

September 2009 Bluebook and Greenbook Tables and Charts

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September 2009 Bluebook Tables and Charts[†]

Recent Developments

Chart 1 Interest Rate Developments

Figure: Expected federal funds rates

Line chart, by percent, late 2009 to 2011. There are two series, "September 17, 2009" and "August 11, 2009". They begin at about 0.25. September 17, 2009 generally increases to end at 2.4. August 11, 2009 generally increases to end at about 2.8.

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

Source. CME Group.

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

Bar chart, by percent, 2010:Q1 to 2012:Q2. There are two series, "Recent: 17 respondents" and "Last FOMC: 17 respondents". Recent: 17 respondents begins at about 0 and generally increases to about 30 by 2010:Q3. It then generally decreases to about 0 by 2011:Q4, and generally increases to about 6 by 2012:Q1. It then generally decreases to end at about 0. Last FOMC: 17 respondents begins at about 0 and generally increases to about 24 by 2010:Q2. It then generally decreases to about 0 by 2011:Q3, and generally increases to about 13 by 2012:Q1. It then generally decreases to end at about 0.

Source. Federal Reserve Bank of New York.

Figure: Eurodollar implied volatility term structure

Line chart, by percentage points, 4 to 21 months ahead. There are two series, "September 17, 2009" and "August 11, 2009". They begin at about 0.4. September 17, 2009 generally increases to end at about 4.1. August 11, 2009 generally increases to end at about 4.7.

Note. Eurodollar implied volatility term structure is the width of a 90 percent confidence interval computed from the term structures for the expected federal funds rate and implied volatility.

Source. Bloomberg.

Figure: Nominal Treasury yields

Line chart, by percent, 2007 to September 17, 2009. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are two series, "10-year" and "2-year". They begin at about 4.7 and generally track together until they reach about 5 by 2007. 10-year generally increases to about 5.4 by 2007, and generally decreases to about 2.6 by late 2008. It then generally increases to about 4.3 by 2009, and generally decreases to end at about 3.8. It is at about 4.1 at the time of the August 2009 FOMC meeting. 2-year generally decreases to about 1.5 by 2008, and generally increases to about 3 by 2008. It then generally decreases to about 0.4 by late 2008, and generally increases to end at about 1. It is at about 1.4 at the time of the August 2009 FOMC meeting.

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

Source. Staff estimates.

Figure: Inflation compensation

Line chart, by percent, 2007 to September 17, 2009. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are two series, "Next 5 years" and "5-to-10 year forward". Next 5 years begins at about 2.3 and generally decreases to about 1.8 by 2008. It then generally increases to about 2.5 by mid-2008, and generally decreases to about -1.55 by late 2008. It then generally increases to end at about 1.5. It is at about 1.25 at the time of the August 2009 FOMC. 5-to-10 year forward begins at about 2.5 and generally increases to about 3.5 by 2008. It then generally decreases to about 2.0 by late 2008, and generally increases to end at about 3.0. It is at about 3.25 at the time of the August 2009 FOMC meeting.

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

Source. Barclays, PLC. and Staff estimates.

Figure: Survey measures of long-term inflation

Line chart, by percent, 2002 to 2009. There are two series, "Philadelphia Fed" and "Michigan Survey". Philadelphia Fed begins at about 2.5 and generally decreases to about 2.3 by 2007. It then generally increases to end at about 2.5 by 2009:Q3. Michigan Survey begins at about 2.7 and generally increases to about 3.0 by 2002. It then generally decreases to about 2.5 by 2002, and generally increases to about 3.4 by 2008. It then generally decreases to about 2.6 by early

2009, and generally increases to end at about 2.9 by September.

Source. Survey of Professional Forecasters; Reuters/University of Michigan.

Chart 2

Asset Market Developments

Figure: Equity prices

Line chart, 2008 to September 17, 2009. January 2, 2008 = 100. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are three series, "S&P 500", "Bank ETF", and "Insurance ETF". S&P 500 begins at about 98 and generally decreases to about 48 by 2009. It then generally increases to end at about 74. It is at about 70 at the time of the August 2009 FOMC meeting. Bank ETF begins at about 98 and generally decreases to about 91 by 2008. It then generally increases to about 110 by 2008, and generally decreases to about 58 by 2008. It then generally increases to about 91 by 2008, and generally decreases to about 21 by 2009. It then generally increases to end at about 57. It is at about 53 at the time of the August 2009 FOMC meeting. Insurance ETF begins at about 100 and generally decreases to about 30 by 2009. It then generally increases to end at about 72. It is at about 64 at the time of the August 2009 FOMC meeting.

Note. There are 24 banks included in the Bank ETF and 24 insurance companies included in the Insurance ETF.

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

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

Line chart, by percent, 2002 to September 17, 2009. Data are daily. The August 2009 FOMC meeting is marked in the time series. The series begins at about 20 and generally decreases to about 18 by 2002. It then generally increases to about 47 by 2002, and generally decreases to about 8 by late 2005. It then generally increases to about 60 by late 2008, and generally decreases to end at about 24. It is at about 28 at the time of the August 2009 FOMC meeting.

Source. Chicago Board Options Exchange.

Figure: Corporate bond spreads

Line chart, 2002 to September 17, 2009. Unit is basis points. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are two series, "10-year BBB" and "10-year High-Yield". These two series use two different scales. 10-year BBB begins at about 190 and generally increases to about 315 by late 2002. It then generally decreases to about 90 by early 2005, and generally increases to about 655 by late 2008. It then generally decreases to end at about 290. It is at about 295 at the time of the August 2009 FOMC meeting. 10-year High-Yield begins at about 500 and generally increases to about 850 by 2002. It then generally decreases to about 250 by early 2005, and generally increases to about 1650 by late 2008. It then generally decreases to end at about 625. It is at about 700 at the time of the August 2009 FOMC meeting.

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

Source. Merrill Lynch and Staff estimates.

Figure: Senior unsecured debt issuance

Line chart, by billions of dollars, November 2008 to September 2009. There are two series, "FDIC-guaranteed" and "Non-guaranteed". FDIC-guaranteed begins at about 20 and generally increases to about 90 by December 2008. It then generally decreases to about 24 by February 2009, and generally increases to about 57 by March. It then generally decreases to about 0 by August, and generally increases to end at about 5. Non-guaranteed begins at about 0 and generally increases to about 5 by January 2009. It then generally decreases to about 0 by February, and generally increases to about 29 by May. It then generally decreases to about 8 by July, and generally increases to end at about 10.

Note. September issuance is through September 17.

Source. Bloomberg and Staff estimates.

Figure: Selected interest rates

Line chart, by percent, January to September 2009. The August 2009 FOMC meeting is marked in the time series. There are three series, "FRM", "MBS yield", and "On-the-run 10-yr treasury". FRM begins at about 5 and generally increases to about 5.2 by early February. It then generally decreases to about 4.8 by late March, and generally increases to about 5.5 by June. It then generally decreases to end at about 5 by September 16. It is at about 5.4 at the time of the August 2009 FOMC meeting. MBS yield begins at about 4.2 and generally decreases to about 3.7 by January. It then generally increases to about 5 by June, and generally decreases to end at about 4.4 by September 17. On-the-run 10-yr treasury begins at about 2.5 and generally decreases to about 2.2 by January. It then generally increases to about 3.9 by June, and generally decreases to end at about 3.5 by September 17. It is at about 3.7 at the time of the August 2009 FOMC meeting.

Note. Data are business daily except for FRM which is weekly.

Source. Bloomberg.

Figure: Gross ABS Issuance

Bar chart, by billions of dollars, 2006 to September 2009. Data are monthly rate. There are three series, "Credit Card", "Auto", and "Student Loan". Approximate

values are: 2006: Credit Card 5, Auto 7.5, and Student Loan 7. 2007: Credit Card 8, Auto 6.5, and Student Loan 5.5. 2008:H1: Credit Card 8, Auto 6, and Student Loan 4. 2008:H2: Credit Card 1.8, Auto 0.7, and Student Loan 1.5. 2009:Q1: Credit Card 0.2, Auto 3.3, and Student Loan 1. April 2009: Credit Card 1, Auto 3.5, and Student Loan 5. May 2009: Credit Card 7.5, Auto 3.5, and Student Loan 3. June 2009: Credit Card 13, Auto 7, and Student Loan 1. July 2009: Credit Card 2.5, Auto 11.5, and Student Loan 3. August 2009: Credit Card 4.5, Auto 0.5, and Student Loan 3. September 2009: Credit Card 6, and Auto 9.

Note. Auto ABS include car loans and leases and financing for buyers of motorcycles. September 2009 plotted values show actual issuance as of September 11, 2009.

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

Chart 3 Market Functioning

Figure: Spreads of Libor over OIS

Line chart, January 2007 to September 17, 2009. Unit is basis points. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are three series, "1-month", "3-month", and "6-month". 1-month begins at about 0 and generally increases to about 110 by December 2007. It then generally decreases to about 15 by January 2008, and generally increases to about 335 by October 2008. It then generally decreases to about 85 by late November 2008, and generally increases to about 160 by early December 2008. It then generally decreases to end at about 10. It is at about 15 at the time of the August 2009 FOMC meeting. 3-month begins at about 0 and generally increases to about 110 by early December 2007. It then generally decreases to about 30 by January 2008, and generally increases to about 365 by October 2008. It then generally decreases to end at about 15. It is at about 28 at the time of the August 2009 FOMC meeting. 6-month begins at about 0 and generally increases to about 100 by early December 2007. It then generally decreases to about 49 by January 2008, and generally increases to about 325 by October 2008. It then generally decreases to end at about 50. It is at about 65 at the time of the August 2009 FOMC.

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

Source. Bloomberg.

Figure: Spreads on 30-day commercial paper

Line chart, July 2007 to September 15, 2009. Unit is basis points. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are two series, "ABCP" and "A2/P2". ABCP begins at about 0 and generally increases to about 200 by December 2007. It then generally decreases to about 30 by late January 2008, and generally increases to about 395 by late September 2008. It then generally decreases to end at about 20. It is at about 5 at the time of the August 2009 FOMC meeting. A2/P2 begins at about 10 and generally increases to about 150 by December 2007. It then generally decreases to about 40 by January 2008, and generally increases to about 615 by early January 2009. It then generally decreases to end at about 35. It is at about 30 at the of the August 2009 FOMC meeting.

Note. The ABCP spread is the AA ABCP rate minus the AA nonfinancial rate. The A2/P2 spread is the A2/P2 nonfinancial rate minus the AA nonfinancial rate.

Source. Depository Trust & Clearing Corporation.

Figure: Treasury on-the-run premium

Line chart, 2001 to September 2009. Unit is basis points. Data are monthly averages. The August 2009 FOMC meeting is marked in the time series. There are two series, "10-year note" and "2-year". 10-year note begins at about 15 and generally increases to about 28 by 2002. It then generally decreases to about 5 by late 2006, and generally increases to about 60 by early 2009. It then generally decreases to end at about 28. It is at about 34 at the time of the August 2009 FOMC meeting. 2-year begins at about 8 and generally increases to about 10 by 2001. It then generally decreases to about -3 by 2003, and generally increases to about 14 by early 2009. It then generally decreases to about -2 by 2009, and generally increases to end at about 0. It is at about 2 at the time of the August 2009 FOMC meeting.

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

Source. Staff estimates.

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

Line chart, by billions of dollars, 2003 to 2009. Data are monthly averages. There are two series, "Trading volume" and "Turnover". These two series use two different scales. Trading volume begins at about 80 and generally decreases to about 50 by 2003. It then generally increases to about 230 by 2007, and generally decreases to about 122 by 2007. It then generally increases to about 285 by early 2008, and generally decreases to about 65 by early 2009. It then generally increases to end at about 128 by September. It is at about 125 at the time of the August 2009 FOMC meeting. Turnover begins at about 1.3 and generally decreases to about 0.9 by 2003. It then generally increases to about 4.6 by early 2007, and generally decreases to about 2.3 by 2007. It then generally increases to about 5.5 by late 2007, and generally decreases to about 0.8 by early 2009. It then generally increases to end at about 1.2 by August. It is at about 1.2 at the time of the August 2009 FOMC meeting.

Note. Turnover is trading volume divided by total outstanding at the end of the month. September observation for trading volume is the month-to-date average.

Source. BrokerTec Interdealer Market Data and Bloomberg.

Figure: Average range of CDS dealer contributions

Line chart showing Investment-grade: Financial, January 2007 to September 16, 2009. Unit is basis points. Data are daily. The August 2009 FOMC meeting is marked in the time series. The series begins at about 2 and generally increases to about 30 by July 2008. It then generally decreases to about 15 by early September 2008, and generally increases to about 65 by March 2009. It then generally decreases to end at about 12. It is at about 12 at the time of the August 2009 FOMC meeting.

Source. Markit.

Figure: Cash-synthetic spread in corporate bond market

Line chart, June 2008 to September 16, 2009. Unit is basis points. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are two series, "JPMorgan US liquid index" and "Investment-grade CDX". JPMorgan US liquid index begins at about 160 and generally increases to about 530 by early December 2008. It then generally decreases to about 430 by February, and generally increases to about 510 by March. It then generally decreases to end at about 175. It is at about 180 at the time of the August 2009 FOMC meeting. Investment-grade CDX begins at about 100 and generally increases to about 275 by November. It then generally decreases to about 195 by February 2009, and generally increases to about 265 by March. It then generally decreases to end at about 100. It is at about 110 at the time of the August 2009 FOMC meeting.

Note. JPMorgan US liquid index is spread to swaps.

Source. JPMorgan.

[Box:] Balance Sheet Developments during the Intermeeting Period

Federal Reserve Balance Sheet
Billions of dollars

	Change since last FOMC	Current (09/16/2009)	Maximum level	Date of maximum level
Total assets	133	2,143	2,256	12/17/08
Selected assets:				
Liquidity programs for financial firms	-57	286	1,247	11/06/08
Primary, secondary, and seasonal credit	-5	29	114	10/28/08
Term auction credit (TAF)	-38	196	493	03/11/09
Foreign central bank liquidity swaps	-14	61	586	12/04/08
Primary Dealer Credit Facility (PDCF)	0	0	156	09/29/08
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)	0	0	152	10/01/08
Lending through other credit facilities	-1	87	351	01/23/09
Net portfolio holdings of Commercial Paper Funding Facility LLC (CPFF)	-15	43	351	01/23/09
Term Asset-Backed Securities Loan Facility (TALF)	14	44	44	09/11/09
Support for specific institutions	-2	101	118	04/02/09
Credit extended to AIG, net	-2	39	91	10/27/08
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	0	61	75	12/30/08
Securities held outright_	191	1,570	1,570	09/16/09
U.S. Treasury securities	34	760	791	08/14/07
Agency securities	15	125	125	09/16/09
Agency mortgage-backed securities**	142	685	685	09/16/09
Memo: Term Securities Lending Facility (TSLF)	-3	0	236	10/01/08
Total liabilities	133	2,092	2,213	12/04/08
Selected liabilities:				
Federal Reserve notes in circulation	2	874	877	09/09/09
Reserve balances of depository institutions	101	863	955	05/20/09
U.S. Treasury, general account	30	72	137	10/23/08
U.S. Treasury, supplemental financing account	0	200	559	10/22/08
Other deposits	0	0	53	04/14/09

Total capital	0	51	53	09/15/09
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* 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. [Return to table](#)

Chart 4 Debt and Money

Figure: Bank credit

Line chart, February 2007 to August 2009. January 2008 = 100. Data are monthly averages. The series begins at about 90.8 and generally increases to about 104.6 by November 2009. It then generally decreases to end at about 99.1.

Source. Federal Reserve.

Figure: C&I loan rate spreads

Line chart, 1997 to 2009:Q3. Unit is basis points. Data are quarterly. A vertical line indicates the NBER Peak in December 2007. The series begins at about 155 and generally increases to about 189 by late 2002. It then generally decreases to about 137 by late 2005, and generally increases to about 148 by early 2008. It then generally decreases to about 139 by 2008, and generally increases to end at about 198. It is at about 143 at the time of the NBER peak.

Note. C&I loan rate spreads are the spread over market interest rate on an instrument of comparable maturity adjusted for changes in non-price 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.

Source. Survey of Terms of Business Lending.

Growth of debt of nonfinancial sectors

Percent, s.a.a.r.

	Total	Business	Household	Government
2007	8.7	13.5	6.6	6.1
2008	6.0	5.4	0.3	17.5
Q1	5.4	7.8	3.0	6.7
Q2	3.3	6.4	0.3	4.4
Q3	8.2	5.1	-0.5	28.6
Q4	6.4	1.8	-1.7	26.7
2009				
Q1	4.1	-0.2	-1.1	18.0
Q2	4.8	-1.8	-1.7	23.2
Q3 _p	4.1	-1.5	-0.3	17.0

Source. Flow of Funds.

p Projected. [Return to table](#)

Figure: Growth of debt of household sector

Line chart, by percent, 1991 to 2009:Q3. Data are quarterly, s.a.a.r. There are two series, "Consumer credit" and "Home mortgage". Consumer credit begins at about 0 and generally decreases to about -2 by 1991. It then generally increases to about 16.5 by late 1994, and generally decreases to about 3 by early 1998. It then generally increases to about 12.5 by 1998, and generally decreases to about -6.5 by 2009. It then generally increases to end at about -5. Home mortgage begins at about 8 and generally decreases to about 3.5 by 1991. It then fluctuates but generally increases to about 15.8 by 2003, and generally decreases to about -2.5 by 2008. It then generally increases to end at about 0.6.

Note. 2009:Q3 is projected.

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

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

Bar chart, by billions of dollars, 2006 to August 2009. Data are monthly rate. There are three series, "C&I loans", "Commercial paper", and "Bonds". There is also a "Sum" series presented as a line chart which sums the total of the other series. Approximate values are: 2006: Bonds 20, C&I loans 9, Commercial paper 1, Sum 30. 2007: Bonds 27, C&I loans 21, Commercial paper 0, Sum 48. 2008:Q1: Bonds 16, C&I loans 26, Commercial paper 6, Sum 48. 2008:Q2: Bonds 30, C&I loans

12, Commercial paper -7, Sum 35. 2008:Q3: Bonds 9, C&I loans 14, Commercial paper 7, Sum 30. 2008:Q4: Bonds 18, C&I loans -6, Commercial paper 0.5, Sum 12.5. 2009:Q1: Bonds 49, C&I loans -18, Commercial paper -12, Sum 19. 2009:Q2: Bonds 33, C&I loans -19, Commercial paper -11, Sum 3. July 2009: Bonds 19, C&I loans -22, Commercial paper -3, Sum -6. August 2009: Bonds 20, C&I loans -38, Commercial paper -0.5, Sum -18.5.

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

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

Figure: Growth of M2

Bar chart, by percent, 2006 to August 2009. Data are s.a.a.r. The series begins at about 5.2 and generally increases to about 8.2. It then generally decreases to about 4 by 2008:Q3, and generally increases to about 14.2 by 2008:Q4. It then generally decreases to end at about -7.2.

Source. Federal Reserve.

[Box:] Why Is Money Growth So Weak?

Figure: M2 Growth Rate

Line chart, by percent, 2006 to 2009:Q3. Data are s.a.a.r. There are two series, "Actual" and "Model prediction". Actual begins at about 6 and generally decreases to about 3.5 by 2006. It then generally increases to about 8 by 2008, and generally decreases to about 4 by 2008. It then generally increases to about 14 by late 2008, and generally decreases to end at about -2. Model prediction begins at about 4.8 and generally increases to about 13 by 2008. It then generally decreases to about 1 by 2009, and generally increases to end at about 4.5.

Table 1: Growth of M2 and Major Components
(percent, seasonally adjusted annual rate)

	M2	Liquid Deposits ¹	Small Time Deposits	Retail MMMF	Currency
2008:Q1	8.4	6.9	2.0	30.7	-1.2
2008:Q2	5.6	6.8	-3.1	12.6	3.1
2008:Q3	4.0	3.2	11.6	-2.8	7.1
2008:Q4	14.3	9.8	35.5	9.3	13.7
2009:Q1	12.9	20.6	0.2	-7.6	16.0
2009:Q2	2.6	12.6	-16.3	-23.9	6.9
July - August 2009	-5.2	6.0	-29.6	-43.0	3.7
Memo: Level, August 2009 (\$B)	8,298	5,317	1,218	899	858

1 Includes non-interest bearing transaction accounts (demand deposits), other checkable deposits, and savings accounts (including money market deposit accounts, or MMDAs). [Return to table](#)

Table 2: Growth of Commercial Bank Sources and Uses of Funds
(percent, seasonally adjusted annual rate)

	Sources			Uses			Memo: Total Assets ⁵
	M2 Deposits ¹	Managed Liabilities ²	All Other ³	Loans	Securities	All Other ⁴	
2008:Q1	3.9	11.9	25.1	12.4	0.5	20.6	11.3
2008:Q2	3.9	3.5	-9.3	1.5	1.2	6.2	0.9
2008:Q3	7.9	3.0	-6.4	2.3	7.3	9.3	3.1
2008:Q4	18.8	37.7	6.2	2.0	18.1	104.1	22.9
2009:Q1	14.5	-25.5	3.2	-7.1	-0.3	8.9	-2.6
2009:Q2	9.1	-15.2	-12.3	-6.6	6.4	-5.6	-3.8
July - August 2009	-0.3	-15.1	-33.6	-18.2	7.6	-14.2	-11.7
Memo: Level, August 2009 (\$B)	5,653	3,890	2,264	6,886	2,315	2,798	11,807

1 Includes liquid and small time deposits at commercial banks. Based on weekly data reported on Wednesdays that exclude primary obligations. [Return to table](#)

2 Includes large time deposits, net due to related foreign offices, and nonbank borrowing (including from the Federal Reserve). [Return to table](#)

³ Includes borrowings from banks, some trading liabilities, and equity. [Return to table](#)

⁴ Includes interbank loans, cash (including reserve balances), trading assets, and other assets. [Return to table](#)

⁵ Unlike loans, total assets are net of banks' allowance for loan and lease losses, which currently stands at about \$192 billion. [Return to table](#)

Chart 5

International Financial Indicators

Figure: Nominal ten-year government bond yields

Line chart, by percent, 2007 to 2009. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are three series, "UK", "Germany", and "Japan". UK and Germany use one scale and Japan uses the other. UK begins at about 4.75 and generally increases to about 5.5 by mid-2007. It then generally decreases to about 4.3 by early 2008, and generally increases to about 5.25 by mid-2008. It then generally decreases to about 4.4 by early 2009, then generally increases to about 5.3 by mid-2008, then generally decreases to about 3.0 by 2009, and generally increases to end at about 3.75. It is at about 3.74 at the time of the August 2009 FOMC meeting. Germany begins at about 4.0 and generally increases to about 4.7 by mid-2007. It then generally decreases to about 3.75 by early 2008, and generally increases to about 4.7 by mid-2008. It then generally decreases to about 2.95 by early 2009, and generally increases to end at about 3.4. It is at about 3.45 at the time of the August 2009 FOMC meeting. Japan begins at about 1.7 and generally decreases to about 1.6 by 2007. It then generally increases to about 1.98 by mid-2007, and generally decreases to about 1.25 by early 2008. It then generally increases to about 1.9 by 2008, and generally decreases to about 1.22 by late 2008. It then generally increases to about 1.52 by 2009, and generally decreases to end at about 1.28. It is at about 1.45 at the time of the August 2009 FOMC meeting.

Source: Bloomberg.

Figure: Stock price indexes: Industrial countries

Line chart, 2007 to 2009. December 31, 2006 = 100. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are three series, "UK (FTSE-350)", "Euro Area (DJ Euro)", and "Japan (Topix)". UK begins at about 100 and generally increases to about 109 by 2007. It then generally decreases to about 56 by early 2009, and generally increases to end at about 83. It is at about 76 at the time of the August 2009 FOMC meeting. Euro Area begins at about 101 and generally increases to about 112 by 2007. It then generally decreases to about 43 by early 2009, and generally increases to end at about 69. It is at about 63 at the time of the August 2009 FOMC meeting. Japan begins at about 100 and generally increases to about 109 by 2009. It then generally decreases to about 69 by 2008, and generally increases to about 85 by 2008. It then generally decreases to about 41 by early 2009, and generally increases to end at about 56. It is at about 58 at the time of the August 2009 FOMC meeting.

Source: Bloomberg.

Figure: Stock price indexes: Emerging market economies

Line chart, 2007 to 2009. December 31, 2006 = 100. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are three series, "Brazil", "Korea", and "Mexico". Brazil begins at about 100 and generally increases to about 162.5 by 2008. It then generally decreases to about 70 by late 2008, and generally increases to end at about 134. It is at about 125 at the time of the August 2009 FOMC meeting. Korea begins at about 100 and generally decreases to about 90 by 2007. It then generally increases to about 140 by late 2007, and generally decreases to about 64 by late 2008. It then generally increases to end at about 118. It is at about 110 at the time of the August 2009 FOMC meeting. Mexico begins at about 100 and generally increases to about 123 by late 2007. It then generally decreases to about 95 by early 2008, and generally increases to about 120 by 2008. It then generally decreases to about 63 by late 2008, and generally increases to end at about 112.5. It is at about 106 at the time of the August 2009 FOMC meeting.

Source: Bloomberg.

Figure: Nominal trade-weighted dollar indexes

Line chart, 2007 to 2009. December 31, 2006 = 100. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are three series, "Broad", "Major Currencies", and "Other Important Trading Partners". Broad begins at about 100 and generally decreases to about 88.5 by 2008. It then generally increases to about 107.5 by early 2009, and generally decreases to end at about 97.5. It is at about 97 at the time of the August 2009 FOMC meeting. Major Currencies begins at about 99.8 and generally increases to about 102 by 2007. It then generally decreases to about 85 by 2008, and generally increases to about 106 by early 2009. It then generally decreases to end at about 92.5. It is at about 93.5 at the time of the August 2009 FOMC meeting. Other Important Trading Partners begins at about 100 and generally decreases to about 91.5 by 2008. It then generally increases to about 110 by early 2009, and generally decreases to end at about 102.5. It is at about 101.5 at the time of the August 2009 FOMC meeting.

Source: FRBNY and Bloomberg.

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

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Monetary Policy Strategies

Chart 6
Equilibrium Real Federal Funds Rate

Figure: Short-Run Estimates with Confidence Intervals

Line chart, by percent, 1990 to 2009. There are five series, "The actual real funds rate based on lagged core inflation", "Greenbook-consistent measure (FRB/US)", "Range of model-based estimates", "70 Percent confidence interval", and "90 Percent confidence interval". The actual real funds rate based on lagged core inflation begins at about 4.5 and generally decreases to about 0 by 1992. It then generally increases to about 5 by 2000, and generally decreases to about -1 by 2004. It then generally increases to about 3 by 2007, and generally decreases to end at about -1.1. Greenbook-consistent measure begins at about 4.1 by 1997, and generally decreases to about 3.5 by 1998. It then generally increases to about 5.6 by 2000, and generally decreases to about 0 by 2003. It then generally increases to about 3.2 by 2007, and generally decreases to about -4 by early 2009. It then generally increases to end at about -2. The other 3 series closely track each other throughout the chart, with the 70 percent confidence interval being about 1 percent both lesser and greater than the Range of model-based estimates, and the 90 percent confidence interval being about 2 percent both lesser and greater than the Range of model-based estimates at any given point. The Range of model-based estimates starts at between about 1 and 3.8, decreases to between about -0.5 and 1.9 by 1991, generally increases to between about 2.5 and 4.7 by 1999, generally decreases to between about -5 and -1.8 by early 2009, and generally increases to between about -2.9 and -0.5.

Short-Run and Medium-Run Measures

	Current Estimate	Previous Bluebook
Short-Run Measures		
Single-equation model	-1.3	-2.4
Small structural model	-1.1	-3.0
EDO model	-0.3	-2.3
FRB/US model	-2.4	-4.1
Confidence intervals for four model-based estimates		
70 percent confidence interval	-3.0 to 0.4	
90 percent confidence interval	-3.9 to 1.3	
Greenbook-consistent measures		
EDO model	-3.1	-5.0
FRB/US model	-1.9	-2.7
Medium-Run Measures		
Single-equation model	1.3	1.2
Small structural model	1.3	1.5
Confidence intervals for two model-based estimates		
70 percent confidence interval	0.4 to 2.2	
90 percent confidence interval	-0.2 to 2.9	
TIPS-based factor model	2.0	2.0
Memo		
Actual real federal funds rate	-1.2	-1.5

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

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

Figure: Nominal Federal Funds Rate

Line chart, by percent, 2009 to 2013. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained", and "Previous Bluebook: Unconstrained". Current Bluebook: Constrained begins at about 0.2 and generally increases to end at about 3. Current Bluebook: Unconstrained begins at about 0.2 and generally decreases to about -4.8 by late 2010. It then generally increases to end at about 4.8. Previous Bluebook: Unconstrained begins at about 0.2 and generally decreases to about -6.2 by 2010. It then generally increases to end at about 5.

Figure: Real Federal Funds Rate

Line chart, by percent, 2009 to 2013. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained", and "Previous Bluebook: Unconstrained". Current Bluebook: Constrained begins at about -1.2 and generally increases to end at about 1.2. Current Bluebook: Unconstrained begins at about -1 and generally increases to about -1.2 by 2009. It then generally decreases to about -6.4 by 2010, and generally increases to end at about 2.9. Previous Bluebook: Unconstrained begins at about -1.2 and generally decreases to about -7.6 by 2010. It then generally increases to end at about 3.3.

Figure: Civilian Unemployment Rate

Line chart, by percent, 2009 to 2013. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained", and "Previous Bluebook: Unconstrained". Current Bluebook: Constrained begins at about 9.3 and generally increases to about 9.8 by 2009. It then generally decreases to end at about 3.6. Current Bluebook: Unconstrained begins at about 9.3 and generally increases to about 9.8 by 2009. It then generally decreases to end at about 4. Previous Bluebook: Unconstrained begins at about 9.3 and generally increases to about 9.8 by 2009. It then generally decreases to end at about 3.6.

Figure: Core PCE Inflation

Line chart, by percent, 2009 to 2013. Data are four-quarter averages. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained", and "Previous Bluebook: Unconstrained". Current Bluebook: Constrained begins at about 1.6 and generally decreases to about 1.3 by 2009. It then generally increases to about 1.5 by early 2010, generally decreases to about 1.18 by late 2011, and generally increases to end at about 1.8. Current Bluebook: Unconstrained begins at about 1.6 and generally decreases to about 1.4 by 2009. It then generally increases to end at about 2.0. Previous Bluebook: Unconstrained begins at about 1.6 and generally decreases to about 1.47 by 2009. It then generally increases to about 1.74 by early 2010, and generally decreases to about 1.5 by 2010. It then generally increases to end at about 1.8.

Chart 8

The Policy Outlook in an Uncertain Environment

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

Line chart, by percent, 2009 to 2013. There are three series, "Current Bluebook", "Previous Bluebook", and "Greenbook assumption". They begin at about 0.2 and track closely together until about 2011. Current Bluebook generally increases to end at about 4. Previous Bluebook generally increases to end at about 4.1. Greenbook assumption generally increases to end at about 3.8.

Note: There is dark and light shading that represents the 70 and 90 percent confidence intervals respectively. The 70 percent interval covers about 2.5 to 5.2 and the 90 percent interval covers about 1.6 to 6 by 2013:Q4.

Figure: Information from Financial Markets

Line chart, by percent, 2009 to 2013. There are three series, "Current Bluebook", "Previous Bluebook", and "Greenbook assumption". They begin at about 0.2 and generally increase together to about 0.4 by early 2010. Current Bluebook generally increases to end at about 3.7. Previous Bluebook generally increases to end at about 4.1.

Note: There is dark and light shading that represents the 70 and 90 percent confidence intervals respectively. The 90 percent interval covers about 1.3 to 6.9 and the 70 percent interval covers about 1.8 to 5.3. In the previous Bluebook, the 90 percent interval covers about 1.4 to 7.2 and the 70 percent interval covers about 2 to 5.8.

Near-Term Prescriptions of Simple Policy Rules

	Constrained Policy		Unconstrained Policy	
	2009Q4	2010Q1	2009Q4	2010Q1
Taylor (1993) rule	0.13	0.13	-0.32	-0.24
Previous Bluebook	0.13	0.13	-0.84	-0.83
Taylor (1999) rule	0.13	0.13	-3.79	-3.62
Previous Bluebook	0.13	0.13	-4.72	-4.66

First-difference rule	0.22	0.39	0.22	0.39
<i>Previous Bluebook</i>	<i>0.13</i>	<i>0.13</i>	<i>-0.48</i>	<i>-0.50</i>
Estimated outcome-based rule	0.13	0.13	-0.40	-1.00
<i>Previous Bluebook</i>	<i>0.13</i>	<i>0.13</i>	<i>-1.81</i>	<i>-2.55</i>
Estimated forecast-based rule	0.13	0.13	-0.44	-1.08
<i>Previous Bluebook</i>	<i>0.13</i>	<i>0.13</i>	<i>-1.76</i>	<i>-2.52</i>

Memo

	2009Q4	2010Q1
Greenbook assumption	0.13	0.13
Fed funds futures	0.16	0.23
Median expectation of primary dealers	0.13	0.13
Blue Chip forecast (September 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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September 2009 Bluebook Tables and Charts

Policy Alternatives

Table 1: Overview of Alternative Language for the September 22-23, 2009 FOMC Announcement

August FOMC		September Alternatives		
		A	B	C
Forward Guidance on Funds Rate Path				
	"for an extended period"	"for an extended period"	"for an extended period"	"So long as inflation remains well contained ... until it has greater assurance that the economic recovery will be sustained"
Treasury Securities Purchases				
Total Amount	\$300 billion	\$300 billion	\$300 billion	\$300 billion
Pace	pace will "gradually slow"	-----	-----	-----
Completion	by the end of October	by the end of October	by the end of October	by the end of October
Agency MBS Purchases				
Total Amount	"up to" \$1.25 trillion	"a total of" \$1.5 trillion	"up to" \$1.25 trillion	"a total of about" \$1 trillion
Pace	-----	-----	pace will "gradually slow"	pace will "gradually slow"
Completion	by the end of the year	through the second quarter of 2010	by the end of the first quarter of 2010 OR in the second quarter of 2010	by the end of the year
Agency Debt Purchases				
Total Amount	"up to" \$200 billion	"up to" \$200 billion	"up to" \$200 billion	"a total of about" \$150 billion
Pace	-----	-----	pace will "gradually slow"	pace will "gradually slow"
Completion	by the end of the year	by the end of the year	by the end of the first quarter of 2010 OR in the second quarter of 2010	by the end of the year
Evaluation of LSAP Timing and Overall Amounts				
	adjustments to timing and amounts of all LSAPs will continue to be evaluated	adjustments to timing and amounts of all LSAPs will continue to be evaluated	adjustments to timing and amounts of all LSAPs will continue to be evaluated	adjustments to timing and amounts of all LSAPs will continue to be evaluated

Long-Run Projections of the Balance Sheet and Monetary Base

Balance Sheet Projections Summary

Alternative A		Alternative B	Alternative C
Total Assets			
Peak month	June 2010	June 2010	December 2009
Peak amount	\$2.6 trillion	\$2.4 trillion	\$2.2 trillion
December 2016	\$1.6 trillion	\$1.4 trillion	\$1.4 trillion
Agency MBS			
Total Purchased	\$1.5 trillion	\$1.25 trillion	\$1.0 trillion
December 2016	\$0.9 trillion	\$0.7 trillion	\$0.5 trillion
Reserve Balances			
Peak month	June 2010	June 2010	December 2009
Peak amount	\$1.4 trillion	\$1.2 trillion	\$1.1 trillion

Growth Rates for Monetary Base

Date	Baseline	Alternative A	Alternative C	Memo: August baseline
	Percent, annual rate			
	Monthly			
Jun-09	-31.0	-31.0	-31.0	-31.0
Jul-09	-35.5	-35.5	-35.5	-16.4
Aug-09	6.4	6.4	6.4	96.8
Sep-09	38.5	47.8	47.8	116.4
Oct-09	109.1	125.8	106.9	59.7
Nov-09	94.2	107.5	74.2	57.6
Dec-09	27.1	40.3	9.3	80.2
Jan-10	-20.0	-7.3	-39.9	42.9
Feb-10	-30.7	-19.2	-54.5	8.6
Mar-10	-2.5	7.8	-26.3	29.9
	Quarterly			
Q2 2009	27.4	27.4	27.4	27.4
Q3 2009	-11.5	-10.5	-10.5	23.9
Q4 2009	73.4	87.0	67.5	82.6
Q1 2010	1.8	14.1	-18.4	44.7
Q2 2010	7.5	18.2	-21.8	11.3
Q3 2010	9.6	14.2	-7.0	-2.6
Q4 2010	-6.9	-7.2	-6.3	-10.8
	Annual - Q4 to Q4			
2009	42.8	47.3	41.4	58.9

2010	3.0	10.1	-12.8	10.5
2011	-7.4	-7.3	-7.5	-7.7
2012	-11.6	-11.1	-12.7	-10.2
2013	-9.9	-9.5	-10.7	-7.1
2014	-9.8	-9.4	-2.9	-8.3
2015	-8.8	-8.5	0.9	-6.6
2016	1.1	-8.6	3.4	-8.7

Note: Not seasonally adjusted.

Baseline Scenario

Figure: Federal Reserve Assets

Stacked line chart, by billions of dollars, 2006 to 2016. There are nine series, "Treasury securities", "Repurchase agreements", "TALF", "Agency debt", "TAF", "Other loans and facilities", "Agency MBS", "Central bank swaps", and "SDR and other assets". Approximate values of all series are given as of the beginning of each year. 2006: Treasury securities 750, Repurchase agreements 20, SDR and other assets 40. 2007: Treasury securities 760, Repurchase agreements 20, SDR and other assets 40. 2008: Treasury securities 730, Repurchase agreements 20, TAF 15, Central bank swaps 5, SDR and other assets 40. 2009: Treasury securities 495, Agency debt 10, Agency MBS 1, TAF 400, Central bank swaps 460, Other loans and facilities 440, SDR and other assets 10. 2010: Treasury securities 750, Agency debt 200, Agency MBS 810, TAF 5, Central bank swaps 5, TALF 65, Other loans and facilities 100, SDR and other assets 75. 2011: Treasury securities 750, Agency debt 100, Agency MBS 1140, TAF 5, TALF 75, Other loans and facilities 90, SDR and other assets 80. 2012: Treasury securities 750, Agency debt 50, Agency MBS 500, TAF 5, TALF 60, Other loans and facilities 35, SDR and other assets 80. 2013: Treasury securities 700, Agency debt 25, Agency MBS 500, TAF 5, TALF 10, Other loans and facilities 10, SDR and other assets 80. 2014: Treasury securities 700, Agency debt 15, Agency MBS 500, TAF 5, TALF 5, Other loans and facilities 2, SDR and other assets 80. 2015: Treasury securities 600, Agency debt 10, Agency MBS 500, TAF 5, TALF 1, SDR and other assets 80. 2016: Treasury securities 550, Agency debt 4, Agency MBS 500, TAF 5, SDR and other assets 80.

Figure: Federal Reserve Liabilities and Capital

Stacked line chart, by billions of dollars, 2006 to 2016. There are six series, "Federal Reserve notes", "Deposits, other than reserve balances", "Other liabilities", "Reverse repurchase agreements", "Reserve balances", and "Capital". Approximate values of all series are given as of the beginning of each year. 2006: Federal Reserve notes 750, Reverse repurchase agreements 15, Reserve balances 10, Capital 20. 2007: Federal Reserve notes 750, Reverse repurchase agreements 20, Reserve balances 10, Capital 20. 2008: Federal Reserve notes 750, Reverse repurchase agreements 20, Reserve balances 10, Capital 20. 2009: Federal Reserve notes 800, Reverse repurchase agreements 75, Deposits, other than reserve balances 200, Reserve balances 650, Capital 15. 2010: Federal Reserve notes 900, Reverse repurchase agreements 15, Deposits, other than reserve balances 250, Reserve balances 1100, Other liabilities 2, Capital 20. 2011: Federal Reserve notes 950, Reverse repurchase agreements 15, Deposits, other than reserve balances 180, Reserve balances 1090, Other liabilities 2, Capital 20. 2012: Federal Reserve notes 980, Reverse repurchase agreements 15, Deposits, other than reserve balances 150, Reserve balances 850, Other liabilities 2, Capital 30. 2013: Federal Reserve notes 1000, Reverse repurchase agreements 15, Deposits, other than reserve balances 150, Reserve balances 600, Other liabilities 2, Capital 50. 2014: Federal Reserve notes 1025, Reverse repurchase agreements 15, Deposits, other than reserve balances 150, Reserve balances 400, Other liabilities 2, Capital 55. 2015: Federal Reserve notes 1100, Reverse repurchase agreements 15, Deposits, other than reserve balances 150, Reserve balances 110, Other liabilities 2, Capital 100. 2016: Federal Reserve notes 1175, Reverse repurchase agreements 15, Deposits, other than reserve balances 150, Reserve balances 10, Other liabilities 2, Capital 120.

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

Alternative A

Figure: Federal Reserve Assets

Stacked line chart, by billions of dollars, 2006 to 2016. There are nine series, "Treasury securities", "Repurchase agreements", "TALF", "Agency debt", "TAF", "Other loans and facilities", "Agency MBS", "Central bank swaps", and "SDR and other assets". Approximate values of all series are given as of the beginning of each year. 2006: Treasury securities 750, Repurchase agreements 15, SDR and other assets 30. 2007: Treasury securities 760, Repurchase agreements 20, SDR and other assets 30. 2008: Treasury securities 735, Repurchase agreements 20, TAF 30, Central bank swaps 10, SDR and other assets 30. 2009: Treasury securities 490, Agency debt 15, Agency MBS 20, TAF 480, Central bank swaps 350, Other loans and facilities 350, SDR and other assets 20. 2010: Treasury securities 750, Agency debt 150, Agency MBS 1050, TAF 15, Central bank swaps 5, TALF 50, Other loans and facilities 50, SDR and other assets 50. 2011: Treasury securities 750, Agency debt 50, Agency MBS 1300, TAF 5, TALF 100, Other loans and facilities 50, SDR and other assets 100. 2012: Treasury securities 750, Agency debt 30, Agency MBS 1200, TAF 5, TALF 100, Other loans and facilities 35, SDR and other assets 100. 2013: Treasury securities 700, Agency debt 25, Agency MBS 1150, TAF 5, TALF 25, Other loans and facilities 15, SDR and other assets 100. 2014: Treasury securities 650, Agency debt 15, Agency MBS 1000, TAF 5, TALF 6, Other loans and facilities 4, SDR and other assets 100. 2015: Treasury securities 600, Agency debt 10, Agency MBS 940, TAF 5, TALF 2, SDR and other assets 100. 2016: Treasury securities 600, Agency debt, 5, Agency MBS 900, TAF 5, SDR and other assets 100.

Figure: Federal Reserve Liabilities and Capital

Stacked line chart, by billions of dollars, 2006 to 2016. There are six series, "Federal Reserve notes", "Deposits, other than reserve balances", "Other liabilities", "Reverse repurchase agreements", "Reserve balances", and "Capital". Approximate values of all series are given as of the beginning of each year. 2006: Federal Reserve notes 750, Reverse repurchase agreements 15, Reserve balances 10, Capital 10. 2007: Federal Reserve notes 750, Reverse repurchase agreements 20, Reserve balances 10, Capital 15. 2008: Federal Reserve notes 760, Reverse repurchase agreements 25, Reserve balances 10, Capital 20. 2009: Federal Reserve notes 800, Reverse repurchase agreements 50, Deposits, other than reserve balances 190, Reserve balances 700, Capital 15. 2010: Federal Reserve notes 900, Reverse repurchase agreements 15, Deposits, other than reserve balances 170, Reserve balances 1090, Capital 15. 2011: Federal Reserve notes 940, Reverse repurchase agreements 15, Deposits, other than reserve balances 110, Reserve balances 1250, Other liabilities 2, Capital 25. 2012: Federal Reserve notes 950, Reverse repurchase agreements 15, Deposits, other than reserve balances 150, Reserve balances 1000, Other liabilities 2, Capital 40. 2013: Federal Reserve notes 1000, Reverse repurchase agreements 15, Deposits, other than reserve balances 240, Reserve balances 725, Other liabilities 2, Capital 50. 2014: Federal Reserve notes 1050, Reverse repurchase agreements 15, Deposits, other than reserve balances 200, Reserve balances 500, Other liabilities 2, Capital 60. 2015: Federal Reserve notes 1100, Reverse repurchase agreements 15, Deposits, other than reserve balances 250, Reserve balances 300, Other liabilities 2, Capital 80. 2016: Federal Reserve notes 1200, Reverse repurchase agreements 15, Deposits, other than reserve balances 200, Reserve balances 75, Other liabilities 2, Capital 100.

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

Alternative C

Figure: Federal Reserve Assets

Stacked line chart, by billions of dollars, 2006 to 2016. There are nine series, "Treasury securities", "Repurchase agreements", "TALF", "Agency debt", "TAF", "Other loans and facilities", "Agency MBS", "Central bank swaps", and "SDR and other assets". Approximate values of all series are given as of the beginning of each year. 2006: Treasury securities 750, Repurchase agreements 20, SDR and other assets 45. 2007: Treasury securities 760, Repurchase agreements 20, SDR and other assets 45. 2008: Treasury securities 700, Repurchase agreements 20, TAF 20, Central bank swaps 10, SDR and other assets 45. 2009: Treasury securities 490, Agency debt 10, Agency MBS 150, TAF 400, Central bank swaps 350, Other loans and facilities 400, SDR and other assets 25. 2010: Treasury securities 750, Agency debt 200, Agency MBS 790, TAF 5, Central bank swaps 5, TALF 50, Other loans and facilities 50, SDR and other assets 45. 2011: Treasury securities 750, Agency debt 100, Agency MBS 700, TAF 5, TALF 100, Other loans and facilities 50, SDR and other assets 80. 2012: Treasury securities 750, Agency debt 50, Agency MBS 700, TAF 5, TALF 75, Other loans and facilities 25, SDR and other assets 80. 2013: Treasury securities 680, Agency debt 25, Agency MBS 700, TAF 5, TALF 15, Other loans and facilities 15, SDR and other assets 100. 2014: Treasury securities 650, Agency debt 20, Agency MBS 630, TAF 5, TALF 5, Other loans and facilities 2, SDR and other assets 100. 2015: Treasury securities 650, Agency debt 10, Agency MBS 550, TAF 5, TALF 2, SDR and other assets 100. 2016: Treasury securities 650, Agency debt 5, Agency MBS 500.

Figure: Federal Reserve Liabilities and Capital

Stacked line chart, by billions of dollars, 2006 to 2016. There are six series, "Federal Reserve notes", "Deposits, other than reserve balances", "Other liabilities", "Reverse repurchase agreements", "Reserve balances", and "Capital". Approximate values of all series are given as of the beginning of each year. 2006: Federal Reserve notes 750, Reverse repurchase agreements 15, Reserve balances 10, Capital 10. 2007: Federal Reserve notes 750, Reverse repurchase agreements 20, Reserve balances 10, Capital 15. 2008: Federal Reserve notes 750, Reverse repurchase agreements 25, Reserve balances 10, Capital 25. 2009: Federal Reserve notes 800, Reverse repurchase agreements 50, Deposits, other than reserve balances 100, Reserve balances 600, Capital 15. 2010: Federal Reserve notes 900, Reverse repurchase agreements 15, Deposits, other than reserve balances 150, Reserve balances 850, Other liabilities 2, Capital 40. 2011: Federal Reserve notes 950, Reverse repurchase agreements 15, Deposits, other than reserve balances 120, Reserve balances 700, Other liabilities 2, Capital 50. 2012: Federal Reserve notes 980, Reverse repurchase agreements 15, Deposits, other than reserve balances 120, Reserve balances 550, Other liabilities 2, Capital 60. 2013: Federal Reserve notes 1000, Reverse repurchase agreements 15, Deposits, other than reserve balances 150, Reserve balances 250, Other liabilities 2, Capital 80. 2014: Federal Reserve notes 1050, Reverse repurchase agreements 15, Deposits, other than reserve balances 250, Reserve balances 150, Other liabilities 2, Capital 100. 2015: Federal Reserve notes 1100, Reverse repurchase agreements 15, Deposits, other than reserve balances 50, Reserve balances 25, Other liabilities 2, Capital 150. 2016: Federal Reserve notes 1200, Reverse repurchase agreements 15, Deposits, other than reserve balances 1, Reserve balances 10, Other liabilities 2, Capital 200.

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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September 2009 Bluebook Tables and Charts

Bank Credit, Debt, and Money Forecast

Growth Rates for M2

(percent, annual rate)

Greenbook Forecast*			
Monthly Growth Rates			
Jan-09		12.1	
Feb-09		4.0	
Mar-09		10.4	
Apr-09		-7.6	
May-09		9.1	
Jun-09		3.6	
Jul-09		-3.1	
Aug-09		-7.3	
Sep-09		0.8	
Oct-09		-3.5	
Nov-09		-3.2	
Dec-09		-3.0	
Jan-10		-2.1	
Feb-10		-0.5	
Mar-10		1.6	
Apr-10		2.9	
May-10		3.2	
Jun-10		3.3	
Jul-10		4.2	
Aug-10		4.2	
Sep-10		4.2	
Quarterly Growth Rates			
2009 Q1		12.9	
2009 Q2		2.6	
2009 Q3		-0.8	
2009 Q4		-2.8	
2010 Q1		-1.7	
2010 Q2		2.3	
2010 Q3		3.9	
Annual Growth Rates			
2008		8.3	
2009		3.0	
2010		2.2	
Growth	From	To	
Aug-09		Dec-09	-2.2
2008 Q3		2009 Q3	6.3

2009 Q3	2010 Q1	-1.8
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* This forecast is consistent with nominal GDP and interest rates in the Greenbook forecast. Actual data through August 31, 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	-1.2	-1.9	-0.8
Lagged headline inflation	0.8	-1.9	-0.7
Projected headline inflation	-1.2	-2.0	-0.8

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: Temporary Holdings of Longer-term Treasuries

Line chart, 2009 to 2016. There are two series, "Current" and "August". They begin at about 0 and generally increase to about 300 by late 2009. Current generally decreases to end at about 80, and August generally decreases to end at about 60.

Figure: Agency Debt

Line chart, 2009 to 2016. There are three series, "Alternative A & C", "Alternative B" and "August". Alternative A & C begins at about 120 by mid-2009 and generally increases to about 150 by early 2010. It then generally decreases to about 148 by 2010. Alternative B and August begin at about 20. Alternative B generally increases to about 148 by 2010, and generally decreases to end at about 12. August generally increases to about 150 by early 2010, and generally decreases to end at about 32.

Figure: Agency MBS

Line chart, 2009 to 2016. There are four series, "Alternative A", "Alternative B", "Alternative C", and "August". Alternative A begins at about 0, generally increases to about 1380 by mid-2010, and generally decreases to end at about 900. Alternative B begins at about 0, generally increases to about 1150 by mid-2010, and generally decreases to end at about 720. Alternative C begins at about 0, generally increases to about 800 by 2010, and generally decreases to end at about 520. August begins at about 0, generally increases to about 1220 by 2010, and generally decreases to end at about 800.

Figure: TAF

Line chart, 2009 to 2016. There are two series, "Current" and "August". They begin at about 450 and generally increase to about 500 by 2009. They then generally decrease to about 10 by early 2011 and remain constant until the end.

Figure: TALF

Line chart, 2009 to 2016. There are two series, "Current" and "August". Current begins at about 0, generally increases to about 1380 by mid-2010, generally decreases to about 0 by late 2015, and remains constant until the end. August begins at about 0, generally increases to about 162 by mid-2010, generally decreases to about 0 by late 2015, and remains constant until the end.

Figure: CPFF

Line chart, 2009 to 2016. There are two series, "Current" and "August". These two series track closely together throughout the chart. They begin at about 340 and generally decrease to about 0 by mid-2010. They then remain constant until the end.

Federal Reserve liabilities and capital

Figure: TGA and SFP

Line chart, 2009 to 2016. There are four series, "Current TGA", "August TGA", "Current SFP", and "August SFP". Current TGA begins at about 25 and generally increases to about 130 by 2009. It then generally decreases to about 0 by late 2010, and remains about constant until the end. August TGA begins at about 25 and generally increases to about 135, and generally decreases to about 0 by late 2009. It then remains about constant until the end. Current SFP begins at about 120 and generally increases to about 200 by 2009. It then generally decreases to about 15 by late 2009, generally increases to about 200 by 2010, remains constant until early 2016, and generally decreases to end at about 25. August SFP begins at about 200, generally decreases to about 0 by 2010, and remains about constant until the end.

Figure: Reserve Balances

Line chart, 2009 to 2016. There are four series, "Alternative A", "Alternative B", "Alternative C", and "August". Alternative A begins at about 890 and generally decreases to about 650 by mid-2009. It then generally increases to about 1400 by mid-2010, and generally decreases to end at about 0. Alternative B begins at about 890 and generally decreases to about 650 by mid-2009. It then generally increases to about 1400 by mid-2010, and generally decreases to end at about 0. Alternative C begins at about 890 and generally decreases to about 650 by 2009. It then generally increases to about 1100 by early 2010, and generally decreases to end at about 0 by late 2015. It then remains about constant until the end. August begins at about 890 and generally decreases to about 650 by mid-2009. It then generally increases to about 1500 by 2010, and generally decreases to end at about 100.

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

End-of-Year									
	Aug 31, 2009	2009	2010	2011	2012	2013	2014	2015	2016
	\$Billions								
Total assets	2,081	2,243	2,316	2,171	1,949	1,805	1,667	1,567	1,439
Selected assets:									
Liquidity programs for financial firms	309	185	21	21	21	21	21	21	21
Primary, secondary, and seasonal credit	33	30	1	1	1	1	1	1	1
Term auction credit (TAF)	212	125	20	20	20	20	20	20	20
Foreign central bank liquidity swaps	63	30	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	85	114	134	125	61	34	20	0	0
Net portfolio holdings of Commercial Paper Funding Facility (CPFF)	48	28	0	0	0	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	37	86	134	125	61	34	20	0	0
Support for specific institutions	101	73	70	55	36	14	3	2	1
Credit extended to AIG	39	18	29	23	13	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	62	55	41	32	23	14	3	2	1
Securities held outright	1,492	1,768	1,983	1,860	1,721	1,626	1,513	1,434	1,307
U.S. Treasury securities	747	775	768	748	690	670	630	612	562
Agency securities	119	138	121	86	67	50	34	31	14
Agency mortgage-backed securities	625	855	1,094	1,026	964	906	849	791	731
Memo: TSLF	0	0	0	0	0	0	0	0	0
Repurchase agreements	0	0	0	0	0	0	0	0	0
Special drawing rights certificate account	2	5	10	12	12	12	12	12	12
Total liabilities	2,030	2,191	2,256	2,102	1,870	1,714	1,562	1,446	1,300
Selected liabilities									
Federal Reserve notes in circulation	870	882	909	937	996	1,059	1,111	1,158	1,204
Reserve balances of depository institutions	783	1,180	1,098	916	624	406	203	39	25
U.S. Treasury, general account	93	70	5	5	5	5	5	5	5
U.S. Treasury, supplemental financing account	200	15	200	200	200	200	200	200	22
Total capital	52	52	60	69	79	91	105	120	138

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

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

Last update: April 1, 2015

September 2009 Greenbook Part 1 Tables and Charts[†]

Domestic Developments

Key Background Factors Underlying the Baseline Staff Projection

Note: In each panel, shading represents the projection period, which begins in 2009:Q4, except where noted. In the upper-left panel that reports the federal funds rate, the dashed line is not apparent because the paths of the federal funds rate in the August and current Greenbooks are the same.

Figure: Federal Funds Rate

Line chart, by percent, 2006 to 2011. Data are quarterly averages. There are three series, "Current Greenbook", "August Greenbook", and "Market forecast". They track closely together throughout the chart. They begin at about 4.5 and generally increase to about 5.3 by mid-2006. They remain about constant until mid-2007. They then generally decrease to about 0.1 by mid-2009. Current Greenbook and August Greenbook remain at 0.1 to the end. Market forecast generally increases to end at about 2.5.

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 August Greenbook is also marked separately for each series. BBB corporate rate and the August Greenbook begin at about 6, and generally increase to about 9.5 by late 2008. BBB corporate rate generally decreases to end at about 6.2, and August Greenbook generally decreases to end at about 6.5 by late 2010. Conforming mortgage rate and the August Greenbook begins at about 6.2 and generally increases to about 6.6 by 2006. It then generally decreases to about 5 by early 2009, and generally increases to end at about 5.5. August Greenbook generally increases to end at about 5.5 by 2010. 10-year Treasury rate and August Greenbook begins at about 4.7 and generally increases to about 5.2 by 2006. It then generally decreases to about 3.3 by early 2009, and generally increases to end at about 4.1. August Greenbook generally increases to end at about 4.1 by 2010.

Figure: Equity Prices

Line chart, 2006 to 2011. Data are quarter-end. 2006:Q1 = 100, ratio scale. There are two series, "Dow Jones Total Stock Market Index" and "August Greenbook". They begin at about 111 and generally decrease to about 108 by 2006. They then generally increase to about 130 by 2007, and generally decrease to about 68 by early 2009. They track closely together, generally increasing until they reach about 82 by 2009. Dow Jones Total Stock Market Index generally increases to end at about 128 and August Greenbook generally increases to end at about 107.

Figure: House Prices

Line chart, 2006 to 2011. 2005:Q2 = 100, ratio scale. Data are quarterly. There are two series, "LoanPerformance index" and "August Greenbook". LoanPerformance index begins at about 108 and generally decreases to about 75 by early 2009. It then generally increases to about 77 by 2009, and generally decreases to end at about 75. August Greenbook begins at about 106 and generally decreases to end at about 73 by late 2010.

Note: The projection period begins in 2009:Q3.

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 "August Greenbook". They begin at about 73 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. It then generally decrease to about 45 by early 2009, and generally track together until they reach 70 by mid-2009. West Texas Intermediate generally increases to end at about 78 and August Greenbook generally increases to end at about 80 by 2010.

Figure: Broad Real Dollar

Line chart, 2006 to 2011. 2006:Q1 = 100. Data are quarterly averages. There are two series, "Broad Real Dollar" and "August Greenbook". They begin at about 101 and generally decrease to about 87.5 by 2008. They then generally increase to about 99 by early 2009. Broad Real Dollar generally decreases to end at about 87.5 and August Greenbook generally decreases to end at about 89.5 by late 2010.

Figure: House Price Appreciation

Line chart, by percent, s.a.a.r., March 2009 to July 2009. Data are monthly. There are three series, "FHFA", "20-city S&P/Case-Shiller", and "LoanPerformance". Approximate values for each month are: March: FHFA -16, 10-city S&P/Case-Shiller -25, and LoanPerformance -18. April: FHFA -5.5, 10-city S&P/Case-Shiller -10.5, and LoanPerformance 5. May: FHFA 8, 10-city S&P/Case-Shiller 1, LoanPerformance 17. June: FHFA 6, 10-city S&P/Case-Shiller 8, and LoanPerformance 15. July: LoanPerformance 12.

Note: For July, only LoanPerformance data are available.

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

Figure: RPX Futures Price for Oct. 2010 Contract

Line chart, by price per square foot, in dollars, May 2008 to September 15, 2009. Data are business daily. The series begins at about 208 and generally increases to about 210 by late May. It then generally decreases to about 135 by April 2009, and generally increases to end at about 191.

Source: RadarLogic.

Figure: Home Value Expectations over Next Year

Line chart, by percent, March 2007 to September 2009. Data are monthly. There are two series, "Decrease" and "Increase". "Decrease" begins at about 12 and generally increases to about 27 by May 2008. It then generally decreases to about 18 by September 2008, and generally increases to about 28 by February 2009. It then generally decreases to end at about 15. "Increase" begins at about 41 and generally decreases to about 7.5 by late February 2009. It then generally increases to end at about 23.

Source: Reuters/University of Michigan Surveys of Consumers.

Figure: House Prices

Line chart, 2002 to 2012. 2005:Q2=100. Data are quarterly. There are two series, "Current" and "Previous". Current begins at about 61 and generally increases to about 105 by early 2007. It then generally decreases to end at about 72. Previous begins at about 64 and generally increases to about 103 by early 2006. It then generally decreases to end at about 69.

Note: Shading indicates that the projection period begins in 2009:Q3.

Source: First American CoreLogic.

Figure: Over/Under Valuation of Single-Family Homes

Line chart, by percent, 1988 to 2012. Data are quarterly. There are two series, "Current" and "Previous". They begin at about 4 and generally increase to about 9 by early 1989. They then generally decrease to about -5 by 1997, and track closely together until about early 2002 when they reach about 9. Current generally increases to about 42 by early 2006, and generally decreases to end at about -19. Previous generally increases to about 37 by late 2005, and generally decreases to end at about -28.

Note: Shading indicates that the projection period begins in 2009:Q3.

Source: First American CoreLogic.

	2009		2010	2011
	Q2	H2		
Current	12.3	-1.2	-2.8	0.6
Aug. GB	-4.0	-11.0	-7.3	-1.5

Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

Measure	2009:Q2		2009:Q3		2009:Q4	
	Aug. GB	Sept. GB	Aug. GB	Sept. GB	Aug. GB	Sept. GB
Real GDP	-1.5	-1.0	.8	2.5	1.7	3.2
Private domestic final purchases	-3.5	-2.8	-1.0	1.6	-.7	-.5

Personal consumption expenditures	-1.2	-.9	.9	2.3	1.2	.8
Residential investment	-30.1	-22.9	-9.8	3.0	-6.8	4.0
Business fixed investment	-10.7	-10.3	-11.9	-3.8	-12.5	-11.3
Government outlays for consumption and investment	6.1	6.5	2.9	1.8	3.2	4.3
	Contribution to growth (percentage points)					
Inventory investment	-.9	-1.5	1.4	1.0	1.5	2.8
Net exports	1.1	1.6	-.3	-.2	.1	-.1

Projections of Real GDP

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

Measure	2009		2010	2011
	H1	H2		
Real GDP	-3.8	2.8	3.5	4.5
Previous Greenbook	-4.0	1.2	3.1	
Final sales	-1.8	.9	2.9	4.1
Previous Greenbook	-2.3	-.2	2.6	
Personal consumption expenditures	-.2	1.6	2.9	3.6
Previous Greenbook	-.3	1.0	2.6	
Residential investment	-31.0	3.5	12.9	25.3
Previous Greenbook	-34.3	-8.3	9.3	
Business fixed investment	-26.1	-7.6	5.0	9.9
Previous Greenbook	-26.3	-12.2	3.5	
Government purchases	1.9	3.1	1.6	1.0
Previous Greenbook	1.7	3.1	1.6	
Exports	-18.2	14.3	8.2	8.6
Previous Greenbook	-18.7	7.3	5.3	
Imports	-26.3	12.7	8.0	8.0
Previous Greenbook	-25.4	6.8	4.8	
	Contribution to growth (percentage points)			
Inventory change	-1.9	1.9	.6	.4
Previous Greenbook	-1.6	1.4	.5	
Net exports	2.1	-.2	-.2	-.2
Previous Greenbook	1.9	-.1	-.1	

[Box:] The NAIRU in the Staff Projection

Figure: Unemployed permanent job losers

Line chart, by percent of labor force, 2008 to mid-2009. The series begins at about 1.8 and generally increases to end at about 5.3.

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

Figure: Beveridge curve

Scatterplot, by staff composite help-wanted index on the y-axis, from 60 to 150, and unemployment rate on the x-axis, from 3.0 to 9.5. There are four series, "2001 to 2008", "2009:Q1", "2009:Q2", and "2009:Q3". Values from 2001 to 2008 show a clear trend of the unemployment rate increasing and the staff composite help-wanted index decreasing. Most of the 2001-2008 values fall between the ranges of unemployment rate from about 4.3 to 6 and staff composite help-wanted index from about 132 to 90. 2009:Q1 is marked at about 74 for staff composite help-wanted index and 7.7 for unemployment rate. 2009:Q2 is marked at about 71 for staff composite help-wanted index and 8.8 for unemployment rate. 2009:Q3 (the average of July and August) is marked at about 77 for staff composite help-wanted index and 9.0 for unemployment rate.

Note: The unemployment rate is adjusted to remove the staff estimate of the influence of the Emergency Unemployment Compensation program.

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	2.8	2.0	1.8	1.6	1.9
Previous Greenbook	1.5	2.5	2.8	2.0	1.6	1.6	
Contributions ¹							
Capital deepening	.7	1.4	.7	.5	.0	-.1	.4
Previous Greenbook	.7	1.4	.7	.5	-.2	-.1	
Multifactor productivity	.5	.7	1.6	1.3	1.7	1.6	1.4
Previous Greenbook	.5	.7	1.6	1.3	1.6	1.5	
Labor composition	.3	.3	.3	.2	.2	.1	.1
MEMO							
Potential GDP	3.0	3.4	2.8	2.4	2.0	2.1	2.3
Previous Greenbook	3.0	3.4	2.8	2.4	2.0	2.0	

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

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

The Outlook for the Labor Market

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

Measure	2008	2009	2010	2011
Output per hour, nonfarm business	.9	3.7	1.3	1.4
Previous Greenbook	1.0	2.3	1.7	
Nonfarm private payroll employment	-2.1	-4.1	2.1	3.3
Previous Greenbook	-2.1	-4.1	1.5	
Household survey employment	-1.5	-3.0	1.7	2.3
Previous Greenbook	-1.5	-3.0	1.2	
Labor force participation rate ¹	65.9	65.5	65.4	65.3
Previous Greenbook	65.9	65.6	65.3	
Civilian unemployment rate ¹	6.9	9.9	9.2	7.9
Previous Greenbook	6.9	10.0	9.6	
MEMO				
GDP gap ²	-4.6	-6.9	-5.6	-3.6
Previous Greenbook	-4.6	-7.8	-6.8	

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	1.0	1.3	1.0

Previous Greenbook	1.7	1.1	1.3	
Food and beverages	6.8	-1.1	1.5	.7
Previous Greenbook	6.8	-3	1.6	
Energy	-9.1	-2.4	5.0	2.1
Previous Greenbook	-9.1	-1.3	5.4	
Excluding food and energy	2.0	1.4	1.1	1.0
Previous Greenbook	2.0	1.4	1.0	
Consumer price index	1.5	1.1	1.5	1.1
Previous Greenbook	1.5	1.3	1.5	
Excluding food and energy	2.0	1.7	1.2	1.1
Previous Greenbook	2.0	1.7	1.1	
GDP chain-weighted price index	1.9	.9	1.2	1.1
Previous Greenbook	1.9	1.0	1.1	
ECl for compensation of private industry workers ¹	2.4	1.2	1.8	2.0
Previous Greenbook	2.4	1.0	1.2	
Compensation per hour, nonfarm business sector	2.6	-3	1.8	2.1
Previous Greenbook	2.6	-4	1.2	
Prices of core goods imports ²	3.8	-1.4	1.3	1.0
Previous Greenbook	3.8	-1.6	1.2	

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	-.5	3.5	4.5	4.9	4.3	2.8
Civilian unemployment rate ¹	9.9	9.2	7.9	5.9	4.7	4.6
PCE prices, total	1.0	1.3	1.0	1.2	1.5	1.7
Core PCE prices	1.4	1.1	1.0	1.1	1.4	1.7
Federal funds rate ¹	.1	.1	.1	2.4	3.8	4.1

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

Alternative Scenarios

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

Measure and scenario	2009 H2	2010	2011	2012	2013- 14
<i>Real GDP</i>					
Extended Greenbook baseline	2.8	3.5	4.5	4.9	3.5
V-shaped recovery	4.0	5.0	5.4	4.6	2.8
Earlier liftoff	4.0	5.3	5.2	4.0	2.4
Higher saving rate	1.6	.9	4.1	4.8	4.3
Greater financial headwinds	1.3	.8	4.2	5.3	4.7
Greater disinflation	2.8	3.4	4.2	4.9	4.2
Labor market damage	2.5	2.6	4.3	5.8	3.8
<i>Unemployment rate¹</i>					

Extended Greenbook baseline	9.9	9.2	7.9	5.9	4.6
V-shaped recovery	9.8	8.6	7.0	5.2	4.6
Earlier liftoff	9.8	8.5	6.9	5.3	5.0
Higher saving rate	10.0	10.4	9.3	7.3	5.2
Greater financial headwinds	10.1	10.4	9.3	7.1	4.7
Greater disinflation	9.9	9.2	8.0	6.1	4.2
Labor market damage	10.1	10.3	9.2	6.0	4.4
<i>Core PCE inflation</i>					
Extended Greenbook baseline	1.3	1.1	1.0	1.1	1.5
V-shaped recovery	1.3	1.1	1.0	1.1	1.7
Earlier liftoff	1.2	1.6	1.9	2.2	2.8
Higher saving rate	1.3	.9	.5	.6	1.0
Greater financial headwinds	1.3	.9	.5	.7	1.2
Greater disinflation	1.0	.4	.1	-.1	.0
Labor market damage	1.4	1.1	1.2	1.5	1.9
<i>Federal funds rate¹</i>					
Extended Greenbook baseline	.1	.1	.1	2.4	4.1
V-shaped recovery	.1	.1	1.0	3.2	4.4
Earlier liftoff	.1	.6	2.4	4.6	5.5
Higher saving rate	.1	.1	.1	.2	2.6
Greater financial headwinds	.1	.1	.1	.6	3.5
Greater disinflation	.1	.1	.1	.5	2.4
Labor market damage	.1	.1	.3	3.0	4.9

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
<i>Real GDP (percent change, Q4 to Q4)</i>						
Projection	-.5	3.5	4.5	4.9	4.3	2.8
Confidence interval						
Greenbook forecast errors	-1.4±.3	1.7±5.3	2.8±6.3	...	...	...
FRB/US stochastic simulations	-1.2±.1	2.2±5.2	2.7±6.2	2.6±6.5	2.5±6.5	1.0±4.9
<i>Civilian unemployment rate (percent, Q4)</i>						
Projection	9.9	9.2	7.9	5.9	4.7	4.6
Confidence interval						
Greenbook forecast errors	9.5±10.2	8.4±10.0	6.8±9.0	...	...	...
FRB/US stochastic simulations	9.6±10.1	8.4±9.8	7.0±8.8	5.1±7.0	3.9±5.6	3.7±5.4
<i>PCE prices, total (percent change, Q4 to Q4)</i>						
Projection	1.0	1.3	1.0	1.2	1.5	1.7
Confidence interval						
Greenbook forecast errors	.5±1.5	.2±2.4	-.3±2.3	...	...	...
FRB/US stochastic simulations	.7±1.4	.5±2.3	.0±2.1	.1±2.2	.5±2.5	.7±2.8
<i>PCE prices excluding food and energy (percent change, Q4 to Q4)</i>						
Projection	1.4	1.1	1.0	1.1	1.4	1.7
Confidence interval						

Greenbook forecast errors	1.1±1.8	.4±1.8	.0±2.0	...	...	...
FRB/US stochastic simulations	1.2±1.7	.4±1.8	.2±1.8	.3±1.9	.7±2.3	.9±2.6
<i>Federal funds rate (percent, Q4)</i>						
Projection	.1	.1	.1	2.4	3.8	4.1
Confidence interval						
FRB/US stochastic simulations	.1±.1	.1±.2	.1±2.4	.1±4.2	2.1±5.6	2.5±5.9

Notes: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969-2008 set of model equation residuals.

Intervals derived from Greenbook forecast errors are based on projections made from 1979-2008, except for PCE prices excluding food and energy, where the sample is 1981-2008.

... Not applicable. The Greenbook forecast horizon has typically extended about two years. [Return to table](#)

Forecast Confidence Intervals and Alternative Scenarios

Confidence Intervals Based on FRB/US Stochastic Simulations

Figure: Real GDP

Line chart, by 4-quarter percent change, 2007 to 2014. There are seven series, "Extended Greenbook baseline", "V-shaped recovery", "Earlier liftoff", "Higher saving rate", "Greater financial headwinds", "Greater disinflation", and "Labor market damage". They begin at about 2 and generally decrease to about 1.5 by 2007. They then generally increase to about 2.7 by mid-2007, and generally decrease to about -4 by 2009. Extended Greenbook baseline generally increases to about 5 by early 2013, and generally decreases to end at about 2.8. V-shaped recovery generally increases to about 5.6 by mid-2011, and generally decreases to end at about 2. Earlier liftoff generally increases to about 5.8 by 2011, and generally decreases to end at about 1.8. Higher saving rate generally increases to about 5.4 by 2013, and generally decreases to end at about 3.6. Greater financial headwinds generally increases to about 5.8 by 2013, and generally decreases to end at about 4. Greater disinflation generally increases to about 5.5 by 2013, and generally decreases to end at about 3.6. Labor market damage generally increases to about 6.4 by early 2013, and generally decreases to end at about 2.7. There is a 90 percent confidence interval shown, which ranges from about 0 to 6.1 and a 70 percent confidence interval, which ranges from about 1 to 5.

Figure: Unemployment Rate

Line chart, by percent, 2007 to 2014. There are seven series, "Extended Greenbook baseline", "V-shaped recovery", "Earlier liftoff", "Higher saving rate", "Greater financial headwinds", "Greater disinflation", and "Labor market damage". They begin at about 4.5 and generally increase together until they reach about 9.7 by 2009. Extended Greenbook baseline generally increases to about 9.85 by late 2009, and generally decreases to end at about 4.6. V-shaped recovery generally increases to about 9.75 by 2009, and generally decreases to end at about 4.5. Earlier liftoff generally increases to about 9.75 by 2009, generally decreases to about 4.75 by 2013, and generally increases to end at about 5.0. Higher saving rate generally increases to about 10.48 by 2010, and generally decreases to end at about 5.25. Greater financial headwinds generally increases to about 10.3 by 2010, and generally decreases to end at about 4.7. Greater disinflation generally increases to about 9.8 by late 2009, and generally decreases to end at about 4.2. Labor market damage generally increases to about 10.3 by 2010, and generally decreases to end at about 4.3. There is a 90 percent confidence interval shown, which ranges from about 3.25 to 5.8 and a 70 percent confidence interval, which ranges from about 3.75 to 5.4.

Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 2007 to 2014. There are seven series, "Extended Greenbook baseline", "V-shaped recovery", "Earlier liftoff", "Higher saving rate", "Greater financial headwinds", "Greater disinflation", and "Labor market damage". They begin at about 2.45 and generally decrease to about 2.25 by 2007. They then generally increase to about 2.65 by 2008, and generally decrease together until they reach about 1.35 by 2009. Extended Greenbook baseline generally increases to about 1.45 by late 2009, generally decreases to about 1.0 by late 2011, and generally increases to end at about 1.72. V-shaped recovery generally increases to about 1.45 by late 2009, generally decreases 0.98 by early 2012, and generally increases to end at about 1.8. Earlier liftoff generally decreases to about 1.28 by 2010, and generally increases to end at about 3.0. Higher saving rate generally decreases to about 0.48 by early 2012, and generally increases to end at about 1.1. Greater financial headwinds generally decreases to about 0.5 by early 2012, and generally increases to end at about 1.3. Greater disinflation generally decreases to about -0.15 by 2012, and generally increases to end at about 0.2. Labor market damage generally decreases to about 1.1 by late 2010, and generally increases to end at about 2.1. There is a 90 percent confidence interval shown, which ranges from about 0.45 to 3.08 and a 70 percent confidence interval, which ranges from about 0.9 to 2.55.

Figure: Federal Funds Rate

Line chart, by percent, 2007 to 2014. There are seven series, "Extended Greenbook baseline", "V-shaped recovery", "Earlier liftoff", "Higher saving rate", "Greater financial headwinds", "Greater disinflation", and "Labor market damage". They begin at about 5.2 and generally decrease to about 0.2 by 2010. Extended Greenbook baseline remains about constant until late 2011, and generally increases to end at about 4.1. V-shaped recovery generally increases to end at about 4.4. Earlier liftoff generally increases to about 5.7 by late 2013, and generally decreases to end at about 5.6. Higher saving rate remains about constant until 2012, and generally increases to end at about 2.6. Greater financial headwinds remains about constant until 2012, and generally increases to end at about 3.5. Greater disinflation remains about constant until late 2012, and generally increases to end at about 2.4. Labor market damage remains about constant until 2011, and

Evolution of the Staff Forecast

Line chart, by percent, Q4/Q4, January 24, 2007 to September 16, 2009. There are three series, "2008", "2009", and "2010". 2008 begins at about 2.5 and generally decreases to about 0.1 by March 13, 2008. It then generally increases to about 1.5 by September 10, 2008, and generally decreases to end at about -2.0. 2009 begins at about 2.2 by September 12, 2007, and generally increases to about 3.0 by March 12, 2008. It then generally decreases to about -2.25 by March 12, 2009, and generally increases to end at about -0.5. 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 3.5. 2011 is marked at about 4.5.

Line chart, by percent, fourth quarter, January 24, 2007 to September 16, 2009. There are three series, "2008", "2009" and "2010". 2008 begins at about 4.9 and generally increases to about 5.15 by March 14, 2007. It then generally decreases to about 4.8 by June 20, 2007, and generally increases to end at about 6.9. 2009 begins at about 4.9 by September 12, 2007 and generally increases to end at about 9.9. 2010 begins at about 5.85 by September 10, 2008, and generally increases to about 9.75 by June 17, 2009. It then generally decreases to end at about 9.25. 2011 is marked at about 8.0.

Line chart, by percent, Q4/Q4, January 24, 2007 to September 16, 2009. There are three series, "2008", "2009", and "2010". 2008 begins at about 2.0 and generally increases to about 2.1 by May 2, 2007. It then generally decreases to about 1.9 by September 12, 2007, and generally increases to about 2.4 by September 10, 2008. It then generally decreases to end at about 2.0. 2009 begins at about 1.9 by September 12, 2007, and generally increases to about 2.25 by June 18, 2008. It then generally decreases to about 1.0 by January 22, 2009, and generally increases to end at about 1.4. 2010 begins at about 1.9 by September 10, 2008, and generally decreases to about 0.5 by March 12, 2009. It then generally increases to end at about 1.1. 2011 is marked at about 1.0.

Changes in GDP, Prices, and Unemployment

[illegible]

2011: Q2	...	5.6	...	4.4	...	1.0	...	1.0	...	-7
Q4	...	5.6	...	4.6	...	1.0	...	1.0	...	-6
<i>Four-quarter³</i>										
2008:Q4	.1	.1	-1.9	-1.9	1.7	1.7	2.0	2.0	2.1	2.1
2009:Q4	-.4	.4	-1.4	-.5	1.1	1.0	1.4	1.4	3.1	3.0
2010:Q4	4.3	4.7	3.1	3.5	1.3	1.3	1.0	1.1	-.4	-.7
2011:Q4	...	5.6	...	4.5	...	1.0	...	1.0	...	-1.3
<i>Annual</i>										
2008	2.6	2.6	.4	.4	3.3	3.3	2.4	2.4	5.8	5.8
2009	-1.7	-1.4	-3.0	-2.6	.1	.2	1.5	1.5	9.3	9.2
2010	3.2	4.0	2.2	2.9	1.6	1.5	1.1	1.2	9.8	9.5
2011	...	5.4	...	4.3	...	1.1	...	1.0	...	8.4

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	-1.0	2.5	3.2	2.8	3.2	3.8	4.2	4.4	4.5	4.6	4.6	-5	3.5	4.5
<i>Previous Greenbook</i>	-6.4	-1.5	.8	1.7	2.5	3.0	3.4	3.6	...	...	...	...	-1.4	3.1	...
Final sales	-4.1	.5	1.5	.3	2.2	3.1	2.9	3.4	3.6	4.1	4.2	4.6	-5	2.9	4.1
<i>Previous Greenbook</i>	-4.1	-.5	-.5	.2	1.8	2.6	2.9	3.3	...	...	...	...	-1.3	2.6	...
Priv. dom. final purch.	-7.2	-2.8	1.6	-.5	2.3	3.3	3.7	4.3	4.4	4.9	5.0	5.4	-2.3	3.4	5.0
<i>Previous Greenbook</i>	-7.2	-3.5	-1.0	-.7	1.5	2.7	3.4	4.1	...	...	...	...	-3.1	2.9	...
Personal cons. expend.	.6	-.9	2.3	.8	2.5	2.8	2.9	3.3	3.3	3.6	3.6	3.8	.7	2.9	3.6
<i>Previous Greenbook</i>	.6	-1.2	.9	1.2	2.1	2.4	2.8	3.2	...	...	...	...	.4	2.6	...
Durables	3.9	-5.5	15.9	-7.0	10.0	9.9	7.5	10.7	9.8	11.9	11.5	13.0	1.4	9.5	11.6
Nondurables	1.9	-2.1	.6	1.9	2.0	2.2	2.7	2.9	2.9	3.0	3.1	3.2	.6	2.5	3.1
Services	-.3	.2	.9	1.7	1.6	1.9	2.3	2.3	2.4	2.5	2.6	2.6	.6	2.0	2.5
Residential investment	-38.2	-22.9	3.0	4.0	7.0	12.4	15.4	17.0	20.2	23.9	26.8	30.5	-15.5	12.9	25.3
<i>Previous Greenbook</i>	-38.2	-30.1	-9.8	-6.8	-3.1	10.4	13.0	18.1	...	...	...	...	-22.4	9.3	...
Business fixed invest.	-39.2	-10.3	-3.8	-11.3	-.3	4.8	7.2	8.7	9.2	10.3	9.8	10.3	-17.4	5.0	9.9
<i>Previous Greenbook</i>	-39.2	-10.7	-11.9	-12.5	-2.3	2.8	6.0	8.0	...	...	...	...	-19.5	3.5	...
Equipment & software	-36.4	-6.2	4.8	-3.0	5.2	10.2	11.8	12.3	12.8	15.0	14.4	14.9	-11.7	9.8	14.3
<i>Previous Greenbook</i>	-36.4	-8.3	-5.7	-4.2	2.7	7.7	10.5	12.0	...	...	...	...	-14.8	8.2	...
Nonres. structures	-43.6	-17.1	-18.0	-25.9	-11.0	-5.9	-2.3	.7	1.1	-.2	-.9	-.8	-27.0	-4.7	-.2
<i>Previous Greenbook</i>	-43.6	-14.6	-22.1	-26.6	-11.6	-6.8	-3.2	-.6	...	...	...	...	-27.6	-5.7	...
Net exports ²	-386	-332	-339	-342	-351	-351	-359	-367	-374	-379	-385	-387	-350	-357	-381
<i>Previous Greenbook²</i>	-386	-347	-357	-355	-357	-358	-362	-364	...	...	...	...	-362	-360	...
Exports	-29.9	-4.6	20.9	8.1	7.4	7.9	8.4	8.9	8.6	8.4	8.3	9.0	-3.3	8.2	8.6
Imports	-36.4	-14.8	18.4	7.2	8.1	6.4	8.7	8.9	8.6	7.8	8.0	7.6	-8.9	8.0	8.0
Gov't. cons. & invest.	-2.6	6.5	1.8	4.3	3.1	2.0	.7	.6	1.0	1.0	1.0	1.0	2.5	1.6	1.0
<i>Previous Greenbook</i>	-2.6	6.1	2.9	3.2	3.3	2.1	.7	.5	2.4	1.6	...
Federal	-4.3	11.0	3.5	9.6	6.2	3.5	.1	-.2	.8	.9	.8	.8	4.8	2.4	.8

Farm ¹	0	8	0	-4	-1	-5	3	3	3
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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	-1.0	2.5	3.2	2.8	3.2	3.8	4.2	4.4	4.5	4.6	4.6	-5	3.5	4.5
<i>Previous Greenbook</i>	-6.4	-1.5	.8	1.7	2.5	3.0	3.4	3.6	...	...	...	...	-1.4	3.1	...
Final sales	-4.1	.5	1.5	.4	2.2	3.1	3.0	3.4	3.6	4.1	4.2	4.6	-5	2.9	4.1
<i>Previous Greenbook</i>	-4.1	-.5	-.5	.2	1.8	2.6	2.9	3.3	...	...	...	...	-1.3	2.7	...
Priv. dom. final purch.	-6.1	-2.4	1.3	-.4	1.9	2.7	3.1	3.5	3.6	4.0	4.1	4.4	-1.9	2.8	4.1
<i>Previous Greenbook</i>	-6.1	-2.9	-.8	-.6	1.2	2.2	2.8	3.3	...	...	...	...	-2.6	2.4	...
Personal cons. expend.	.4	-.6	1.6	.6	1.8	2.0	2.1	2.3	2.3	2.5	2.6	2.7	.5	2.0	2.5
<i>Previous Greenbook</i>	.4	-.9	.6	.8	1.5	1.7	2.0	2.2	...	...	...	...	.2	1.9	...
Durables	.3	-.4	1.1	-.5	.7	.7	.5	.7	.7	.8	.8	.9	.1	.7	.8
Nondurables	.3	-.3	.1	.3	.3	.4	.4	.5	.5	.5	.5	.5	.1	.4	.5
Services	-.1	.1	.5	.8	.8	.9	1.1	1.1	1.2	1.2	1.3	1.3	.3	1.0	1.2
Residential investment	-1.3	-.7	.1	.1	.2	.3	.4	.4	.5	.6	.7	.8	-.5	.3	.7
<i>Previous Greenbook</i>	-1.3	-.9	-.2	-.2	-.1	.2	.3	.4	...	...	...	...	-.7	.2	...
Business fixed invest.	-5.3	-1.1	-.4	-1.1	.0	.4	.6	.8	.8	.9	.9	.9	-2.0	.5	.9
<i>Previous Greenbook</i>	-5.3	-1.1	-1.2	-1.2	-.2	.3	.5	.7	...	...	...	...	-2.2	.3	...
Equipment & software	-3.0	-.4	.3	-.2	.3	.6	.7	.8	.8	.9	.9	1.0	-.8	.6	.9
<i>Previous Greenbook</i>	-3.0	-.6	-.4	-.3	.2	.5	.6	.7	...	...	...	...	-1.0	.5	...
Nonres. structures	-2.3	-.7	-.7	-.9	-.3	-.2	-.1	.0	.0	.0	.0	.0	-1.1	-.1	.0
<i>Previous Greenbook</i>	-2.3	-.6	-.9	-1.0	-.4	-.2	-.1	.0	...	...	...	...	-1.2	-.2	...
Net exports	2.6	1.6	-.2	-.1	-.3	.0	-.3	-.2	-.2	-.2	-.2	-.1	1.0	-.2	-.2
<i>Previous Greenbook</i>	2.6	1.1	-.3	.1	-.1	.0	-.1	-.1	...	...	...	...	.9	-.1	...
Exports	-4.0	-.5	2.1	.9	.8	.9	1.0	1.0	1.0	1.0	1.0	1.1	-.4	.9	1.0
Imports	6.6	2.1	-2.3	-1.0	-1.1	-.9	-1.2	-1.3	-1.3	-1.1	-1.2	-1.1	1.4	-1.1	-1.2
Gov't. cons. & invest.	-.5	1.3	.4	.9	.6	.4	.2	.1	.2	.2	.2	.2	.5	.3	.2
<i>Previous Greenbook</i>	-.5	1.2	.6	.7	.7	.4	.2	.1	...	...	...	...	.5	.3	...
Federal	-.3	.8	.3	.8	.5	.3	.0	.0	.1	.1	.1	.1	.4	.2	.1
Defense	-.3	.7	.1	.5	.2	.1	.1	.0	.0	.0	.0	.0	.3	.1	.0
Nondefense	-.1	.2	.1	.2	.3	.2	-.1	-.1	.1	.1	.1	.1	.1	.1	.1
State & local	-.2	.5	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Change in bus. inventories	-2.4	-1.5	1.0	2.8	.6	.1	.8	.8	.8	.4	.4	.1	.0	.6	.4
<i>Previous Greenbook</i>	-2.4	-.9	1.4	1.5	.7	.4	.6	.2	...	...	...	...	-.1	.5	...
Nonfarm	-2.4	-1.6	1.0	2.8	.6	.2	.8	.8	.8	.4	.4	.1	-.1	.6	.4
Farm	.1	.1	.0	.0	.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	.7	1.0	1.4	1.2	1.1	1.1	1.2	1.1	1.0	1.0	.9	1.2	1.1
<i>Previous Greenbook</i>	1.9	.2	.8	1.2	1.1	1.2	1.1	1.0	...	...	...	...	1.0	1.1	...
PCE chain-wt. price index	-1.5	1.3	2.9	1.4	1.4	1.4	1.3	1.2	1.1	1.0	1.0	1.0	1.0	1.3	1.0
<i>Previous Greenbook</i>	-1.5	1.3	2.4	2.2	1.5	1.3	1.1	1.0	...	...	...	...	1.1	1.3	...
Energy	-36.7	-2.2	39.5	4.9	6.0	6.2	4.5	3.5	2.8	2.0	1.9	1.8	-2.4	5.0	2.1
<i>Previous Greenbook</i>	-36.7	-2.2	27.7	20.1	10.1	6.4	3.5	1.9	...	...	...	...	-1.3	5.4	...
Food	-1.1	-3.6	-1.5	1.8	1.7	1.6	1.5	1.0	.7	.7	.7	.7	-1.1	1.5	.7
<i>Previous Greenbook</i>	-1.1	-3.6	1.5	2.2	2.1	1.9	1.5	1.0	...	...	...	...	-.3	1.6	...
Ex. food & energy	1.1	2.0	1.5	1.2	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.4	1.1	1.0
<i>Previous Greenbook</i>	1.1	2.0	1.2	1.2	1.0	1.0	1.0	1.0	...	...	...	...	1.4	1.0	...
CPI	-2.4	1.3	3.6	1.8	1.6	1.7	1.5	1.3	1.2	1.1	1.1	1.1	1.1	1.5	1.1
<i>Previous Greenbook</i>	-2.4	1.3	3.6	2.7	1.9	1.6	1.3	1.1	...	...	...	...	1.3	1.5	...
Ex. food & energy	1.5	2.4	1.5	1.5	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.7	1.2	1.1
<i>Previous Greenbook</i>	1.5	2.4	1.5	1.3	1.1	1.0	1.0	1.0	...	...	...	...	1.7	1.1	...
ECl, hourly compensation 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
<i>Previous Greenbook</i> ²	.7	.7	1.3	1.3	1.3	1.2	1.1	1.1	...	...	...	...	1.0	1.2	...
Nonfarm business sector															
Output per hour	.3	6.6	5.2	2.9	1.4	1.4	1.1	1.3	1.1	1.6	1.6	1.5	3.7	1.3	1.4
<i>Previous Greenbook</i>	.3	5.3	2.2	1.3	1.8	1.4	1.9	1.9	...	...	...	...	2.3	1.7	...
Compensation per hour	-4.7	.4	1.8	1.6	1.6	1.7	1.8	1.9	2.0	2.0	2.1	2.1	-3	1.8	2.1
<i>Previous Greenbook</i>	-2.6	-.8	.8	1.0	1.2	1.2	1.2	1.2	...	...	...	...	-.4	1.2	...
Unit labor costs	-5.0	-5.8	-3.2	-1.2	.3	.3	.7	.6	.9	.4	.5	.6	-3.8	.5	.6
<i>Previous Greenbook</i>	-2.8	-5.9	-1.3	-.3	-.6	-.2	-.7	-.7	...	...	...	...	-2.6	-.5	...
Core goods imports chain-wt. price index ³	-9.4	-2.4	3.5	3.5	2.0	1.3	1.0	1.0	1.0	1.0	1.0	1.0	-1.4	1.3	1.0
<i>Previous Greenbook</i> ³	-9.4	-2.3	3.1	2.7	1.6	1.1	1.0	.9	...	...	...	...	-1.6	1.2	...

Changes in Prices and Costs

[illegible]

	1.2	2.2	2.1	2.7	2.3	2.0	1.7	1.1	...
ECl, hourly compensation ¹	4.0	3.8	2.9	3.2	3.0	2.4	1.2	1.8	2.0
<i>Previous Greenbook</i> ¹	4.0	3.8	2.9	3.2	3.0	2.4	1.0	1.2	...
Nonfarm business sector									
Output per hour	5.0	1.5	1.4	.9	2.8	.9	3.7	1.3	1.4
<i>Previous Greenbook</i>	5.0	1.5	1.4	.9	2.8	1.0	2.3	1.7	...
Compensation per hour	5.7	3.4	3.5	4.5	3.6	2.6	-.3	1.8	2.1
<i>Previous Greenbook</i>	5.6	3.3	3.5	4.4	3.6	2.6	-.4	1.2	...
Unit labor costs	.6	1.9	2.0	3.5	.7	1.6	-3.8	.5	.6
<i>Previous Greenbook</i>	.6	1.8	2.0	3.5	.7	1.6	-2.6	-.5	...
Core goods imports chain-wt. price index ²	1.6	3.6	2.2	2.5	3.5	3.8	-1.4	1.3	1.0
<i>Previous Greenbook</i> ²	1.6	3.6	2.2	2.5	3.5	3.8	-1.6	1.2	...

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	-.2	.3	.7	.5	.7	1.0	.9	.9	1.0	-4.6	2.4	3.7
Unemployment rate ³	8.1	9.2	9.6	9.9	9.8	9.6	9.4	9.2	8.8	8.5	8.2	7.9	9.9	9.2	7.9
Previous Greenbook ³	8.1	9.2	9.8	10.0	10.0	9.9	9.8	9.6	...	...	...	...	10.0	9.6	...
GDP gap ⁴	-6.6	-7.3	-7.2	-6.9	-6.8	-6.5	-6.1	-5.6	-5.2	-4.7	-4.2	-3.6	-6.9	-5.6	-3.6
Previous Greenbook ⁴	-6.6	-7.4	-7.7	-7.8	-7.7	-7.4	-7.1	-6.8	...	...	...	...	-7.8	-6.8	...
Industrial production ⁵	-19.0	-10.5	4.3	5.0	5.3	5.1	5.5	6.2	6.0	5.8	7.0	8.7	-5.6	5.5	6.9
Previous Greenbook ⁵	-19.1	-11.6	3.0	3.4	3.9	4.7	5.2	5.5	...	...	...	...	-6.6	4.8	...
Manufacturing industr. prod. ⁵	-22.0	-9.0	6.3	4.9	5.1	5.2	5.6	6.7	6.6	6.5	7.9	9.9	-5.7	5.6	7.7
Previous Greenbook ⁵	-22.1	-10.5	4.4	3.5	3.8	4.8	5.1	6.0	...	...	...	...	-6.8	4.9	...
Capacity utilization rate - mfg. ³	66.7	65.3	66.6	67.7	68.8	70.0	71.2	72.7	74.0	75.4	77.0	79.0	67.7	72.7	79.0
Previous Greenbook ³	66.7	65.1	66.0	66.9	67.8	68.9	70.1	71.5	...	...	...	...	66.9	71.5	...
Housing starts ⁶	.5	.5	.6	.7	.7	.8	.9	1.0	1.1	1.2	1.3	1.4	.6	.9	1.2
Light motor vehicle sales ⁶	9.5	9.6	11.3	10.0	11.1	12.0	12.5	13.1	13.6	14.3	15.0	16.0	10.1	12.2	14.7
Income and saving															
Nominal GDP ⁵	-4.6	-1.0	3.1	4.2	4.3	4.4	5.0	5.3	5.6	5.6	5.6	5.6	.4	4.7	5.6
Real disposable pers. income ⁵	.2	3.9	-3.4	1.0	1.9	2.6	3.4	3.7	1.8	3.9	4.2	4.3	.4	2.9	3.6
Previous Greenbook ⁵	1.1	3.2	-2.5	.5	1.6	1.4	2.7	2.3	...	...	...	...	.6	2.0	...
Personal saving rate ³	3.7	5.0	3.8	3.9	3.8	3.8	4.0	4.1	3.8	3.9	4.0	4.1	3.9	4.1	4.1
Previous Greenbook ³	4.0	5.2	4.5	4.4	4.3	4.1	4.0	3.9	...	...	...	...	4.4	3.9	...
Corporate profits ⁷	22.8	19.2	25.2	16.8	6.9	6.7	14.5	9.5	8.1	8.5	11.2	6.9	21.0	9.4	8.7
Profit share of GNP ³	8.3	8.7	9.1	9.4	9.4	9.5	9.7	9.8	9.8	9.9	10.0	10.1	9.4	9.8	10.1
Net federal saving ⁸	-969	-1,307	-1,263	-1,286	-1,287	-1,277	-1,289	-1,285	-1,175	-1,140	-1,126	-1,106	-1,206	-1,285	-1,137
Net state & local saving ⁸	-37	-11	-13	11	35	40	47	55	7	5	0	-1	-12	44	3
Gross national saving rate ³	11.2	10.2	10.1	10.4	10.3	10.5	10.7	11.0	11.2	11.6	11.9	12.1	10.4	11.0	12.1

Net national saving rate ³	-2.5	-3.1	-3.3	-2.8	-2.9	-2.6	-2.3	-1.9	-1.6	-1.1	-7	-4	-2.8	-1.9	-4
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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
<i>Employment and production</i>									
Nonfarm payroll employment ¹	-.1	2.0	2.4	2.1	1.2	-2.3	-4.6	2.4	3.7
Unemployment rate ²	5.8	5.4	4.9	4.4	4.8	6.9	9.9	9.2	7.9
<i>Previous Greenbook</i> ²	5.8	5.4	4.9	4.4	4.8	6.9	10.0	9.6	...
GDP gap ³	-1.7	-.8	-.4	-.4	-.5	-4.6	-6.9	-5.6	-3.6
<i>Previous Greenbook</i> ³	-1.7	-.8	-.4	-.4	-.5	-4.6	-7.8	-6.8	...
Industrial production ⁴	1.6	3.0	2.6	1.8	1.8	-6.7	-5.6	5.5	6.9
<i>Previous Greenbook</i> ⁴	1.6	3.0	2.6	1.8	1.8	-6.7	-6.6	4.8	...
Manufacturing industr. prod. ⁴	1.8	3.6	3.8	1.2	1.9	-8.7	-5.7	5.6	7.7
<i>Previous Greenbook</i> ⁴	1.8	3.6	3.8	1.2	1.9	-8.7	-6.8	4.9	...
Capacity utilization rate - mfg. ²	74.6	77.3	79.2	79.0	78.7	70.9	67.7	72.7	79.0
<i>Previous Greenbook</i> ²	74.6	77.3	79.2	79.0	78.7	70.9	66.9	71.5	...
Housing starts ⁵	1.8	2.0	2.1	1.8	1.4	.9	.6	.9	1.2
Light motor vehicle sales ⁵	16.6	16.8	16.9	16.5	16.1	13.1	10.1	12.2	14.7
<i>Income and saving</i>									
Nominal GDP ⁴	6.0	6.4	6.3	5.4	5.3	.1	.4	4.7	5.6
Real disposable pers. income ⁴	3.9	3.5	.6	4.6	1.0	.3	.4	2.9	3.6
<i>Previous Greenbook</i> ⁴	3.9	3.5	.6	4.6	1.0	.3	.6	2.0	...
Personal saving rate ²	3.6	3.6	1.5	2.5	1.5	3.8	3.9	4.1	4.1
<i>Previous Greenbook</i> ²	3.6	3.6	1.5	2.5	1.5	3.8	4.4	3.9	...
Corporate profits ⁶	12.2	21.9	19.6	3.7	-5.7	-25.1	21.0	9.4	8.7
Profit share of GNP ²	9.1	10.5	11.8	11.6	10.3	7.8	9.4	9.8	10.1
Net federal saving ⁷	-376	-379	-283	-204	-236	-643	-1206	-1285	-1137
Net state & local saving ⁷	-39	-8	26	51	22	-40	-12	44	3
Gross national saving rate ²	14.3	14.3	15.5	16.3	13.8	12.2	10.4	11.0	12.1
Net national saving rate ²	2.5	2.7	3.5	4.2	1.6	-.7	-2.8	-1.9	-.4

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	2010	2011	Q1 ^a	Q2 ^a	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget					Not seasonally adjusted											
Receipts ¹	2524	2109	2202	2470	442	599	520	502	475	665	561	557	527	757	628	597
Outlays ¹	2983	3540	3621	3619	891	904	865	925	931	893	873	910	922	893	894	914
Surplus/deficit ¹	-459	-1431	-1419	-1149	-449	-305	-345	-423	-455	-228	-313	-352	-395	-136	-266	-317
<i>Previous Greenbook</i>	-459	-1437	-1467	-1268	-449	-305	-351	-405	-485	-247	-329	-388	-422	-170	-287	-334
On-budget	-642	-1572	-1532	-1280	-468	-382	-337	-468	-459	-300	-305	-402	-401	-213	-263	-366
Off-budget	183	141	113	131	19	77	-8	45	4	72	-7	50	6	77	-2	48
Means of financing																
Borrowing	768	1727	1469	1169	465	338	363	276	648	218	328	342	385	161	281	307
Cash decrease	-296	89	33	0	98	-49	35	198	-170	15	-10	15	15	-20	-10	15
Other ²	-13	-385	-83	-20	-114	16	-52	-50	-23	-5	-5	-5	-5	-5	-5	-5
Cash operating balance, end of period	372	283	250	250	269	318	283	85	255	240	250	235	220	240	250	235
NIPA federal sector					Seasonally adjusted annual rates											
Receipts	2534	2285	2355	2580	2251	2203	2238	2261	2355	2385	2419	2457	2578	2619	2666	2710
Expenditures	3074	3338	3640	3762	3220	3510	3501	3547	3643	3662	3708	3742	3753	3759	3793	3816
Consumption expenditures	914	970	1047	1083	954	980	991	1016	1048	1061	1064	1067	1082	1088	1094	1100
Defense	620	655	699	719	643	662	668	684	699	705	709	712	719	721	723	725
Nondefense	294	315	348	364	311	318	323	332	349	356	356	355	363	367	371	375
Other spending	2160	2368	2593	2679	2266	2530	2510	2531	2595	2601	2644	2676	2672	2671	2698	2715
Current account surplus	-540	-1053	-1285	-1182	-969	-1307	-1263	-1286	-1287	-1277	-1289	-1285	-1175	-1140	-1126	-1106
Gross investment	141	157	166	168	152	157	159	164	166	167	168	168	168	168	168	168
Gross saving less gross investment ³	-563	-1087	-1324	-1219	-999	-1340	-1297	-1324	-1326	-1316	-1328	-1324	-1212	-1177	-1162	-1140
Fiscal indicators⁴																
High-employment (HEB) surplus/deficit	-495	-659	-751	-762	-611	-845	-736	-740	-744	-745	-774	-793	-732	-742	-781	-823
Change in HEB, percent of potential GDP	1.7	1.0	0.5	-0.1	1.1	1.5	-0.7	-0.0	-0.0	-0.0	0.1	0.1	-0.4	0.0	0.2	0.2
Fiscal impetus (FI), percent of GDP	0.8	1.0	0.9	-0.0	0.0	0.7	0.2	0.3	0.2	0.2	0.1	0.1	-0.1	-0.0	-0.1	-0.2
<i>Previous Greenbook</i>	0.9	1.0	0.9	-0.2	0.0	0.7	0.2	0.3	0.4	0.1	0.1	-0.0	-0.1	-0.1	-0.1	-0.1

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

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

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

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

a--Actual [Return to table](#)

Change in Debt of the Domestic Nonfinancial Sectors

(Percent)

Period ¹	Total	Households			Business	State and local governments	Federal government	Memo: Nominal GDP	
		Total	Home mortgages	Consumer credit					
Year									
2004	8.9	11.1	13.6	5.6	6.3	7.4	9.0	6.4	
2005	9.5	11.1	13.2	4.5	8.7	10.2	7.0	6.3	
2006	9.0	10.0	11.0	4.1	10.5	8.2	3.9	5.4	
2007	8.7	6.6	6.6	5.7	13.5	9.3	4.9	5.3	
2008	6.0	.3	-.6	1.6	5.4	1.9	24.2	.1	
2009	4.2	-.9	-.2	-4.8	-.6	7.6	22.7	.4	
2010	5.7	.9	.5	.8	2.2	4.1	19.7	4.7	
2011	5.0	2.3	.8	7.2	2.9	3.9	12.1	5.6	
Quarter									
2008:	1	5.4	3.0	2.4	4.5	7.8	3.6	8.1	1.0
	2	3.3	.3	-.5	4.1	6.4	.9	5.9	3.5
	3	8.2	-.5	-2.5	.6	5.1	3.3	39.2	1.4
	4	6.4	-1.7	-1.7	-2.9	1.8	-.2	37.0	-5.4
2009:	1	4.1	-1.1	-.1	-3.7	-.2	4.9	22.6	-4.6
	2	4.8	-1.7	-1.4	-6.5	-1.8	8.3	28.2	-1.0
	3	4.1	-.3	.4	-4.9	-1.5	8.4	19.8	3.1
	4	3.6	-.4	.2	-4.7	1.1	7.9	13.4	4.2
2010:	1	7.1	.3	.4	-1.9	1.7	4.1	27.8	4.3
	2	5.1	.8	.5	.0	2.0	4.0	16.9	4.4
	3	5.0	1.1	.5	1.7	2.6	4.0	14.7	5.0
	4	5.1	1.4	.5	3.6	2.4	3.9	14.2	5.3
2011:	1	4.7	1.8	.6	5.1	2.6	3.9	11.9	5.6
	2	5.2	2.1	.7	6.5	3.2	3.9	12.3	5.6
	3	4.8	2.4	.8	7.7	2.7	3.8	11.0	5.6
	4	5.0	2.7	.9	8.8	2.8	3.8	11.2	5.6

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	1553.3	1429.0	1913.6	1768.3	1470.4	1264.3	2456.6	1733.8	1715.2	1748.7	1653.1	1842.6	1740.1	1837.7
Net equity issuance	-334.9	8.7	-85.0	-100.0	69.6	0.0	-40.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0
Net debt issuance	1888.2	1420.3	1998.6	1868.3	1400.8	1264.3	2496.6	1833.8	1815.2	1848.7	1753.1	1942.6	1840.1	1937.7
Borrowing indicators														
Debt (percent of GDP) ¹	226.1	240.9	243.3	243.2	242.3	242.1	242.8	243.9	244.0	243.9	243.6	243.2	242.9	242.6
Borrowing (percent of GDP)	13.1	10.0	13.5	12.0	9.8	8.8	17.2	12.5	12.2	12.3	11.5	12.5	11.7	12.2

Households														
Net borrowing ²	35.6	-123.7	121.9	310.9	-47.4	-58.3	39.3	105.4	147.7	195.3	243.3	289.8	334.6	376.0
Home mortgages	-59.5	-24.1	52.2	80.7	38.0	19.0	38.0	57.0	57.0	57.0	66.5	76.0	85.5	95.0
Consumer credit	40.2	-125.6	20.8	178.9	-123.9	-116.3	-46.1	0.0	41.3	88.0	126.0	162.9	197.7	229.2
Debt/DPI (percent) ³	127.5	126.2	122.3	119.0	125.8	124.9	123.8	122.8	121.7	120.6	120.2	119.3	118.4	117.7
Business														
Financing gap ⁴	228.9	-176.0	-151.2	-50.2	-233.9	-219.1	-176.6	-165.6	-146.5	-116.1	-80.7	-57.2	-39.8	-23.2
Net equity issuance	-334.9	8.7	-85.0	-100.0	69.6	0.0	-40.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0
Credit market borrowing	571.8	-68.2	243.8	326.0	-168.1	121.4	192.7	220.0	287.7	275.0	296.1	371.0	313.3	323.6
State and local governments														
Net borrowing	41.7	169.0	97.8	97.8	193.8	185.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
Current surplus ⁵	212.7	212.7	262.3	225.9	201.2	226.5	251.5	257.5	265.5	274.6	228.1	227.7	223.7	223.9
Federal government														
Net borrowing	1239.2	1442.3	1535.0	1133.7	1422.5	1015.5	2166.9	1410.6	1282.0	1280.6	1115.9	1184.1	1094.5	1140.3
Net borrowing (n.s.a.)	1239.2	1442.3	1535.0	1133.7	362.6	275.9	647.7	217.7	327.5	342.2	385.0	161.0	280.6	307.1
Unified deficit (n.s.a.)	680.5	1521.9	1347.9	1113.7	345.0	423.0	455.2	228.0	312.5	352.2	395.0	136.0	265.6	317.1
<i>Depository institutions</i>														
Funds supplied	415.1	-444.0	-351.1	1133.3	-794.8	36.1	160.0	11.3	88.4	-1664.0	-1805.7	1974.6	1993.3	2371.1

Note. Data after 2009:Q2 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

Indicator	2009		Projection			
			2009		2010	2011
	Q1	Q2	Q3	Q4		
Foreign output	-8.6	1.7	3.8	3.2	3.5	4.1
Previous Greenbook	-8.7	.6	2.8	2.6	3.3	...
Foreign CPI	-1.0	1.0	1.7	1.7	1.6	1.8
Previous Greenbook	-1.0	1.0	1.7	1.7	1.7	...
	Contribution to growth (percentage points)					
U.S. net exports	2.6	1.6	-.2	-.1	-.2	-.2
Previous Greenbook	2.6	1.1	-.3	.1	-.1	...

Indicator	2009		Projection			
	Q1	Q2	2009		2010	2011
			Q3	Q4		
Advanced Foreign Economies	-7.8	-1.5	2.1	2.1	2.5	3.2
Previous Greenbook	-7.8	-2.2	.7	1.4	2.2	...
Emerging Market Economies	-9.6	6.0	6.2	4.5	4.7	5.2
Previous Greenbook	-9.8	4.4	5.5	4.2	4.6	...

[illegible]

Exports						
Core goods	-12.5	2.6	4.0	3.2	1.9	1.2
Previous Greenbook	-15.3	3.0	4.0	2.2	1.4	...

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.

... Not applicable.

Staff Projections for Trade in Goods and Services

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

Measure	2009		Projection			
			2009		2010	2011
	Q1	Q2	Q3	Q4		
Real imports	-36.4	-14.8	18.4	7.2	8.0	8.0
Previous Greenbook	-36.4	-12.5	10.5	3.2	4.8	...
Real exports	-29.9	-4.6	20.9	8.1	8.2	8.6
Previous Greenbook	-29.9	-5.6	10.1	4.6	5.3	...

Note: Changes for years are measured as Q4/Q4.

Alternative Scenario: Dollar Depreciation

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

Indicator and simulation	2009	2010		2011	2012-13
	H2	H1	H2		
U.S. real GDP					
Baseline	2.8	3.0	4.0	4.5	4.6
Dollar Depreciation	3.1	4.1	5.2	4.1	4.4
U.S. PCE prices excluding food and energy					
Baseline	1.3	1.1	1.1	1.0	1.3
Dollar Depreciation	1.6	1.7	1.4	.9	1.3
U.S. federal funds rate (percent)					
Baseline	.1	.1	.1	.1	3.8
Dollar Depreciation	.1	.1	.1	.5	3.9
U.S. trade balance (percent share of GDP)					
Baseline	-2.8	-2.9	-3.0	-3.0	-2.8
Dollar Depreciation	-2.4	-1.8	-1.8	-2.4	-2.8

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 24, 2007 to September 16, 2009. There are three series, "2008", "2009", and "2010". 2008 begins at about -6.7 and generally increases to about -4.75 by April 22, 2009. It then generally decreases to end at about -4.8. 2009 begins at about -5.25 by September 12, 2007, and generally increases to about -4.1 by April 23, 2008. It then generally decreases to about -4.55 by June 18, 2008, and generally increases to end at about -2.8. 2010 begins at about -3.4 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 -3.1. 2011 is marked at about -3.05.

Figure: Foreign Real GDP

Line chart, by percent change, Q4/Q4, January 24, 2007 to September 16, 2009. There are three series, "2008", "2009", and "2010". 2008 begins at about 3.5 and generally decreases to end at about -1. 2009 begins at about 3.2 by September 12, 2007, and generally increases to about 3.6 by March 13, 2008. It then generally decreases to about -2.3 by March 12, 2009, and generally increases to end at about -0.1. 2010 begins at about 3.5 by September 10, 2008, and generally decreases to about 2.4 by March 12, 2009. It then generally increases to end at about 3.5. 2011 is marked at about 4.1.

Figure: Core Import Prices

Line chart, by percent change, Q4/Q4, January 24, 2007 to September 16, 2009. There are three series, "2008", "2009", and "2010". 2008 begins at about 1 and generally increases to about 7.1 by September 10, 2008. It then generally decreases to end at about 3.8. 2009 begins at about 1 by September 12, 2007, and generally decreases to about 0.6 by October 24, 2007. It then generally increases to about 1.5 by July 30, 2008, and generally decreases to about -4.1 by March 12, 2009. It then generally increases to end at about -1.5. 2010 begins at about 1.4 by September 10, 2008, and remains about constant until the end. 2011 is marked at about 1.

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

Outlook for Foreign Real GDP and Consumer Prices: Selected Countries

(Percent changes)

Measure and country	Projected											
	2009				2010				2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
REAL GDP¹	Quarterly changes at an annual rate											
Total Foreign	-8.6	1.7	3.8	3.2	3.1	3.4	3.6	3.8	4.0	4.1	4.1	4.1
Advanced Foreign Economies	-7.8	-1.5	2.1	2.1	2.0	2.4	2.7	2.9	3.1	3.2	3.3	3.3
of which:												
Canada	-6.1	-3.4	2.3	2.7	2.5	2.7	3.2	3.3	3.8	3.8	3.9	3.9
Japan	-12.4	2.3	3.9	2.4	1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.1
United Kingdom	-9.3	-2.6	1.4	2.0	1.8	2.4	2.7	3.0	3.0	3.1	3.2	3.2
Euro Area ²	-9.5	-0.5	1.6	1.4	1.6	2.0	2.3	2.6	2.7	2.9	3.0	3.1
Germany	-13.4	1.3	2.7	2.2	2.1	2.2	2.4	2.7	2.8	3.0	3.5	3.6
Emerging Market Economies	-9.6	6.0	6.2	4.5	4.4	4.7	4.9	5.0	5.1	5.2	5.2	5.2
Asia	-2.7	14.3	7.4	6.1	5.7	5.7	5.9	6.0	5.9	6.0	6.0	6.0
Korea	0.5	11.0	4.0	3.8	3.8	4.4	4.5	4.5	4.4	4.4	4.4	4.4
China	6.5	18.5	12.1	10.2	8.8	8.0	8.2	8.4	8.5	8.6	8.7	8.8
Latin America	-16.7	-1.9	5.3	3.1	3.3	3.8	4.0	4.1	4.4	4.4	4.4	4.4
Mexico	-21.2	-4.4	6.5	3.2	3.3	4.0	4.2	4.4	4.5	4.5	4.5	4.5
Brazil	-3.8	7.8	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
CONSUMER PRICES³	Four-quarter changes											
Total Foreign	1.8	0.9	0.3	0.8	1.5	1.7	1.6	1.6	1.7	1.7	1.7	1.8
Advanced Foreign Economies	1.0	0.0	-0.6	0.2	0.8	1.1	1.1	1.0	1.0	1.1	1.1	1.1
of which:												
Canada	1.2	0.1	-0.6	0.5	1.1	1.4	1.4	1.5	1.6	1.7	1.7	1.8
Japan	-0.1	-1.0	-1.8	-1.2	-0.5	-0.2	-0.4	-0.5	-0.5	-0.6	-0.6	-0.6
United Kingdom ⁴	3.0	2.1	1.5	1.9	2.5	2.3	1.7	1.5	1.1	1.3	1.6	1.8
Euro Area ²	1.0	0.2	-0.3	0.3	1.0	1.3	1.3	1.2	1.2	1.2	1.3	1.3
Germany	0.8	0.2	-0.2	0.5	0.9	1.2	1.1	1.1	1.1	1.1	1.1	1.1
Emerging Market Economies	2.7	1.6	1.1	1.5	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4
Asia	1.0	-0.3	-0.6	0.3	1.4	1.8	1.8	1.8	1.9	2.0	2.0	2.1

Korea	3.9	2.8	2.0	2.3	2.4	2.2	2.2	2.2	2.2	2.3	2.3	2.3
China	-0.6	-1.5	-1.4	-0.5	0.8	1.1	1.3	1.3	1.4	1.5	1.6	1.6
Latin America	6.3	5.9	5.0	4.0	3.6	3.0	2.9	2.9	3.0	3.0	3.0	3.0
Mexico	6.2	6.0	5.2	4.1	3.6	2.7	2.5	2.5	2.5	2.5	2.5	2.5
Brazil	5.9	5.3	4.4	4.2	3.9	3.5	3.6	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	2.9	3.8	4.1	4.0	4.2	-1.0	-0.1	3.5	4.1
Advanced Foreign Economies	1.8	2.6	2.8	2.5	2.5	-1.6	-1.4	2.5	3.2
of which:									
Canada	1.5	3.7	3.1	1.9	2.8	-1.0	-1.2	2.9	3.8
Japan	2.4	1.1	2.9	2.1	1.9	-4.5	-1.2	1.9	2.1
United Kingdom	3.2	2.4	2.4	2.8	2.4	-1.8	-2.2	2.5	3.1
Euro Area ²	1.2	1.8	2.2	3.5	2.2	-1.7	-1.8	2.1	2.9
Germany	0.1	0.2	1.6	4.3	1.6	-1.8	-2.1	2.3	3.2
Emerging Market Economies	4.5	5.5	5.9	5.9	6.4	-0.1	1.5	4.7	5.2
Asia	6.9	6.0	7.7	7.2	8.2	0.2	6.1	5.8	6.0
Korea	3.7	2.6	5.2	4.6	5.7	-3.4	4.8	4.3	4.4
China	10.3	9.9	10.3	10.8	12.3	6.9	11.7	8.3	8.6
Latin America	1.8	5.0	4.0	4.7	4.5	-0.8	-2.9	3.8	4.4
Mexico	1.3	4.5	3.5	4.0	3.7	-1.7	-4.6	4.0	4.5
Brazil	1.0	4.7	3.7	4.6	6.1	1.2	3.0	4.0	4.0
CONSUMER PRICES ³									
Total Foreign	2.1	2.8	2.3	2.1	3.7	3.3	0.8	1.6	1.8
Advanced Foreign Economies	1.3	1.8	1.6	1.4	2.2	2.0	0.2	1.0	1.1
of which:									
Canada	1.7	2.3	2.3	1.4	2.5	1.9	0.5	1.5	1.8
Japan	-0.3	0.5	-1.0	0.3	0.5	1.0	-1.2	-0.5	-0.6
United Kingdom ⁴	1.3	1.4	2.1	2.7	2.1	3.8	1.9	1.5	1.8
Euro Area ²	2.0	2.3	2.3	1.8	2.9	2.3	0.3	1.2	1.3
Germany	1.1	2.1	2.2	1.3	3.1	1.7	0.5	1.1	1.1
Emerging Market Economies	3.1	3.9	3.0	2.9	5.1	4.6	1.5	2.2	2.4
Asia	2.3	3.1	2.6	2.4	5.5	3.7	0.3	1.8	2.1
Korea	3.5	3.4	2.5	2.1	3.4	4.5	2.3	2.2	2.3
China	2.7	3.3	1.4	2.1	6.7	2.7	-0.5	1.3	1.6
Latin America	4.9	5.6	3.8	4.1	4.2	6.5	4.0	2.9	3.0
Mexico	3.9	5.3	3.1	4.1	3.8	6.2	4.1	2.5	2.5
Brazil	11.5	7.2	6.1	3.2	4.3	6.2	4.2	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	-0.2	-0.2
Exports of G&S	0.6	0.7	0.7	1.1	1.2	-0.4	-0.4	0.9	1.0
Imports of G&S	-0.7	-1.6	-0.8	-0.7	-0.2	1.2	1.4	-1.1	-1.2
Percentage change, Q4/Q4									
Exports of G&S	6.2	7.1	6.7	10.2	10.2	-3.4	-3.3	8.2	8.6
Services	4.3	9.1	3.6	12.0	13.0	-3.5	-1.3	5.8	6.0
Computers	11.3	5.8	14.2	8.4	1.3	-2.4	9.0	9.5	9.5
Semiconductors	38.3	-6.0	17.6	2.1	29.1	-12.7	15.8	11.0	11.0
Core Goods ¹	4.8	7.2	7.2	9.9	8.4	-3.1	-5.5	9.3	9.9
Imports of G&S	5.1	10.9	5.2	4.1	0.9	-6.8	-8.9	8.0	8.0
Services	3.3	8.8	2.3	7.1	2.0	0.2	-2.8	4.0	6.1
Oil	1.3	10.7	1.3	-8.2	0.0	0.3	-12.7	-0.4	-2.1
Natural Gas	1.3	4.9	13.7	-10.1	13.4	-24.0	-0.6	18.6	0.6
Computers	17.1	23.2	12.5	14.3	8.8	-11.3	16.4	15.5	15.5
Semiconductors	-0.1	9.8	7.5	-0.8	3.6	-9.7	2.2	5.0	5.0
Core Goods ²	5.3	10.9	5.8	5.8	0.2	-9.8	-11.7	10.6	10.4
Billions of Chained 2005 Dollars									
Net Goods & Services	-603.9	-688.0	-722.7	-729.2	-647.7	-494.3	-349.7	-356.9	-381.4
Exports of G&S	1116.8	1222.8	1305.1	1422.0	1546.1	1629.3	1463.7	1589.8	1725.8
Imports of G&S	1720.7	1910.8	2027.8	2151.2	2193.8	2123.5	1813.4	1946.7	2107.2
Billions of dollars									
US CURRENT ACCOUNT BALANCE	-521.5	-631.1	-748.7	-803.5	-726.6	-706.1	-412.4	-450.7	-480.3
Current Acct as Percent of GDP	-4.7	-5.3	-5.9	-6.0	-5.2	-4.9	-2.9	-3.0	-3.1
Net Goods & Services (BOP)	-495.0	-610.0	-715.3	-760.4	-701.4	-695.9	-370.2	-426.7	-461.0
Investment Income, Net	51.0	73.4	78.8	54.7	97.9	125.5	86.6	105.4	110.1
Direct, Net	112.7	150.9	173.2	174.0	236.7	249.9	208.1	231.7	249.5
Portfolio, Net	-61.7	-77.5	-94.4	-119.4	-138.8	-124.3	-121.5	-126.4	-139.4
Other Income & Transfers,Net	-77.5	-94.5	-112.2	-97.9	-123.1	-135.7	-128.8	-129.4	-129.4

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	1.6	-0.2	-0.1	-0.3	-0.0	-0.3	-0.2	-0.2	-0.2	-0.2	-0.1
Exports of G&S	-4.0	-0.5	2.1	0.9	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.1

Imports of G&S	6.6	2.1	-2.3	-1.0	-1.1	-0.9	-1.2	-1.3	-1.3	-1.1	-1.2	-1.1
Percentage change from previous period, s.a.a.r.												
Exports of G&S	-29.9	-4.6	20.9	8.1	7.4	7.9	8.4	8.9	8.6	8.4	8.3	9.0
Services	-13.6	-0.1	5.1	4.8	4.8	5.5	6.2	6.6	6.3	5.9	5.8	5.9
Computers	-14.0	-10.8	59.6	15.2	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
Semiconductors	-17.1	12.6	61.6	19.3	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Core Goods ¹	-38.3	-7.3	27.7	9.2	8.6	9.0	9.5	10.1	9.8	9.5	9.5	10.6
Imports of G&S	-36.4	-14.8	18.4	7.2	8.1	6.4	8.7	8.9	8.6	7.8	8.0	7.6
Services	-11.5	-7.6	5.3	3.6	6.0	-0.1	4.7	5.5	5.9	6.0	6.1	6.4
Oil	-15.9	-21.9	-6.3	-5.8	0.8	-1.8	0.0	-0.5	-1.6	-4.6	-1.0	-1.4
Natural Gas	5.9	-2.4	-18.2	15.7	57.3	10.2	40.8	-18.9	-9.7	3.3	36.0	-19.3
Computers	-22.3	24.8	61.0	17.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
Semiconductors	-47.8	24.7	43.0	17.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Core Goods ²	-46.7	-18.6	26.5	10.4	9.5	9.7	11.0	12.3	11.7	10.7	9.5	9.9
Billions of Chained 2005 Dollars, s.a.a.r.												
Net Goods & Services	-386.5	-332.0	-338.8	-341.5	-350.9	-350.8	-359.2	-366.7	-374.4	-379.3	-385.2	-386.6
Exports of G&S	1434.5	1417.8	1486.6	1515.7	1542.9	1572.5	1604.6	1639.3	1673.7	1707.6	1742.1	1780.0
Imports of G&S	1821.0	1749.8	1825.4	1857.2	1893.8	1923.3	1963.8	2006.1	2048.0	2086.8	2127.3	2166.7
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-410.8	-392.4	-419.2	-427.3	-454.6	-440.0	-451.9	-456.3	-481.1	-471.1	-482.8	-486.4
Current Account as % of GDP	-2.9	-2.8	-2.9	-3.0	-3.1	-3.0	-3.0	-3.0	-3.1	-3.0	-3.1	-3.1
Net Goods & Services (BOP)	-369.6	-332.0	-384.0	-395.1	-414.2	-418.6	-431.2	-442.8	-454.8	-458.0	-464.3	-466.9
Investment Income, Net	84.3	80.4	88.7	92.8	98.6	103.5	107.8	111.6	112.7	111.8	110.1	105.6
Direct, Net	208.0	203.4	207.0	214.0	221.2	228.6	235.6	241.7	246.5	249.5	250.8	251.0
Portfolio, Net	-123.7	-123.0	-118.3	-121.2	-122.6	-125.1	-127.8	-130.0	-133.8	-137.7	-140.7	-145.5
Other Inc. & Transfers, Net	-125.5	-140.9	-123.8	-125.1	-139.0	-124.9	-128.5	-125.1	-139.0	-124.9	-128.5	-125.1

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

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

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

Last update: April 1, 2015

September 2009 Greenbook Part 2 Tables and Charts[†]

Domestic Nonfinancial Developments

Changes in Employment

(Thousands of employees; seasonally adjusted)

Measure and sector	2008				2009		
	2008	2008	2008	2008	2009	2009	2009
		Q4	Q1	Q2	June	July	Aug.
	Average monthly change				Monthly change		
Nonfarm payroll employment (establishment survey)	-257	-553	-691	-428	-463	-276	-216
Private	-270	-552	-695	-425	-391	-248	-198
Natural resources and mining	4	-2	-12	-11	-10	-6	-8
Manufacturing	-73	-140	-202	-140	-123	-43	-63
Ex. motor vehicles	-58	-121	-176	-117	-102	-74	-48
Construction	-57	-97	-124	-80	-79	-73	-65
Residential	-35	-51	-53	-26	-25	-23	-23
Nonresidential	-22	-45	-71	-54	-54	-50	-43
Wholesale trade	-16	-32	-36	-20	-15	-17	-17
Retail trade	-44	-80	-55	-27	-20	-43	-10
Financial activities	-19	-35	-51	-35	-33	-17	-28
Temporary help services	-44	-70	-73	-28	-30	-8	-7
Nonbusiness services ¹	19	-19	-25	19	18	23	26
Total government	14	-1	4	-3	-72	-28	-18
Federal government	3	2	10	3	-43	9	-5
Total employment (household survey)	-246	-564	-817	-230	-374	-155	-392
Memo:							
Aggregate hours of private production workers (percent change) ²	-3.3	-7.4	-8.9	-7.8	-.7	.1	-.3
Average workweek (hours) ³	33.6	33.4	33.2	33.1	33.0	33.1	33.1
Manufacturing (hours)	40.8	40.2	39.6	39.5	39.5	39.8	39.8

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

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

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

Figure: Changes in Private Payroll Employment

Line chart, by thousands, 1999 to August 2009. Data are 3-month moving averages. The series begins at about 240 and generally increases to about 300 by late 1999. It then generally decreases to about -310 by late 2001, and generally increases to about 300 by 2004. It then generally decreases to about -700 by early 2009, and generally increases to end at about -290.

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

Figure: Aggregate Hours and Workweek of Production and Nonsupervisory Workers

Line chart, 1999 to August 2009. There are two series, "Aggregate hours", an index (2002 = 100), and "Workweek", which is by hours. These two series use two different scales. Aggregate hours begins at about 100.8 and generally increases to about 104 by 2000. It then generally decreases to about 98.1 by 2003, and generally increases to about 107.8 by late 2007. It then generally decreases to end at about 99. Workweek begins at about 34.4 and generally decreases to about

33.6 by early 2003. It then generally increases to about 34.0 by late 2006, and generally decreases to end at about 33.15.

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

Selected Unemployment and Labor Force Participation Rates

(Percent; seasonally adjusted)

Rate and group	2008	2008			2009		
		Q4	Q1	Q2	June	July	Aug.
Civilian unemployment rate							
Total	5.8	6.9	8.1	9.2	9.5	9.4	9.7
Teenagers	18.7	20.7	21.3	22.7	24.0	23.8	25.5
20-24 years old	10.2	11.3	13.0	15.0	15.2	15.3	15.1
Men, 25 years and older	4.8	6.0	7.4	8.8	9.2	9.0	9.5
Women, 25 years and older	4.4	5.2	6.2	6.9	7.0	6.9	7.0
Labor force participation rate							
Total	66.0	65.9	65.6	65.8	65.7	65.5	65.5
Teenagers	40.2	38.7	38.3	38.4	38.6	38.0	37.7
20-24 years old	74.4	74.1	73.7	74.1	73.4	73.5	73.0
Men, 25 years and older	75.4	75.2	74.6	74.9	75.0	74.8	75.0
Women, 25 years and older	60.0	60.1	60.0	60.3	60.3	60.1	59.9

Figure: Unemployment Rate

Line chart, by percent, 2000 to August 2009. A vertical line indicates the NBER Peak in December 2007. The series begins at about 4 and generally increases to about 6.4 by 2003. It then generally decreases to about 4.5 by late 2006, and generally increases to end at about 9.7. It is at about 4.9 at the time of the NBER peak.

Note: 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.

Figure: Labor Force Participation Rate

Line chart, by percent, 2000 to August 2009. A vertical line indicates the NBER Peak in December 2007. The series begins at about 67.3 and generally decreases to about 65.8 by 2004. It then generally increases to about 66.3 by late 2006, and generally decreases to end at about 65.5. It is at about 66.0 at the time of the NBER peak.

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

Figure: Persons Working Part Time for Economic Reasons

Line chart, by percent of household employment, 2000 to August 2009. The series begins at about 2.3 and generally increases to about 3.5 by 2003. It then generally decreases to about 2.7 by 2006, and generally increases to end at about 6.5.

Figure: Job Losers Unemployed Less Than 5 Weeks

Line chart, by percent of household employment, 2000 to August 2009. There are two series, "Job Losers Unemployed Less Than 5 Weeks" and "3-month moving average". These two series track closely together throughout the chart. They begin at about 0.84 and generally increases to about 1.3 by late 2001. It then generally decreases to about 0.84 by early 2007, and generally increases to end at about 1.42.

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

Labor Market Indicators

Figure: Insured Unemployment

Stacked line chart, by millions, 1999 to 2009. There are two series, "Incl. extended and emergency benefits" and "Regular state programs". Incl. extended and emergency benefits begins at about 0 and generally increases to about 5 by 2002. It is also 0 from about 2004 to mid-2008, and then generally increases to end at about 9.7 by August 22, 2009. Regular state programs begins at about 2.2 and generally decreases to about 2 by 2000. It then generally increases to about 3.7 by 2002, and generally decreases to about 2.5 by 2006. It then generally increases to about 6.8 by 2009, and generally decreases to end at about 6.1 by August 29, 2009.

Note: 4-week moving averages.

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

Figure: Layoffs and Initial Claims

Line chart, 1999 to 2009. There are two series, "Layoffs and discharges", which is by percent of private employment, and "Initial claims", which is by thousands. These two series use two different scales. Layoffs and discharges begins at about 1.6 by late 2000, and generally increases to about 2.1 by early 2001. It then generally decreases to about 1.3 by early 2006, and generally increases to about 2.25 by early 2009. It then generally decreases to about 1.8 by mid-2009, and generally increases to end at about 2.1 by July. Initial claims begins at about 335 and generally decreases to about 265 by 2000. It then generally increases to about 495 by late 2001, and generally decreases to about 280 by early 2006. It then generally increases to about 655 by early 2009, and generally decreases to end at about 575 by September 5.

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.

Figure: Net Hiring Plans

Line chart, by percent, 1999 to 2009. There are two series, "Manpower, Inc." and "NFIB net hiring plans" (3-month moving average). Manpower, Inc. begins at about 21 and generally increases to about 25 by 2000. It then generally decreases to about 7.5 by 2003, and generally increases to about 21 by early 2005. It then generally decreases to end at about -2.5 by 2009:Q4. NFIB net hiring plans begins at about 17 and generally decreases to about 5.5 by early 2003. It then generally increases to about 17 by late 2006, and generally decreases to about -5 by early 2009. It then generally increases to end at about -2.5 by August.

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

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

Figure: Job Openings

Line chart, 1999 to 2009. There are two series, "Job openings", which is by percent of private employment plus job openings, and "Composite Help Wanted Index", 1980=100. These two series use two different scales. Job openings begins at about 3.9 by late 2000, and generally decreases to about 2.5 by 2003. It then generally increases to about 3.6 by early 2007, and generally decreases to end at about 1.9 by July. Composite Help Wanted Index begins at about 91 and generally decreases to about 50 by 2003. It then generally increases to about 75 by early 2007, and generally decreases to end at about 46 by August.

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

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

Figure: Job Availability and Hard-to-Fill Positions

Line chart, 1999 to August 2009. There are two series, "Job availability", which is an index, and "Hard-to-fill" (3-month moving average), which is by percent. These two series use two different scales. Job availability begins at about 135 and generally increases to about 142 by late 1999. It then generally decreases to about 78 by 2003, and generally increases to about 110 by 2007. It then generally decreases to end at about 58. Hard-to-fill begins at about 30 and generally increases to about 33.5 by 2000. It then generally decreases to about 16 by 2003, and generally increases to about 27.5 by 2006. It then generally decreases to end at about 10.

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

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

Figure: Expected Labor Market Conditions

Line chart, 1999 to 2009. There are two series, "Conference Board" and "Reuters/Michigan". Both series are indexes: the proportion of households expecting labor market conditions to improve, minus the proportion expecting conditions to worsen, plus 100. Conference Board begins at about 100 and generally increases to about 110 by 2000. It then generally decreases to about 85 by early 2003, and generally increases to about 106 by early 2004. It then generally decreases to about 60 by early 2009, and generally increases to end at about 95 by August. Reuters/Michigan begins at about 87 and generally increases to about 100 by 1999. It then generally decreases to about 49 by 2001, and generally increases to about 107 by 2004. It then generally decreases to about 38 by late 2008, and generally increases to end at about 90 by September.

Note: September 2009 value is preliminary.

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

Output per Hour

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

Sector	2007:Q2	2008:Q2	2008		2009	
	to 2008:Q2	to 2009:Q2 ¹	Q3	Q4	Q1	Q2 ¹
Nonfarm business						
All persons	2.6	1.9	-.1	.8	.3	6.6
All employees ²	2.1	1.6	-.6	-1.0	1.1	7.3

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		2009		
			Q1	Q2	June	July	Aug.
			Annual rate		Monthly rate		
Total	100.0	-6.7	-19.0	-10.5	-.4	1.0	.8
Previous	100.0	-6.7	-19.1	-11.4	-.4	.5	.5
Manufacturing	79.0	-8.7	-22.0	-9.0	-.3	1.4	.6
Ex. motor veh. and parts	74.5	-7.8	-18.3	-8.8	-.1	.6	.4
Ex. high-tech industries	70.3	-7.8	-18.0	-9.3	-.2	.5	.4
Mining	10.6	.8	-11.7	-21.3	-.9	.6	.5
Utilities	10.4	.3	-4.1	-11.2	-.5	-1.6	1.9
<i>Selected industries</i>							
Energy	23.9	1.3	-6.5	-14.2	-.7	-.7	1.1
High technology	4.2	-6.9	-24.3	.7	.8	2.5	-.5
Computers	1.0	-11.9	-26.5	-22.1	-1.9	-1.2	-1.1
Communications equipment	1.3	10.4	-3.5	-4.1	2.9	.7	.0
Semiconductors ²	1.8	-15.0	-38.1	22.2	.3	6.1	-.6
Motor vehicles and parts	4.5	-23.3	-69.5	-13.8	-3.6	20.1	5.5
Aircraft and parts	2.3	-13.2	64.6	-18.4	-1.2	2.1	-.7
<i>Total ex. selected industries</i>	65.1	-8.3	-21.1	-9.3	-.1	.4	.5
Consumer goods	20.7	-4.2	-9.2	-5.2	-.1	-.2	1.0
Durables	3.5	-14.7	-25.7	-12.8	-.5	1.4	-.7
Nondurables	17.1	-1.8	-5.7	-3.8	-.1	-.4	1.2
Business equipment	6.6	-4.8	-23.5	-22.0	-.8	.4	.3
Defense and space equipment	1.1	-2.1	-4.9	4.2	.1	1.9	-.3
Construction supplies	4.8	-11.8	-34.1	-10.8	-.1	.7	.0
Business supplies	7.3	-9.8	-24.8	-11.1	.3	.0	.2

Materials	24.6	-11.7	-27.0	-8.9	-.1	1.0	.4
Durables	12.4	-11.4	-37.9	-23.9	-.6	1.9	.0
Nondurables	12.2	-12.0	-14.6	7.1	.4	.2	.8

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

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

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

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

Capacity Utilization

(Percent of capacity)

Sector	1972-2008 average	1994-95 high	2001-02 low	2008 Q4	Q1	2009 Q2	July	Aug.
Total industry	80.9	84.9	73.5	74.2	70.4	68.6	69.0	69.6
Manufacturing	79.6	84.5	71.4	70.9	66.7	65.3	66.1	66.6
Mining	87.6	89.1	84.9	89.6	86.8	81.9	81.7	82.2
Utilities	86.8	93.3	84.2	83.6	82.4	79.6	77.3	78.7
Stage-of-process groups								
Crude	86.6	89.9	81.7	83.8	80.9	79.5	80.0	80.7
Primary and semifinished	82.0	87.9	74.3	73.4	68.4	66.2	66.3	66.7
Finished	77.7	80.3	70.0	71.0	68.4	67.1	67.7	68.5

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

Indicators of High-Tech Manufacturing Activity

Figure: Industrial Production in the High-Tech Sector

Line chart, 2002 to August 2009. 2002 = 100, ratio scale. There are three series, "Semiconductors", "Computers", and "Communications equipment". Semiconductors begins at about 90 and generally increases to about 325 by 2008. It then generally decreases to about 220 by early 2009, and generally increases to end at about 248. Computers begins at about 100 and generally increases to about 240 by 2008. It then generally decreases to end at about 160. Communications equipment begins at about 100 and generally increases to end at about 170.

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

Figure: Bookings and Billings for Semiconductor Manufacturing Equipment

Line chart, by billions of dollars, 2002 to July 2009. There are two series, "Billings" and "Bookings". Billings begins at about 0.85 and generally increases to about 1.0 by 2002. It then generally decreases to about 0.75 by 2003, and generally increases to about 1.5 by 2004. It then generally decreases to about 1.0 by 2005, and generally increases to about 1.7 by 2007. It then generally decreases to about 0.4 by 2009, and generally increases to end at about 0.55. Bookings begins at about 0.69 and generally increases to about 1.15 by 2002. It then generally decreases to about 0.7 by 2003, and generally increases to about 1.7 by 2006. It then generally decreases to about 0.28 by 2009, and generally increases to end at about 0.52.

Note: FRB seasonals.

Source: Semiconductor Equipment and Materials International.

Figure: MPU Shipments and Intel Revenue

Line chart, by billions of dollars, ratio scale, 2002 to 2009. There are two series, "Intel revenue" and "Worldwide MPU shipments". Intel revenue begins at about 6.9 and generally decreases to about 6.5 by 2002. It then generally increases to about 9.9 by mid-2005, and generally decreases to about 8.5 by mid-2006. It then generally increases to about 10.3 by early 2008, and generally decreases to about 7.75 by early 2009. It then generally increases to end at about 8.4 by 2009:Q3. Worldwide MPU shipments begins at about 6.0 and generally increases to about 6.75 by 2002. It then generally decreases to about 5.75 by 2002, and generally increases to about 9.3 by 2007. It then generally decreases to about 5.8 by early 2009, and generally increases to end at about 8.45 by July.

Note: FRB seasonals. MPU is a microprocessor unit. Q3 Intel revenue is the midpoint of the range given by the company's guidance as of August 28, 2009. MPU shipments are a 3-month sum.

Source: Intel; Semiconductor Industry Association.

Figure: U.S. Personal Computer and Server Absorption

Line chart, by millions of units, ratio scale, 2002 to 2009. There are two series, "Servers" and "PCs". These two series use two different scales. Servers begins at about 0.44 and generally increases to about 0.78 by early 2008. It then generally decreases to end at about 0.48. PCs begins at about 11.3 and generally decreases to about 11.2 by 2002. It then generally increases to about 16.7 by late 2007, generally decreases to about 16.0 by late 2008, and generally increases to end at about 16.5.

Note: FRB seasonals. PC and server units represent the most recent U.S. data available from IDC. Q3 PC units are from the PC forecast data release (marked at about 16.8 million units). Q3 server units are from the server forecast data release (marked at about 0.57 million units).

Source: IDC.

Figure: Capital Expenditures by Selected Telecommunications Service Providers

Line chart, by billions of dollars, ratio scale, 2001 to 2009:Q2. The series begins at about 73 and generally decreases to about 32.5 by 2003. It then generally increases to about 47.5 by early 2006, and generally decreases to end at about 34.5. The annual average is marked in the time series for each year. For 2001, it is marked at about 65, for 2002 it is marked at about 45, for 2003 it is marked at about 37, for 2004 it is marked at about 37.5, for 2005 it is marked at about 40.5, for 2006 it is marked at about 45, for 2007 it is marked at about 44, for 2008 it is at about 41.5. 2009 annual guidance is marked at about 37.

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

Source: SEC filings.

Figure: High-Tech Exports

Line chart, by billions of dollars, 2002 to July 2009. The series begins at about 114 and generally decreases to about 103 by late 2002. It then generally increases to about 151 by 2008, and generally decreases to about 106 by 2009. It then generally increases to end at about 118.

Note: Includes semiconductors and related equipment, communications equipment, and computers and peripherals.

Source: U.S. International Trade Commission.

Indicators of Industrial Activity

Figure: Motor Vehicle Assemblies

Line chart, by millions of units, 2002 to September 2009. There are two series, "Autos and light trucks" and "Medium and heavy trucks". These two series use two different scales. Autos and light trucks begins about 11.7 and generally increases to about 12.9 by 2002. It then generally decreases to about 3.6 by early 2009, and generally increases to end at about 6.4. Medium and heavy trucks begins at about 0.2 and generally increases to about 0.55 by 2006. It then generally decreases to about 0.1 by 2009, and generally increases to end at about 0.19.

Note: September values are based on latest industry schedules.

Source: Ward's Communications.

Figure: IP Diffusion Index

Line chart, an index, 2002 to August 2009. A vertical line indicates the NBER Peak in December 2007. The series begins at about 50 and generally increases to about 65 by 2002. It then generally decreases to about 40 by 2003, and generally increases to about 67 by late 2003. It then generally decreases to about 16 by early 2009, and generally increases to end at about 51. It is at about 50 at the time of the NBER peak.

Note: The diffusion index equals the percentage of series that increased relative to 3 months earlier plus one-half the percentage that were unchanged.

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

Figure: Manufacturing Capacity Utilization

Line chart, by percent, 1997 to August 2009. A vertical line indicates the NBER Peak in December 2007. The series begins at about 82.5 and generally increases to about 83.5 by late 1997. It then generally decreases to about 71.5 by late 2001, and generally increases to about 79.5 by late 2005. It then generally decreases to end at about 67. It is at about 78.5 at the time of the NBER peak.

Note: Horizontal line is 1972-2008 average (approximately 77). A shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research (NBER): March 2001-November 2001.

Source: Federal Reserve, 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 2009. There are two series, "ISM", which is a diffusion index, and "RADGO", which is by percent. These two series use two different scales. ISM begins at about 55 and generally increases to about 65 by 2002. It then generally decreases to about 47 by 2003, and generally increases to about 71 by late 2003. It then generally decreases to about 24 by late 2008, and generally increases to end at about 65 by August. RADGO begins at about -1 and generally increases to about 2.8 by late 2003. It then generally decreases to about -2.2 by early 2004, and generally increases to about 2.5 by 2005. It then generally decreases to about -5 by 2008, and generally increases to end at about 2.5 by July.

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

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

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

Line chart, a diffusion index, 2002 to 2009. There are two series, "Empire State" and "Regional average". Empire State begins at about 56 and generally increases to about 60 by 2002. It then generally decreases to about 51 by late 2002, and generally increases to about 70 by 2004. It then generally decreases to about 27 by early 2009, and generally increases to end at about 60. Regional average begins at about 54 and generally increases to about 58 by 2002. It then generally decreases to about 45 by 2003, and generally increases to about 65 by late 2003. It then generally decreases to about 30 by late 2008, and generally increases to end at about 53.

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

Source: Federal Reserve.

Figure: Three-Month Changes in Months' Supply

Line chart, a diffusion index, 2000 to August 2009. A vertical line indicates the NBER Peak in December 2007. The series begins at about 38 and generally increases to about 75 by 2000. It then generally decreases to about 8 by 2002, and generally increases to about 90 by late 2008. It then generally decreases to about 25 by mid-2009, and generally increases to end at about 32. It is at about 50 at the time of the NBER peak.

Note: The diffusion index equals 50 plus one-half of the share of industries whose month's supply is up relative to 3 months earlier minus one-half of the share of industries whose month's supply is down relative to 3 months earlier. A shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research (NBER): March 2001-November 2001.

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

Sales of Light Vehicles

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

Category	2008	2008		2009			
		Q4	Q1	Q2	June	July	Aug.
Total	13.1	10.4	9.5	9.6	9.7	11.2	14.1
Autos	6.7	5.3	4.8	4.9	5.0	6.2	8.0
Light trucks	6.4	5.1	4.7	4.7	4.7	5.1	6.1
North American ¹	9.8	7.7	6.8	7.1	7.2	8.3	10.1
Autos	4.5	3.6	3.1	3.2	3.3	4.2	5.3
Light trucks	5.3	4.2	3.7	3.9	3.9	4.2	4.8
Foreign-produced	3.3	2.7	2.7	2.4	2.5	2.9	4.0
Autos	2.2	1.7	1.7	1.6	1.7	2.0	2.7
Light trucks	1.1	.9	1.0	.8	.8	.9	1.2
Memo:							
Detroit Three market share (percent) ²	48.3	48.0	44.1	46.8	46.3	44.8	41.3

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

1. Excludes some vehicles produced in Canada that are classified as imports by the industry. [Return to table](#)

2. Includes domestic and foreign brands affiliated with the Detroit Three. [Return to table](#)

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

[Content redacted.]

Figure: Light Vehicle Market Shares

Line chart, by percent, 2002 to August 2009. There are two series, "Detroit Three domestically produced" and "All domestically produced". Detroit Three begins at about 60 and generally increases to about 64 by late 2002. It then generally decreases to about 42 by mid-2008, generally increases to about 52 by 2008, and generally decreases to end at about 40. All domestically produced begins at about 80 and fluctuates but generally increases to about 82.5 by mid-2005. It then generally decreases too end at about 72.3.

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

Figure: Car-Buying Attitudes

Line chart, 2002 to September 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. Appraisal of car-buying conditions begins at about 155 and generally decreases to about 140 by early 2003. It then generally increases to about 160 by late 2003, and generally decreases to about 90 by mid-2008. It then generally increases to about 140 by mid-2009, and generally decreases to end at about 124. Good time to buy: low prices begins at about 36 and generally decreases to about 28 by late 2002. It then generally increases to about 56 by 2005, and generally decreases to about 30 by 2006. It then generally increases to about 65 by 2009, and generally decreases to end at about 50.

Note: September 2009 values are preliminary.

Source: Reuters/University of Michigan Surveys of Consumers.

Figure: Average Value of Incentives on Light Vehicles

Line chart, by current dollars per vehicle, ratio scale, 2004 to September 6, 2009. The series begins at about 2200 and generally increases to about 2900 by 2004. It then generally decreases to about 1100 by late 2006, and generally increases to about 2420 by late 2008. It then generally decreases to end at about 1590.

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.

Production of Domestic Light Vehicles

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

Item	2009				2009			
	Q1	Q2	Q3	Q4	May	June	July	Aug.
U.S. production ¹	4.4	4.4	6.3	6.8	4.2	4.0	5.7	6.4
Autos	1.7	1.8	2.6	2.8	1.8	1.8	2.3	2.6
Light trucks	2.8	2.5	3.8	4.0	2.4	2.2	3.5	3.8
Days' supply ²	93	70	n.a.	n.a.	76	70	55	36
Autos	93	78	n.a.	n.a.	84	76	55	32
Light trucks	93	64	n.a.	n.a.	70	64	55	41
Inventories ³	2.05	1.63	n.a.	n.a.	1.83	1.63	1.50	1.20
Autos	.92	.82	n.a.	n.a.	.88	.82	.75	.56
Light trucks	1.13	.81	n.a.	n.a.	.95	.81	.75	.64
Memo: U.S. production, total motor vehicles ⁴	4.6	4.5	6.5	6.9	4.3	4.1	5.9	6.6

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

1. Production rates for the third and fourth quarters of 2009 reflect the latest industry schedules. [Return to table](#)

2. Quarterly values are calculated with end-of-period stocks and average reported sales. [Return to table](#)

3. End-of-period stocks. [Return to table](#)

4. Includes medium and heavy trucks. [Return to table](#)

n.a. Not available. [Return to table](#)

Source: Ward's Communications.

Figure: Inventories of Light Vehicles

Line chart, by millions of units, 1998 to August 2009. The series begins at about 2.8 and generally decreases to about 2.5 by mid-1998. It then generally increases to about 3.8 by 2000, and generally decreases to about 2.4 by late 2001. It then generally increases to about 3.4 by 2004, and generally decreases to end at about 1.25.

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

Figure: Days' Supply of Light Vehicles

Line chart, by days, 1998 to August 2009. There are two series, "Using sales in current month" and "Using 3-month moving average of sales". These two series track closely together throughout the chart, beginning at about 68. They then generally decrease to about 54 by mid-1998, and generally increase to about 79 by late 2000. They then generally decrease to about 40 by 2001, and generally increase to about 83 by mid-2004. They then generally decrease to about 47 by mid-2005, and generally increase to about 100 by early 2009. They then generally decrease to end at about 37.

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

Real Personal Consumption Expenditures

(Percent change from preceding comparable period)

Category	2008	2009		2009		
	H2	Q1	Q2	June	July	Aug.
	Annual rate			Monthly rate		
Total real PCE¹	-3.3	.6	-1.0	.1	.2	n.a.
Motor vehicles	-31.1	9.6	-6.1	2.4	8.7	18.0
Goods ex. motor vehicles	-6.6	1.9	-2.9	.0	-.2	1.0
Services	-.4	-.3	.2	.1	.1	n.a.
Ex. energy	-.5	-.2	.7	.1	.2	n.a.
Memo:						
Real PCE control ²	-6.8	1.3	-2.5	.1	.0	.9
Nominal retail control ³	-4.4	1.9	-2.8	.1	-.3	.7

1. The values for Q2, June, July, and August are staff estimates based on available data. The semiannual values are Q4/Q2. [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.

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

Figure: Change in Real PCE Goods

Line chart showing 6-month moving average, by percent, 1991 to August 2009. A vertical line indicates the NBER Peak in December 2007. The series begins at about -0.55 and generally increases to about 0.72 by early 1999. It then generally decreases to about -0.62 by early 2009, and generally increases to end at about -0.02. It is at about 0.2 at the time of the NBER peak.

There is a second line chart, by percent, 2006 to August 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 0.3 and generally decreases to about 0.1 by mid-2006. It then generally increases to about 0.4 by 2006, and generally decreases to about -0.6 by late 2008. It then generally increases to end at about -0.05. Monthly begins at about 1.4 and generally decreases to about -0.65 by 2006. It then generally increases to about 1.2 by late 2006, and generally decreases to about -1.9 by late 2008. It then generally increases to end at about 2.4.

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.

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

Figure: Change in Real PCE Services

Line chart showing 6-month moving average, by percent, 1990 to July 2009. A vertical line indicates the NBER Peak in December 2007. The series begins at about 0.37 and generally decreases to about -0.07 by early 1991. It then generally increases to about 0.5 by early 2000, and generally decreases to about 0.06 by 2001. It then generally increases to about 0.34 by late 2004, and generally decreases to about -0.09 by 2008. It then generally increases to end at about 0.02. It is at about 0.1 at the time of the NBER peak.

There is a second line chart, by percent, 2006 to July 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 0.16 and generally increases to about 0.3 by early 2007. It then generally decreases to about -0.1 by 2008, and generally increases to end at about -0.0. Monthly begins at about -0.12 and generally increases to about 0.59 by early 2006. It then fluctuates but generally decreases to about -0.35 by 2008, and generally increases to about 0.28 by 2008. It then generally decreases to about -0.1 by late 2008, and generally 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.

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

Fundamentals of Household Spending

Figure: Household Net Worth and Dow Jones Total Market Index

Line chart, 1999 to 2009. There are two series, "Ratio of household net worth to DPI", a ratio, and "Total Market Index", an index. These two series use two different scales. Ratio of household net worth to DPI begins at about 5.75 and generally increases to about 6.7 by late 1999. It then generally decreases to about 5.0 by 2002, and generally increases to about 6.4 by early 2007. It then generally decreases to about 4.5 by early 2009, and generally increases to end at about 4.7 by 2009:Q2. Total Market Index begins at about 11500 and generally increases to about 14500 by 2000. It then generally decreases to about 7700 by 2002, and generally increases to about 15800 by 2007. It then generally decreases to about 7600 by early 2009, and generally increases to end at about 10600 by September 15, 2009.

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

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

Figure: Change in Real Disposable Personal income

Line chart, by 12-month percent change, 1999 to July 2009. The series begins at about 4.5 and generally decreases to about 2 by 1999. It then generally increases to about 6 by 2000, and generally decreases to about 0.6 by late 2002. It then generally increases to about 5 by late 2006, and generally decreases to about -0.5 by early 2008. It then generally increases to about 4.8 by 2008, generally decreases to about -1.8 by mid-2009, and generally increases to end at about 0.6.

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

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

Figure: Personal Saving Rate

Line chart, by percent, 1999 to July 2009. The series begins at about 4.6 and generally decreases to about 2 by 1999. It then generally increases to about 4.8 by 2001, and generally decreases to about 1 by late 2001. It then generally increases to about 4.4 by 2002, and generally decreases to about 0.7 by 2005. It then generally increases to about 6 by 2009, and generally decreases to end at about 4.2.

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

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

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

Line chart, by percent, 1999 to September 15, 2009. There are two series, "Treasury yield" and "Federal funds rate". Treasury yield begins at about 4.7 and generally increases to about 6.8 by early 2000. It then generally decreases to about 2.1 by late 2008, and generally increases to end at about 3.5. Federal funds rate begins at about 4.7 and generally increases to about 6.5 by 2000. It then generally decreases to about 1 by 2003, and generally increases 5.2 by 2006. It then generally decreases to end at about 0.1.

Source: Federal Reserve Board.

Figure: Consumer Confidence

Line chart, 1990 to 2009. A vertical line indicates the NBER Peak in December 2007. There are two series, "Reuters/Michigan", 1966=100, and "Conference Board", 1985=100. These two series use two difference scales. Reuters/Michigan begins at about 93 and generally decreases to about 62 by 1990. It then generally increases to about 112 by early 2000, and generally decreases to about 55 by late 2008. It then generally increases to end at about 70 by September. It is at about 92 at the time of the NBER peak. Conference Board begins at about 106 and generally decreases to about 48 by early 1992. It then generally increases to about 144 by early 2000, and generally decreases to about 62 by 2003. It then generally increases to about 112 by 2007, and generally decreases to about 25 by early 2009. It then generally increases to end at about 52 by August. It is at about 90 at the time of the NBER peak.

Note: September 2009 value is preliminary. 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.

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

Private Housing Activity

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



Sector	2008					
		Q1	Q2	May	June	July
<i>All units</i>						
Starts	.91	.53	.54	.55	.59	.58
Permits	.91	.53	.53	.52	.57	.56
<i>Single-family units</i>						
Starts	.62	.36	.43	.41	.48	.49
Permits	.58	.36	.41	.41	.43	.46
Adjusted permits ¹	.58	.37	.42	.42	.45	.47
New homes						
Sales	.49	.34	.37	.36	.40	.43
Months' supply ²	10.68	11.61	9.55	9.71	8.51	7.51
Existing homes						
Sales	4.35	4.12	4.24	4.22	4.33	4.61
Months' supply ²	9.98	9.69	8.80	8.82	8.39	8.03
<i>Multifamily units</i>						
Starts	.28	.17	.11	.14	.11	.09
Built for rent	.22	.14	.10	n.a.	n.a.	n.a.
Built for sale	.07	.03	.02	n.a.	n.a.	n.a.
Permits	.33	.17	.12	.11	.14	.10
<i>Condos and co-ops</i>						
Existing home sales	.56	.47	.52	.50	.56	.63

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

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

n.a. Not available.

Source: Census Bureau.

Figure: Private Housing Starts and Permits

Line chart, by millions of units (seasonally adjusted annual rate), 1999 to July 2009. There are three series, "Single-family starts", "Single-family adjusted permits", and "Multifamily starts". Single-family starts and Single-family adjusted permits track closely together throughout the chart. They begin at about 1.34 and generally decrease to about 1.18 by mid-2000. They then generally increase to about 1.82 by 2005, and generally decrease to end at about 0.5. Multifamily starts begins at about 0.4 and generally decreases to about 0.3 by mid-1999. It then generally increases to about 0.5 by early 2000, and fluctuates but generally decreases to end at about 0.1.

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

Source: Census Bureau.

Indicators of Single-Family Housing

Figure: New Single-Family Home Sales

Line chart, by millions of units (annual rate), 2001 to 2009. There are two series, "Total" and "Large homebuilders". These two series use two different scales. Total begins at about 0.95 and generally increases to about 1.4 by mid-2005. It then generally decreases to about 0.33 by early 2009, and generally increases to end at about 0.44 by July. Large homebuilders begins at about 0.23 and generally increases to about 0.37 by mid-2005. It then generally decreases to end at about 0.1 by August.

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

Figure: Inventories of New Homes and Months' Supply

Line chart, 2001 to July 2009. There are two series, "Inventories of new homes", which is by thousands of units, and "Months' supply", which is by months. These two series use two different scales. Inventories of new homes begins at about 300 and generally increases to about 575 by mid-2006. It then generally decreases to end at about 270. Months' supply begins at about 3.8 and generally increases to about 4.3 by 2001. It then generally decreases to about 3.5 by 2003, and generally increases to about 11.2 by early 2009. It then generally decreases to end at about 8.2.

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

Source: Census Bureau.

Figure: Existing Single-Family Home Sales

Line chart, 2001 to July 2009. There are two series, "Existing home sales", which is by millions of units (annual rate), and "Pending home sales", an index (2001=100). Existing home sales begins at about 4.55 and generally increases to about 6.3 by 2005. It then generally decreases to about 4.0 by early 2009, and generally increases to end at about 4.6. Pending home sales begins at about 103 and generally increases to about 107 by early 2001. It then generally decreases to about 90 by 2001, and generally increases to about 127 by 2005. It then generally decreases to about 80 by early 2009, and generally increases to end at about 97.

Source: National Association of Realtors.

Figure: Mortgage Rates

Line chart showing 30-year conforming FRM, by percent, 2001 to September 9, 2009. The series begins at about 7.1 and generally decreases to about 5.25 by mid-2003. It then generally increases to about 6.75 by mid-2006, and generally decreases to about 4.75 by 2009. It then generally increases to about 5.5 by 2009, and generally decreases to end at about 5.1.

Note: 2-week moving average.

Source: Federal Home Loan Mortgage Corporation.

Figure: Prices of Existing Homes

Line chart, by percent change from year earlier, 2001 to 2009. There are three series, "LP price index", "Monthly FHFA purchase-only index", and "20-city S&P/Case-Shiller monthly price index". LP price index begins at about 9.8 and generally increases to about 17.5 by early 2005. It then generally decreases to about -20 by early 2009, and generally increases to end at about -12.5 by July. Monthly FHFA purchase-only index begins at about 7 and generally increases to about 10 by 2005. It then generally decreases to about -8 by late 2008, and generally increases to end at about -5 by June. 20-city S&P/Case-Shiller monthly price index begins at about 12.5 and generally decreases to about 7.5 by early 2002. It then generally increases to about 17.5 by 2004, and generally decreases to about -18 by late 2008. It then generally increases to end at about -15.

Note: LoanPerformance plans to publish its price index in late September. Data are confidential until then.

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

Figure: House Price Expectations

Line chart, a diffusion index, 2007 to September 2009. There are two series, "5 years ahead" and "1 year ahead". 5 years ahead begins at about 65 and generally decreases to about 43 by 2008. It then generally increases to about 64 by 2009, and generally decreases to end at about 55. 1 year ahead begins at about 30 and generally decreases to about -20 by 2009. It then generally increases to end at about 10.

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

Source: Reuters/University of Michigan Surveys of Consumers.

Orders and Shipments of Nondefense Capital Goods

(Percent change; seasonally adjusted current dollars)

Category	2009				
	Q1	Q2	May	June	July
	Annual rate		Monthly rate		
Shipments	-28.1	-17.5	-1.0	1.1	1.1
Excluding aircraft	-35.4	-14.4	-.4	1.4	.8
Computers and peripherals	-.8	-8.1	-.5	.3	2.7
Communications equipment	-47.3	-3.5	-.7	10.8	6.6
All other categories ¹	-36.7	-15.9	-.4	.7	.1
Orders	-49.1	13.3	9.1	-.2	8.6
Excluding aircraft	-44.2	3.8	4.3	3.8	-.3
Computers and peripherals	-18.4	13.0	15.9	.5	-2.9
Communications equipment	-58.7	48.2	7.2	10.2	5.1
All other categories ¹	-44.7	-.6	2.9	3.5	-.6

Memo:					
Shipments of complete aircraft ²	40.3	36.8	35.8	36.0	34.1

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

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

Source: Census Bureau.

Figure: Communications Equipment

Line chart, by billions of chained (2005) dollars, ratio scale, 2000 to July 2009. There are two series, "Shipments" and "Orders". Shipments begins at about 9 and generally increases to about 10 by late 2000. It then generally decreases to about 5 by early 2003, and generally increases to about 7 by mid-2006. It then generally decreases to about 5 by 2009, and generally increases to end at about 6.5. Orders begins at about 10 and generally increases to about 14 by 2000. It then generally decreases to about 2.8 by 2002, and generally increases to about 9 by early 2006. It then generally decreases to about 4.5 by early 2009, and generally increases to end at about 7.5.

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

Source: Census Bureau.

Figure: Non-High-Tech, Nontransportation Equipment

Line chart, by billions of chained (2005) dollars, ratio scale, 2000 to July 2009. There are two series, "Orders" and "Shipments". Orders begins at about 46.5 and generally decreases to about 36 by early 2002. It then generally increases to about 49 by 2006, and generally decreases to end at about 35. Shipments begins at about 44 and generally increases to about 45 by 2000. It then generally decreases to about 37 by late 2001, and generally increases to about 46 by late 2006. It then generally decreases to end at about 36.

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

Source: Census Bureau.

Figure: Computers and Peripherals

Line chart, 2000 to 2009. There are two series, "Industrial production", an index (2000=100), and "Real M3 shipments", which is by billions of chained (2005) dollars, ratio scale. These two series use two different scales. Industrial production begins at about 98 and generally increases to about 230 by 2008. It then generally decreases to end at about 164 by August. Real M3 shipments begins at about 8.4 and generally increases to about 16.6 by 2006. It then generally decreases to about 12.7 by late 2006, and generally increases to about 18 by early 2008. It then generally decreases to about 14 by late 2008, and generally increases to end at about 16 by July.

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, by thousands of units, ratio scale, 2000 to August 2009. There are two series, "Net new orders of class 5-8 trucks" and "Sales of class 4-8 trucks". Net new orders of class 5-8 trucks begins at about 400 and generally decreases to about 290 by 2001. It then generally increases to about 540 by 2002, and generally decreases to about 255 by 2002. It then generally increases to about 960 by 2006, and generally decreases to about 160 by early 2009. It then generally increases to end at about 280. Sales of class 4-8 trucks begins at about 530 and generally decreases to about 290 by early 2003. It then generally increases to about 560 by late 2006, and generally decreases to end at about 190.

Note: Annual rate, FRB seasonals.

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

Fundamentals of Equipment and Software Investment

Note: In each panel, shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. A vertical line 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, by 4-quarter percent change, 1990 to 2009:Q2. The series begins at about 3 and generally decreases to about -2 by early 1991. It then generally increases to about 6 by 2000, and generally decreases to about 0 by late 2001. It then generally increases to about 5 by early 2004, and generally decreases to end at about -5.5. It is at about 2.5 at the time of the NBER peak.

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

Figure: User Cost of Capital

Line chart, by 4-quarter percent change, 1990 to 2009:Q2. There are two series, "Non-high-tech" and "High-tech". Non-high-tech begins at about -1.5 and generally increases to about 1.5 by late 1990. It then generally decreases to about -7.5 by 1991, and generally increases to about 13 by late 1994. It then generally decreases to about -11.5 by 2003, and generally increases to about 19 by late 2008. It then generally decreases to end at about 12. It is at about 0 at the time of the NBER peak. High-tech begins at about -7 and generally increases to about -6.5 by late 1990. It then generally decreases to about -12.5 by 1992, and generally increases to about -1 by late 1994. It then generally decreases to about -14 by 2003, and generally increases to about 2 by late 2008. It then generally decreases to end at about -2.5. It is at about -5 at the time of the NBER peak.

Source: Staff calculation.

Figure: Corporate Bond Yields

Line chart, by percent, 1990 to September 2009. There are two series, "10-year high-yield" and "10-year BBB". 10-year high-yield begins at about 14.5 and generally decreases to about 9 by 1996. It then generally increases to about 13.8 by late 1999, and generally decreases to about 7.2 by early 2004. It then generally increases to about 17.9 by late 2008, and generally decreases to end at about 10.1. It is at about 9.7 at the time of the NBER peak. 10-year BBB begins at about 10 and generally decreases to about 7 by 1992. It then generally increases to about 9 by late 1993, and generally decreases to about 5.2 by late 2003. It then generally increases to about 10 by late 2008, and generally decreases to end at about 6.5. It is at about 6.5 at the time of the NBER peak.

Note: End of month. September value as of September 15.

Source: Merrill Lynch.

Figure: NFIB: Survey on Loan Availability

Line chart, by percent, 1990 to August 2009. There are two series, "Credit expected to be tighter" and "Credit more difficult to obtain". These two series use two different scales. Credit expected to be tighter begins at about 8 and generally increases to about 12.5 by early 1991. It then generally decreases to about 0 by early 1997, and generally increases to about 16.5 by late 2008. It then generally decreases to end at about 12. It is at about 8.5 at the time of the NBER peak. Credit more difficult to obtain begins at about 7 and generally increases to about 13 by early 1991. It then generally decreases to about 0 by 1998, and generally increases to end at about 13.8. It is at about 6.5 at the time of the NBER peak.

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, a diffusion index, 1990 to August 2009. There are two series, "ISM" and "Philadelphia Fed". These two series use two different scales. ISM begins at about 46 and generally decreases to about 37.5 by early 1991. It then generally increases to about 57.5 by late 1993, and generally decreases to about 37.5 by late 2000. It then generally increases to about 58 by 2003, generally decreases to about 33 by late 2008, and generally increases to end at about 54. It is at about 47.5 at the time of the NBER peak. Philadelphia Fed begins at about 40 and generally decreases to about 25 by 1990. It then generally increases to about 70 by late 1992, and generally decreases to about 33 by early 2000. It then generally increases to about 68 by early 2003, generally decreases to about 30 by late 2008, and generally increases to end at about 52. It is at about 48 at the time of the NBER peak.

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

Nonresidential Construction and Indicators

(All spending series are seasonally adjusted at an annual rate; nominal CIPPI deflated by BEA prices through Q1 and by staff projection thereafter)

Figure: Total Structures

Line chart, by billions of chained (2005) dollars, 1999 to July 2009. The series begins at about 324 and generally increases to about 361 by 2000. It then generally decreases to about 250 by 2004, and generally increases to about 360 by 2008. It then generally decreases to end at about 320.

Source: Census Bureau.

Figure: Office, Commercial, Communication, and Other

Line chart, by billions of chained (2005) dollars, 1999 to July 2009. There are four series, "Other", "Commercial", "Office", and "Communication". Other begins at about 88 and generally increases to about 90 by 2000. It then generally decreases to about 75 by 2005, and generally increases to about 107 by 2008. It then generally decreases to end at about 93. Commercial begins at about 75 and generally increases to about 86 by early 2000. It then generally decreases to about 65 by early 2003, and generally increases to about 79 by 2007. It then generally decreases to end at about 45. Office begins at about 60 and generally decreases to

about 55 by early 2000. It then generally increases to about 74 by late 2000, and generally decreases to about 34 by 2003. It then generally increases to about 48 by 2008, and generally decreases to end at about 35. Communication begins at about 17 and generally increases to about 27 by 2000. It then generally decreases to about 15 by early 2004, and generally increases to about 25 by 2008. It then generally decreases to end at about 16.

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

Source: Census Bureau.

Figure: Manufacturing and Power

Line chart, by billions of chained (2005) dollars, 1999 to July 2009. There are two series, "Power" and "Manufacturing". Power begins at about 32 and generally increases to about 38 by early 1999. It then generally decreases to about 22.5 by 1999, and generally increases to about 53.5 by late 2001. It then generally decreases to about 23 by 2004, and generally increases to end at about 63. Manufacturing begins at about 50 and generally decreases to about 22.5 by early 2003. It then generally increases to end at about 67.5.

Source: Census Bureau.

Figure: Drilling and Mining Indicators

Line chart, 1999 to 2009. There are two series, "Footage drilled", which is by millions of feet, and "Drilling rigs in operation", which is by number. These two series use two different scales. Footage drilled begins at about 7.5 and generally increases to about 32 by late 2008. It then generally decreases to end at about 14. Drilling rigs in operation begins at about 600 and generally increases to about 1290 by early 2001. It then generally decreases to about 800 by 2002, and generally increases to about 1930 by 2008. It then generally decreases to end at about 990.

Note: The September readings for drilling rigs are based on data through September 11, 2009. Both series are seasonally adjusted by FRB staff.

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

Figure: Vacancy Rates

Line chart, by percent, 1999 to 2009:Q2. There are three series, "Office", "Industrial", and "Retail". Office begins at about 9.5 and generally decreases to about 8 by early 2000. It then generally increases to about 17 by early 2003, and generally decreases to about 12.5 by mid-2007. It then generally increases to end at about 15.5. Industrial begins at about 7.8 and generally decreases to about 7 by 2000. It then generally increases to about 11.8 by 2003, and generally decreases to about 9.2 by 2007. It then generally increases to end at about 13.5. Retail begins at about 8 and generally decreases to about 7 by late 2000. It then generally increases to about 8.4 by 2002, and generally decreases to about 7.5 by early 2006. It then generally increases to end at about 11.8.

Note: Industrial space includes both manufacturing structures and warehouses.

Source: Torto Wheaton Research.

Figure: Architectural Billings and Nonresidential Construction Employment

Line chart, 1999 to 2009. There are two series, "Billings", a diffusion index, and "Change in employment", which is by percent. These two series use two different scales. Billings begins at about 55 and generally decreases to about 43.5 by late 2001. It then generally increases to about 59 by 2005, and generally decreases to about 33.5 by early 2009. It then generally increases to end at about 41.5 by July. Change in employment begins at about 0.0 by early 2001, and generally decreases to about -0.75 by 2002. It then generally increases to about 0.8 by 2006, and generally decreases to about -2.0 by early 2009. It then generally increases to end at about -1.25.

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

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

Nonfarm Inventory Investment

(Billions of dollars; seasonally adjusted annual rate)

Measure and sector	2008			2009		
	Q4	Q1	Q2	May	June	July
Real inventory investment (chained 2005 dollars)						
Total nonfarm business	-35.7	-114.9	-163.2	...	...	...
Motor vehicles	-.7	-63.6	-48.1	...	...	...
Nonfarm ex. motor vehicles	-35.1	-51.3	-115.1	...	...	...
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	-19.8	-49.3	-111.0	-86.3	-138.2 ^e	n.a.
Manufacturing	8.2	-28.9	-40.0	-26.7	-45.3 ^e	n.a.
Wholesale trade ex. motor vehicles & parts	-10.2	-8.8	-52.4	-36.8	-81.8 ^e	n.a.

Retail trade ex. motor vehicles & parts	-17.8	-11.6	-18.6	-22.8	-11.0 ^e	n.a.
<i>Book-value inventory investment (current dollars)</i>						
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	-155.9	-143.2	-150.2	-124.9	-178.0	-121.4
Manufacturing	-65.2	-77.3	-63.6	-48.4	-68.9	-43.8
Wholesale trade ex. motor vehicles & parts	-55.7	-47.3	-62.9	-49.8	-90.6	-55.3
Retail trade ex. motor vehicles & parts	-34.9	-18.6	-23.7	-26.8	-18.5	-22.3

n.a. Not available.

... Not applicable.

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

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

Figure: Inventory Ratios ex. Motor Vehicles

Line chart, by months, 2000 to 2009. There are two series, "Staff flow-of-goods system" and "Census book-value data". Staff flow-of-goods system begins at about 1.77 and generally decreases to about 1.53 by late 2007. It then generally increases to end at about 1.65 by August. Census book-value data begins at about 1.35 and generally increases to about 1.41 by 2001. It then generally decreases to about 1.17 by late 2005, and generally increases to about 1.38 by early 2009. It then generally decreases to about 1.32 by July.

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, an index, 2000 to August 2009. The series begins at about 46.8 and generally increases to about 56 by late 2000. It then generally decreases to about 37.5 by 2004, and generally increases to about 57.5 by late 2008. It then generally decreases to end at about 39.

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

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

Federal Government Budget

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

Figure: Surplus or Deficit (-)

Line chart, by billions of dollars, 1996 to August 2009. Data are 12-month moving sums. The series begins at about -160 and generally increases to about 290 by 2001. It then generally decreases to about -440 by 2004, and generally increases to about -150 by 2007. It then generally decreases to end at about -1095. There is a second series (thin line) that begins at about -450 in late 2008, and generally decreases to end at about -1330.

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

Figure: Outlays and Receipts

Line chart, by percent change from year earlier, 1996 to August 2009. Data are 12-month moving sums. There are two series, "Receipts" and "Outlays". Receipts begins at about 7.5 and generally increases to about 10 and generally decreases to about 5 by 1999. It then generally increases to about 12 by 2000, and generally decreases to about -12.5 by mid-2002. It then generally increases to about 15 by 2005, and generally decreases to end at about -15. Outlays begins at about 4 and generally decreases to about 1.5 by 1998. It then generally increases to about 8 by 2006, and generally decreases to about 2.8 by 2007. It then generally increases to end at about 10.

Recent Federal Outlays and Receipts

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

Function or source	Sum of July-August			12 months ending in August		
	2008	2009	Percent change	2008	2009	Percent change
Outlays	496.8	556.3	12.0	2,939.4	3,238.7	10.2
Net interest	49.2	40.6	-17.6	247.9	204.0	-17.7

National defense	105.3	108.0	2.6	615.2	660.4	7.4
Major transfers ¹	270.4	320.0	18.3	1,633.9	1,866.4	14.2
Other	71.9	87.8	22.1	442.4	507.9	14.8
Receipts	317.5	297.0	-6.4	2,536.8	2,157.9	-14.9
Individual income and payroll taxes	266.3	254.1	-4.6	1,985.7	1,791.6	-9.8
Corporate income taxes	14.2	7.5	-47.0	327.4	163.1	-50.2
Other	37.0	35.4	-4.5	223.7	203.3	-9.1
Surplus or deficit (-)	-179.3	-259.3	...	-402.7	-1,080.8	...
Memo:						
Unadjusted surplus or deficit (-)	-214.7	-292.1	...	-387.7	-1,332.6	...

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

... Not applicable.

CBO Baseline Budget Projections and Economic Assumptions

	Actual 2008	2009	2010	2011	2012	2013	2014	Average 2015-19
Budget projections¹ (fiscal years)	Billions of dollars							
Receipts	2524	2100	2264	2717	3010	3221	3403	3913
Outlays	2983	3688	3644	3638	3600	3759	3961	4542
Surplus or deficit (-)	-459	-1587	-1381	-921	-590	-538	-558	-630
Debt held by public ²	5803	7612	8868	9782	10382	10870	11439	14324
	Percent of GDP							
Receipts	17.7	14.9	15.7	18.1	19.1	19.4	19.6	20.0
Outlays	21.0	26.1	25.2	24.3	22.8	22.6	22.9	23.2
Surplus or deficit (-)	-3.2	-11.2	-9.6	-6.1	-3.7	-3.2	-3.2	-3.2
Debt held by public ²	40.8	53.8	61.4	65.2	65.9	65.5	66.0	67.8
Economic assumptions³ (calendar years)	Percent change, year over year							
Nominal GDP	3.3	-.7	2.9	4.0	5.4	5.2	4.1	4.1
Real GDP	1.1	-2.5	1.7	3.5	5.0	4.5	3.0	2.4
PCE prices	3.3	.4	1.5	.8	.7	.8	1.1	1.7
Core PCE prices	2.2	1.7	1.1	.6	.6	.8	1.1	1.6
CPI-U	3.8	-.5	1.7	1.3	1.0	1.1	1.5	2.0
Core CPI-U	2.3	1.7	1.3	1.0	1.0	1.2	1.5	2.0
	Percent, annual average							
Unemployment rate	5.8	9.3	10.2	9.1	7.2	5.6	4.9	4.8
Treasury yields								
3-month	1.4	.2	.6	1.7	3.1	4.1	4.5	4.7
10-year	3.7	3.3	4.1	4.4	4.7	5.0	5.3	5.6

1. The CBO calculates the cost of the TARP by estimating the present value (or accrual value) of all of the program's financial transactions, adjusted for market risk. Also, the CBO includes all of the costs and revenues associated with the GSEs (Fannie Mae and Freddie Mac) in the budget in a manner consistent with its assumption that these institutions should be treated as part of the federal government. [Return to table](#)

2. Debt held by the public at the end of the period. [Return to table](#)

3. The CBO did not update its economic assumptions to reflect the comprehensive NIPA revision released by the BEA in July 2009. The CBO still used a reference year of 2000 for its price and GDP projections, and its projections also do not reflect the BEA's reclassification affecting core PCE prices. [Return to table](#)

Administration Budget Deficit Projections and Economic Assumptions

	Actual 2008	2009	2010	2011	2012	2013	2014	Average 2015-19
Budget projections (fiscal years)	Billions of dollars							
Receipts	2524	2074	2264	2591	2945	3161	3365	3987
Outlays	2983	3653	3766	3715	3741	3936	4143	4802
Deficit (-)	-459	-1580	-1502	-1123	-796	-775	-778	-815
Total debt held by public ¹	5803	7856	9575	10590	11443	12281	13126	17493
	Percent of GDP							
Receipts	17.7	14.7	15.7	17.1	18.4	18.6	18.7	19.0
Outlays	21.0	25.9	26.1	24.6	23.3	23.2	23.0	22.9
Deficit (-)	-3.2	-11.2	-10.4	-7.4	-5.0	-4.6	-4.3	-3.9
Total debt held by public ¹	40.8	55.7	66.3	70.0	71.4	72.3	72.9	76.5
Economic assumptions (calendar years)	Percent change, fourth quarter to fourth quarter							
Nominal GDP	1.2	.2	4.1	5.8	6.1	6.1	5.8	4.7
Real GDP	-1.9	-1.7	2.9	4.3	4.3	4.3	4.0	2.9
GDP price index	1.9	1.4	1.2	1.4	1.7	1.7	1.7	1.8
CPI-U	1.5	.5	1.4	1.7	2.0	2.0	2.0	2.1
	Percent, annual average							
Unemployment rate	5.8	9.3	9.8	8.6	7.7	6.8	5.9	5.4
Treasury yields								
3-month	1.4	.2	1.3	2.6	3.8	4.0	4.0	4.0
10-year	3.7	3.6	4.5	4.9	5.2	5.2	5.2	5.2

1. Debt held by the public at the end of the period. [Return to table](#)

Source: Office of Management and Budget (2009), *Mid-Session Review: Budget of the U.S. Government, Fiscal Year 2010* (August).

State and Local Indicators

Figure: Real Spending on Consumption and Investment

Line chart, by percent change, annual rate, 1999 to 2009:Q2. There are two series, "Spending", and "4-quarter moving average". Spending begins at about 3.5 and generally increases to about 5 by late 1999. It then generally decreases to about 0 by 2000, and generally increases to about 9 by 2001. It then generally decreases to about -2.8 by mid-2001, and generally increases to about 8.8 by late 2001. It then generally decreases to about -1.5 by late 2008, and generally increases to end at about 3.8. 4-quarter moving average begins at about 5.8 and generally decreases to about -1 by 2005. It then generally increases to about 2 by early 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, by thousands of jobs, monthly average, late 1998 to 2009:Q3. The series begins at about 25 and generally increases to about 40 by early 1999. It then generally decreases to about 25 by 2000, and generally increases to about 46 by 2001. It then generally decreases to about 0 by 2003, and generally increases to about 22 by 2008. It then generally decreases to end at about -25.

Note: Q3 is the average of July and August.

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

Figure: Real Construction

Line chart, by billions of chained (2005) dollars, annual rate, 1999 to 2009:Q2. The series begins at about 195 and generally increases to about 238 by early 2002. It then generally decreases to about 215 by late 2004, and generally increases to about 232 by late 2007. It then generally decreases to about 218 by early 2009, and generally increases to end at about 230. July 2009 is marked in the time series at about 235.

Note: Nominal CPIP deflated by BEA prices through Q2 and by staff projection thereafter.

Source: Census Bureau, Construction Spending.

Figure: State Revenues

Line chart, by percent change from year earlier, 1999 to 2009:Q1. There are two series, "Individual and corporate income taxes" and "Total revenues". Individual and corporate income taxes begins at about 8.5 and generally decreases to about 4 by early 1999. It then generally increases to about 17.5 by 2000, and generally decreases to about -20 by 2002. It then generally increases to about 27 by 2005, and generally decreases to end at about -17.5. Total revenues begins at about 6.5 and generally decreases to about 4 by early 1999. It then generally increases to about 12.5 by early 2000, and generally decreases to about -10 by 2002. It then generally increases to about 16.5 by 2005, and generally decreases to end at about -12.

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

Figure: Local Revenues

Line chart, by percent change from year earlier, 1999 to 2009:Q1. There are two series, "Property taxes" and "Total revenues". Property taxes begins at about 5.5 and generally decreases to about -0.5 by 2000. It then generally increases to about 23 by 2002, and generally decreases to about -7.5 by 2003. It then generally increases to about 16 by 2003, and generally decreases to about 2.5 by 2004. It then generally increases to about 10.5 by 2008, and generally decreases to end at about 7.5. The total revenues curve fluctuates widely and tracks the property taxes curve fairly closely. It begins at about 2.5, reaches a peak of about 15 in 2002, and decreases to about -5 in 2003 before recovering to about 13 later that year. It then generally decreases and ends at about 4 in 2009:Q1.

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	
	Aug. 2008	Aug. 2009	Annual rate		Monthly rate	
			May 2009	Aug. 2009	July 2009	Aug. 2009
CPI						
Total	5.4	-1.5	-2	4.9	.0	.4
Food	6.1	.4	-2.2	-.5	-.3	.1
Energy	27.2	-23.0	-18.9	57.1	-.4	4.6
Ex. food and energy	2.5	1.4	2.3	1.4	.1	.1
Core goods	.6	1.1	4.4	1.0	.2	-.3
Core services	3.3	1.6	1.5	1.6	.0	.2
Shelter	2.4	.9	1.1	-.2	-.2	.1
Other services	4.6	2.5	1.7	3.9	.3	.4
Memo: core ex. tobacco	2.5	1.2	1.5	1.3	.1	.1
Chained CPI (n.s.a.) ¹	4.6	-1.5	...	...	...	...
Ex. food and energy ¹	2.1	1.0	...	...	...	...
PCE prices ²						
Total	4.4	-.5	.2	3.8	.0	.4
Food and bev. at home	6.7	-.5	-4.3	-.9	-.4	.1
Energy	28.4	-23.9	-19.4	64.7	-.4	4.9
Ex. food and energy	2.7	1.3	1.8	1.5	.1	.1
Core goods	.6	1.1	3.6	-.1	-.1	-.1
Core services	3.4	1.5	1.2	2.1	.1	.2

Housing services	2.8	1.7	2.0	.3	.0	.1
Other services	3.5	1.4	1.0	2.6	.2	.3
Memo: core ex. tobacco	2.6	1.1	1.0	1.4	.1	.1
Core market-based	2.6	1.7	2.1	1.3	.1	.1
Core non-market-based	2.7	-.8	.2	2.8	.3	.2
<i>PPI</i>						
Total finished goods	9.7	-4.3	-2.1	11.0	-9	1.7
Food	9.0	-4.1	-3.4	.0	-1.5	.4
Energy	27.6	-21.1	-10.1	59.6	-2.4	8.0
Ex. food and energy	3.7	2.3	.5	2.4	-.1	.2
Core consumer goods	3.9	2.8	1.8	2.2	-.1	.1
Capital equipment	3.3	1.6	-1.0	2.3	-.2	.3
Intermediate materials	16.3	-12.3	-6.6	14.8	-.2	1.8
Ex. food and energy	11.8	-8.2	-5.2	4.8	.2	.6
Crude materials	35.4	-35.2	26.7	15.9	-4.5	3.8
Ex. food and energy	31.4	-30.0	19.4	57.2	2.9	6.0

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

2. PCE prices in August 2009 are staff estimates. [Return to table](#)

... Not applicable.

Source: For consumer price index (CPI) and producer price index (PPI), U.S. Dept. of Labor, Bureau of Labor Statistics; for personal consumption expenditures (PCE), U.S. Dept. of Commerce, Bureau of Economic Analysis.

Consumer Prices

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

Figure: PCE Prices

Line chart, by percent, 2000 to August 2009. There are two series, "Total PCE" and "Core PCE". Total begins at about 2.3 and generally increases to about 3 by 2000. It then generally decreases to about 0.7 by early 2002, and generally increases to about 4 by 2005. It then generally decreases to about 1.5 by late 2006, generally increases to about 4.5 by 2008, and generally decreases to end at about -0.5. Core begins at about 1.7 and generally increases to about 2.6 by 2002. It then generally decreases to about 1.5 by 2003, and generally increases to about 2.8 by 2008. It then 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, by percent, 2000 to 2009. There are three series, "PCE excluding food and energy", "Market-based components", and "Trimmed mean". PCE excluding food and energy begins at about 1.6 and generally increases to about 2 by 2001. It then generally decreases to about 1.2 by mid-2001, and generally increases to about 2.5 by 2002. It then generally decreases to about 1.4 by 2003, and generally increases to about 2.7 by 2008. It then generally decreases to end at about 1.4 by August. Market-based components begins at about 1.3 and generally increases to about 1.9 by 2001. It then generally decreases to about 1.2 by 2003, and generally increases to about 2.6 by 2008. It then generally decreases to end at about 1.7 by July. Trimmed mean begins at about 2 and generally increases to about 2.6 by 2001. It then generally decreases to about 1.8 by late 2003, and generally increases to about 3 by early 2007. It then generally decreases to end at about 1.7 by July.

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, by percent, 2000 to August 2009. 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 then generally decreases to about 1.1 by late 2003, and generally increases to about 3 by 2006. It then generally decreases to end at about 1.5. PCE begins at about 1.5 and generally increases to about 2 by mid-2001. It then generally decreases to about 1.2 by 2001, and generally increases to about 2.7 by mid-2008. It then generally decreases to end at about 1.4. CPI chained begins at about 1.8 by late 2000, and generally decreases to about 0.75 by late 2003. It then generally increases to about 2.7 by 2006, and generally decreases to end at about 1.

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, by percent, 2000 to August 2009. There are two series, "Services ex. energy" and "Goods ex. food and energy". Services begins at about 2.6 and generally increases to about 3 by 2001. It then generally decreases to about 1.9 by mid-2001, and generally increases to about 4.1 by late 2002. It then generally decreases to end at about 1. Goods begins at about -1 and generally increases to about 0 by early 2001. It then generally decreases to about -2.5 by 2003, and generally increases to end at about 1.5.

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

Figure: Total PCE

Line chart, by percent, 2000 to August 2009. There are two series, "Total PCE" and "3-month change, annual rate". Total PCE begins at about 2 and generally increases to about 3 by 2000. It then generally decreases to about 1 by late 2001, and generally increases to about 4.5 by 2008. It then generally decreases to end at about -1. 3-month change begins at about 3 and generally decreases to about -1.5 by late 2001. It then generally increases to about 8 by 2005, and generally decreases to about -7.8 by late 2008. It then generally increases to end at about 4.

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

Figure: PCE excluding Food and Energy

Line chart, by percent, 2000 to August 2009. There are two series, "PCE excluding Food and Energy" and "3-month change, annual rate". PCE excluding Food and Energy begins at about 1.5 and generally increases to about 2.7 by 2002. It then generally decreases to about 1.5 by 2003, generally increases to about 2.7 by 2008, and generally decreases to end at about 1.4. 3-month change begins at about 2.1 and generally increases to about 2.8 by early 2000. It then generally decreases to about -1.2 by 2001, and generally increases to about 4 by late 2001. It then fluctuates but generally decreases to about 0.2 by late 2008, and generally increases to end at about 1.5.

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, by cents per gallon, 2005 to September 7, 2009. Data are retail price less average spot crude price (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 increases to about 110 by early 2005. It then generally decreases to about 79 by mid-2005, and generally increases to about 167 by 2007. It then generally decreases to about 72 by mid-2008, and generally increases to about 158 by 2008. It then generally decreases to about 72 by 2009, and generally increases to end at about 90.

Figure: Gasoline Price Decomposition

Line chart, by cents per gallon, 2005 to September 7, 2009. There are three series, "Retail price", "Rack price", and "Average spot crude price". Retail price begins at about 195 and generally increases to about 300 by 2005. It then generally decreases to about 225 by late 2006, and generally increases to about 400 by mid-2008. It then generally decreases to about 178 by late 2008, and generally increases to end at about 250. Rack price begins at about 140 and generally increases to about 350 by mid-2008. It then generally decreases to about 118 by late 2008, and generally increases to end at about 195. Average spot crude price begins at about 98 and generally increases to about 330 by mid-2008. It then generally decreases to about 75 by late 2008, and generally increases to end at about 160.

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

Figure: Gasoline Inventories

Line chart, by millions of barrels, late 2005 to September 11, 2009. Data are adjusted for ethanol use. The series begins at about 197 and generally increases to about 232 by early 2007. It then generally decreases to about 198 by 2007, and generally increases to about 241 by early 2008. It then generally decreases to about 195 by 2008, and generally increases to end at about 212.

Note: Bounds are defined as the monthly mean over the preceding five years, plus or minus the standard deviation for each month. The bounds generally track the series throughout the chart, typically being about 20 million barrels wide, with the series typically being toward the center of the bounds. Monthly data through May 2009, weekly data thereafter. 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, by dollars per million BTU, 2005 to September 15, 2009. The series begins at about 5.5 and generally increases to about 15.5 by late 2005. It then generally decreases to about 4.2 by 2006, and generally increases to about 13.6 by 2008. It then generally decreases to end at about 3.5.

Note: National average spot price.

Source: Bloomberg.

Figure: PCE: Food at Home and Core Prices

Line chart, by 12-month percent change, 2005 to August 2009. There are two series, "Food and beverages" and "Ex. food and energy". Food and beverages begins at about 2.1 and generally increases to about 2.7 by 2005. It then generally decreases to about 0.9 by 2006, and generally increases to about 7 by 2008. It then generally decreases to end at about -0.4. Ex. food and energy begins at about 2.3 and remains about constant until 2007. It then generally increases to about 2.6 by mid-2008, and generally decreases to end at about 1.3.

Note: August 2009 plotted values are staff estimates.

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

Figure: Spot Prices of Agricultural Commodities

Line chart, by dollars per bushel, 2005 to September 15, 2009. There are three series, "Corn", "Soybeans", and "Wheat". There are two different scales, Soybeans and Wheat share one and Corn uses the other. Corn begins at about 2 and generally increases to about 7 by mid-2008. It then generally decreases to end at about 3.2. Soybeans begins at about 5.4 and generally increases to about 7 by mid-2005. It then generally decreases to about 5 by 2006, and generally increases to about 16 by mid-2008. It then generally decreases to about 8 by late 2008, and generally increases to end at about 10. Wheat begins at about 4 and generally increases to about 13.2 by early 2008. It then generally decreases to end at about 4.7.

Source: Commodity Research Bureau.

Broad Measures of Inflation

(Percent change, Q2 to Q2)

Measure	2006	2007	2008	2009
Product prices				
GDP price index	3.6	3.0	1.9	1.5
Less food and energy	3.6	2.7	2.4	.9
Nonfarm business chain price index	3.5	2.4	1.1	1.7
Expenditure prices				
Gross domestic purchases price index	3.9	2.8	3.5	-.2
Less food and energy	3.4	2.6	2.8	.8
PCE price index	3.2	2.4	3.8	-.2
Less food and energy	2.3	2.2	2.5	1.6
PCE price index, market-based components	3.3	2.3	3.7	-.1
Less food and energy	2.2	2.0	2.3	2.1
CPI	3.9	2.6	4.3	-.9
Less food and energy	2.5	2.3	2.3	1.8
Chained CPI	3.6	2.4	3.8	-1.2
Less food and energy	2.2	1.8	2.0	1.4
Median CPI	2.8	3.1	3.0	2.4
Trimmed mean CPI	2.6	2.7	3.0	1.9
Trimmed mean PCE	2.6	2.7	2.7	2.1

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	Reuters/Michigan Survey		Professional forecasters
		2	3	

inflation ¹		1 year		5 to 10 years		(10 years)_	
		Mean	Median	Mean	Median	CPI	PCE
2007:	Q4	4.0	4.1	3.3	2.9	2.4	2.1
2008:	Q1	4.1	4.2	3.3	3.0	2.5	2.2
	Q2	4.4	6.4	3.8	3.3	2.5	2.2
	Q3	5.3	5.4	3.6	3.1	2.5	2.2
	Q4	1.6	3.0	2.9	2.8	2.5	2.2
2009:	Q1	.0	2.4	3.3	2.9	2.4	2.2
	Q2	-1.2	3.4	3.1	2.9	2.5	2.3
	Q3	n.a.	3.2	3.3	2.9	2.5	2.2
2009:	May	-1.3	3.2	3.1	2.9	2.5	2.3
	June	-1.4	3.9	3.2	3.0	...	...
	July	-2.1	3.6	3.4	3.0	...	...
	Aug.	-1.5	3.0	3.1	2.8	2.5	2.2
	Sept.(p)	n.a.	3.1	3.3	2.9	...	...

1. Percent change from the same period in the preceding year. [Return to table](#)

2. Responses to the question, By about what percent do you expect prices to go up, on average, during the next 12 months? [Return to table](#)

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.

p Preliminary. [Return to table](#)

Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for Reuters/Michigan Survey, Reuters/University of Michigan Surveys of Consumers; for professional forecasters, the Federal Reserve Bank of Philadelphia.

Measures of Expected Inflation

Figure: Survey Measures (Reuters/University of Michigan)

Line chart, by percent, 1978 to 2009:Q3. Data are quarterly. There are two series, "Median, next 5 to 10 years" and "Median, next 12 months". Median, next 5 to 10 years begins at about 6.8 by early 1981, and generally decreases to about 4.8 by 1985. There is no data from late 1985 to mid-1990, where it begins at about 4.5 by 1990 and generally decreases to end at about 3. Median, next 12 months begins at about 6, and generally increases to about 10.2 by 1980. It then generally decreases to about 2.5 by 1983, and generally increases to about 4.9 by late 1990. It then generally decreases to about 1 by late 2001, and generally increases to about 5 by 2008. It then generally decreases to end at about 3.

There is a second line chart, by percent, 2005 to September 2009. Data are monthly. There are two series, "Median, next 5 to 10 years" and "Median, next 12 months". Median, next 5 to 10 years begins at about 2.7 and generally increases to about 3.5 by 2008. It then generally decreases to end at about 2.9. Median, next 12 months begins at about 2.9 and generally increases to about 4.7 by 2005. It then generally decreases to about 3 by late 2006, and generally increases to about 5.2 by 2008. It then generally decreases to about 1.7 by late 2008, and generally increases to end at about 2.6.

Source: Reuters/University of Michigan Surveys of Consumers.

Figure: Inputs to Models of Inflation

Line chart, by percent, 1971 to 2009:Q3. Data are quarterly. There are two series, "FRB/US long-run expectations measure for PCE inflation" and "Distributed lag of core PCE inflation". FRB/US long-run expectations measure for PCE inflation begins at about 3.2 and generally increases to about 7.8 by 1981. It then generally decreases to end at about 2.2. Distributed lag of core PCE inflation begins at about 5 and generally decreases to about 3.5 by 1973. It then generally increases to about 8.8 by early 1981, and generally decreases to end at about 2.1.

There is a second line chart, by percent, 2005 to 2009:Q3. Data are quarterly. There are two series, "FRB/US long-run expectations measure for PCE inflation" and "Distributed lag of core PCE inflation". FRB/US long-run expectations measure for PCE inflation begins at about 2 and remains about constant until 2007. It then generally increases to end at about 2.2. Distributed lag of core PCE inflation begins at about 1.8 and generally increases to about 2.5 by late 2008. It then generally decreases to about 1.9 by early 2009, and generally increases to end at about 2.1.

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

Source: For the distributed lag of core PCE inflation, FRB staff calculations; for the FRB/US measure, for 2007 forward, the median projection for PCE inflation over the next 10 years from the Survey of Professional Forecasters (SPF); for 1990 to 2006, the equivalent SPF projection for the CPI; for 1981 to 1989, a related survey for the CPI conducted by Richard Hoey; and for the

period preceding 1981, a model-based estimate constructed by Board staff. The survey data before 2007 are adjusted down 0.5 percentage point to put the CPI projections approximately on a PCE basis.

Figure: Inflation Compensation from TIPS

Line chart, by percent, 2001 to 2009:Q2. 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 3.1 by late 2003. It then generally decreases to about 2.5 by 2005, and generally increases to about 3 by early 2008. It then generally decreases to about 2.5 by early 2009, and generally increases to end at about 2.8. Next 5 years begins at about 1.6 and generally increases to about 2 by 2001. It then generally decreases to about 1.2 by late 2001, and generally increases to about 2.7 by early 2005. It then generally decreases to about -0.6 by late 2008, and generally increases to end at about 0.8.

There is a second line chart, by percent, 2005 to September 15, 2009. Data are weekly. There are two series, "5 to 10 years ahead" and "Next 5 years". 5 to 10 years ahead begins at about 2.7 and generally increases to about 3.5 by 2008. It then generally decreases to about 2 by late 2008, and generally increases to end at about 3. Next 5 years begins at about 2.7 and generally increases to about 2.9 by 2005. It then generally decreases to about 1.9 by early 2008, and generally increases to about 2.5 by mid-2008. It then generally decreases to about -1.6 by late 2008, and generally increases to end at about 1.25.

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 September 15, 2009. Ratio scale, 2006 = 100. There are two series, "Industrials" and "Metals". Industrials begins at about 55 and generally decreases to about 50 by early 1992. It then generally increases to about 70 by early 1995, and generally decreases to about 48 by late 2001. It then generally increases to about 139 by 2008, and generally decreases to about 62 by late 2008. It then generally increases to end at about 95. Metals begins at about 48 and generally decreases to about 40 by 1993. It then generally increases to about 56 by early 1995, and generally decreases to about 34 by late 2001. It then generally increases to about 160 by 2008, and generally decreases to about 61 by late 2008. It then generally increases to end at about 102.

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 September 15, 2009. Ratio scale, 1967 = 100. There are two series, "Spot industrials" and "Futures". Spot industrials begins at about 300 and generally decreases to about 250 by 1993. It then generally increases to about 355 by 1995, and generally decreases to about 220 by late 2001. It then generally increases to about 560 by 2008, and generally decreases to about 320 by late 2008. It then generally increases to end at about 455. Futures begins at about 225 and generally decreases to about 210 by 1992. It then generally increases to about 260 by 1996, and generally decreases to about 190 by early 1999. It then generally increases to about 615 by 2008, and generally decreases to about 340 by late 2008. It then generally increases to end at about 440.

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 8/4/09 ²	8/4/09 ² to 9/15/09	52-week change to 9/15/09
JOC industrials	-41.4	40.6	2.0	-18.1
JOC metals	-48.2	64.3	1.2	-12.3
CRB spot industrials	-34.3	34.2	-8	-2.6
CRB spot foodstuffs	-14.1	5.9	.2	-17.7
CRB futures	-24.7	21.4	.4	-5.0

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

2. August 4, 2009, is the Tuesday preceding publication of the August Greenbook. [Return to table](#)

Hourly Compensation and Unit Labor Costs

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

Category	2007:Q2	2008:Q2	2008		2009	
	to	to	Q3	Q4	Q1 ^e	Q2 ^e
	2008:Q2	2009:Q2 ^e				
<i>Compensation per hour</i>						
Nonfarm business	2.7	.7	4.5	2.9	-4.7	.4
<i>Output per hour</i>						
Nonfarm business	2.6	1.9	-.1	.8	.3	6.6
<i>Unit labor costs</i>						
Nonfarm business	.1	-1.1	4.6	2.0	-5.0	-5.8

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

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

Figure: Compensation per Hour

Line chart, by percent change from year-earlier period, 1996 to 2009:Q2. There are two series, "Productivity and costs" and "ECI". Productivity and costs begins at about 3 and generally increases to about 3.6 by 1996. It then generally decreases to about 2.6 by 1997, and generally increases to about 8.5 by 2000. It then generally decreases to about 2.7 by early 2002, and generally increases to about 5.7 by late 2003. It then generally decreases to end at about 0.8. ECI begins at about 2.8 and generally increases to about 4.8 by 2000. It then generally decreases to end at about 1.5.

Note: Productivity and costs plotted value for 2009:Q2 is a staff estimate.

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

Figure: Unit Labor Costs

Line chart, by percent change from year-earlier period, 1996 to 2009:Q2. The series begins at about 1 and generally decreases to about 0.5 by 1996. It then generally increases to about 4.9 by early 2000, and generally decreases to about -3.5 by early 2002. It then generally increases to about 3.7 by early 2007, and generally decreases to end at about -1.

Note: Plotted value for 2009:Q2 is a staff estimate.

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

Figure: Average Hourly Earnings

Line chart, by percent change from year-earlier period, 1996 to August 2009. The series begins at about 3.25 and generally decreases to about 2.95 by 1996. It then generally increases to about 4.4 by 1998, and generally decreases to about 1.5 by early 2004. It then generally increases to about 4.3 by late 2006, and generally decreases to end at about 2.6.

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

Figure: Markup, Nonfarm Business

Line chart showing nonfarm business markup, by ratio, 1996 to 2009:Q2. The series begins at about 1.62 and generally increases to about 1.63 by 1997. It then generally decreases to about 1.53 by early 2001, and generally increases to end at about 1.715. The average for 1968-present is plotted as a horizontal line at about 1.575.

Note: The markup is the ratio of output price to unit labor costs. Plotted value for 2009:Q2 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.

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

Last update: April 1, 2015

September 2009 Greenbook Part 2 Tables and Charts[†]

Domestic Financial Developments

Selected Financial Market Quotations

(One-day quotes in percent except as noted)

Instrument	2008		2009		Change to Sept. 15 from selected dates (percentage points)		
	Sept. 12	June 22	Aug. 11	Sept. 15	2008 Sept. 12	2009 June 22	2009 Aug. 11
<i>Short-term</i>							
FOMC intended federal funds rate	2.00	.13	.13	.13	-1.87	.00	.00
Treasury bills ¹							
3-month	1.46	.20	.18	.13	-1.33	-.07	-.05
6-month	1.80	.34	.28	.21	-1.59	-.13	-.07
Commercial paper (A1/P1 rates) ²							
1-month	2.39	.30	.22	.19	-2.20	-.11	-.03
3-month	2.75	.63	.29	.25	-2.50	-.38	-.04
Large negotiable CDs ¹							
3-month	2.79	.40	.32	.25	-2.54	-.15	-.07
6-month	3.09	.68	.46	.36	-2.73	-.32	-.10
Eurodollar deposits ³							
1-month	2.60	.65	.50	.35	-2.25	-.30	-.15
3-month	3.00	1.05	.80	.50	-2.50	-.55	-.30
Bank prime rate							
	5.00	3.25	3.25	3.25	-1.75	.00	.00
<i>Intermediate- and long-term</i>							
U.S. Treasury ⁴							
2-year	2.24	1.17	1.20	.96	-1.28	-.21	-.24
5-year	2.97	2.71	2.70	2.42	-.55	-.29	-.28
10-year	3.93	4.04	3.97	3.74	-.19	-.30	-.23
U.S. Treasury indexed notes ⁵							
5-year	1.33	1.45	1.54	.99	-.34	-.46	-.55
10-year	1.77	2.10	1.89	1.63	-.14	-.47	-.26
Municipal general obligations (Bond Buyer) ⁶							
	4.54	4.86	4.65	4.33	-.21	-.53	-.32
Private instruments							
10-year swap	4.26	3.97	3.98	3.67	-.59	-.30	-.31
10-year FNMA ⁷	4.36	4.40	4.35	4.15	-.21	-.25	-.20
10-year AA ⁸	6.62	5.94	5.41	5.13	-1.49	-.81	-.28
10-year BBB ⁸	7.22	7.58	6.72	6.44	-.78	-1.14	-.28
10-year high yield ⁸	10.66	12.13	10.61	10.17	-.49	-1.96	-.44
Home mortgages (FHLMC survey rate)							
30-year fixed	5.78	5.42	5.29	5.07	-.71	-.35	-.22

1-year adjustable	5.03	4.93	4.72	4.64	-39	-29	-08
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Stock exchange index	Record high		2009			Change to Sept. 15 from selected dates (percent)		
	Level	Date	June 22	Aug. 11	Sept. 15	Record high	2009 June 22	2009 Aug. 11
Dow Jones Industrial	14,165	10-9-07	8,339	9,241	9,683	-31.64	16.12	4.78
S&P 500 Composite	1,565	10-9-07	893	994	1,053	-32.75	17.87	5.86
Nasdaq	5,049	3-10-00	1,766	1,970	2,103	-58.35	19.05	6.75
Russell 2000	856	7-13-07	493	562	605	-29.32	22.73	7.60
D.J. Total Stock Index	15,807	10-9-07	9,130	10,243	10,870	-31.23	19.06	6.11

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.

June 22, 2009, is the day before the June 2009 FOMC monetary policy announcement.

August 11, 2009, is the day before the most recent FOMC monetary policy announcement.

Policy Expectations and Treasury Yields

Figure: Interest Rates

Line chart, by percent, August 4, 2009 to September 16, 2009. There are two series, "10-year Treasury yield" and "March 2010 Eurodollar". These two series use two different scales. 10-year Treasury yield begins at about 3.62 and generally increases to about 3.9 by August 7. It then generally decreases to about 3.3 by September 11, and generally increases to end at about 3.48. March 2010 Eurodollar begins at about 1.04 and generally increases to about 1.25 by August 7. It then generally decreases to end at about 0.65. The FOMC statement is marked in the time series at about late August 12. Retail sales is marked in the time series at about early August 13. CPI is marked in the time series at about early August 14. Existing home sales is marked in the time series at about August 21. Advance durable goods is marked in the time series by early August 26. ISM manufacturing, Pending home sales is marked in the time series at about September 1. Nonfarm payroll is marked in the time series at about early September 4. Retail sales is marked in the time series at about early September 15.

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

Source: Bloomberg.

Figure: Implied Federal Funds Rate

Line chart, by percent, September 2009 to October 2011. There are two series, "August 11, 2009" and "September 15, 2009". August 11, 2009 begins at about 0.2 and generally increases to end at about 2.8. September 15, 2009 begins at about 0.2 and generally increases to end at about 2.4.

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, by percent, 1 to 20 years ahead. There are two series, "August 11, 2009" and "September 15, 2009". August 11, 2009 begins at about 0.2 and generally increases to end at about 4.5. September 15, 2009 begins at about 0.2 and generally increases to end at about 4.25.

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, by percent, January 2007 to September 15, 2009. Data are daily. The August 2009 FOMC meeting is marked in the time series. The series begins at about 4.6 and generally decreases to about 3.5 by May 2007. It then generally increases to about 13.5 by September 2008, and generally decreases to about 6.8 by March 2009. It then generally increases to about 11.6 by late April 2009, and generally decreases to end at about 8. It is at about 9.8 at the time of the August 2009 FOMC meeting.

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

Source: Bloomberg.

Figure: Inflation Compensation

Line chart, by percent, January 2007 to September 15, 2009. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are two series, "5 to 10 years ahead" and "Next 5 years". 5 to 10 years ahead begins at about 2.5 and generally increases to about 3.6 by late September 2008. It then generally decreases to about 2 by October 2008, and generally increases to end at about 3. It is at about 3.3 at the time of the August 2009 FOMC meeting. Next 5 years begins at about 2.3 and generally decreases to about 1.9 by February 2008. It then generally increases to about 2.6 by early June 2008, and generally decreases to about -1.6 by late October. It then generally increases to end at about 1.5. It is at about 1.1 at the time of the August 2009 FOMC meeting.

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

Source: Federal Reserve Board.

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

Figure: Bank ETFs

Line chart, January 2008 to September 15, 2009. January 2, 2009 = 100. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are two series, "Large banks" and "Regional and smaller banks". Large banks begins at about 190 and generally decreases to about 170 by January. It then generally increases to about 212 by early February, and generally decreases to about 108 by July. It then generally increases to about 175 by September, and generally decreases to about 40 by early March 2009. It then generally increases to end at about 100. It is at about 100 at the time of the August 2009 FOMC meeting. Regional and smaller banks begins at about 120 and generally decreases to about 80 by July 2008. It then generally increases to about 140 by September, and generally decreases to about 48 by early March. It then generally increases to end at about 77. It is at about 80 at the time of the August 2009 FOMC meeting.

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 September 15, 2009. Unit is basis points. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are two series, "Large bank holding companies" and "Other banks". Large bank holding companies begins at about 50 and generally increases to about 212 by March 2008. It then generally decreases to about 65 by May, and generally increases to about 368 by early March 2009. It then generally decreases to end at about 120. It is at about 148 at the time of the August 2009 FOMC meeting. Other banks begins at about 55 and generally increases to about 245 by late September. It then generally decreases to end at about 125. It is at about 140 at the time of the August 2009 FOMC meeting.

Note: Median spreads for 6 large bank holding companies and 11 other banks.

Source: Markit.

Figure: Libor over OIS Spread

Line chart, July 2007 to September 2009. Unit is basis points. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are three series, "1-month", "3-month", and "6-month". 1-month begins at about 10 and generally increases to about 105 by early December. It then generally decreases to about 15 by January 2008, and generally increases to about 335 by October. It then generally decreases to end at about 10. It is at about 10 at the time of the August 2009 FOMC meeting. 3-month begins at about 10 and generally increases to about 100 by early December. It then generally decreases to about 35 by January 2008, and generally increases to about 360 by early November 2008. It then generally decreases to end at about 15. It is at about 30 at the time of the August 2009 FOMC meeting. 6-month begins at about 15 and generally increases to about 100 by early December. It then generally decreases to about 45 by early January 2008, and generally increases to about 330 by early October. It then generally decreases to end at about 50.

Source: British Bankers' Association and Prebon.

Figure: Spreads on 30-day Commercial Paper

Line chart, July 2007 to September 14, 2009. Unit is basis points. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are two series, "ABCP" and "A2/P2". They begin at about 0 and generally increase to about 190 by early December 2007. They then generally decrease to about 40 by early February, and generally increase together until they reach about 400 by early October 2008. ABCP generally decreases to end at about 20. It is at about 25 at the time of the August 2009 FOMC meeting. A2/P2 generally increases to about 600 by late December, and generally decreases to end at about 25. It is at about 45 at the time of the August 2009 FOMC meeting.

Note: The ABCP spread is the AA ABCP rate minus the AA nonfinancial rate. The A2/P2 spread is the A2/P2 nonfinancial rate minus the AA nonfinancial rate.

Source: Depository Trust & Clearing Corporation.

Figure: Federal Reserve Credit Outstanding

Line chart, by billions of dollars, November 2007 to September 15, 2009. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are

three series, "Primary credit", "TAF", and "CPFF". Primary credit begins at about 0 and generally increases to about 115 by October. It then generally decreases to end at about 35. It is at about 35 at the time of the August 2009 FOMC meeting. TAF begins at about 0 and generally increases to about 500 by March 2009. It then generally decreases to end at about 200. It is at about 230 at the time of the August 2009 FOMC meeting. CPFF begins at about 0 by late October 2008. It then generally increases to about 350 by January, and generally decreases to end at about 48. It is at about 50 at the time of the August 2009 FOMC meeting.

Source: Federal Reserve.

Figure: Federal Reserve Large-Scale Asset Purchases

Line chart, by billions of dollars, December 2008 to September 11, 2009. Data are weekly. The August 2009 FOMC meeting is marked in the time series. There are three series, "Agency MBS", "Agency debt", and "Treasury securities". Agency debt begins at about 0 and generally increases to end at about 835. It is at about 740 at the time of the August 2009 FOMC meeting. Agency debt begins at about 0 and generally increases to end at about 120. It is at about 100 at the time of the August 2009 FOMC meeting. Treasury securities begins at about 0 and remains about constant until late March 2009. It then generally increases to end at about 300. It is at about 250 at the time of the August 2009 FOMC meeting.

Note: Due to settlement lags and other factors, cumulative purchases may be substantially higher than current holdings in the SOMA portfolio.

Source: Federal Reserve.

Corporate Yields, Risk Spreads, and Stock Prices

Figure: Selected Stock Price Indexes

Line chart, June 2008 to September 15, 2009. August 11, 2009 = 100. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are two series, "S&P Financial" and "S&P 500". S&P Financial begins at about 177 and generally decreases to about 50 by March 2009. It then generally decreases to end at about 108. It is at about 100 at the time of the August 2009 FOMC meeting. S&P 500 begins at about 140 and generally decreases to about 68 by early March. It then generally increases to end at about 105. It is at about 101 at the time of the August 2009 FOMC meeting.

Source: Standard & Poor's.

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

Line chart, by percent, 1990 to September 15, 2009. Data are monthly. There are two series, "Expected 10-year real equity return" and "Expected real yield on 10-year Treasury" (off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation). Expected 10-year real equity return begins at about 7.7 and generally increases to about 9.5 by late 1990. It then generally decreases to about 2.1 by early 2000, and generally increases to about 12 by late 2008. It then generally decreases to end at about 8.7. Expected real yield on 10-year Treasury begins at about 4.3 and generally decreases to about 2 by 1993. It then generally increases to about 4.8 by late 1994, and generally decreases to about 1.1 by 2003. It then generally increases to about 2.8 by 2007, and generally decreases to end at about 1.4.

Note: There are two marks on the chart, at about 8.5 for Expected 10-year real equity return and about 1.4 for Expected real yield on 10-year Treasury, that denote the latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S.

Source: Thomson Financial.

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

Line chart, by percent, 2002 to September 15, 2009. Data are weekly, as measured on Fridays or the most recent business day. The August 2009 FOMC meeting is marked in the time series. The series begins at about 21 and generally increases to about 31 by mid-2002. It then generally decreases to about 10 by late 2006, and generally increases to about 80 by late 2008. It then generally decreases to end at about 25. It is at about 25 at the time of the August 2009 FOMC meeting.

Source: Chicago Board of Exchange.

Figure: Corporate Bond Yields

Line chart, by percent, 2002 to September 15, 2009. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are two series, "10-year high-yield" and "10-year BBB". 10-year high-yield begins at about 11 and generally increases to about 12.3 by 2002. It then generally decreases to about 7 by early 2005, and generally increases to about 19.8 by late 2008. It then generally decreases to end at about 10.2. It is at about 11 at the time of the August 2009 FOMC meeting. 10-year BBB begins at about 7 and generally increases to about 8 by 2002. It then generally decreases to about 5 by mid-2003, and generally increases to about 10 by late 2008. It then generally decreases to end at about 6.4. It is at about 7 at the time of the August 2009 FOMC meeting.

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

Figure: Corporate Bond Spreads

Line chart, 2002 to September 15, 2009. Unit is basis points. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are two series, "10-year high-yield" and "10-year BBB". 10-year high-yield begins at about 550 and generally increases to about 900 by 2002. It then generally decreases to about 285 by early 2005, and generally increases 1650 by early 2009. It then generally decreases to end at about 680. It is at about 725 at the time of the August 2009 FOMC meeting. 10-year BBB begins at about 225 and generally increases to about 300 by late 2002. It then generally decreases to about 100 by early 2005, and

generally increases to about 650 by late 2008. It then generally decreases to end at about 295. It is at about 300 at the time of the August 2009 FOMC meeting.

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

Figure: Estimated Median Bid-Asked Spread for Corporate Bonds

Line chart, 2005 to September 15, 2009. Unit is basis points. Data are daily. The August 2009 FOMC meeting is marked in the time series. There are two series, "High-yield" and "Investment-grade". High-yield begins at about 125 and generally increases to about 25 by late 2005. It then generally decreases to about 105 by 2008, and generally increases to about 360 by early 2009. It then generally decreases to end at about 100. It is at about 135 at the time of the August 2009 FOMC meeting. Investment-grade begins at about 80 and fluctuates narrowly throughout most of the period. It generally decreases to about 50 by late 2006, generally increases to about 150 by late 2008, and then generally decreases to end at about 90. It is about 100 at the time of the August 2009 FOMC meeting.

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

Corporate Earnings and Credit Quality

Figure: Domestic Corporate Profits before Tax

Line chart, by billions of dollars, 1988 to 2009:Q2. Data are quarterly. There are two series, "Nonfinancial" and "Financial". Nonfinancial begins at about 310 and generally increases to about 345 by late 1988. It then generally decreases to about 275 by early 1991, and generally increases to about 600 by 1997. It then generally decreases to about 290 by late 2001, and generally increases to about 1000 by 2006. It then generally decreases to about 520 by late 2008, and generally increases to end at about 810. Financial begins at about 20 and generally increases to about 450 by early 2006. It then generally decreases to about 140 by late 2008, and generally increases to about 280.

Note: Profits before tax plus capital consumption adjustment.

Note: Shaded bars indicate periods of business recessions defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009.

Source: Bureau of Economic Analysis.

Figure: Revisions to Expected S&P 500 Earnings

Line chart, by percent, 2002 to mid-September 2009. Data are monthly. There are two series, "All firms" and "Nonfinancial firms". They begin at about -1.5 and generally increase to about 0.8 by early 2002. They then generally decrease to about -3.6 by late 2002, and generally increase to about 2 by 2004. They then generally decrease to about -17.5 by early 2009, and generally increase to end at about 0.

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

Source: Thomson Financial.

Figure: Financial Ratios for Nonfinancial Corporations

Line chart, by ratio, 1989 to 2009:Q2. There are two series, "Debt over total assets" and "Liquid assets over total assets". There two series use two different scales. Debt over total assets begins at about 0.335 by 1990, and generally decreases to about 0.28 by 1996. It then generally increases to about 0.31 by 1999, and generally decreases to about 0.242 by 2006. It then generally increases to end at about 0.295 by early 2009, and generally decreases to end at about 0.285. Liquid assets over total assets begins at about 0.052 and generally decreases to about 0.05 by early 1990. It then generally increases to about 0.104 by 2004, and generally decreases to about 0.089 by 2008. It then generally increases to end at about 0.10.

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

Source: Calculated using Compustat data.

Figure: Bond Ratings Changes of Nonfinancial Companies

Bar chart, by percent of outstandings, 1991 to 2009:Q3. Data are annual rate. There are two series, "Upgrades" and "Downgrades". Upgrades begins at about 12 and generally decreases to about 8 by 1994. It then generally increases to about 20 by 1995, and generally decreases to about 3 by 2002. It then generally increases to about 10 by 2007, and generally decreases to about 2 by 2008:H2. It then generally increases to about 7 by 2009:H1, and generally decreases to end at about 2. Downgrades begins at about 28 and generally increases to about 37 by 1992. It then generally decreases to about 8 by 1995, and generally increases to about 38 by 2002. It then generally decreases to about 10 by 2004, and generally increases to about 29 by 2009:H1. It then generally decreases to end at about 8.

Note: 2009:Q3 is based on July and August.

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

Figure: Selected Default and Delinquency Rates

Line chart, by percent of outstandings, 1990 to 2009. There are two series, "C&I loan delinquency rate" and "Bond default rate". C&I loan delinquency rate begins at about 5 and generally increases to about 6.2 by 1991. It then generally decreases to about 1.6 by late 1997, and generally increases to about 3.9 by 2002. It

then generally decreases to about 1.1 by late 2006, and generally increases to end at about 3.7 by 2009:Q2. Bond default rate begins at about 1.6 and generally increases to about 3.3 by early 1991. It then generally decreases to about 0 by late 1993, and generally increases to about 3.8 by late 2002. It then generally decreases to about 0 by early 2008, and generally increases to about 7.3 by early 2009. It then generally decreases to end at about 3.2 by August.

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

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

Figure: Expected Nonfinancial Year-Ahead Defaults

Line chart, by percent of liabilities, 1994 to September 2009. Data are monthly. The series begins at about 0.5 and generally decreases to about 0.3 by 1997. It then generally increases to about 4.4 by 2002, and generally decreases to about 0.2 by 2007. It then generally increases to about 5 by 2009, and generally decreases to end at about 2.

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	H2	Q1	Q2	July	Aug.
Nonfinancial corporations									
Stocks ¹	4.6	4.7	5.5	3.5	4.0	2.7	8.0	2.2	5.6
Initial public offerings	1.7	1.8	1.6	.6	.1	.3	.2	.0	.3
Seasoned offerings	2.8	2.9	3.8	2.9	3.9	2.4	7.8	2.1	5.3
Bonds ²	18.7	29.3	35.1	36.0	19.4	57.4	42.8	21.5	29.8
Investment grade	8.7	13.1	17.5	24.9	14.2	42.5	22.8	7.3	15.8
Speculative grade	5.2	6.2	7.5	3.1	.4	3.0	7.5	2.6	7.5
Other (sold abroad/unrated)	4.8	10.1	10.0	8.0	4.8	11.9	12.4	11.7	6.5
Memo									
Net issuance of commercial paper ³	-2	2.4	-.4	-.5	3.7	-12.7	-12.2	-3.7	-1.1
Change in C&I loans at commercial banks ³	10.1	11.2	21.2	20.7	5.2	-16.0	-18.7	-22.1	-36.4
Financial corporations									
Stocks ¹	5.0	5.3	8.6	17.2	9.9	.9	30.8	3.1	4.9
Bonds ²	170.4	180.6	151.7	66.2	24.6	38.9	50.2	34.5	29.8

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

1. Excludes private placements and equity-for-equity swaps that occur in restructurings. [Return to table](#)

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

3. End-of-period basis, seasonally adjusted. [Return to table](#)

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

Figure: Selected Components of Net Debt Financing

Bar chart, by billions of dollars, 2005 to August 2009. Data are monthly rate, nonfinancial firms. There are three series, "Commercial paper", "C&I loans", and "Bonds". Commercial paper and C&I loans are seasonally adjusted, period-end basis. There is also a "Total" series plotted as a curve which shows the sum of the other series. Approximate values are: 2005: Bonds 6, C&I loans 8, Total 14. 2006: Bonds 18, C&I loans 11, Commercial paper 3, Total 32. 2007: Bonds 28, C&I loans 20, Total 48. 2008:H1: Bonds 22, C&I loans 21, Total 43. 2008:H2: Bonds 11, C&I loans 7, Commercial paper 2, Total 20. 2009:Q1: Bonds 49, C&I loans -16, Commercial paper -12, Total 21. 2009:Q2: Bonds 32, C&I loans -19, Commercial paper -11, Total 2. July 2009: Bonds 17, C&I loans -22, Commercial paper -4, Total -9. August 2009: Bonds 19, C&I loans -36, Commercial paper -1.5, Total -18.5.

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

Figure: Components of Net Equity Issuance

Bar chart, by billions of dollars, 2005 to 2009:Q2. Data are monthly rate, nonfinancial firms. There are four series, "Public issuance", "Private issuance", "Repurchases", and "Cash mergers". There is also a "Total" series plotted as a curve which shows the sum of the other series. Approximate values are: 2005: Private issuance 10, Public issuance 4, Repurchases -28, Cash mergers -14, Total -28. 2006: Private issuance 12, Public issuance 7, Repurchases -37, Cash mergers -23, Total -41. 2007: Private issuance 19, Public issuance 9, Repurchases -45, Cash mergers -38, Total -55. 2008:H1: Private issuance 20, Public issuance 8, Repurchases -32, Cash mergers -16, Total -20. 2008:H2: Private issuance 22, Public issuance 7, Repurchases -26, Cash mergers -16, Total -13. 2009:Q1: Private issuance 17, Public issuance 3, Repurchases -10, Cash mergers -7, Total 3. 2009:Q2: Private issuance 14, Public issuance 10, Repurchases -10, Cash mergers -8, Total 6.

Note: 2009:Q2 is an estimate. Private issuance was revised back to 2005.

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

Commercial Real Estate

Figure: Commercial Mortgage Debt

Line chart, by percent change, annual rate, 2000 to 2009:Q2. Data are quarterly. The series begins at about 12 and generally decreases to about 7 by early 2002. It then generally increases to about 16.5 by late 2005, and generally decreases to about 9 by early 2007. It then generally increases to about 15 by 2007, and generally decreases to end at about -1.5.

Note: 2009:Q2 is an estimate.

Source: Federal Reserve.

Figure: Commercial Real Estate Sales

Line chart, 2001 to August 2009. There are two series, "Dollar value of all sales", which is by billions of dollars, and "% of properties sold at nominal loss", which is by percent. These two series use two different scales. Dollar value of all sales begins at about 8 and generally increases to about 72 by early 2007. It then generally decreases to end at about 9. % of properties sold at nominal loss begins at about 5 and generally increases to about 17 by late 2001. It then generally decreases to about 6 by 2002, and generally increases to about 16 by 2007. It then generally decreases to about 9 by 2008, and generally increases to end at about 47.

Note: Three-month moving averages shown.

Source: Real Capital Analytics.

Figure: Prices of Commercial Real Estate

Line chart, 1994 to 2009. Index, 2001:Q1=100. There are two series, "NCREIF TBI", which data are quarterly, and "Moody's index", which data are monthly. NCREIF TBI begins at about 75 and generally increases to about 208 by 2007. It then generally decreases to end at about 137.5 by 2009:Q2. Moody's index begins at about 100 by 2001, and generally increases to about 188 by 2007. It then generally decreases to end at about 125 by June.

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

Figure: Delinquency Rates on Commercial Mortgages on Existing Properties

Line chart, by percent, 1996 to 2009. There are three series, "At commercial banks", "At life insurance companies" and "CMBS". At commercial banks begins at about 3.4 and generally decreases to about 1 by 2006. It then generally increases to end at about 4.1. At life insurance companies begins at about 2.4 and generally increases to about 2.6 by 1996. It then generally decreases to about 0 by late 2005, remains about constant until 2008, and generally increases to end at about 0.2. CMBS begins at about 0.5 by late 1998, and generally increases to about 1.9 by late 2003. It then generally decreases to about 0.4 by 2007, and generally increases to end at about 4.2.

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

Source: Citigroup; Call Reports; ACLI.

Figure: Delinquency Rates on Construction Loans at Banks

Line chart, by percent, 2007:Q1 to 2009:Q2. Data are quarterly. There are two series, "Residential construction" and "Commercial construction". Residential construction begins at about 2.8 and generally increases to end at about 23.8. Commercial construction begins at about 2 and generally increases to end at about 14.

Note: Data series begin in 2007:Q1.

Source: Call Reports.

Figure: Commercial Mortgage CDS Index Prices (CMBX)

Line chart, by percent, April 2007 to September 10, 2009. Data are daily, by rating. The August 2009 FOMC meeting is marked in the time series. There are three

series, "Senior AAA", "Junior AAA", and "BBB-". Senior AAA begins at about 100 and generally decreases to about 84 by March 2008. It then generally increases to about 95 by early May, and generally decreases to about 56 by late November. It then generally increases to about 85 by early August, and generally decreases to end at about 80. It is at about 80 at the time of the August 2009 FOMC meeting. Junior AAA begins at about 99 by early January 2008, and generally decreases to about 66 by March. It then generally increases to about 90 by late April, and generally decreases to about 25 by April 2009. It then generally increases to end at about 48. It is at about 47 at the time of the August 2009 FOMC meeting. BBB- begins at about 100 and generally decreases to about 30 by March 2008. It then generally increases to about 49 by May, and generally decreases to about 8 by April 2009. It then generally increases to end at about 15. It is at about 16 at the time of the August 2009 FOMC meeting.

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

Source: JPMorgan Chase & Co.

Residential Mortgages

Figure: Mortgage Rate and MBS Yield

Line chart, by percent, October 2006 to September 2009. Data are weekly. The August 2009 FOMC meeting is marked in the time series. There are two series, "30-year conforming fixed-rate mortgage rate" and "MBS yield". 30-year conforming fixed-rate mortgage rate begins at about 6.3 and generally decreases to about 6.1 by late November. It then generally increases to about 6.75 by early June, and generally decreases to about 5.5 by late January 2008. It then generally increases to about 6.6 by late July, and generally decreases to about 4.8 by late March. It then generally increases to about 5.58 by June, and generally decreases to end at about 5.05 by September 9. It is at about 5.25 at the time of the August 2009 FOMC meeting. MBS yield begins at about 5.8 and generally increases to about 6.0 by early October. It then generally decreases to about 5.5 by late November, and generally increases to about 6.45 by early June. It then generally decreases to about 3.7 by January, and generally increases to about 5.02 by June. It then generally decreases to end at about 4.4 by September 15. It is at about 4.6 at the time of the August 2009 FOMC meeting.

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

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

Figure: Spread of Mortgage Rate to Treasury Yield

Line chart, October 2006 to September 9, 2009. Unit is basis points. Data are weekly. The August 2009 FOMC meeting is marked in the time series. There are two series, "30-yr FRM to 10-yr Treasury" and "5/1 ARM to 2-yr Treasury". 30-yr FRM to 10-yr Treasury begins at about 165 and generally decreases to about 142 by January 2007. It then generally increases to about 250 by August 2008, and generally decreases 88 by late May. It then generally increases to end at about 130. It is at about 130 at the time of the August 2009 FOMC meeting. 5/1 ARM to 2-yr Treasury begins at about 140 and generally decreases to about 100 by late January 2007. It then generally increases to about 525 by early December, and generally decreases to end at about 355. It is at about 350 at the time of the August 2009 FOMC meeting.

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

Source: Bloomberg; Freddie Mac.

Figure: Agency and Non-Agency MBS Issuance

Bar chart, by billions of dollars, 2002 to July 2009. Data are monthly rate. There are three series, "Non-agency", "GSEs", and "Ginnie Mae". Approximate values are: 2002: Ginnie Mae 12.5, GSEs 110.5, Non-agency 27. 2003: Ginnie Mae 20, GSEs 158, Non-agency 42. 2004: Ginnie Mae 10, GSEs 70, Non-agency 70. 2005: Ginnie Mae 8, GSEs 72, Non-agency 90. 2006: Ginnie Mae 5, GSEs 70, Non-agency 85. 2007: Ginnie Mae 6, GSEs 94, Non-agency 50. 2008:H1: Ginnie Mae 22, GSEs 98. 2008:H2: Ginnie Mae 26, GSEs 49. 2009:Q1: Ginnie Mae 30, GSEs 78. 2009:Q2: Ginnie Mae 40, GSEs 110. July 2009: Ginnie Mae 48, GSEs 104.

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

Figure: Prices of Existing Homes

Line chart, by percent change from a year earlier, 2002 to 2009. Data are monthly. There are three series, "FHFA price index", "LoanPerformance price index", and "20-city S&P/Case-Shiller price index". FHFA price index begins at about 7 and generally increases to about 10 by 2005. It then generally decreases to about -9 by late 2008, and generally increases to end at about -5 by June. LoanPerformance begins at about 8.8 and generally increases to about 17.5 by 2005. It then generally decreases to about -20.1 by early 2009, and generally increases to end at about -12 by July. 20-city S&P/Case-Shiller price index begins at about 7.5 and generally increases to about 17 by 2004. It then generally decreases to about -19 by early 2009, and generally increases to end at about -15 by June.

Note: LoanPerformance plans to publish its price index in late September. Data are confidential until then.

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

Figure: Delinquencies on Prime Mortgages

Line chart, by percent of loans, 2001 to July 2009. 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 mid-2005. It then generally increases to end at about 13.5. Fixed-rate begins at about 1.5 and generally increases to end at about 4.2.

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, by percent of loans, 2001 to 2009. Data are monthly. There are two series, "FHA" and "Subprime". These two series use two different scales. FHA begins at about 3.3 and generally increases to end at about 7.5 by July. Subprime begins at about 8 and generally increases to about 10 by early 2003. It then generally decreases to about 5.5 by 2005, and generally increases to end at about 30.5.

Note: Percent of loans 90 or more days past due 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, by percent change, annual rate, 2004 to July 2009. Data are 3-month change. There are two series, "Revolving" and "Nonrevolving". Revolving begins at about 3 and generally increases to about 4.2 by 2004. It then generally decreases to about 1 by 2004, and generally increases to about 8 by 2004. It then generally decreases to about 2 by early 2005, and generally increases to about 9 by mid-2007. It then generally decreases to about -12.5 by 2009, and generally increases to end at about -8.8. Nonrevolving begins at about 6 and generally increases to about 7 by 2004. It then generally decreases to about 4 by 2004, and generally increases to about 8.5 by late 2004. It then generally decreases to end at about -6.2.

Source: Federal Reserve.

Figure: Gross Consumer ABS Issuance

Bar chart, by billions of dollars, 2005 to September 2009. Data are monthly rate. There are two series, "TALF eligible" and "Non-TALF". Approximate values are: 2005: TALF eligible 0, Non-TALF 19. 2006: TALF eligible 0, Non-TALF 19. 2007: TALF eligible 0, Non-TALF 19.8. 2008:H1: TALF eligible 0, Non-TALF 18. 2008:H2: TALF eligible 0, Non-TALF 4. 2009:Q1: TALF eligible 2.8, Non-TALF 1.2. 2009:Q2: TALF eligible 10, Non-TALF 4.5. July 2009: TALF eligible 12.5, Non-TALF 4. August 2009: TALF eligible 13, Non-TALF 3.5. September 2009: TALF eligible 14.8, Non-TALF 0.

Note: Credit card, auto, and student loan ABS. September 2009 is through September 11.

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

Figure: Credit Card Rates and Volume of Mail Offerings

Line chart, 2007 to 2009. Data are monthly. The August 2009 FOMC meeting is marked in the time series. There are two series, "Volume of mail offerings", which is by millions, and "Interest rates", which is by percent. Volume of mail offerings begins at about 555 and generally increases to about 610 by 2007. It then generally decreases to about 485 by 2007, and generally increases to about 550 by late 2007. It then generally decreases to about 100 by early 2009, and generally increases to end at about 100 by July. There is no data for the August 2009 FOMC meeting. Interest rates begins at about 14.7 and generally decreases to about 10.8 by 2009. It then generally increases to end at about 11.5 by September 9. It is at about 11.1 at the time of the August 2009 FOMC meeting.

Source: For interest rates, Bankrate Monitor; for mail volume, Mintel.

Figure: Delinquencies on Consumer Loans

Line chart, by percent, 1997 to 2009. There are three series, "Credit card loans in securitized pools", "Nonrevolving consumer loans at commercial banks", and "Auto loans at captive finance companies". Credit card loans in securitized pools begins at about 5.3 and generally increases to about 5.6 by 1997. It then generally decreases to about 4.6 by early 2000, and generally increases to about 5.5 by 2003. It then generally decreases to about 3.3 by late 2005, and generally increases to end at about 6 by July. Nonrevolving consumer loans at commercial banks begins at about 3.1 and generally increases to about 3.2 by early 1999. It then generally decreases to about 2 by late 2005, and generally increases to end at about 3.7 by 2009:Q2. Auto loans at captive finance companies begins at about 3.3 and generally increases to about 3.7 by early 1997. It then generally decreases to about 1.9 by 2004, and generally increases to end at about 3.2 by July.

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

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

Fund type	2008		2009				Assets
	H1	H2	Q1	Q2	July	Aug. ^e	July
Total long-term funds	11.8	-49.7	0.5	46.1	46.7	51.6	6,825
Equity funds	-3.6	-36.0	-14.4	14.2	9.8	3.5	4,365
Domestic	-5.0	-20.7	-7.8	9.7	2.8	-2.3	3,265

International	1.3	-15.3	-6.5	4.4	7.0	5.8	1,099
Hybrid funds	1.7	-4.8	-2.9	2.3	1.8	3.0	559
Bond funds	13.8	-8.9	17.8	29.7	35.1	45.1	1,901
High-yield	-0.2	0.1	2.7	2.9	1.9	0.8	164
Other taxable	11.1	-7.4	11.2	21.1	25.9	34.9	1,335
Municipals	2.9	-1.6	3.9	5.7	7.3	9.4	402
Money market funds	56.1	59.6	0.1	-55.2	-49.9	-55.6	3,623

Note: Excludes reinvested dividends.

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

Source: Investment Company Institute.

Treasury Finance

Figure: Treasury Auction Amounts

Line chart, by billions of dollars, 2005:Q1 to 2009:Q3. Data are quarterly. There are four series, "2-year", "3-year", "5-year", and "10-year". 2-year begins at about 73 and generally decreases to about 52 by 2007:Q3. It then generally increases to about 120 by 2009:Q2, and generally decreases to end at about 86. 3-year begins at about 24 and generally decreases to about 0 by late 2007:Q3. It then remains about constant until late 2008:Q3, and generally increases to end at about 112. 5-year begins at about 45 and generally decreases to about 38 by 2007:Q2. It then generally increases to end at about 109. 10-year begins at about 25 and remains about constant until 2008:Q1. It then generally increases to about 62 by late 2009:Q2, and generally decreases to about 40.

Note: 2009:Q3 is estimated using data through August.

Source: U.S. Treasury Dept.

Figure: Foreign Participation in Treasury Auctions

Line chart, by percent of total issue, 2000 to 2009. Data are 6-month moving averages. The August 2009 FOMC meeting is marked in the time series. There are two series, "Indirect bids" and "Actual foreign allotment". Indirect bids begins at about 27 by 2003, and generally increases to about 44 by 2004. It then generally decreases to about 24 by 2008, and generally increases to end at about 40 by September 15, 2009. It is at about 40 at the time of the August 2009 FOMC meeting. Actual foreign allotment begins at about 10 and generally increases to about 26 by 2004. It then generally decreases to about 15 by 2006, and generally increases to end at about 25 by July 31. There is no data for the August 2009 FOMC meeting.

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

Source: Federal Reserve Board.

Figure: Average Absolute Nominal Yield Curve Fitting Error

Line chart, 2001 to September 15, 2009. Unit is basis points. Data are daily. The series begins at about 3 and generally decreases to about 1.5 by 2007. It then generally increases to about 22.5 by late 2008, and generally decreases to end at about 3.5. It is at about 3 at the time of the August 2009 FOMC meeting. There are two peaks, one to about 13 by 2001, and the other to about 6 by mid-2003.

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

Source: Federal Reserve Board.

Figure: Daily Treasury Market Volume

Line chart, by billions of dollars, 2004 to September 2009. Data are monthly averages. The August 2009 FOMC meeting is marked in the time series. The series begins at about 75 and fluctuates but generally increases to about 200 by 2007. It then generally decreases to about 75 by early 2009, and generally increases to end at about 115. It is at about 100 at the time of the August 2009 FOMC meeting.

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

Source: Bloomberg.

Figure: Treasury On-the-Run Premium

Line chart showing 10-year note, 2001 to September 2009. Unit is basis points. Data are monthly averages. The August 2009 FOMC meeting is marked in the time series. The series begins at about 15 and generally increases to about 27 by 2002. It then generally decreases to about 6 by late 2006, and generally increases to about 60 by early 2009. It then generally decreases to end at about 29. It is at about 34 at the time of the August 2009 FOMC meeting.

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

Source: Federal Reserve Board.

Figure: Treasury Fails-to-Deliver

Line chart, by billions of dollars, 2007:Q1 to September 2, 2009. Data are weekly. The August 2009 FOMC meeting is marked in the time series. The series begins at about 250 and generally decreases to about 0 by 2007:Q1. It then generally increases to about 1200 by early 2008:Q2, and generally decreases to about 0 by 2008:Q3. It then generally increases to about 2700 by 2008:Q4, and generally decreases to end at about 0. It is at about 0 at the time of the August 2009 FOMC meeting.

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

State and Local Government Finance

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

Type of security	2005	2006	2007	2008		2009			
				H1	H2	Q1	Q2	July	Aug.
Total	38.4	36.1	40.4	41.7	33.2	30.5	42.4	33.2	49.5
Long-term ¹	34.2	32.5	35.5	38.1	26.7	28.7	37.1	25.9	36.1
Refundings ²	15.6	10.6	12.6	18.0	11.2	10.5	14.4	9.1	11.9
New capital	18.6	21.9	22.9	20.1	15.5	18.2	22.7	16.8	24.2
Short-term	4.2	3.7	4.9	3.6	6.5	1.8	5.3	7.3	13.4
Memo: Long-term taxable	2.1	2.5	2.4	2.8	1.8	1.1	7.9	4.9	10.4

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, by number of ratings changes, 1991 to 2009:Q2. Data are annual rate. There are two series, "Upgrades" and "Downgrades". Upgrades begins at about 250 and generally increases to about 400 by 1992. It then generally decreases to about 300 by 1993, and generally increases to about 1100 by 2000. It then generally decreases to about 450 by 2002, and generally increases to about 2300 by 2006. It then generally decreases to about 1700 by 2008:H1, and generally increases to about 3000 by 2009:Q1. It then generally decreases to end at about 2450. Downgrades begins at about 600 and generally decreases to about 200 by 1997. It then generally increases to about 1300 by 2007, and generally decreases to end at about 350.

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

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

Figure: Municipal Bond Yields

Line chart, by percent, 2005 to 2009. Data are weekly. There are two series, "20-year general obligation" and "7-day SIFMA swap index". 20-year general obligation begins at about 4.5 and generally decreases to about 4 by late 2006. It then generally increases to about 6 by 2008, and generally decreases to end at about 4.4 by September 10. 7-day SIFMA swap index begins at about 1.5 and generally increases to about 4 by late 2006. It then generally decreases to about 1.3 by early 2008, and generally increases to about 8 by 2008. It then generally decreases to end at about 0.3 by September 2.

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

Source: Municipal Market Advisors; Bond Buyer.

Figure: Municipal Bond Yield Ratio

Line chart showing 20-year, by ratio (General Obligation over Treasury), 1994 to September 10, 2009. Data are weekly. The series begins at about 0.82 and generally increases to about 0.99 by 2003. It then generally decreases to about 0.85 by early 2007, and generally increases to about 1.87 by early 2009. It then generally decreases to end at about 1.05.

Source: Bond Buyer.

M2 Monetary Aggregate

(Based on seasonally adjusted data)

Aggregate and components	Percent change (annual rate) ¹						Level (billions of dollars), Aug. (p)
	2007	2008	2009				
			Q1	Q2	July	Aug. (p)	
M2	5.9	8.3	12.9	2.6	-3.1	-7.3	8,298
Components ²							
Currency	2.0	5.8	16.0	6.9	0.6	6.7	858
Liquid deposits ³	4.3	6.8	20.6	12.6	7.9	4.1	5,317
Small time deposits	4.4	11.7	0.2	-16.3	-26.0	-33.1	1,218
Retail money market funds	20.2	12.9	-7.6	-23.9	-36.0	-50.0	899
Memo:							
Institutional money market funds	40.2	24.6	29.9	6.3	-7.0	-23.2	2,459
Monetary base	2.0	70.4	65.4	24.2	-10.3	28.2	1,705

1. For years, Q4 to Q4; for quarters and months, calculated from corresponding average levels. [Return to table](#)

2. Nonbank traveler's checks are not listed. [Return to table](#)

3. Sum of demand deposits, other checkable deposits, and savings deposits. [Return to table](#)

p Preliminary. [Return to table](#)

Source: Federal Reserve.

Commercial Bank Credit

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

Type of credit	2007	2008	H2 2008	Q1 2009	Q2 2009	July 2009	Aug. 2009	Level ¹ Aug. 2009
Total	9.9	5.1	4.5	-5.5	-3.5	-12.6	-10.8	9,258
Loans ²								
Total	10.7	4.6	2.1	-7.1	-6.6	-19.3	-17.0	6,886
Core	9.6	5.2	2.7	-3.0	-5.8	-8.7	-14.4	6,120
To businesses								
Commercial and industrial	19.0	16.6	11.4	-13.4	-15.3	-12.1	-28.0	1,453
Commercial real estate	9.3	6.0	2.9	-.7	-1.7	-5.1	-7.8	1,690
To households								
Residential real estate	5.6	-3.0	-5.2	-1.4	-1.5	-9.5	-12.2	2,131
Revolving home equity	5.7	13.0	13.0	10.0	2.8	-6.1	-5.3	606
Closed-end mortgages	5.6	-7.9	-11.2	-5.6	-3.2	-10.8	-15.1	1,524
Consumer	6.7	7.2	7.4	8.0	-7.0	-8.4	-9.4	847
Memo: Originated ³	6.4	5.7	4.4	1.4	-4.3	-3.8	-11.4	1,248
Other	18.7	.5	-1.5	-34.2	-13.0	-95.6	-37.3	767
Securities								
Total	7.0	6.9	12.9	-.2	6.4	7.7	7.4	2,372
Treasury and agency	-6.1	18.6	32.4	5.9	-5.8	8.6	15.5	1,418
Other ⁴	28.3	-7.0	-11.2	-9.6	25.6	6.4	-4.4	953

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. [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.

Figure: Bank Credit, by Bank Size

Line chart, 2007 to August 2009. January 2007 = 100. Data are monthly, s.a. There are two series, "Large banks" and "Other banks". Large banks begins at about 100 and generally increases to about 115.1 by late 2008. It then generally decreases to end at about 102.5. Other banks begins at about 100.5 and generally increases to about 114.5 by mid-2009. It then generally decreases to end at about 113.

Note: Large is defined as the top 25 banks by asset size.

Source: Federal Reserve.

Figure: C&I Loan Rate Spreads--All Banks

Line chart showing weighted average adjusted, 1997 to 2009:Q3. Unit is basis points. Data are quarterly. A vertical line indicates the NBER Peak in December 2007. The series begins at about 155 and generally increases to about 188 by late 2002. It then generally decreases to about 137 by late 2005, and generally increases to end at about 198. It is at about 144 at the time of the NBER peak.

Note: The spread over market interest rate on an instrument of comparable maturity. Weighted average 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.

Source: Survey of Terms of Business Lending.

Figure: Return on Assets

Line chart, by percent, annual rate, 1985 to 2009:Q2. Data are quarterly, s.a. A vertical line indicates the NBER Peak in December 2007. The series begins at about 0.75 and generally decreases to about -1.55 by 1987. It then generally increases to about 1.5 by 2006, and generally decreases to about -1.0 by late 2008. It then generally increases to end at about -0.1. It is at about 0.5 at the time of the NBER peak.

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

Source: Call Report.

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

Last update: April 1, 2015

International Developments

Trade in Goods and Services

	Annual rate				Monthly rate		
	2008	2008	2009		2009		
		Q4	Q1	Q2	May	June	July
	Percent change						
Nominal <u>BOP</u>							
Exports	-3.4	-38.0	-40.7	-4.6	1.4	2.1	2.2
Imports	-7.3	-46.2	-55.4	-11.4	-.7	2.5	4.7
Real <u>NIPA</u>							
Exports	-3.4	-19.5	-29.9	-5.0	...	...	...
Imports	-6.8	-16.7	-36.4	-15.1	...	...	...
	Billions of dollars						
Nominal <u>BOP</u>							
Net exports	-695.9	-578.0	-369.6	-332.0	-26.4	-27.5	-32.0
Goods, net	-840.2	-715.3	-496.1	-461.9	-37.2	-38.3	-42.7
Services, net	144.3	137.3	126.5	129.9	10.8	10.8	10.7

n.a. Not available.

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

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

NIPA National income and product accounts. [Return to table](#)

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

U.S. International Trade in Goods and Services

(Quarterly)

Figure: Trade Balance

Line chart, by billions of dollars, annual rate, 1999 to July 2009. The series begins at about -220 and generally decreases to about -800 by 2006. It then generally increases to end at about -340. July 2009 is marked at about -340.

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

Bar chart, by percentage points, annual rate, 1999 to 2009:Q2. The series begins at about -1.6 and generally increases to about -0.25 by 1999. It then generally decreases to about -1.5 by early 2000, and generally increases to about 0.3 by 2001. It then generally decreases to about -1.7 by 2004, and generally increases to about 2.65 by early 2009. It then generally decreases to end at about 1.6.

Figure: Selected Exports

Line chart, by billions of dollars, annual rate, 1999 to 2009. There are four series, "Capital goods ex. aircraft", "Industrial supplies", "Consumer goods", and "Aircraft". Capital goods begins at about 248 and generally increases to about 328 by 2000. It then generally decreases to about 230 by early 2002, and generally increases to about 395 by mid-2008. It then generally decreases to end at about 300. Industrial supplies begins at about 128 and generally increases to about 165 by 2000. It then generally decreases to about 138 by early 2002, and generally increases to about 400 by 2008. It then generally decreases to end at about 250. Consumer goods begins at about 78 and generally increases to about 170 by mid-2008. It then generally decreases to end at about 146. Aircraft begins at about

55 and generally decreases to about 45 by 2003. It then generally increases to end at about 75.

Figure: Selected Imports

Line chart, by billions of dollars, annual rate, 1999 to 2009. There are four series, "Capital goods", "Consumer goods", "Industrial supplies", and "Oil". Capital goods begins at about 278 and generally increases to about 365 by mid-2000. It then generally decreases to about 272 by late 2001, and generally increases to about 470 by 2008. It then generally decreases to end at about 349. Consumer goods begins at about 228 and generally increases to about 490 by 2008. It then generally decreases to end at about 420. Industrial supplies begins at about 140 and generally increases to about 188 by early 2001. It then generally decreases to about 150 by late 2001, and generally increases to about 350 by 2008. It then generally decreases to end at about 178. Oil begins at about 45 and generally increases to about 126 by mid-2000. It then generally decreases to about 80 by early 2002, and generally increases to about 525 by 2008. It then generally decreases to about 210 by early 2009, and generally increases to end at about 228.

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	
	Q1	Q2	June	July	Q1	Q2	June	July
Exports of goods and services	1488.8	1471.3	1498.5	1531.1	-207.8	-17.5	30.6	32.6
Goods exports	997.5	984.5	1008.6	1040.5	-164.8	-13.0	23.7	31.9
Gold	13.8	12.3	12.0	12.7	.4	-1.5	-2.3	.8
Other goods	983.7	972.2	996.7	1027.8	-165.2	-11.4	26.0	31.1
Capital goods	393.8	373.1	377.1	386.1	-42.3	-20.7	5.3	9.0
Aircraft & parts	79.0	73.4	74.1	76.0	14.7	-5.6	1.9	1.8
Computers & accessories	36.9	35.5	35.2	39.1	-2.4	-1.4	-.9	4.0
Semiconductors	33.4	35.0	36.9	38.5	-10.6	1.6	2.7	1.6
Other capital goods	244.5	229.2	230.9	232.4	-44.0	-15.3	1.7	1.6
Automotive	70.2	66.7	65.5	81.6	-38.9	-3.4	.8	16.0
Ind. supplies (ex. ag., gold)	240.2	249.8	267.8	272.6	-59.3	9.6	15.9	4.8
Consumer goods	146.0	144.2	144.9	149.3	-10.1	-1.8	-.3	4.4
Agricultural	94.4	101.0	103.7	98.8	-8.6	6.6	3.0	-4.9
All other goods	39.1	37.4	37.8	39.4	-6.0	-1.7	17.8	1.7
Services exports	491.3	486.7	489.9	490.6	-43.0	-4.6	6.9	.7
Imports of goods and services	1858.4	1803.3	1828.4	1914.6	-416.2	-55.1	43.9	86.2
Goods imports	1493.6	1446.5	1468.6	1552.6	-383.9	-47.2	36.9	84.0
Oil	208.9	227.8	259.2	268.5	-132.9	18.9	50.7	9.4
Gold	7.3	8.4	11.4	10.1	.7	1.1	4.7	-1.3
Other goods	1277.5	1210.3	1198.0	1273.9	-251.7	-67.2	-18.5	75.9
Capital goods	366.3	345.6	346.3	361.9	-60.5	-20.7	-.7	15.6
Aircraft & parts	30.2	31.4	31.5	33.5	-2.0	1.2	1.2	2.0
Computers & accessories	80.6	84.4	89.1	95.0	-7.0	3.8	5.4	6.0
Semiconductors	19.0	20.4	20.8	21.5	-4.0	1.4	.1	.8
Other capital goods	236.5	209.4	205.0	211.8	-47.5	-27.1	-7.4	6.8
Automotive	129.4	126.8	132.9	161.5	-70.1	-2.6	11.0	28.5
Ind. supplies (ex. oil, gold)	212.9	178.7	172.8	182.1	-74.8	-34.2	-8.7	9.3

Consumer goods	423.6	419.1	404.8	425.1	-32.9	-4.4	-21.2	20.3
Foods, feeds, beverages	81.7	81.5	82.3	81.6	-7.1	-.2	.9	-.7
All other goods	63.7	58.6	58.9	61.7	-6.3	-5.1	.1	2.8
Services imports	364.8	356.8	359.8	362.0	-32.2	-8.0	7.0	2.2
Memo:								
Oil quantity (mb/d)	13.78	11.62	11.66	11.63	.19	-2.16	.81	-.03
Oil import price (\$/bbl)	41.61	53.70	60.85	63.22	-27.83	12.10	8.23	2.37

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, by 12-month percent change, 1999 to 2009. There are two series, "Core goods" and "Non-oil goods". Core goods begins at about -1.5 and generally increases to about 1.7 by 2000. It then generally decreases to about -3.6 by early 2002, and generally increases to about 8.9 by mid-2008. It then generally decreases to end at about -6. Non-oil goods begins at about -2.8 and generally increases to about 2.2 by early 2001. It then generally decreases to about -5.2 by early 2002, and generally increases to about 8 by mid-2008. It then generally decreases to end at about -6.7.

Figure: Categories of Core Imports

Line chart, by 12-month percent change, 1999 to 2009. There are two series, "Material-intensive goods" and "Finished goods". Material-intensive goods begins at about -5 and generally increases to about 6.5 by early 2000. It then generally decreases to about -10.2 by early 2002, and generally increases to about 19.5 by mid-2008. It then generally decreases to end at about -16. Finished goods begins at about -0.5 and generally decreases to about -1.5 by 2002. It then generally increases to about 4 by 2008, and generally decreases to end at about -1.

Figure: Oil

Line chart, by dollars per barrel, 1999 to 2009. There are two series, "Spot West Texas Intermediate" and "Import unit value". Spot West Texas Intermediate begins at about 11 and generally increases to about 35 by late 2000. It then generally decreases to about 20 by late 2001, and generally increases to about 135 by 2008. It then generally decreases to about 37 by early 2009, and generally decreases to end at about 71. Import unit value begins at about 9 and generally increases to about 29 by mid-2000. It then generally decreases to about 15 by late 2001, and generally increases to about 126 by mid-2008. It then generally decreases to about 37 by early 2009, and generally increases to end at about 71.

Figure: Natural Gas

Line chart, 1999 to 2009. There are two series, "Import price index", 2000 = 100, and "Spot Henry Hub", which is dollars per million Btu. These two series use two different scales. Import price index begins at about 65 and generally decreases to about 50 by 1999. It then generally increases to about 220 by early 2001, and generally decreases to about 60 by early 2002. It then generally increases to about 275 by late 2005, and generally decreases to about 122 by late 2006. It then generally increases to about 280 by mid-2008, and generally decreases to end at about 90. Spot Henry Hub begins at about 2 and generally increases to about 9.5 by late 2000. It then generally decreases to about 2.5 by 2001, and generally increases to about 14 by 2005. It then generally decreases to about 4.5 by 2006, generally increases to about 13 by mid-2008, and generally decreases to end at about 2.5.

Figure: Merchandise Exports

Line chart, by 12-month percent change, 1999 to 2009. There are two series, "Core goods" and "Total goods". Core goods begins at about -2 and generally increases to about 3 by early 2000. It then generally decreases to about -2.5 by early 2002, and generally increases to about 13.9 by mid-2008. It then generally decreases to about -11 by mid-2009, and generally increases to end at about -7.2. Total goods begins at about -2.8 and generally increases to about 2 by early 2000. It then generally decreases to about -3 by early 2002, and generally increases to about 10 by mid-2008. It then generally decreases to about -8 by mid-2009, and generally increases to end at about -6.

Figure: Categories of Core Exports

Line chart, by 12-month percent change, 1999 to 2009. There are two series, "Material-intensive goods" and "Finished goods". Material-intensive goods begins at about -6.5 and generally increases to about 7.5 by early 2000. It then generally decreases to about -7 by 2001, and generally increases to about 24.8 by mid-2008. It then generally decreases to about -21.5 by mid-2009, and generally increases to end at about -16. Finished goods begins at about 0 and generally increases to about 3.8 by 2008. It then generally decreases to end at about 1.5.

Prices of U.S. Imports and Exports

(Percentage change from previous period)

	Annual rate			Monthly rate		
	2009			2009		
	Q1	Q2	Q3 ^e	June	July	Aug.
	BLS prices					
Merchandise imports	-24.3	14.9	11.4	2.7	-7	2.0
Oil	-72.6	247.1	89.1	17.2	-2.6	10.5
Non-oil	-10.9	-3.2	.4	.2	-.3	.4
Core goods ¹	-11.3	-1.2	1.1	.2	-.2	.4
Finished goods	-1.2	-.5	.1	.1	-.0	-.0
Cap. goods ex. comp. & semi.	-.7	-1.4	.5	.0	.2	-.1
Automotive products	-.5	.0	1.2	.1	.1	.2
Consumer goods	-1.8	-.1	-.8	.1	-.2	-.2
Material-intensive goods	-30.1	-2.9	3.4	.4	-.5	1.5
Foods, feeds, beverages	-9.6	.8	.9	.4	-1.0	1.7
Industrial supplies ex. fuels	-35.4	-4.2	3.9	.3	-.3	1.3
Computers	-8.3	-4.2	1.0	-.6	.6	.0
Semiconductors	-10.9	7.1	-6.9	.0	-2.0	.5
Natural gas	-61.0	-74.7	-25.4	4.3	-9.0	1.5
Merchandise exports	-8.8	2.4	3.4	1.0	-.3	.7
Core goods ²	-11.1	2.5	3.8	1.3	-.5	.9
Finished goods	1.6	.3	1.7	.2	.2	.1
Cap. goods ex. comp. & semi.	3.1	2.5	1.8	.2	.3	.1
Automotive products	.5	-.6	-.8	-.1	-.2	.1
Consumer goods	-1.2	-4.0	3.6	.4	.4	.3
Material-intensive goods	-24.4	5.2	6.3	2.6	-1.4	1.7
Agricultural products	-12.3	19.5	-4.1	4.2	-4.9	.2
Industrial supplies ex. ag.	-28.4	1.2	10.1	2.0	-.1	2.3
Computers	-9.1	-3.4	-2.3	-.3	-.7	.5
Semiconductors	7.4	12.3	4.9	-.3	1.2	.1
	NIPA prices					
Chain price index						
Imports of goods & services	-28.3	4.1	--	...	...	...
Non-oil merchandise	-10.5	-4.0	--	...	...	...
Core goods ¹	-9.4	-2.4	--	...	...	...
Exports of goods & services	-12.6	.5	--	...	...	...
Total merchandise	-14.8	2.5	--	...	...	...
Core goods ²	-12.5	2.6	--	...	...	...

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.

U.S. International Financial Transactions

Figure: Treasury Auction Issuance of Bills, Notes, and Bonds, and Foreign Share of Allotments

Bar chart, "Total Issuance", which is by billions of dollars, January 2008 to August 2009. There is another series, "Foreign share", which is by percent and is plotted as a curve. These two series use two different scales. Data are monthly. Total Issuance begins at about 370 and generally increases to about 500 by February 2008. It then generally decreases to about 370 by April 2008, and generally increases to about 1100 by November 2008. It then generally decreases to about 580 by December 2008, and generally increases to about 890 by July 2009. It then generally decreases to end at about 750. Foreign Share begins at about 7.5 and generally decreases to about 7 by February. It then generally increases to about 11.8 by April, and generally decreases to about 6.5 by October. It then generally increases to about 25 by June 2009, and generally decreases to end at about 20.5.

Source: U.S. Department of the Treasury, Office of Debt Management.

Summary of U.S. International Transactions

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

	2007	2008	2008		2009			
			Q3	Q4	Q1	Q2	June	July
Official financial flows	451.1	-54.6	-108.9	-286.5	313.5	319.6	119.1	81.7
1. Change in foreign official assets in the U.S. (increase, +)	475.2	480.0	117.5	-17.9	70.7	128.2	56.1	43.4
a. <u>G-10</u> countries + <u>ECB</u>	36.8	-8.4	8.9	-16.0	-7.4	15.5	20.5	6.6
b. <u>OPEC</u>	33.0	45.5	16.1	-3.4	-5.0	-0.3	-1.3	-0.4
c. All other countries	405.5	430.0	92.5	-11.4	83.1	113.0	36.9	37.2
2. Change in U.S. official assets (decrease, +) ¹	-24.1	-534.6	-226.4	-268.7	242.8	191.4	63.0	38.2
Private financial flows	212.5	559.7	252.0	374.8	-266.4	n.a.	...	...
Banks								
3. Change in net foreign positions of banking offices in the U.S. ²	-86.1	-15.6	-106.7	338.9	-278.6	-191.5	-116.7	-99.0
Securities ³								
4. Foreign net purchases (+) of U.S. securities	673.9	70.9	-24.1	52.7	3.7	18.3	57.0	-16.0
a. Treasury securities	67.1	197.0	79.1	81.6	55.4	17.4	47.6	-19.2
b. Agency bonds	-8.6	-185.0	-70.1	-21.5	-45.2	-13.8	-2.4	-2.8
c. Corporate and municipal bonds	384.7	2.5	-35.4	-3.8	-12.5	-21.0	-4.5	-17.5
d. Corporate stocks ⁴	230.7	56.4	2.4	-3.6	6.0	35.7	16.3	23.5
5. U.S. net acquisitions (-) of foreign securities	-366.8	60.5	79.6	68.6	-33.1	-89.8	-35.5	-30.8
a. Bonds	-218.5	64.2	65.5	37.0	-31.8	-52.5	-20.6	-15.2
b. Stock purchases	-136.4	3.4	14.1	35.8	0.6	-37.3	-14.9	-15.6
c. Stock swaps ⁴	-11.9	-7.1	0.0	-4.3	-1.9	0.0	0.0	0.0
Other flows ⁵								
6. U.S. direct investment (-) abroad	-398.6	-332.0	-54.1	-84.5	-24.0	n.a.	...	...
7. Foreign direct investment in the U.S.	275.8	319.7	62.8	96.8	35.3	n.a.	...	...
8. Net derivatives (inflow, +)	6.2	-28.9	-4.1	-14.5	8.4	n.a.	...	...
9. Foreign acquisitions of U.S. currency	-10.7	29.2	5.8	29.9	11.8	n.a.	...	...
10. Other (inflow, +) ⁶	118.8	455.8	292.8	-113.0	10.0	n.a.	...	...

U.S. current account balance⁵	-726.6	-706.1	-184.2	-154.9	-101.5	n.a.	...	...
Capital account balance⁷	-1.9	1.0	3.0	-0.7	-0.7	n.a.	...	...
Statistical discrepancy⁵	64.9	200.1	38.1	67.2	55.1	n.a.	...	...

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

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

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

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

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

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

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

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

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

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

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

n.a. Not available.

... Not applicable.

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

Foreign Official Financial Inflows (+) through July 2009

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

Figure: Total

Line chart, 2005 to 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 28 and generally decreases to about 17 by 2005. It then generally increases to about 49 by 2007, and generally decreases to about 22 by late 2007. It then generally increases to about 65 by 2008, and generally decreases to about 8 by early 2009. It then generally increases to end at about 37. Monthly begins at about 17 and generally decreases to about 4 by early 2005. It then generally increases to about 64 by mid-2006, and generally decreases to about -19 by 2007. It then generally increases to about 110 by early 2008, and generally decreases to about -10 by late 2008. It then generally increases to about 55 by mid-2009, and generally decreases to end at about 44.

Figure: Treasury Securities

Line chart, 2005 to 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 15 and generally decreases to about 8 by 2005. It then generally increases to about 20 by early 2006, and generally decreases to about 0 by 2007. It then generally increases to about 55 by early 2009, generally decreases to about 40 by 2009, and generally increases to end at about 50. Monthly begins at about 11 and generally decreases to about -10 by 2005. It then generally increases to about 34 by early 2006, and generally decreases to about -30 by 2007. It then generally increases to about 80 by late 2008, and generally decreases to about 22 by early 2009. It then generally increases to end at about 60.

Figure: Agency Securities

Line chart, 2005 to 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 5 and generally increases to about 27 by 2007. It then generally decreases to about 5 by late 2007, and generally increases to about 30 by mid-2008. It then generally decreases to about -18.5 by late 2008, and generally increases to about 0 by 2009. It then generally decreases to end at about -5. Monthly begins at about 8 and generally decreases to about 0 by 2005. It then generally increases to about 35 by 2007, and generally decreases to about -3 by late 2007. It then generally increases to about 37 by 2008, and generally decreases to about -40 by late 2008. It then generally increases to about 10 by early 2009, and generally decreases to end at about -14.

Figure: Foreign Official Balances Held at the Federal Reserve Bank of New York, Daily through August 26, 2009

Line chart, 2007 to 2009. There are two series, "Treasury securities" and "Agency securities". Treasury securities begins at about 1150 and generally increases to end at about 2000. Agency securities begins at about 600 and generally increases to about 1000 by mid-2008. It then generally decreases to end at about 800.

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

Private Securities Flows through July 2009

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

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

Figure: Total

Line chart, 2005 to 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 40 and generally increases to about 90 by mid-2007. It then generally decreases to about -5 by early 2009, and generally increases to end at about 12. Monthly begins at about 50 and generally decreases to about 10 by 2005. It then generally increases to about 150 by 2007, and generally decreases to about -80 by early 2009. It then generally increases to about 59 by mid-2009, and generally decreases to end at about -18.

Figure: Treasury Securities

Line chart, 2005 to 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 0 and generally increases to about 20 by 2005. It then generally decreases to about -12 by early 2006, and generally increases to about 29 by late 2008. It then generally decreases to about 1 by mid-2009, and generally increases to end at about 15. Monthly begins at about 12 and generally increases to about 44 by 2005. It then generally decreases to about -38 by 2006, and generally increases to about 92 by late 2008. It then generally decreases to about -38 by early 2009, and generally increases to about 50 by 2009. It then generally decreases to end at about -20.

Figure: Agency Bonds

Line chart, 2005 to 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 10 and generally decreases to about -28 by 2008. It then generally increases to end at about -6. Monthly begins at about 11 and generally decreases to about -8 by 2005. It then generally increases to about 12 by 2005, and fluctuates but generally decreases to about -44 by mid-2008. It then generally increases to end at about -3.

Figure: Corporate and Municipal Bonds

Line chart, 2005 to 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 27 and generally decreases to about 20 by 2005. It then generally increases to about 60 by early 2007, and generally decreases to about -12 by late 2008. It then generally increases to about 2 by 2009, and generally decreases to end at about -6. Monthly begins at about 12 and generally increases to about 88 by 2007. It then generally decreases to about -20 by 2008, and generally increases to about 32 by late 2008. It then generally decreases to end at about -18.

Figure: Corporate Stocks

Line chart, 2005 to 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 10 and generally decreases to about 5 by mid-2005. It then generally increases to about 27 by 2007, and generally decreases to about 0 by late 2008. It then generally increases to end at about 11. Monthly begins at about 12 and generally decreases to about 2 by 2005. It then generally increases to about 42 by 2007, and generally decreases to about -30 by mid-2007. It then generally increases to about 40 by late 2007, and generally decreases to about -8 by mid-2008. It then generally increases to end at about 24.

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

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

Figure: Total

Line chart, 2005 to 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about -14 and generally decreases to about -44 by early 2007. It then generally increases to about 28 by late 2008, and generally decreases to end at about -20. Monthly begins at about -12 and generally decreases to about -60 by early 2007. It then fluctuates but generally increases to about 32 by 2008, and generally decreases to end at about -30.

Figure: Bonds

Line chart, 2005 to 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about -10 and generally increases to about -3 by late 2005. It then generally decreases to about -28 by 2007, and generally increases to about 20 by late 2008. It then generally decreases to end at about -10. Monthly begins at about -2 and generally decreases to about -12 by 2005. It then generally increases to about 15 by mid-2005, and generally decreases to about -44 by early 2007. It then generally increases to about 36 by 2008, and generally decreases to about -28 by late 2008. It then generally increases to about -2 by early 2009, and generally decreases to end at about -14.

Figure: Stock Purchases & Swaps

Line chart, 2005 to 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about -4 and generally decreases to about -18 by late 2005. It then generally increases to about -4 by 2006, and generally decreases to about -20 by 2007. It then generally increases to about 10 by late 2008, and generally decreases to end at about -9. Monthly begins at about -8 and generally decreases to about -20 by early 2005. It then generally increases to about 7 by 2006, and generally decreases to about -34 by late 2006. It then fluctuates but generally increases to about 19 by 2008, and generally decreases to end at about -15.

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

Exchange Value of the Dollar and Stock Market Indexes

	Latest	Percent change since August Greenbook
<i>Exchange rates*</i>		
Euro (\$/euro)	1.4617	-1.5
Yen (¥/\$)	90.950	-4.7
Sterling (£/\$)	1.6436	3.0
Canadian dollar (C\$/ \$)	1.0760	0.7
<i>Nominal dollar indexes*^</i>		
Broad index	103.1	0.4
Major Currencies index	74.5	0.1
OITP index	135.0	0.7
<i>Stock market indexes</i>		
DJ Euro Stoxx	266	7.5
TOPIX	933	-2.8
FTSE 100	5042	7.9
S&P 500	1053	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. January 4, 2005 = 100. Data are weekly. There are three series, "Major currencies index", "Euro" and "Yen". Major currencies index begins at about 100 and generally increases to about 108 by late 2005. It then generally decreases to about 86 by 2008, and generally increases to about 107 by early 2009. It then generally decreases to end at about 93. Euro begins at about 100 and generally increases to about 114 by late 2005. It then generally decreases to about 84 by 2008, and generally increases to about 105 by late 2008. It then generally decreases to end at about 90. Yen begins at about 100 and generally increases to about 118 by mid-2007. It then generally decreases to about 85 by early 2009, and generally increases to about 97 by early 2009. It then generally decreases to end at about 87.

There is a second line chart, May to September 2009. August 4, 2009 = 100. Data are daily. The August 2009 Greenbook is marked in the time series. There are three series, "Major currencies index", "Euro" and "Yen". Major currencies index begins at about 109 and generally decreases to about 102 by early June. It then generally increases to about 105 by mid-June, and generally decreases to end at about 100. Euro begins at about 109 and generally decreases to about 101 by early June. It then generally increases to about 104.5 by July, and generally decreases to end at about 98. Yen begins at about 104 and generally decreases to about 99.5 by late May. It then generally increases to about 104 by June, and generally decreases to about 97 by July. It then generally increases to about 102 by August, and generally decreases to end at about 95. They are at about 100 at the time of the August 2009 Greenbook.

Figure: Stock Market Indexes

Line chart, 2005 to 2009. January 4, 2005 = 100. Data are weekly. There are three series, "DJ Euro Stoxx", "TOPIX", and "S&P 500". DJ Euro Stoxx begins at about 100 and generally increases to about 161 by mid-2007. It then generally decreases to about 64 by early 2009, and generally increases to end at about 100. TOPIX begins at about 100 and generally increases to about 150 by 2006. It then generally decreases to about 101 by early 2008, and generally increases to about 125 by mid-2008. It then generally decreases to about 62 by 2009, and generally increases to end at about 82. S&P 500 begins at about 100 and generally increases to about 130 by 2007. It then generally decreases to about 58 by early 2009, and generally increases to end at about 88.

There is a second line chart, May to September 2009. August 4, 2009 = 100. Data are daily. The August 2009 Greenbook is marked in the time series. There are three series, "DJ Euro Stoxx", "TOPIX", and "S&P 500". DJ Euro Stoxx begins at about 91 and generally increases to about 95 by early June. It then generally decreases to about 85 by July, and generally increases to end at about 110. TOPIX begins at about 88 and generally increases to about 100 by June. It then generally decreases to about 89 by July, and generally increases to about 102.5 by August. It then generally decreases to end at about 97.5. S&P 500 begins at about 91 and generally increases to about 94 by June. It then generally decreases to about 87.5 by July, and generally increases to end at about 105. They are at about 100 at the time of the August Greenbook.

Industrial Countries: Nominal and Real Interest Rates

Percent

	3-month <u>Libor</u>		10-year nominal		10-year indexed	
	Latest	Change since Aug. Greenbook	Latest	Change since Aug. Greenbook	Latest	Change since Aug. Greenbook
Germany	0.72	-0.13	3.29	-0.05	1.02	-0.31
Japan	0.35	-0.06	1.32	-0.12	2.31	-0.18
United Kingdom	0.61	-0.27	3.62	-0.23	0.98	-0.32
Canada	0.50	-0.10	3.37	-0.17	...	...
United States	0.29	-0.18	3.47	-0.23	1.72	-0.26

... Not applicable.

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

Figure: Nominal 10-Year Government Bond Yields

Line chart, by percent, 2005 to 2009. Data are weekly. There are three series, "Germany", "Japan", and "United States". Germany begins at about 3.6 and generally decreases to about 3 by 2005. It then generally increases to about 4.7 by mid-2008, and generally decreases to end at about 3.3. Japan begins at about 1.5 and generally increases to about 2 by 2006. It then generally decreases to end at about 1.4. United States begins at about 4.3 and generally increases to about 5.3 by mid-2006. It then generally decreases to about 2.2 by late 2008, and generally increases to end at about 3.5.

There is a second line chart, May to September 2009. Data are daily. The August 2009 Greenbook is marked in the time series. There are three series, "Germany", "Japan", and "United States". Germany begins at about 3.2 and generally increases to about 3.7 by June. It then generally decreases to end at about 3.4. It is at about 3.4 at the time of the August 2009 Greenbook. Japan begins at about 1.5 and generally increases to about 1.6 by early June. It then generally decreases to about 1.3 by July, generally increases to about 1.5 by August, and generally decreases to end at about 1.3. It is at about 1.5 at the time of the August 2009 Greenbook. United States begins at about 3.2 and generally decreases to about 3.1 by May. It then generally increases to about 4 by June, and generally decreases to about 3.4 by July. It then generally increases to about 3.9 by August, and generally decreases to end at about 3.5. It is at about 3.7 at the time of the August 2009 Greenbook.

Figure: Inflation-Indexed 10-Year Government Bond Yields

Line chart, by percent, 2005 to 2009. Data are weekly. There are three series, "France", "Japan", and "United States". France begins at about 1.4 and generally increases to about 1.7 by 2005. It then generally decreases to about 1 by 2005, and generally increases to about 2.8 by late 2008. It then generally decreases to end at about 1. Japan begins at about 0.8 and generally decreases to about 0.4 by 2005. It then generally increases to about 5 by late 2008, and generally decreases to end at about 2.2. United States begins at about 1.7 and generally increases to about 2.9 by mid-2007. It then generally decreases to about 1.2 by early 2008, and generally increases to about 3.6 by late 2008. It then generally decreases to end at about 1.8.

There is a second line, May to September 2009. Data are daily. The August 2009 Greenbook is marked in the time series. There are three series, "France", "Japan", and "United States". France begins at about 1.4 and generally decreases to about 1.2 by May. It then generally increases to about 1.6 by June, and generally decreases to end at about 0.88. It is at about 1.3 at the time of the August 2009 Greenbook. Japan begins at about 3.1 and generally increases to about 3.6 by late May. It then generally decreases to end at about 2.3. It is at about 2.5 at the time of the August 2009 Greenbook. United States begins at about 2 and generally decreases to about 1.8 by May. It then generally increases to about 2.2 by June, and generally decreases to end at about 1.7. It is at about 2 at the time of the August 2009 Greenbook.

Measures of Market Volatility

Figure: Dollar-Euro Options-Implied Volatility

Line chart, by percent, 2005 to 2009. Data are weekly. There are three series, "1-month" and "3-month". These two series track closely together throughout the chart. They begin at about 10 and generally decrease to about 5 by mid-2007. They then generally increase to about 27 by late 2008, and generally decrease to about 12.

There is a second line chart, May to September 2009. Data are daily. The August 2009 Greenbook is marked in the time series. There are two series, "1-month" and "3-month". They begin at about 13.7 and generally decrease to about 13 by mid-May. They then generally increase together until they reach about 16 by early June. 1-month generally decreases to about 10.2 by late August, and generally increase to end at about 11. It is at about 12 at the time of the August 2009 Greenbook. 3-month generally decreases to about 12 by late July, generally increases to about 12.8 by early August, and generally decreases to end at about 11.7. It is at about 12.8 at the time of the August 2009 Greenbook.

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

Figure: Yen-Dollar Options-Implied Volatility

Line chart, by percent, 2005 to 2009. Data are weekly. There are two series, "1-month" and "3-month". These two series track closely together throughout the chart. They begin at about 10 and generally decrease to about 7 by 2007. They then generally increase to about 33 by 2008, and generally decrease to end at about 14.

There is a second line chart, May to September 2009. Data are daily. The August 2009 Greenbook is marked in the time series. There are two series, "1-month" and "3-month". 1-month begins at about 16.5 and generally decreases to about 12.5 by May. It then generally increases to about 15.75 by early June, and generally decreases to about 13.0 by early July. It then generally increases to about 16.1 by July, generally decreases to about 12.75 by early September, and generally increases to end at about 13.78. 3-month begins at about 13.5 and generally decreases to about 12.5 by May. It then generally increases to about 15.3 by early June, and generally decreases to about 13.25 by early July. It then generally increases to about 15.4 by July, generally decreases to about 13.4 by September, and generally increases to end at about 14.4. They are at about 14.1 at the time of the August 2009 Greenbook.

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

Figure: Realized Stock Market Volatility

Line chart, by percent, 2005 to 2009. Data are weekly. There are three series, "DJ Euro Stoxx", "TOPIX", and "S&P 500". DJ Euro Stoxx begins at about 10 and remains about constant until early 2006. It then generally increases to about 62 by late 2008, and generally decreases to end at about 22. TOPIX begins at about 15 and generally decreases to about 10 by 2005. It then generally increases to about 64 by late 2008, and generally decreases to end at about 20. S&P 500 begins at about 10 and generally increases to about 14 by mid-2006. It then generally decreases to about 9 by 2006, and generally increases to about 72 by late 2008. It then generally decreases to end at about 22.

There is a second line chart, May to September 2009. Data are daily. The August 2009 Greenbook is marked in the time series. There are three series, "DJ Euro Stoxx", "TOPIX", and "S&P 500". DJ Euro Stoxx begins at about 36 and generally decreases to end at about 20. It is at about 23 at the time of the August 2009 Greenbook. TOPIX begins at about 29 and generally increases to about 30 by mid-May. It then generally decreases to about 17.5 by August, and generally increases to end at about 18. It is at about 20 at the time of the August 2009 Greenbook. S&P 500 begins at about 40 and generally decreases to end at about 18. It is at about 20.5 at the time of the August 2009 Greenbook.

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

Figure: Realized 10-Year Bond Volatility

Line chart, by percent, 2005 to 2009. Data are weekly. There are three series, "Germany", "Japan", and "United States". Germany begins at about 4 and generally increases to about 5 by mid-2006. It then generally decreases to about 2.5 by early 2007, and generally increases to about 10 by early 2009. It then generally decreases to end at about 6. Japan begins at about 4 and generally decreases to about 3 by early 2005. It then generally increases to about 6.5 by mid-2008, and generally decreases to end at about 2.5. United States begins at about 6 and generally decreases to about 4 by 2006. It then generally increases to about 16 by late 2008, and generally decreases to end at about 10.5.

There is a second line chart, May to September 2009. Data are daily. The August 2009 Greenbook is marked in the time series. There are three series, "Germany", "Japan", and "United States". Germany begins at about 10 and generally decreases to end at about 6. It is at about 7.5 at the time of the August 2009 Greenbook. Japan begins at about 3 and remains about constant until late June. It then generally decreases to end at about 2.5. It is at about 2.5 at the time of the August 2009 Greenbook. United States begins at about 14 and generally decreases to about 13.5 by mid-May. It then generally increases to about 15 by early June, and generally decreases to about 12 by June. It then generally increases to about 13.5 by August, and generally decreases to end at about 11. It is at about 13 at the time of the August 2009 Greenbook.

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

Emerging Markets: Exchange Rates and Stock Market Indexes



	Exchange value of the dollar		Stock market index	
	Latest	Percent change since	Latest	Percent change since
		Aug. Greenbook*		Aug. Greenbook
Mexico	13.3365	1.8	29625	6.3
Brazil	1.8058	-1.5	59264	5.8
Venezuela	2.14	0.0	53795	16.5
China	6.8289	-0.0	3034	-12.6
Hong Kong	7.7501	0.0	20866	0.3
Korea	1217.4	-0.2	1653	5.6
Taiwan	32.57	-0.2	7346	5.6
Thailand	33.90	-0.2	703	9.7

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

Figure: Exchange Value of the Dollar

Line chart, 2005 to 2009. January 4, 2005 = 100. Data are weekly. There are four series, "Mexico", "Brazil", "Korea", and "China". Mexico begins at about 100, remains about constant until late 2007, and generally decreases to about 90 by mid-2008. It then generally increases to about 138 by early 2009, and generally decreases to end at about 120. Brazil begins at about 100 and generally decreases to about 60 by mid-2008. It then generally increases to about 90 by late 2008, and generally decreases to end at about 68. Korea begins at about 100 and generally decreases to about 89 by late 2007. It then generally increases to about 150 by early 2009, and generally decreases to end at about 120. China begins at about 100, generally decreases to about 80 by mid-2008, and generally remains constant until the end.

There is a second line chart, May to September 2009. August 4, 2009 = 100. Data are daily. The August 2009 Greenbook is marked in the time series. There are four series, "Mexico", "Brazil", "Korea", and "China". Mexico begins at about 105 and generally decreases to about 97.5 by mid-May. It then generally increases to about 105.5 by July, and generally decreases to about 97.5 by August. It then generally increases to end at about 101. Brazil begins at about 118 and generally decreases to about 104 by June. It then generally increases to about 110 by late June, and generally decreases to end at about 97.8. Korea begins at about 105 and generally decreases to about 100 by early June. It then generally increases to about 107.5 by July, and generally decreases to end at about 99.5 by early August. It then generally decreases to end at about 99. China begins at about 100 and remains constant until the end. They are at about 100 at the time of the August 2009 Greenbook.

Figure: Stock Market Indexes

Line chart, 2005 to 2009. January 4, 2005 = 100. Data are weekly. There are four series, "Mexico", "Brazil", "Korea", and "Hong Kong". Mexico begins at about 100 and generally increases to about 250 by mid-2007. It then generally decreases to about 125 by late 2008, and generally increases to end at about 225. Brazil begins at about 100 and generally increases to about 280 by 2008. It then generally decreases to about 128 by late 2008, and generally increases to end at about 225. Korea begins at about 100 and generally increases to about 230 by late 2007. It then generally decreases to about 115 by late 2008, and generally increases to end at about 285. Hong Kong begins at about 100 and generally increases to about 220 by late 2007. It then generally decreases to about 80 by early 2009, and generally increases to end at about 150.

There is a second line chart, May to September 2009. August 4, 2009 = 100. Data are daily. The August 2009 Greenbook is marked in the time series. There are four series, "Mexico", "Brazil", "Korea", and "Hong Kong". Mexico begins at about 84 and generally increases to about 92 by June. It then generally decreases to about 84 by July, and generally increases to end at about 107. Brazil begins at about 90 and generally decreases to about 88 by mid-May. It then generally increases to about 98 by late May, and generally decreases to about 87 by June. It then generally increases to end at about 107. Korea begins at about 89 and generally decreases to about 88 by June. It then generally increases to about end at about 108. Hong Kong begins at about 79 and generally increases to about 102 by early August. It then generally decreases to about 95 by early September, and generally increases to end at about 103.5. They are at about 100 at the time of the August 2009 Greenbook.

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

Percent

	Short-term interest rates*		Dollar-denominated bond spreads**	
	Latest	Change since Aug. Greenbook	Latest	Change since Aug. Greenbook
Mexico	4.49	0.01	1.79	-0.15
Brazil	9.00	0.40	2.24	-0.16
Argentina	12.44	-0.63	7.47	-1.35
China	...	...	0.86	-0.16

Korea	2.10	0.00	...	...
Taiwan	1.14	0.07	...	...
Singapore	0.31	0.00	...	...
Hong Kong	0.14	0.07	...	...

* One-month interest rate except 1-week rate for Korea. (No reliable short-term interest rate exists for China.) [Return to table](#)

** EMBI+ Spreads or EMBI Global Spreads over similar-maturity U.S. Treasury securities. [Return to table](#)

... Not applicable. Korea, Taiwan, and Hong Kong have no outstanding dollar-denominated sovereign bonds. [Return to table](#)

Figure: EMBI+ Spreads

Line chart, by percent, 2005 to 2009. Data are weekly. There are three series, "Overall", "Mexico", and "Brazil". Overall begins at about 3.7 and generally decreases to about 1.5 by 2007. It then generally increases to about 8 by 2008, and generally decreases to end at about 3.2. Mexico begins at about 1.7 and generally decreases to about 0.8 by 2007. It then generally increases to about 5.3 by late 2008, and generally decreases to end at about 2. Brazil begins at about 4 and generally increases to about 4.8 by 2005. It then generally decreases to about 1.4 by 2007, and generally increases to about 6 by 2008. It then generally decreases to end at about 2.2.

There is a second line chart, May to September 2009. Data are daily. The August 2009 Greenbook is marked in the time series. There are three series, "Overall", "Mexico", and "Brazil". Overall begins at about 5.3 and generally decreases to about 3.5 by early August. It then generally increases to about 3.9 by early September, and generally decreases to end at about 3.3. It is at about 3.5 at the time of the August 2009 Greenbook. Mexico begins at about 3 and generally decreases to about 2.1 by late May. It then generally increases to about 2.9 by July and generally decreases to about 1.7 by August. It then generally increases to about 2.5 by early September, and generally decreases to end at about 1.8. It is at about 1.9 at the time of the August 2009 Greenbook. Brazil begins at about 3.5 and generally decreases to about 2.4 by August. It then generally increases to about 2.7 by late August, and generally decreases to end at about 2.2. It is at about 2.5 at the time of the August 2009 Greenbook.

Figure: EMBI Global Spreads

Line chart, by percent, 2005 to 2009. Data are weekly. There are three series, "China", "Malaysia", and "Indonesia". China begins at about 0.9 and remains about constant until mid-2007. It then generally increases to about 3.2 by 2008, and generally decreases to end at about 1. Malaysia begins at about 0.9 and remains about constant until mid-2007. It then generally increases to about 5 by 2008, and generally decreases to end at about 2. Indonesia begins at about 2.8 and generally decreases to about 2 by 2005. It then generally increases to about 3.2 by mid-2005, and generally decreases to about 1.8 by mid-2007. It then generally increases to about 10.2 by late 2008, and generally decreases to end at about 2.8.

There is a second line, May to September 2009. Data are daily. The August 2009 Greenbook is marked in the time series. There are three series, "China", "Malaysia", and "Indonesia". China begins at about 1.5 and generally decreases to about 0.5 by June. It then generally increases to about 1.7 by July, and generally decreases to end at about 0.9. It is at about 1 at the time of the August 2009 Greenbook. Malaysia begins at about 2.9 and generally decreases to about 1.3 by early August. It then generally increases to end at about 2.8. It is at about 1.2 at the time of the August 2009 Greenbook. Indonesia begins at about 5.4 and generally decreases to about 3 by early August. It then generally increases to about 3.6 by early September, and generally decreases to end at about 2.9. It is at about 3.2 at the time of the August 2009 Greenbook.

Advanced Foreign Economies

Figure: Average Real Gross Domestic Product

Line chart, by annualized percent change, s.a., 1999 to 2009. Data are quarterly. The series begins at about 3.7 and generally increases to about 5.5 by early 2000. It then generally decreases to about -0.7 by 2001, and generally increases to about 3.7 by early 2007. It then generally decreases to about -7.8 by early 2009, and generally increases to end at about -1.6.

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

Source: FRB staff calculations.

Figure: Consumer Prices

Line chart, by 12-month percent change, s.a., 1999 to 2009. Data are monthly. There are four series, "Japan", "Euro area", "Canada", and "United Kingdom". Japan begins at about 0.4 and generally decreases to about -1.5 by early 2002. It then generally increases to about 1 by late 2004, and generally decreases to about -1.2 by late 2005. It then generally increases to about 2.4 by mid-2008, and generally decreases to end at about -2.2. Euro area begins at about 0.9 and generally increases to about 3.2 by 2001. It then generally decreases to about 1.6 by mid-2007, and generally increases to about 4 by mid-2008. It then generally decreases to about -0.7 by mid-2009, and generally increases to end at about -0.2. Canada begins at about 0.9 and generally increases to about 3.9 by 2001. It then generally decreases to about 0.8 by late 2001, and generally increases to about 4.7 by early 2003. It then generally decreases to about 0.8 by early 2004, and generally increases to about 3.4 by 2008. It then generally decreases to end at about -1. United Kingdom begins at about 1.6 and generally decreases to about 0.5 by 2000. It then generally increases to about 5.2 by 2008, and generally decreases to end at about 1.5.

Source: Haver Analytics.

Figure: Official or Targeted Interest Rates

Line chart, by percent, 1999 to 2009. There are four series, "Japan", "Euro area", "Canada", and "United Kingdom". Japan begins at about 0.3 and generally decreases to about 0 by early 2001. It then remains about constant until mid-2006, generally increases to about 0.5 by early 2007, and generally decreases to end at about 0.1. Euro area begins at about 3 and generally decreases to about 2.5 by 1999. It then generally increases to about 4.7 by 2000, and generally decreases to about 2 by 2003. It remains about constant until late 2005, generally increases to about 4.3 by mid-2008, and generally decreases to end at about 1. Canada begins at about 5 and generally decreases to about 4.5 by 1999. It then generally increases to about 5.7 by 2000, and generally decreases to about 2 by early 2002. It then generally increases to about 3.3 by 2003, and generally decreases to about 2 by 2004. It then generally increases to about 4.5 by mid-2007, and generally decreases to end at about 0.2. United Kingdom begins at about 6.3 and generally decreases to about 5 by 1999. It then generally increases to about 6 by 2000, and generally decreases to about 3.5 by mid-2003. It then generally increases to about 5.7 by mid-2007, and generally decreases to end at about 0.5.

Source: Bloomberg.

Japanese Real GDP

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

Component	2007 ¹	2008 ¹	2008		2009	
			Q3	Q4	Q1	Q2
GDP	1.9	-4.5	-5.1	-12.8	-12.4	2.3
Total domestic demand	.5	-1.8	-4.6	-1.9	-9.1	-4.0
Consumption	.3	-.2	.5	-2.9	-4.6	3.0
Private investment	-1.9	-8.8	-14.0	-20.7	-28.6	-20.7
Public investment	-4.3	-4.7	6.4	8.8	10.5	33.6
Government consumption	3.2	.1	-.7	5.5	.4	-1.3
Inventories ²	.3	.1	-2.0	2.2	-1.2	-2.8
Exports	9.8	-12.9	-2.9	-44.2	-63.9	28.1
Imports	1.4	2.6	.7	10.3	-47.7	-18.9
Net exports ²	1.3	-2.3	-.6	-9.5	-5.9	5.1

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, late 1999 to 2009. Index, 2005 = 100. There are two series, "Industrial production" and "Tertiary services". Industrial production begins at about 95 and generally increases to about 103 by late 2000. It then generally decreases to about 87 by 2001, and generally increases to about 110 by late 2007. It then generally decreases to about 68 by early 2009, and generally increases to end at about 83. Tertiary services begins at about 93 and generally increases to about 104 by 2008. It then generally decreases to end at about 95.

Source: Haver Analytics.

Figure: Real Trade

Line chart, late 1999 to 2009. Index, 2005 =100. There are two series, "Real exports" and "Real imports". Real exports begins at about 73 and generally increases to about 82 by 2000. It then generally decreases to about 67 by late 2001, and generally increases to about 134 by early 2008. It then generally decreases to about 77 by early 2009, and generally increases to end at about 95. Real imports begins at about 79 and generally increases to about 110 by early 2007. It then generally decreases to about 81 by early 2009, and generally increases to end at about 88.

Source: Haver Analytics.

Figure: Labor Market

Line chart, late 1999 to 2009. There are two series, "Unemployment rate", which is by percent, and "Job openings to applications", which is a ratio. Unemployment rate begins at about 4.6 and generally increases to about 5.5 by 2002. It then generally decreases to about 3.55 by mid-2007, and generally increases to end at about 5.7. Job openings to applications begins at about 0.49 and generally increases to about 0.65 by late 2000. It then generally decreases to about 0.5 by early 2002, and generally increases to about 1.08 by early 2007. It then generally decreases to end at about 0.42.

Source: Haver Analytics.

Figure: Consumer Price Inflation

Line chart, by percent, 12-month basis, n.s.a., late 1999 to 2009. There are two series, "Consumer price inflation" and "Core". Consumer price inflation begins at about -0.7 and generally decreases to about -1.7 by early 2002. It then generally increases to about 2.5 by mid-2008, and generally decreases to end at about -2.3. Core begins at about -0.2 and generally decreases to about -1.2 by early 2001. It then generally increases to about -0.2 by 2003, and generally decreases to about -1 by 2004. It then generally increases to about 0 by mid-2008, and generally decreases to end at about -0.8.

Note: Core excludes food and energy; staff calculations.

Source: Haver Analytics.

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

Indicator	2008	2009		2009			
	Q4	Q1	Q2	May	June	July	Aug.
Housing starts	-8.3	-10.6	-15.7	-2.7	-1.2	-.5	n.a.
Machinery orders ¹	-15.1	-9.9	-4.9	-3.0	9.7	-9.3	n.a.
Household expenditures	-1.4	-1.9	.9	-.1	.1	.5	n.a.
New car registrations	-12.6	-12.2	14.4	4.4	7.4	11.6	-.7
Business sentiment ²	-24.0	-46.0	-45.0	...	...	...	...
Wholesale prices ³	2.6	-1.8	-5.4	-5.5	-6.7	-8.5	-8.5

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	
			Q3	Q4	Q1	Q2
GDP	2.2	-1.7	-1.4	-7.0	-9.5	-.5
Total domestic demand	1.9	-.3	.9	-2.5	-7.7	-3.3
Consumption	1.2	-.7	-.1	-1.8	-2.0	.7
Investment	3.3	-5.5	-5.3	-13.0	-19.5	-5.0
Government consumption	1.9	2.5	2.0	2.3	2.6	1.8
Inventories ²	.1	.7	1.5	.7	-2.9	-2.8
Exports	4.0	-6.7	-3.6	-25.7	-31.0	-4.3
Imports	3.5	-3.8	1.3	-17.5	-27.8	-10.9
Net exports ²	.3	-1.4	-2.3	-4.7	-1.8	2.8
Memo: GDP of selected countries						
France	2.1	-1.6	-.9	-5.5	-5.3	1.4
Germany	1.6	-1.8	-1.3	-9.4	-13.4	1.3
Italy	.1	-2.9	-3.1	-8.1	-10.4	-2.0

1. Q4/Q4. [Return to table](#)
2. Percentage point contribution to GDP growth. [Return to table](#)

Source: Haver Analytics.

Euro Area

Figure: Nominal Exports and Imports

Line chart, by billions of U.S. dollars, late 1999 to 2009. There are two series, "Exports" and "Imports". These two series track closely together throughout the chart. They begin at about 75 and generally increase to about 225 by mid-2008. They then generally decrease to about 128 by early 2009, and generally increase to end at about 140.

Source: Haver Analytics.

Figure: Economic Sentiment

Line chart, by percent balance, late 1999 to 2009. There are two series, "Consumer confidence" and "Industrial confidence". Consumer confidence begins at about -2 and generally increases to about 3 by 2000. It then generally decreases to about -22 by 2003, and generally increases to about -1 by 2007. It then generally decreases to about -35 by early 2009, and generally increases to end at about -22. Industrial confidence begins at about -2 and generally increases to about 6 by 2000. It then generally decreases to about -18 by late 2001, and generally increases to about 6 by 2007. It then generally decreases to about -38 by early 2009, and generally increases to end at about -26.

Source: Haver Analytics.

Figure: Unemployment Rate

Line chart, by percent, late 1999 to 2009. The series begins at about 8.75 and generally decreases to about 7.8 by late 2000. It then generally increases to about 9.0 by 2005, and generally decreases to about 7.2 by early 2008. It then generally increases to end at about 9.5.

Source: Haver Analytics.

Figure: Consumer Price Inflation

Line chart, by percent, 12-month basis, n.s.a., late 1999 to 2009. There are two series, "Consumer price inflation" and "Core". Consumer price inflation begins at about 1.4 and generally increases to about 3.2 by 2001. It then generally decreases to about 1.6 by 2006, and generally increases to about 4.1 by mid-2008. It then generally decreases to about -0.8 by 2009, and generally increases to end at about -0.2. Core begins at about 0.8 and generally increases to about 2.5 by early 2002. It then generally decreases to about 1.3 by late 2005, generally increases to about 2 by 2007, and generally decreases to end at about 1.4.

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

Source: Haver Analytics.

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

Indicator	2008	2009					
	Q4	Q1	Q2	May	June	July	Aug.
Industrial production ¹	-6.2	-7.5	-2.7	.7	-.2	-.3	n.a.
Retail sales volume ²	-.8	-.8	-.3	-.5	.0	-.2	n.a.
New car registrations	-7.0	.9	12.2	5.2	2.2	-2.1	1.0
Employment	-.3	-.7	-.5	...	...	...	...
Producer prices ³	2.7	-2.0	-5.2	-5.4	-5.9	-7.8	n.a.
M3 ³	9.2	6.5	4.7	4.3	4.1	3.5	n.a.

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

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

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

n.a. Not available.

... Not applicable.

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	
			Q3	Q4	Q1	Q2
GDP	2.4	-1.8	-2.9	-7.0	-9.3	-2.6
Total domestic demand	3.1	-2.9	-3.1	-8.7	-9.5	-3.4
Consumption	2.2	-.5	-1.3	-4.3	-5.3	-3.4
Investment	4.9	-7.8	-10.7	-4.7	-26.9	-17.0
Government consumption	1.2	3.5	1.9	4.3	.9	3.1
Inventories ²	.6	-2.0	-.8	-6.3	-1.5	1.0
Exports	3.4	-3.8	-1.7	-15.6	-25.0	-10.2
Imports	5.6	-7.7	-2.8	-20.2	-24.1	-12.2
Net exports ²	-.8	1.4	.4	2.1	.4	.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, by percent, 12-month basis, n.s.a., late 1999 to 2009. There are two series, "Consumer price inflation" and "Core". Consumer price inflation begins at about 1.2 and generally decreases to about 0.5 by 2000. It then generally increases to about 3.2 by early 2007, and generally decreases to about 1.8 by 2007. It then generally increases to about 5.5 by 2008, and generally decreases to end at about 1.7. Core begins at about 0.5 and generally decreases to about -0.4 by mid-2000. It then generally increases to about 1.4 by 2001, and generally decreases to about 0.6 by 2006. It then generally increases to end at about 1.7.

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

Source: Haver Analytics.

Figure: Unemployment Rates

Line chart, by percent, late 1999 to 2009. There are two series, "Labor Force Survey" and "Claimant count". Labor Force Survey begins at about 5.8 and generally decreases to about 4.7 by 2004. It then generally increases to about end at about 8. Claimant count begins at about 4, generally decreases to about 2.4 by early 2008, and generally increases to end at about 5.

Source: Haver Analytics.

Figure: Purchasing Managers Survey

Line chart, 50+ = expansion, late 1999 to 2009. There are two series, "Services" and "Manufacturing". Services begins at about 57.5 and generally increases to about 60 by late 1999. It then generally decreases to about 46.5 by 2001, and generally increases to about 61 by late 2006. It then generally decreases to about 40 by 2008, and generally increases to end at about 54. Manufacturing begins at about 54 and generally increases to about 57 by late 1999. It then generally decreases to about 45.5 by late 2001, and generally increases to about 56.5 by 2004. It then generally decreases to about 35 by late 2008, and generally increases to end at about 50.

Source: Reuters.

Figure: Labor Costs

Line chart, by percent, 12-month basis, late 1999 to 2009. There are two series, "Unit wage costs" and "Average earnings". Unit wage costs begins at about -2.2 and generally increases to about 5 by 2002. It then generally decreases to about -5.5 by mid-2003, and generally increases to about 12.5 by early 2009. It then generally decreases to end at about 2.4. Average earnings begins at about 5 and generally decreases to about 2.8 by late 2001. It then generally increases to about 6 by early 2008, and generally decreases to about -6.5 by early 2009. It then generally increases to about 3.5 by 2009, and generally decreases to end at about -1.

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

Source: Haver Analytics.

Economic Indicators

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



Indicator	2008	2009		2009			
	Q4	Q1	Q2	May	June	July	Aug.
Producer input prices ¹	9.0	.7	-8.9	-8.8	-12.0	-12.2	-7.5
Industrial production	-4.5	-5.1	-.5	-.6	.6	.6	n.a.
Business confidence ²	-38.3	-45.0	-22.0	-17.0	-17.0	-14.0	-5.0
Consumer confidence ²	-28.1	-31.0	-19.9	-20.8	-18.1	-16.0	-16.2
Trade balance ³	-9.6	-11.8	-12.3	-3.7	-3.9	-4.0	n.a.
Current account ³	-13.7	-12.2	--	...	...	...	...

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	
			Q3	Q4	Q1	Q2
GDP	2.8	-1.0	.4	-3.7	-6.1	-3.4
Total domestic demand	6.6	-1.1	.6	-6.1	-10.9	-.0
Consumption	5.4	.2	.6	-3.1	-1.2	1.8
Investment	4.5	-3.6	.6	-14.8	-22.8	-5.6
Government consumption	3.7	3.1	-.0	2.5	2.1	3.2
Inventories ²	1.7	-1.1	.1	-1.2	-5.1	-.4
Exports	-1.5	-7.3	-4.1	-17.7	-30.4	-19.3
Imports	8.5	-7.7	-3.4	-23.4	-38.9	-8.5
Net exports ²	-4.2	.7	-.4	2.2	4.1	-3.4

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

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

Source: Haver Analytics.

Canada

Figure: Real Gross Domestic Product by Industry

Line chart, by percent change from year earlier, late 1999 to 2009. The series begins at about 6.1 and generally increases to about 6.8 by late 1999. It then generally decreases to about 0.2 by 2001, and generally increases to about 4.4 by 2004. It then generally decreases to end at about -3.6.

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, late 1999 to 2009. Index, 2002 = 100. There are two series, "Real exports" and "Real imports". They begin at about 97 and generally increase to about 105 by mid-2000. Real exports generally decreases to about 92 by 2003, and generally increases to about 114 by late 2006. It then generally decreases to about 77 by 2009, and generally increases to end at about 84. Real imports generally decreases to about 94 by late 2001, and generally increases to about 145 by mid-2008. It then generally decreases to about 107 by early 2009, and generally increases to end at about 118.

Source: Haver Analytics.

Figure: Unemployment Rate

Line chart, by percent, late 1999 to 2009. The series begins at about 7.2 and generally decreases to about 6.75 by mid-2000. It then generally increases to about 8.0 by late 2001, and generally decreases to about 5.78 by early 2008. It then generally increases to end at about 8.7.

Source: Haver Analytics.

Figure: Consumer Price Inflation

Line chart, by percent, 12-month basis, n.s.a., late 1999 to 2009. There are two series, "Consumer price inflation" and "Core". Consumer price inflation begins at about 2.2 and generally increases to about 4.1 by 2001. It then generally decreases to about 0.6 by late 2001, and generally increases to about 4.8 by early 2003. It then generally decreases to about 0.6 by early 2004, and generally increases to about 3.5 by mid-2008. It then generally decreases to end at about -1. Core begins at about 1.6 and generally increases to about 4.2 by early 2003. It then generally decreases to about 0.9 by 2004, generally increases to about 2.4 by mid-2007, and generally decreases to end at about 1.

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

Source: Haver Analytics.

Economic Indicators

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

Indicator	2008	2009		2009			
	Q4	Q1	Q2	May	June	July	Aug.
Industrial production	-3.2	-5.0	-4.1	-1.8	-.6	n.a.	n.a.
New manufacturing orders	-9.3	-12.2	-2.0	-12.0	16.7	-4.0	n.a.
Retail sales	-1.7	-1.1	.5	.6	.4	n.a.	n.a.
Employment	.1	-1.4	-.4	-.2	-.0	-.3	.2
Wholesale sales	-7.6	-7.3	.1	.1	1.0	n.a.	n.a.
Ivey PMI ¹	43.8	41.5	53.4	48.4	58.2	51.8	55.7

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				
			Q1	Q2	June	July	Aug.
Real GDP ¹	12.3	6.9	6.5	18.5	...	...	...
Industrial production	19.5	1.8	7.8	4.4	6.2	-.7	1.7
Consumer prices ²	6.5	1.2	-.6	-1.5	-1.7	-1.8	-1.2
Merch. trade balance ³	262.7	298.1	324.9	144.1	65.5	71.2	134.1

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

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

3. Billions of U.S. dollars, annual rate. Imports are valued at cost, insurance, and freight. [Return to table](#)

n.a. Not available.

... Not applicable.

Source: CEIC.

Indian Economic Indicators

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

Indicator	2007	2008	2009

	Q1		Q2	June	July	Aug.	
Real GDP ¹	9.3	5.8	6.3	7.3	...	...	...
Industrial production	9.9	4.4	1.0	3.6	6.1	-1.0	n.a.
Consumer prices ²	5.5	9.7	9.4	8.2	8.3	10.9	n.a.
Wholesale prices ²	3.8	6.2	3.2	.5	-1.0	-1.3	-9
Merch. trade balance ³	-79.2	-121.6	-57.7	-60.2	-72.6	-76.4	n.a.
Current account ⁴	-11.3	-36.1	19.0	n.a.	...	...	...

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

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

3. Billions of U.S. dollars, annual rate. [Return to table](#)

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

n.a. Not available.

... Not applicable.

Source: CEIC.

China and India

Figure: Industrial Production

Line chart, 2003 to 2009. Index, January 2000 = 100. There are two series, "China" and "India". China begins at about 130 and generally increases to about 332 by 2008. It then generally decreases to about 300 by late 2008, and generally increases to end at about 362.5. India begins at about 115 and generally increases to end at about 188.

Source: CEIC.

Figure: Consumer Prices

Line chart, by percent change from year earlier, 2003 to 2009. There are two series, "China" and "India". China begins at about 0.4 and generally increases to about 5.2 by mid-2004. It then generally decreases to about 0.9 by early 2006, and generally increases to about 8.8 by early 2008. It then generally decreases to about -1.8 by 2009, and generally increases to end at about -1.2. India begins at about 3.5, and, with some volatility, generally increases to end at about 11.

Source: China Statistic and Consultancy Service Center; CEIC.

Figure: Merchandise Trade Balances

Line chart, by billions of dollars, 2003 to 2009. Data are 3-month moving averages (n.s.a.). There are two series, "China" and "India". China begins at about 2 and generally decreases to about 0 by 2004. It then generally increases to about 44 by early 2009, and generally decreases to end at about 7. India begins at about -1 and generally decreases to about -14 by 2008. It then generally increases to end at about -5.

Source: China Statistic and Consultancy Service Center; CEIC.

Figure: Benchmark Interest Rates

Line chart, by percent, 2003 to 2009. There are two series, "China" and "India". China begins at about 5.4 and remain about constant until 2004. It then generally increases to about 7.5 by late 2007, and generally decreases to end at about 5.4. India begins at about 5.5 and generally increases to about 7.5 by early 2003. It then generally decreases to about 4.5 by 2003, and generally increases to about 9 by mid-2008. It then generally decreases to end at about 4.7.

Source: Bloomberg; CEIC.

Figure: Gross External Debt

Line chart, by percent of Gross Domestic Product, 2003 to 2009. There is one series, "India". It begins at about 22 and generally decreases to about 17 by 2006. It then generally increases to end at about 24.

Source: Bank for International Settlements; Haver Analytics.

Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to 2009. There is one series, "India". It begins at about 6.5 and generally increases to about 7.5 by 2003. It then generally decreases to about 4.5 by early 2004, and generally increases to end at about 20.

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				
			Q1	Q2	May	June	July
<i>Real GDP¹</i>							
Hong Kong	7.1	-2.7	-16.1	13.9	...	...	...
Korea	5.7	-3.4	.5	11.0	...	...	...
Singapore	5.8	-4.0	-12.2	20.7	...	...	...
Taiwan	6.5	-8.5	-3.7	11.8	...	...	...
<i>Industrial production</i>							
Hong Kong	-1.5	-6.6	-2.8	n.a.	...	...	...
Korea	7.0	3.0	-2.7	11.4	1.4	5.7	2.0
Singapore	5.9	-4.2	-7.4	13.9	-2.6	-9.6	23.4
Taiwan	7.8	-1.8	-8.0	17.3	1.6	5.0	1.2

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

n.a. Not available.

... Not applicable.

Source: CEIC; Reuters.

Economic Indicators for Newly Industrialized Economies: Merchandise Trade Balance

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

	2007	2008	2009				
			Q1	Q2	June	July	Aug.
Hong Kong	-23.5	-25.9	-19.9	-15.5	-19.2	-39.9	n.a.
Korea	28.2	6.0	41.0	68.0	59.0	61.5	n.a.
Singapore	36.2	18.4	11.6	26.8	23.9	34.1	n.a.
Taiwan	16.8	4.4	26.5	21.7	18.2	23.2	27.9

n.a. Not available.

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				
			Q1	Q2	June	July	Aug.
Hong Kong	3.8	2.1	1.7	-.1	-.9	-1.5	n.a.
Korea	3.6	4.1	3.9	2.8	2.0	1.6	2.2
Singapore	4.4	4.3	2.1	-.5	-.5	-.5	n.a.
Taiwan	3.3	1.3	.0	-.8	-2.0	-2.3	-.8

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

n.a. Not available.

Source: CEIC.

Newly Industrialized Economies

Figure: Industrial Production

Line chart, 2003 to 2009. Index, January 2000 = 100. There are four series, "Korea", "Singapore", "Hong Kong", and "Taiwan". Korea begins at about 115 and generally increases to about 172 by early 2008. It then generally decreases to about 133 by late 2008, and generally increases to end at about 170. Singapore begins at about 101 and generally decreases to about 89 by early 2003. It then generally increases to about 180 by mid-2007, and generally decreases to about 112 by early 2009. It then generally increases to end at about 158. Hong Kong begins at about 79 and generally increases to about 85 by mid-2005. It then generally decreases to end at about 73. Taiwan begins at about 105 and generally increases to about 150 by early 2008. It then generally decreases to about 95 by early 2009 and generally increases to end at about 125.

Source: CEIC.

Figure: Consumer Prices

Line chart, by percent change from year earlier, 2003 to 2009. There are four series, "Korea", "Singapore", "Hong Kong", and "Taiwan". Korea begins at about 4 and generally increases to about 4.8 by 2003. It then generally decreases to about 2 by 2007, and generally increases to about 6 by mid-2008. It then generally decreases to about 1.5 by 2009, and generally increases to end at about 2. Singapore begins at about 1 and generally decreases to about -0.2 by mid-2003. It then generally increases to about 2.3 by 2004, and generally decreases to about -0.1 by 2005. It then generally increases to about 7.4 by 2008, and generally decreases to end at about -0.6. Hong Kong begins at about -1.6 and generally decreases to about -4 by mid-2003. It then generally increases to about 6.5 by mid-2008, and generally decreases to end at about -1. Taiwan begins at about 1 and generally decreases to about -2 by 2003. It then generally increases to about 3.8 by mid-2005, and generally decreases to about -1.2 by 2006. It then generally increases to about 6.5 by early 2008, and generally decreases to end at about -0.8.

Source: CEIC; Bank of Korea; Reuters.

Figure: Merchandise Trade Balances

Line chart, by billions of dollars, 2003 to 2009. Data are 3-month moving averages (n.s.a.). There are four series, "Korea", "Singapore", "Hong Kong", and "Taiwan". Korea begins at about 1 and generally decreases to about 0.8 by 2003. It then generally increases to about 3.7 by early 2005, and generally decreases to about -1.2 by 2008. It then generally increases to about 6.2 by 2009, and generally decreases to end at about 5.2. Singapore begins at about 1.7 and generally increases to about 3.3 by 2006. It then generally decreases to about 0.5 by early 2009, and generally increases to end at about 2.2. Hong Kong begins at about -0.8 and generally decreases to about -1.9 by 2004. It then generally increases to about -0.6 by late 2004, and generally decreases to about -3 by mid-2008. It then generally increases to about -0.6 by late 2008, and generally decreases to end at about -1.9. Taiwan begins at about 1.3 and generally increases to about 1.6 by 2003. It then generally decreases to about -0.6 by late 2004, and generally increases to about 2.7 by 2007. It then generally decreases to about -0.1 by early 2008, and generally increases to end at about 2.

Source: CEIC.

Figure: Benchmark Interest Rates

Line chart, by percent, 2003 to 2009. There are three series, "Korea", "Hong Kong", and "Taiwan". Korea begins at about 4.3 and generally decreases to about 3.2 by late 2004. It then generally increases to about 5.2 by mid-2008, and generally decreases to end at about 2. Hong Kong begins at about 2.9 and generally decreases to about 2.6 by mid-2003. It then generally increases to about 6.8 by 2006, and generally decreases to end at about 0.5. Taiwan begins at about 1.6 and generally decreases to about 1.4 by 2003. It then generally increases to about 3.7 by mid-2008, and generally decreases to end at about 1.1.

Source: Bloomberg.

Figure: Gross External Debt

Line chart, by percent of Gross Domestic Product, 2003 to 2009. There are three series, "Korea", "Hong Kong", and "Taiwan". Korea begins at about 25 and generally increases to end at about 51. Hong Kong begins at about 220 and generally increases to about 325 by late 2007. It then generally decreases to end at about 322. Taiwan begins at about 15 and generally increases to about 28 by 2006. It then generally decreases to end at about 25.

Source: Bank for International Settlements.

Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to 2009. There are three series, "Korea", "Hong Kong", and "Taiwan". Korea begins at about 40 and generally decreases to about 25 by late 2004. It then generally increases to about 78 by 2008, and generally decreases to end at about 75. Hong Kong begins at about 198 and generally increases to about 354 by late 2007. It then generally decreases to end at about 260. Taiwan begins at about 24 and generally increases to about 35 by mid-2006. It then generally decreases to end at about 25.

Source: Bank for International Settlements.

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

Indicator	2007	2008	2009				
			Q1	Q2	May	June	July
Real GDP ²							
Indonesia	5.8	5.3	4.4	4.5	...	...	...
Malaysia	7.2	.1	-17.6	14.5	...	...	...
Philippines	6.4	2.9	-8.3	9.8	...	...	...
Thailand	5.9	-4.2	-7.2	9.6	...	...	...
Industrial production ³							
Indonesia ⁴	5.6	3.0	1.9	-7	3.1	-2.9	-1.8
Malaysia	2.1	.5	-4.5	2.0	-6	.2	5.5
Philippines	-2.7	.3	-17.0	13.5	5.8	1.5	n.a.
Thailand	8.2	5.3	-9.0	9.8	.3	2.5	1.9

1. Association of Southeast Asian Nations. [Return to text](#)
2. Gross domestic product. Annual rate. Annual data are Q4/Q4. [Return to table](#)
3. Annual data are annual averages. [Return to table](#)
4. Staff estimate. [Return to table](#)

n.a. Not available.
... Not applicable.

Source: CEIC.

ASEAN-4 ¹ Economic Indicators: Merchandise Trade Balance

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

Indicator	2007	2008	2009				
			Q1	Q2	May	June	July
Indonesia	39.6	31.6	29.8	36.9	34.5	34.1	31.4
Malaysia	29.2	42.7	38.1	30.8	33.1	31.1	29.8
Philippines	-5.0	-7.7	-8.7	-5.0	-6.3	-6.3	n.a.
Thailand	11.6	.2	32.6	22.6	34.8	12.2	11.8

1. Association of Southeast Asian Nations. [Return to text](#)
- n.a. Not available.

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

ASEAN-4 ¹ Economic Indicators: Consumer Price Inflation

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

Indicator	2007 ²	2008 ²	2009				
			Q1	Q2	June	July	Aug.
Indonesia	5.8	11.1	8.6	5.6	3.7	2.7	2.8
Malaysia	2.4	4.4	3.7	1.3	-1.4	-2.4	-2.4
Philippines	3.9	8.0	6.9	3.2	1.5	.2	.1
Thailand	3.2	.4	-.2	-2.8	-4.0	-4.4	-1.0

1. Association of Southeast Asian Nations. [Return to text](#)
2. Dec./Dec. [Return to table](#)

n.a. Not available.

Source: CEIC; IMF International Financial Statistics database.

ASEAN-4

Figure: Industrial Production

Line chart, 2003 to 2009. Index, January 2000 = 100. There are four series, "Indonesia", "Malaysia", "Philippines" and "Thailand". Indonesia begins at about 140 and generally increases to about 173 by late 2004. It then generally decreases to about 139 by late 2005, and generally increases to end at about 162.5. Malaysia begins at about 110 and generally increases to about 162.5 by early 2008. It then generally decreases to about 132 by early 2009, and generally increases to end at about 145. Philippines begins at about 100 and generally decreases to about 62.5 by late 2008. It then generally increases to end at about 77. Thailand begins at about 132 and generally increases to about 212 by late 2007. It then generally decreases to about 164 by late 2008, and generally increases to end at about 190.

Source: CEIC; Bank of Philippines.

Figure: Consumer Prices

Line chart, by percent change from year earlier, 2003 to 2009. There are four series, "Indonesia", "Malaysia", "Philippines" and "Thailand". Indonesia begins at about 8.8 and generally decreases to about 5 by early 2004. It then generally increases to about 18 by late 2005, and generally decreases to about 5 by late 2006. It then generally increases to about 12.2 by 2008, and generally decreases to end at about 2.5. Malaysia begins at about 2 and generally decreases to about 0.8. It then generally increases to about 5 by 2006, and generally decreases to about 2 by 2007. It then generally increases to about 8 by mid-2008, and generally decreases to end at about -2.5. Philippines begins at about 3 and generally increases to about 8 by late 2004. It then generally decreases to about 2.5 by 2007, and generally increases to about 12.5 by mid-2008. It then generally decreases to end at about 0. Thailand begins at about 2.5 and generally decreases to about 1 by early 2004. It then generally increases to about 6.5 by 2005, and generally decreases to about 0.8 by 2007. It then generally increases to about 9.5 by mid-2008, generally decreases to about -4.8 by mid-2009, and generally increases to end at about -1.

Source: IMF International Financial Statistics; CEIC.

Figure: Merchandise Trade Balances

Line chart, by billions of dollars, 2003 to 2009. Data are 3-month moving averages (n.s.a.). There are four series, "Indonesia", "Malaysia", "Philippines" and "Thailand". Indonesia begins at about 2 and generally increases to about 3.8 by late 2006. It then generally decreases to about 2 by early 2009, and generally increases to end at about 2.8. Malaysia begins at about 1.5 and generally increases to about 4.5 by mid-2008. It then generally decreases to end at about 2.8. Philippines begins at about -0.4 and generally decreases to about -0.9 by early 2008. It then generally increases to end at about -0.5. Thailand begins at about 0.2 and generally increases to about 0.8 by 2003. It then generally decreases to about -1.2 by 2005, and generally increases to about 1.3 by 2008. It then generally decreases to about -1.3 by late 2008, and generally increases to about 2.8 by early 2009, and generally decreases to end at about 1.6.

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

Figure: Benchmark Interest Rates

Line chart, by percent, 2003 to 2009. There are four series, "Indonesia", "Malaysia", "Philippines" and "Thailand". Indonesia begins at about 12.5 and generally decreases to about 7.5 by early 2004. It then generally increases to about 12.5 by late 2005, and generally decreases to end at about 7.5. Malaysia begins at about 2.5 and remains about constant until mid-2005. It then generally increases to about 3 by 2006, and generally decreases to end at about 2. Philippines begins at about 7 and generally increases to about 7.5 by 2005. It then generally decreases to end at about 4. Thailand begins at about 2 and generally decreases to about 1.5 by mid-2003. It then generally increases to about 5 by 2006, and generally decreases to end at about 1.5.

Source: Bloomberg; Haver Analytics.

Figure: Gross External Debt

Line chart, by percent of Gross Domestic Product, 2003 to 2009. There are four series, "Indonesia", "Malaysia", "Philippines" and "Thailand". Indonesia begins at about 55 and generally decreases to about 29 by 2008. It then generally increases to about 34 by early 2009, and generally decreases to end at about 29. Malaysia begins at about 43 and generally increases to about 52 by 2003. It then generally decreases to about 29 by late 2007, and generally increases to end at about 43. Philippines begins at about 75 and generally decreases to about 30 by late 2008. It then generally increases to end at about 35. Thailand begins at about 40 and generally decreases to about 20 by late 2007. It then generally increases to end at about 24.

Note. ASEAN is the Association of Southeast Asian Nations.

Source: CEIC; Bank for International Settlements.

Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to 2009. There are four series, "Indonesia", "Malaysia", "Philippines" and "Thailand". Indonesia begins at about 49 and generally decreases to about 38 by early 2004. It then generally increases to about 62 by 2005, and generally decreases to about 16 by 2006. It then generally increases to about 41 by late 2008, and generally decreases to end at about 34. Malaysia begins at about 30 and generally increases to about 32 by 2003. It then generally decreases to about 20 by late 2006, and generally increases to end at about 35. Philippines begins at about 48 and generally decreases to about 45 by late 2003. It then generally increases to about 57 by early 2004, and generally decreases to about 20 by early 2008. It then generally increases to about 27 by 2008, and generally decreases to end at about 20. Thailand begins at about 27 and generally decreases to about 20 by late 2004. It then generally increases to

about 31 by early 2006, and generally decreases to end at about 16.

Source: Bank for International Settlements.

Mexican Economic Indicators

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

Indicator	2007	2008	2009				
			Q1	Q2	June	July	Aug.
Real GDP ¹	3.7	-1.7	-21.2	-4.4	...	...	...
Overall economic activity	3.1	1.0	-5.2	-1.6	-.2	n.a.	n.a.
Industrial production	2.4	-1.0	-4.7	-1.1	-.2	2.8	n.a.
Unemployment rate ²	3.7	4.0	4.8	5.7	5.6	5.7	n.a.
Consumer prices ³	3.8	6.5	6.2	6.0	5.7	5.4	5.1
Merch. trade balance ⁴	-10.1	-17.3	-12.1	-4.9	-8.3	-14.7	n.a.
Merchandise imports ⁴	281.9	308.6	228.8	217.3	223.8	226.2	n.a.
Merchandise exports ⁴	271.9	291.3	216.7	212.3	215.5	211.4	n.a.
Current account ⁵	-8.2	-15.7	-13.5	1.8	...	...	...

1. Gross domestic product. Annual rate. Annual data are Q4/Q4. [Return to table](#)
2. Percent; counts as unemployed those working 1 hour a week or less. [Return to table](#)
3. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec. [Return to table](#)
4. Billions of U.S. dollars, annual rate. [Return to table](#)
5. Billions of U.S. dollars, not seasonally adjusted, annual rate. [Return to table](#)

n.a. Not available.
... Not applicable.

Source: Haver Analytics; Bank of Mexico.

Brazilian Economic Indicators

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

Indicator	2007	2008	2009				
			Q1	Q2	June	July	Aug.
Real GDP ¹	6.1	1.2	-3.8	7.8	...	...	...
Industrial production	6.0	3.1	-6.8	3.7	.4	2.2	n.a.
Unemployment rate ²	9.3	7.9	8.5	8.3	7.9	7.9	n.a.
Consumer prices ³	4.5	5.9	5.8	5.2	4.8	4.5	4.4
Merch. trade balance ⁴	40.0	25.0	21.0	43.2	50.4	23.4	32.1
Current account ⁵	1.6	-28.2	-19.8	-8.5	-6.4	-20.0	n.a.

1. Gross domestic product. Annual rate. Annual data are Q4/Q4. [Return to table](#)
2. Percent. [Return to table](#)
3. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec. Price index is IPCA. [Return to table](#)
4. Billions of U.S. dollars, annual rate. [Return to table](#)
5. Billions of U.S. dollars, not seasonally adjusted, annual rate. [Return to table](#)

n.a. Not available.
... Not applicable.

Source: Haver Analytics; IMF International Financial Statistics database; Instituto Brasileiro de Geografia e Estatística.

Latin America

Figure: Industrial Production

Line chart, 2003 to 2009. Index, January 2000 = 100. There are two series, "Brazil" and "Mexico". Brazil begins at about 108 and generally decreases to about 105 by 2003. It then generally increases to about 142 by 2008, and generally decreases to about 113 by late 2008. It then generally increases to end at about 127. Mexico begins at about 97 and generally increases to about 115 by early 2007. It then generally decreases to about 101 by 2009, and generally increases to end at about 104.

Source: Fundacion de Investigaciones Economicas Latinoamericanas; Haver Analytics.

Figure: Consumer Prices

Line chart, by percent change from year earlier, 2003 to 2009. There are two series, "Brazil" and "Mexico". Brazil begins at about 14.8 and generally increases to about 17.5 by 2003. It then generally decreases to about 3 by late 2006, and generally increases to about 6.5 by mid-2008. It then generally decreases to end at about 4.4. Mexico begins at about 5.2 and generally increases to about 5.5 by 2003. It then generally decreases to about 2.8 by late 2005, and generally increases to about 7 by late 2008. It then generally decreases to end at about 5.

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

Figure: Merchandise Trade Balances

Line chart, by billions of dollars, 2003 to 2009. Data are 3-month moving averages (n.s.a.). There are two series, "Brazil" and "Mexico". Brazil begins at about 1.6 and generally increases to about 4.3 by early 2006. It then generally decreases to about 1.3 by late 2008, and generally increases to about 3.6 by mid-2009. It then generally decreases to end at about 2.9. Mexico begins at about -0.2 and generally increases to about 0 by early 2003. It then generally decreases to about -1.4 by early 2005, and generally increases to about 0.3 by early 2006. It then generally decreases to about -2 by late 2008, and generally increases to end at about -0.8.

Source: IMF International Financial Statistics, Bank of Mexico.

Figure: Benchmark Interest Rates

Line chart, by percent, 2003 to 2009. There are two series, "Brazil" and "Mexico". Brazil begins at about 25.5 and generally increases to about 26.5 by 2003. It then generally decreases to about 16 by 2004, and generally increases to about 20 by 2005. It then generally decreases to end at about 8.5. Mexico begins at about 9 and generally decreases to about 4 by 2003. It then generally increases to about 9.8 by 2005, and generally decreases to end at about 4.5.

Source: Bloomberg.

Figure: Gross External Debt

Line chart, by percent of Gross Domestic Product, 2003 to 2009. There are two series, "Brazil" and "Mexico". Brazil begins at about 187.5 and generally decreases to about 48 by mid-2008. It then generally increases to end at about 62.5. Mexico begins at about 25 and generally decreases to about 18 by mid-2008. It then generally increases to end at about 24.

Source: Haver Analytics; Bank for International Settlements.

Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to 2009. There are two series, "Brazil" and "Mexico". Brazil begins at about 81 and generally decreases to about 24 by late 2006. It then generally increases to about 32 by early 2007, and generally decreases to end at about 17. Mexico begins at about 47 and generally decreases to about 25 by 2006. It then generally increases to end at about 28.

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

Supplemental Notes

The Domestic Nonfinancial Economy

Private Housing Activity

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

Sector	2008	2009				
		Q1	Q2	June	July	Aug.
All units						
Starts	.91	.53	.54	.59	.59	.60
Permits	.91	.53	.53	.57	.56	.58
Single-family units						
Starts	.62	.36	.43	.48	.49	.48
Permits	.58	.36	.41	.43	.46	.46
Adjusted permits ¹	.58	.37	.42	.45	.47	.47
New homes						
Sales	.49	.34	.37	.40	.43	n.a.
Months' supply ²	10.68	11.61	9.55	8.51	7.51	n.a.
Existing homes						
Sales	4.35	4.12	4.24	4.33	4.61	n.a.
Months' supply ²	9.98	9.69	8.80	8.39	8.03	n.a.
Multifamily units						
Starts	.28	.17	.12	.11	.10	.12
Built for rent	.22	.14	.10	n.a.	n.a.	n.a.
Built for sale	.07	.03	.02	n.a.	n.a.	n.a.
Permits	.33	.17	.12	.14	.10	.12
Condos and co-ops						
Existing home sales	.56	.47	.52	.56	.63	n.a.

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

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

n.a. Not available. [Return to table](#)

Source: Census Bureau.

Figure: Private Housing Starts and Permits

Line chart, by millions of units (seasonally adjusted annual rate), 1999 to August 2009. There are three series, "Single-family starts", "Single-family adjusted permits", and "Multifamily starts". Single-family starts and Single-family adjusted permits track closely together throughout the chart. They begin at about 1.33 and generally decrease to about 1.12 by mid-2000. They then generally increase to about 1.8 by 2005, and generally decrease to about .35 by early 2009. They then generally increase to end at about .5. Multifamily starts begins at about .4 and generally decreases to about .3 by mid-1999. It then generally increases to about .5 by early 2000, and fluctuates but generally decreases to end at about .12.

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

Source: Census Bureau.

Nonfarm Inventory Investment

(Billions of dollars; seasonally adjusted annual rate)

Measure and sector	2008			2009		
	Q4	Q1	Q2	May	June	July
<i>Real inventory investment (chained 2005 dollars)</i>						
Total nonfarm business	-35.7	-114.9	-168.6^e	...	...	...
Motor vehicles	-7	-63.6	-48.1 ^e	...	...	...
Nonfarm ex. motor vehicles	-35.1	-51.3	-120.5 ^e	...	...	...
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	-19.8	-49.3	-111.0^e	-86.3^e	-138.2^e	n.a.
Manufacturing	8.2	-28.9	-40.0 ^e	-26.7 ^e	-45.3 ^e	n.a.
Wholesale trade ex. motor vehicles & parts	-10.2	-8.8	-52.4 ^e	-36.8 ^e	-81.8 ^e	n.a.
Retail trade ex. motor vehicles & parts	-17.8	-11.6	-18.6 ^e	-22.8 ^e	-11.0 ^e	n.a.
<i>Book-value inventory investment (current dollars)</i>						
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	-155.9	-143.2	-150.2	-124.9	-178.0	-121.4
Manufacturing	-65.2	-77.3	-63.6	-48.4	-68.9	-43.8
Wholesale trade ex. motor vehicles & parts	-55.7	-47.3	-62.9	-49.8	-90.6	-55.3
Retail trade ex. motor vehicles & parts	-34.9	-18.6	-23.7	-26.8	-18.5	-22.3

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, by months, 2000 to 2009. There are two series, "Staff flow-of-goods system" and "Census book-value data". Staff flow-of-goods system begins at about 1.77 and generally decreases to about 1.52 by late 2007. It then generally increases to end at about 1.65 by August. Census book-value data begins at about 1.35 and generally increases to about 1.41 by early 2001. It then generally decreases to about 1.18 by late 2005, and generally increases to about 1.38 by late 2008. It then generally decreases to end at about 1.31 by July.

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, an index, 2000 to August 2009. The series begins at about 47.2 and generally increases to about 56 by early 2001. It then generally decreases to about 37 by mid-2004, and generally increases to about 57.5 by late 2008. It then generally decreases to end at about 38.8.

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

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

The Domestic Financial Economy

Commercial Bank Credit

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

Type of credit	2007	2008	H2 2008	Q1 2009	Q2 2009	July 2009	Aug. 2009	Level ¹ Aug. 2009
Total	9.9	5.1	4.5	-5.5	-3.5	-12.6	-10.6	9,260
<i>Loans²</i>								
Total	10.7	4.6	2.1	-7.1	-6.6	-19.3	-17.0	6,886
Core	9.6	5.2	2.7	-3.0	-5.8	-8.7	-14.4	6,120

To businesses								
Commercial and industrial	19.0	16.6	11.4	-13.4	-15.3	-12.1	-27.8	1,453
Commercial real estate	9.3	6.0	2.9	-.7	-1.7	-5.1	-7.8	1,690
To households								
Residential real estate	5.6	-3.0	-5.2	-1.4	-1.5	-9.5	-12.3	2,131
Revolving home equity	5.7	13.0	13.0	10.0	2.8	-6.1	-5.1	606
Closed-end mortgages	5.6	-7.9	-11.2	-5.6	-3.2	-10.8	-15.2	1,524
Consumer	6.7	7.2	7.4	8.0	-7.0	-8.4	-9.3	847
Memo: Originated ³	6.4	5.7	4.4	1.4	-4.3	-3.8	-11.4	1,248
Other	18.7	.5	-1.5	-34.2	-13.0	-95.6	-37.8	766
Securities								
Total	7.0	6.9	12.9	-.3	6.3	7.7	8.5	2,373
Treasury and agency	-6.1	18.6	32.4	5.9	-5.8	7.9	17.2	1,419
Other ⁴	28.3	-7.0	-11.2	-9.6	25.5	7.3	-4.3	954

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. [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.

Selected Financial Market Quotations

(One-day quotes in percent except as noted)

Instrument	2008		2009		Change to Sept. 17 from selected dates (percentage points)		
	Sept. 12	June 22	Aug. 11	Sept. 17	2008 Sept. 12	2009 June 22	2009 Aug. 11
Short-term							
FOMC intended federal funds rate	2.00	.13	.13	.13	-1.87	.00	.00
Treasury bills ¹							
3-month	1.46	.20	.18	.10	-1.36	-.10	-.08
6-month	1.80	.34	.28	.20	-1.60	-.14	-.08
Commercial paper (A1/P1 rates) ²							
1-month	2.39	.30	.22	.18	-2.21	-.12	-.04
3-month	2.75	.63	.29	.22	-2.53	-.41	-.07
Large negotiable CDs ¹							
3-month	2.79	.40	.32	.25	-2.54	-.15	-.07
6-month	3.09	.68	.46	.36	-2.73	-.32	-.10
Eurodollar deposits ³							
1-month	2.60	.65	.50	.40	-2.20	-.25	-.10
3-month	3.00	1.05	.80	.55	-2.45	-.50	-.25
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	1.17	1.20	.97	-1.27	-.20	-.23
5-year	2.97	2.71	2.70	2.41	-.56	-.30	-.29

10-year	3.93	4.04	3.97	3.68	- .25	- .36	- .29
U.S. Treasury indexed notes ⁵							
5-year	1.33	1.45	1.54	1.01	- .32	- .44	- .53
10-year	1.77	2.10	1.89	1.63	- .14	- .47	- .26
Municipal general obligations (Bond Buyer) ⁶	4.54	4.86	4.65	4.20	- .34	- .66	- .45
Private instruments							
10-year swap	4.26	3.97	3.98	3.63	- .63	- .34	- .35
10-year FNMA ⁷	4.36	4.40	4.35	4.11	- .25	- .29	- .24
10-year AA ⁸	6.62	5.94	5.41	5.05	- 1.57	- .89	- .36
10-year BBB ⁸	7.22	7.58	6.72	6.38	- .84	- 1.20	- .34
10-year high yield ⁸	10.66	12.13	10.61	9.98	- .68	- 2.15	- .63
Home mortgages (FHLMC survey rate)							
30-year fixed	5.78	5.42	5.29	5.04	- .74	- .38	- .25
1-year adjustable	5.03	4.93	4.72	4.58	- .45	- .35	- .14

Stock exchange index	Record high		2009			Change to Sept. 17 from selected dates (percent)		
	Level	Date	June 22	Aug. 11	Sept. 17	Record high	2009 June 22	2009 Aug. 11
Dow Jones Industrial	14,165	10-9-07	8,339	9,241	9,784	-30.93	17.33	5.87
S&P 500 Composite	1,565	10-9-07	893	994	1,065	-31.92	19.31	7.15
Nasdaq	5,049	3-10-00	1,766	1,970	2,127	-57.87	20.41	7.97
Russell 2000	856	7-13-07	493	562	615	-28.08	24.89	9.49
D.J. Total Stock Index	15,807	10-9-07	9,130	10,243	11,008	-30.36	20.58	7.47

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.
June 22, 2009, is the day before the June 2009 FOMC monetary policy announcement.
August 11, 2009, is the day before the most recent FOMC monetary policy announcement.

The International Economy

U.S. Current Account

(Billions of dollars, seasonally adjusted annual rate)

Period		Goods and services, net	Investment income, net	Other income and transfers, net	Current account balance
Annual					
2007		-701.4	97.9	-123.1	-726.6
2008		-695.9	125.6	-135.7	-706.1
Quarterly					
2008:	Q3	-743.8	143.7	-136.7	-736.7
	Q4	-578.0	92.1	-133.6	-619.5
2009:	Q1	-369.6	80.4	-128.6	-417.8

Q2	-332.0	72.8	-135.9	-395.2
<i>Change</i>				
Q3-Q2	-12.4	31.4	-4.9	14.2
Q4-Q3	165.8	-51.6	3.1	117.2
Q1-Q4	208.3	-11.7	5.0	201.7
Q2-Q1	37.6	-7.7	-7.3	22.6

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

Summary of U.S. International Transactions

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

	2007	2008	2008		2009			
			Q3	Q4	Q1	Q2	June	July
Official financial flows	451.1	-54.6	-108.9	-286.5	313.5	316.1	117.9	82.6
1. Change in foreign official assets in the U.S. (increase, +)	475.2	480.0	117.5	-17.9	70.7	124.7	54.9	44.9
a. <u>G-10</u> countries + <u>ECB</u>	36.8	-8.4	8.9	-16.0	-7.4	15.5	20.5	6.6
b. <u>OPEC</u>	33.0	45.5	16.1	-3.4	-5.0	-0.3	-1.3	-0.4
c. All other countries	405.5	430.0	92.5	-11.4	83.1	117.5	38.4	38.7
2. Change in U.S. official assets (decrease, +) ¹	-24.1	-534.6	-226.4	-268.7	242.8	191.4	63.0	37.7
Private financial flows	212.5	559.7	252.0	374.8	-278.1	-257.8	...	...
Banks								
3. Change in net foreign positions of banking offices in the U.S. ²	-86.1	-15.6	-106.7	338.9	-278.6	-191.5	-116.7	-99.0
Securities³								
4. Foreign net purchases (+) of U.S. securities	673.9	70.9	-24.1	52.7	-3.8	-8.0	41.7	-14.8
a. Treasury securities	67.1	197.0	79.1	81.6	52.4	-22.5	27.8	-19.0
b. Agency bonds	-8.6	-185.0	-70.1	-21.5	-49.7	-0.3	2.1	-1.8
c. Corporate and municipal bonds	384.7	2.5	-35.4	-3.8	-12.5	-21.0	-4.5	-17.5
d. Corporate stocks ⁴	230.7	56.4	2.4	-3.6	6.0	35.7	16.3	23.5
5. U.S. net acquisitions (-) of foreign securities	-366.8	61.4	79.6	69.5	-35.2	-91.9	-36.2	-31.5
a. Bonds	-218.5	62.1	65.5	34.9	-33.9	-54.6	-21.3	-15.9
b. Stock purchases	-136.4	6.4	14.1	38.8	0.6	-37.3	-14.9	-15.6
c. Stock swaps ⁴	-11.9	-7.1	0.0	-4.3	-1.9	0.0	0.0	0.0
Other flows⁵								
6. U.S. direct investment (-) abroad	-398.6	-332.0	-54.1	-84.5	-40.3	-44.9	...	...
7. Foreign direct investment in the U.S.	275.8	319.7	62.8	96.8	23.9	26.1	...	...
8. Net derivatives (inflow, +)	6.2	-28.9	-4.1	-14.5	8.4	n.a.	...	...
9. Foreign acquisitions of U.S. currency	-10.7	29.2	5.8	29.9	11.8	-1.9	...	...
10. Other (inflow, +) ⁶	118.8	454.9	292.8	-113.9	35.6	54.3	...	...
U.S. current account balance⁵	-726.6	-706.1	-184.2	-154.9	-104.5	-98.8	...	...
Capital account balance⁷	-1.9	1.0	3.0	-0.7	-0.7	-0.7	...	...
Statistical discrepancy⁵	64.9	200.1	38.1	67.2	69.8	41.2	...	...

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

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

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

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

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

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

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

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

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

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

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

... Not applicable.

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

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

Last update: April 1, 2015
