 to 2009, in dollars per barrel. There are two series which track very closely throughout the chart, "Spot West Texas Intermediate" and "Import unit value". They begin at about 12 and generally increase to about 35 by late 2000. They decrease to about 20 by early 2002. They generally increase to about 75 by early 2006, decrease to about 50 by late 2006, increase to about 135 by early 2008, decrease to about 37 by late 2008, and increases to end at about 78.

Figure: Natural Gas

Line chart, 1999 to 2009. There are two series, "Import price index", where 2000=100, and "Spot Henry Hub", in dollars per million Btu. The two series generally rise and fall together. Import price index begins at about 60 and generally increases to about 220 by late 2000. It generally decreases to about 60 by early 2002, generally increases to about 190 by early 2003, decreases to about 120 by 2004, generally increases to about 160 by 2005, continues to increase to about 280 by late 2005, decreases to about 125 by mid-2006, generally increases to about 290 by 2008, and generally decreases to end at about 90. Spot Henry Hub begins at about 2, generally increases to about 10 by late 2000, decreases to about 3 by late 2001, increases to about 9 by early 2003, decreases to about 5 by late 2003, generally increases to about 14 by 2005, decreases to about 5 by 2006, generally increases to about 13 by 2008, and 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". They track closely throughout the charts, with Total goods generally being about a half percent lower. Core goods begins at about -2 and increases to about 3.5 by early 2000. It decrease to about -2 by 2002, generally increases to about 4 by early 2003, decreases to about 2 by mid-2003, increases to about 5 by 2004, decreases to about 3.5 by 2006, then fluctuates but generally increases to about 14 by early 2008. It decreases to about -11 by mid-2009 and increases to end at about -4.5. Total goods ends at about -3.5.

Figure: Categories of Core Exports

Line chart, 1999 to 2009, by 12-month percent change. There are two series, "Material-intensive goods" and "Finished goods." Material-intensive goods begins at about -4 and increases to about 7 by 2000, decreases to about -7 by early 2002, increases to about 10 by early 2003, decreases to about 4 by mid-2003, increases to about 12 by 2004, decreases to about 6 by early 2005, and fluctuates but generally increases to about 24 by mid-2008. It decreases to about -21 by mid-2009 and increases to end at about -10. Finished goods begins at about 0 and remains about constant until 2003. It generally increases to about 4 by early 2008, then decreases to end at about 1.

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

Summary of U.S. International Transactions

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

	2007	2008	2008	2009				
			Q4	Q1	Q2	Q3	Sept.	Oct.
Official financial flows	**451.1**	**-54.6**	**-286.5**	**313.5**	**316.1**	**128.0**	**11.9**	**71.3**
1. Change in foreign official assets in the U.S. (increase, +)	475.2	480.0	-17.9	70.7	124.6	76.1	10.7	46.6
a. Long-term Treasury securities	76.7	203.8	-15.7	35.0	103.2	99.7	41.9	39.8
b. Short-term Treasury securities	21.5	272.4	194.0	84.8	21.2	25.8	-9.6	0.3
c. Long-term agency securities	171.0	66.4	-95.8	0.0	-3.1	-25.7	-10.9	-2.2
d. Other[1]	205.9	-62.7	-100.4	-49.2	3.3	-23.8	-10.8	8.7
2. Change in U.S. official assets (decrease, +)[2]	-24.1	-534.6	-268.7	242.8	191.4	51.9	1.2	24.7
Private financial flows	**212.5**	**559.7**	**374.8**	**-278.1**	**-257.8**	**n.a.**	**...**	**...**
Banks								
3. Change in net foreign positions of banking offices in the U.S.[3]	-81.7	-4.4	321.3	-269.9	-203.0	32.2	112.2	8.4
Securities[4]								
4. Foreign net purchases (+) of U.S. securities	673.9	68.6	52.7	-3.8	-8.0	-0.3	21.9	-43.6
a. Treasury securities	67.1	196.4	81.6	52.4	-22.4	-25.7	6.8	-44.6
b. Agency bonds	-8.6	-186.6	-21.5	-49.7	-0.3	6.8	6.8	-4.5
c. Corporate and municipal bonds	384.7	2.5	-3.8	-12.5	-21.0	-32.6	-6.6	-3.9
d. Corporate stocks[5]	230.7	56.4	-3.6	6.0	35.7	51.1	14.9	9.4
5. U.S. net acquisitions (-) of foreign securities	-366.8	45.9	57.6	-35.2	-91.9	-54.6	-17.8	-25.4
a. Bonds	-218.5	46.6	23.1	-33.9	-54.6	-24.7	-17.2	-19.8
b. Stock purchases	-136.4	6.4	38.8	0.6	-37.3	-29.9	-0.6	-5.7
c. Stock swaps[6]	-11.9	-7.1	-4.3	-1.9	0.0	0.0	0.0	0.0
Other flows[5]								
6. U.S. direct investment (-) abroad	-398.6	-332.0	-84.5	-40.3	-44.9	n.a.	...	...
7. Foreign direct investment in the U.S.	275.8	319.7	96.8	23.9	26.1	n.a.	...	...
8. Net derivatives (inflow, +)	6.2	-28.9	-17.7	7.2	11.3	n.a.	...	...
9. Foreign acquisitions of U.S. currency	-10.7	29.2	29.9	11.8	-1.9	n.a.	...	...
10. Other (inflow, +)[7]	114.4	461.5	-81.3	28.2	54.4	n.a.	...	...
U.S. current account balance[6]	**-726.6**	**-706.1**	**-154.9**	**-104.5**	**-98.8**	**n.a.**	**...**	**...**
Capital account balance[8]	**-1.9**	**1.0**	**-0.7**	**-0.7**	**-0.7**	**n.a.**	**...**	**...**
Statistical discrepancy[6]	**64.9**	**200.1**	**67.2**	**69.8**	**41.2**	**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 foreign official net purchases of stocks, bonds, short-term securities, and changes in other bank-reported liabilities to foreign official institutions. Return to table

2. Includes changes in U.S. official reserve assets and in outstanding reciprocal currency swaps with certain foreign central banks. Return to table

3. 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

4. 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

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

6. Quarterly data; seasonally adjusted. Return to table

7. 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

8. Seasonally adjusted; consists of transactions in nonproduced nonfinancial assets and capital transfers. 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 October 2009

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

Figure: Total

Line chart, 2005 to 2009, by billions of dollars; monthly rate, not seasonally adjusted. There are two series, "Total" and its 6-month moving average. The 6-month moving average begins at about 25, decreases to about 19 by mid-2005, increases to about 48 by mid-2006, decreases to about 38 by late 2006, increases to about 50 by early 2007, decreases to about 20 by mid-2007, increases to about 65 by mid-2008, generally decreases to about 10 by early 2009, and increases to end at about 37. The Total series generally fluctuates about 0-20 billion dollars below or above the 6-month average at any given time, except in mid-2007 when it's about 40 billion dollars below and in late 2007 when it's about 70 billion dollars above.

Figure: Treasury Securities

Line chart, 2005 to 2009, by billions of dollars; monthly rate, not seasonally adjusted. There are two series, "Treasury Securities" and its 6-month moving average. The 6-month moving average begins at about 18, decreases to about 10 by mid-2005, increases to about 20 by early 2006, remains about constant until late 2006, generally decreases to about 0 by late 2007, generally increases to about 55 by late 2008, and generally decreases to end at about 45. The Treasury Securities series generally fluctuates about 0-20 billion dollars below or above the 6-month average at any given time, except in mid-2007 when it's about 30 million dollars below, and late 2007 and mid-2008 when it's about 30 billion dollars above.

Figure: Long-Term Agency Securities

Line chart, 2005 to 2009, by billions of dollars; monthly rate, not seasonally adjusted. There are two series, "Long-Term Agency Securities" and its 6-month moving average. The 6-month moving average begins at about 6 and generally increases to about 28 by early 2007, decreases to about 5 by late 2007, increases to about 30 by mid-2008, decreases to about -20 by late 2008, and increases to about 0 by mid-2009. It decreases to end at about -5. The Long-term Agency Securities series generally fluctuates about -10 billion dollars below or above the 6-month average at any given time, except in late 2008 when it's about 20-30 billion dollars below.

Figure: Foreign Official Balances Held at the Federal Reserve Bank of New York, Daily through December 3, 2009

Line chart, 2007 to 2009, by billions of dollars; monthly rate, not seasonally adjusted. There are two series, "Treasury securities" and "Agency securities". Treasury securities begins at about 1150 and generally increases to about 1250 by mid-2007. It remains about constant until late 2007 then generally increases to end at about 2125. Agency securities begins at about 625 and generally increases to about 950 by mid-2008. It generally decreases to end at about 750.

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

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

Private Securities Flows through October 2009

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

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

Figure: Total

Line chart, 2005 to 2009, in billions of dollars; monthly rate, not seasonally adjusted. Chart shows "Total" and its 6-month moving average. Total series fluctuates about 0-40 billion dollars above or below the moving average at any given time, except for mid-2007 when it's about 80 billion above, and early 2009 when it's about 80 billion below. The 6-month moving average begins at about 40 and fluctuates between about 40 and 60 until mid-2006. It generally increases to about 90 by mid-2007, decreases to about 0 by mid-2008, and remains about constant until the end.

Figure: Treasury Securities

Line chart, 2005 to 2009, in billions of dollars; monthly rate, not seasonally adjusted. Chart shows "Treasury Securities" and its 6-month moving average. Treasury Securities fluctuates about 0-40 billion dollars above or below the moving average at any given time, except for late 2008 when it's about 60 billion above. The 6-month moving average begins at about 0 and increases to about 19 in early 2005. It generally decreases to about -10 by mid-2006, generally increases to about 28 by late 2008, and generally decreases to end at about -10.

Figure: Agency Bonds

Line chart, 2005 to 2009, in billions of dollars; monthly rate, not seasonally adjusted. Chart shows "Agency Bonds" and its 6-month moving average. Agency Bonds fluctuates about 0 to 20 billion dollars above or below the moving average at any given time. The 6-month moving average begins at about 8 and generally decreases to about -8 by early 2007. It increases to about 5 by late 2007, generally decreases to about -25 by mid-2008, and increases to end at about 2.

Figure: Corporate and Municipal Bonds

Line chart, 2005 to 2009, in billions of dollars; monthly rate, not seasonally adjusted. Chart shows "Corporate and Municipal Bonds" and its 6-month moving average. Corporate and Municipal Bonds fluctuates about 0-30 billion dollars above or below its moving average at any given time, except for late 2008 when it's about 40 billion above. The moving average begins at about 23 and generally increases to about 60 by early 2007. It generally decreases to about -18 by late 2008, increases to about 2 by mid-2009, and decreases to end at about -8.

Figure: Corporate Stocks

Line chart, 2005 to 2009, in billions of dollars; monthly rate, not seasonally adjusted. Chart shows "Corporate Stocks" and its 6-month moving average. Corporate stocks fluctuates about 0-20 billion dollars above or below the moving average at any given time, except for mid-2007 when it's about 45 billion below. The moving average begins at about 10, generally decrease to about 5 by mid-2005, increases to about 15 by mid-2006, decreases to about 10 by late 2006, increases to about 25 by mid-22007, decreases to about 0 by late 2008, and increases to end at about 18.

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

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

Figure: Total

Line chart, 2005 to 2009, in billions of dollars; monthly rate, not seasonally adjusted. Chart shows "Total" and its 6-month moving average. Total fluctuates about 0-20 billion dollars above or below its moving average at any given time. The moving average begins at about -17 and generally decreases to about -43 by early 2007, and generally increases to about 20 by late 2008. It generally decreases to end at about -24.

Figure: Bonds

Line chart, 2005 to 2009, in billions of dollars; monthly rate, not seasonally adjusted. Chart shows "Bonds" and its 6-month moving average. Bonds fluctuates about 0-20 billion dollars above or below the moving average at any given time, except in mid-2008 when it's about 30 billion above, and late 2008 when it's about 40 billion below. The moving average begins at about -8 and increases to about -3 by late 2005. It decreases to about -25 by early 2007, generally increases to about 18 by late 2008, and generally decreases to end at about -15.

Figure: Stock Purchases & Swaps

Line chart, 2005 to 2009, in billions of dollars; monthly rate, not seasonally adjusted. Chart shows "Stock Purchases & Swaps" and its 6-month moving average. Stock Purchases & Swaps fluctuates about 0-30 billion dollars above or below its moving average at any given time. The moving average begins at about -5 and decreases to about -19 by late 2005. It increases to about -5 by mid-2006, decreases to about -20 by early 2007, increases to about 8 by late 2008, and decreases to end at about -12.

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

Exchange Value of the Dollar and Stock Market Indexes

	Latest	Percent change since October Greenbook
*Exchange rates**		
Euro ($/euro)	1.4741	0.1
Yen (¥/$)	88.410	-2.9
Sterling ($/£)	1.6302	0.4
Canadian dollar (C$/$)	1.0599	-1.5
Nominal dollar indexes^*		
Broad index	101.4	-1.0
Major Currencies index	73.5	-0.9
OITP index	132.4	-1.0
Stock market indexes		
DJ Euro Stoxx	266	2.7
TOPIX	897	0.9
FTSE 100	5223	2.8
S&P 500	1092	4.7

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

^ Indexed to 100 in Jan. 1997 for the Broad and OITP indexes and Mar. 1973 for the Major Currencies index. Return to table

Figure: Exchange Value of the Dollar

Line chart, 2005 to 2009, an index where January 4, 2005=100. Data are weekly. There are three series, "Major currencies index", "Euro", and "Yen". Major currencies index begins at 100, generally increases to about 108 by late 2005, generally decreases to about 86 by mid-2008, generally increases to about 108 by early 2009, and generally decreases to end at about 90. Euro begins at 100 and generally increases to about 114 by late 2005, generally decreases to about 85 by mid-2008, generally increases to about 106 by early 2009, and generally decreases to end at about 90. Yen begins at 100 and generally increases to about 118 by mid-2007. It generally decreases to about 93 by early 2008, generally increases to about 105 by late 2008, decreases to about 85 by early 2009, increases to about 95 by mid-2009, and generally decreases to end at about 84. There is a second detailed chart that shows data from August to December 2009, where October 28 2009=100 with daily data. Yen begins at about 105, Euro at about 102 and Major currencies Index at about 100. All three generally decrease to the end. Major currencies ends at about 99, Euro at about 101, and Yen at about 96. The October Greenbook is marked in the timeline when all three series are at about 100.

Figure: Stock Market Indexes

Line chart, 2005 to 2009, an index where January 4, 2005=100. Data are weekly. There are three series, "DJ Euro Stoxx", "TOPIX", and "S&P 500". All three begin at 100. Euro Stoxx generally increases to about 165 by mid-2007, generally decreases to about 65 by early 2009, and generally increases to end at about 100. TOPIX generally increases to about 150 by early 2006, decreases to about 130 by mid-2006, increases to about 150 by mid-2007, generally decrease to about 65 by early 2009, and increases to end at about 73. S&P 500 generally increases to about 120 by late 2007, generally decreases to about 65 by early 2009, and increases to end at about 90. There is a second detailed chart that shows data from August to December 2009, where October 28. 2009=100, with daily data. TOPIX begins at about 108 and generally decreases to about 90 by late November. It generally increases to end at about 100. Euro Stoxx begins at about 95 and fluctuates but generally increases to about 108 by October. It decreases to about 98 by early November, increases to about 106 by mid-November, decreases to about 100 by late November, and ends at about 103. S&P begins at about 94 and fluctuates but generally increases to end at about 104. The October Greenbook is marked in the timeline when all three series are at about 100.

Industrial Countries: Nominal and Real Interest Rates

Percent

	3-month Libor		10-year nominal		10-year indexed	
	Latest	Change since Oct. Greenbook	Latest	Change since Oct. Greenbook	Latest	Change since Oct. Greenbook
Germany	0.68	0.01	3.14	-0.12	0.84	-0.20
Japan	0.28	-0.04	1.27	-0.14	1.99	-0.27
United Kingdom	0.61	0.02	3.70	0.09	0.71	-0.02
Canada	0.47	-0.03	3.29	-0.17	...	...

United States	0.26	-0.02	3.40	-0.04	1.39	-0.19

… Not applicable.

Libor: London interbank offered rate. Return to table

Figure: Nominal 10-Year Government Bond Yields

Line chart, 2005 to 2009, by percent. There are three series, "Germany", "Japan", and "United States". United States begins at about 4.25 and generally increases to about 5.1 by mid-2006. It generally decreases to about 2.2 by late 2008, generally increases to about 4 by mid-2009 and generally decreases to end at about 3.4. Japan begins at about 1.25, fluctuates between about 1.1 and 2 for the duration of the chart, and ends at about 1.2. Germany begins at about 3.6, generally decrease to about 3 by mid-2005, generally increases to about 4.6 by mid-2007, generally decreases to about 3.7 by early 2008, generally increases to about 4.7 by mid-2008, generally decreases to about 3 by early 2009, generally increases to about 3.7 by mid-2009 and generally decreases to end at about 3.2. There is a second more detailed chart showing daily data from August to early December 2009. Germany and the United States track closely. Germany begins at about 3.4 and the United States at about 3.7. Both have a slight decreasing trend. Germany ends at about 3.2 and the United States at about 3.5. Japan begins at about 1.4 and generally decreases to end at about 1.2. The October Greenbook is marked in the timeline when the United States is at about 3.5, Germany is at about 3.3, and Japan is at about 1.4.

Figure: Inflation-Indexed 10-Year Government Bond Yields

Line chart, 2005 to 2009, by percent. There are three series, "France", "Japan", and the "United States". France begins at about 1.7, generally decreases to about 1.5 by late 2005, generally increases to about 2.2 by mid-2007, generally decreases to about 1.7 by early 2008, generally increases to about 2.4 by late 2008, and generally decreases to end at about 0.8. Japan begins at about 0.8 and generally increases to about 1.4 by mid-2008. It further increases to about 5 by late 2008, decreases to about 3 by very early 2009, increases to about 3.9 by the end of Q1 2009, and generally decreases to end at about 2. The United States begins at about 1.9, generally increases to about 2.4 by mid-2007, generally decreases to about 1.7 by early 2008, generally increases to about 3.8 by late 2008, and generally decreases to end at about 1.8. There is a second detailed chart showing daily data from August to early December 2009. All three series have a decreasing trend. France begins at about 1.3 and ends at about 0.8. Japan begins at about 2.4 and ends at about 2. The United States begins at about 1.95 and ends at about 1.4. The October Greenbook is marked in the series when France is at about 0.9, Japan at about 2.3, and the United States at about 1.6.

Measures of Market Volatility

Figure: Dollar-Euro Options-Implied Volatility

Line chart, 2005 to 2009, by percent. Data are weekly. Annualized volatility is derived from at-the-money options. There are two series which track very closely through the chart, "1-month" and "3-month". They begin at about 10, generally decrease to about 5 by mid-2007, generally increase to about 13 by early 2008, decrease to about 8 by mid-2008 and generally increase to about 28 by late 2008. They generally decrease to end. 1-month ends at about 10 and 3-month at about 12.5. There is a second detailed chart showing daily data from August to early December 2009. 1-month starts at about 12, decreases to about 10.4 by early September, fluctuates between about 9.8 and 12.1 until the end, and ends at about 10.6. 3-month follows the same pattern and is generally about 0.5 to 1.5 percent higher at any given time. It ends at about 12.3. The October Greenbook is marked in the timeline in late October when 3-month is at about 12 and 1-month is at about 11.

Figure: Yen-Dollar Options-Implied Volatility

Line chart, 2005 to 2009, by percent. Data are weekly. Annualized volatility is derived from at-the-money options. Both series, "1-month" and "3-month", track very closely through the chart. They start at about 10 and remain about constant until mid-2007. They generally increase to about 18 by early 2008. They decrease to about 10 by Q3 2008, generally increase to about 35 (with 3-month at about 25) by late 2008, and generally decrease to end at about 13. There is a second detailed chart showing daily data from August to December 2009. 1-month begins at about 14, generally increases to about 15.2 by late August, generally decreases to about 12.8 by mid-September, generally increases to about 14.5 by late September, generally decreases to about 11 by late November, increases to about 14.2 by early December, decreases to about 12.3 and then increases to end at about 13.8. 3-month is generally about 0.5 percent higher at any given time, and ends at about 14.6. The October Greenbook is marked in the timeline in late October when both series are at about 13.5.

Figure: Realized Stock Market Volatility

Line chart, 2005 to 2009, by percent. Data are weekly. Data shows annualized standard deviation of 60-day window of daily returns. There are three series, "TOPIX", "S&P 500", and "DJ Euro Stoxx". All series begin at about 10 and remain about constant until early 2007. All three generally increase to about 60 by late 2008, with S&P being slightly higher, and all three generally decrease to end at about 20. There is a second, detailed chart with daily data from August to December. DJ Euro Stoxx begins at about 23 and generally decreases to about 18 by late September, and generally increases to end at about 21. TOPIX begins at about 21 and decreases to about 18 by early August, increases to about 20 by late August, remains about constant until early November, decreases to about 16 by late November, and increases to end at about 20. S&P 500 begins at about 22 and generally decreases to about 16 by October, increases to about 17.5 by early November, and generally decreases to end at about 17. The October Greenbook is marked in the timeline in late October when DJ Euro Stoxx and TOPIX are at about 19 and S&P 500 is at about 16.5.

Figure: Realized 10-Year Bond Volatility

Line chart, 2005 to 2009, by percent, data are weekly annualized standard deviation of 60-day window of daily returns. There are three series, "Germany", "Japan", and "United States". United States begins at about 6, generally decreases to about 4 by late 2006, generally increases to about 12 by early 2008, decreases to about 8 by mid-2008, increases to about 16 by late 2008, and generally decreases to end at about 8. Japan begins at about 4, remains about constant until about mid-2007, generally increases to about 6 by mid-2008, and generally decreases to end at about 3.5. Germany begins at about 4, remains about constant until early 2007, generally increases to about 10 by early 2009, and decreases to end at about 6. There is a second detailed chart showing daily data from August to December 2009. United States begins at about 13.5 and generally decreases to end at about 7.7. Japan begins at about 3 and remains about constant to the end. Germany begins at about 7.8 and generally decreases to end at about 5.8. The October Greenbook is marked in the series in late October, when the United States is at about 8, Germany is at about 6, and Japan is at about 3.

Emerging Markets: Exchange Rates and Stock Market Indexes

	Exchange value of the dollar		Stock market index	
	Latest	Percent change since Oct. Greenbook*	Latest	Percent change since Oct. Greenbook
Mexico	12.8410	-3.3	31710	10.6
Brazil	1.7500	-0.2	67729	12.6
Venezuela	2.14	0.0	53161	5.1
China	6.8275	0.0	3297	8.8
Hong Kong	7.7504	0.0	22061	1.4
Korea	1151.2	-2.9	1628	1.1
Taiwan	32.22	-0.7	7769	3.1
Thailand	33.15	-0.9	699	-0.7

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

Figure: Exchange Value of the Dollar

Line chart, an index where January 4, 2005=100. Data are weekly. There are four series, "Mexico", "Brazil", "Korea", and "China". Mexico begins at 100 and generally remains about constant until late 2007. It generally decreases to about 90 by mid-2008, generally increases to about 135 by early 2009, and generally decrease to about 115 by 2009:Q2. It remains about constant until the end. Brazil begins at 100 and generally decreases to about 60 by mid-2008. It generally increases to about 90 by early 2009 and decreases to end at about 65. Korea begins at 100 and generally decreases to about 90 by late 2007. It generally increases to about 150 by early 2009. It generally decreases to end at about 115. China begins at 100 and generally decreases to about 85 by mid-2008. It remains about constant until the end. A second chart shows daily data from August to December 2009 where October 28, 2009=100. Mexico begins at about 99 and generally decreases to about 97 by late August. It increases to about 102 by September, decreases to about 98 by mid-September, increases to about 103 by early October, fluctuates but generally decreases to about 95 by early December, and increases to end at about 97. Brazil begins at about 104 and fluctuates but generally increases to about 110 by September. It generally decreases to about 98 by November and increases to end at about 101. Korea begins at about 104 and generally decreases to end at about 99. China begins and remains about constant at 100. The October 2009 Greenbook is marked in the timeline in late October when all series are at about 100.

Figure: Stock Market Indexes

Line chart, an index where January 4, 2005=100. Data are weekly. There are four series, "Mexico", "Brazil", "Korea", and "Hong Kong." Mexico begins at 100 and generally increases to about 260 by mid-2007. It remains about constant until early 2008, decreases to about 140 by late 2008, and generally increases to end at about 245. Brazil begins at 100 and generally increases to about 300 by mid-2008. It decrease to about 140 by early 2009, and generally increases to end at about 270. Korea begins at 100, generally increases to about 220 by late 2007, generally decreases to about 130 by late 2008, and generally increases to end at about 190. Hong Kong begins at 100 and generally increases to about 220 by late 2007. It generally decreases to about 90 by early 2009, and generally increases to end at about 155. A second chart shows daily data from August to December 2009, where October 28, 2009=100. Mexico begins at about 94 and fluctuates but generally increases to end at about 108. Brazil begins at about 88 and generally increases to end at about 108. Korea begins at about 98, generally increases to about 108 by September, and generally decreases to about 95 by late November. It increases to end at about 102. Hong Kong begins at about 95, generally decreases to about 90 by early September, generally increases to about 106 by November, and generally decreases to end at about 100.

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

Percent

	Short-term interest rates*		Dollar-denominated bond spreads**	
	Latest	Change since Oct. Greenbook	Latest	Change since Oct. Greenbook
Mexico	4.47	-0.06	1.76	-0.43
Brazil	8.60	0.00	2.12	-0.31

Argentina	...	...	7.67	0.73
China	...	...	0.74	-0.09
Korea	2.10	0.00	...	...
Taiwan	1.20	0.06	...	...
Singapore	0.31	0.00	...	...
Hong Kong	0.05	-0.02	...	...

* 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, 2005 to 2009, by percent. Data are weekly. There are three series, "Overall", "Mexico", and "Brazil". Overall begins at about 3.8 and generally decreases to about 1.9 by mid-2007. It generally increases to about 8 by late 2008, and generally decreases to end at about 3. Mexico begins at about 1.8, generally decreases to about 1 by mid-2007, generally increases to about 5.2 by late 2008, and generally decreases to end at about 1.9. Brazil begins at about 4, generally decreases to about 1.8 by mid-2007, generally increases to about 6 by late 2008, and generally decreases to end at about 2. A second chart shows daily data from August to December 2009. Overall begins at about 3.7, decreases to about 3.4 by early August, increases to about 3.9 by late August, decreases to about 2.9 by October, and generally increases to end at about 3.1 Mexico begins at about 2, generally increases to about 2.5 by late August, decreases to about 1.7 by mid-September, increases to about 2 by late September, decreases to about 1.7 by early October, increases to about 2 by late October, and generally decreases to end at about 1.7. Brazil begins at about 2.5, increases to about 2.7 by early September, and fluctuates but generally decreases to about 2.1 by early December. The late October 2009 Greenbook is marked in the timeline when Overall is at about 3.3, Mexico is at about 2, and Brazil is at about 2.4.

Figure: EMBI Global Spreads

Line chart, 2005 to 2009, by percent. Data are weekly. There are three series, "China", "Malaysia", and "Indonesia." China begins at about 1, remains about constant until late 2007, increases to about 3.5 by late 2008, and generally decreases to end at about 0.5. Malaysia begins at about 1, remains about constant until late 2007, generally increases to about 5 by late 2008, and generally decreases to end at about 1.5. Indonesia begins at about 3, generally increases to about 3.5 by early 2005, generally decreases to about 2 by mid-2007, generally increases to about 11 by late 2008, and generally decreases to end at about 3. A second chart shows daily data from August to December 2009. Indonesia begins at about 3.3, decreases to about 3 by early August, increases to about 3.6 by late August, generally decreases to about 2.4 by early October, generally increases to about 3 by early November, decreases to about 2.8 by mid-November, increases to about 3.2 by late November, and decreases to end at about 2.8. Malaysia begins at about 1.4 and generally increases to about 2 by early September, and generally decreases to end at about 1.6. China begins at about 1, decreases to about .8 by early August, increases to about 1.3 by early September, generally decreases to about 0.7 by mid-September, and remains about constant until the end. The late October 2009 Greenbook is marked in the timeline when China is at about 0.7, Malaysia is at about 1.7, and Indonesia is at about 2.8.

Advanced Foreign Economies

Figure: Average Real Gross Domestic Product

Line chart, 1999 to 2009, by annualized percent change, s.a. Data are quarterly. The series begins at about 3.8, generally increases to about 5.6 by early 2000, generally decreases to about -0.4 by late 2001, then fluctuates between about 0.3 and 4 until early 2007. It then decreases to about -8 by early 2009, and increases to end at about 1.8.

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

Source: FRB staff calculations.

Figure: Consumer Prices

Line chart, 1999 to 2009, by 12-month percent change, s.a. Data are monthly. There are four series, "Japan", "Euro area", "Canada", and "United Kingdom". Japan begins at about 0, generally decreases to about -1.5 by early 2002, generally increases to about 0.5 by late 2004, decreases to about -1.5 by late 2005, increases to about 0.5 by mid-2006, decreases to about -0.2 by late 2007, increases to about 2 by mid-2008, and decreases to end at about -2.4. Euro area begins at about 1, generally increases to about 3 by early 2001. It decreases and remains about constant at 2 until late 2007. It increases to about 4 by mid-2008 and decreases to about -0.4 by mid-2009. It increases to end at about 0.4. Canada begins at about 1, generally increases to about 4 by 2001, decreases to about 1 by late 2001, generally increases to about 4.5 by early 2003, decreases to about 0.5 by early 2004, fluctuates but remains about constant until mid-2007, generally increases to about 3.5 by mid-2008, and generally decreases to end at about 0. United Kingdom begins at about 1.5, fluctuates between about 1 and 2 until late 2007, generally increases to about 5 by late 2008, and decreases to end at about 1.9.

Source: Haver Analytics.

Figure: Official or Targeted Interest Rates

Line chart, 1999 to 2009, by percent. There are four series, "Japan", "Euro area", "Canada", and "United Kingdom." Japan begins at about 0 and remains at about 0 until the end, except for a couple times when it rises to about 0.5, notably from late 2006 and late 2008. Euro area begins at about 3, decreases to about 2.5 for most of 1999, then increases to about 4.5 by early 2001. It decreases to about 2 by mid-2003, remains constant until late 2005, increases to about 4.25 by late 2008, and decreases to end at 1. Canada begins at about 5, decreases to 4.5 for most of 1999, increases to about 5.75 by early 2001, decreases to about 2 by early 2002, fluctuates between 2 and 3.5 until late 2005, increases to about 4 by mid-2006 and remains constant until mid-2007. It decreases to end at about 0.25. United Kingdom begins at about 6, decreases to about 5 by mid-1999, increases to about 6 by early 2006, remains there until early 2001, decreases to about 4 by mid-2003, increases to about 4.5 by mid-2004, and remains about constant until mid-2006. It increases to about 5.75 by late 2007 and 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		
			Q4	Q1	Q2	Q3
GDP	1.7	-4.4	-10.2	-11.9	2.7	1.3
Total domestic demand	.3	-2.0	-1.4	-9.0	-2.7	-.2
Consumption	1.2	-1.9	-3.5	-4.9	4.8	3.8
Private investment	-4.3	-5.1	-19.5	-28.6	-19.8	-13.6
Public investment	-4.2	-8.6	1.7	15.5	27.5	-6.3
Government consumption	2.7	-.5	4.7	2.8	1.1	-.5
Inventories [2]	.3	.4	3.2	-1.4	-2.7	.3
Exports	9.5	-13.4	-44.9	-61.7	28.8	28.6
Imports	1.5	.2	-6.2	-47.7	-13.0	13.9
Net exports [2]	1.2	-2.2	-8.0	-5.3	4.5	2.0

1. Q4/Q4. Return to table

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

Source: Haver Analytics.

Japan

Figure: Economic Activity

Line chart, 2000 to 2009, an index where 2005=100. There are two series, "Industrial production" and "Tertiary services". Industrial production begins at about 97 and generally increases to about 103 by late 2000. It decreases to about 87 by late 2001, generally increases to about 110 by early 2008, decreases to about 69 by early 2009 and increases to end at about 87. Tertiary services begins at about 93 and generally increases to about 103 by late 2007. It decreases to about 95 by early 2009 and increases to about 99 by the end.

Source: Haver Analytics.

Figure: Real Trade

Line chart, 2000 to 2009, index where 2005=100. There are two series, "Real exports" and "Real imports". Real exports begins at about 78, decreases to about 68 by late 2001, generally increases to about 135 by late 2007, decreases to about 78 by early 2009 and increases to end at about 105. Real imports begins at about 80, generally increases to about 91 by late 2000, decreases to about 84 by late 2001, generally increases to about 105 by late 2008, decreases to about 80 by early 2009, increases to about 98 by late 2009, and decreases to end at about 91.

Source: Haver Analytics.

Figure: Labor Market

Line chart, 2000 to 2009. There are two series, "Unemployment rate", which is by percent, and "Job openings to applications", which is a ratio. Unemployment begins at about 4.8 and generally increases to about 5.5 by early 2003. It generally decreases to about 3.5 by mid-2007 and generally increases to about 5.8 by mid-2009. It decreases to end at about 5.2. Job openings begins at about 0.5, increases to about 0.65 by late 2000, decreases to about 0.5 by late 2001, increases to about 1.1 by late 2006, decreases to about 0.43 by mid-2009, and increases to end at about 0.45.

Source: Haver Analytics.

Figure: Consumer Price Inflation

Line chart, 2000 to 2009, by percent, 12-month basis, n.s.a. There are two series, "Core" (excludes all food and energy; staff calculations) and "Consumer price inflation". Core begins at about -0.3 and generally decreases to about -1.1 by early 2001. It generally increases to about 0.1 by late 2008 then decreases to end at about -1.1. Consumer price inflation begins at about -0.5, fluctuates but remains about constant until mid-2001, decrease to about -1.6 by early 2002, generally increases to about 1 by late 2004, decreases to about -1.2 by late 2005, increases to about 1 by mid-2006, decreases to about -0.2 by early 2007, increases to about 2.5 by mid-2008, and decreases to end at about -2.5.

Source: Haver Analytics.

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

Indicator	2009			2009			
	Q1	Q2	Q3	Aug.	Sept.	Oct.	Nov.
Housing starts	-10.6	-15.7	-7.2	-9.3	3.3	9.0	n.a.
Machinery orders[1]	-9.9	-4.9	-.9	.5	10.5	n.a.	n.a.
Household expenditures	-1.9	.9	.5	-.1	.7	n.a.	n.a.
New car registrations	-10.8	14.4	19.7	-.2	3.3	5.3	4.4
Business sentiment[2]	-46.0	-45.0	-38.0	…	…	…	…
Wholesale prices[3]	-1.8	-5.5	-8.3	-8.5	-8.0	-6.7	n.a.

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[1]	2008	2009		
			Q4	Q1	Q2	Q3
GDP	2.1	-1.8	-7.3	-9.4	-.6	1.5
Total domestic demand	1.8	-.5	-2.8	-7.2	-3.2	.9
Consumption	1.2	-.7	-2.0	-1.8	.2	-.9
Investment	3.1	-5.5	-14.2	-18.3	-6.5	-1.4
Government consumption	2.0	2.4	2.6	2.5	2.6	2.1
Inventories[2]	.1	.6	.7	-2.8	-2.3	1.4
Exports	4.2	-6.9	-25.7	-30.6	-5.0	12.2
Imports	3.5	-4.1	-17.8	-26.4	-11.1	10.7
Net exports[2]	.4	-1.4	-4.5	-2.4	2.6	.6
Memo: GDP of selected countries						
France	2.1	-1.7	-5.9	-5.5	1.1	1.1
Germany	1.6	-1.8	-9.4	-13.4	1.8	2.9
Italy	.1	-2.9	-8.0	-10.5	-1.9	2.4

1. Q4/Q4. Return to table

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

Source: Haver Analytics.

Euro Area

Figure: Nominal Exports and Imports

Line chart, 2000 to 2009, in billions of U.S. dollars. There are two series, "Exports" and "Imports". Both series start at about 75, generally increase to about 225 by early 2008, generally decrease to about 140 by early 2009, and generally increase to end at about 160.

Source: Haver Analytics.

Figure: Economic Sentiment

Line chart, 2000 to 2009, by percent balance. There are two series, "Consumer confidence" and "Industrial confidence." Consumer confidence begins at about 0 and generally decreases to about -21 by early 2003. It generally increases to about 0 by mid-2007 and generally decreases to about -35 by early 2009. It increases to end at about -18. Industrial confidence begins at about 0, increases to about 6 by mid-2000, decreases to about -18 by late 2001, generally increases to about 8 by mid-2007, decreases to about -37 by early 2009 and increases to end at about -20.

Source: Haver Analytics.

Figure: Unemployment Rate

Line chart, 2000 to 2009, by percent. The series begins at about 8.6, generally decreases to about 7.8 by 2001, generally increases to about 9 by early 2005, generally decreases to about 7.2 by early 2008, and increases to end at about 9.8.

Source: Haver Analytics.

Figure: Consumer Price Inflation

Line chart, 2000 to 2009, by percent, 12-month basis, n.s.a. There are two series, "Consumer price inflation" and "Core" (excludes all food and energy; staff calculations). Core begins at about 1, generally increases to about 2.5 by early 2002, generally decreases to about 1.4 by early 2006, increases to about 1.9 by early 2007, and generally decreases to end at about 1.3. Consumer price inflation begins at about 1.9 and generally remains about constant until late 2007 except in early 2001 when it rises to about 3.3 and during 2005-2006 when it's at about 2.5. It generally increases to about 4 by early 2008, decreases to about -0.9 by mid-2009, and increases to end at about 0.7.

Source: Haver Analytics.

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

Indicator	2009			2009			
	Q1	Q2	Q3	July	Aug.	Sept.	Oct.
Industrial production[1]	-8.6	-1.1	2.2	.3	1.2	.3	n.a.
Retail sales volume[2]	-.8	-.3	-.5	-.2	-.0	-.5	.0
New car registrations	.9	12.2	1.4	-2.0	1.0	-.9	n.a.
Employment	-.7	-.5	n.a.	…	…	…	…
Producer prices[3]	-2.0	-5.2	-7.1	-7.6	-6.8	-7.0	-6.3
M3[3]	6.5	4.7	2.8	3.5	3.0	2.0	.2

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		
			Q4	Q1	Q2	Q3
GDP	2.4	-2.0	-6.9	-9.6	-2.3	-1.2
Total domestic demand	3.1	-3.3	-8.7	-9.9	-3.2	-.3

Consumption	2.2	-.8	-4.7	-6.0	-2.6	-.3
Investment	4.9	-8.7	-8.4	-26.2	-19.3	-1.1
Government consumption	1.2	3.1	4.0	.3	2.4	.9
Inventories[2]	.6	-1.9	-5.3	-1.5	1.3	-.0
Exports	3.4	-3.5	-15.2	-25.5	-5.5	2.0
Imports	5.6	-8.0	-20.2	-25.2	-8.4	5.2
Net exports[2]	-.8	1.5	2.1	.6	1.0	-.9

1. Q4/Q4. Return to table

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

Source: Haver Analytics.

United Kingdom

Figure: Consumer Price Inflation

Line chart, 2000 to 2009, by percent, 12-month basis, n.s.a. There are two series, "Core" (excludes food and energy; staff calculations), and "Consumer price inflation." Consumer price inflation begins at about 0.8 and generally increases to about 3 by early 2007. It decreases to about 1.8 by mid-2007, generally increases to about 5.5 by mid-2008, and decreases to end at about 1.5. Core begins at about -0.1, decreases to about -0.4 by mid-2000, increases to about 1.5 by late 2001, and fluctuates between about 1.5 and 0.5 until early 2008. It then increases to about 1.9 by late 2008, decreases to about 0.6 by early 2009, and generally increases to end at about 1.8.

Source: Haver Analytics.

Figure: Unemployment Rates

Line chart, 2000 to 2009, by percent. There are two series, "Labor Force Survey" and "Claimant count". Labor Force Survey begins at about 5.8 and generally decreases to about 4.8 by mid-2005. It increases to about 5.5 by late 2006, decreases to about 5.2 by early 2008 and increases to end at about 7.8. Claimant count begins at about 3.8, generally decreases to about 2.7 by early 2005, increases to about 3 by late 2006, decrease to about 2.3 by early 2008, and increases to end at about 5.2.

Source: Haver Analytics.

Figure: Purchasing Managers Survey

Line chart, 2000 to 2009, where a value of 50+=expansion. There are two series, "Services" and "Manufacturing". Services begins at about 58 and generally decreases to about 46 by late 2001. It increases to about 57 by early 2002, decreases to about 48 by early 2003, increases to about 60 by late 2003, decreases to about 55 by late 2004, increases to about 63 by late 2006, decreases to about 40 by late 2008, and increases to end at about 57. Manufacturing begins at about 52, remains about constant until early 2001, decreases to about 47 by mid-2001, increases to about 53 by early 2002, decreases to about 47 by early 2003, increases to about 55 by late 2004, decreases to about 47 by early 2005, increases to about 56 by early 2007, decreases to about 36 by early 2009, and generally increases to end at about 53.

Source: Reuters.

Figure: Labor Costs

Line chart, 2000 to 2009, by percent, 12-month basis. There are two series, "Unit wage costs" (manufacturing industries), and "Average earnings" (whole economy, including bonuses). Unit wage costs begins at about -1, decreases to about -3 almost immediately and then generally increases to about 5 by early 2002. It decreases to about -5 by early 2003, increases to about 1 and then decreases back to about -5 by late 2003. It generally increases to about 3 by mid-2006, decreases to about -2 by late 2007, increases to about 13 by early 2009, and decreases to end at about 3. Average earnings begins at about 7, decreases to about 3 by late 2001 and remains about constant until early 2008. It decreases to about -2 by early 2009, increases to about 3 by mid-2009 and decreases to end at about 1.

Source: Haver Analytics.

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

Indicator	2009			2009			
	Q2	Q3	Q4	Sept.	Oct.	Nov.	Dec.
Producer input prices[1]	-8.9	-8.7	n.a.	-6.2	.1	n.a.	n.a.
Industrial production	-.6	-.9	n.a.	1.3	.0	n.a.	n.a.
2							

Business confidence_	-22.0	-7.0	.3	-2.0	4.0	4.0	-7.0
Consumer confidence[2]	-19.9	-14.1	n.a.	-10.1	-8.3	-8.3	n.a.
Trade balance[3]	-13.0	-12.7	n.a.	-5.0	-5.2	n.a.	n.a.
Current account[3]	-17.7	n.a.	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		
			Q4	Q1	Q2	Q3
GDP	2.8	-1.0	-3.7	-6.2	-3.1	.4
Total domestic demand	6.6	-1.1	-6.1	-11.4	1.0	5.7
Consumption	5.4	.2	-3.1	-1.4	1.8	3.1
Investment	4.5	-3.6	-14.8	-22.8	-4.9	8.9
Government consumption	3.7	3.1	2.5	2.2	3.3	5.0
Inventories[2]	1.7	-1.1	-1.2	-5.5	.4	.9
Exports	-1.5	-7.3	-17.7	-29.8	-19.5	15.3
Imports	8.5	-7.7	-23.4	-39.2	-6.9	36.0
Net exports[2]	-4.2	.7	2.2	4.5	-4.0	-5.5

1. Q4/Q4. Return to table

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

Source: Haver Analytics.

Canada

Figure: Real Gross Domestic Product by Industry

Line chart, 2000 to 2009, by percent change from year earlier. The series begins at about 6.5, decreases to about 0 by late 2001, increases to about 4 by mid-2002, decreases to about 0.7 by mid-2003, increases to about 4 by early 2006, decreases to about 1.8 by late 2006, increases to about 3.5 by late 2007, decreases to about -4.2 by mid-2009 and increases to end at about -3.5.

Note: Constructed from various Statistics Canada surveys and supplements to the quarterly income and expenditure-based estimates.

Source: Haver Analytics.

Figure: Real Trade

Line chart, 2000 to 2009, where 2002=100. Real exports begins at about 103, generally decreases to about 93 by mid-2003, increases to about 115 by late 2006, decreases to about 80 by early 2009, and increases to end at about 85. Real imports begins at about 103, increases to about 105 by late 2000, decreases to about 95 by late 2001, generally increases to about 145 by late 2008, decreases to about 106 by early 2009, increases to about 117 by mid-2009 and decreases to end at 116.

Source: Haver Analytics.

Figure: Unemployment Rate

Line chart, 2000 to 2009, by percent. The series begins at about 6.8 and generally increases to about 8 by early 2002. It decreases to about 7.3 by mid-2003, increases to about 8 by late 2003, decreases to about 5.8 by early 2008, increases to about 8.8 by mid-2009, and decreases to end at about 8.5.

Source: Haver Analytics.

Figure: Consumer Price Inflation

Line chart, 2000 to 2009, by percent, 12-month basis, n.s.a. There are two series, "Core" (excludes all food and energy; staff calculations) and "Consumer price inflation". Core begins at about 1.3 and increases to about 4.5 by late 2002. It generally decreases to about 1 by early 2004, generally increases to about 2.2 by mid-2007, generally decreases to about 0.7 by mid-2009 and increases to end at about 1.2. Consumer price inflation begins at about 2.2, generally increases to about 4 by mid-2001, decreases to about 0.7 by late 2001, increases to about 5 by early 2003, decreases to about 0.6 by late 2003, fluctuates between about 3.5 and 0.8 until mid-2008, decreases to about -1 by mid-2009, and increases to end at about 0.1.

Source: Haver Analytics.

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

Indicator	2009			2009			
	Q1	Q2	Q3	Aug.	Sept.	Oct.	Nov.
Industrial production	-5.2	-4.6	-1.4	-.9	1.2	n.a.	n.a.
New manufacturing orders	-12.0	-1.4	1.1	1.8	7.4	n.a.	n.a.
Retail sales	-1.1	.5	1.3	.5	1.2	n.a.	n.a.
Employment	-1.4	-.4	-.2	.2	.2	-.3	.5
Wholesale sales	-7.3	.8	2.9	-.7	.3	n.a.	n.a.
Ivey PMI[1]	41.5	53.4	56.4	55.7	61.7	61.2	55.9

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

n.a. Not available.

Source: Haver Analytics; Bank for International Settlements.

Chinese Economic Indicators

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

Indicator	2007	2008	2009				
			Q2	Q3	Aug.	Sept.	Oct.
Real GDP[1]	12.3	6.9	18.5	9.8	...	...	...
Industrial production	19.5	1.8	4.4	5.4	1.7	1.3	-2.9
Consumer prices[2]	6.5	1.2	-1.5	-1.3	-1.2	-.8	-.5
Merch. trade balance[3]	262.7	298.1	142.4	100.3	133.4	98.8	183.5

1. Gross domestic product. Annual rate. Quarterly data estimated by staff from reported 4-quarter growth rates. Annual data are Q4/Q4. Return to table

2. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec. Return to table

3. Billions of U.S. dollars, annualized. Imports are valued at cost, insurance, and freight. Return to table

... Not applicable.

Source: CEIC.

Indian Economic Indicators

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

Indicator	2007	2008	2009				
			Q2	Q3	Aug.	Sept.	Oct.
Real GDP[1]	9.3	5.9	7.3	15.1	...	...	...
Industrial production	9.9	4.4	3.6	5.3	2.3	.5	n.a.
Consumer prices[2]	5.5	9.7	8.9	11.1	10.7	10.7	10.5
Wholesale prices[2]	3.8	6.1	.5	-.1	-.2	.5	1.3
Merch. trade balance[3]	-79.2	-121.9	-62.3	-71.6	-90.3	-64.0	-85.4

Current account[4]	-11.3	-36.1	-23.2	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, annualized. Return to table

4. Billions of U.S. dollars, not seasonally adjusted, annualized. Return to table

n.a. Not available.

... Not applicable.

Source: CEIC.

China and India

Figure: Industrial Production

Line chart, 2003 to 2009, an index where January 2000=100. There are two series, "China" and "India". China begins at about 170 and generally increases to end at about 360. India begins at about 120 and generally increases to end at about 195.

Source: CEIC.

Figure: Consumer Prices

Line chart, 2003 to 2009, by percent change from year earlier. There are two series, "China" and "India". China begins at about 0.3 and generally increases to about 5.5 by mid-2004. It generally decreases to about 1 by mid-2006 and increases to about 8.8 by late 2007. It decreases to about -2 by early 2009 and increases to end at about -0.3. India begins at about 3.8 and increases to about 5 by mid-2003. It decreases to about 3 by late 2003. It fluctuates but generally increases to and at about 10.5.

Source: China Statistic and Consultancy Service Center; CEIC.

Figure: Merchandise Trade Balances

Line chart, 2003 to 2009, in billions of dollars, as a 3-month moving average (n.s.a.). There are two series, "China" and "India". China begins at about 0 and remains about constant until early 2004. It generally increases to about 45 by late 2008 and decreases to about 8 by mid-2009. It increases to end at about 12. India begins at about -1 and generally decreases to about -11 by late 2008. It increases to about -5 by mid-2009 and decreases to end at about -8.

Source: China Statistic and Consultancy Service Center; CEIC.

Figure: Benchmark Interest Rates

Line chart, 2003 to 2009, by percent. There are two series, "China" and "India". China begins at about 5.25 and generally increase to about 7.5 by mid-2008. It decreases to about 5.25 by early 2009 and remains constant until the end. India begins at about 5.5, almost immediately increases to about 7.5, decreases to about 4.75 from mid-2003 to late 2004 except in early 2004 when it spikes to about 6. It increases to about 9 by late 2008, decreases to about 4.75 by early 2009 and remains constant to the end.

Source: Bloomberg; CEIC.

Figure: Gross External Debt

Line chart, 2003 to 2009, by percent of gross domestic product. There is one series, India, which begins at about 22, generally decreases to about 18 by mid-2006, generally increases to about 23 by late 2008 and ends at about 22.

Source: Bank for International Settlements; Haver Analytics.

Figure: Short-Term External Debt

Line chart, by percent of reserves. There is one series, India, which begins at about 7 and generally decreases to about 4 by early 2004. It generally increases to about 6 by mid-2007, then further increases to about 20 by late 2008. It decreases to end at about 16.

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				
			Q2	Q3	Aug.	Sept.	Oct.
Real GDP[1]							
Hong Kong	7.0	-2.6	14.9	1.5	...	...	...
Korea	5.7	-3.4	11.0	13.6	...	...	...
Singapore	5.8	-4.0	21.7	14.2	...	...	...
Taiwan	6.5	-6.3	18.8	8.3	...	...	...
Industrial production							
Hong Kong	-1.5	-6.6	-.3	n.a.	...	...	...
Korea	7.0	3.0	11.4	7.2	-1.4	5.6	-3.8
Singapore	5.9	-4.2	15.3	8.6	-5.9	-13.5	.9
Taiwan	7.8	-1.8	17.3	7.0	-.2	7.0	-.5

1. Gross domestic product. Annual rate. Annual data are Q4/Q4. Return to table

n.a. Not available.

... Not applicable.

Source: CEIC.

Economic Indicators for Newly Industrialized Economies: Merchandise Trade Balance

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

	2007	2008	2009				
			Q2	Q3	Sept.	Oct.	Nov.
Hong Kong	-23.5	-25.9	-15.5	-39.3	-44.3	-42.1	n.a.
Korea	28.2	6.0	68.0	57.0	56.2	46.2	n.a.
Singapore	36.2	18.4	26.8	21.7	1.5	38.6	n.a.
Taiwan	16.8	4.4	21.7	24.4	22.2	21.2	-11.8

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]	2009				
			Q2	Q3	Sept.	Oct.	Nov.
Hong Kong	3.8	2.1	-.1	-.9	.5	2.2	n.a.
Korea	3.6	4.1	2.8	2.0	2.2	2.0	2.4
Singapore	4.4	4.3	-.5	-.4	-.4	-.8	n.a.
Taiwan	3.3	1.3	-.8	-1.3	-.9	-1.9	-1.6

1. Dec./Dec. Return to table

n.a. Not available

Source: CEIC.

Newly Industrialized Economies

Figure: Industrial Production

Line chart, 2003 to 2009, an index where January 2000=100. There are four series, "Korea", "Singapore", "Hong Kong", and "Taiwan". Korea begins at about 116 and generally increases to about 170 by early 2008. It decreases to about 135 by late 2008 and generally increases to about 180 by mid-2009. It decreases to end at about 170. Singapore begins at about 102 and decreases to about 88 by early 2003. It fluctuates but generally increases to about 180 by mid-2007. It decreases to about 140 by late 2007, generally increases to about 165 by early 2008, generally decreases to about 112 by early 2009, generally increases to about 168 by mid-2009, and decreases to end at about 140. Hong Kong begins at about 80 and generally increases to about 85 by early 2006. It generally decreases to end at about 70. Taiwan begins at about 105 and generally increases to about 147 by early 2008. It decreases to about 100 by late 2008 and generally increases to end at about 133.

Source: CEIC.

Figure: Consumer Prices

Line chart, 2003 to 2009, as percent change from year earlier. There are four series, "Korea", "Singapore", "Hong Kong", and "Taiwan". Korea begins at about 4, generally decreases to about 3 by mid-2003, generally increases to about 5 by late 2004, generally decreases to about 2 by early 2007, generally increases to about 6 by early 2008, and generally decreases to end at about 2. Singapore begins at about 1 and generally decreases to about -0.5 by mid-2003. It generally increases to about 2 by mid-2004, generally decreases to about 0 by mid-2005, generally increases to about 8 by mid-2008, and generally decreases to end at about -1. Hong Kong begins at about -1.9, generally decreases to about -4 by mid-2003, generally increases to about 2.5 by early 2007, decreases to about 1 soon thereafter, and generally increases to about 6 by mid-2008. It generally decreases to about -1.8 by mid-2009 and increases to end at about 2.1. Taiwan begins at about 1 and decreases to about -2 by early 2003. It generally increases to about 4 by mid-2004, decreases to about 0 by early 2005, increases to about 4 by mid-2005, decreases to about -1.7 by late 2006, generally increases to about 6 by late 2008, and generally decreases to end at about -1.9.

Source: CEIC; Bank of Korea; Reuters.

Figure: Merchandise Trade Balances

Line chart, 2003 to late 2009, in billions of dollars, as a 3-month moving average (n.s.a). There are four series, "Korea", "Singapore", "Hong Kong", and "Taiwan". Korea begins at about 1 and generally increases to about 3.8 by early 2005. It fluctuates between about 1.8 and 3 until late 2007, then generally decreases to about -1.5 by late 2008. It increases to about 6.5 by early 2009 and decreases to end at about 4.3. Singapore begins at about 1.8 and generally increases to about 3.5 by mid-2007. It generally decreases to about 0.8 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 early 2004. It increases to about -0.6 by late 2004 and generally decreases to about -3 by mid-2008. It increases to about -0.5 by late 2008 and generally decreases to end at about -3.5. Taiwan begins at about 1.5 and generally decreases to about -0.5 by late 2004. It generally increases to about 2.5 by late 2007, generally decreases to about 0 by early 2008, and generally increases to about 2 by early 2009. It remains about constant until late 2009 and decreases to end at about 1.

Source: CEIC.

Figure: Benchmark Interest Rates

Line chart, 2003 to 2009. There are three series, "Korea", "Hong Kong", and "Taiwan". Korea begins at about 4.25 and decreases to about 3.5 by late 2004. It remains constant until late 2005, then generally increases to about 5.25 by late 2008. It decreases to 2 by early 2009 and remains 2 until the end. Hong Kong begins at about 2.5 and decreases to about 2.25 by mid-2003. It remains constant until mid-2004 then increases to about 6.75 by early 2006. It remains constant until late 2007, then decreases to end at about 0.5. Taiwan begins at about 1.75, decreases to about 1.5 by mid-2003 and remains there until late 2004. It increases to about 3.75 by late 2008 and decreases to about 1.25 by early 2009. It remains constant to the end.

Source: Bloomberg.

Figure: Gross External Debt

Line chart, 2003 to 2009, as percent of gross domestic product. There are three series, "Korea", "Hong Kong", and "Taiwan". Korea begins at about 25 and generally increases to end at about 50. Hong Kong begins at about 210 and generally increases to about 340 by late 2007. It generally decreases to end at about 300. Taiwan begins at about 20 and remains about constant until the end.

Source: Bank for International Settlements.

Figure: Short-Term External Debt

Line chart, 2003 to early 2009, by percent of reserves. There are three series, "Korea", "Hong Kong", and "Taiwan". Korea begins at about 45 and decreases to about 30 by early 2005. It increases to about 75 by late 2008 and decreases to end at about 60. Hong Kong begins at about 195 and generally increases to about 370 by late 2007. It decreases to end at about 220. Taiwan begins at about 20 and generally remains about constant until the end.

Source: Bank for International Settlements.

ASEAN-4 Economic Indicators: Growth

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

Indicator	2007	2008	2009				
			Q2	Q3	Aug.	Sept.	Oct.
Real GDP[1]							

Indonesia	5.8	5.3	4.7	7.9	…	…	…
Malaysia	7.3	.2	12.5	9.9	…	…	…
Philippines	6.4	2.9	7.0	4.1	…	…	…
Thailand	5.6	-4.1	9.0	5.5	…	…	…
Industrial production[2]							
Indonesia[3]	5.6	3.0	-.6	-1.0	4.9	-5.3	n.a.
Malaysia	2.1	.7	2.0	3.4	-2.3	-1.7	n.a.
Philippines	-2.7	.3	12.4	5.3	-2.0	7.3	n.a.
Thailand	8.2	5.3	9.7	4.0	-4.1	9.8	.1

1. Gross domestic product. Annual rate. Annual data are Q4/Q4. Return to table

2. Annual data are annual averages. Return to table

3. Staff estimate. Return to table

Note: Association of Southeast Asian Nations.

… Not applicable.

n.a. Not available

Source: CEIC.

ASEAN-4 Economic Indicators: Merchandise Trade Balance

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

Indicator	2007	2008	2009				
			Q2	Q3	Aug.	Sept.	Oct.
Indonesia	39.6	31.6	36.9	n.a.	31.4	n.a.	n.a.
Malaysia	29.2	42.7	30.8	30.2	30.3	30.5	40.2
Philippines	-5.0	-7.7	-5.0	-2.7	.4	-1.5	n.a.
Thailand	12.8	.1	22.6	15.9	26.7	9.2	15.2

Note: Association of Southeast Asian Nations.

n.a. Not available

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

ASEAN-4 Economic Indicators: Consumer Price Inflation

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

Indicator	2007 [1]	2008 [1]	2009				
			Q2	Q3	Sept.	Oct.	Nov.
Indonesia	5.8	11.1	5.6	2.8	2.8	2.6	2.4
Malaysia	2.4	4.4	1.3	-2.3	-2.0	-1.5	n.a.
Philippines	3.9	8.0	3.2	.3	.7	1.6	2.8
Thailand	3.2	.4	-2.8	-2.2	-1.0	.4	1.9

1. Dec./Dec. Return to table

Note: Association of Southeast Asian Nations.

n.a. Not available

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

ASEAN-4

Figure: Industrial Production

Line chart, 2003 to 2009, an index where January 2000=100. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand." Indonesia begins at about 140 and generally increases to about 170 by late 2004. It generally decreases to about 140 by late 2005 and generally increases to about 170 by late 2008. It generally decreases to end at about 160. Malaysia begins at about 110 and generally increases to about 160 by early 2008. It generally decreases to about 130 by late 2008 and increases to end by about 140. Philippines begins at about 100 and generally decreases to about 90 by mid-2008. It further decreases to about 60 by late 2008 and increases to end at about 77. Thailand begins at about 130 and generally increases to about 215 by early 2008. It generally decreases to about 165 by late 2008, and generally increases to end at about 210.

Source: CEIC; Bank of Philippines.

Figure: Consumer Prices

Line chart, 2003 to 2009, by percent change from year earlier. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand." Indonesia begins at about 8 and generally decreases to about 5 by early 2004. It generally increases to about 18 by late 2005 and decreases to about 5 by late 2006. It remains about constant until late 2007, then increases to about 12 by mid-2008 and decreases to end at about 3. Malaysia begins at about 2 and generally increases to about 4 by early 2006. It decreases to about 2 by early 2007, then generally increases to about 8 by mid-2008. It decreases to about -3 by mid-2009 and increases to end at about -1. Philippines begins at about 3 and generally increases to about 8 by late 2004. It generally decrease to about 3 by early 2007 and generally increases to about 12 by mid-2008. It decreases to about 0 by mid-2009 and increases to end at about 3. Thailand begins at about 3 and remains about constant until late 2003, it then generally increases to about 7 by early 2006, decreases to about 2 by mid-2007, increases to about 8 by mid-2008, decreases to about -4 by mid-2009 and increases to end at about 2.

Source: IMF International Financial Statistics; CEIC.

Figure: Merchandise Trade Balances

Line chart, 2003 to 2009, in billions of dollars, as 3-month moving average (n.s.a.). There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand." Indonesia begins at about 2 and fluctuates but generally increases to about 3.8 by late 2006. It generally decreases to about 2 by late 2008 and increases to about 3.3 by early 2009. It decreases to end at about 2.8. Malaysia begins at about 1.8 and generally increases to about 4.8 by mid-2008. It generally decreases to end at about 2.8. Philippines begins at about -0.5 and remains about constant until early 2007. It generally decreases to about -1 by early 2008 and increases to end at about -0.3. Thailand begins at about 0.2 and generally decreases to about -1 by mid-2005. It increases to about 1.7 by early 2008. It decreases to about -0.5 by early 2008, increases to about 1.6 by mid-2008, decreases to about -1.8 by late 2008, increases to about 2.7 by early 2009, and decreases to end at about 1.7.

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

Figure: Benchmark Interest Rates

Line chart, 2003 to 2009, by percent. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand." Indonesia begins at about 13 and generally decreases to about 8 by early 2004. It remains constant through the end of 2004 and generally increases to about 13 by early 2006. It generally decreases to end at about 7. Malaysia begins at about 3 and remains about constant until late 2005. It increases to about 4 by early 2006 and remains about constant until late 2008. It decreases to about 3 by early 2009 and remains constant to the end. Philippines begins at about 7 and remains about constant until early 2005. It increases to about 8 in mid-2005 and remains about constant until mid-2007. It generally decreases to end at about 4. Thailand begins at about 2 and remains about constant until mid-2004. It generally increases to about 5 by mid-2006, decreases to about 3.5 by early 2007, remains about constant until late 2008 and decreases to about 2 by early 2009. It remains about constant until the end.

Source: Bloomberg; Haver Analytics.

Figure: Gross External Debt

Line chart, 2003 to 2009, by percent of gross domestic product. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand." Indonesia begins at about 58 and generally decreases to about 25 by mid-2008. It increases to about 33 by early 2009 and decreases to end at about 28. Malaysia begins at about 43 and increases to about 48 by mid-2003. It decreases to about 29 by late 2007, increases to about 44 by early 2009 and decreases to end at about 42. Philippines begins at about 75 and generally decreases to end at about 33. Thailand begins at about 42 and generally decreases to about 22 by late 2007. It increases to end at about 25.

Note: ASEAN is the Association of Southeast Asian Nations.

Source: CEIC; Bank for International Settlements.

Figure: Short-Term External Debt

Line chart, 2003 to 2009, by percent of reserves. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand." Indonesia begins at about 48 and generally decreases to about 38 by early 2004. It generally increases to about 63 by mid-2005, generally decreases to about 15 by mid-2006, generally increases to about 44 by late 2008, and decreases to about 35 by the end. Malaysia begins at about 30 and generally decreases to about 18 by early 2007. It generally increases to end at about 35. Philippines begins at about 48 and generally increases to about 58 by early 2004. It generally decreases to end at about 17. Thailand begins at about 28 and decreases to about 20 by mid-2004. It generally increases to about 30 by mid-2006 and generally decreases to end at about 14.

Source: Bank of International Settlements.

Mexican Economic Indicators

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

Indicator	2007	2008	2009				
			Q2	Q3	Aug.	Sept.	Oct.
Real GDP[1]	3.7	-1.7	-1.1	12.2	…	…	…
Overall economic activity	3.1	1.0	-1.3	2.2	-1.3	.7	n.a.
Industrial production	2.4	-.9	-1.1	1.3	-1.2	.2	n.a.
Unemployment rate[2]	3.7	4.0	5.7	5.9	5.9	6.0	5.8
Consumer prices[3]	3.8	6.5	6.0	5.1	5.1	4.9	4.5
Merch. trade balance[4]	-10.1	-17.3	-4.4	-8.4	-7.2	-6.7	11.5
Merchandise imports[4]	281.9	308.6	218.5	231.9	229.6	238.4	234.4
Merchandise exports[4]	271.9	291.3	214.1	223.5	222.3	231.7	246.0
Current account[5]	-8.3	-15.8	3.4	-7.6	…	…	…

1. Gross domestic product. Annual rate. Annual data are Q4/Q4. Return to table

2. Percent; counts as unemployed those working 1 hour a week or less. Return to table

3. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec. Return to table

4. Billions of U.S. dollars, annualized. Return to table

5. Billions of U.S. dollars, not seasonally adjusted, annualized. Return to table

n.a. Not available.

… Not applicable.

Source: Haver Analytics; Bank of Mexico.

Brazilian Economic Indicators

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

Indicator	2007	2008	2009				
			Q2	Q3	Sept.	Oct.	Nov.
Real GDP[1]	6.1	1.2	7.8	n.a.	…	…	…
Industrial production	6.0	3.1	4.1	4.8	1.8	2.2	n.a.
Unemployment rate[2]	9.3	7.9	8.2	7.9	7.7	7.7	n.a.
Consumer prices[3]	4.5	5.9	5.2	4.4	4.3	4.2	n.a.
Merch. trade balance[4]	40.0	25.0	43.1	21.7	9.5	14.4	18.0
Current account[5]	1.6	-28.2	-8.5	-19.2	-27.7	-34.9	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, annualized. Return to table

5. Billions of U.S. dollars, not seasonally adjusted, annualized. Return to table

n.a. Not available.

… Not applicable.

Source: Haver Analytics; IMF International Financial Statistics database; Intituto Brasileiro de Geografia e Estatistica.

Latin America

Figure: Industrial Production

Line chart, 2003 to 2009, index where January 2000=100. There are two series, "Brazil" and "Mexico". Brazil starts at about 108 and generally increases to about 143 by mid-2008. It decreases to about 110 by late 2008 and generally increases to end at about 135. Mexico begins at about 100 and generally increases to about 115 by early 2008. It generally decreases to end at about 105.

Source: Fundacion de Investigaciones Economicas Latinoamericanas; Haver Analytics.

Figure: Consumer Prices

Line chart, 2003 to 2009, as percent change from year earlier. There are two series, "Brazil" and "Mexico". Brazil begins at about 15 and increase to about 17 by mid-2003. It decreases to about 5 by early 2004, generally increases to about 7 by early 2005, generally decreases to about 3 by late 2006, increases to about 6 by late 2008 and decreases to end at about 4. Mexico begins at about 5.2 and fluctuates between about 4 and 6 until ending at about 4.8.

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

Figure: Merchandise Trade Balances

Line chart, 2003 to 2009, in billions of dollars, as 3-month moving average (n.s.a.). There are two series, "Brazil" and "Mexico". Brazil begins at about 1.6 and generally increases to about 4.3 by mid-2006. It decreases to about 1.2 by early 2008, increases to about 2.9 by mid-2008, decreases to about 1.3 by early 2009, increases to about 3.7 by mid-2009 and decreases to end at about 1.3. Mexico begins at about -0.3, decreases to about -0.9 by early 2003, increases to about -0.2 by late 2003, decreases to about -1.3 by late 2004, increases to about 0.3 by early 2006, decreases to about -1.5 by mid-2007, increases to about -0.2 by late 2007, generally decreases to about -2.1 by late 2008, and generally increases to end at about -0.1.

Source: IMF International Financial Statistics, Bank of Mexico.

Figure: Benchmark Interest Rates

Line chart, 2003 to 2009, by percent. There are two series, "Brazil" and "Mexico". Brazil begins at about 26 and generally decreases to about 16 by early 2004. It increases to about 20 by mid-2005 and generally decreases to about 12 by late 2007. It increases to about 14 by late 2008 and decreases to end at about 8. Mexico begins at about 9 and generally decreases to about 4 by mid-2003. It increases to about 10 by mid-2005, decreases to about 7 by mid-2006, remains about constant until late 2008 and decreases to end at about 4.

Source: Bloomberg.

Figure: Gross External Debt

Line chart, 2003 to 2009, as percent of gross domestic product. There are two series, "Brazil" and "Mexico". Brazil begins at about 190 and generally decreases to about 48 by mid-2008. It increases to about 60 by early 2009 and decreases to end at about 52. Mexico begins at about 25 and remains about constant to the end.

Source: Haver Analytics; Bank for International Settlements.

Figure: Short-Term External Debt

Line chart, 2003 to 2009, by percent of reserves. There are two series, "Brazil" and "Mexico". Brazil begins at about 80 and decreases to about 57 by mid-2003. It further generally decreases to end at about 18. Mexico begins at about 48 and generally decreases to about 26 by mid-2006. It increases to about 32 by early 2007 and remains about constant to the end.

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

December 2009 Greenbook Supplement Tables and Charts†

Supplemental Notes

The Domestic Nonfinancial Economy

Real Personal Consumption Expenditures

(Percent change from preceding comparable period)

Category	Q1	Q2	Q3	Sept.	Oct.	Nov.
	2009			2009		
	Annual rate			Monthly rate		
Total real PCE[1]	**.6**	**-.9**	**3.0**	**-.6**	**.3**	**n.a.**
Motor vehicles	9.6	-6.3	53.7	-29.8	8.9	5.1
Goods ex. motor vehicles	-2.8	-5.9	3.4	.7	.0	.4
Services	-.3	.2	1.0	.2	.2	n.a.
Ex. energy	-.2	.7	1.1	.1	.1	n.a.
Memo:						
Real PCE control[2]	1.3	-2.5	3.3	.7	.2	.4
Nominal retail control[3]	2.6	-2.8	1.4	.6	.3	.5

1. The values for Q3, September, October, and November are staff estimates based on available data. Return to table

2. Durables excluding motor vehicles, nondurables excluding gasoline, and food services. Return to table

3. Total sales less outlays at building material and supply stores, automobile and other motor vehicle dealers, and gasoline stations. Return to table

n.a. Not available. Return to table

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

Figure: Change in Real PCE Goods

Line chart, 1990 to November 2009, by percent, as a 6-month moving average. The series starts at about -0.55 and generally increases to about 0.6 by 1994. It generally decreases to about 0.1 by 1995 and generally increases to about 0.75 by 1999. It generally decreases to about -0.05 by early 2003 and fluctuates between about 0.1 and 0.5 until late 2007. It then generally decreases to about -0.6 by early 2009 and increases to end at about 0.2. At the time of the last business cycle peak, the series is at about 0.15. There is a second chart showing detailed data from 2006 to November 2009. It shows the Change in Real PCE Goods and the 6-month moving average. The 6-month moving average begins at about 0.38 and generally decreases to about -0.45 by early 2009. It generally increases to end at about 0.2. The full series typically fluctuates about 0-.75 percent above or below the 6-month moving average at any given time, except from late 2008 to the end, when it fluctuates about 2 percent above or below.

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, 1990 to October 2009, by percent as a 6-month moving average. The series begins at about 0.38 and decreases to about -0.05 by late 1990. It then generally increases to about 0.45 by 1991 and generally decreases to about 0.15 by 1994. It then generally increases to about 0.5 by 1999, then decreases to about 0.1 by 2001, then generally increases to about 0.35 by 2004, then generally decreases to about -0.1 by 2008, then generally increases to end at about 0.1. At the time of the last business cycle peak, the series is at about 0.05. There is a second chart with detailed information showing the monthly and 6-moving average data from 2006 to October 2009. The monthly data fluctuates widely throughout the chart from about 0.55 to about -0.35. It has a decreasing trend until late 2008 when it begins to generally increase. It ends at about 0.25. The 6-month moving average starts at about 0.15 and generally increases to about 0.25 by mid-2007. It then generally decreases to about -0.15 by late 2008 and increases to end at about 0.1.

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.

Reuters/University of Michigan Survey of Consumers

Indexes of consumer sentiment
(Not seasonally adjusted)

Category	2009							
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[P]
Composite of current and expected conditions[1]	68.7	70.8	66.0	65.7	73.5	70.6	67.4	73.4
Current conditions[1]	67.7	73.2	70.5	66.6	73.4	73.7	68.8	79.1
Expected conditions[1]	69.4	69.2	63.2	65.0	73.5	68.6	66.5	69.7
Personal financial situation								
Now compared with 12 months ago[2]	61	67	70	58	69	69	63	72
Expected in 12 months[2]	114	121	110	111	115	117	112	114
Expected business conditions								
Next 12 months[2]	75	69	69	69	88	81	70	80
Next 5 years[2]	88	86	73	80	91	76	83	84
Appraisal of buying conditions								
Cars	132	139	131	139	126	124	126	132
Large household appliances[2]	113	121	111	113	120	120	114	132
Houses	162	157	147	156	156	156	154	154
Expected unemployment change - next 12 months	132	133	136	124	110	120	124	113
Prob. household will lose a job - next 5 years	27	27	26	27	27	24	26	25
Expected inflation - next 12 months								
Mean	3.2	3.9	3.6	3.0	2.8	3.2	3.1	3.1
Median	2.8	3.1	2.9	2.8	2.2	2.9	2.7	2.1
Expected inflation - next 5 to 10 years								
Mean	3.1	3.2	3.4	3.1	3.2	3.2	3.2	3.1
Median	2.9	3.0	3.0	2.8	2.8	2.9	3.0	2.6

Note. Figures on financial, business, and buying conditions are the percent reporting 'good times' (or 'better') minus the percent reporting 'bad times' (or 'worse'), plus 100. Expected change in unemployment is the fraction expecting unemployment to rise minus the fraction expecting unemployment to fall, plus 100.

P Preliminary. Return to table

1. Feb. 1966 = 100. Return to table

2. Indicates the question is one of the five equally-weighted components of the index of sentiment. Return to table

Figure: Consumer Sentiment

Line chart, 2002 to late 2009. There are two series, "Reuters/Michigan", and index where 1966=100, and "Conference Board", an index where 1985=100. Reuters/Michigan begins at about 90, generally increases to about 98 by early 2002, generally decreases to about 78 by mid-2003, generally increases to about 107 by early 2004, generally decreases to about 75 by mid-2005, generally increases to about 100 by late 2006, generally decreases to about 58 by late 2008, and generally increases to end in December at about 74 (December value is preliminary). Conference Board begins at about 93 and increases to about 110 by early 2002. It generally decreases to about 62 by early 2003, generally increases to about 84 by mid-2007, decreases to about 37 by early 2009, and generally increases to end at about 50 in November.

Figure: Expected Inflation (Reuters/University of Michigan)

Line chart, 2002 to December 2009 (December values are preliminary). By percent. There are two series, "Median, 5 to 10 years ahead" and "Median, 12 months ahead". 5 to 10 years ahead begins at about 3 and remains about constant until the end. 12 months ahead begins at about 1.8 and increases to about 2.7 by early 2002. It decreases to about 2.5 by late 2002, increases to about 3.2 by early 2003, decreases to about 1.8 by mid-2003, generally increases to about 4.7 by late 2005, and fluctuates between about 3 and 5 until mid-2008. It then decrease to about 1.7 by late 2008, generally increases to about 3 by mid-2009 and decreases to end at about 2.2.

Nonfarm Inventory Investment

(Billions of dollars; seasonally adjusted annual rate)

Measure and sector	2009					
	Q1	Q2	Q3	Aug.	Sept.	Oct.
Real inventory investment (chained 2005 dollars)						
Total nonfarm business	**-114.9**	**-163.1**	**-140.3**e	**...**	**...**	**...**
Motor vehicles	-63.6	-48.1	-4.3	...	...	...
Nonfarm ex. motor vehicles	-51.3	-115.1	-135.9e	...	...	...
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	**-49.3**	**-110.9**	**-127.2**e	**-115.3**	**-164.2**e	**n.a.**
Manufacturing	-28.9	-39.8	-53.3e	-46.6	-82.0e	n.a.
Wholesale trade ex. motor vehicles & parts	-8.8	-52.5	-51.9e	-52.7	-51.1e	n.a.
Retail trade ex. motor vehicles & parts	-11.6	-18.6	-22.0e	-16.0	-31.1e	n.a.
Book-value inventory investment (current dollars)						
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	**-143.2**	**-150.2**	**-137.1**	**-136.4**	**-136.2**	**21.4**
Manufacturing	-77.3	-63.6	-62.2	-56.4	-74.9	21.1
Wholesale trade ex. motor vehicles & parts	-47.3	-62.9	-50.7	-54.1	-34.5	8.9
Retail trade ex. motor vehicles & parts	-18.6	-23.7	-24.2	-25.9	-26.8	-8.7

n.a. Not available.

... Not applicable. Return to table

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, 2000 to October 2009, in months. There are two series, "Staff flow-of-goods system" and "Census book-value data". Flow-of-goods system begins at about 1.75 and decreases to about 1.7 by early 2000. It remains about constant until late 2001, then generally decreases to about 1.5 by late 2007. It generally increases to about 1.67 by early 2009 and decreases to end at about 1.61. Book-value data begins at about 1.36 and generally increases to about 1.42 by early 2001. It generally decreases to about 1.18 by late 2005, increases to about 1.25 by late 2006, decreases to about 1.18 by mid-2008, increases to about 1.37 by early 2009, and generally decreases to end at about 1.25.

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, 2000 to November 2009, as an index. The series begins at about 47 and generally increases to about 57 by late 2000. It generally decreases to about 39 by early 2002, generally increases to about 47 by late 2002, decreases to about 37 by mid-2004, generally increases to about 57 by early 2009, and decreases to end at about 37.

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

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

Federal Government Indicators

Figure: Total Real Federal Purchases

Line chart, 2004 to 2009:Q3, by percent change, annual rate. There are two series, "Current", and "4-quarter moving average". Current begins at about 5 and generally decreases to about -5 by late 2004. Throughout 2005 and early 2006 it fluctuates widely, reaching a low of about -7 and high of about 13, and generally decreasing to about -5 by early 2007. It then generally increases to about 14 by mid-2008, generally decreases to about -5 by early 2009, increases to about 12 by mid-2009 and decreases to end at about 8. The 4-quarter moving average begins at about 8 and generally decreases to about 2 by early 2005. It then generally increases to about 4 by early 2006, decreases to about -2 by early 2007, increases to about 8 by late 2008 and decreases to end at about 5.

Note: NIPA measure.

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

Figure: Real Defense Spending

Line chart, 2004 to 2009, in billions of chained (2005) dollars. There are two series, "Unified", which is monthly, and NIPA, which is quarterly. The two series track together very closely throughout the chart, with the monthly series generally varying about 25 billion more or less than the quarterly series at any given time, except for late 2004 when it's about 100 more or less. The quarterly series begins at about 505 and generally increases to end at about 640 in Q3. The monthly series ends in November at about 580.

Note: Nominal unified defense spending is seasonally adjusted and deflated by BEA prices. NIPA defense purchases exclude consumption of fixed capital.

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

Figure: Unified Budget Deficit

Line chart, 2000 to November 2008. There are two series which track very closely throughout the chart, "Billions of dollars" and "Percent of GDP". Billions of dollars begins at about 150 and increases to about 280 by 2001. It then decreases to about -400 by 2004 and increases to about -200 by 2007. It decreases to end at about -1400. Percent of GDP begins at about 1.8 and increases to about 2.4 by 2001. It decreases to about -4 by 2004, increases to about -1.5 by 2007, and decreases to end at about -10.

Note: Adjusted for payment-timing shifts; cumulative deficit over the previous 12 months.

Source: Monthly Treasury Statement.

Figure: Unified Outlays and Receipts

Line chart, 2000 to November 2009, by percent change from year earlier. There are two series, "Outlays" and "Receipts". Outlays begins at about 4 and increases to about 10 by 2002. It generally decreases to about 7 by 2003 and remains about constant until 2006. It generally decreases to about 3 by late 2007, generally increases to about 18 by early 2009, and decreases to end at about 13. Receipts begins at about 6 and generally increases to about 12 by late 2000, generally decreases to about -12 by early 2002, generally increases to about 15 by 2005, and generally decreases to end at about -19.

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

Source: Monthly Treasury Statement.

Figure: Federal Debt Held by the Public

Line chart, as percent of GDP, 2000 to November 2009. The series begins at about 37 and generally decreases to about 32 by 2001. It then generally increases to about 36 by early 2005 and remains about constant until 2008. It then generally increases to about 53 by mid-2009 and decreases to end at about 52.

Source: Monthly Treasury Statement.

Recent Unified Federal Outlays and Receipts

Function or source	Oct. - Nov. 2009	
	Bilions of dollars	Percent change*
Outlays	566	-4.2
National defense	118	.8
Major transfers[1]	318	17.0
Other primary spending	94	-41.3
Net interest	36	-14.0
Receipts	269	-13.1
Individual income and payroll taxes	236	-14.1
Corporate income taxes	-7	…
Other	39	20.5
Deficit (-)	-297	…

Note: Adjusted for payment-timing shifts.

* Relative to same year-earlier period. Return to table

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

… Not applicable.

Source: Monthly Treasury Statement.

The Domestic Financial Economy

Selected Financial Market Quotations

(One-day quotes in percent except as noted)

Instrument	2008	2009			Change to Dec. 10 from selected dates (percentage points)		
	Sept. 12	Sept. 22	Nov. 3	Dec. 10	2008 Sept. 12	2009 Sept. 22	2009 Nov. 3
Short-term							
FOMC intended federal funds rate	2.00	.13	.13	.13	-1.87	.00	.00
Treasury bills[1]							
3-month	1.46	.11	.06	.02	-1.44	-.09	-.04
6-month	1.80	.20	.17	.15	-1.65	-.05	-.02
Commercial paper (A1/P1 rates)[2]							
1-month	2.39	.18	.16	.15	-2.24	-.03	-.01
3-month	2.75	.21	.18	.18	-2.57	-.03	.00
Large negotiable CDs[1]							
3-month	2.79	.25	.22	.22	-2.57	-.03	.00
6-month	3.09	.35	.32	.30	-2.79	-.05	-.02
Eurodollar deposits[3]							
1-month	2.60	.40	.30	.32	-2.28	-.08	.02
3-month	3.00	.55	.45	.45	-2.55	-.10	.00
Bank prime rate	5.00	3.25	3.25	3.25	-1.75	.00	.00
Intermediate- and long-term							
U.S. Treasury[4]							
2-year	2.24	.99	.93	.75	-1.49	-.24	-.18
5-year	2.97	2.44	2.37	2.19	-.78	-.25	-.18
10-year	3.93	3.74	3.73	3.69	-.24	-.05	-.04
U.S. Treasury indexed notes[5]							
5-year	1.33	1.11	.70	.50	-.83	-.61	-.20
10-year	1.77	1.69	1.48	1.43	-.34	-.26	-.05
Municipal general obligations (Bond Buyer)[6]	4.54	4.20	4.39	4.19	-.35	-.01	-.20
Private instruments							
10-year swap	4.26	3.67	3.62	3.61	-.65	-.06	-.01
10-year FNMA[7]	4.36	4.12	4.06	3.92	-.44	-.20	-.14
10-year AA[8]	6.62	5.11	5.12	5.02	-1.60	-.09	-.10
10-year BBB[8]	7.22	6.36	6.25	6.06	-1.16	-.30	-.19
10-year high yield[8]	10.66	9.90	9.48	9.38	-1.28	-.52	-.10
Home mortgages (FHLMC survey rate)							
30-year fixed	5.78	5.04	4.98	4.81	-.97	-.23	-.17
1-year adjustable	5.03	4.52	4.47	4.24	-.79	-.28	-.23

Stock exchange index	Record high		2009			Change to Dec. 10 from selected dates (percent)		
	Level	Date	Sept. 22	Nov. 3	Dec. 10	Record high	2009 Sept. 22	2009 Nov. 3
Dow Jones Industrial	14,165	10-9-07	9,830	9,772	10,406	-26.54	5.86	6.49
S&P 500 Composite	1,565	10-9-07	1,072	1,045	1,102	-29.57	2.86	5.45
Nasdaq	5,049	3-10-00	2,146	2,057	2,191	-56.60	2.08	6.49
Russell 2000	856	7-13-07	621	571	595	-30.43	-4.08	4.34
D.J. Total Stock Index	15,807	10-9-07	11,083	10,729	11,296	-28.54	1.93	5.29

1. Secondary market. Return to table

2. Financial commercial paper. Return to table

3. Bid rates for Eurodollar deposits collected around 9:30 a.m. eastern time. Return to table

4. Derived from a smoothed Treasury yield curve estimated using off-the-run securities. Return to table

5. Derived from a smoothed Treasury yield curve estimated using all outstanding securities and adjusted for the carry effect. Return to table

6. Most recent Thursday quote. Return to table

7. Constant-maturity yields estimated from Fannie Mae domestic noncallable coupon securities. Return to table

8. Derived from smoothed corporate yield curves estimated using Merrill Lynch bond data. Return to table

NOTES:
September 12, 2008, is the last business day before Lehman Brothers Holdings filed for bankruptcy.
September 22, 2009, is the day before the September 2009 FOMC monetary policy announcement.
November 3, 2009, is the day before the most recent FOMC monetary policy announcement.

Commercial Bank Credit

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

Type of credit	2007	2008	H2 2008	H1 2009	Q3 2009	Oct. 2009	Nov. 2009	Level[1] Nov. 2009
Total	9.9	5.0	4.8	-5.5	-7.3	-12.0	-3.9	9,109
Loans[2]								
Total	10.6	4.4	3.0	-7.4	-12.9	-15.5	-4.4	6,777
Core	9.5	5.0	3.2	-4.7	-9.7	-14.4	-6.6	6,021
To businesses								
Commercial and industrial	19.0	16.3	14.1	-14.1	-20.0	-28.7	-16.1	1,361
Commercial real estate	9.4	6.0	3.2	-1.6	-5.6	-11.5	-10.0	1,654
To households								
Residential real estate	5.3	-3.2	-5.4	-2.0	-8.1	-11.8	2.2	2,164
Revolving home equity	5.6	13.0	12.9	6.5	-5.2	-5.1	-6.3	604
Closed-end mortgages	5.3	-8.0	-11.3	-5.1	-9.3	-14.4	5.5	1,560
Consumer	6.8	7.1	7.6	.0	-3.4	-2.7	-7.2	842
Memo: Originated[3]	6.5	5.6	4.5	-1.7	-4.3	-3.8	-12.9	1,227
Other	18.7	.8	1.7	-25.4	-37.0	-24.8	14.1	756
Securities								
Total	7.6	6.9	11.1	.7	10.7	-1.6	-2.6	2,332
Treasury and agency	-5.5	16.4	31.4	.5	20.5	.8	6.1	1,413
Other[4]	28.0	-4.1	-12.0	1.0	-3.0	-5.4	-16.0	919

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

1. Billions of dollars. Pro rata averages of weekly (Wednesday) levels. Return to table

2. Excludes interbank loans. Return to table

3. Includes an estimate of outstanding loans securitized by commercial banks that retained recourse or servicing rights. Return to table

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

Source: Federal Reserve Board.

Figure: Total Loans at Commercial Banks

Line chart, June 2007 to November 2009, in trillions of dollars. Data are monthly. There are two series, "Large" (top 25 domestic commercial banks ranked by assets as of the last Call Report) and "Small" (all other domestic commercial banks). Small begins at about 2.2 and increases to about 2.5 by February 2009. It decreases to end at about 2.4. Large begins at about 4 and increases to about 4.3 by February 2008. It remains about constant until about September 2008, then generally decreases to end at about 3.8. At the time of the last business cycle peak, Large is at about 4.2 and Small is at about 2.4.

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

Source: Federal Reserve Board.

Figure: Change in Unused Commitments

Line chart, 1990 to 2009:Q3, by percent. Data are quarterly. The series begins at about 22 and decreases to about -2 by late 1991. It generally increases to about 27 by 1996, generally decreases to about -3 by 1999, generally increases to about 18 by 2000, generally decreases to about -8 by 2004, generally increases to about 16 by 2006, generally decreases to about -34 by late 2008 and increases to end at about -12. At the time of the last business cycle peak, the series is at about -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: Call Report data, adjusted for the effects of merger and failure activity involving large thrift institutions.

Figure: C&I Loan Rate Spreads

Line chart, 1997 to 2009:Q4, by basis points. Data are quarterly. The series begins at about 155 and generally increases to about 190 by 2003. It generally decreases to about 137 by late 2008 and increases to end at about 215. At the time of the last business cycle peak, the series is at about 144.

Note: The spread over market interest rate on an instrument of comparable maturity, adjusted for changes in nonprice loan characteristics. A shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research (NBER): March 2001-November 2001. The NBER peak is the last business cycle peak as defined by the NBER (December 2007).

Source: Survey of Terms of Business Lending.

The International Economy

Trade in Goods and Services

		Annual rate			Monthly rate		
	2008	2009			2009		
		Q1	Q2	Q3	Aug.	Sept.	Oct.
	Percent change						
Nominal BOP							
Exports	-3.4	-40.7	-.8	24.8	.3	2.8	2.6
Imports	-7.3	-55.4	-9.9	37.2	-.5	5.6	.4
Real NIPA							
Exports	-3.4	-29.9	-4.1	17.0	…	…	…
Imports	-6.8	-36.4	-14.7	20.8	…	…	…
	Billions of dollars						
Nominal BOP							
Net exports	-695.9	-369.6	-325.0	-389.5	-30.3	-35.7	-32.9
Goods, net	-840.2	-496.1	-461.9	-528.6	-42.0	-47.4	-44.8
Services, net	144.3	126.5	137.0	139.0	11.7	11.7	11.9

n.a. Not available.

… Not applicable.

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, 1999 to September 2009, in billions of dollars, annual rate. The series begins at about -210 and generally decreases to about -800 by mid-2006. It increases to about -680 by 2007 and decreases to about -750 by late 2008. It increases to about -320 by early 2009 and decreases to end at about -400.

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

Bar chart, 1999 to 2009, by percentage points, annual rate. Approximate values are: 1999:Q1 -1.6; 1999:Q2 -1.2; 1999:Q3 -.8; 1999:Q4 -.2; 2000:Q1 -1.5; 2000:Q2 -.5; 2000:Q3 -.9; 2000:Q4 -.3; 2001:Q1 .3; 2001:Q2 .4; 2001:Q3 -.8; 2001:Q4 -.5; 2002:Q1 -.7; 2002:Q2 -.8; 2002:Q3 -.6; 2002:Q4 -1.3; 2003:Q1 .4; 2003:Q2 -.9; 2003:Q3 .5; 2003:Q4 -.3; 2004:Q1 -.5; 2004:Q2 -1.7; 2004:Q3 -.5; 2004:Q4 -.6; 2005:Q1 .4; 2005:Q2 .2; 2005:Q3 -.4; 2005:Q4 -.7; 2006:Q1 .5; 2006:Q2 0; 2006:Q3 -.7; 2006:Q4 1.9; 2007:Q1 .6; 2007:Q2 1.4; 2007:Q3 2.3; 2007:Q4 2.3; 2008:Q1 .4; 2008:Q2 2.4; 2008:Q3 -.1; 2008:Q4 .5; 2009:Q1 2.7; 2009:Q2 1.7; 2009:Q3 -.8.

Figure: Selected Exports

Line chart, 1999 to 2009, by billions of dollars, annual rate. There are four series, "Capital goods ex. aircraft", "Industrial supplies", "Consumer goods", and "Aircraft." Capital goods begins at about 245 and increases to about 300 by 2000. It decreases to about 235 by early 2002 and generally increases to about 390 by 2008. It generally decreases to end at about 315. Industrial supplies begins at about 130 and increases to about 170 by 2000. It decreases to about 140 by early 2002. It generally increases to about 4000 by 2008, decreases to about 240 by late 2008, and increases to end at about 280. Consumer goods begins at about 80 and generally increases to about 175 by 2008. It decreases to about 145 by early 2009 and increases to end at about 150. Aircraft begins at about 60 and decreases to about 50 by early 1999. It remains about constant until 2004. It increases to about 80 by late 2008, and decreases to end at about 70.

Figure: Selected Imports

Line chart, 1999 to 2009, in billions of dollars, annual rate. There are four series, "Consumer goods", "Capital goods", "Industrial supplies", and "Oil". Consumer goods begins at about 230 and increases to about 295 by 2000. It decreases to about 280 by late 2001. It increases to about 490 by 2008, and decreases to end at about 425. Capital goods begins at about 280 and increases to about 365 by 2000, decreases to about 280 by 2001, increases to about 470 by 2008, decreases to about 340 by early 2009 and increases to end at about 360. Industrial supplies begins at about 140, increases to about 190 by 2001, decreases to about 155 by early 2002, generally increases to about 350 by early 2008, decreases to about 180 by early 2009 and increases to end at about 190. Oil begins at about 40, increases to about 130 by 2000, decreases to about 80 by early 2002, generally increases to about 340 by 2006, decreases to about 275 by late 2006, increases to about 530 by early 2008, decreases to about 210 by late 2008, and increases to end at about 275.

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

U.S. Exports and Imports of Goods and Services

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

	Levels				Change[1]			
	2009		2009		2009		2009	
	Q2	Q3	Sept.	Oct.	Q2	Q3	Sept.	Oct.
Exports of goods and services	**1485.6**	**1570.1**	**1600.6**	**1642.1**	**-3.2**	**84.5**	**43.5**	**41.5**
Goods exports	984.5	1055.6	1083.6	1122.5	-13.0	71.1	41.4	38.9
Gold	12.3	14.3	15.0	16.8	-1.5	2.0	-.2	1.8
Other goods	972.2	1041.4	1068.6	1105.7	-11.4	69.1	41.6	37.1
Capital goods	373.1	382.2	390.1	404.6	-20.7	9.1	19.7	14.5
Aircraft & parts	73.4	70.4	73.5	75.8	-5.6	-3.0	11.9	2.3
Computers & accessories	35.5	37.4	36.5	39.6	-1.4	1.9	-.2	3.1
Semiconductors	35.0	38.5	38.2	41.6	1.6	3.5	-.6	3.4

Other capital goods	229.2	235.9	241.9	247.7	-15.3	6.7	8.6	5.7
Automotive	66.7	86.4	90.1	95.1	-3.4	19.7	2.6	5.0
Ind. supplies (ex. ag., gold)	249.8	283.3	297.0	300.4	9.6	33.5	16.5	3.5
Consumer goods	144.2	150.0	153.1	165.0	-1.8	5.8	5.5	11.9
Agricultural	101.0	99.0	97.0	98.9	6.6	-1.9	-4.2	1.9
All other goods	37.4	40.4	41.3	41.6	-1.7	3.0	18.5	.4
Services exports	501.1	514.5	517.0	519.6	9.8	13.4	2.0	2.6
Imports of goods and services	**1810.6**	**1959.7**	**2028.4**	**2037.3**	**-47.8**	**149.1**	**107.5**	**8.9**
Goods imports	1446.5	1584.2	1652.2	1660.3	-47.2	137.7	106.0	8.1
Oil	227.8	275.5	305.6	273.9	18.9	47.7	52.5	-31.7
Gold	8.4	8.8	8.5	10.5	1.1	.4	.7	2.0
Other goods	1210.3	1299.9	1338.1	1375.9	-67.2	89.6	52.8	37.8
Capital goods	345.6	364.2	370.9	384.4	-20.7	18.6	10.3	13.5
Aircraft & parts	31.4	29.1	28.8	30.9	1.2	-2.3	3.8	2.1
Computers & accessories	84.4	95.0	96.0	106.2	3.8	10.6	1.9	10.2
Semiconductors	20.4	22.2	22.6	24.4	1.4	1.8	-.2	1.8
Other capital goods	209.4	217.9	223.5	222.9	-27.1	8.4	4.8	-.6
Automotive	126.8	178.0	196.1	201.1	-2.6	51.2	19.6	5.0
Ind. supplies (ex. oil, gold)	178.7	190.5	200.2	208.4	-34.2	11.8	11.2	8.1
Consumer goods	419.1	422.6	424.6	436.5	-4.4	3.5	6.5	11.9
Foods, feeds, beverages	81.5	81.0	80.4	82.9	-.2	-.5	-.2	2.5
All other goods	58.6	63.6	65.7	62.5	-5.1	5.1	5.3	-3.2
Services imports	364.1	375.5	376.2	377.0	-.7	11.3	1.5	.8
Memo:								
Oil quantity (mb/d)	11.62	11.36	12.12	10.92	-2.16	-.26	1.70	-1.20
Oil import price ($/bbl)	53.70	66.25	69.07	68.70	12.10	12.55	2.55	-.37

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, 1999 to 2009, by 12-month percent change. There are two series, "Core goods", and "Non-oil goods". Both series track closely together throughout the chart. They begin at about -2 and generally increase to about 2 by 2000. They generally decrease to about -4 by early 2002 with Non-oil goods being about 1 percent lower. They generally increase to about 4 by 2004, decrease to about 1 by 2006, and increase to about 9 by 2008. They decrease to about -6 by mid-2009, with Non-oil goods being slightly lower, and they increase to end at about -1.

Figure: Categories of Core Imports

Line chart, 1999 to 2009, by 12-month percent change. There are two series, "Material-intensive goods" and "Finished goods". Material-intensive goods begins at about -4 and generally increases to about 7 by early 2000. It generally decrease to about -10 by early 2002, increases to about 12 by 2004, decreases to about 4 by 2005, increases to about 11 by 2006, generally decreases to about 5 by 2007, increases to about 19 by 2009, decreases to about -17 by mid-2009, and increases to end at about -3. Finished Goods begins at about 0 and ends at about 0, rising briefly to about 2 in 2005 and 4 in 2008.

Figure: Oil

Line chart, 1999 to 2009, in dollars per barrel. There are two series which track very closely throughout the chart, "Spot West Texas Intermediate" and "Import unit value". They begin at about 12 and generally increase to about 35 by late 2000. They decrease to about 20 by early 2002. They generally increase to about 75 by early 2006, decrease to about 50 by late 2006, increase to about 135 by early 2008, decrease to about 37 by late 2008, and increases to end at about 75.

Figure: Natural Gas

Line chart, 1999 to 2009. There are two series, "Import price index", where 2000=100, and "Spot Henry Hub", in dollars per million Btu. The two series generally rise and fall together. Import price index begins at about 60 and generally increases to about 220 by late 2000. It generally decreases to about 60 by early 2002, generally increases to about 190 by early 2003, decreases to about 120 by 2004, generally increases to about 160 by 2005, continues to increase to about 280 by late 2005, decreases to about 125 by mid-2006, generally increases to about 290 by 2008, and generally decreases to about 80 by late 2009 and increases to end at about 120. Spot Henry Hub begins at about 2, generally increases to about 10 by late 2000, decreases to about 3 by late 2001, increases to about 9 by early 2003, decreases to about 5 by late 2003, generally increases to about 14 by 2005, decreases to about 5 by 2006, generally increases to about 13 by 2008, and 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". They track closely throughout the charts, with Total goods generally being about a half percent lower. Core goods begins at about -2 and increases to about 3.5 by early 2000. It decrease to about -2 by 2002, generally increases to about 4 by early 2003, decreases to about 2 by mid-2003, increases to about 5 by 2004, decreases to about 3.5 by 2006, then fluctuates but generally increases to about 14 by early 2008. It decreases to about -11 by mid-2009 and increases to end at about 0.3. Total goods ends at about 0.4.

Figure: Categories of Core Exports

Line chart, 1999 to 2009, by 12-month percent change. There are two series, "Material-intensive goods" and "Finished goods." Material-intensive goods begins at about -4 and increases to about 7 by 2000, decreases to about -7 by early 2002, increases to about 10 by early 2003, decreases to about 4 by mid-2003, increases to about 12 by 2004, decreases to about 6 by early 2005, and fluctuates but generally increases to about 24 by mid-2008. It decreases to about -21 by mid-2009 and increases to end at about -2. Finished goods begins at about 0 and remains about constant until 2003. It generally increases to about 4 by early 2008, then decreases to end at about 1.

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		
	2009			2009		
	Q2	Q3	Q4[e]	Sept.	Oct.	Nov.
	BLS prices					
Merchandise imports	14.9	12.0	9.6	.2	.8	1.7
Oil	246.9	88.3	32.3	-.6	2.0	6.2
Non-oil	-3.3	1.1	5.1	.3	.6	.7
Core goods[1]	-1.2	2.4	5.5	.7	.5	.4
Finished goods	-.5	.4	1.1	.1	.2	.0
Cap. goods ex. comp. & semi.	-1.4	.4	.9	.0	.2	.1
Automotive products	.0	2.0	2.0	.2	.3	.1
Consumer goods	-.1	-.4	.6	.0	.2	-.1
Material-intensive goods	-2.9	7.1	16.1	2.2	1.3	1.2
Foods, feeds, beverages	.8	1.0	5.3	.5	.3	.5
Industrial supplies ex. fuels	-4.2	8.7	19.4	2.7	1.6	1.4
Computers	-4.2	.3	-.8	.0	-.4	.4
Semiconductors	7.1	-5.4	4.8	.4	.4	.5
Natural gas	-74.8	-39.3	116.5	-14.1	17.1	30.0

Merchandise exports	2.4	3.4	2.7	-.2	.2	.8
Core goods[2]	2.6	4.1	2.9	-.3	.1	1.0
Finished goods	.4	2.1	.7	.0	.1	-.0
Cap. goods ex. comp. & semi.	2.5	2.0	.7	.0	.2	-.1
Automotive products	-.6	-.5	.6	.1	.1	.0
Consumer goods	-3.9	4.3	.9	.1	.0	.2
Material-intensive goods	5.3	6.5	5.4	-.7	.2	2.2
Agricultural products	19.6	-7.8	-3.2	-2.9	-.7	3.7
Industrial supples ex. ag.	1.3	12.1	8.7	.1	.5	1.7
Computers	-3.4	-1.7	9.3	.7	.2	3.3
Semiconductors	12.3	-.8	2.7	.1	.1	.7
	NIPA prices					
Chain price index						
Imports of goods & services	4.2	11.3	--	…	…	…
Non-oil merchandise	-3.9	.5	--	…	…	…
Core goods[1]	-2.3	1.2	--	…	…	…
Exports of goods & services	.1	4.7	--	…	…	…
Total merchandise	1.9	4.8	--	…	…	…
Core goods[2]	2.4	5.2	--	…	…	…

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.

† Note: Data values for figures are rounded and may not sum to totals. Return to text

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