

Accessible Material

November 2009 Bluebook and Greenbook Tables and Charts

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November 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, "October 29, 2009" and "September 22, 2009". October 29, 2009 begins at about 0.15 and generally increases to end at about 2.48. September 22, 2009 begins at about 0.2 and generally increases to end at about 2.75.

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

Source. CME Group.

Figure: Implied distribution of federal funds rate six months ahead

Line chart, by percent, 0.25 to 4.50. There are two series, "Recent: 10/29/2009" and "Last FOMC: 9/22/2009". Recent: 10/29/2009 begins at about 52 and generally decreases to about 15 by 0.50. It then generally increases to about 20 by 0.75 and generally decreases to about 0 by 2.75. It remains about constant until the end. Last FOMC: 9/22/2009 begins at about 55 and generally decreases to about 0 by 2.25. It remains about constant until the end.

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

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

Line chart, by percent, 2010:Q1 to 2012:Q2. There are two series, "Recent: 18 respondents" and "Last FOMC: 17 respondents". Recent: 18 respondents begins at about 0 and generally increases to about 23 by 2010:Q2. It then generally decreases to about 12 by 2010:Q4, and generally increases to about 27 by 2011:Q1. It then generally decreases to about 0 by 2011:Q4, and generally increases to about 12 by 2012:Q1. It then generally decreases to end at about 0. Last FOMC: 17 respondents begins at nearly 18 for 2010:Q2, increases to nearly 30 for 2010:Q3, decreases back to nearly 18 for 2010:Q4 and 2011:Q1, and then decreases to nearly 6 for 2011:Q2, 2011:Q3, and 2012:Q1.

Source. Federal Reserve Bank of New York.

Figure: Nominal Treasury yields

Line chart, by percent, 2007 to October 29, 2009. Data are daily. The September 2009 FOMC meeting is marked in the time series. There are two series, "10-year" and "2-year". 10-year begins at about 4.8 and generally increases to about 5.4 by 2007. It then generally decreases to about 2.7 by late 2008, and generally increases to about 4.3 by 2009. It then generally decreases to end at about 3.8. It is at about 3.7 at the time of the September 2009 FOMC meeting. 2-year begins at about 4.8 and generally decreases to about 0.5 by late 2008. It then generally increases to end at about 1. It is at about 1 at the time of the September 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 October 29, 2009. Data are daily. The September 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 2.55 by mid-2008, and generally decreases to about -1.5 by late 2008. It then generally increases to end at about 1.6. It is at about 1.4 at the time of September 2009 FOMC meeting. 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 2.95 at the time of the September 2009 FOMC meeting.

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

Source. Barclay, PLC., and staff estimates.

Figure: Survey measures of inflation expectations

Line chart, by percent, 2002 to October 2009. There are two series, "Michigan 1-year" and "Michigan 10-year". Michigan 1-year begins at about 1.9 and generally increases to about 3.1 by early 2003. It then generally decreases to about 1.7 by mid-2003, and generally increases to about 5.2 by mid-2008. It then generally decreases to about 1.6 by late 2008, and generally increases to end at about 2.8. Michigan 10-year begins at about 2.7 and generally increases to about 3 by

2002. It then generally decreases to about 2.5 by 2002, and generally increases to about 3.4 by mid-2008. It then generally decreases to end at about 2.88.

Source. Reuters/University of Michigan.

Chart 2 Asset Market Developments

Figure: Equity prices

Line chart, 2008 to October 29, 2009. January 2, 2008 = 100. Data are daily. The September 2009 FOMC meeting is marked in the time series. The series, "S&P 500", begins at about 100 and generally decreases to about 48 by 2009. It then generally increases to end at about 72. It is at about 73 at the time of the September 2009 FOMC meeting.

Source. Bloomberg.

Figure: S&P 500 earnings per share (seasonally adjusted)

Line chart, by dollars, 2000 to 2009:Q3. Data are quarterly. The September 2009 FOMC meeting is marked in the time series. The series begins at about 14 and generally increases to about 14.3 by mid-2000. It then generally decreases to about 10.8 by early 2002, and generally increases to about 24 by mid-2007. It then generally decreases to about 5.4 by late 2008, and generally increases to end at about 16. It is at about 16 at the time of the September 2009 FOMC meeting.

Note. 2009:Q3 is estimated.

Source. Thomson Financial.

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

Line chart, by percent, 2002 to October 29, 2009. Data are daily. The September 2009 FOMC meeting is marked in the time series. The series begins at about 20 and generally increases to about 46 by 2002. It then generally decreases to about 7 by late 2006, and generally increases to about 80 by late 2008. It then generally decreases to end at about 30. It is at about 27 at the time of the September 2009 FOMC meeting.

Source. Chicago Board Options Exchange.

Figure: Bank ETFs

Line chart, January 2009 to October 29, 2009. January 2, 2009 = 100. Data are daily. The September 2009 FOMC meeting is marked in the time series. There are two series, "Large banks" and "Small banks". Large banks begins at about 99 and generally decreases to about 40 by early March. It then generally increases to about 110 by October, and generally decreases to end at about 100. It is at about 108 at the time of the September 2009 FOMC meeting. Small banks begins at about 100 and generally decreases to about 50 by March 2009. It then generally increases to end at about 74. It is at about 76 at the time of the September 2009 FOMC meeting.

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

Source. Bloomberg.

Figure: Corporate bond spreads

Line chart, 2002 to October 29, 2009. Unit is basis points. Data are daily. The September 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 200 and generally increases to about 320 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 260. It is at about 275 at the time of the September 2009 FOMC meeting. 10-year High-Yield begins at about 500 and generally increases to about 850 by late 2002. It then generally decreases to about 250 by early 2005, and generally increases to about 1630 by late 2008. It then generally decreases to end at about 600. It is at about 630 at the time of the September 2009 FOMC meeting.

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

Source. Merrill Lynch and staff estimates.

Figure: Select interest rates

Line chart, by percent, January 2009 to October 2009. The September 2009 FOMC meeting is marked in the time series. There are three series, "30-year fixed rate mortgage", "MBS yield" and "On-the-run 10-yr Treasury". 30-year fixed rate mortgage begins at about 5 and generally increases to about 5.3 by early February. It then generally decreases to about 4.8 by late March, and generally increases to about 5.6 by April. It then generally decreases to end at about 5 by October 28. It is at about 5 at the time of the September 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 4.3 by October 29. It is at about 4.5 at the time of the September 2009 FOMC meeting. On-the-run 10-yr Treasury begins at about 2.5 and generally increases to end at about 3.5 by October 29. It is at about 3.5 at the time of the September 2009 FOMC meeting.

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

Source. Bloomberg.

Chart 3 Market Functioning and Federal Reserve Facilities

Figure: Gross ABS issuance

Stacked bar chart, by billions of dollars, 2006 to October 2009. Data are monthly rate. There are three series, "Credit Card", "Auto" and "Student Loan". Approximate values are: 2006: Credit Card 5, Auto 8, and Student Loan 7. 2007: Credit Card 7.5, Auto 7, and Student Loan 5.5. 2008:H1: Credit Card 8, Auto 6, and Student Loan 4. 2008:H2: Credit Card 2, Auto .5, and Student Loan 1.5. 2009:Q1: Credit Card 2.5, Auto 2.5, and Student Loan 1.5. April 2009: Credit Card 1, Auto 4, and Student Loan 5. May 2009: Credit Card 7.5, Auto 3.5, and Student Loan 3. June 2009: Credit Card 13, Auto 6, and Student Loan 1. July 2009: Credit Card 3, Auto 10, and Student Loan 3. August 2009: Credit Card 4.5, Auto 0, and Student Loan 3. September 2009: Credit Card 10, Auto 9.5, and Student Loan 0. October 2009: Credit Card 0, Auto 3.5, and Student Loan .5.

Note. October 2009 plotted values are actual issuance as of October 23, 2009. Auto ABS include car loans and leases and financing for buyers of motorcycles.

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

Figure: Libor over OIS spread

Line chart, September 2008 to October 29, 2009. Unit is basis points. Data are daily. The September 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 50 and generally increases to about 335 by October 2008. It then generally decreases to about 15 by mid-May, and remains about constant until the end. 3-month begins at about 78 and generally increases to about 360 by October 2008. It then generally decreases to end at about 15. 1-month and 3-month are at about 15 at the time of the September 2009 FOMC meeting. 6-month begins at about 100 and generally increases to about 325 by October 2008. It then generally decreases to end at about 30. It is at about 50 at the time of the September 2009 FOMC meeting.

Source. British Bankers' Association and Prebon.

Figure: Spreads on 30-day commercial paper

Line chart, July 2007 to October 28, 2009. Unit is basis points. Data are daily. The September 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 early February, and generally increases to 395 by early October 2008. It then generally decreases to end at about 25. It is at about 15 at the time of the September 2009 FOMC meeting. A2/P2 begins at about 15 and generally increases to about 150 by December 2007. It then generally decreases to about 50 by January 2008, and generally increases to about 610 by January 2009. It then generally decreases to end at about 25. It is at about 20 at the time of the September 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: Senior unsecured debt issuance

Line chart, by billions of dollars, November 2008 to October 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 56 by March. It then generally decreases to about 0 by August, and generally increases to about 18 by September. It then generally decreases to end at about 8. Non-guaranteed begins at about 0 and generally increases to about 30 by May. It then generally decreases to about 8 by July, and generally increases to about 17 by September. It then generally decreases to end at about 4.

Note. Staff estimates.

Source. Bloomberg.

Figure: Secondary loan market pricing

Line chart, January 2007 to October 29, 2009. Data are daily. The September 2009 FOMC meeting is marked in the time series. There are two series, "Bid-asked spread", in basis points, and "Bid price", which is by percent of par. These two series use two different scales. Bid-asked spread begins at about 55 and generally increases to about 420 by early January 2009. It then generally decreases to end at about 188. It is at about 198 at the time of the September 2009 FOMC meeting. Bid price begins at about 99 and generally decreases to about 60 by December 2008. It then generally increases to end at about 85. It is at about 84 at the time of the September 2009 FOMC meeting.

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

Figure: Usage of TALF and other lending facilities

Line chart, by billions of dollars, January 2007 to October 28, 2009. Data are daily. The September 2009 FOMC meeting is marked in the time series. There are

two series, "Other facilities" and "TALF". These two series use two different scales. Other facilities begins at about 0 and remains about constant until December 2007. It then generally increases to about 1520 by December 2008, and generally decreases to end at about 200. It is at about 310 at the time of the September 2009 FOMC meeting. TALF begins at about 0, remains about constant until March 2009, and generally increases to end at about 49. It is at about 49 at the time of the September 2009 FOMC meeting.

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

Source. Federal Reserve.

[Box:] Balance Sheet Developments during the Intermeeting Period

Federal Reserve Balance Sheet

Billions of dollars

	Change since last FOMC	Current (10/28/2009)	Maximum level	Date of maximum level
Total assets	3	2,165	2,256	12/17/08
Selected assets:				
Liquidity programs for financial firms	-89	195	1,247	11/06/08
Primary, secondary, and seasonal credit	-6	23	114	10/28/08
Term auction credit (TAF)	-57	139	493	03/11/09
Foreign central bank liquidity swaps	-26	33	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	-24	60	351	01/23/09
Net portfolio holdings of Commercial Paper Funding Facility LLC (CPFF)	-23	19	351	01/23/09
Term Asset-Backed Securities Loan Facility (TALF)	-1	41	44	09/11/09
Support for specific institutions	10	110	118	04/02/09
Credit extended to AIG, net	6	45	91	10/27/08
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	4	65	75	12/30/08
Securities held outright*	102	1,690	1,693	10/23/09
U.S. Treasury securities	9	775	791	08/14/07
Agency securities	12	142	142	10/28/09
Agency mortgage-backed securities**	81	774	777	10/23/09
Memo: Term Securities Lending Facility (TSLF)	0	0	236	10/01/08
Total liabilities	3	2,112	2,213	12/04/08
Selected liabilities:				
Federal Reserve notes in circulation	3	875	878	10/14/09
Reserve balances of depository institutions	191	1,083	1,097	10/23/09
U.S. Treasury, general account	-29	31	137	10/23/08
U.S. Treasury, supplemental financing account	-170	30	559	10/22/08
Other deposits	11	11	53	04/14/09
Total capital	-0	53	53	10/28/09

+0 (-0) denotes positive (negative) value rounded to zero. [Return to table](#)

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

** Includes only mortgage-backed security purchases that have already settled. Over the intermeeting period, the Open Market Desk committed to purchase an additional \$82 billion of MBS, on net. Total MBS purchases are about 973 billion. [Return to table](#)

Figure: Nominal trade-weighted dollar indexes

Line chart, 2007 to October 29, 2009. December 31, 2006 = 100. Data are daily. The September 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 101 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 96. It is at about 97 at the time of the September 2009 FOMC meeting. Major Currencies begins at about 100 and generally increases to about 102 by 2007. It then generally decreases to about 85 by early 2008, and generally increases to about 106 by early 2009. It then generally decreases to end at about 91.5. It is at about 92 at the time of the September 2009 FOMC meeting. Other Important Trading Partners begins at about 100 and generally decreases to about 91.5 by mid-2008. It then generally increases to about 110.5 by early 2009, and generally decreases to end at about 101. It is at about 102 at the time of the September 2009 FOMC meeting.

Source. FRBNY and Bloomberg.

Figure: Nominal ten-year government bond yields

Line chart, by percent, 2007 to October 29, 2009. Data are daily. The September 2009 FOMC meeting is marked in the time series. There are three series, "UK", "Germany", and "Japan". UK and Germany share the same 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 3.0 by early 2009, and generally increases to about 4.0 by mid-2009. It then generally decreases to end at about 3.6. It is at about 3.6 at the time of the September 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 4.65 by mid-2008. It then generally decreases to about 2.9 by early 2009, and generally increases to end at about 3.3. It is at about 3.4 at the time of the September 2009 FOMC meeting. Japan begins at about 1.7 and generally decreases to about 1.55 by 2007. It then generally increases to about 1.95 by mid-2007, and generally decreases to about 1.25 by early 2008. It then generally increases to about 1.85 by mid-2008, and generally decreases to about 1.2 by late 2008. It then generally increases to end at about 1.4. It is at about 1.3 at the time of the September 2009 FOMC meeting.

Source. Bloomberg.

Figure: Stock price indexes: Industrial countries

Line chart, 2007 to October 29, 2009. December 31, 2006 = 100. Data are daily. The September 2009 FOMC meeting is marked in the time series. There are three series, "UK (FTSE-350)", "Euro Area (DJ Euro)", and "Japan (Topix)". UK (FTSE-350) begins at about 100 and generally increases to about 108 by mid-2007. It then generally decreases to about 42 by early 2009, and generally increases to end at about 55. It is at about 56 at the time of the September 2009 FOMC meeting. Euro Area (DJ Euro) begins at about 100 and generally increases to about 112 by 2007. It then generally decreases to about 44 by early 2009, and generally increases to end at about 70. It is at about 68 at the time of the September 2009 FOMC meeting. Japan (Topix) begins at about 100 and generally increases to about 107 by mid-2007. It then generally decreases to about 42 by early 2009, and generally increases to about 58 by mid-2009. It then generally decreases to end at about 55. It is at about 57 at the time of the September 2009 FOMC meeting.

Source. Bloomberg.

Figure: Stock price indexes: Emerging market economies

Line chart, 2007 to October 29, 2009. December 31, 2006 = 100. Data are daily. The September 2009 FOMC meeting is marked in the time series. There are three series, "Brazil (Bovespa)", "Korea (KOSPI)", and "Mexico (Bolsa)". Brazil (Bovespa) begins at about 100 and generally decreases to about 89 by early 2007. It then generally increases to about 162.5 by 2008, and generally decreases to about 75 by late 2008. It then generally increases to about 148 by 2009, and generally decreases to end at about 134. It is at about 135 at the time of the September 2009 FOMC meeting. Korea (KOSPI) begins at about 100 and generally decreases to about 100 and generally decreases to about 92 by early 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 114. It is at about 116 at the time of the September 2009 FOMC meeting. Mexico (Bolsa) begins at about 100 and generally increases to about 125 by late 2007. It then generally decreases to about 64 by late 2008, and generally increases to end at about 112. It is at about 110 at the time of the September 2009 FOMC meeting.

Source. Bloomberg.

Chart 5 Debt and Money

Figure: Bank credit

Line chart, February 2007 to October 2009. January 2008 = 100. Data are monthly averages. The series begins at about 90.8 and generally increases to about 104.5 by early November 2008. It then generally decreases to end at about 97.

Note. October 2009 is estimated.

Source. Federal Reserve.

Figure: Changes in commercial banks' lending standards

Line chart, by net percent, 1990 to 2009:Q3. Data are quarterly. The series begins at about 20 and generally increases to about 53 by late 1990. It then generally decreases to about -19 by 1993, and generally increases to about 41 by late 2000. It then generally decreases to about -20 by early 2005, and generally increases

to about 88 by late 2008. It then generally decreases to end at about 32. It is at about 70 at the time of the NBER peak.

Note. Series plots net percentage of core loans in categories for which banks reported a tightening of lending standards. Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. A vertical line indicates the NBER Peak in December 2007. The NBER peak is the last business cycle peak as defined by the NBER.

Source. Senior Loan Officer Opinion Survey and Call Reports.

Growth of debt of nonfinancial sectors

Percent, s.a.a.r.

	Total	Business	Household	Government
2007	8.7	13.4	6.6	6.1
2008	5.9	5.3	0.2	17.5
Q1	5.4	7.8	2.9	6.7
Q2	3.3	6.4	0.2	4.4
Q3	8.2	5.1	-0.5	28.6
Q4	6.3	1.7	-1.8	26.7
2009				
Q1	4.1	0.0	-1.1	17.9
Q2	4.5	-1.8	-1.7	22.0
Q3	4.1	-1.5	-0.3	17.0

Source. Flow of Funds.

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 end at about -7. Home mortgage begins at about 8 and generally decreases to about 3.5 by 1991. It then generally increases to about 16 by 2003, and generally decreases to about -2.5 by 2008. It then generally increases to end at about 1.

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 October 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 curve which plots the total of the other series. Approximate values are: 2006: Bonds 18, C&I loans 11, Commercial paper 1, Sum 30. 2007: Bonds 26, C&I loans 22, Commercial paper 0, Sum 48. 2008:Q1: Bonds 17, C&I loans 25, Commercial paper 6, Sum 48. 2008:Q2: Bonds 30, C&I loans 12, Commercial paper -7, Sum 35. 2008:Q3: Bonds 8, C&I loans 16, Commercial paper 6, Sum 30. 2008:Q4: Bonds 18, C&I loans -7, Commercial paper 0, Sum 11. 2009:Q1: Bonds 48, C&I loans -18, Commercial paper -12, Sum 18. 2009:Q2: Bonds 32, C&I loans -19, Commercial paper -11, Sum 2. 2009:Q3: Bonds 22, C&I loans -35, Commercial paper -1, Sum -14. October 2009: Bonds 11, Commercial paper 22, C&I loans -15, Sum 18.

Note. CP and C&I loans are seasonally adjusted; bonds are not. October 2009 is estimated.

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

Figure: Growth of M2

Bar chart, by percent, 2006 to October 2009. Data are s.a.a.r. The series begins at about 5.2 and generally increases to about 8.2 by 2008:Q1. It then generally decreases to about 4 by 2008:Q3, and generally increases to about 14.3 by 2008:Q4. It then generally decreases to about 0 by 2009:Q3, and generally increases to end at about 3.

Note. October 2009 is estimated.

Source. Federal Reserve.

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

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Monetary Policy Strategies

Chart 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 4.7 and generally decreases to about -0.3 by 1992. It then generally increases to about 4.9 by 2000, and generally decreases to about -0.8 by 2004. It then generally increases to about 3 by 2006, and generally decreases to about -2 by late 2008. It then generally increases to end at about -1. Greenbook-consistent measure begins at about 4.2 and generally decreases to about 3.5 by late 1998. It then generally increases to about 5.7 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 three series closely track each other throughout the chart, with the 70 percent confidence interval being about 1 percent both lesser and greater than the Range of model-based estimates, and the 90 Percent confidence interval being about 2 percent both lesser and greater than the Range of model-based estimates at any given point. The Range of model-based estimates begins at between 1 and 4, decreases to about -0.8 and 2.1 by early 1991. It then generally increases to about 2.4 and 4.8 by early 2000, generally decreases to about -5 and -1.6 by early 2009, and generally increases to end at about -2.1 and 0.5.

Short-Run and Medium-Run Measures

	Current Estimate	Previous Bluebook
Short-Run Measures		
Single-equation model	-1.7	-1.3
Small structural model	-1.2	-1.1
EDO model	0.4	-0.3
FRB/US model	-2.0	-2.4
Confidence intervals for four model-based estimates		
70 percent confidence interval	-2.9 to 0.7	
90 percent confidence interval	-3.8 to 1.8	
Greenbook-consistent measures		
EDO model	-3.7	-3.1
FRB/US model	-2.0	-1.9
Medium-Run Measures		
Single-equation model	1.3	1.3
Small structural model	1.9	1.3
Confidence intervals for two model-based estimates		
70 percent confidence interval	0.6 to 2.5	
90 percent confidence interval	-0.2 to 3.0	
TIPS-based factor model	2.0	2.0
Memo		
Actual real federal funds rate	-1.2	-1.2

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

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

Figure: Nominal Federal Funds Rate

Line chart, by percent, 2009 to 2014. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained" and "Previous Bluebook: Unconstrained". Current Bluebook: Constrained begins at about 0.2 and remains about constant until early 2012. It then generally increases to end at about 4.6. Current Bluebook: Unconstrained begins at about 0.2, generally decreases to about -5.2 by late 2010, and generally increases to end at about 5.4. Previous Bluebook: Unconstrained begins at about 0.2, generally decreases to about -4.8 by late 2010, and generally increases to end at about 5.3.

Figure: Real Federal Funds Rate

Line chart, by percent, 2009 to 2014. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained" and "Previous Bluebook: Unconstrained". Current Bluebook: Constrained begins at about -1.3 and generally increases to end at about 2.6. Current Bluebook: Unconstrained begins at about -1.3 and generally increases to about -1 by 2009. It then generally decreases to about -6.8 by late 2010, and generally increases to end at about 3. Previous Bluebook: Unconstrained begins at about -1.3 and generally increases to about -1 by 2009. It then generally decreases to about -6.4 by 2010, and generally increases to end at about 3.

Figure: Civilian Unemployment Rate

Line chart, by percent, 2009 to 2014. 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 10.1 by late 2009. It then generally decreases to about 3.6 by early 2014, and generally increases to end at about 3.75. Current Bluebook: Unconstrained begins at about 9.3 and generally increases to about 10.1 by late 2009. It then generally decreases to about 4 by 2013, and generally increases to end at about 4.6. Previous Bluebook: Unconstrained begins at about 9.3 and generally increases to about 9.8 by late 2009. It then generally decreases to about 3.9 by mid-2013, and generally increases to end at about 4.6.

Figure: Core PCE Inflation

Line chart, by percent, 2009 to 2014. Data are four-quarter averages. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained" and "Previous Bluebook: Unconstrained". Current Bluebook: Constrained begins at about 1.6 and generally decreases to about 1.2 by late 2011. It then generally increases to end at about 2.05. Current Bluebook: Unconstrained begins at about 1.6 and generally decreases to about 1.3 by 2009. It then generally increases to end at about 2.25. Previous Bluebook: Unconstrained begins at about 1.6 and generally decreases to about 1.3 by 2009. It then generally increases to end at about 2.22.

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 2014. There are three series, "Current Bluebook", "Previous Bluebook", and "Greenbook assumption". Current Bluebook begins at about 0.2, remains about constant until early 2012, and generally increases to end at about 4. Previous Bluebook begins at about 0.2, remains about constant until mid-2011, and generally increases to end at about 4.1. Greenbook assumption begins at about 0.2, remains about constant until early 2012, and generally increases to end at about 3.9.

Note: There is dark and light shading that represent the 70 and 90 percent confidence intervals respectively. The 70 percent interval covers about 2.4 to 6 and the 90 percent interval covers about 1.3 to 7.1 by the end of the chart.

Figure: Information from Financial Markets

Line chart, by percent, 2009 to 2014. There are two series, "Current Bluebook", and "Previous Bluebook". Current Bluebook begins at about 0.2 and generally increases to end at about 3.8. Previous Bluebook begins at about 0.4 and generally increases to end at about 3.8.

Note: There is dark and light shading that represent the 70 and 90 percent confidence intervals respectively. The 90 percent interval covers about 0.9 to 7.3 and the 70 percent interval covers about 1.5 to 5.6 by the end of the chart. In the previous Bluebook, the 90 percent interval covers about 0.9 to 7.2 and the 70 percent interval covers about 1.5 to 5.6.

Near-Term Prescriptions of Simple Policy Rules

	Constrained Policy		Unconstrained Policy	
	2009Q4	2010Q1	2009Q4	2010Q1
Taylor (1993) rule	0.13	0.13	-0.67	-0.56
Previous Bluebook	0.13	0.13	-0.32	-0.24

Taylor (1999) rule	0.13	0.13	-4.46	-4.23
<i>Previous Bluebook</i>	<i>0.13</i>	<i>0.13</i>	<i>-3.79</i>	<i>-3.62</i>
Estimated outcome-based rule	0.13	0.13	-0.61	-1.34
<i>Previous Bluebook</i>	<i>0.13</i>	<i>0.13</i>	<i>-0.40</i>	<i>-1.00</i>
Estimated forecast-based rule	0.13	0.13	-0.57	-1.34
<i>Previous Bluebook</i>	<i>0.13</i>	<i>0.13</i>	<i>-0.44</i>	<i>-1.08</i>
First-difference rule	0.13	0.25	0.11	0.23
<i>Previous Bluebook</i>	<i>0.22</i>	<i>0.39</i>	<i>0.22</i>	<i>0.39</i>

Memo

	2009Q4	2010Q1
Greenbook assumption	0.13	0.13
Fed funds futures	0.13	0.18
Median expectation of primary dealers	0.13	0.13
Blue Chip forecast (October 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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November 2009 Bluebook Tables and Charts

Policy Alternatives

Table 1: Overview of Alternative Language for the November 3-4, 2009 FOMC Announcement

September FOMC	November Alternatives			
	A	B	C	
Forward Guidance on Funds Rate Path				
	"exceptionally low levels of the federal funds rate for an extended period"	"this exceptionally low range for the federal funds rate for an extended period"	"exceptionally low levels of the federal funds rate for an extended period"	"low levels of the federal funds rate for some time"
Agency MBS Purchases				
Total Amount	"a total of" \$1.25 trillion	"a total of" \$1.5 trillion	"a total of" \$1.25 trillion	"cap" at \$1.1 trillion
Pace	pace will "gradually slow"		pace will "gradually slow"	
Completion	by the end of the first quarter of 2010	through the second quarter of 2010	by the end of the first quarter of 2010	by the end of January 2010
Agency Debt Purchases				
Total Amount	"up to" \$200 billion	"up to" \$200 billion	"a total of" \$175 billion	"cap" at \$160 billion
Pace	pace will "gradually slow"		pace will "gradually slow"	
Completion	by the end of the first quarter of 2010	through the second quarter of 2010	by the end of the first quarter of 2010	by the end of January 2010
Evaluation of LSAP Timing and Overall Amounts				
	timing and amounts of all LSAPs will continue to be evaluated		timing and amounts of all LSAPs will continue to be evaluated	

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Accessible Material

November 2009 Bluebook Tables and Charts[†]

Long-Run Projections of the Balance Sheet and Monetary Base

Balance Sheet Projections Summary

	Alternative A	Alternative B	Alternative C
Agency Debt Securities			
Total Purchased	\$200 billion	\$175 billion	\$160 billion
December 2016	\$34 billion	\$25 billion	\$19 billion
Agency MBS			
Total Purchased	\$1.5 trillion	\$1.25 trillion	\$1.1 trillion
December 2016	\$0.8 trillion	\$0.7 trillion	\$0.6 trillion
Total Assets			
Peak month	September 2010	June 2010	April 2010
Peak amount	\$2.6 trillion	\$2.4 trillion	\$2.3 trillion
December 2016	\$1.5 trillion	\$1.5 trillion	\$1.5 trillion
Reserve Balances			
Peak month	September 2010	December 2009	November 2009
Peak amount	\$1.3 trillion	\$1.2 trillion	\$1.1 trillion

Growth Rates for Monetary Base

Date	Baseline	Alternative A	Alternative C	Memo: September baseline
Percent, annual rate				
Monthly				
Sep-09	66.9	66.9	66.9	38.5
Oct-09	88.4	88.4	88.4	109.1
Nov-09	94.9	101.1	89.4	94.2
Dec-09	16.0	27.4	5.9	27.1
Jan-10	-8.1	3.3	-18.3	-20.0
Feb-10	-10.3	1.2	-23.4	-30.7
Mar-10	-14.1	-2.4	-28.5	-2.5
Apr-10	-9.9	1.7	-19.8	11.2
May-10	10.4	21.1	-3.3	22.4
Jun-10	8.9	19.3	-10.8	25.0
Quarterly				
Q3 2009	-2.5	-2.5	-2.5	-11.5
Q4 2009	73.7	76.8	71.0	73.4
Q1 2010	6.9	17.9	-3.9	1.8
Q2 2010	-4.3	7.0	-17.3	7.5
Q3 2010	-2.4	15.4	-11.2	9.6
Q4 2010	-10.1	1.8	-9.3	-6.9

Annual - Q4 to Q4				
2009	45.0	45.9	44.1	42.8
2010	-2.5	10.9	-10.1	3.0
2011	-9.9	-10.5	-9.7	-7.4
2012	-13.1	-12.9	-13.4	-11.6
2013	-9.6	-9.4	-9.8	-9.9
2014	-10.8	-10.4	-5.9	-9.8
2015	0.6	-9.6	4.2	-8.8
2016	3.8	0.6	3.8	1.1

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 15, SDR and other assets 35. 2007: Treasury securities 760, Repurchase agreements 20, SDR and other assets 35. 2008: Treasury securities 740, Repurchase agreements 20, TAF 15, Central bank swaps 10, SDR and other assets 35. 2009: Treasury securities 499, Agency MBS 10, TAF 440, Central bank swaps 350, Other loans and facilities 480, SDR and other assets 15. 2010: Treasury securities 760, Agency debt 220, Agency MBS 950, TAF 15, Central bank swaps 5, TALF 40, Other loans and facilities 60, SDR and other assets 50, 2011: Treasury securities 750, Agency debt 150, Agency MBS 1080, TALF 50, Other loans and facilities 55, SDR and other assets 80. 2012: Treasury securities 750, Agency debt 50, Agency MBS 980, TALF 50, Other loans and facilities 40, SDR and other assets 90. 2013: Treasury securities 700, Agency debt 60, Agency MBS 890, TALF 10, Other loans and facilities 15, SDR and other assets 100. 2014: Treasury securities 680, Agency debt 60, Agency MBS 770, TALF 5, Other loans and facilities 5, SDR and other assets 100. 2015: Treasury securities 600, Agency debt 25, Agency MBS 795, TALF 2, Other loans and facilities 1, SDR and other assets 100. 2016: Treasury securities 580, Agency debt 20, Agency MBS 600, Other loans and facilities 1, 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, Reserve balances 15, Reverse repurchase agreements 10, Reserve balances 5, Capital 20. 2007: Federal Reserve notes 760, Reverse repurchase agreements 20, Reserve balance 10, Capital 25. 2008: Federal Reserve notes 775, Reverse repurchase agreements 40, Reserve balances 10, Capital 30. 2009: Federal Reserve notes 890, Reverse repurchase agreements 60, Deposits, other than reserve balances 170, Reserve balances 590, Capital 20. 2010: Federal Reserve notes 880, Reverse repurchase agreements 60, Deposits, other than reserve balances 112, Reserve balances 1130, Other liabilities 2, Capital 30. 2011: Federal Reserve notes 900, Reverse repurchase agreements 60, Deposits, other than reserve balances 200, Reserve balances 950, Other liabilities 2, Capital 50. 2012: Federal Reserve notes 980, Reverse repurchase agreements 60, Deposits, other than reserve balances 240, Reserve balances 700, Other liabilities 2, Capital 75. 2013: Federal Reserve notes 1000, Reverse repurchase agreements 60, Deposits, other than reserve balances 230, Reserve balances 420, Other liabilities 5, Capital 80. 2014: Federal Reserve notes 1100, Reverse repurchase agreements 60, Deposits, other than reserve balances 100, Reserve balances 140, Other liabilities 5, Capital 100. 2015: Federal Reserve notes 1150, Reverse repurchase agreements 60, Deposits, other than reserve balances 220, Reserve balances 10, Other liabilities 5, Capital 110. 2016: Federal Reserve notes 1200, Reverse repurchase agreements 60, Deposits, other than reserve balances 10, Reserve balances 5, Other liabilities 5, Capital 125.

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 40. 2007: Treasury securities 780, Repurchase agreements 20, SDR and other assets 50. 2008: Treasury securities 720, Repurchase agreements 15, TAF 20, Central bank swaps 5, SDR and other assets 50. 2009: Treasury securities 498, Agency debt 15, Agency MBS 5, TAF 440, Central bank swaps 350, Other loans and facilities 480, SDR and other assets 15. 2010: Treasury securities 780, Agency debt 200, Agency MBS 1010, TAF 5, Central bank swaps 2, TALF 20, Other loans and facilities 180, SDR and other assets 60. 2011: Treasury securities 750, Agency debt 200, Agency MBS 1275, TALF 45, Other loans and facilities 200, SDR and other assets 70. 2012: Treasury securities 750, Agency debt 130, Agency MBS 1140, TALF 20, Other loans and facilities 100, SDR and other assets 60. 2013: Treasury securities 700, Agency debt 65, Agency MBS 1025, TALF 10, Other loans and facilities 35, SDR and other assets 75. 2014: Treasury securities 650, Agency debt 50, Agency MBS 1000, TALF 5, Other loans and facilities 10, SDR and other assets 80. 2015: Treasury securities 600, Agency debt 25, Agency MBS 1000, TALF 2, Other loans and facilities 5, SDR and other assets 80. 2016: Treasury securities 580, Agency debt 20, Agency MBS 1000, TALF 1, 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, Other liabilities 2, Capital 20. 2007: Federal Reserve notes 750, Reverse repurchase agreements 20, Reserve balances 10, Other liabilities 2, Capital 20. 2008: Federal Reserve notes 780, Reverse repurchase agreements 30, Reserve balances 10, Other liabilities 1, Capital 30. 2009: Federal Reserve notes 850, Reverse repurchase agreements 50, Deposits, other than reserve balances 170, Reserve balances 700, Other liabilities 1, Capital 20. 2010: Federal Reserve notes 890, Reverse repurchase notes 50, Deposits, other than reserve balances 110, Reserve balances 1175, Other liabilities 1, Capital 25. 2011: Federal Reserve notes 940, Reverse repurchase agreements 60, Deposits, other than reserve balances 200, Reserve balances 1275, Other liabilities 2, Capital 35. 2012: Federal Reserve notes 950, Reverse repurchase agreements 60, Deposits, other than reserve balances 250, Reserve balances 940, Other liabilities 5, Capital 40. 2013: Federal Reserve notes 1000, Reverse repurchase agreements 60, Deposits, other than reserve balances 225, Reserve balances 650, Other liabilities 5, Capital 50. 2014: Federal Reserve notes 1080, Reverse repurchase agreements 60, Deposits, other than reserve balances 225, Reserve balances 380, Other liabilities 5, Capital 55. 2015: Federal Reserve notes 1150, Reverse repurchase agreements 60, Deposits, other than reserve balances 200, Reserve balances 200, Other liabilities , Capital 80. 2016: Federal Reserve notes 1180, Reverse repurchase agreements 60, Deposits, other than reserve balances 230, Reserve balances 5, Other liabilities 5, 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 15, SDR and other assets 40. 2007: Treasury securities 760, Repurchase agreements 15, SDR and other assets 40. 2008: Treasury securities 700, Repurchase agreements 25, TAF 15, Central bank swaps 5, SDR and other assets 40. 2009: Treasury securities 500, Agency debt 20, Agency MBS 10, TAF 430, Central bank swaps 350, Other loans and facilities 430, SDR and other facilities 20. 2010: Treasury securities 750, Agency debt 170, Agency MBS 925, TAF 5, Central bank swaps 5, TALF 20, Other loans and facilities 210, SDR and other assets 50. 2011: Treasury securities 770, Agency debt 110, Agency MBS 870, TALF 60, Other loans and facilities 170, SDR and other assets 80. 2012: Treasury securities 750, Agency debt 50, Agency MBS 830, TALF 30, Other loans and facilities 100, SDR and other assets 80. 2013: Treasury securities 680, Agency debt 40, Agency MBS 860, TALF 5, Other loans and facilities 25, SDR and other assets 90. 2014: Treasury securities 730, Agency debt 25, Agency MBS 675, TALF 2, Other loans and facilities 15, SDR and other facilities 100. 2015: Treasury securities 600, Agency debt 15, Agency MBS 860, TALF 1, Other loans and facilities 5, SDR and other assets 100. 2016: Treasury securities 680, Agency debt 10, Agency MBS 575, 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, Deposits, other than reserve balances 2, Capital 20. 2007: Federal Reserve notes 750, Reverse repurchase agreements 20, Reserve balances 10, Deposits, other than reserve balances 2, Capital 20. 2008: Federal Reserve notes 750, Reverse repurchase agreements 30, Reserve balances 10, Deposits, other than reserve balances 2, Capital 20. 2009: Federal Reserve notes 850, Reverse repurchase agreements 50, Deposits, other than reserve balances 120, Reserve balances 650, Other liabilities 1, Capital 25. 2010: Federal Reserve notes 880, Reverse repurchase agreements 50, Deposits, other than reserve balances 110, Reserve balances 1050, Other liabilities 1, Capital 30. 2011: Federal Reserve notes 900, Reverse repurchase agreements 50, Deposits, other than reserve balances 200, Reserve balances 800, Other liabilities 2, Capital 50. 2012: Federal Reserve notes 980, Reverse repurchase agreements 50, Deposits, other than reserve balances 240, Reserve balances 560, Other liabilities 2, Capital 50. 2013: Federal Reserve notes 1000, Reverse repurchase agreements 50, Deposits, other than reserve balances 220, Reserve balances 300, Other liabilities 2, Capital 50. 2014: Federal Reserve notes 1050, Reverse repurchase agreements 50, Deposits, other than reserve balances 200, Reserve balances 130, Other liabilities 5, Capital 65. 2015: Federal Reserve notes 1150, Reverse repurchase agreements 50, Deposits, other than reserve balances 60, Reserve balances 5, Other liabilities 5, Capital 75. 2016: Federal Reserve notes 1200, Reverse repurchase agreements 50, Deposits, other than reserve balances 5, Reserve balances 10, Other liabilities 5, Capital 100.

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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November 2009 Bluebook Tables and Charts

Bank Credit, Debt, and Money Forecasts

Growth Rates for M2

(percent, annual rate)

Greenbook Forecast*			
Monthly Growth Rates			
	Apr-09	-7.7	
	May-09	10.2	
	Jun-09	4.6	
	Jul-09	-2.5	
	Aug-09	-7.4	
	Sep-09	4.0	
	Oct-09	3.0	
	Nov-09	0.7	
	Dec-09	0.3	
	Jan-10	1.9	
	Feb-10	2.3	
	Mar-10	2.3	
	Apr-10	2.4	
	May-10	2.4	
	Jun-10	2.6	
	Jul-10	3.2	
	Aug-10	3.3	
	Sep-10	3.3	
	Oct-10	3.7	
	Nov-10	3.6	
	Dec-10	3.7	
Quarterly Growth Rates			
	2009 Q2	2.7	
	2009 Q3	0.1	
	2009 Q4	1.2	
	2010 Q1	1.5	
	2010 Q2	2.4	
	2010 Q3	3.0	
	2010 Q4	3.5	
Annual Growth Rates			
	2008	8.3	
	2009	4.2	
	2010	2.7	
	2011	4.7	
Growth	From	To	
	Sep-09	Dec-09	1.3

2008 Q4	2009 Q4	4.2
2009 Q4	2010 Q2	2.0

* This forecast is consistent with nominal GDP and interest rates in the Greenbook forecast. Actual data through October 19, 2009; projections thereafter. [Return to table](#)

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November 2009 Bluebook Tables and Charts

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	-2.0	-0.8
Lagged headline inflation	0.8	-2.0	-0.9
Projected headline inflation	-1.3	-2.0	-0.9

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

Individual Balance Sheet Item Profiles

Note. All values are in billions of dollars.

Asset purchases and Federal Reserve liquidity programs and credit facilities

Figure: Agency Debt

Line chart, 2009 to 2016. There are four series, "September", "Baseline", "Alternative A", and "Alternative C". They begin at about 25 and generally increase together until they reach about 125 by 2009. September generally increases to about 148 by 2010, and generally decreases to end at about 20. Baseline generally increases to about 175 by early 2010, and generally decreases to end at about 30. Alternative A generally increases to about 198 by mid-2010, and generally decreases to end at about 40. Alternative C generally increases to about 155 by early 2010, and generally decreases to end at about 25.

Figure: Agency MBS

Line chart, 2009 to 2016. There are four series, "September", "Baseline", "Alternative A" and "Alternative C". They begin at about 0 and generally increase together until they reach about 900 by early 2010. September generally increases to about 1125 by mid-2010, and generally decreases to end at about 720. Baseline generally increases to about 1100 by mid-2010, and generally decreases to end at about 760. Alternative A generally increases to about 1350 by late 2010, and generally decreases to end at about 800. Alternative C generally increases to about 998 by 2010 and generally decreases to end at about 560.

Figure: TAF

Line chart, 2009 to 2016. There are two series, "September" and "Baseline". They begin at about 450 and generally decrease to about 425 by 2009. They then generally increase to about 495 by 2009, and generally decrease together until they reach about 160 by late 2009. September generally decreases to about 30 by mid-2010, and remains about constant until the end. Baseline generally decreases to about 0 by mid-2010, and remains about constant until the end.

Figure: TALF

Line chart, 2009 to 2016. There are two series, "September" and "Baseline". They begin at about 0 and generally increase together until they reach about 40 by 2009. September generally increases to about 138 by 2010, and generally decreases to end at about 0. Baseline generally increases to about 95 by mid-2010, and generally decreases to end at about 0.

Figure: Credit Extended to AIG

Line chart, 2009 to 2016. There are two series, "September" and "Baseline". September begins at about 39 and generally increases to about 46 by 2009. It then generally decreases to about 18 by early 2010, and generally increases to about 29 by early 2011. It then generally decreases to about 0 by early 2014, and remains about constant until the end. Baseline begins at about 38 and generally increases to about 46 by 2009. It then generally decreases to about 0 by early 2014, and remains about constant until the end.

Federal Reserve liabilities and capital

Figure: Reverse Repurchase Agreements

Line chart, 2009 to 2016. There are two series, "September" and "Baseline". September begins at about 77 and generally decreases to about 64 by late 2009. It

then remains about constant until the end. Baseline begins at about 77 and generally decreases to about 30 by late 2009. It then remains about constant until the end.

Figure: SFA

Line chart, 2009 to 2016. There are four series, "September", "Baseline", "Alternative A" and "Alternative C". They begin at about 170 and generally increase to about 200 by 2009. They then generally decrease to about 20 by late 2009, and generally increase to about 200 by 2010. They remain about constant together until about mid-2014. September and Alternative A remain about constant at about 200 until early 2016, and then generally decrease to end at about 15. Baseline remains about constant until early 2015, and then generally decreases to end at about 0. Alternative C generally decreases to end at about 0.

Figure: Reserve Balances

Line chart, 2009 to 2016. There are four series, "September", "Baseline", "Alternative A" and "Alternative C". They begin at about 880 and generally decrease to about 650 by mid-2009. They track closely together until they reach about 1120 by late 2009. September generally increases to about 1200 by mid-2010, and generally decreases to end at about 0. Baseline generally decreases to about 0 by early 2015, and remains about constant until the end. Alternative A generally increases to about 1320 by late 2010, and generally decreases to end at about 0. Alternative C generally decreases to about 0 by mid-2014, and remains about constant until the end.

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

	End-of-Year									
	Oct 28, 2009	2009	2010	2011	2012	2013	2014	2015	2016	
	\$Billions									
Total assets	2,165	2,270	2,248	2,059	1,829	1,705	1,564	1,463	1,480	
Selected assets:										
Liquidity programs for financial firms	195	140	5	1	1	1	1	1	1	
Primary, secondary, and seasonal credit	23	25	5	1	1	1	1	1	1	
Term auction credit (TAF)	139	95	0	0	0	0	0	0	0	
Foreign central bank liquidity swaps	33	20	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	60	76	90	76	33	25	17	0	0	
Net portfolio holdings of Commercial Paper Funding Facility (CPFF)	19	16	0	0	0	0	0	0	0	
Term Asset-Backed Securities Loan Facility (TALF)	41	60	90	76	33	25	17	0	0	
Support for specific institutions	110	108	86	60	30	14	3	2	1	
Credit extended to AIG	45	43	45	28	7	0	0	0	0	
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	65	65	41	32	23	14	3	2	1	
Securities held outright	1,691	1,843	1,961	1,814	1,657	1,557	1,435	1,352	1,370	
U.S. Treasury securities	775	775	768	746	679	659	615	597	693	
Agency debt securities	142	164	151	109	86	67	48	43	25	
Agency mortgage-backed securities	774	904	1,042	959	892	831	772	712	652	
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	5	5	8	10	10	10	10	10	10	
Total liabilities	2,113	2,218	2,188	1,990	1,749	1,613	1,459	1,342	1,340	
Selected liabilities										
Federal Reserve notes in circulation	875	879	906	934	995	1,062	1,119	1,169	1,217	
Reverse repurchase agreements	64	64	64	64	64	64	64	64	64	
Reserve balances of depository institutions	1,111	1,163	984	758	456	253	41	25	25	

U.S. Treasury, general account	18	68	5	5	5	5	5	5	5
U.S. Treasury, supplemental financing account	15	15	200	200	200	200	200	50	0
Total capital	53	53	60	69	80	92	106	121	140

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

November 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 September 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", "September Greenbook" and "Market forecast". These three series track closely together throughout the chart. They begin at about 4.5 and generally increase to about 5.2 by mid-2006. They remain about constant until mid-2007. They then generally decrease to about 0.15 by early 2009. Current Greenbook and June Greenbook remain at 0.1 to the end. Market forecast generally increases to end at about 2.2.

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", and the September Greenbook is also marked separately for each of these series. BBB corporate rate and the September Greenbook begin at about 6 and generally increase to about 9.4 by late 2008. BBB corporate rate generally decreases to end at about 6, and September Greenbook generally decreases to end at about 6.2. Conforming mortgage rate and September Greenbook begin at about 6.3 and then generally increase to about 6.7 by 2006. They continue to track closely together, generally decreasing, until late 2009 at about 5.1. Conforming mortgage rate generally increases to end at about 5.7 and September Greenbook generally increases to end at about 5.5. 10-year Treasury yield and September Greenbook begin at about 4.7 and generally increase to about 5.2 by 2006. They then generally decrease to about 3.3 by early 2009, and generally increase to end at about 4.1.

Figure: Equity Prices

Line chart, 2006 to 2011. 2006:Q1 = 100, ratio scale. Data are quarter-end. There are two series, "Dow Jones Total Stock Market Index" and "September Greenbook". They begin at about 100 and generally decrease to about 97 by 2006. They then generally increase to about 116 by 2007, and generally decrease to about 62 by early 2009. They track closely together, generally increasing together until they reach about 83 by mid-2009. Dow Jones generally increases to end at about 111 and September Greenbook generally increases to end at about 115.

Figure: House Prices

Line chart, 2006 to 2011. 2006:Q1 = 100, ratio scale. Data are quarterly. There are two series, "LoanPerformance index" and "September Greenbook". They begin at about 100 and generally decrease to about 68. They then generally increase to about 72. LoanPerformance index generally decreases to end at about 69 and September Greenbook generally decreases to end at about 68.

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 "September Greenbook". They begin at about 64 and generally increase to about 70 by 2006. They then generally decrease to about 58 by early 2007, and generally increase to about 125 by 2008. They then generally decrease to about 44 by early 2009, and track closely together, generally increasing together until they reach 68 by 2009. West Texas Intermediate generally increases to end at about 87 and September Greenbook generally increases to end at about 78.

Figure: Broad Real Dollar

Line chart, 2006 to 2011. 2006:Q1 = 100. Data are quarterly averages. There are two series, "Broad Real Dollar" and "September Greenbook". They begin at about 100 and generally decrease to about 87 by 2008. They then generally increase to about 98 by early 2009, and track closely together, generally decreasing to about 92 by late 2009. Broad Real Dollar generally decreases to end at about 86.5 and September Greenbook generally decreases to end at about 87.5.

Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

Measure	2009:Q3		2009:Q4	
	September Greenbook	October Greenbook	September Greenbook	October Greenbook
Real GDP	2.5	3.4	3.2	2.8
Private domestic final purchases	1.6	3.0	-5	-1
Personal consumption expenditures	2.3	3.4	.8	.7
Residential investment	3.0	20.9	4.0	.1
Business fixed investment	-3.8	-3.8	-11.3	-6.4
Government outlays for consumption and investment	1.8	2.3	4.3	1.8
	Contribution to growth (percentage points)			
Inventory investment	1.0	.9	2.8	2.3
Net exports	-.2	-.6	-.1	.1

Projections of Real GDP

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

Measure	2009:H2	2010:H1	2010	2011
Real GDP	3.1	3.2	3.4	4.4
Previous Greenbook	2.8	3.0	3.5	4.5
Final sales	1.4	2.7	2.7	3.9
Previous Greenbook	.9	2.7	2.9	4.1
Personal consumption expenditures	2.0	2.4	2.3	3.4
Previous Greenbook	1.6	2.6	2.9	3.6
Residential investment	10.0	9.5	10.0	22.6
Previous Greenbook	3.5	9.6	12.9	25.3
Business fixed investment	-5.1	3.1	5.7	9.5
Previous Greenbook	-7.6	2.2	5.0	9.9
Government purchases	2.1	2.6	1.7	.9
Previous Greenbook	3.1	2.6	1.6	1.0
Exports	12.2	8.4	8.7	8.8
Previous Greenbook	14.3	7.6	8.2	8.6
Imports	11.3	6.4	7.0	7.7
Previous Greenbook	12.7	7.2	8.0	8.0
	Contribution to growth (percentage points)			
Inventory change	1.7	.4	.7	.5
Previous Greenbook	1.9	.4	.6	.4
Net exports	-.2	.0	-.0	-.1
Previous Greenbook	-.2	-.2	-.2	-.2

[Box:] Revision to Structural Productivity and Potential Output in the Staff Projection

Figure: Nonfarm Business Productivity

Line chart, chained 2005 dollars per hour, 2007 to 2009. There are three series, "Productivity", "Structural productivity, Oct. Greenbook" and "Structural productivity, Sept. Greenbook". Productivity begins at about 51.05 and generally increases to end at about 55.2. Structural productivity, Oct. Greenbook begins at about 51.5 and generally increases to end at about 54.5. Structural productivity, Sept. Greenbook begins at about 51.5 and generally increases to end at about 54.15.

Figure: Okun's Law

Line chart, by percent, 2007 to 2009. There are three series, "Unemployment rate", "Simulation, Oct. Greenbook potential" and "Simulation, Sept. Greenbook potential". Unemployment rate begins at about 4.5 and generally increases to end at about 9.6. Simulation, Oct. Greenbook potential begins at about 5 and generally increases to end at about 9. Simulation, Sept. Greenbook potential begins at about 5 and generally increases to end at about 8.8.

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	2.3	2.5	1.6	1.9
Previous Greenbook	1.5	2.5	2.8	2.0	1.8	1.6	1.9
<i>Contributions¹</i>							
Capital deepening	.7	1.4	.7	.5	-.0	-.1	.5
Previous Greenbook	.7	1.4	.7	.5	-.0	-.1	.4
Multifactor productivity	.5	.7	1.6	1.6	2.4	1.6	1.4
Previous Greenbook	.5	.7	1.6	1.3	1.7	1.6	1.4
Labor composition	.3	.3	.3	.2	.2	.1	.1
MEMO							
Potential GDP	3.0	3.4	2.8	2.7	2.7	2.1	2.4
Previous Greenbook	3.0	3.4	2.8	2.4	2.0	2.1	2.3

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

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

The Outlook for the Labor Market

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

Measure	2008	2009	2010	2011
Output per hour, nonfarm business	.9	4.6	1.1	.8
Previous Greenbook	.9	3.7	1.3	1.4
Nonfarm private payroll employment	-2.1	-4.4	1.8	3.4
Previous Greenbook	-2.1	-4.1	2.1	3.3
Household survey employment	-1.5	-3.7	1.6	2.4
Previous Greenbook	-1.5	-3.0	1.7	2.3
Labor force participation rate ¹	65.9	65.2	65.1	65.0
Previous Greenbook	65.9	65.5	65.4	65.3
Civilian unemployment rate ¹	6.9	10.1	9.5	8.2
Previous Greenbook	6.9	9.9	9.2	7.9
MEMO				
GDP gap ²	-4.8	-7.6	-6.4	-4.5
Previous Greenbook	-4.6	-6.9	-5.6	-3.6

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)

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Measure	2008	2009	2010	2011
PCE chain-weighted price index	1.7	1.1	1.4	1.0
Previous Greenbook	1.7	1.0	1.3	1.0
Food and beverages	6.8	-1.9	1.3	.7
Previous Greenbook	6.8	-1.1	1.5	.7
Energy	-9.1	1.3	7.7	2.4
Previous Greenbook	-9.1	-2.4	5.0	2.1
Excluding food and energy	2.0	1.4	1.1	1.0
Previous Greenbook	2.0	1.4	1.1	1.0
Consumer price index	1.5	1.3	1.7	1.2
Previous Greenbook	1.5	1.1	1.5	1.1
Excluding food and energy	2.0	1.7	1.2	1.1
Previous Greenbook	2.0	1.7	1.2	1.1
GDP chain-weighted price index	1.9	.7	1.3	1.1
Previous Greenbook	1.9	.9	1.2	1.1
ECI for compensation of private industry workers ¹	2.4	1.2	1.8	2.0
Previous Greenbook	2.4	1.2	1.8	2.0
Compensation per hour, nonfarm business sector	2.6	-.2	1.8	2.1
Previous Greenbook	2.6	-.3	1.8	2.1
Prices of core goods imports ²	3.8	-1.7	1.5	1.0
Previous Greenbook	3.8	-1.4	1.3	1.0

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

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

The Long-Term Outlook

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

Measure	2009	2010	2011	2012	2013	2014
Real GDP	-.3	3.4	4.4	5.0	4.8	3.2
Civilian unemployment rate ¹	10.1	9.5	8.2	6.1	4.9	4.7
PCE prices, total	1.1	1.4	1.0	1.2	1.4	1.6
Core PCE prices	1.4	1.1	1.0	1.1	1.4	1.6
Federal funds rate ¹	.1	.1	.1	2.1	3.5	3.9

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

Alternative Scenarios

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

Measure and scenario	2009	2010	2011	2012	2013-14
	H2				
<i>Real GDP</i>					
Extended Greenbook baseline	3.1	3.4	4.4	5.0	4.0
Jobless recovery	3.2	4.0	5.6	6.4	4.7
Jobless recovery and more caution	3.1	3.4	4.4	5.0	5.1
Weaker aggregate demand	2.2	2.0	4.4	5.4	4.6
V-shaped recovery	4.3	4.8	5.6	4.8	3.2
Earlier liftoff	4.3	5.1	5.6	4.2	2.8
Greater disinflation	3.1	3.3	4.1	4.9	4.8

<i>Unemployment rate¹</i>					
Extended Greenbook baseline	10.1	9.5	8.2	6.1	4.7
Jobless recovery	10.2	10.1	9.2	6.6	4.5
Jobless recovery and more caution	10.2	10.3	9.8	7.8	5.5
Weaker aggregate demand	10.2	10.2	8.9	6.6	4.7
V-shaped recovery	10.0	8.9	7.2	5.2	4.6
Earlier liftoff	10.0	8.8	7.1	5.3	5.0
Greater disinflation	10.1	9.5	8.3	6.3	4.3
<i>Core PCE inflation</i>					
Extended Greenbook baseline	1.3	1.1	1.0	1.1	1.5
Jobless recovery	1.3	.9	.4	.4	1.1
Jobless recovery and more caution	1.3	.9	.2	.0	.5
Weaker aggregate demand	1.3	1.0	.8	.9	1.3
V-shaped recovery	1.3	1.1	1.1	1.2	1.7
Earlier liftoff	1.2	1.6	2.0	2.2	2.9
Greater disinflation	1.0	.4	.1	-.1	.0
<i>Federal funds rate¹</i>					
Extended Greenbook baseline	.1	.1	.1	2.1	3.9
Jobless recovery	.1	.1	.1	.6	3.7
Jobless recovery and more caution	.1	.1	.1	.1	1.7
Weaker aggregate demand	.1	.1	.1	1.3	3.7
V-shaped recovery	.1	.1	.8	3.1	4.4
Earlier liftoff	.1	.1	2.3	4.5	5.5
Greater disinflation	.1	.1	.1	.1	2.1

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	-3	3.4	4.4	5.0	4.8	3.2
Confidence interval						
Greenbook forecast errors	-9-.2	1.7-5.1	3.0-5.8	...	...	...
FRB/US stochastic simulations	-9-.3	2.1-5.1	2.7-6.4	2.7-6.9	2.5-7.1	1.0-5.5
<i>Civilian unemployment rate (percent, Q4)</i>						
Projection	10.1	9.5	8.2	6.1	4.9	4.7
Confidence interval						
Greenbook forecast errors	10.0-10.2	8.8-10.2	7.2-9.2	...	...	...
FRB/US stochastic simulations	9.9-10.3	8.8-10.1	7.1-9.1	5.0-7.2	3.8-6.0	3.5-5.8
<i>PCE prices, total (percent change, Q4 to Q4)</i>						
Projection	1.1	1.4	1.0	1.2	1.4	1.6
Confidence interval						
Greenbook forecast errors	.9-1.4	.3-2.6	-.2-2.2	...	...	...
FRB/US stochastic simulations	.9-1.5	.6-2.4	.0-2.2	.1-2.3	.4-2.6	.6-2.8
<i>PCE prices excluding food and energy (percent change, Q4 to Q4)</i>						
Projection	1.4	1.1	1.0	1.1	1.4	1.6

Confidence interval						
Greenbook forecast errors	1.2-1.7	.4-1.7	.0-1.9	...	...	...
FRB/US stochastic simulations	1.2-1.6	.4-1.7	.2-1.9	.3-2.0	.7-2.3	.9-2.6
<i>Federal funds rate (percent, Q4)</i>						
Projection	.1	.1	.1	2.1	3.5	3.9
Confidence interval						
FRB/US stochastic simulations	.1-.1	.1-.1	.1-1.6	.4-3.9	2.1-5.2	2.5-5.6

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", "Jobless recovery", "Jobless recovery and more caution", "Weaker aggregate demand", "V-shaped recovery", "Earlier liftoff", and "Greater disinflation". They begin at about 2 and generally decrease to about 1.5 by early 2007. They then generally increase to about 2.8 by mid-2007, and generally decrease to about -3.8 by mid-2009. Extended Greenbook baseline generally increases to about 5.2 by early 2013, and generally decreases to end at about 3.4. Jobless recovery generally increases to about 6.7 by early 2013, and generally decreases to end at about 3.6. Jobless recovery and more caution generally increases to about 5.8 by 2013, and generally decreases to end at about 4.5. Weaker aggregate demand generally increases to about 5.8 by early 2013, and generally decreases to end at about 3.8. V-shaped recovery generally increases to about 5.6 by mid-2011, and generally decreases to about 2.5. Earlier liftoff generally increases to about 5.9 and generally decreases to end at about 2.1. Greater disinflation generally increases to about 5.6 by 2013, and generally decreases to end at about 4. There is a 90 percent confidence interval shown, which ranges from about -0.3 to 7 and a 70 percent confidence interval, which ranges from about 1.1 to 5.6.

Figure: Unemployment Rate

Line chart, by percent, 2007 to 2014. There are seven series, "Extended Greenbook baseline", "Jobless recovery", "Jobless recovery and more caution", "Weaker aggregate demand", "V-shaped recovery", "Earlier liftoff", and "Greater disinflation". They begin at about 4.5 and generally increase together until they reach about 10.0 by 2009. Extended Greenbook baseline generally increases to about 10.15 by early 2010, and generally decreases to end at about 4.75. Jobless recovery generally increases to about 10.4 by early 2010, and generally decreases to end at about 4.5. Jobless recovery and more caution generally increases to about 10.4 by early 2010, and generally decreases to end at about 5.5. Weaker aggregate demand generally increases to about 10.4 and generally decreases to end at about 4.75. V-shaped recovery generally decreases to about 4.4 by late 2013, and generally increases to end at about 4.5. Earlier liftoff generally decreases to about 5.0. Greater disinflation generally increases to about 10.15 by early 2010, and generally decreases to end at about 4.25. There is a 90 percent confidence interval shown, which ranges from about 2.8 to 6.3 and a 70 percent confidence interval, which ranges from about 3.5 to 5.78.

Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 2007 to 2014. There are seven series, "Extended Greenbook baseline", "Jobless recovery", "Jobless recovery and more caution", "Weaker aggregate demand", "V-shaped recovery", "Earlier liftoff", and "Greater disinflation". They begin at about 2.45 and generally decrease to about 2.25 by 2007. It then generally increases to about 2.6 by mid-2008, and generally decrease together until they reach about 1.3 by mid-2009. Extended Greenbook baseline generally increases to about 1.4 by late 2009, generally decreases to about 0.98 by late 2011, and generally increases to end at about 1.6. Jobless recovery generally decreases to about 0.3 by 2012, and generally increases to end at about 1.3. Jobless recovery and more caution generally decreases to about -0.1 by mid-2012, and generally increases to end at about 0.2. Weaker aggregate demand generally decreases to about 0.75 by late 2011, and generally increases to end at about 1.45. V-shaped recovery generally decreases to about 1.0 by late 2011, and generally increases to end at about 1.85. Earlier liftoff generally decreases to about 1.25 by 2010, and generally increases to end at about 3.0. Greater disinflation generally decreases to about -0.15 by late 2012, and generally increases to end at about 0.15. There is a 90 percent confidence interval shown, which ranges from about 0.35 to 3.1 and a 70 percent confidence interval, which ranges from about 0.8 to 2.55.

Figure: Federal Funds Rate

Line chart, by percent, 2007 to 2014. There are seven series, "Extended Greenbook baseline", "Jobless recovery", "Jobless recovery and more caution", "Weaker aggregate demand", "V-shaped recovery", "Earlier liftoff", and "Greater disinflation". They begin at about 5.3, generally decrease to about 0.2 by late 2009, and remains about constant until 2010. Extended Greenbook baseline generally increases to end at about 3.8. Jobless recovery generally increases to about 5.6 and generally decreases to end at about 5.5. Jobless recovery and more caution remains about constant until mid-2013, and generally increases to end at about 1.6. Weaker aggregate demand remains about constant until mid-2012 and generally increases to end at about 5.5. V-shaped recovery remains about constant until

mid-2011, and generally increases to end at about 4.5. Earlier liftoff remains about constant until late 2010, and generally increases to end at about 5.6. Greater disinflation remains about constant until late 2012, and generally increases to end at about 2.2. There is a 90 percent confidence interval shown, which ranges from about 1.5 to 6.5 and a 70 percent confidence interval, which ranges from about 2.5 to 5.5.

Evolution of the Staff Forecast

Figure: Change in Real GDP

Line chart, by percent, Q4/Q4, January 24, 2007 to October 29, 2009. There are four series, "2008", "2009", "2010" and "2011". 2008 begins at about 2.5 and generally decreases to about 0.0 by March 13, 2008. It then generally increases to about 1.5 by September 10, 2008, and generally decreases to end at about -1.9. 2009 begins at about 2.2 by September 12, 2007 and generally increases to about 3.0 by March 13, 2008. It then generally decreases to about -2.25 by March 12, 2009, and generally increases to end at about -0.3. 2010 begins at about 2.7 by September 10, 2008, generally decreases to about 1.5 by March 12, 2009, and generally increases to end at about 3.5. 2011 begins at about 4.5 and generally decreases to end at about 4.45.

Figure: Unemployment Rate

Line chart, by percent, fourth quarter, January 24, 2007 to October 29, 2009. There are four series, "2008", "2009", "2010" and "2011". 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, generally increases 6.85 by January 22, 2009, and remains about constant until the end. 2009 begins at about 4.98 by September 12, 2007 and generally increases to end at about 10.1. 2010 begins at about 5.9 by September 10, 2008 and generally increases to about 9.75 by June 17, 2009. It then generally decreases to about 9.2 by September 16, 2009 and generally increases to end at about 9.5. 2011 begins at about 7.9 by September 16, 2009 and generally increases to end at about 8.25.

Figure: Change in PCE Prices excluding Food and Energy

Line chart, by percent, Q4/Q4, January 24, 2007 to October 29, 2009. There are four series, "2008", "2009", "2010" and "2011". 2008 begins at about 2.0 and generally increases to about 2.15 by May 2, 2007. It then generally decreases to about 1.88 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 1.88 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 begins at about 1.0 and remains about constant until the end.

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

Changes in GDP, Prices, and Unemployment

(Percent, annual rate except as noted)

Interval	Nominal GDP		Real GDP		PCE price index		Core PCE price index		Unemployment rate ¹		
	09/16/09	10/29/09	09/16/09	10/29/09	09/16/09	10/29/09	09/16/09	10/29/09	09/16/09	10/29/09	
<i>Quarterly</i>											
2009:	Q1	-4.6	-4.6	-6.4	-6.4	-1.5	-1.5	1.1	1.1	8.1	8.1
	Q2	-1.0	-8	-1.0	-7	1.3	1.4	2.0	2.0	9.2	9.2
	Q3	3.1	4.2	2.5	3.4	2.9	2.8	1.5	1.4	9.6	9.6
	Q4	4.2	3.1	3.2	2.8	1.4	2.0	1.2	1.2	9.9	10.1
2010:	Q1	4.3	5.0	2.8	3.2	1.4	1.8	1.1	1.0	9.8	10.1
	Q2	4.4	4.5	3.2	3.2	1.4	1.5	1.1	1.1	9.6	9.9
	Q3	5.0	4.7	3.8	3.5	1.3	1.3	1.1	1.1	9.4	9.7
	Q4	5.3	5.0	4.2	3.9	1.2	1.2	1.1	1.1	9.2	9.5
2011:	Q1	5.6	5.4	4.4	4.2	1.1	1.1	1.0	1.0	8.8	9.2
	Q2	5.6	5.5	4.5	4.4	1.0	1.0	1.0	1.0	8.5	8.9
	Q3	5.6	5.6	4.6	4.5	1.0	1.0	1.0	1.0	8.2	8.6
	Q4	5.6	5.5	4.6	4.5	1.0	1.0	1.0	1.0	7.9	8.2
<i>Two-quarter²</i>											
2009:	Q2	-2.9	-2.7	-3.8	-3.6	-1	-1	1.6	1.6	2.3	2.3
	Q4	3.7	3.7	2.8	3.1	2.1	2.4	1.3	1.3	.7	.9
2010:	Q2	4.4	4.7	3.0	3.2	1.4	1.6	1.1	1.0	-3	-2

	Q4	5.1	4.9	4.0	3.7	1.2	1.3	1.1	1.1	-4	-4
2011:	Q2	5.6	5.5	4.4	4.3	1.0	1.1	1.0	1.0	-7	-6
	Q4	5.6	5.6	4.6	4.5	1.0	1.0	1.0	1.0	-6	-7
<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	-.5	-.3	1.0	1.1	1.4	1.4	3.0	3.2
2010:	Q4	4.7	4.8	3.5	3.4	1.3	1.4	1.1	1.1	-7	-6
2011:	Q4	5.6	5.5	4.5	4.4	1.0	1.0	1.0	1.0	-1.3	-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		-1.4	-1.3	-2.6	-2.5	.2	.2	1.5	1.5	9.2	9.2
2010		4.0	4.1	2.9	3.0	1.5	1.8	1.2	1.2	9.5	9.8
2011		5.4	5.3	4.3	4.1	1.1	1.1	1.0	1.0	8.4	8.7

1. Level, except for two-quarter and four-quarter intervals. [Return to table](#)

2. Percent change from two quarters earlier; for unemployment rate, change is in percentage points. [Return to table](#)

3. Percent change from four quarters earlier; for unemployment rate, change is in percentage points. [Return to table](#)

Changes in Real Gross Domestic Product and Related Items

(Percent, annual rate except as noted)

Item	2009				2010				2011				2009 ¹	2010 ¹	2011 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	-6.4	-7	3.4	2.8	3.2	3.2	3.5	3.9	4.2	4.4	4.5	4.5	-3	3.4	4.4
<i>Previous Greenbook</i>	-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
Final sales	-4.1	.7	2.4	.4	2.5	3.0	2.5	3.0	3.4	3.9	4.2	4.3	-2	2.7	3.9
<i>Previous Greenbook</i>	-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
Priv. dom. final purch.	-7.2	-2.7	3.0	-.1	2.4	2.9	2.9	3.5	4.1	4.5	5.0	5.0	-1.9	2.9	4.7
<i>Previous Greenbook</i>	-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
Personal cons. expend.	.6	-.9	3.4	.7	2.4	2.3	2.1	2.4	3.0	3.3	3.6	3.6	.9	2.3	3.4
<i>Previous Greenbook</i>	.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
Durables	3.9	-5.6	22.2	-7.6	10.2	10.9	7.0	8.3	10.1	10.3	12.1	11.0	2.6	9.1	10.9
Nondurables	1.9	-1.9	2.0	1.9	2.3	1.9	1.7	2.1	2.8	3.1	3.2	3.2	.9	2.0	3.1
Services	-.3	.2	1.2	1.7	1.3	1.2	1.5	1.7	2.0	2.3	2.5	2.6	.7	1.4	2.3
Residential investment	-38.2	-23.3	20.9	.1	9.3	9.7	8.1	13.1	15.5	22.4	24.1	28.7	-13.0	10.0	22.6
<i>Previous Greenbook</i>	-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
Business fixed invest.	-39.2	-9.6	-3.8	-6.4	.9	5.5	7.2	9.4	9.8	9.0	10.4	9.0	-16.1	5.7	9.5
<i>Previous Greenbook</i>	-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
Equipment & software	-36.4	-4.9	1.1	3.5	6.2	10.3	10.9	12.7	13.5	12.9	15.0	12.9	-10.8	10.0	13.6
<i>Previous Greenbook</i>	-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
Nonres. structures	-43.6	-17.3	-12.3	-23.3	-9.4	-4.3	-.8	2.3	1.7	.2	-.4	-.3	-25.1	-3.2	.3
<i>Previous Greenbook</i>	-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
Net exports ²	-386	-330	-348	-343	-346	-340	-341	-341	-348	-348	-351	-350	-352	-342	-349
<i>Previous Greenbook²</i>	-386	-332	-339	-342	-351	-351	-359	-367	-374	-379	-385	-387	-350	-357	-381
Exports	-29.9	-4.1	14.7	9.6	8.2	8.5	8.9	9.4	8.9	8.5	8.5	9.1	-4.1	8.7	8.8
Imports	-36.4	-14.7	16.3	6.4	7.4	5.5	7.5	7.7	8.9	7.1	7.6	7.3	-9.5	7.0	7.7
Gov't. cons. & invest.	-2.6	6.7	2.3	1.8	3.0	2.1	1.0	.6	1.0	1.0	1.0	.5	2.0	1.7	.9
<i>Previous Greenbook</i>	-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

Federal	-4.3	11.4	7.9	4.8	6.5	3.6	.6	-.4	1.3	1.1	1.2	.5	4.8	2.5	1.0
Defense	-5.1	14.0	8.4	1.0	4.8	2.4	1.9	.3	.6	.4	.5	-.5	4.3	2.3	.2
Nondefense	-2.5	6.1	6.8	13.6	9.9	6.3	-2.1	-1.8	2.6	2.6	2.6	2.6	5.8	2.9	2.6
State & local	-1.5	3.9	-1.1	-.1	.7	1.2	1.3	1.3	.9	.9	.9	.5	.3	1.1	.8
Change in bus. inventories ²	-114	-160	-131	-60	-36	-30	0	29	55	70	80	89	-116	-9	73
<i>Previous Greenbook</i> ²	-114	-165	-134	-45	-25	-20	7	33	58	71	85	87	-114	-1	75
Nonfarm ²	-115	-163	-134	-64	-41	-35	-4	25	52	67	77	87	-119	-14	71
Farm ²	0	2	3	4	4	3	3	3	3	3	3	3	2	3	3

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

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

Changes in Real Gross Domestic Product and Related Items

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

Item	2003	2004	2005	2006	2007	2008	2009	2010	2011
Real GDP	3.8	3.1	2.7	2.4	2.5	-1.9	-.3	3.4	4.4
<i>Previous Greenbook</i>	3.8	3.1	2.7	2.4	2.5	-1.9	-.5	3.5	4.5
Final sales	3.8	2.8	2.7	2.8	2.7	-1.4	-.2	2.7	3.9
<i>Previous Greenbook</i>	3.8	2.8	2.7	2.8	2.7	-1.4	-.5	2.9	4.1
Priv. dom. final purch.	4.2	4.2	3.1	2.5	1.4	-3.2	-1.9	2.9	4.7
<i>Previous Greenbook</i>	4.2	4.2	3.1	2.5	1.4	-3.2	-2.3	3.4	5.0
Personal cons. expend.	3.4	3.5	2.7	3.3	2.0	-1.8	.9	2.3	3.4
<i>Previous Greenbook</i>	3.4	3.5	2.7	3.3	2.0	-1.8	.7	2.9	3.6
Durables	8.9	5.5	2.1	6.3	4.6	-11.8	2.6	9.1	10.9
Nondurables	3.9	3.0	3.3	3.2	1.5	-2.9	.9	2.0	3.1
Services	2.2	3.4	2.6	2.8	1.7	.3	.7	1.4	2.3
Residential investment	11.5	6.6	5.3	-15.7	-20.5	-21.0	-13.0	10.0	22.6
<i>Previous Greenbook</i>	11.5	6.6	5.3	-15.7	-20.5	-21.0	-15.5	12.9	25.3
Business fixed invest.	5.9	7.0	4.4	7.8	7.9	-6.0	-16.1	5.7	9.5
<i>Previous Greenbook</i>	5.9	7.0	4.4	7.8	7.9	-6.0	-17.4	5.0	9.9
Equipment & software	7.5	8.8	6.1	6.0	3.2	-10.7	-10.8	10.0	13.6
<i>Previous Greenbook</i>	7.5	8.8	6.1	6.0	3.2	-10.7	-11.7	9.8	14.3
Nonres. structures	1.3	1.7	-.1	13.0	18.9	3.2	-25.1	-3.2	.3
<i>Previous Greenbook</i>	1.3	1.7	-.1	13.0	18.9	3.2	-27.0	-4.7	-.2
Net exports ¹	-604	-688	-723	-729	-648	-494	-352	-342	-349
<i>Previous Greenbook</i> ¹	-604	-688	-723	-729	-648	-494	-350	-357	-381
Exports	6.2	7.1	6.7	10.2	10.2	-3.4	-4.1	8.7	8.8
Imports	5.1	10.9	5.2	4.1	.9	-6.8	-9.5	7.0	7.7
Gov't. cons. & invest.	1.6	.6	.7	1.5	2.5	3.0	2.0	1.7	.9
<i>Previous Greenbook</i>	1.6	.6	.7	1.5	2.5	3.0	2.5	1.6	1.0
Federal	5.7	2.3	1.2	2.2	3.4	8.9	4.8	2.5	1.0
Defense	8.4	2.4	.4	4.4	2.6	9.5	4.3	2.3	.2
Nondefense	.7	2.3	2.6	-2.3	5.2	7.5	5.8	2.9	2.6
State & local	-.5	-.4	.4	1.2	1.9	-.3	.3	1.1	.8
Change in bus. inventories ¹	17	66	50	59	19	-26	-116	-9	73
<i>Previous Greenbook</i> ¹	17	66	50	59	19	-26	-114	-1	75

Nonfarm ¹	17	58	50	63	20	-20	-119	-14	71
Farm ¹	0	8	0	-4	-1	-5	2	3	3

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

Contributions to Changes in Real Gross Domestic Product

(Percentage points, annual rate except as noted)

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

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

Changes in Prices and Costs

(Percent, annual rate except as noted)

Item	2009				2010				2011				2009 ¹	2010 ¹	2011 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
GDP chain-wt. price index	1.9	.0	.8	.3	1.7	1.3	1.2	1.1	1.2	1.1	1.0	1.0	.7	1.3	1.1
<i>Previous Greenbook</i>	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
PCE chain-wt. price index	-1.5	1.4	2.8	2.0	1.8	1.5	1.3	1.2	1.1	1.0	1.0	1.0	1.1	1.4	1.0
<i>Previous Greenbook</i>	-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
Energy	-36.7	-2.0	41.1	20.3	15.2	7.8	4.5	3.7	3.2	2.3	2.1	2.0	1.3	7.7	2.4
<i>Previous Greenbook</i>	-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
Food	-1.1	-3.6	-2.1	-8	1.3	1.5	1.5	1.0	.7	.7	.7	.7	-1.9	1.3	.7
<i>Previous Greenbook</i>	-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
Ex. food & energy	1.1	2.0	1.4	1.2	1.0	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.4	1.1	1.0
<i>Previous Greenbook</i>	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
CPI	-2.4	1.3	3.6	2.6	2.3	1.8	1.5	1.4	1.3	1.2	1.2	1.2	1.3	1.7	1.2
<i>Previous Greenbook</i>	-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
Ex. food & energy	1.5	2.4	1.5	1.5	1.2	1.1	1.2	1.2	1.1	1.1	1.1	1.2	1.7	1.2	1.1
<i>Previous Greenbook</i>	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
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	1.7	1.6	1.7	1.7	1.8	1.9	2.0	2.0	2.1	2.1	1.2	1.8	2.0
Nonfarm business sector															
Output per hour	.3	7.0	7.2	4.2	2.4	.8	.6	.7	.7	.8	.9	.9	4.6	1.1	.8
<i>Previous Greenbook</i>	.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
Compensation per hour	-4.7	.4	1.9	1.6	1.6	1.7	1.8	1.9	2.0	2.0	2.1	2.1	-2	1.8	2.1
<i>Previous Greenbook</i>	-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
Unit labor costs	-5.0	-6.2	-5.0	-2.5	-8	.9	1.2	1.3	1.3	1.2	1.2	1.2	-4.7	.7	1.2
<i>Previous Greenbook</i>	-5.0	-5.8	-3.2	-1.2	.3	.3	.7	.6	.9	.4	.5	.6	-3.8	.5	.6
Core goods imports chain-wt. price index ³	-9.4	-2.3	1.0	4.4	2.6	1.4	1.0	1.0	1.0	1.0	1.0	1.0	-1.7	1.5	1.0
<i>Previous Greenbook</i> 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

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

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

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

Changes in Prices and Costs

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

Item	2003	2004	2005	2006	2007	2008	2009	2010	2011
GDP chain-wt. price index	2.1	3.2	3.5	2.9	2.7	1.9	.7	1.3	1.1
<i>Previous Greenbook</i>	2.1	3.2	3.5	2.9	2.7	1.9	.9	1.2	1.1
PCE chain-wt. price index	1.9	3.0	3.3	1.9	3.6	1.7	1.1	1.4	1.0
<i>Previous Greenbook</i>	1.9	3.0	3.3	1.9	3.6	1.7	1.0	1.3	1.0
Energy	8.6	18.6	21.5	-3.7	19.7	-9.1	1.3	7.7	2.4
<i>Previous Greenbook</i>	8.6	18.6	21.5	-3.7	19.7	-9.1	-2.4	5.0	2.1
Food	3.2	2.7	1.5	1.7	4.7	6.8	-1.9	1.3	.7
<i>Previous Greenbook</i>	3.2	2.7	1.5	1.7	4.7	6.8	-1.1	1.5	.7
Ex. food & energy	1.5	2.2	2.3	2.3	2.5	2.0	1.4	1.1	1.0
<i>Previous Greenbook</i>	1.5	2.2	2.3	2.3	2.5	2.0	1.4	1.1	1.0
CPI	2.0	3.4	3.8	1.9	4.0	1.5	1.3	1.7	1.2
<i>Previous Greenbook</i>	2.0	3.4	3.8	1.9	4.0	1.5	1.1	1.5	1.1

Ex. food & energy	1.2	2.2	2.1	2.7	2.3	2.0	1.7	1.2	1.1
<i>Previous Greenbook</i>	1.2	2.2	2.1	2.7	2.3	2.0	1.7	1.2	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	1.2	1.8	2.0
Nonfarm business sector									
Output per hour	5.0	1.5	1.4	.9	2.8	.9	4.6	1.1	.8
<i>Previous Greenbook</i>	5.0	1.5	1.4	.9	2.8	.9	3.7	1.3	1.4
Compensation per hour	5.7	3.4	3.5	4.5	3.6	2.6	-2	1.8	2.1
<i>Previous Greenbook</i>	5.7	3.4	3.5	4.5	3.6	2.6	-3	1.8	2.1
Unit labor costs	.6	1.9	2.0	3.5	.7	1.6	-4.7	.7	1.2
<i>Previous Greenbook</i>	.6	1.9	2.0	3.5	.7	1.6	-3.8	.5	.6
Core goods imports chain-wt. price index ²	1.6	3.6	2.2	2.5	3.5	3.8	-1.7	1.5	1.0
<i>Previous Greenbook</i> ²	1.6	3.6	2.2	2.5	3.5	3.8	-1.4	1.3	1.0

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

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

Other Macroeconomic Indicators

Item	2009				2010				2011				2009 ¹	2010 ¹	2011 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
<i>Employment and production</i>															
Nonfarm payroll employment ²	-2.1	-1.5	-9	-5	.0	.7	.5	.7	.9	.9	1.0	1.0	-5.1	2.0	3.9
Unemployment rate ³	8.1	9.2	9.6	10.1	10.1	9.9	9.7	9.5	9.2	8.9	8.6	8.2	10.1	9.5	8.2
<i>Previous Greenbook</i> 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
GDP gap ⁴	-7.0	-7.8	-7.6	-7.6	-7.3	-7.1	-6.8	-6.4	-6.0	-5.5	-5.0	-4.5	-7.6	-6.4	-4.5
<i>Previous Greenbook</i> 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
Industrial production ⁵	-19.0	-10.3	5.2	6.4	3.9	4.5	5.0	6.3	5.9	5.5	7.2	8.2	-5.0	4.9	6.7
<i>Previous Greenbook</i> 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
Manufacturing industr. prod. ⁵	-22.0	-8.7	7.1	6.2	3.7	4.9	5.2	7.0	6.6	6.1	8.2	9.3	-5.2	5.2	7.5
<i>Previous Greenbook</i> 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
Capacity utilization rate - mfg. ³	66.7	65.4	66.8	68.1	69.0	70.1	71.3	72.8	74.2	75.4	77.1	79.0	68.1	72.8	79.0
<i>Previous Greenbook</i> 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
Housing starts ⁶	.5	.5	.6	.7	.8	.8	.9	.9	1.0	1.1	1.2	1.3	.6	.8	1.2
Light motor vehicle sales ⁶	9.5	9.6	11.5	9.9	10.9	12.1	12.5	13.2	13.6	13.9	14.7	15.2	10.1	12.2	14.4
<i>Income and saving</i>															
Nominal GDP ⁵	-4.6	-8	4.2	3.1	5.0	4.5	4.7	5.0	5.4	5.5	5.6	5.5	.4	4.8	5.5
Real disposable pers. income ⁵	.2	3.8	-3.5	-1	3.6	.3	3.2	3.7	1.0	4.1	4.4	4.3	.1	2.7	3.4
<i>Previous Greenbook</i> 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
Personal saving rate ³	3.7	4.9	3.3	3.3	3.6	3.2	3.4	3.7	3.3	3.5	3.7	3.8	3.3	3.7	3.8
<i>Previous Greenbook</i> 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
Corporate profits ⁷	22.8	15.6	69.7	-29.5	105.5	6.5	10.2	6.2	6.7	4.3	5.7	5.7	14.2	26.5	5.6
Profit share of GNP ³	8.3	8.6	9.7	8.8	10.4	10.5	10.6	10.6	10.7	10.7	10.7	10.7	8.8	10.6	10.7
Net federal saving ⁸	-969	-1,294	-1,321	-1,212	-1,427	-1,359	-1,372	-1,370	-1,250	-1,217	-1,209	-1,183	-1,199	-1,382	-1,215
Net state & local saving ⁸	-37	-25	-10	16	51	55	59	63	17	15	6	1	-14	57	9

Gross national saving rate ³	11.2	10.1	9.7	10.1	10.1	10.3	10.7	11.1	11.3	11.7	11.9	12.2	10.1	11.1	12.2
Net national saving rate ³	-2.5	-3.4	-3.4	-3.0	-2.9	-2.6	-2.2	-1.7	-1.5	-1.0	-7	-4	-3.0	-1.7	-4

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

2. Change, millions. [Return to table](#)

3. Percent, annual values are for the fourth quarter of the year indicated. [Return to table](#)

4. Percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. Annual values are for the fourth quarter of the 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	-5.1	2.0	3.9
Unemployment rate ²	5.8	5.4	4.9	4.4	4.8	6.9	10.1	9.5	8.2
<i>Previous Greenbook²</i>	5.8	5.4	4.9	4.4	4.8	6.9	9.9	9.2	7.9
GDP gap ³	-1.6	-7	-3	-3	-4	-4.8	-7.6	-6.4	-4.5
<i>Previous Greenbook³</i>	-1.7	-8	-4	-4	-5	-4.6	-6.9	-5.6	-3.6
Industrial production ⁴	1.6	3.0	2.6	1.8	1.8	-6.7	-5.0	4.9	6.7
<i>Previous Greenbook⁴</i>	1.6	3.0	2.6	1.8	1.8	-6.7	-5.6	5.5	6.9
Manufacturing industr. prod. ⁴	1.8	3.6	3.8	1.2	1.9	-8.7	-5.2	5.2	7.5
<i>Previous Greenbook⁴</i>	1.8	3.6	3.8	1.2	1.9	-8.7	-5.7	5.6	7.7
Capacity utilization rate - mfg. ²	74.6	77.3	79.2	79.0	78.7	70.9	68.1	72.8	79.0
<i>Previous Greenbook²</i>	74.6	77.3	79.2	79.0	78.7	70.9	67.7	72.7	79.0
Housing starts ⁵	1.8	2.0	2.1	1.8	1.4	.9	.6	.8	1.2
Light motor vehicle sales ⁵	16.6	16.8	16.9	16.5	16.1	13.1	10.1	12.2	14.4
<i>Income and saving</i>									
Nominal GDP ⁴	6.0	6.4	6.3	5.4	5.3	.1	.4	4.8	5.5
Real disposable pers. income ⁴	3.9	3.5	.6	4.6	1.0	.3	.1	2.7	3.4
<i>Previous Greenbook⁴</i>	3.9	3.5	.6	4.6	1.0	.3	.4	2.9	3.6
Personal saving rate ²	3.6	3.6	1.5	2.5	1.5	3.8	3.3	3.7	3.8
<i>Previous Greenbook²</i>	3.6	3.6	1.5	2.5	1.5	3.8	3.9	4.1	4.1
Corporate profits ⁶	12.2	21.9	19.6	3.7	-5.7	-25.1	14.2	26.5	5.6
Profit share of GNP ²	9.1	10.5	11.8	11.6	10.3	7.8	8.8	10.6	10.7
Net federal saving ⁷	-376	-379	-283	-204	-236	-643	-1199	-1382	-1215
Net state & local saving ⁷	-39	-8	26	51	22	-40	-14	57	9
Gross national saving rate ²	14.3	14.3	15.5	16.3	13.8	12.2	10.1	11.1	12.2
Net national saving rate ²	2.5	2.7	3.5	4.2	1.6	-.7	-3.0	-1.7	-.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 ^a	2010	2011	Q1 ^a	Q2 ^a	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget					Not seasonally adjusted											
Receipts ¹	2524	2105	2192	2473	442	599	516	499	468	665	560	562	526	756	629	603
Outlays ¹	2983	3522	3646	3660	891	904	847	876	962	916	892	922	932	903	904	922
Surplus/deficit ¹	-459	-1417	-1454	-1187	-449	-305	-331	-378	-494	-251	-332	-359	-406	-147	-275	-319
<i>Previous Greenbook</i>	-459	-1431	-1419	-1149	-449	-305	-345	-423	-455	-228	-313	-352	-395	-136	-266	-317
On-budget	-642	-1554	-1547	-1312	-468	-382	-320	-420	-482	-321	-323	-408	-410	-223	-271	-366
Off-budget	183	137	92	125	19	77	-11	42	-12	70	-9	49	4	76	-4	47
Means of financing																
Borrowing	768	1743	1499	1207	465	338	379	220	690	241	347	349	396	172	290	309
Cash decrease	-296	96	25	0	98	-49	43	191	-170	15	-10	15	15	-20	-10	15
Other ²	-13	-423	-70	-20	-114	16	-90	-34	-26	-5	-5	-5	-5	-5	-5	-5
Cash operating balance, end of period	372	275	250	250	269	318	275	85	255	240	250	235	220	240	250	235
NIPA federal sector					Seasonally adjusted annual rates											
Receipts	2534	2282	2348	2529	2251	2211	2217	2369	2310	2341	2373	2410	2527	2567	2611	2655
Expenditures	3074	3346	3691	3790	3220	3506	3538	3581	3737	3700	3746	3781	3776	3784	3820	3838
Consumption expenditures	914	973	1052	1089	954	979	1003	1020	1052	1065	1070	1072	1088	1095	1102	1107
Defense	620	659	701	723	643	663	680	684	701	707	712	714	723	725	728	730
Nondefense	294	314	351	366	311	316	322	336	351	358	358	357	365	369	373	378
Other spending	2160	2374	2639	2701	2266	2527	2535	2561	2685	2635	2676	2709	2689	2689	2719	2731
Current account surplus	-540	-1065	-1343	-1262	-969	-1294	-1321	-1212	-1427	-1359	-1372	-1370	-1250	-1217	-1209	-1183
Gross investment	141	158	165	167	152	159	162	162	164	166	167	167	166	167	167	166
Gross saving less gross investment ³	-563	-1099	-1377	-1292	-999	-1330	-1356	-1246	-1462	-1394	-1407	-1403	-1281	-1247	-1238	-1210
Fiscal indicators⁴																
High-employment (HEB) surplus/deficit	-491	-706	-844	-838	-639	-875	-846	-705	-920	-861	-888	-903	-811	-807	-832	-841
Change in HEB, percent of potential GDP	1.8	1.3	0.7	-0.2	1.1	1.5	-0.2	-0.9	1.3	-0.4	0.1	0.1	-0.6	-0.1	0.1	0.0
Fiscal impetus (FI), percent of GDP	0.8	1.0	1.0	-0.2	0.0	0.7	0.3	0.3	0.3	0.2	0.1	0.0	-0.2	-0.0	-0.1	-0.2
<i>Previous Greenbook</i>	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

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

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

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

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

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

Change in Debt of the Domestic Nonfinancial Sectors

(Percent)

Period ¹	Total	Households			Business	State and local governments	Federal government	Memo: Nominal GDP	
		Total	Home mortgages	Consumer credit					
Year									
2004	8.9	11.1	13.5	5.6	6.3	7.4	9.0	6.4	
2005	9.5	11.1	13.2	4.5	8.8	10.2	7.0	6.3	
2006	9.0	10.1	11.1	4.1	10.5	8.2	3.9	5.4	
2007	8.7	6.6	6.6	5.7	13.4	9.3	4.9	5.3	
2008	5.9	.2	-.7	1.6	5.3	1.9	24.2	.1	
2009	4.0	-.8	.1	-5.4	-.8	5.2	22.1	.4	
2010	5.9	.9	.6	.3	1.9	4.2	21.0	4.8	
2011	5.3	2.3	1.0	6.7	3.2	4.0	12.4	5.5	
Quarter									
2008:	1	5.4	2.9	2.3	4.5	7.8	3.6	8.1	1.0
	2	3.3	.2	-.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	6.3	-1.8	-1.8	-2.9	1.7	-.2	37.0	-5.4
2009:	1	4.1	-1.1	-.1	-3.7	-.0	4.5	22.6	-4.6
	2	4.5	-1.7	-1.4	-6.5	-1.8	3.6	28.2	-.8
	3	4.1	-.3	.9	-6.8	-1.5	5.4	20.7	4.2
	4	2.8	.1	1.0	-5.2	.1	7.0	10.5	3.1
2010:	1	7.3	.3	.5	-2.5	.8	4.2	30.1	5.0
	2	5.3	.7	.5	-.4	1.7	4.1	18.0	4.5
	3	5.2	1.0	.6	1.1	2.3	4.2	15.6	4.7
	4	5.3	1.5	.7	3.0	2.8	4.2	14.4	5.0
2011:	1	4.9	1.8	.8	4.5	2.8	4.0	12.3	5.4
	2	5.3	2.1	.9	6.0	3.3	4.0	12.7	5.5
	3	5.1	2.5	1.0	7.3	3.2	3.9	11.3	5.6
	4	5.2	2.8	1.1	8.4	3.2	3.9	11.2	5.5

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	1538.9	1338.0	1980.7	1840.5	1517.6	903.7	2537.7	1807.2	1757.5	1820.3	1726.4	1895.3	1840.5	1900.0
Net equity issuance	-335.1	11.1	-75.0	-100.0	114.5	-80.0	-20.0	-80.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0
Net debt issuance	1874.0	1326.9	2055.7	1940.5	1403.1	983.7	2557.7	1887.2	1857.5	1920.3	1826.4	1995.3	1940.5	2000.0
Borrowing indicators														
Debt (percent of GDP) ¹	226.0	240.1	242.2	242.9	241.2	241.4	241.5	242.7	243.0	243.2	243.0	242.9	242.7	242.6
Borrowing (percent of GDP)	13.0	9.3	13.9	12.4	9.8	6.8	17.5	12.8	12.5	12.7	11.9	12.9	12.3	12.6

Households															
Net borrowing ²	26.6	-103.8	118.8	318.7	-39.1	16.2	35.2	97.0	143.6	199.4	248.1	294.4	346.3	386.0	
Home mortgages	-68.5	10.7	61.7	102.1	95.0	104.5	47.5	57.0	66.5	76.0	85.5	95.0	109.2	118.7	
Consumer credit	40.2	-140.9	7.4	165.0	-173.0	-128.8	-60.7	-8.9	26.7	72.5	111.7	148.1	185.3	215.1	
Debt/DPI (percent) ³	127.4	126.3	122.5	119.5	125.7	125.1	123.5	123.1	122.0	120.9	120.8	119.8	118.9	118.2	
Business															
Financing gap ⁴	231.4	-178.8	-207.0	-74.7	-284.3	-239.2	-235.5	-228.9	-202.3	-161.5	-121.4	-86.4	-58.2	-32.9	
Net equity issuance	-335.1	11.1	-75.0	-100.0	114.5	-80.0	-20.0	-80.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	
Credit market borrowing	566.6	-89.9	209.4	356.9	-167.5	12.0	87.2	188.2	253.0	309.3	320.5	375.1	364.4	367.5	
State and local governments															
Net borrowing	41.6	116.8	99.8	97.8	123.1	161.8	97.8	97.8	101.8	101.8	97.8	97.8	97.8	97.8	
Current surplus ⁵	212.7	222.9	274.9	232.3	204.5	231.2	267.2	272.1	277.3	283.1	237.9	236.8	229.2	225.5	
Federal government															
Net borrowing	1239.2	1402.9	1627.7	1167.2	1486.6	793.7	2337.5	1504.2	1359.2	1309.8	1160.0	1228.0	1132.0	1148.8	
Net borrowing (n.s.a.)	1239.2	1402.9	1627.7	1167.2	378.7	220.4	690.4	241.1	346.8	349.5	396.0	172.0	290.0	309.2	
Unified deficit (n.s.a.)	680.5	1462.2	1436.1	1147.2	330.8	377.6	493.9	251.0	331.8	359.5	406.0	147.0	275.0	319.2	
Depository institutions															
Funds supplied	415.1	-465.7	77.4	89.3	-774.8	-70.9	-399.2	104.0	-610.5	1215.4	-77.9	-180.2	411.7	203.7	

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

Accessible Material

November 2009 Greenbook Part 1 Tables and Charts[†]

International Developments

Summary of Staff Projections

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

Indicator	2009		Projection			
			2009		2010	2011
	Q1	Q2	Q3	Q4		
Foreign output	-8.6	1.7	4.4	3.6	3.6	4.1
Previous Greenbook	-8.6	1.7	3.8	3.2	3.5	4.1
Foreign CPI	-1.0	1.0	1.5	2.0	1.7	1.8
Previous Greenbook	-1.0	1.0	1.7	1.7	1.6	1.8
Contribution to growth (percentage points)						
U.S. net exports	2.6	1.6	-6	.1	.0	-1
Previous Greenbook	2.6	1.6	-2	-1	-2	-2

Note: Changes for years measured as Q4/Q4.

Staff Projections for Foreign GDP Growth by Region

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

Indicator	2009		Projection			
			2009		2010	2011
	Q1	Q2	Q3	Q4		
Advanced Foreign Economies	-7.9	-1.6	1.8	2.5	2.6	3.2
Previous Greenbook	-7.8	-1.5	2.1	2.1	2.5	3.2
Emerging Market Economies	-9.6	6.0	7.7	5.0	4.9	5.2
Previous Greenbook	-9.6	6.0	6.2	4.5	4.7	5.2

Note: Changes for years measured as Q4/Q4.

Staff Projections of Selected Trade Prices

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

Trade category	2009		Projection			
			2009		2010	2011
	Q1	Q2	Q3	Q4		
<i>Imports</i>						
Core goods	-9.4	-2.3	1.0	4.4	1.5	1.0
Previous Greenbook	-9.4	-2.4	3.5	3.5	1.3	1.0
Oil (dollars per barrel)	41.58	53.71	65.34	74.10	79.11	81.49
Previous Greenbook	41.58	53.71	64.56	64.68	70.58	72.72
<i>Exports</i>						
Core goods	-12.5	2.4	5.3	4.5	2.1	1.2

Previous Greenbook	-12.5	2.6	4.0	3.2	1.9	1.2
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Note: Prices for core exports exclude computers and semiconductors. Prices for core imports exclude computers, semiconductors, oil, and natural gas. Both prices are on a national income and product account chain-weighted basis.

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

Staff Projections for Trade in Goods and Services

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

Measure	Projection					
	2009		2009		2010	2011
	Q1	Q2	Q3	Q4		
Real imports	-36.4	-14.7	16.3	6.4	7.0	7.7
Previous Greenbook	-36.4	-14.8	18.4	7.2	8.0	8.0
Real exports	-29.9	-4.1	14.7	9.6	8.7	8.8
Previous Greenbook	-29.9	-4.6	20.9	8.1	8.2	8.6

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	H2		
<i>U.S. real GDP</i>						
Baseline	3.1	3.2	3.7	4.4	4.4	4.9
Dollar Depreciation	3.2	3.8	4.7	4.6	4.6	4.8
Stronger EME Demand	3.6	4.0	4.1	4.4	4.4	4.8
<i>U.S. PCE prices (excluding food and energy)</i>						
Baseline	1.3	1.0	1.1	1.0	1.0	1.2
Dollar Depreciation	1.5	1.6	1.7	1.2	1.2	1.4
Stronger EME Demand	1.7	1.3	1.3	1.1	1.1	1.3
<i>U.S. federal funds rate (percent)</i>						
Baseline	.1	.1	.1	.1	.1	3.5
Dollar Depreciation	.1	.1	.1	1.0	1.0	4.1
Stronger EME Demand	.1	.1	.1	.5	.5	3.8
<i>U.S. trade balance (percent share of GDP)</i>						
Baseline	-3.0	-3.0	-2.9	-2.9	-2.9	-2.7
Dollar Depreciation	-2.8	-2.2	-1.7	-1.8	-1.8	-1.9
Stronger EME Demand	-2.7	-2.6	-2.5	-2.6	-2.6	-2.6

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 October 29, 2009. There are four series, "2008", "2009", "2010", and "2011". 2008 begins at about -6.7 and generally increases to about -4.75 by October 22, 2008. It remains about constant until about June 17, 2009, and generally decreases to end at about -4.85. 2009 begins at about -5.4 by September 12, 2008, and generally increases to about -3.0 by December 10, 2008. It then generally decreases to about -3 by March 12,

2009, and generally increases to end at about -3.0. 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 -3.0. 2011 begins at about -3.1 by September 16, 2009, and generally increases to end at about -3.0.

Figure: Foreign Real GDP

Line chart, by percent change, Q4/Q4, January 2007 to October 29, 2009. There are four series, "2008", "2009", "2010", and "2011". 2008 begins at about 3.5 and remains about constant until about August 2, 2007. It then generally decreases to about -1 by March 12, 2009, and remains about constant until the end. 2009 begins at about 3.3 by September 12, 2007 and generally increases to about 3.7 by March 13, 2008. It then generally decreases to about -2.4 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 3.7. 2011 begins at about 4.1 by September 16, 2009 and remains about constant until the end.

Figure: Core Import Prices

Line chart, by percent change, Q4/Q4, January 24, 2007 to October 29, 2009. There are four series, "2008", "2009", "2010", and "2011". 2008 begins at about 1 and generally increases to about 7.2 by September 10, 2008. It then generally decreases to about 3.4 by January 22, 2009 and generally increases to end at about 3.8. 2009 begins at about 1 and generally increases to about 1.5 by July 30, 2008. It then generally decreases to about -4.2 by March 12, 2009, and generally increases to end at about -1.7. 2010 begins at about 1.4 by September 10, 2008 and generally decreases to about 1 by April 22, 2009. It then generally increases to end at about 1.5. 2011 begins at about 1 by September 16, 2009 and remains about constant until the end.

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

Outlook for Foreign Real GDP and Consumer Prices: Selected Countries

(Percent changes)

Measure and country	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	4.4	3.6	3.3	3.5	3.7	3.9	4.0	4.1	4.1	4.1
Advanced Foreign Economies	-7.9	-1.6	1.8	2.5	2.3	2.6	2.7	2.9	3.1	3.2	3.3	3.3
of which:												
Canada	-6.1	-3.4	2.0	3.3	3.1	3.1	3.3	3.3	3.8	3.8	3.9	3.9
Japan	-12.4	2.3	4.2	2.5	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0
United Kingdom	-9.6	-2.3	-1.6	2.4	1.9	2.5	2.8	3.0	3.0	3.0	3.2	3.2
Euro Area ²	-9.6	-0.7	1.8	1.6	1.6	2.0	2.3	2.6	2.7	2.8	3.0	3.0
Germany	-13.4	1.3	2.7	2.4	2.1	2.2	2.4	2.7	2.8	3.0	3.5	3.6
Emerging Market Economies	-9.6	6.0	7.7	5.0	4.7	4.8	5.0	5.2	5.1	5.2	5.2	5.2
Asia	-2.7	14.3	9.3	5.7	5.8	5.8	5.9	6.1	6.0	6.0	6.1	6.0
Korea	0.5	11.0	12.3	3.8	3.8	4.4	4.4	4.4	4.4	4.4	4.4	4.4
China	6.5	18.5	9.8	10.0	8.8	8.2	8.2	8.5	8.6	8.7	8.8	8.8
Latin America	-16.7	-1.8	6.7	4.5	3.7	4.0	4.2	4.4	4.3	4.3	4.3	4.3
Mexico	-21.2	-4.4	7.8	4.7	3.5	4.0	4.2	4.5	4.5	4.5	4.5	4.5
Brazil	-3.8	7.8	6.0	4.5	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	0.2	0.9	1.5	1.7	1.8	1.7	1.7	1.8	1.8	1.8
Advanced Foreign Economies	1.0	0.0	-0.8	-0.0	0.6	0.9	1.1	1.0	1.0	1.1	1.1	1.2
of which:												
Canada	1.2	0.1	-0.9	0.3	0.9	1.2	1.5	1.5	1.6	1.7	1.7	1.8
Japan	-0.1	-1.0	-2.2	-1.7	-1.1	-0.9	-0.6	-0.7	-0.7	-0.6	-0.6	-0.6
United Kingdom ⁴	3.0	2.1	1.5	2.0	2.6	2.4	1.9	1.7	1.2	1.4	1.6	1.8
Euro Area ²	1.0	0.2	-0.4	0.3	0.9	1.2	1.4	1.2	1.2	1.2	1.3	1.3
Germany	0.8	0.2	-0.4	0.3	0.6	0.9	1.2	1.0	1.1	1.1	1.1	1.1

Emerging Market Economies	2.7	1.6	1.2	1.7	2.4	2.5	2.4	2.4	2.4	2.5	2.5	2.5
Asia	1.0	-0.3	-0.5	0.6	1.8	2.2	2.2	2.1	2.1	2.2	2.2	2.2
Korea	3.9	2.8	2.0	2.0	2.1	2.0	2.0	2.2	2.2	2.3	2.3	2.3
China	-0.6	-1.5	-1.3	-0.2	1.3	1.7	1.8	1.7	1.7	1.8	1.9	1.9
Latin America	6.3	5.9	4.9	4.0	3.6	2.9	2.9	2.9	3.0	3.0	3.0	3.0
Mexico	6.2	6.0	5.1	4.0	3.5	2.7	2.5	2.5	2.5	2.5	2.5	2.5
Brazil	5.9	5.3	4.3	4.1	3.8	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 GDP¹									
Total Foreign	2.9	3.8	4.1	4.0	4.2	-1.0	0.1	3.6	4.1
Advanced Foreign Economies	1.8	2.6	2.8	2.5	2.5	-1.6	-1.4	2.6	3.2
of which:									
Canada	1.5	3.7	3.1	1.9	2.8	-1.0	-1.1	3.2	3.9
Japan	2.4	1.1	2.9	2.1	1.9	-4.5	-1.1	2.0	2.0
United Kingdom	3.2	2.4	2.4	2.8	2.4	-2.0	-2.9	2.6	3.1
Euro Area ²	1.2	1.7	2.1	3.5	2.2	-1.8	-1.8	2.1	2.9
Germany	0.1	0.2	1.6	4.3	1.6	-1.8	-2.0	2.3	3.2
Emerging Market Economies	4.5	5.5	5.9	5.9	6.4	-0.1	2.0	4.9	5.2
Asia	6.9	6.0	7.7	7.2	8.2	0.2	6.5	5.9	6.0
Korea	3.7	2.6	5.2	4.6	5.7	-3.4	6.8	4.2	4.4
China	10.3	9.9	10.3	10.8	12.3	6.9	11.1	8.4	8.7
Latin America	1.8	5.0	4.0	4.7	4.5	-0.8	-2.3	4.1	4.3
Mexico	1.3	4.5	3.5	4.0	3.7	-1.7	-4.0	4.0	4.5
Brazil	1.0	4.7	3.7	4.6	6.1	1.2	3.5	4.0	4.0
CONSUMER PRICES³									
Total Foreign	2.1	2.8	2.3	2.1	3.7	3.3	0.9	1.7	1.8
Advanced Foreign Economies	1.3	1.8	1.6	1.4	2.2	2.0	-0.0	1.0	1.2
of which:									
Canada	1.7	2.3	2.3	1.4	2.5	1.9	0.3	1.5	1.8
Japan	-0.3	0.5	-1.0	0.3	0.5	1.0	-1.7	-0.7	-0.6
United Kingdom ⁴	1.3	1.4	2.1	2.7	2.1	3.8	2.0	1.7	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	0.3	1.0	1.1
Emerging Market Economies	3.1	3.9	3.0	2.9	5.1	4.6	1.7	2.4	2.5
Asia	2.3	3.1	2.6	2.4	5.5	3.7	0.6	2.1	2.2
Korea	3.5	3.4	2.5	2.1	3.4	4.5	2.0	2.2	2.3
China	2.7	3.3	1.4	2.1	6.7	2.7	-0.2	1.7	1.9
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	4.0	2.5	2.5

Brazil	11.5	7.2	6.1	3.2	4.3	6.2	4.1	3.7	3.7
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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	-0.0	-0.1
Exports of G&S	0.6	0.7	0.7	1.1	1.2	-0.4	-0.5	1.0	1.0
Imports of G&S	-0.7	-1.6	-0.8	-0.7	-0.2	1.2	1.5	-1.0	-1.1
Percentage change, Q4/Q4									
Exports of G&S	6.2	7.1	6.7	10.2	10.2	-3.4	-4.1	8.7	8.8
Services	4.3	9.1	3.6	12.0	13.0	-3.5	-1.6	6.0	5.9
Computers	11.3	5.8	14.2	8.4	1.3	-2.4	5.0	9.5	9.5
Semiconductors	38.3	-6.0	17.6	2.1	29.1	-12.7	19.5	11.0	11.0
Core Goods ¹	4.8	7.2	7.2	9.9	8.4	-3.1	-6.6	10.1	10.2
Imports of G&S	5.1	10.9	5.2	4.1	0.9	-6.8	-9.5	7.0	7.7
Services	3.3	8.8	2.3	7.1	2.0	0.2	-3.5	3.9	5.9
Oil	1.3	10.7	1.3	-8.2	0.0	0.3	-10.7	-2.9	-0.8
Natural Gas	1.3	4.9	13.7	-10.1	13.4	-24.0	4.8	8.6	0.9
Computers	17.1	23.2	12.5	14.3	8.8	-11.3	14.5	15.5	15.5
Semiconductors	-0.1	9.8	7.5	-0.8	3.6	-9.7	7.2	5.0	5.0
Core Goods ²	5.3	10.9	5.8	5.8	0.2	-9.8	-12.8	10.1	10.0
Billions of Chained 2005 Dollars									
Net Goods & Services	-603.9	-688.0	-722.7	-729.2	-647.7	-494.3	-352.0	-341.8	-349.2
Exports of G&S	1116.8	1222.8	1305.1	1422.0	1546.1	1629.3	1456.6	1582.7	1723.1
Imports of G&S	1720.7	1910.8	2027.8	2151.2	2193.8	2123.5	1808.5	1924.5	2072.3
Billions of dollars									
US CURRENT ACCOUNT BALANCE	-521.5	-631.1	-748.7	-803.5	-726.6	-706.1	-426.0	-457.9	-464.4
Current Acct as Percent of GDP	-4.7	-5.3	-5.9	-6.0	-5.2	-4.9	-3.0	-3.1	-3.0
Net Goods & Services (BOP)	-495.0	-610.0	-715.3	-760.4	-701.4	-695.9	-378.0	-439.0	-453.5
Investment Income, Net	51.0	73.4	78.8	54.7	97.9	125.5	83.9	108.9	117.0
Direct, Net	112.7	150.9	173.2	174.0	236.7	249.9	205.0	230.8	252.0
Portfolio, Net	-61.7	-77.5	-94.4	-119.4	-138.8	-124.3	-121.1	-121.9	-135.0
Other Income & Transfers, Net	-77.5	-94.5	-112.2	-97.9	-123.1	-135.7	-131.9	-127.9	-127.9

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

Outlook for U.S. International Transactions

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

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

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

Outlook for U.S. International Transactions

	Projected											
	2009				2010				2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NIPA REAL EXPORTS and IMPORTS												

Percentage point contribution to GDP growth												
Net Goods & Services	2.6	1.7	-0.6	0.1	-0.1	0.2	-0.1	-0.0	-0.3	-0.0	-0.1	0.0
Exports of G&S	-4.0	-0.5	1.5	1.0	0.9	0.9	1.0	1.1	1.0	1.0	1.0	1.1
Imports of G&S	6.6	2.1	-2.0	-0.9	-1.0	-0.8	-1.1	-1.1	-1.3	-1.0	-1.1	-1.1
Percentage change from previous period, s.a.a.r.												
Exports of G&S	-29.9	-4.1	14.7	9.6	8.2	8.5	8.9	9.4	8.9	8.5	8.5	9.1
Services	-13.6	0.1	2.8	5.5	5.2	5.8	6.3	6.7	6.3	5.8	5.7	5.7
Computers	-14.0	-10.8	30.2	21.4	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
Semiconductors	-17.1	27.7	61.7	19.3	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Core Goods ¹	-38.3	-7.2	19.7	11.1	9.6	9.9	10.2	10.8	10.2	9.9	9.9	10.9
Imports of G&S	-36.4	-14.7	16.3	6.4	7.4	5.5	7.5	7.7	8.9	7.1	7.6	7.3
Services	-11.5	-7.5	2.8	3.1	6.4	-0.1	4.2	5.1	5.5	5.9	6.0	6.1
Oil	-15.9	-21.9	1.4	-4.5	-3.4	-4.5	-1.4	-2.3	3.9	-4.6	-1.0	-1.4
Natural Gas	5.9	-2.4	-17.6	41.6	41.3	-13.3	30.6	-12.9	9.6	-15.9	27.2	-11.6
Computers	-22.3	24.7	57.3	12.9	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
Semiconductors	-47.8	24.7	57.0	29.2	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Core Goods ²	-46.7	-18.6	21.7	9.2	9.6	9.7	10.0	10.9	10.8	10.3	9.3	9.5
Billions of Chained 2005 Dollars, s.a.a.r.												
Net Goods & Services	-386.5	-330.4	-348.3	-342.7	-345.9	-339.7	-340.8	-340.7	-348.0	-348.3	-351.0	-349.7
Exports of G&S	1434.5	1419.5	1469.1	1503.2	1533.0	1564.7	1598.4	1634.6	1669.9	1704.5	1739.7	1778.1
Imports of G&S	1821.0	1749.8	1817.3	1845.9	1879.0	1904.4	1939.2	1975.3	2017.9	2052.8	2090.7	2127.8
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-417.8	-395.2	-436.1	-455.1	-476.0	-452.3	-453.5	-449.9	-472.0	-456.2	-464.9	-464.6
Current Account as % of GDP	-2.9	-2.8	-3.1	-3.2	-3.3	-3.1	-3.0	-3.0	-3.1	-2.9	-3.0	-2.9
Net Goods & Services (BOP)	-369.6	-332.0	-383.3	-427.2	-441.0	-435.4	-438.4	-441.3	-453.4	-451.8	-454.6	-454.4
Investment Income, Net	80.4	72.8	86.7	95.7	102.5	106.5	111.9	114.9	118.8	119.0	116.7	113.3
Direct, Net	204.8	196.8	204.8	213.6	220.6	227.9	234.4	240.3	246.8	251.3	254.0	255.8
Portfolio, Net	-124.4	-124.0	-118.1	-117.9	-118.2	-121.4	-122.6	-125.3	-128.0	-132.3	-137.3	-142.4
Other Inc. & Transfers, Net	-128.6	-135.9	-139.5	-123.6	-137.5	-123.4	-127.0	-123.6	-137.5	-123.4	-127.0	-123.6

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

November 2009 Greenbook Part 2 Tables and Charts[†]

Domestic Nonfinancial Developments

Changes in Employment

(Thousands of employees; seasonally adjusted)

Measure and sector	2008		2009				
	Q1	Q2	Q3	July	Aug.	Sept.	
	Average monthly change			Monthly change			
Nonfarm payroll employment (establishment survey)	-257	-691	-428	-256	-304	-201	-263
Private	-270	-695	-425	-213	-246	-182	-210
Natural resources and mining	4	-12	-11	-4	-6	-6	-1
Manufacturing	-73	-202	-140	-53	-41	-66	-51
Ex. motor vehicles	-58	-176	-117	-58	-73	-52	-48
Construction	-57	-124	-80	-64	-69	-60	-64
Residential	-35	-53	-26	-18	-20	-20	-13
Nonresidential	-22	-71	-54	-47	-50	-40	-51
Wholesale trade	-16	-36	-20	-10	-14	-13	-5
Retail trade	-44	-55	-27	-31	-45	-9	-39
Financial activities	-19	-51	-35	-16	-14	-25	-10
Temporary help services	-44	-73	-28	-5	-6	-7	-2
Nonbusiness services ¹	19	-25	19	6	10	24	-16
Total government	14	4	-3	-43	-58	-19	-53
Federal government	3	10	3	0	9	-2	-6
Total employment (household survey)	-246	-817	-230	-444	-155	-392	-785
Memo:							
Aggregate hours of private production workers (percent change) ²	-3.3	-8.9	-7.8	-3.0	.1	-.2	-.5
Average workweek (hours) ³	33.6	33.2	33.1	33.1	33.1	33.1	33.0
Manufacturing (hours)	40.8	39.6	39.5	39.9	39.9	39.9	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, 2000 to September 2010. Data are 3-month moving averages. The series begins at about 250 and generally decreases to about -315 by late 2001. It then generally increases to about 280 by mid-2004, and generally decreases to about -700 by early 2009. It then generally increases to end at about -210.

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

Figure: Aggregate Hours and Workweek of Production and Nonsupervisory Workers

Line chart, 2000 to September 2009. There are two series, "Aggregate hours" (index, 2002 = 100) and "Workweek" (hours). These two series use two different scales. Aggregate hours begins at about 103.2 and generally increases to about 104 by late 2000. It then generally decreases to about 98.2 by mid-2003, and generally increases to about 107.8 by late 2007. It then generally decreases to end at about 98.8. Workweek begins at about 34.4 and generally decreases to about

33.6 by early 2003. It then generally increases to about 34.05 by late 2006, and generally decreases to end at about 33.0.

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

Selected Unemployment and Labor Force Participation Rates

(Percent; seasonally adjusted)

Rate and group	2008	2009					
		Q1	Q2	Q3	July	Aug.	Sept.
<i>Civilian unemployment rate</i>							
Total	5.8	8.1	9.2	9.6	9.4	9.7	9.8
Teenagers	18.7	21.3	22.7	25.1	23.8	25.5	25.9
20-24 years old	10.2	13.0	15.0	15.1	15.3	15.1	14.9
Men, 25 years and older	4.8	7.4	8.8	9.4	9.0	9.5	9.7
Women, 25 years and older	4.4	6.2	6.9	7.1	6.9	7.0	7.3
<i>Labor force participation rate</i>							
Total	66.0	65.6	65.8	65.4	65.5	65.5	65.2
Teenagers	40.2	38.3	38.4	37.5	38.0	37.7	36.9
20-24 years old	74.4	73.7	74.1	72.9	73.5	73.0	72.3
Men, 25 years and older	75.4	74.6	74.9	74.9	74.8	75.0	74.8
Women, 25 years and older	60.0	60.0	60.3	59.9	60.1	59.9	59.7

Figure: Unemployment Rate

Line chart, by percent, 2001 to September 2009. The series begins at about 4.3 and generally increases to about 6.4 by mid-2003. It then generally decreases to about 4.5 by late 2006, and generally increases to end at about 9.8. It is at about 4.8 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. A vertical line indicates the NBER peak in December 2007. The NBER peak is the last business cycle peak as defined by the NBER.

Figure: Labor Force Participation Rate

Line chart, by percent, 2001 to September 2009. The series begins at about 67.25 and generally decreases to about 65.8 by 2006. It then generally increases to about 66.3 by late 2006, and generally decreases to end at about 65.2. It is at about 66.05 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, 2001 to September 2009. The series begins at about 2.45 and generally increases to about 3.5 by early 2003. It then generally decreases to about 2.75 by 2006, and generally increases to end at about 6.6.

Figure: Job Losers Unemployed Less Than 5 Weeks

Line chart, by percent of household employment, 2001 to September 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 0.9 and generally increase to about 1.3 by late 2001. They then generally decrease to about 0.85 by early 2007, and generally increase to about 1.59 by early 2009. They then generally decrease to end at about 1.4.

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

Labor Market Indicators

Figure: Insured Unemployment

Line chart, by millions, 2000 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 5.1 by 2002. It is also 0 from about 2004 to mid-2008, and then generally increases to end at about 10

by October 3, 2009. Regular state programs begins at about 2.1 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 by October 10, 2009.

Note: 4-week moving averages.

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

Figure: Layoffs and Initial Claims

Line chart, 2000 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 2001. It then generally decreases to about 1.3 by early 2006, and generally increases to about 2.23 by 2009. It then generally decreases to end at about 2.0 by August. Initial claims begins at about 288 and generally decreases to about 265 by 2000. It then generally increases to about 448 by 2002, and generally decreases to about 280 by early 2006. It then generally increases to about 660 by 2009, and generally decreases to end at about 530 by October 17.

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: Hiring and Hiring Plans

Line chart, 2000 to 2009. There are two series, "Hires", which is by percent of private employment, and "Hiring plans", which is by percent. Hiring plans data are 3-month moving averages. These two series use two different scales. Hires begins at about 4.5 by late 2000, and generally increases to about 4.98 by 2001. It then generally decreases to about 3.8 by 2003, and generally increases to about 4.75 by early 2005. It then generally decreases to about 3.3 by mid-2009, and generally increases to end at about 3.5 by August. Hiring plans begins at about 19 and generally decreases to about 6 by early 2003. It then generally increases to about 16.5 by late 2006, and generally decreases to end at about -4.5 by September.

Note: Hiring plans is percent planning an increase in employment minus percent planning a reduction. Seasonally adjusted by FRB staff.

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

Figure: Job Openings

Line chart, 2000 to 2010. 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 4.0 and generally decreases to about 2.5 by early 2003. It then generally increases to about 3.6 by 2006, and generally decreases to end at about 1.9 by August. Composite Help Wanted Index begins at about 93 and generally decreases to about 49 by 2003. It then generally increases to about 76 by late 2006, and generally decreases to about 40 by 2009. It then generally increases to about 47 by mid-2009, and generally decreases to end at about 42.

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, 2000 to 2009. There are two series, "Job availability", an index, and "Hard-to-fill", which is by percent. These two series use two different scales. Job availability begins at about 142 and generally decreases to about 78 by mid-2003. It then generally increases to about 110 by early 2007, and generally decreases to end at about 58 by October. Hard-to-fill begins at about 32 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 8 by September.

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, an index, 2000 to October 2009. There are two series, "Conference Board" and "Reuters/Michigan". Conference Board begins at about 107 and generally decreases to about 85 by early 2001. It then generally increases to about 107 by 2002, and generally decreases to about 60 by early 2009. It then generally increases to about 95 by mid-2009, and generally decreases to end at about 90. Reuters/Michigan begins at about 96 and generally decreases to about 50 by 2001. It then generally increases to about 108 by mid-2004, and generally decreases to about 38 by late 2008. It then generally increases to about 90 by 2009, and generally decreases to end at about 78.

Note: The proportion of households expecting labor market conditions to improve, minus the proportion expecting conditions to worsen, plus 100. Reuters/Michigan October 2009 plotted value is preliminary.

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

Selected Components of Industrial Production

(Percent change from preceding comparable period)

Component	Proportion 2008 (percent)	2009			2009		
		2008 ¹	Q2	Q3	July	Aug.	Sept.
			Annual rate		Monthly rate		
Total	100.0	-6.7	-10.3	5.2	.9	1.2	.7
Previous	100.0	-6.7	-10.5	...	1.0	.8	...
Manufacturing	79.0	-8.7	-8.7	7.1	1.2	1.2	.9
Ex. motor veh. and parts	74.5	-7.8	-8.7	3.8	.5	.9	.5
Ex. high-tech industries	70.3	-7.8	-9.1	3.4	.3	1.0	.5
Mining	10.6	.8	-21.7	3.7	1.2	1.1	.7
Utilities	10.4	.3	-11.2	-5.8	-1.5	1.9	-.7
<i>Selected industries</i>							
Energy	23.9	1.3	-14.4	-2.5	-.4	1.1	.5
High technology	4.2	-6.9	-.1	10.7	2.8	.0	.0
Computers	1.0	-11.9	-25.1	-16.9	-1.2	-1.4	-1.4
Communications equipment	1.3	10.4	-4.1	6.3	.5	.3	-1.1
Semiconductors ²	1.8	-15.0	22.3	33.2	7.1	.4	1.8
Motor vehicles and parts	4.5	-23.3	-10.4	103.0	17.8	6.1	8.1
Aircraft and parts	2.3	-13.2	-18.5	4.7	2.0	-.7	1.8
<i>Total ex. selected industries</i>	<i>65.1</i>	<i>-8.3</i>	<i>-9.1</i>	<i>3.6</i>	<i>.3</i>	<i>1.2</i>	<i>.3</i>
Consumer goods	20.7	-4.2	-4.9	1.4	-.4	1.3	.3
Durables	3.5	-14.7	-12.9	1.6	1.4	-.5	.2
Nondurables	17.1	-1.8	-3.3	1.4	-.7	1.6	.3
Business equipment	6.6	-4.8	-22.5	-.2	.3	1.4	-.2
Defense and space equipment	1.1	-2.1	4.0	15.9	2.0	1.3	1.2
Construction supplies	4.8	-11.8	-10.7	2.9	.5	.4	-.4
Business supplies	7.3	-9.8	-10.7	-1.2	-.4	.4	-.5
Materials	24.6	-11.7	-8.6	8.0	.9	1.4	.7
Durables	12.4	-11.4	-24.0	7.7	1.6	1.4	.7
Nondurables	12.2	-12.0	7.7	8.3	.3	1.4	.7

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

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

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

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

Capacity Utilization

(Percent of capacity)

Sector	1972- 2008 average	1994- 95 high	2001- 02 low	2009				
				Q1	Q2	Q3	Aug.	Sept.
Total industry	80.9	84.9	73.5	70.4	68.7	69.8	69.9	70.5

Manufacturing	79.6	84.5	71.4	66.7	65.4	66.8	66.8	67.5
Mining	87.6	89.1	84.9	86.8	81.8	82.8	82.9	83.6
Utilities	86.8	93.3	84.2	82.4	79.6	78.1	78.7	78.1
<i>Stage-of-process groups</i>								
Crude	86.6	89.9	81.7	80.9	79.5	81.4	81.4	82.5
Primary and semifinished	82.0	87.9	74.3	68.4	66.2	66.9	67.0	67.3
Finished	77.7	80.3	70.0	68.4	67.1	68.4	68.6	69.3

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

Indicators of Industrial Activity

Figure: IP Diffusion Index

Line chart, an index, 1997 to September 2009. The series begins at about 59 and generally increases to about 71 by late 1997. It then generally decreases to about 30 by early 2001, and generally increases to about 68 by late 2003. It then generally decreases to about 16 by late 2008, and generally increases to end at about 69. It is at about 49 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. A shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research (NBER): March 2001-November 2001. A vertical line indicates the NBER Peak in December 2007.

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

Figure: Motor Vehicle Assemblies

Line chart, by millions of units, 2002 to October 2009. There are two series, "Autos and light trucks" and "Medium and heavy trucks". These two series use two different scales. Autos and light trucks begins at about 12 and generally increases to about 12.8 by mid-2002. It then generally decreases to about 3.7 by early 2009, and generally increases to end at about 7. October 2009 is marked at about 0.48. Medium and heavy trucks begins at about 0.2 and generally increases to about 0.55 by mid-2006. It then generally decreases to about 0.1 by 2009, and generally increases to end at about 0.18. October 2009 is marked at about 0.15.

Note: October values are based on latest industry schedules.

Source: Ward's Communications.

Figure: Manufacturing Capacity Utilization

Line chart, by percent, 1997 to September 2009. The series begins at about 82.2 and generally increases to about 84 by late 1997. It then generally decreases to about 72 by late 2001, and generally increases to about 80 by late 2005. It then generally decreases to about 65 by mid-2009, and generally increases to end at about 67.5. It is at about 78 at the time of the NBER peak.

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

Source: 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 September 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 6 by 2002. It then generally decreases to about 47 by early 2003, and generally increases to about 72 by late 2003. It then generally decreases to about 23 by late 2008, and generally increases to end at about 61. It is at about 53 at the time of the NBER peak in December 2007. 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 mid-2005. It then generally decreases to about -5.2 by 2008, generally increases to about 2 by mid-2009, and generally decreases to end at about 0. It is at about -1 at the time of the NBER peak in December 2007.

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: Regional Survey Average

Line chart, an index, 2002 to October 2009. The series begins at about 53 and generally increases to about 58 by 2002. It then generally decreases to about 45 by 2003, and generally increases to about 65 by late 2003. It then generally decreases to about 31 by late 2008, and generally increases to end at about 54. The series is about 54 at the time of the NBER peak in December 2007.

Note: The regional average includes new orders indexes from the Chicago, Dallas, Kansas City, New York (Empire State), Philadelphia, and Richmond surveys. The chart includes a horizontal line at about 50.

Source: Federal Reserve.

Figure: Weekly Production Index excluding Motor Vehicles

Bar chart, an index, October 2008 to October 2009. The bar chart, showing monthly aggregate of weekly index, begins at about 17.4 and generally decreases to about 16.0 by June. It then generally increases to end at about 16.75. There is also a curve, "Weekly index". It begins at about 17.5 and generally decreases to about 15.5 by June. It then generally increases to about 16.7 by early July, and generally decrease to about 15.7 by July. It then generally increases to end at about 16.8.

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

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

Production of Domestic Light Vehicles

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

Item	2009				2009			
	Q1	Q2	Q3	Q4	June	July	Aug.	Sept.
U.S. production ¹	4.4	4.5	6.4	6.8	4.1	5.6	6.3	7.1
Autos	1.7	1.9	2.5	2.7	1.9	2.2	2.5	2.8
Light trucks	2.8	2.5	3.8	4.0	2.2	3.4	3.8	4.3
Days' supply ²	93	70	50	n.a.	70	55	36	63
Autos	93	78	46	n.a.	76	55	32	59
Light trucks	93	64	55	n.a.	64	55	40	66
Inventories ³	2.05	1.63	1.38	n.a.	1.63	1.50	1.20	1.38
Autos	.92	.82	.63	n.a.	.82	.75	.56	.63
Light trucks	1.13	.81	.75	n.a.	.81	.75	.64	.75
Memo: U.S. production, total motor vehicles ⁴	4.6	4.6	6.5	7.0	4.2	5.7	6.5	7.3

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

1. Production rates for the fourth quarter 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 September 2009. The series begins at about 2.7 and generally increases to about 2.8 early 1998. It then generally decreases to about 2.45 by mid-1998, and generally increases to about 3.4 by 2004. It then generally decreases to about 1.2 by 2009, and generally increases to end at about 1.38.

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

Figure: Days' Supply of Light Vehicles

Line chart, 1998 to September 2009. Unit is days. The series begins at about 70 and generally decreases to about 55 by mid-1998. It then generally increases to about 80 by late 2000, and generally decreases to about 40 by late 2001. It then generally increases to about 100 by early 2009, and generally decreases to about 35 by 2009. It then generally increases to end at about 64.

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

Indicators of High-Tech Manufacturing Activity

Figure: Industrial Production in the High-Tech Sector

Line chart, 2002 = 100, ratio scale, 2002 to September 2009. There are three series, "Semiconductors", "Computers", and "Communications equipment". Semiconductors begins at about 90 and generally increases to about 315 by mid-2008. It then generally decreases to about 218 by early 2009, and generally increases to end at about 250. Computers begins at about 101 and generally increases to about 238 by 2008. It then generally decreases to end at about 158. Communications equipment begins at about 105 and generally decreases to about 98 by late 2002. It then generally increases to end at about 170.

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

Figure: U.S. Personal Computer and Server Absorption

Line chart, by millions of units, ratio scale, 2002 to 2009. There are two series, "Servers" and "PCs". These two series use two different scales. Servers begins at about 0.435 and generally increases to about 0.79 by early 2008. It then generally decreases to about 0.48 by 2009, and generally increases to about 0.59 by 2009. 2009 is marked at about 0.61. PCs begins at about 11.3 and generally decreases to about 11.15 by 2002. It then generally increases to about 16.7 by late 2007, and generally decreases to about 16.0 by late 2008. It then generally increases to end at about 17.3 by 2009:Q3.

Note: FRB seasonals. PC and server units represent the most recent U.S. data available from IDC. Q3 PC units are from the IDC Top 10 data release. Q3 server units are implied from the IDC Top 10 data release.

Source: IDC.

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 6.88 and generally decreases to about 6.5 by 2002. It then generally increases to about 10.4 by early 2008, and generally decreases to about 7.75 by early 2009. It then generally increases to end at about 9.8 by 2009:Q4. Worldwide MPU shipments begins at about 6.0 and generally increases to about 6.3 by 2002. It then generally decreases to about 5.75 by 2002, and generally increases to about 9.4 by 2007. It then generally decreases to about 5.8 by early 2009, and generally increases to end at about 8.75 by August.

Note: FRB seasonals. MPU is a microprocessor unit. Q4 Intel revenue is the midpoint of the range given by the company's guidance as of October 13, 2009. MPU shipments are a 3-month sum.

Source: Intel; Semiconductor Industry Association.

Figure: Circuit Board Orders and Shipments

Line chart, by billions of dollars, 2002 to August 2009. There are two series, "Orders" and "Shipments". Orders begins at about 97 and generally increases to about 101 by 2002. It then generally decreases to about 68 by 2003, and generally increases to about 132 by 2005. It then generally decreases to about 70 by early 2009, and generally increases to end at about 77. Shipments begins at about 91 and generally increases to about 101 by 2002. It then generally decreases to about 70 by 2003, and generally increases to about 115 by 2006. It then generally decreases to about 70 by 2009, and generally increases to end at about 75.

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

Source: Institute for Printed Circuits.

Figure: Bookings and Billings for Semiconductor Manufacturing Equipment

Line chart, by billions of dollars, 2002 to September 2009. There are two series, "Billings" and "Bookings". Billings begins at about 0.85 and generally decreases to about 0.8 by 2002. It then generally increases to about 1.02 by 2002, and generally decreases to about 0.76 by mid-2003. It then generally increases to about 1.7 by mid-2007, and generally decreases to about 0.38 by early 2009. It then generally increases to end at about 0.6. Bookings begins at about 0.68 and generally increases to about 1.15 by mid-2002. It then generally decreases to about 0.7 by mid-2003, and generally increases to about 1.7 by 2006. It then generally decreases to about 0.24 by 2009, and generally increases to end at about 0.72.

Note: FRB seasonals.

Source: Semiconductor Equipment and Materials International.

Figure: High-Tech Spending Plans

Line chart, a diffusion index, 2003 to 2009:Q3. The series begins at about 65 and generally decreases to about 64 by 2003. It then generally increases to about 79 by 2005, and generally decreases to about 43 by late 2008. It then generally increases to end at about 67.

Note: Based on survey question on firms' plans to increase or decrease their spending on high-tech equipment in the next 12 months.

Source: NABE Industry Survey.

Sales of Light Vehicles

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

Category	2008		2009			
	Q1	Q2	Q3	July	Aug.	Sept.

Total	13.1	9.5	9.6	11.5	11.2	14.1	9.2
Autos	6.7	4.8	4.9	6.4	6.2	8.0	5.0
Light trucks	6.4	4.7	4.7	5.1	5.1	6.1	4.2
North American ¹	9.8	6.8	7.1	8.4	8.3	10.2	6.7
Autos	4.5	3.1	3.2	4.2	4.2	5.3	3.3
Light trucks	5.3	3.7	3.9	4.2	4.2	4.9	3.5
Foreign-produced	3.3	2.7	2.4	3.1	2.9	3.9	2.5
Autos	2.2	1.7	1.6	2.1	2.0	2.7	1.7
Light trucks	1.1	1.0	.8	.9	.9	1.2	.8
Memo:							
Detroit Three market share (percent) ²	48.3	44.1	46.8	43.1	44.8	41.3	43.7

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: Market Share of Small and Midsize Autos

Line chart, by percent, 2004 to September 2009. The series begins at about 35 and generally increases to about 37.5 by 2004. It then generally decreases to about 30 by mid-2005, and generally increases to about 51 by 2009. It then generally decreases to end at about 43.

Note: As a share of total light vehicle sales.

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

Figure: Car-Buying Attitudes

Line chart, 2002 to October 2009. There are two series, "Appraisal of car-buying conditions", an index, and "Good time to buy: low prices", which is by percent. These two series use two different scales. Appraisal of car-buying conditions begins at about 155 and generally decreases to about 140 by early 2003. It then generally increases to about 160 by early 2004, 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 127. Good time to buy: low prices begins at about 36 and generally decreases to about 27 by early 2005. It then generally increases to about 56 by 2005, and generally decreases to about 29 by 2006. It then generally increases to about 66 by mid-2009, and generally decreases to end at about 54.

Note: October 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 October 18, 2009. The series begins at about 2200 and generally increases to about 2950 by 2004. It then generally decreases to about 1100 by early 2007, and generally increases to about 2450 by late 2008. It then generally decreases to about 1580 by 2009, and generally increases to end at about 1850.

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

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

Real Personal Consumption Expenditures

(Percent change from preceding comparable period)

Category	2009			2009		
	Q1	Q2	Q3	July	Aug.	Sept.
	Annual rate			Monthly rate		

Total real PCE¹	.6	-.9	n.a.	.2	.9	n.a.
Motor vehicles	9.5	-6.3	54.3	6.2	17.2	-24.8
Goods ex. motor vehicles	2.0	-2.8	4.3	.0	1.3	.5
Services	-.3	.2	n.a.	.1	.2	n.a.
Ex. energy	-.2	.7	n.a.	.2	.2	n.a.
Memo:						
Real PCE control ²	1.3	-2.5	3.6	.0	1.1	.4
Nominal retail control ³	1.9	-2.8	1.7	-.2	.7	.5

1. The values for Q3, July, August, and September are staff estimates based on available data. [Return to table](#)

2. Durables excluding motor vehicles, nondurables excluding gasoline, and food services. [Return to table](#)

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

n.a. Not available.

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 September 2009. The series begins at about -0.54 and generally increases to about 0.72 by early 1999. It then generally decreases to about -0.63 by late 2008, and generally increases to end at about -0.0. It is at about 0.2 at the time of the NBER peak.

There is a second line chart, by percent, 2006 to September 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 0.4 and generally decreases to about -0.6 by early 2009. It then generally increases to end at about 0. Monthly begins at about 1.4 and generally decreases to about -1.9 by 2008. It then generally increases to about 2.6 by 2009, and generally decreases to end at about -2.0.

Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. A vertical line indicates the NBER Peak in December 2007. 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, 1991 to August 2009. The series begins at about 0.38 and generally decreases to about -0.06 by early 1991. It then generally increases to about 0.5 by 2000, and generally decreases to about -0.08 by 2008. It then generally increases to end at about 0.8. It is at about 0.8 at the time of 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 0.16 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 0.18. Monthly begins at about -0.1 and generally increases to about 0.58 by 2006. It then generally decreases to about -0.36 by 2008, and generally increases to end at about 0.2.

Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. A vertical line indicates the NBER Peak in December 2007. 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" and "Total Market Index". These two series use two different scales. Ratio of household net worth to DPI begins at about 5.75 and generally increases to about 6.2 by late 1999. It then generally decreases to about 5.0 by 2002, and generally increases to about 6.4 by early 2006. It then generally decreases to about 4.5 by early 2009, and generally increases to end at about 4.72 by 2009:Q2. Total Market Index begins at about 11500 and generally increases to about 14400 by 2000. It then generally decreases to about 7600 by 2002, and generally increases to about 15600 by late 2007. It then generally decreases to about 7400 by early 2009, and generally increases to end at about 10750 by October 27.

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

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

Figure: Change in Real Disposable Personal Income

Line chart, by 12-month percent change, 1999 to August 2009. The series begins at about 4.4 and generally decreases to about 1.9 by 1999. It then generally increases to about 6 by 2000, and generally decreases to about -1.9 by mid-2009. It then generally increases to end at about 1.4.

Note: Values for December 2004 to 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 August 2009. The series begins at about 4.6 and generally decreases to about 1 by 2001. It then generally increases to about 4.4 by 2002, and generally decrease to about 0.7 by 2005. It then generally increases to about 5.9 by early 2009, and generally decreases to end at about 3.

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 October 27, 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 late 1999. It then generally decreases to about 2 by late 2008, and generally increases to end at about 3.5. Federal funds rate begins at about 4.8 and generally increases to about 6.5 by 2000. It then generally decreases to about 1 by mid-2003, and generally increases to about 5.3 by 2006. It then generally decreases to end at about 0.1.

Source: Federal Reserve Board.

Figure: Consumer Confidence

Line chart, 1990 to October 2009. There are two series, "Reuters/Michigan" (index, 1966 = 100) and "Conference Board" (index, 1985 = 100). Reuters/Michigan begins at about 82.5 and generally decreases to about 65 by 1990. It then generally increases to about 111 by late 1999, and generally decreases to about 55 by late 2008. It then generally increases to about 75 by 2009, and generally decreases to end at about 70. It is at about 75 at the time of the NBER peak. Conference Board begins at about 108 and generally decreases to about 49 by early 1992. It then generally increases to about 144 by 2000, and generally decreases to about 62 by early 2003. It then generally increases to about 110 by mid-2007, generally decreases to about 25 by early 2009, and generally increases to end at about 49. It is at about 90 at the time of the NBER peak.

Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. A vertical line indicates the NBER Peak in December 2007. The NBER peak is the last business cycle peak as defined by the NBER. Reuters/Michigan October 2009 value is preliminary.

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

Private Housing Activity

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

Sector	2008	2009					
		Q1	Q2	Q3	July	Aug.	Sept.
<i>All units</i>							
Starts	.91	.53	.54	.59	.59	.59	.59
Permits	.91	.53	.53	.57	.56	.58	.58
<i>Single-family units</i>							
Starts	.62	.36	.43	.50	.51	.48	.50
Permits	.58	.36	.41	.46	.46	.46	.45
Adjusted permits ¹	.58	.37	.42	.48	.49	.47	.47
<i>New homes</i>							
Sales	.49	.34	.37	.41	.41	.42	.40
Months' supply ²	10.68	11.61	9.44	7.62	7.85	7.51	7.49
<i>Existing homes</i>							
Sales	4.35	4.12	4.24	4.66	4.61	4.47	4.89
Months' supply ²	9.98	9.68	8.78	7.97	8.03	8.61	7.27
<i>Multifamily units</i>							
Starts	.28	.17	.12	.09	.09	.11	.09
Built for rent	.22	.14	.10	n.a.	n.a.	n.a.	n.a.
Built for sale	.07	.03	.02	n.a.	n.a.	n.a.	n.a.

Permits	.33	.17	.12	.11	.10	.12	.12
<i>Condos and co-ops</i>							
Existing home sales	.56	.47	.52	.64	.63	.62	.68

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 September 2009. There are three series, "Single-family starts", "Single-family adjusted permits" and "Multifamily starts". Single-family starts and Single-family adjusted permits begin at about 1.34 and generally decrease to about 1.12 by mid-2000. They then generally increase to about 1.83 by 2005, and generally decrease to about 0.38 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 1999. It then generally increases to about .5 by early 2000, and generally decreases to about to end at about .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 September 2009. There are two series, "Total" and "Large homebuilders". These two series use two different scales. Total begins at about 0.92 and generally increases to about 1.4 by mid-2005. It then generally decreases to about 0.32 by early 2009, and generally increases to end at about 0.4. Large homebuilders begins at about 0.24 and generally decreases to about 0.21 by 2001. It then generally increases to about 0.43 by mid-2005, and generally decreases to end at about 0.12.

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 September 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 250. Months' supply begins at about 3.8 and generally increases to about 4.3 by 2001. It then generally decreases to about 3.6 by 2003, and generally increases to about 11.2 by early 2009. It then generally decreases to end at about 7.4.

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 2009. There are two series, "Existing home sales", which is by millions of units (annual rate), and "Pending home sales", an index (2001=100). These two series use two different scales. Existing home sales begins at about 4.5 and generally increases to about 6.35 by 2005. It then generally decreases to about 4.0 by late 2008, and generally increases to end at about 4.88 by September. Pending home sales begins at about 101 and generally increases to about 108 by 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 104 by August.

Source: National Association of Realtors.

Figure: Mortgage Rates

Line chart showing 30-year conforming FRM, by percent, 2001 to October 21, 2009. The series begins at about 7.15 and generally decreases to about 5.25 by mid-2003. It then generally increases to about 6.8 by mid-2006, and generally decreases to end at about 4.9.

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 August 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 10 and generally decreases to about 8 by early 2002. It then generally increases to about

17.5 by early 2005, and generally decreases to about -20 by early 2009. It then generally increases to end at about -10. Monthly FHFA purchase-only index begins at about 7.5 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 -3. 20-city S&P/Case-Shiller monthly price index begins at about 12.5 and generally decreases to about 7 by early 2002. It then generally increases to about 17.5 by mid-2004, and generally decreases to about -19 by early 2009. It then generally increases to end at about -13.

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 October 2009. There are two series, "5 years ahead" and "1 year ahead". 5 years ahead begins at about 65 and generally decreases to about 42 by 2008. It then generally increases to end at about 54. 1 year ahead begins at about 30 and generally decreases to about -20 by early 2009. It then generally increases to end at about 10.

Note: Diffusion index is constructed by subtracting expectations of decrease from expectations of increase. October 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				
	Q2	Q3	July	Aug.	Sept.
	Annual rate		Monthly rate		
Shipments	-17.5	-.2	.6	-2.6	2.2
Excluding aircraft	-14.4	-1.9	.3	-2.2	-.2
Computers and peripherals	-8.1	-4.0	1.8	-4.3	.4
Communications equipment	-3.5	24.7	3.8	-4.6	-4.9
All other categories ¹	-15.9	-3.9	-.2	-1.8	.2
Orders	13.3	22.2	7.0	-7.7	2.5
Excluding aircraft	3.8	11.2	-1.3	-.8	2.0
Computers and peripherals	13.0	-1.7	-3.7	-2.8	.4
Communications equipment	48.2	34.9	4.8	-4.4	-8.4
All other categories ¹	-.6	10.4	-1.7	-.2	3.3
Memo:					
Shipments of complete aircraft ²	36.8	n.a.	34.1	32.6	n.a.

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

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

n.a. Not available.

Source: Census Bureau.

Figure: Communications Equipment

Line chart, by billions of chained (2005) dollars, ratio scale, 2000 to September 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 2002, and generally increases to about 7 by mid-2006. It then generally decreases to end at about 5.8. Orders begins at about 9.8 and generally increases to about 14 by 2000. It then generally decreases to about 2.4 by late 2002, and generally increases to about 8.5 by early 2006. It then generally decreases to end at about 5.5.

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 September 2009. There are two series, "Orders" and "Shipments". They begin at about 44 and generally decrease to about 42 by early 2000. They then generally increase to about 36 by early 2002. Orders generally increases to about 49 by 2006, and generally decreases to about 33 by early 2009. It then generally increases to end at about 35. Shipments generally increases to about 46 by late 2006, and generally decreases to end at about 35.

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 September 2009. There are two series, "Industrial production", 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 97 and generally increases to about 108 by 2001. It then generally decreases to about 97 by early 2003, and generally increases to about 230 by 2008. It then generally decreases to end at about 150. Real M3 shipments begins at about 8.4 and generally increases to about 16.2 by mid-2006. It then generally decreases to about 12.6 by 2006, and generally increases to about 18 by late 2007. It then generally decreases to about 14.2 by late 2008, and generally increases to end at about 16.

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 September 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 300 by 2001. It then generally increases to about 960 by early 2006, and generally decreases to about 150 by early 2009. It then generally increases to end at about 300. Sales of class 4-8 trucks begins at about 525 and generally decreases to about 290 by early 2003. It then generally increases to about 580 by late 2006, generally decreases to about 190 by 2009, and generally increases to end at about 200.

Note: Annual rate, FRB seasonals.

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

Fundamentals of Equipment and Software Investment

Note: In each panel, shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER). 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 2.9 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 2004, and generally decreases to end at about 5.2. It is at about 2.3 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 -2 and generally increases to about 1.5 by late 1990. It then generally decreases to about -8 by late 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 -8 and generally increases to about -6 by late 1990. It then generally decreases to about -12.5 by 1992, and generally increases to about -1 by 1994. It then generally decreases to about -13.8 by late 2003, and generally increases to about 2.4 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 October 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 1997. It then generally increases to about 13.7 by late 2000, and generally decreases to about 7.3 by late 2003. It then generally increases to about 17.8 by late 2008, and generally decreases to end at about 9.3. It is at about 9.3 at the time of the NBER peak. 10-year BBB begins at about 10.1 and generally decreases to about 7 by 1993. It then generally increases to about 9 by late 1993, and generally decreases to about 5.2 by 2004. It then generally increases to about 10 by late 2008, and generally decreases to end at about 6. It is at about 6.4 at the time of the NBER peak.

Note: End of month. October value as of October 27.

Source: Merrill Lynch.

Figure: NFIB: Survey on Loan Availability

Line chart, by percent, 1990 to September 2009. There are two series, "Credit expected to be higher" and "Credit more difficult to obtain". These two series use two

different scales. Credit expected to be higher begins at about 8 and generally increases 13 by late 1990. It then generally decreases to about 0 by early 1997, and generally increases to about 16.2 by late 2008. It then generally decreases to about 11.5 by 2009, and generally increases to end at about 15. 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 early 1998, and generally increases to about 16 by 2009. It then generally decreases to end at about 14. 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 2009. There are two series, "ISM" and "Philadelphia Fed". These two series use two different scales. ISM begins at about 49 and generally decreases to about 40 by early 1991. It then generally increases to about 62 by 2003, and generally decreases to about 32 by late 2008. It then generally increases to end at about 53 by September. It is at about 50 at the time of the NBER peak. Philadelphia Fed begins at about 40 and generally increases to about 45 by 1990. It then generally decreases to about 25 by late 1990, and generally increases to about 70 by late 1992. It then generally decreases to about 32 by early 2000, and generally increases to about 68 by early 2003. It then generally decreases to about 30 by early 2009, and generally increases to end at about 57 by October. It is at about 50 at the time of the NBER peak.

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

Nonresidential Construction and Indicators

(All spending series are seasonally adjusted at an annual rate; nominal CPIP deflated by BEA prices through Q2 and by staff projection thereafter)

Figure: Total Structures

Line chart, by billions of chained (2005) dollars, 1999 to August 2009. The series begins at about 320 and generally increases to about 360 by 2000. It then generally decreases to about 250 by mid-2005, and generally increases to about 360 by 2008. It then generally decreases to end at about 312.

Source: Census Bureau.

Figure: Office, Commercial, Communication, and Other

Line chart, by billions of chained (2005) dollars, 1999 to 2009. There are four series, "Other", "Commercial", "Office", and "Communication". Other begins at about 90 and generally decreases to about 75 by mid-2005. It then generally increases to about 108 by mid-2008, and generally decreases to end at about 91. Commercial begins at about 74 and generally increases to about 85 by early 2000. It then generally decreases to about 64 by early 2003, and generally increases to about 78 by 2007. It then generally decreases to end at about 42 by August. Office begins at about 60 and generally decreases to about 56 by early 2000. It then generally increases to about 72 by late 2000, and generally decreases to about 34 by 2003. It then generally increases to about 48 by mid-2008, and generally decreases to end at about 33. Communication begins at about 16 and generally increases to about 27 by 2000. It then generally decreases to about 15 by late 2003, 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 August 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 by late 2001. It then generally decreases to about 23 by mid-2004, and generally increases to end at about 64. Manufacturing begins at about 50 and generally decreases to about 22.5 by early 2003. It then generally increases to about 68 by 2009, and generally decreases to end at about 65.

Source: Census Bureau.

Figure: Drilling and Mining Indicators

Line chart, 1999 to 2009. There are two series, "Footage drilled", which is by millions of feet, and "Drilling rigs in operation", which is by number. These two series use two different scales. Footage drilled begins at about 8 and generally increases to about 16 by 2001. It then generally decreases to about 12 by 2002, and generally increases to about 32 by late 2008. It then generally decreases to about 13.8 by 2009, and generally increases to end at about 15 by August. Drilling rigs in operation begins at about 600 and generally decreases to about 520 by 1999. It then generally increases to about 1280 by 2001, and generally decreases to about 800 by 2002. It then generally increases to about 1925 by 2008, and generally decreases to about 900 by mid-2009. It then generally increases to end at about 1000 by October.

Note: The October readings for drillings rigs are based on data through October 23, 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 7.8 by 2000. It then generally increases to about 16.8 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 6.8 by mid-2000. It then generally increases to about 12 by early 2004, and generally decreases to about 9.3 by mid-2007. It then generally increases to end at about 13.2. Retail begins at about 8 and generally decreases to about 7 by early 2001. It then generally increases to about 8.2 by early 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 September 2009. There are two series, "Billings", which is a diffusion index, and "Change in employment", which is by percent. These two series use two different scales. Billings begins at about 54.5 and generally decreases to about 43.5 by late 2001. It then generally increases to about 59 by 2005, and generally decreases to about 34 by early 2009. It then generally increases to end at about 42.5. Change in employment begins at about 0.0 by 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	June	July	Aug.
<i>Real inventory investment (chained 2005 dollars)</i>						
Total nonfarm business	-35.7	-114.9	-163.1	...	...	...
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	-110.9	-137.5	-109.1^e	n.a.
Manufacturing	8.2	-28.9	-39.8	-44.8	-36.4 ^e	n.a.
Wholesale trade ex. motor vehicles & parts	-10.2	-8.8	-52.5	-81.6	-56.5 ^e	n.a.
Retail trade ex. motor vehicles & parts	-17.8	-11.6	-18.6	-11.2	-16.1 ^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	-178.0	-138.6	-110.1
Manufacturing	-65.2	-77.3	-63.6	-68.9	-55.2	-47.2
Wholesale trade ex. motor vehicles & parts	-55.7	-47.3	-62.9	-90.6	-63.4	-51.8
Retail trade ex. motor vehicles & parts	-34.9	-18.6	-23.7	-18.5	-20.0	-11.0

n.a. Not available.

... Not applicable.

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

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

Figure: Inventory Ratios ex. Motor Vehicles

Line chart, by months, 2000 to 2009. There are two series, "Staff flow-of-goods system" and "Census book-value data". Staff flow-of-goods system begins at about 1.76 and generally decreases to about 1.52 by late 2007. It then generally increases to about 1.67 by early 2009, and generally decreases to end at about 1.62 by September. Census book-value data begins at about 1.35 and generally increases to about 1.41 by 2001. It then generally decreases to about 1.18 by late 2005, and generally increases to about 1.38 by late 2008. It then generally decreases to end at about 1.29 by August.

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 September 2009. The series begins at about 47 and generally increases to about 56 by early 2001. It then generally decreases to about 37.2 by 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.

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 September 2009. Data are 12-month moving sums. The series begins at about -190 and generally increases to about 270 by 2001. It then generally decreases to about -450 by 2004, and generally increases to about -160 by 2007. It then generally decreases to end at about -1150. There is a second series series, represented by a thin line, that begins at about -480 in 2008, and generally decreases to end at about -1400.

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 September 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 11.8 by late 2000. It then generally decreases to about -12.5 by mid-2002, and generally increases to about 15 by late 2005. It then generally decreases to end at about -17. Outlays begins at about 4 and generally decreases to about 2 by mid-1998. It then generally increases to about 8 by mid-2006, and generally decreases to about 3 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-September			12 months ending in September		
	2008	2009	Percent change	2008	2009	Percent change
Outlays	739.7	818.6	10.7	2,961.5	3,258.1	10.0
Net interest	63.9	42.1	-34.2	248.9	190.8	-23.3
National defense	163.0	171.0	4.9	624.5	665.7	6.6
Major transfers ¹	399.9	481.3	20.4	1,642.0	1,898.3	15.6
Other	112.9	124.2	10.0	446.2	503.3	12.8
Receipts	589.7	515.9	-12.5	2,523.6	2,104.6	-16.6
Individual income and payroll taxes	468.7	424.5	-9.4	1,996.5	1,759.5	-11.9
Corporate income taxes	67.8	36.3	-46.4	304.3	138.2	-54.6
Other	53.2	55.2	3.7	222.8	206.9	-7.1
Surplus or deficit (-)	-150.0	-302.7	...	-437.9	-1,153.5	...
Memo:						
Unadjusted surplus or deficit (-)	-168.9	-330.8	...	-454.8	-1,417.1	...

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

... Not applicable.

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 4.5 and generally decreases to about 0 by 2000. It then generally increases to about 8.8 by 2001, and generally decreases to about -3 by mid-2001. It then generally

increases to about 9 by late 2001, and generally decreases to about -1.8 by late 2008. It then generally increases to end at about 4.2. 4-quarter moving average begins at about 6 and generally decreases to about 2 by late 2000. It then generally increases to about 4.8 by late 2001, and generally decreases to about -1 by 2005. It then generally increases to about 1.8 by early 2007, and generally decreases to about -1 by early 2009. It then generally increases 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, 1999 to 2009:Q3. The series begins at about 40 and generally decreases to about 24 by early 2000. It then generally increases to about 46 by early 2001, and generally decreases to about 0 by 2003. It then generally increases to about 22 by 2007, and generally decreases to end at about -42.

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:Q3. The series begins at about 202 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 2007. It then generally decreases to about 218 by early 2009, and generally increases to end at about 229 in 2009:Q2. 2009:Q3 is marked with a dot at about 232.

Note: Nominal CPIP deflated by BEA prices through Q2 and by a staff projection thereafter. Observation for Q3 is the average for July and August.

Source: Census Bureau, Construction Spending.

Figure: State Revenues

Line chart, by percent change from year earlier, 1999 to 2009:Q2. There are two series, "Individual and corporate income taxes" and "Total revenues". Individual and corporate income taxes begins at about 4 and generally increases to about 18 by 2000. It then generally decreases to about -19 by 2002, and generally increases to about 27 by mid-2005. It then generally decreases to end at about -23.5. Total revenues begins at about 4 and generally increases to about 12.5 by early 2000. It then generally decreases to about -10 by 2002, and generally increases to about 16 by 2005. It then generally decreases to end at about -16.5.

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:Q2. There are two series, "Property taxes" and "Total revenues". Property taxes begins at about 6 and generally decreases to about -1 by 2000. It then generally increases to about 22.8 by 2002, and generally decreases to about -8 by 2003. It then generally increases to about 16 by 2003, and generally decreases to end at about 0. Total revenues begins at about 2.8 and generally increases to about 15 by 2002. It then generally decreases to about -5 by 2003, and generally increases to about 13 by late 2003. It then generally decreases to end at about -2.5.

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	
	Sept. 2008	Sept. 2009	Annual rate		Monthly rate	
			June 2009	Sept. 2009	Aug. 2009	Sept. 2009
<i>CPI</i>						
Total	4.9	-1.3	3.3	2.5	.4	.2
Food	6.2	-2	-1.5	-1.1	.1	-.1
Energy	23.1	-21.6	22.1	21.1	4.6	.6
Ex. food and energy	2.5	1.5	2.4	1.3	.1	.2
Core goods	.5	1.6	4.1	.9	-.3	.3
Core services	3.2	1.5	1.8	1.4	.2	.1
Shelter	2.4	.7	1.4	-.1	.1	.1
Other services	4.5	2.6	2.1	4.0	.4	.3
Memo: core ex. tobacco	2.4	1.2	2.0	1.1	.1	.2
Chained CPI (n.s.a.) ¹	4.2	-1.4	...	...	...	...

Ex. food and energy ¹	2.0	1.1	...	...	...	...
<i>PCE prices</i> ²						
Total	4.1	-5	2.8	2.0	.3	.1
Food and bev. at home	7.0	-1.2	-2.8	-2.3	.1	-2
Energy	24.5	-22.6	26.9	23.6	5.1	.7
Ex. food and energy	2.5	1.3	2.0	1.3	.1	.1
Core goods	.6	1.2	2.7	-.1	-.2	.2
Core services	3.2	1.3	1.8	1.7	.2	.1
Housing services	2.7	1.4	1.4	-.4	.1	-.1
Other services	3.3	1.3	2.0	2.4	.2	.2
Memo: core ex. tobacco	2.5	1.1	1.7	1.2	.1	.1
Core market-based	2.6	1.6	2.0	1.1	.1	.1
Core non-market-based	2.1	-.7	2.6	2.4	.1	.2
<i>PPI</i>						
Total finished goods	8.8	-4.8	9.0	1.2	1.7	-6
Food	7.8	-4.2	4.4	-4.9	.4	-.1
Energy	23.4	-22.1	40.8	12.0	8.0	-2.4
Ex. food and energy	4.0	1.8	2.1	.0	.2	-.1
Core consumer goods	4.2	2.2	2.4	.0	.1	-.1
Capital equipment	3.6	1.2	1.3	.0	.3	-.1
Intermediate materials	15.3	-11.7	6.8	7.2	1.8	.2
Ex. food and energy	11.8	-7.5	-2.1	7.2	.6	.9
Crude materials	24.2	-31.5	54.4	-11.3	3.8	-2.1
Ex. food and energy	16.4	-19.7	37.3	63.3	6.0	3.6

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

2. PCE prices in September 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 September are staff estimates)

Figure: PCE Prices

Line chart, by percent, 2000 to September 2009. There are two series, "Total PCE" and "Core PCE". Total PCE begins at about 2.2 and generally increases to about 3 by 2000. It then generally decreases to about 0.6 by early 2002, and generally increases to about 4.5 by mid-2008. It then generally decreases to end at about -0.5. Core PCE begins at about 1.6 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 mid-2008. It then generally decreases to end at about 1.3.

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

Figure: Measure 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 mid-2001. It then generally decreases to about 1.2 by 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 mid-2008. It then generally decreases to end at about 1.4 by September. Market-based components begins at about 1.4 and generally increases to about 2 by mid-2001. It then generally decreases to about 1.2 by 2003, and generally increases to about 2.7 by 2008. It then generally decreases to end at about 1.6 by August. Trimmed mean begins at about 2 and generally increases to about 2.6 by mid-2001. It then generally decreases to about 1.7 by late 2003, and generally increases to about 3 by early 2007. It then generally decreases to end at about 1.7 by August.

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 September 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 late 2001, and generally increases to about 2.7 by mid-2008. It then generally decreases to end at about 1.3. CPI chained begins at about 1.85 by late 2000, and generally increases to about 2.2 by 2002. It then generally decreases to about 0.8 by early 2004, and generally increases to about 2.7 by 2006. It then 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 September 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 mid-2001. It then generally decreases to about 2 by 2001, and generally increases to about 4 by 2002. It then generally decreases to end at about 1.2. Goods begins at about -1 and generally increases to about 0 by early 2001. It then generally decreases to about -2.4 by 2003, and generally increases to end at about 1.4.

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

Figure: Total PCE

Line chart, by percent, 2000 to September 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 early 2002, and generally increases to about 4.5 by mid-2008. It then generally decreases to end at about -1. 3-month change, annual rate begins at about 3 and generally increases to about 4.5 by early 2000. It then generally decreases to about -1.5 by 2001, and generally increases to about 8 by 2005. It then generally decreases to about -8 by late 2008, and generally increases to about 4 by 2009. It then generally decreases to end at about 2.

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

Figure: PCE excluding Food and Energy

Line chart, by percent, 2000 to September 2009. There are two series, "PCE excluding Food and Energy" and "3-month change, annual rate". PCE excluding Food and Energy begins at about 1.6 and generally increases to about 2.6 by 2002. It then generally decreases to about 1.4 by 2003, and generally increases to about 2.7 by mid-2008. It then generally decreases to end at about 1.3. 3-month change, annual rate begins at about 2.2 and generally increases to about 2.8 by 2000. It then generally decreases to about -1.1 by 2001, and generally increases to about 4 by late 2001. It then generally decreases to about 0.2 by late 2008, and generally increases to about 2.2 by 2009. It then generally decreases 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 October 19, 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 98 and generally increases to about 110 by 2005. It then generally decreases to about 80 by mid-2005, and generally increases to about 166 by 2007. It then generally decreases to about 70 by mid-2008, and generally increases to about 159 by 2008. It then generally decreases to end at about 88.

Figure: Gasoline Price Decomposition

Line chart, by cents per gallon, 2005 to October 19, 2009. There are three series, "Retail price", "Rack price", and "Average spot crude price". Retail price begins at about 190 and generally increases to about 300 by 2005. It then generally decreases to about 225 by late 2005, 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 165. Rack price begins at about 135 and generally increases to about 235 by 2005. It then generally decreases to about 155 by early 2007, and generally increases to about 350 by mid-2008. It then generally decreases to about 120 by late 2008, and generally increases to end at about 215. 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 180.

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

Figure: Gasoline Inventories

Line chart, by millions of barrels, 2006 to October 23, 2009. The series begins at about 197 and generally increases to about 241 by early 2008. It then generally decreases to about 195 by 2008, and generally increases to about 223 by early 2009. It then generally decreases to end at about 214.

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 June 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, late 2004 to mid-2010. The series begins at about 5.2 and generally increases to about 15.2 by late 2005. It then generally decreases to about 4.1 by 2006, and generally increases to about 13.4 by mid-2008. It then generally decreases to about 2.1 by 2009, and generally increases to end at about 4.8 on October 27, 2009. Futures price begins at about 4.8 on October 27, 2009 and generally increases to end at about 6.

Note: National average spot price.

Source: Bloomberg.

Figure: PCE: Food and Home and Core Prices

Line chart, by 12-month percent change, 2005 to September 2009. There are two series, "Food and beverages" and "Ex. food and energy". Food and beverages begins at about 2.1 and generally decreases to about 0.9 by 2006. It then generally increases to about 7 by 2008, and generally decreases to end at about -1.2. Ex. food and energy begins at about 2.2 and generally increases to about 2.6 by mid-2008. It then generally decreases to end at about 1.4.

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis. September 2009 values are staff estimates.

Figure: Spot Prices of Agricultural Commodities

Line chart, by dollars per bushel, 2005 to October 27, 2009. There are three series, "Corn", "Soybeans", and "Wheat". Corn uses one scale and Soybeans and Wheat use another scale. Corn begins at about 2 and generally increases to about 7 by mid-2008. It then generally decreases to about 3 by 2009, and generally increases to end at about 3.8. Soybeans begins at about 5.2 and generally increases to about 7.2 by mid-2005. It then generally decreases to about 5.2 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 about 12.5 by mid-2009. It then generally decreases to end at about 9.9. Wheat begins at about 4 and generally increases to about 13 by early 2008. It then generally decreases to about 4.2 by 2009, and generally increases to end at about 5.2.

Source: Commodity Research Bureau.

Measures of Expected Inflation

Figure: Survey Measures (Reuters/University of Michigan)

Line chart, 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 late 1985. There is no data from late 1985 to mid-1990, where it begins at about 4.4 by 1990 and generally decreases to end at about 3. Median, next 12 months begins at about 6, and generally increases to about 10.2 by 1980. It then generally decreases to about 2.6 by early 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 2.8.

There is a second line chart, by percent, 2005 to October 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 decreases to about 3.5 by 2008. It then generally decreases to about 2.6 by early 2009, and generally increases to end at about 2.9. Median, next 12 months begins at about 2.9 and generally increases to about 4.6 by 2005. It then generally decreases to about 3 by late 2006, and generally increases to about 5.25 by 2008. It then generally decreases to about 1.7 by late 2008, and generally increases to end at about 2.8.

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 3.1 and generally increases to about 7.5 by early 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 3.4 by early 1973. It then generally increases to about 8.8 by 1981, and generally decreases to about 1.3 by late 1990. It then generally increases to end at about 2.

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 generally increases to about 2.3 by 2009. It then generally decreases 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 early 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:Q3. Data are quarterly. There are two series, "5 to 10 years ahead" and "Next 5 years". 5 to 10 years ahead begins at about 2.1 and generally increases to about 3.1 by late 2003. It then generally decreases to about 2.5 by 2005, and generally increases to end at about 3. Next 5 years begins at about 1.6 and generally increases to about 1.9 by 2001. It then generally decreases to about 1.2 by 2002, and generally increases to about 2.6 by early 2005. It then generally decreases to about -0.7 by late 2008, and generally increases to end at about 1.1.

There is a second line chart, by percent, 2005 to October 27, 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 decreases to about -1.6 by late 2008. It then generally increases to end at about 1.6.

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, an index (2006 = 100), ratio scale, 1991 to October 27, 2009. There are two series, "Industrials" and "Metals". Industrials begins at about 57 and generally decreases to about 50 by late 1991. It then generally increases to about 68 by early 1995, and generally decreases to about 48 by late 2001. It then generally increases to about 138 by 2008, and generally decreases to about 60 by late 2008. It then generally increases to end at about 99. Metals begins at about 47 and generally decreases to about 38 by 1993. It then generally increases to about 57 by early 1995, and generally decreases to about 32 by late 2001. It then generally increases to about 160 by 2008, and generally decreases to about 60 by late 2008. It then generally increases to end at about 110.

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, an index (1967 = 100), ratio scale, 1991 to October 27, 2009. 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 352 by mid-1995, and generally decreases to about 220 by late 2001. It then generally increases to about 560 by early 2008, and generally decreases to about 315 by late 2008. It then generally increases to end at about 450. Futures begins at about 225 and generally decreases to about 200 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 610 by mid-2008, and generally decreases to about 340 by late 2008. It then generally increases to end at about 450.

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 9/15/09 ²	9/15/09 ² to 10/27/09	52-week change to 10/27/09
JOC industrials	-41.4	43.4	4.2	20.0
JOC metals	-48.2	66.3	7.7	56.1
CRB spot industrials	-34.3	33.2	.9	17.2
CRB spot foodstuffs	-14.1	6.1	5.3	3.2
CRB futures	-24.7	21.9	6.3	27.2

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

2. September 15, 2009, is the Tuesday preceding publication of the September Greenbook. [Return to table](#)

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

Accessible Material

November 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 Oct. 27 from selected dates (percentage points)		
	Sept. 12	Aug. 11	Sept. 22	Oct. 27	2008 Sept. 12	2009 Aug. 11	2009 Sept. 22
<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	.18	.11	.08	-1.38	-.10	-.03
6-month	1.80	.28	.20	.17	-1.63	-.11	-.03
Commercial paper (A1/P1 rates) ²							
1-month	2.39	.22	.18	.16	-2.23	-.06	-.02
3-month	2.75	.29	.21	.25	-2.50	-.04	.04
Large negotiable CDs ¹							
3-month	2.79	.32	.25	.22	-2.57	-.10	-.03
6-month	3.09	.46	.35	.31	-2.78	-.15	-.04
Eurodollar deposits ³							
1-month	2.60	.50	.40	.32	-2.28	-.18	-.08
3-month	3.00	.80	.55	.45	-2.55	-.35	-.10
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	1.20	.99	.99	-1.25	-.21	.00
5-year	2.97	2.70	2.44	2.41	-.56	-.29	-.03
10-year	3.93	3.97	3.74	3.72	-.21	-.25	-.02
U.S. Treasury indexed notes ⁵							
5-year	1.33	1.54	1.11	.78	-.55	-.76	-.33
10-year	1.77	1.89	1.69	1.51	-.26	-.38	-.18
Municipal general obligations (Bond Buyer) ⁶							
	4.54	4.65	4.20	4.31	-.23	-.34	.11
Private instruments							
10-year swap	4.26	3.98	3.67	3.70	-.56	-.28	.03
10-year FNMA ⁷	4.36	4.35	4.12	4.04	-.32	-.31	-.08
10-year AA ⁸	6.62	5.41	5.11	5.10	-1.52	-.31	-.01
10-year BBB ⁸	7.22	6.72	6.36	6.22	-1.00	-.50	-.14
10-year high yield ⁸	10.66	10.61	9.90	9.44	-1.22	-1.17	-.46
Home mortgages (FHLMC survey rate)							
30-year fixed	5.78	5.29	5.04	5.00	-.78	-.29	-.04

1-year adjustable	5.03	4.72	4.52	4.54	-49	-18	.02
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Stock exchange index	Record high		2009			Change to Oct. 27 from selected dates (percent)		
	Level	Date	Aug. 11	Sept. 22	Oct. 27	Record high	2009 Aug. 11	2009 Sept. 22
Dow Jones Industrial	14,165	10-9-07	9,241	9,830	9,882	-30.23	6.93	.53
S&P 500 Composite	1,565	10-9-07	994	1,072	1,063	-32.06	6.95	-.77
Nasdaq	5,049	3-10-00	1,970	2,146	2,116	-58.09	7.43	-1.41
Russell 2000	856	7-13-07	562	621	587	-31.41	4.42	-5.43
D.J. Total Stock Index	15,807	10-9-07	10,243	11,083	10,928	-30.87	6.68	-1.40

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](#)
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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.
August 11, 2009, is the day before the August 2009 FOMC monetary policy announcement.
September 22, 2009, is the day before the most recent FOMC monetary policy announcement.

Policy Expectations and Treasury Yields

Figure: Interest Rates

Line chart, by percent, September 16, 2009 to October 27, 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 3.4 and generally increases to about 3.5 by September 22. It then generally decreases to about 3.12 by October 2, and generally increases to about 3.56 by October 27. It then generally decreases to end at about 3.45. March 2010 Eurodollar begins at about 0.62 and generally increases to about 0.74 by September 17. It then generally decreases to about 0.60 by October 2, remains about constant until October 27, and generally decreases to end at about 0.51. The FOMC statement is marked in the time series at about late September 23. ISM index is marked in the time series at about October 1. Nonfarm payroll is marked in the time series at about October 2. Retail sales is marked in the time series at about October 14. PPI is marked in the time series at about October 20. Consumer confidence is marked in the time series at about October 27.

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 January 2012. There are two series, "September 22, 2009" and "October 27, 2009". September 22, 2009 begins at about 0.2 and generally increases to end at about 2.75. October 27, 2009 begins at about generally increases to end at about 2.5.

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

Source: CME Group.

Figure: Treasury Yield Curve

Line chart, by percent, 1 to 20 years ahead. There are two series, "October 27, 2009" and "September 22, 2009". They begin at about 0.2 and generally increase together to about 4.2 by about 13 years ahead. October 27, 2009 generally increases to end at about 4.3 and September 22, 2009 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 October 27, 2009. Data are daily. The September 2009 FOMC meeting is marked in the time series. The series begins at about 4.5 and generally decreases to about 3.2 by May 2007. It then generally increases to about 13.5 by October 2008, and generally decreases to about 6.8 by April 2009. It then generally increases to about 11.7 by May 2009, and generally decreases to about 6.8 by October 2009. It then generally increases to end at about 8.2. It is at about 7.8 at the time of the September 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 October 27, 2009. Data are daily. The September 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 November 2008. It then generally decreases to about 2 by December, and generally increases to end at about 3. It is at about 2.9 at the time of the September 2009 FOMC meeting. Next 5 years begins at about 2.3 and generally decreases to about 1.9 by March 2008. It then generally increases to about 2.6 by June 2008, and generally decreases to about -1.4 by early December. It then generally increases to end at about 1.7. It is at about 1.3 at the time of the September 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 October 27, 2009. January 2, 2009 = 100. Data are daily. The September 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 172 by January. It then generally increases to about 212 by late January, and generally decreases to about 40 by March 2009. It then generally increases to about 110 by October 2009, and generally decreases to end at about 100. It is at about 102 at the time of the September 2009 FOMC meeting. Regional and smaller banks begins at about 121 and generally decreases to about 80 by July 2008. It then generally increases to about 140 by late September 2008, and generally decreases to about 42 by March 2009. It then generally increases to end at about 73. It is at about 75 at the time of the September 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 October 27, 2009. Unit is basis points. Data are daily. The September 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 210 by March 2008. It then generally decreases to about 65 by May 2008, and generally increases to about 370 by March 2009. It then generally decreases to end at about 100. It is at about 115 at the time of the September 2009 FOMC meeting. Other banks begins at about 55 and generally increases to about 240 by late September 2008. It then generally decreases to end at about 120. It is at about 98 at the time of the September 2009 FOMC meeting.

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

Source: Markit.

Figure: Libor over OIS Spread

Line chart, July 2007 to October 28, 2009. Unit is basis points. Data are daily. The September 2009 FOMC meeting is marked in the time series. There are three series, "1-month", "3-month", and "6-month". They begin at about 10 and generally increase to about 95 by September 2007. 1-month generally decreases to about 22 by November 2007, and generally increases to about 330 by October 2008. It then generally decreases to end at about 10. It is at about 10 at the time of the September 2009 FOMC meeting. 3-month generally decreases to about 38 by late January 2008, and generally increases to about 355 by October. It then generally decreases to end at about 10. It is at about 10 at the time of the September 2009 FOMC meeting. 6-month generally decreases to about 48 by late January 2008, and generally increases to about 330 by October 2008. It then generally decreases to end at about 40. It is at about 45 at the time of the September 2009 FOMC meeting.

Source: British Bankers' Association and Prebon.

Figure: Spreads on 30-day Commercial Paper

Line chart, July 2007 to October 26, 2009. Unit is basis points. Data are daily. The September 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 200 by December 2007. They then generally decrease to about 48 by February 2008. ABCP generally increases to about 390 by October 2008, and generally decreases to end at about 20. It is at about 10 at the time of the September 2009 FOMC meeting. A2/P2 generally increases to about 610 by January 2009, and generally decreases to end at about 20. It is at about 5 at the time September 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: Usage of TALF and other lending facilities

Line chart, by billions of dollars, January 2007 to October 27, 2009. Data are daily. The September 2009 FOMC meeting is marked in the time series. There are two series, "Other facilities" and "TALF". Other facilities begins at about 0 and remains about constant until about January 2008. It then generally increases to about 285 by December 2008, and generally decreases to end at about 45. It is at about 60 at the time of the September 2009 FOMC meeting. TALF begins at about 0 and remains about constant until about late March 2009. It then generally increases to end at about 45. It is at about 45 at the time of the September 2009 FOMC meeting.

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

Source: Federal Reserve Board.

Figure: Federal Reserve Large-Scale Asset Purchases

Line chart, by billions of dollars, December 2008 to October 28, 2009. Data are weekly. The September 2009 FOMC meeting is marked in the time series. There are three series, "Agency MBS", "Agency debt", and "Treasury securities". Agency MBS begins at about 0 and generally increases to end at about 990. It is at about 880 at the time of the September 2009 FOMC meeting. Agency debt begins at about 0 and generally increases to end at about 150. It is at about 140 at the time of the September 2009 FOMC meeting. Treasury securities begins at about 0, remains about constant until about late February 2009, and generally increases to end at about 300. It is at about 300 at the time of the September 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 October 27, 2009. September 22, 2009 = 100. Data are daily. The September 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 160 and generally decreases to about 40 by early March. It then generally increases to end at about 97. It is at about 98 at the time of the September 2009 FOMC meeting. S&P 500 begins at about 130 and generally decreases to about 63 by March 2009. It then generally increases to end at about 100. It is at about 98 at the time of the September 2009 FOMC meeting.

Source: Standard & Poor's.

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

Line chart, by percent, 1990 to October 27, 2009. Data are monthly. There are two series, "Expected 10-year real equity return" and "Expected real yield on 10-year Treasury". Expected 10-year real equity return begins at about 7.5 and generally increases to about 9.5 by late 1990. It then generally decreases to about 2 by early 2000, and generally increases to about 12 by late 2008. It then generally decreases to end at about 8.2. Expected real yield on 10-year Treasury begins at about 4.4 and generally decreases to about 2 by 1993. It then generally increases to about 4.8 by late 1994, and generally decreases to end at about 1.4.

Note: Expected real yield on 10-year Treasury is off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation. There are two marks on the chart, at about 8.2 for Expected 10-year real equity return and about 1.5 for Expected real yield on 10-year Treasury that denote the latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S.

Source: Thomson Financial.

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

Line chart, by percent, 2002 to October 27, 2009. Data are weekly, as measured on Fridays or the most recent business day. The September 2009 FOMC meeting is marked in the time series. The series begins at about 21 and generally increases to about 42 by mid-2002. It then generally decreases to about 11 by 2006, and generally increases to about 79 by late 2008. It then generally decreases to end at about 25. It is at about 28 at the time of the September 2009 FOMC meeting.

Source: Chicago Board of Exchange.

Figure: Corporate Bond Yields

Line chart, by percent, 2002 to October 27, 2009. Data are daily. The September 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 decreases to about 10.2 by 2002. It then generally increases to about 12.2 by 2002, and generally decreases to about 7.2 by early 2005. It then generally increases to about 20 by late 2008, and generally decreases to end at about 9.5. It is at about 10.2 at the time of the September 2009 FOMC meeting. 10-year BBB begins at about 7.6 and generally decreases to about 5 by 2003. It then generally increases to about 10 by late 2008, and generally decreases to end at about 6.2. It is at about 6.4 at the time of the September 2009 FOMC meeting.

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

Figure: Corporate Bond Spreads

Line chart, 2002 to October 27, 2009. Unit is basis points. Data are daily. The September 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 decreases to about 500 by 2002. It then generally increases to about 900 by 2002, and generally decreases to about 260 by early 2005. It then generally increases to about 1650 by late 2008, and generally decreases to end at about

580. It is at about 650 at the time of the September 2009 FOMC meeting. 10-year BBB begins at about 200 and generally increases to about 300 by late 2002. It then generally decreases to about 125 by early 2005, and generally increases to about 680 by late 2008. It then generally decreases to end at about 270. It is at about 290 at the time of the September 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 October 27, 2009. Unit is basis points. Data are daily. The September 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 230 by late 2005. It then generally decreases to about 105 by 2008, and generally increases to about 320 by early 2009. It then generally decreases to end at about 120. It is at about 115 at the time of the September 2009 FOMC meeting. Investment-grade begins at about 80 and generally increases to about 120 by 2005. It then generally decreases to about 50 by late 2006, and generally increases to about 150 by 2008. It then generally decreases to end at about 80. It is at about 95 at the time of the September 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: S&P 500 Earnings Per Share (Seasonally Adjusted)

Line chart, by dollars per share, 2000 to 2009:Q3. Data are quarterly. The series begins at about 14 and generally increases to about 14.5 by 2000. It then generally decreases to about 10.5 by late 2001, and generally increases to about 24 by 2007. It then generally decreases to about 5.7 by late 2008, and generally increases to end at about 16.

Note: 2009:Q3 is an estimate.

Source: Thomson Financial.

Figure: Revisions to Expected S&P 500 Earnings

Line chart, by percent, 2002 to mid-October 2009. Data are monthly. There are two series, "All firms" and "Nonfinancial firms". They begin at about -1 and generally increase to about 0.8 by 2002. They then generally decrease to about -3.8 by late 2002, and generally increase to about 2.5 by 2004. All firms generally decreases to about -17.8 by early 2009, and generally increases to about 2.4 by 2009. It then generally decreases to end at about 0. Nonfinancial firms generally decreases to about -17.5 by early 2009, and generally increases to end at about 1.

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, 1990 to 2009:Q2. There are two series, "Debt over total assets" and "Liquid assets over total assets". These series use two different scales. Debt over total assets begins at about 0.335 and generally decreases to about 0.282 by 1996. It then generally increases to about 0.31 by early 2002, and generally decreases to about 0.24 by 2006. It then generally increases to about 0.295 by early 2009, and generally decreases to end at about 0.285. Liquid assets over total assets begins at about 0.05 and generally increases to about 0.102 by 2004. It then generally decreases to about 0.088 by 2008, and generally increases to end at about 0.101.

Note: Data are annual through 1999 and quarterly thereafter; fixed investment is at an annual rate.

Source: Compustat.

Figure: Bond Ratings Changes of Nonfinancial Companies

Line 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 4 by 2002. It then generally increases to about 10 by 2007, and generally decreases to about 4 by 2008. It then generally increases to end at about 8. Downgrades begins at about 28 and generally increases to about 35 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 28 by 2009:H1. It then generally decreases to end at about 9.

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 1.7 by late 1997, and generally increases to about 4 by 2002. It then generally decreases to about 1.2 by late 2006, and generally increases to end at about 3.8. Bond default rate begins at about 1.6 and generally increases to about 3.2 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 late 2007, and generally increases to about 7.2 by early 2009. It then generally decreases to end at about 2.5.

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 October 2009. Data are monthly. The series begins at about 0.5 and generally decreases to about 0.3 by late 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 early 2009, and generally decreases to about 1.7.

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

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

Business Finance

Gross Issuance of Securities by U.S. Corporations

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

Type of security	2005	2006	2007	2008	2009			
					H1	Q3	Sept.	Oct. ^p
<i>Nonfinancial corporations</i>								
Stocks ¹	4.6	4.7	5.5	3.7	5.3	5.4	8.1	4.2
Initial public offerings	1.7	1.8	1.6	.3	.2	.6	1.4	1.2
Seasoned offerings	2.8	2.9	3.8	3.4	5.1	4.8	6.7	3.0
Bonds ²	18.7	29.3	35.1	27.7	50.1	30.4	39.9	23.0
Investment grade	8.7	13.1	17.5	19.5	32.6	13.4	17.1	7.0
Speculative grade	5.2	6.2	7.5	1.8	5.3	7.4	12.4	8.0
Other (sold abroad/unrated)	4.8	10.1	10.0	6.4	12.2	9.7	10.4	8.0
<i>Memo</i>								
Net issuance of commercial paper ³	-2	2.4	-.4	1.6	-12.4	-.9	2.0	22.0
Change in C&I loans at commercial banks ³	10.2	11.1	21.2	12.8	-17.7	-34.6	-42.3	-26.0
<i>Financial corporations</i>								
Stocks ¹	5.0	5.3	8.6	13.5	15.9	5.4	8.3	3.5
Bonds ²	170.4	180.6	151.7	45.4	44.5	38.9	52.2	40.0

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

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

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](#)

^p Forecast based on preliminary data. [Return to table](#)

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

Figure: Selected Components of Net Debt Financing

Line chart, by billions of dollars, 2005 to October 2009. Data are monthly rate, nonfinancial firms. There are three series, "Commercial paper", "C&I loans", and "Bonds". 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 9, Commercial paper 0, Total 15. 2006: Bonds 18, C&I loans 10, Commercial paper 4, Total 32. 2007: Bonds 27, C&I loans 21, Commercial paper 0, Total 48. 2008: Bonds 18, C&I loans 12, Commercial paper 2, Total 32. 2009:H1: Bonds 40, C&I loans -18, Commercial paper -12, Total 10. 2009:Q3: Bonds 22, C&I loans -33, Commercial paper -2, Total -13. October 2009: Bonds 12, C&I loans -26, Commercial paper 22, Total 8.

Note: Commercial paper and C&I loans are seasonally adjusted, period-end basis. October 2009 values are preliminary.

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

Figure: Components of Net Equity Issuance

Line 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 9, Public issuance 4, Repurchases -28, Cash mergers -15, Total -30. 2006: Private issuance 12, Public issuance 6, Repurchases -37, Cash mergers -23, Total -42. 2007: Private issuance 19, Public issuance 6, Repurchases -45, Cash mergers -38, Total -58. 2008: Private issuance 22, Public issuance 14, Repurchases -30, Cash mergers -16, Total -10. 2009:Q1: Private issuance 17, Public issuance 3, Repurchases -10, Cash mergers -6, Total 4. 2009:Q2: Private issuance 13, Public issuance 10, Repurchases -8, and Cash mergers -8, Total 7.

Note: Private issuance was revised back to 2005. 2009:Q2 values are estimates.

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

Commercial Real Estate

Figure: Commercial Mortgage Debt

Line chart, by percentage change, annual rate, 2000 to 2009:Q2. Data are quarterly. The series begins at about 10.6 and generally increases to about 12.5 by 2000. It then generally decreases to about 7.2 by 2002, and generally increases to about 17 by late 2005. It then generally decreases to end at about -2.8.

Source: Federal Reserve.

Figure: Commercial Real Estate Sales

Line chart, 2001 to September 2009. There are two series, "Dollar value of all sales", which is by billions of dollars, and "Percent 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 7 and generally increases to about 72 by early 2007. It then generally decreases to end at about 8. Percent 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 7 by 2002, and generally increases to about 16 by early 2007. It then generally decreases to about 9 by early 2008, and generally increases to end at about 47.

Note: 3-month moving averages.

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", data are quarterly, and "Moody's index", data are monthly. NCREIF TBI begins at about 75 and generally increases to about 200 by 2007. It then generally decreases to end at about 130 by 2009:Q2. Moody's index begins at about 100 by early 2001, and generally increases to about 190 by late 2007. It then generally decreases to end at about 114 by August.

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 by 2009:Q2. 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 2006, and generally increases to end at about 0.15 by 2009:Q2. CMBS begins at about 0.5 by early 1999, and generally increases to about 1.95 by late 2003. It then generally decreases to about 0.3 by 2007, and generally increases to end at about 4.3 by September.

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

Source: Citigroup; Call Reports; ACLI.

Figure: Commercial Mortgage CDS Index Prices (CMBX)

Line chart, by percent, April 2007 to October 27, 2009. Data are daily, by rating. The September 2009 FOMC meeting is marked in the time series. There are three series, "Senior AAA", "Junior AAA", and "BBB-". Senior AAA begins at about 100 and generally decreases to about 83 by March 2008. It then generally increases to about 94 by May 2008, and generally decreases to about 56 by late November 2008. It then generally increases to end at about 80. It is at about 81 at the time of the September 2009 FOMC meeting. Junior AAA begins at about 98 by early January 2008 and generally decreases to about 66 by March 2008. It then generally increases to about 90 by May 2008, and generally decreases to about 25 by April 2009. It then generally increases to about 60 by late September, and generally decreases to end at about 50. It is at about 60 at the time of the September 2009 FOMC meeting. BBB- begins at about 100 and generally increases to about 105 by June 2007. It then generally decreases to about 30 by March 2008, and generally increases to about 48 by May 2008. It then generally decreases to about 9 by April 2009, and generally increases to about 20 by September 2009. It then generally decreases to end at about 15. It is at about 20 at the time of the September 2009 FOMC meeting.

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

Source: JPMorgan Chase & Co.

Figure: REIT Funds Raised

Bar chart, by billions of dollars, 2004 to 2009. Data are quarterly. There are two series, "Capital" and "Debt". Capital begins at about 6.9 and generally decreases to about 2.5 by late 2005. It then generally increases to about 9.5 by late 2006, and generally decreases to about 1.2 by late 2008. It then generally increases to end at about 14. Debt begins at about 6 and generally decreases to about 2.6 by 2005. It then generally increases to about 10.3 by early 2007, and generally decreases to about 0.2 by early 2008. It then generally increases to about 4.2 by 2008, and generally decreases to about 1 by 2008. It then generally increases to end at about 2.8.

Source: NAREIT.

Residential Mortgages

Figure: Mortgage Rate and MBS Yield

Line chart, by percent, October 2006 to October 2009. Data are weekly. The September 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 December 2006. It then generally increases to about 6.75 by June 2007, and generally decreases to about 5.5 by late January 2008. It then generally increases to about 6.65 by July 2008, and generally decreases to about 5.8 by April 2009. It then generally increases to about 5.6 by June 2009, and generally decreases to about 4.8 by October 2009. It generally increases to end at about 5.0 by October 21. It is at about 5.0 at the time of the September 2009 FOMC meeting. MBS yield begins at about 5.75 and generally increases to about 6.4 by June. It then generally decreases to about 4.8 by January 2008, and generally increases to about 6.2 by July 2008. It then generally decreases to about 3.75 by January 2009, and generally increases to about 5.0 by June. It then generally decreases to about 4.1 by September, and generally increases to end at about 4.5. It is at about 4.4 at the time of the September 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 October 21, 2009. Unit is basis points. Data are weekly. The September 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 160 and generally decreases to about 140 by January 2007. It then generally increases to 250 by late August 2008, and generally decreases to about 90 by June 2009. It then generally increases to end at about 135. It is at about 135 at the time of the September 2009 FOMC meeting. 5/1 ARM to 2-yr Treasury begins at about 145 and generally decreases to about 105 by January 2006. It then generally increases to about 525 by December 2008, and generally decreases to end at about 345. It is at about 350 at the time of the September 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

Stacked bar chart, by billions of dollars, 2002 to August 2009. Data are monthly rate. There are three series, "Non-agency", "GSEs", and "Ginnie Mae". Approximate values are: 2002: Ginnie Mae 15, GSEs 110, Non-agency 25, total 150. 2003: Ginnie Mae 20, GSEs 160, and Non-agency 40, total 220. 2004: Ginnie Mae 12.5, GSEs 67.5, and Non-agency 70, total 150. 2005: Ginnie Mae 5, GSEs 75, and Non-agency 90, total 170. 2006: Ginnie Mae 6, GSEs 70, and Non-agency 84, total 160. 2007: Ginnie Mae 8, GSEs 90, and Non-agency 52, total 150. 2008:H1: Ginnie Mae 20, GSEs 94, and Non-agency 6, total 120. 2008:H2: Ginnie Mae 27, GSEs 51, total 78. 2009:Q1: Ginnie Mae 30, GSEs 82, total 112. 2009:Q2: Ginnie Mae 40, GSEs 110, total 150. July 2009: Ginnie Mae 48, GSEs 104, total 152. August 2009: Ginnie Mae 45, GSEs 100, total 145.

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 August 2009. Data are monthly. There are three series, "FHFA price index", "LP price index", and "20-city S&P/Case-Shiller price index". FHFA price index begins at about 7.2 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 -3.5. LP price index begins at about 9 and generally increases to about 17.5 by early 2005. It then generally decreases to about -20.2 by early 2009, and generally increases to end at about -10. 20-city S&P/Case-Shiller price index begins at about 7.5 and generally increases to about 17.5 by 2004. It then generally decreases to about -18.5 by early 2009, and generally increases to end at about -11.

Note: LoanPerformance data are confidential until publicly released.

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

Figure: Delinquencies on Prime Mortgages

Line chart, by percent of loans, 2001 to September 2009. Data are monthly. There are two series, "Variable-rate" and "Fixed-rate". Variable-rate begins at about 2.6 and generally decreases to about 1.2 by 2005. It then generally increases to end at about 14. Fixed-rate begins at about 1.25 and remains about constant until mid-2007. It then generally increases to end at about 4.8.

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

Source: McDash Analytics.

Figure: Delinquencies on Subprime and FHA-Backed Mortgages

Line chart, 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 3.4 and generally increases to end at about 7.7 by September. Subprime begins at about 8 and generally increases to about 9.8 by early 2003. It then generally decreases to about 5.5 by 2005 and generally increases to end at about 32.5 by August.

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

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

Consumer Credit and Mutual Funds

Figure: Consumer Credit

Line chart, by percent change, annual rate, 2004 to August 2009. Data are 3-month change. There are two series, "Revolving" and "Nonrevolving". Revolving begins at about 3 and generally increases to about 5 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 2.5 by early 2005, and generally increases to about 9.5 by mid-2007. It then generally decreases to about -12 by 2009, and generally increases to end at about -7. 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 9 by late 2004. It then generally decreases to about 3 by late 2006, and generally increases to about 6.5 by 2007. It then generally decreases to end at about -7.

Source: Federal Reserve.

Figure: Gross Consumer ABS Issuance

Bar chart, by billions of dollars, 2005 to October 2009. Data are monthly rate. There are two series, "TALF eligible" and "Non-TALF". Approximate values are: 2005: Non-TALF 19.5, TALF eligible 0. 2006: Non-TALF 19.5, TALF eligible 0. 2007: Non-TALF 19.5, TALF eligible 0. 2008:H1: Non-TALF 18, TALF eligible 0. 2008:H2: Non-TALF 3.8, TALF eligible 0. 2009:Q1: TALF eligible 2.8, Non-TALF 3.7. 2009:Q2: TALF eligible 10, Non-TALF 4.5. July 2009: TALF eligible 12, Non-TALF 4. August 2009: TALF eligible 7, Non-TALF 1. September 2009: TALF eligible 14.8, Non-TALF 4.2. October 2009: TALF eligible 3, Non-TALF 1.

Note: Credit card, auto, and student loan ABS. October 2009 plotted values are through October 23.

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

Figure: Credit Card Rates and Volume of Mail Offerings

Line chart, 2007 to August 2009. Data are monthly. There are two series, "Volume of mail offerings", which is by millions, and "Interest rates", which is by percent. These two series use two different scales. Volume of mail offerings begins at about 600 and generally decreases to about 490 by 2007. It then generally increases to about 550 by 2007, and generally decreases to end at about 100. Interest rates begins at about 13.5 and generally decreases to about 11.1 by early 2009. It then generally increases to end at about 12.6.

Source: 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 5.4 and generally increases to about 5.6 by 1997. It then generally decreases to about 3.2 by late 2005, and generally increases to about 6.4 by early 2009. It then generally decreases to end at about 6 by September. Nonrevolving consumer loans at commercial banks begins at about 3.1 and generally decreases to about 2.1 by 2005. It then generally increases to end at about 3.8 by 2009:Q2. Auto loans at captive finance companies begins at about 3.3 and generally increases to about 3.7 by 1997. It then generally decreases to about 2 by 2004, and generally increases to end at about 3.4 by August.

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.	Sept. ^e	Aug.
Total long-term funds	11.8	-49.7	0.5	46.1	45.7	50.0	48.2	7,061
Equity funds	-3.6	-36.0	-14.4	14.2	9.2	3.9	-10.4	4,511
Domestic	-5.0	-20.7	-7.8	9.7	2.3	-2.0	-11.0	3,375
International	1.3	-15.3	-6.5	4.4	6.9	5.9	0.5	1,136
Hybrid funds	1.7	-4.7	-2.9	2.3	1.8	3.2	11.0	577

Bond funds	13.8	-9.0	17.8	29.7	34.7	42.9	47.6	1,973
High-yield	-0.2	0.1	2.7	2.9	1.9	1.0	1.2	167
Other taxable	11.1	-7.4	11.2	21.1	26.0	32.9	36.2	1,386
Municipals	2.9	-1.6	3.9	5.7	6.8	9.1	10.2	420
Money market funds	56.1	59.6	0.1	-54.6	-50.0	-55.6	-139.9	3,569

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 to 2009:Q3. Data are quarterly. There are four series, "2-year", "3-year", "5-year", and "10-year". 2-year begins at about 72 and generally decreases to about 55 by 2007. It then generally increases to end at about 128. 3-year begins at about 22 and generally decreases to about 0 by late 2007. It then remains about constant until about late 2008, and generally increases to end at about 110. 5-year begins at about 44 and generally decreases to about 40 by 2007. It then generally increases to end at about 117. 10-year begins at about 22 and remains about constant until late 2007. It then generally increases to about 60 by mid-2009, and generally decreases to end at about 41.

Source: U.S. Treasury Dept.

Figure: Foreign Participation in Treasury Auctions

Line chart, by percent of total issue, 2000 to October 15, 2009. Data are 6-month moving averages. The September 2009 FOMC meeting is marked in the time series. There are two series, "Indirect bids" and "Actual foreign allotment". Indirect bids begins at about 28 by late 2003 and generally increases to about 44 by 2004. It then generally decreases to about 25 by 2008, and generally increases to end at about 43. It is at about 42 at the time of the September 2009 FOMC meeting. Actual foreign allotment begins at about 9.8 and generally increases to about 26 by 2004. It then generally decreases to about 15 by mid-2006, and generally increases to end at about 27. It is at about 27 at the time of the September 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 October 27, 2009. Unit is basis points. Data are daily. The September 2009 FOMC meeting is marked in the time series. The series begins at about 3 and generally decreases to about 2 by early 2007. It then generally increases to about 22.5 by late 2008, and generally decreases to end at about 3. The series peaks to about 13 by 2001. It is at about 4 at the time of the September 2009 FOMC meeting.

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

Source: Federal Reserve Board.

Figure: Daily Treasury Market Volume

Line chart, by billions of dollars, 2004 to October 2009. Data are monthly averages. The September 2009 FOMC meeting is marked in the time series. The series begins at about 75 and generally increases to about 200 by 2007. It then generally decreases to about 75 by early 2009, and generally increases to end at about 80. It is at about 70 at about at the time of the September 2009 FOMC meeting.

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

Source: Bloomberg.

Figure: Treasury On-the-Run Premium

Line chart showing 10-year note, 2001 to October 2009. Unit is basis points. Data are monthly averages. The September 2009 FOMC meeting is marked in the time series. The series begins at about 15 and generally increases to about 28 by 2002. It then generally decreases to about 16 by 2005, and generally increases to about 60 by early 2009. It then generally decreases to end at about 22. It is at about 28 at the time of the September 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. October 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 October 14, 2009. Data are weekly. The September 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 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 September 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	Q3	Sept.	Oct. ^p
Total	38.4	36.1	40.4	37.5	36.5	41.9	42.5	33.0
Long-term ¹	34.2	32.5	35.5	32.4	32.9	30.7	29.9	31.0
Refundings ²	15.6	10.6	12.6	14.6	12.5	11.0	11.1	14.0
New capital	18.6	21.9	22.9	17.8	20.5	19.7	18.8	17.0
Short-term	4.2	3.7	4.9	5.0	3.6	11.2	12.7	2.0
Memo: Long-term taxable	2.1	2.5	2.4	2.3	4.5	7.9	8.4	1.3

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

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

p Forecast based on preliminary data through October 22, 2009. [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 150 and generally increases to about 1000 by 2000. It then generally decreases to about 450 by 2002, and generally increases to about 2200 by 2006. It then generally decreases to about 1950 by 2007, and generally increases to about 2900 by 2009:Q1. It then generally decreases to end at about 2450. Downgrades begins at about 600 and generally decreases to about 150 by 1999. It then generally increases to about 1400 by 2007, and generally decreases to end at about 380.

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 4.3 by October 22, 2009. 7-day SIFMA swap index begins at about 1.5 and generally increases to about 3.9 by late 2006. It then generally decreases to about 1.2 by early 2008, and generally increases to about 8 by 2008. It then generally decreases to end at about 0.3 by October 14.

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 for 2002 to October 22, 2009. Data are weekly ratio, General Obligation over Treasury. The series begins at about 0.9 and generally increases to about 0.99 by 2003. It then generally decreases to about 0.85 by 2006, and generally increases to about 1.87 by late 2008. It then generally decreases to end at about 1.0.

Source: Bond Buyer.

M2 Monetary Aggregate

(Based on seasonally adjusted data)

Percent change (annual rate) ¹	Level (billions)
-------------------------------------------	------------------

Aggregate and components	2007	2008	2009				of dollars), Oct. (e)
			Q2	Q3	Sept.	Oct. (e)	
M2	5.9	8.3	2.7	0.1	4.0	3.0	8,354
Components²							
Currency	2.0	5.8	6.9	3.4	5.3	0.6	863
Liquid deposits ³	4.3	6.9	12.5	12.7	20.6	21.5	5,503
Small time deposits	4.3	11.7	-16.6	-26.5	-37.9	-43.1	1,133
Retail money market funds	20.2	13.1	-22.1	-33.0	-38.0	-46.7	850
Memo:							
Institutional money market funds	40.2	24.7	6.4	-9.6	-17.9	-40.8	2,341
Monetary base	2.0	70.4	24.2	-2.1	67.8	109.8	1,967

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

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

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

e Estimated. [Return to table](#)

Source: Federal Reserve.

Commercial Bank Credit

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

Type of credit	2007	2008	H1 2009	July 2009	Aug. 2009	Sept. 2009	Level ¹ Sept. 2009
Total	10.0	4.9	-5.8	-7.1	-6.9	-12.5	9,131
Loans²							
Total	10.8	4.6	-7.2	-16.8	-15.2	-18.4	6,793
Core	9.6	5.2	-4.4	-8.8	-12.8	-17.9	6,036
To businesses							
Commercial and industrial	19.0	16.3	-13.9	-16.3	-26.5	-32.0	1,411
Commercial real estate	9.4	6.0	-1.6	-5.8	-6.8	-9.2	1,677
To households							
Residential real estate	5.5	-3.0	-1.4	-7.4	-11.8	-21.2	2,099
Revolving home equity	5.6	13.0	6.6	-6.5	-5.3	-5.7	604
Closed-end mortgages	5.5	-7.9	-4.3	-7.9	-14.4	-27.2	1,496
Consumer	6.8	7.1	.0	-5.2	-3.0	-3.2	849
Memo: Originated ³	6.5	5.6	-1.7	-2.3	-7.4	-5.8	1,245
Other	18.7	.7	-25.4	-76.1	-34.4	-21.9	757
Securities							
Total	7.7	6.0	-.9	23.4	18.6	4.8	2,338
Treasury and agency	-5.4	15.0	-1.7	48.1	33.7	11.9	1,399
Other ⁴	28.1	-4.2	.2	-10.1	-2.9	-5.5	939

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

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

2. Excludes interbank loans. [Return to table](#)

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

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

Source: Federal Reserve.

Figure: Total Loans at Commercial Banks

Line chart, by billions of dollars, June 2007 to September 2009. Data are monthly. There are two series, "Large" and "Small". Large begins at about 3800 and generally increases to about 4200 by October 2008. It then generally decreases to end at about 3740. It is at about 4100 at the time of the NBER peak. Small begins at about 2275 and generally increases to about 2600 by late February 2009. It then generally decreases to end at about 2500. It is at about 2450 at the time of the NBER peak.

Note: A vertical line indicates the NBER Peak in December 2007. The NBER peak is the last business cycle peak as defined by the Nation Bureau of Economic Research (NBER). Large domestically chartered commercial banks are defined as the top 25 domestically chartered commercial banks, ranked by domestic assets as of the previous commercial bank Call Report to which the H.8 release data have been benchmarked. Small domestically chartered commercial banks are defined as all domestically chartered commercial banks not included in the top 25.

Source: Federal Reserve.

Figure: Allowance for Loan Losses at Commercial Banks

Line chart, by billions of dollars, June 2007 to September 2009. Data are monthly. There are two series, "Large" and "Small". Large begins at about 44 and generally increases to end at about 139. It is at about 52 at the time of the NBER peak. Small begins at about 26 and generally increases to about 56 by August 2009. It then generally decreases to end at about 53. It is at about 30 at the time of the NBER peak.

Note: A vertical line indicates the NBER Peak in December 2007. The NBER peak is the last business cycle peak as defined by the Nation Bureau of Economic Research (NBER). Large domestically chartered commercial banks are defined as the top 25 domestically chartered commercial banks, ranked by domestic assets as of the previous commercial bank Call Report to which the H.8 release data have been benchmarked. Small domestically chartered commercial banks are defined as all domestically chartered commercial banks not included in the top 25.

Source: Federal Reserve.

Appendix: Senior Loan Officer Opinion Survey on Bank Lending Practices

Measures of Supply and Demand for Commercial and Industrial Loans, by Size of Firm Seeking Loan

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

Line chart, by percent, 1990 to 2009. The July 2009 survey is marked in the time series. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms". Loans to large and medium-sized firms begins at about 58 and generally decreases to about -20 by 1993. It then generally increases to about 60 by early 2001, and generally decreases to about -25 by 2005. It then generally increases to about 84 by late 2008, and generally decreases to end at about 14. It is at about 32 at the time of the July survey. Loans to small firms begins at about 52 and generally decreases to about -12 by late 1996. It then generally increases to about 45 by early 2001, and generally decreases to about -24 by 2005. It then generally increases to about 85 by late 2008, and generally decreases to end at about 12. It is at about 32 at the time of the July survey.

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

Line chart, by percent, 1990 to 2009. The July 2009 survey is marked in the time series. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms". Loans to large and medium-sized firms begins at about 12 and generally increases to about 60 by early 1991. It then generally decreases to about -60 by 1994, and generally increases to about 60 by 2001. It then generally decreases to about -70 by 2005, and generally increases to about 100 by 2008. It then generally decreases to end at about 40. It is at about 60 at the time of the July survey. Loans to small firms begins at about 8 and generally increases to about 38 by early 1991. It then generally decreases to about -40 by late 1997, and generally increases to about 41 by late 2001. It then generally decreases to about -54 by 2005, and generally increases to about 92 by late 2008. It then generally decreases to end at about 42. It is at about 62 at the time of the July survey.

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

Line chart, by percent, 1991 to 2009. The July 2009 survey is marked in the time series. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms". Loans to large and medium-sized firms begins at about -28 and generally increases to about 38 by 1994. It then generally decreases to about -70 by late 2001, and generally increases to about 46 by early 2005. It then generally decreases to about -60 by 2009, and generally increases to end at about -30. It is at about -7 at the time of the July survey. Loans to small firms begins at about -27 and generally increases to about 38 by 1994. It then generally decreases to about -49 by late 2001, and generally increases to about 40 by 2004. It then generally decreases to about -64 by 2009, and generally increases to end at about -38. It is at about -56 at the time of the July survey.

Measures of Supply and Demand for Commercial Real Estate Loans

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

Line chart, by percent, 1990 to 2009. The July 2009 survey is marked in the time series. The series begins at about 70 and generally decreases to about -10 by 1997. It then generally increases to about 47 by early 2002, and generally decreases to about -24 by early 2005. It then generally increases to about 88 by late 2008, and generally decreases to end at about 33. It is at about 47 at the time of the July survey.

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

Line chart, by percent, 1995 to 2009. The July 2009 survey is marked in the time series. The series begins at about 12 and generally increases to about 26 by late 1995. It then generally decreases to about -2 by 1996, and generally increases to about 48 by 1998. It then generally decreases to about -51 by late 2001, and generally increases to about 26 by mid-2004. It then generally decreases to about -77 by 2009, and generally increases to end at about -42. It is at about -61 at the time of the July survey.

Measures of Supply and Demand for Residential Mortgage Loans

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

Line chart, by percent, 1990 to early 2007. The series, "All residential", begins at about 10 and generally increases to about 33 by early 1991. It then generally decreases to about -17 by late 1993, and generally increases to about 11 by early 2003. It then generally decreases to about -9 by 2006, and generally increases to end at about 16.

There is a second line chart, by percent, 2007:Q2 to 2009:Q4. There are two series, "Prime" and "Nontraditional". Prime begins at about 14 and generally increases to about 72 by 2008:Q3. It then generally decreases to about 21 by 2009:Q3, and generally increases to end at about 25. Nontraditional begins at about 46 and generally decreases to about 40 by 2007:Q3. It then generally increases to about 90 by 2008:Q4, and generally decreases to end at about 30.

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

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

Line chart, by percent, 1990 to early 2007. The series, "All residential", begins at about -48 and generally decreases to about -59 by early 1991. It then generally increases to about 60 by 1991, and generally decreases to about -76 by early 1995. It then generally increases to about 63 by 1998, and generally decreases to about -62 by early 2000. It then generally increases to about 48 by 2003, and generally decreases to about -60 by late 2006. It then generally increases to end at about -37.

There is a second line chart, by percent, 2007:Q2 to 2009:Q4. There are two series, "Prime" and "Nontraditional". Prime begins at about -20 and generally increases to about -10 by 2007:Q3. It then generally decreases to about -60 by 2008:Q1, and generally increases to about 38 by 2009:Q2. It then generally decreases to about 17 by 2009:Q3, and generally increases to end at about 30. Nontraditional begins at about -17 and generally decreases to about -72 by 2008:Q4. It then generally increases to end at about -3.

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

Measures of Supply and Demand for Consumer Loans

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

Line chart, by percent, 1996 to 2009. The July 2009 survey is marked in the time series. There are two series, "Credit card loans" and "Other consumer loans". Credit card loans begins at about 27 and generally increases to about 50 by 1996. It then generally decreases to about -5 by 2000, and generally increases to about 20 by 2001. It then generally decreases to about -10 by 2007, and generally increases to about 68 by 2008. It then generally decreases to end at about 15. It is at about 36 at the time of the July survey. Other consumer loans begins at about 16 and generally increases to about 25 by 1996. It then generally decreases to about -2 by early 1999, and generally increases to about 20 by 2002. It then generally decreases to about -9 by 2005, and generally increases to about 68 by 2008. It then generally decreases to end at about 15. It is at about 36 at the time of the July survey.

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

Line chart, by percent, 1990 to 2009. The July 2009 survey is marked in the time series. The series begins at about 8 and generally increases to about 10 by mid-1990. It then generally decreases to about -14 by early 1991, and generally increases to about 30 by early 1994. It then generally decreases to about -7 by late 2001, and generally increases to about 21 by 2005. It then generally decreases to about -46 by late 2008, and generally increases to end at about -2. It is at about -7 at the time of the July survey.

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

Line chart, by percent, 1991 to 2009. The July survey is marked in the time series. The series begins at about -28 and generally increases to about 38 by 1994. It then generally decreases to about -36 by early 2001, and generally increases to about 32 by 2003. It then generally decreases to about -48 by late 2008, and generally increases to end at about -25. It is at about -21 at the time of the July survey.

Figure: Percentage of Domestic Banks Reporting Each of the Following Was a "Very" Important Source in the Contraction of C&I Loans

Bar chart, by percent weighted by C&I loans. There are eight bars, one for each source. Approximate values are: Decreased origination of term loans: 42. Decreased draws on revolving credit: 32. Paydowns on revolving credit lines: 13. Increased write-downs: 4. Term loans not rolled over or extended: 3. Paydowns of bridge loans: 2. Increased sales or syndication of loans: 0. Increased prepayments of term loans: 0.

Distribution of Extensions and Refinancings of Maturing CRE Loans Across Domestic Banks

Figure: Construction and Land Development Loans

Bar chart, by percent of banks, 0-25 percent of maturing loans to 75-100 percent of maturing loans. There are two series, "Extensions" and "Refinancings". Approximate values are: 0-25: Extensions 20, Refinancings 87.5. 25-50: Extensions 35, Refinancings 12.5. 50-75: Extensions 37, Refinancings 5. 75-100: Extensions 14, Refinancings 0.

Note: Percent of banks is weighted by construction and land development loans.

Figure: Loans Secured by Nonfarm/Nonresidential Real Estate

Bar chart, by percent of banks, 0-25 percent of maturing loans to 75-100 percent of maturing loans. There are two series, "Extensions" and "Refinancings". Approximate values are: 0-25: Extensions 18, Refinancings 77. 25-50: Extensions 22, Refinancings 20. 50-75: Extensions 39, Refinancings 5. 75-100: Extensions 24, Refinancings 1.

Note: Percent of banks is weighted by loans secured by nonfarm/nonresidential real estate.

Figure: Effect of Credit CARD Legislation on Credit Card Terms

Bar chart, by "Net Percent Tightening Weighted by Credit Card Loans (positive=tightening)". There are two series, "Prime borrowers" and "Nonprime borrowers". Approximate values are: Spreads over cost of funds (wider spreads = tighten): Prime borrowers 97, Nonprime borrowers 95. Minimum required credit score (increase score = tighten): Prime borrowers 97, Nonprime borrowers 86. Credit limits: Prime borrowers 92, Nonprime borrowers 86. Extent to which loans are granted to customers not meeting credit thresholds: Prime borrowers 76, Nonprime borrowers 83. Annual fees: Prime borrowers 44, Nonprime borrowers 53. Interchange fees charged to merchants: Prime borrowers 1, Nonprime borrowers 0. Minimum percent of outstanding balances required to be repaid each month: Prime borrowers 1, Nonprime borrowers 0. Length of grace period: Prime borrowers -19, Nonprime borrowers -7. Penalty fees: Prime borrowers -37, Nonprime borrowers -38.

† 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	2009		2009			
	Q1	Q2	Q3 ^e	June	July	Aug.	
Percent change							
<i>Nominal BOP</i>							
Exports	-3.4	-40.7	-4.6	19.2	2.1	2.5	.2
Imports	-7.3	-55.4	-11.4	26.6	2.5	4.9	-1.6
<i>Real NIPA</i>							
Exports	-3.4	-29.9	-4.1	...	...	...	...
Imports	-6.8	-36.4	-14.7	...	...	...	...
Billions of dollars							
<i>Nominal BOP</i>							
Net exports	-695.9	-369.6	-332.0	-375.4	-27.5	-31.9	-30.7
Goods, net	-840.2	-496.1	-461.9	-508.0	-38.3	-42.8	-41.9
Services, net	144.3	126.5	129.9	132.6	10.8	10.9	11.2

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](#)

e BOP data are two months at an annual rate. [Return to table](#)

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

U.S. International Trade in Goods and Services

(Quarterly)

Figure: Trade Balance

Line chart, by billions of dollars, annual rate, 1999 to August 2009. The series begins at about -210 and generally decreases to about -800 by 2006. It then generally increases to about -340 by 2009, and generally decreases to end at about -370. August 2009 is marked at about -375.

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

Bar chart, by percentage points, annual rate, 1999 to 2009. The series begins at about -1.55 and generally increases to about 0.3 by 2001. It then generally decreases to about -1.75 by 2004, and generally increases to about 2.65 by late 2008. 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 ex. aircraft begins at about 245 and generally increases to about 326 by 2000. It then generally decreases to about 230 by early 2002, and generally increases to about 390 by 2008. It then generally decreases to about 300 by 2009, and generally increases to end at about 315. Industrial supplies begins at about 125 and generally increases to about 400 by 2008. It then generally decreases to about 237 by early 2009, and generally increases to end at about 278.

Consumer goods begins at about 80 and generally increases to about 165 by mid-2008. It then generally decreases to end at about 150. Aircraft begins at about 55 and generally decreases to about 47 by early 2000. It then generally increases to end at about 70.

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 275 by late 2001, and generally increases to about 465 by 2008. It then generally decreases to about 347 by 2009, and generally increases to end at about 365. Consumer goods begins at about 228 and generally increases to about 498 by 2008. It then generally decreases to end at about 420. Industrial supplies begins at about 140 and generally increases to about 190 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 185. Oil begins at about 45 and generally increases to about 125 by mid-2000. It then generally decreases to about 80 by early 2002, and generally increases to about 528 by mid-2008. It then generally decreases to about 210 by early 2009, and generally increases to end at about 252.

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

U.S. Exports and Imports of Goods and Services

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

	Levels				Change ¹			
	2009		2009		2009		2009	
	Q2	Q3 ^e	July	Aug.	Q2	Q3 ^e	July	Aug.
Exports of goods and services	1471.3	1537.3	1536.0	1538.7	-17.5	66.1	37.4	2.7
Goods exports	984.5	1041.4	1041.2	1041.6	-13.0	56.8	32.6	.4
Gold	12.3	13.9	12.7	15.2	-1.5	1.6	.8	2.4
Other goods	972.2	1027.4	1028.4	1026.4	-11.4	55.2	31.8	-2.0
Capital goods	373.1	378.2	386.1	370.3	-20.7	5.1	9.0	-15.8
Aircraft & parts	73.4	68.8	76.0	61.6	-5.6	-4.6	1.8	-14.4
Computers & accessories	35.5	37.9	39.1	36.6	-1.4	2.4	4.0	-2.5
Semiconductors	35.0	38.6	38.5	38.8	1.6	3.6	1.6	.2
Other capital goods	229.2	232.9	232.5	233.3	-15.3	3.7	1.6	.8
Automotive	66.7	84.6	81.6	87.5	-3.4	17.8	16.1	6.0
Ind. supplies (ex. ag., gold)	249.8	276.3	272.4	280.3	9.6	26.5	4.6	8.0
Consumer goods	144.2	148.4	149.3	147.6	-1.8	4.3	4.5	-1.7
Agricultural	101.0	100.0	98.8	101.2	6.6	-9	-4.9	2.4
All other goods	37.4	39.9	40.3	39.4	-1.7	2.4	6.8	-8
Services exports	486.7	495.9	494.8	497.1	-4.6	9.2	4.8	2.4
Imports of goods and services	1803.3	1912.7	1918.2	1907.2	-55.1	109.4	89.7	-11.0
Goods imports	1446.5	1549.4	1554.2	1544.5	-47.2	102.9	85.6	-9.7
Oil	227.8	260.0	267.7	252.3	18.9	32.2	8.5	-15.4
Gold	8.4	8.9	10.1	7.7	1.1	.5	-1.3	-2.5
Other goods	1210.3	1280.5	1276.5	1284.6	-67.2	70.2	78.4	8.1
Capital goods	345.6	360.8	361.2	360.4	-20.7	15.1	14.9	-8
Aircraft & parts	31.4	29.3	33.6	24.9	1.2	-2.2	2.1	-8.7
Computers & accessories	84.4	94.5	95.0	94.1	3.8	10.1	5.9	-9
Semiconductors	20.4	22.0	21.2	22.8	1.4	1.6	.4	1.6
Other capital goods	209.4	215.0	211.4	218.5	-27.1	5.5	6.4	7.1
Automotive	126.8	168.2	161.2	175.1	-2.6	41.4	28.3	13.9

Ind. supplies (ex. oil, gold)	178.7	185.2	182.2	188.2	-34.2	6.5	9.4	6.0
Consumer goods	419.1	421.0	425.2	416.7	-4.4	1.8	20.4	-8.5
Foods, feeds, beverages	81.5	81.1	81.9	80.3	-.2	-.3	-.4	-1.6
All other goods	58.6	64.3	64.8	63.8	-5.1	5.7	5.9	-1.0
Services imports	356.8	363.3	363.9	362.7	-8.0	6.5	4.1	-1.2
Memo:								
Oil quantity (mb/d)	11.62	10.99	11.58	10.39	-2.16	-.65	-.08	-1.20
Oil import price (\$/bbl)	53.70	64.88	63.26	66.50	12.10	11.16	2.41	3.24

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

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

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

Prices of U.S. Imports and Exports

Figure: Merchandise Imports

Line chart, by 12-month percent change, 1999 to 2009. There are two series, "Core goods" and "Non-oil goods". Core goods begins at about -1.8 and generally increases to about 1.8 by early 2000. It then generally decreases to about -3.8 by early 2002, and generally increases to about 8.7 by mid-2008. It then generally decreases to about -6.4 by 2009, and generally increases to end at about -4.8. Non-oil goods begins at about -2.7 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 7.9 by mid-2008. It then generally decreases to about -7.3 by 2009, and generally increases to end at about -5.8.

Figure: Categories of Core Imports

Line chart, by 12-month percent change, 1999 to 2009. There are two series, "Material-intensive goods" and "Finished goods". Material-intensive goods begins at about -4.5 and generally increases to about 7 by early 2000. It then generally decreases to about -10 by early 2002, and generally increases to about 19 by mid-2008. It then generally decreases to about -17 by 2009, and generally increases to end at about -13. Finished goods begins at about 0 and generally decreases to about -1.5 by early 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 12 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 increases to end at about 72. Import unit value begins at about 10 and generally increases to about 30 by mid-2000. It then generally decreases to about 17 by late 2001, and generally increases to about 127 by 2008. It then generally decreases to about 37 by early 2009, and generally increases to end at about 72.

Figure: Natural Gas

Line chart, 1999 to 2009. There are two series, "Import price index", 2000 = 100, and "Spot Henry Hub", which is by dollars per million Btu. Import price index begins at about 55 and generally decreases to about 50 by 1999. It then generally increases to about 220 by late 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 120 by late 2006. It then generally increases to about 285 by mid-2008, and generally decreases to end at about 75. Spot Henry Hub begins at about 2 and generally increases to about 9 by late 2000. It then generally decreases to about 2.5 by 2001, and generally increases to about 14.5 by 2005. It then generally decreases to about 4 by 2006, generally increases to about 13 by 2008, and generally decreases to end at about 3.5.

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 14 by mid-2008. It then generally decreases to about -11 by 2009, and generally increases to end at about -7. Total goods begins at about -3 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 2009, and generally increases to end at about -5.5.

Figure: Categories of Core Exports

Line chart, by 12-month percent change, 1999 to 2009. There are two series, "Material-intensive goods" and "Finished goods". Material-intensive goods begins at about -6 and generally increases to about 7 by 2000. It then generally decreases to about -6.5 by late 2001, and generally increases to about 24 by mid-2008. It

then generally decreases to about -22 by mid-2009 and generally increases to end at about -15.2. Finished goods begins at about 0 and generally increases to about 3.5 by late 2008. It then generally decreases to end at about 1.5.

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

Prices of U.S. Imports and Exports

(Percentage change from previous period)

	Annual rate			Monthly rate		
	2009			2009		
	Q1	Q2	Q3	July	Aug.	Sept.
	BLS prices					
Merchandise imports	-24.3	14.9	11.7	-.7	1.6	.1
Oil	-72.6	246.9	86.5	-2.5	7.7	-1.1
Non-oil	-10.9	-3.3	1.0	-.2	.3	.4
Core goods ¹	-11.3	-1.2	2.2	-.2	.4	.7
Finished goods	-1.2	-.5	.2	-.0	-.0	.1
Cap. goods ex. comp. & semi.	-.7	-1.4	.4	.1	.0	.0
Automotive products	-.5	.0	1.9	.2	.2	.1
Consumer goods	-1.8	-.1	-.9	-.3	-.1	.1
Material-intensive goods	-30.1	-2.9	7.1	-.5	1.3	2.3
Foods, feeds, beverages	-9.6	.8	.8	-1.1	1.3	.4
Industrial supplies ex. fuels	-35.4	-4.2	8.8	-.3	1.4	2.8
Computers	-8.3	-4.2	1.3	.6	.0	.2
Semiconductors	-10.9	7.1	-7.1	-2.1	.5	.0
Natural gas	-61.0	-74.8	-41.0	-8.4	-.1	-16.5
Merchandise exports	-8.8	2.4	3.5	-.3	.7	-.3
Core goods ²	-11.1	2.6	3.8	-.5	.8	-.4
Finished goods	1.6	.4	1.9	.2	.1	.0
Cap. goods ex. comp. & semi.	3.1	2.5	1.8	.3	.1	.0
Automotive products	.5	-.6	-.7	-.2	.1	.0
Consumer goods	-1.2	-3.9	4.3	.5	.2	.1
Material-intensive goods	-24.4	5.3	6.2	-1.3	1.6	-.9
Agricultural products	-12.3	19.6	-7.6	-4.9	.2	-2.8
Industrial supplies ex. ag.	-28.4	1.3	11.6	-.1	2.1	-.2
Computers	-9.1	-3.4	.9	-.5	.3	2.0
Semiconductors	7.4	12.3	5.2	1.2	.1	.1
	NIPA prices					
Chain price index						
Imports of goods & services	-28.3	4.2	n.a.	...	...	...
Non-oil merchandise	-10.5	-3.9	n.a.	...	...	...
Core goods ¹	-9.4	-2.3	n.a.	...	...	...
Exports of goods & services	-12.6	.1	n.a.
Total merchandise	-14.8	1.9	n.a.
	2					

Core goods	-12.5	2.4	n.a.
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1. Excludes computers, semiconductors, and natural gas. [Return to table](#)

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

n.a. Not available.

... Not applicable.

BLS Bureau of Labor Statistics. [Return to table](#)

NIPA National income and product accounts.

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

Summary of U.S. International Transactions

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

	2007	2008	2008		2009			
			Q3	Q4	Q1	Q2	July	Aug.
Official financial flows	451.1	-54.6	-108.9	-286.5	313.5	316.1	82.6	32.9
1. Change in foreign official assets in the U.S. (increase, +)	475.2	480.0	117.5	-17.9	70.7	124.6	44.9	20.5
a. <u>G-10</u> countries + <u>ECB</u>	36.8	-8.4	8.9	-16.0	-7.4	15.5	6.6	5.7
b. <u>OPEC</u>	33.0	45.5	16.1	-3.4	-5.0	-0.3	-0.5	1.4
c. All other countries	405.5	430.0	92.5	-11.4	83.1	117.4	38.8	13.4
2. Change in U.S. official assets (decrease, +) ¹	-24.1	-534.6	-226.4	-268.7	242.8	191.4	37.7	12.4
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	-81.7	17.7	-86.7	316.8	-271.4	-200.8	-109.1	10.8
Securities³								
4. Foreign net purchases (+) of U.S. securities	673.9	68.6	-26.4	52.7	-3.8	-8.0	-14.8	-15.6
a. Treasury securities	67.1	196.4	78.5	81.6	52.4	-22.4	-19.1	-17.9
b. Agency bonds	-8.6	-186.6	-71.8	-21.5	-49.7	-0.3	-1.8	2.2
c. Corporate and municipal bonds	384.7	2.5	-35.4	-3.8	-12.5	-21.0	-17.5	-9.7
d. Corporate stocks ⁴	230.7	56.4	2.4	-3.6	6.0	35.7	23.5	9.8
5. U.S. net acquisitions (-) of foreign securities	-366.8	45.9	75.9	57.6	-35.2	-91.9	-31.5	-7.1
a. Bonds	-218.5	46.6	61.8	23.1	-33.9	-54.6	-15.9	7.3
b. Stock purchases	-136.4	6.4	14.1	38.8	0.6	-37.3	-15.6	-14.4
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	-4.9	-17.7	7.2	11.3	...	...
9. Foreign acquisitions of U.S. currency	-10.7	29.2	5.8	29.9	11.8	-1.9	...	...
10. Other (inflow, +) ⁶	114.4	439.4	279.7	-76.8	29.6	52.2	...	...
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.

Foreign Official Financial Inflows (+) through August 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 18 by mid-2005. 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 33. Monthly begins at about 18 and generally decreases to about 3 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 late 2007, and generally decreases to about -10 by 2008. It then generally increases to about 56 by mid-2009, and generally decreases to end at about 20.

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 16 and generally decreases to about 8 by mid-2005. It then generally increases to about 20 by late 2006, and generally decreases to about 0 by 2007. It then generally increases to about 56 by early 2009, and generally decreases to end at about 44. Monthly begins at about 10 and generally decreases to about -10 by late 2005. It then generally increases to about 33 by early 2006, and generally decreases to about -30 by 2007. It then generally increases to about 80 by 2008, and generally decreases to end at about 33.

Figure: Long-Term 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 28 by 2007. It then generally decreases to about 5 by late 2007, and generally increases to about 30 by 2008. It then generally decreases to about -19 by late 2008, and generally increases to end at about -4. Monthly begins at about 8, and fluctuates but generally increases to about 36 by early 2007. It then decreases to about -3 by late 2007, increases to about 38 by early 2008, and decreases to about -40 by late 2008. It then generally increases to end at about -2.

Figure: Foreign Official Balances Held at the Federal Reserve Bank of New York, Daily through October 16, 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 2060. Agency securities begins at about 600 and generally increases to about 1000 by mid-2008. It then generally decreases to end at about 750.

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

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

Private Securities Flows through August 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 92 by 2007. It then generally decreases to end at about 0. Monthly begins at about 40 and generally increases to about 58 by 2005. It then generally decreases to about 8 by 2005, and generally increases to about 150 by 2007. It then generally decreases to about -80 by early 2009, and generally increases to about 40 by 2009. It then generally decreases to end at about -19.

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 2006, and generally increases to about 29 by 2008. It then generally decreases to end at about -1. Monthly begins at about 12 and generally increases to about 45 by 2005. It then generally decreases to about -39 by early 2006, and generally increases to about 90 by late 2008. It then generally decreases to end at about -19.

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 -18 by 2008. It then generally increases to end at about -4. Monthly begins at about 10 and generally decreases to about -20 by early 2007. It then generally increases to about 15 by 2007, and generally decreases to about -45 by mid-2008. It then generally increases to about 8 by 2009, and generally decreases to end at about 2.

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 late 2006, and generally decreases to end at about -8. Monthly begins at about 13 and generally increases to about 87 by 2007. It then generally decreases to about -7 by mid-2007, and generally increases to about 42 by 2008. It then generally decreases to about -20 by late 2008, and generally increases to about 33 by early 2009. It then generally decreases to end at about -10.

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 2005. It then generally increases to about 27 by 2005, and generally decreases to about 0 by late 2008. It then generally increases to end at about 13. Monthly begins at about 12 and generally decreases to about 2 by 2005. It then generally increases to about 44 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 end at about 10.

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 -12 and generally decreases to about -45 by 2007. It then generally increases to about 25 by late 2008, and generally decreases to end at about -21. Monthly begins at about -13 and generally decreases to about -80 by late 2006. It then generally increases to about 30 by mid-2008, and generally decreases to about -35 by mid-2009. It then generally increases to end at about -7.

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 -4 by late 2005. It then generally decreases to about -29 by 2007, and generally increases to about 17 by late 2008. It then generally decreases to about -16 by mid-2009, and generally increases to end at about -10. Monthly begins at about -5 and generally decreases to about -12 by 2005. It then generally increases to about 13 by 2005, and generally decreases to about -45 by early 2007. It then generally increases to about 32 by 2008, and generally decreases to about -30 by late 2008. It then generally increases to end at about 8.

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 -6 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 -10. Monthly begins at about -8 and generally decreases to about -24 by late 2005. It then generally increases to about 8 by mid-2006, and generally decreases to about -36 by late 2006. It then generally increases to about 20 by 2008, and generally decreases to end at about -12.

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

Exchange Value of the Dollar and Stock Market Indexes

	Latest	Percent change since September Greenbook
<i>Exchange rates*</i>		
Euro (\$/euro)	1.4821	-1.4
Yen (¥/\$)	92.040	1.2
Sterling (\$/£)	1.6334	0.6
Canadian dollar (C\$/)\$)	1.0644	-1.1
<i>Nominal dollar indexes*^</i>		
Broad index	102.1	-0.9
Major Currencies index	73.9	-0.8
OITP index	133.5	-1.1
<i>Stock market indexes</i>		
DJ Euro Stoxx	265	-0.3
TOPIX	895	-4.0
FTSE 100	5201	3.2
S&P 500	1063	1.0

* 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 2005. It then generally decreases to about 87 by 2008, and generally increases to about 107 by 2009. It then generally decreases to end at about 91. Euro begins at about 100 and generally increases to about 114 by 2005. It then generally decreases to about 84 by 2008, and generally increases to about 106 by late 2008. It then generally decreases to end at about 90. Yen begins at about 100 and generally increases to about 119 by 2007. It then generally decreases to about 85 by early 2009, and generally increases to about 97 by 2009. It then generally decreases to end at about 88.

There is a second line chart, June to October 2009. September 15, 2009 = 100. Data are daily. The September 2009 Greenbook is marked in the time series. There are three series, "Major currencies index", "Euro", and "Yen". Major currencies index begins at about 101.8 and generally increases to about 105 by June. It then generally decreases to about 98 by mid-October, and generally increases to end at about 99.5. Euro begins at about 103 and generally increases to about 106 by June. It then generally decreases to about 97.8, and generally increases to end at about 98.8. Yen begins at about 106 and generally decreases to about 105.2 by June. It then generally increases to about 106.5 by June, and generally decreases to about 101.8 by July. It then generally increases to about 107.2 by August, and generally decreases to about 97.2 by October. It then generally increases to about 101.8 by October, and generally decreases to end at about 100. They are at about 100 at the time of the October 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 162 by 2007. It then generally decreases to about 65 by 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 60 by early 2009, and generally increases to end at about 80. S&P 500 begins at about 100 and generally increases to about 130 by 2007. It then generally decreases to about 57 by early 2009, and generally increases to end at about 86.

There is a second line chart, June to October 2009. September 15, 2009 = 100. Data are daily. The September 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 88 and generally decreases to about 80 by July. It then generally increases to about 105 by October, and generally decreases to end at about 98. TOPIX begins at about 97.5 and generally increases to about 102 by June. It then generally decreases to about 91 by July, and generally increases to about 105 by August. It then generally decreases to about 93 by early October, and generally increases to end at about 95. S&P 500 begins at about 90 and generally decreases to about 84 by July. It then generally increases to about 105 by October, and

generally decreases to end at about 101. They are at about 100 at the time of the September 2009 Greenbook.

Industrial Countries: Nominal and Real Interest Rates

Percent

	3-month <u>Libor</u>		10-year nominal		10-year indexed	
	Latest	Change since Sep. Greenbook	Latest	Change since Sep. Greenbook	Latest	Change since Sep. Greenbook
Germany	0.68	-0.04	3.27	-0.02	1.04	0.02
Japan	0.32	-0.03	1.40	0.08	2.26	-0.05
United Kingdom	0.59	-0.02	3.61	-0.01	0.81	-0.20
Canada	0.50	-0.00	3.49	0.12	...	...
United States	0.28	-0.01	3.49	0.02	1.60	-0.12

... 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 about 2.95 by late 2008. It then generally increases to end at about 3.4. Japan begins at about 1.4 and generally increases to about 2 by 2006. It then generally decreases to about 1.2 by late 2008, and generally increases to end at about 1.5. United States begins at about 4.3 and generally decreases to about 4 by 2005. It then generally increases to about 5.2 by 2007, and generally decreases to about 2.2 by late 2008. It then generally increases to end at about 3.6.

There is a second line chart, June to October 2009. Data are daily. The September 2009 Greenbook is marked in the time series. There are three series, "Germany", "Japan", and "United States". Germany begins at about 3.7 and generally decreases to about 3.3 by July. It then generally increases to about 3.5 by August, and generally decreases to end at about 3.35. It is at about 3.4 at the time of the September 2009 Greenbook. Japan begins at about 1.5 and generally decreases to about 1.3 by early October. It then generally increases to end at about 1.4. It is at about 1.3 at the time of the September 2009 Greenbook. United States begins at about 3.7 and generally increases to about 4 by June. It then generally decreases to about 3.4 by July, and generally increases to about 3.9 by August. It then generally decreases to about 3.3 by early October, and generally increases to end at about 3.5. It is at about 3.4 at the time of the September 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 1.2 and generally decreases to about 1 by 2005. It then generally increases to about 2.9 by 2008, and generally decreases to end at about 0.9. Japan begins at about 0.6 and generally decreases to about 0.2 by 2005. It then generally increases to about 4.9 by late 2008, and generally decreases to end at about 2.4. United States begins at about 1.7 and generally increases to about 2.8 by mid-2007. It then generally decreases to about 1.2 by 2008, and generally increases to about 3.6 by late 2008. It then generally decreases to end at about 1.6.

There is a second line chart, June to October 2009. Data are daily. The September 2009 Greenbook is marked in the time series. There are three series, "France", "Japan", and "United States". France begins at about 1.5 and generally increases to about 1.7 by June. It then generally decreases to about 0.8 by early October, and generally increases to end at about 1. It is at about 0.9 at the time of the September 2009 Greenbook. Japan begins at about 3.5 and generally decreases to about 2.1 by early October. It then generally increases to end at about 2.3. It is at about 2.3 at the time of the September 2009 Greenbook. United States begins at about 2 and generally increases to about 2.2 by June. It then generally decreases to about 1.5 by October, and generally increases to end at about 1.6. It is at about 1.7 at the time of the September 2009 Greenbook.

Measures of Market Volatility

Figure: Dollar-Euro Options-Implied Volatility

Line chart, by percent, 2005 to 2009. Data are weekly. There are two series, "1-month" and "3-month". They begin at about 10 and generally decrease to about 5 by mid-2007. They then generally increase to about 27.5 by 2008, and generally decrease to end at about 11.

There is a second line chart, June to October 2009. Data are daily. The September 2009 Greenbook is marked in the time series. 1-month begins at about 15.6 and generally increases to about 16.2 by early June. It then generally decreases to about 10 by September, and generally increases to end at about 10.9. It is at about 10.9 at the time of the September 2009 Greenbook. 3-month begins at about 15.6 and generally increases to about 16.2 by early June. It then generally decreases to about 10.9 by late September, and generally increases to end at about 11.8. It is at about 12 at the time of the September 2009 Greenbook.

Note: 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". They begin at about 10 and generally decrease to about 7 by 2007. 1-month generally increases to about 35 by 2008, and generally decreases to end at about 14. 3-month generally increases to about 25 by 2008, and generally decreases to end at about 14.

There is a second line chart, June to October 2009. Data are daily. The September 2009 Greenbook is marked in the time series. There are two series, "1-month" and "3-month". 1-month begins at about 15.3 and generally increases to about 15.8 by early June. It then generally decreases to about 13.0 by early July, and generally increases to about 16.0 by July. It then generally decreases to about 12.6 by September, and generally increases to about 14.5 by late September. It then generally decreases to about 13.2 by October, and generally increases to end at about 13.45. It is at about 13.8 at the time of the September 2009 Greenbook. 3-month begins at about 15.0 and generally increases to about 15.3 by early June. It then generally decreases to about 13.25 by late June, and generally increases to about 15.4 by July. It then generally decreases to about 13.4 by September, and generally increases to end at about 13.8. It is at about 14.1 at the time of the September 2009 Greenbook.

Note: 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 generally increases to about 22 by 2006. It then generally decreases to about 10 by late 2006, and generally increases to about 62 by late 2008. It then generally decreases to end at about 20. TOPIX begins at about 15 and generally decreases to about 10 by 2005. It then generally increases to about 38 by early 2008, and generally decreases to about 22 by mid-2008. 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 remains about constant until 2006. It then generally increases to about 73 by late 2008, and generally decreases to end at about 18.

There is a second line chart, June to October 2009. Data are daily. The September 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 30 and generally decreases to about 18 by late September. It then generally increases to end at about 19. It is at about 20 at the time of the September 2009 Greenbook. TOPIX begins at about 30 and generally decreases to about 18 by August. It then generally increases to end at about 19. It is at about 19 at the time of the September 2009 Greenbook. S&P 500 begins at about 35 and generally decreases to end at about 16. It is at about 18 at the time of the September 2009 Greenbook.

Note: 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 3 by early 2007, and generally increases to about 10 by 2009. It then generally decreases to end at about 6. Japan begins at about 4 and generally decreases to about 3.2 by 2005. It then generally increases to about 5.8 by 2006, and generally decreases to about 3 by mid-2007. 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 2007. It then generally increases to about 16.1 by late 2008, and generally decreases to end at about 9.

There is a second line chart, June to October 2009. Data are daily. The September 2009 Greenbook is marked in the time series. There are three series, "Germany", "Japan", and "United States". Germany begins at about 9, generally decreases to about 6 by early September, and remains about constant until the end. It is at about 6 at the time of the September 2009 Greenbook. Japan begins at about 3.4, generally decreases to about 2.5 by late August, and remains about constant until the end. It is at about 2.5 at the time of the September 2009 Greenbook. United States begins at about 13 and generally decreases to about 11.8 by June. It then generally increases to about 13.8 by August, and generally decreases to end at about 9. It is at about 10.5 at the time of the September 2009 Greenbook.

Note: 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
		Sep. Greenbook*		Sep. Greenbook
Mexico	13.2300	-0.8	29313	-1.1
Brazil	1.7308	-4.2	63161	6.6
Venezuela	2.14	0.0	50100	-6.9
China	6.8292	0.0	3021	-0.4
Hong Kong	7.7495	-0.0	22170	6.2

Korea	1190.0	-2.3	1650	-0.2
Taiwan	32.46	-0.3	7657	4.2
Thailand	33.41	-1.4	715	1.6

* 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 104 and generally decreases to about 90 by 2008. It then generally increases to about 138 by 2009, and generally decreases to end at about 116. Brazil begins at about 104 and generally decreases to about 60 by mid-2008. It then generally increases to about 91 by late 2008, and generally decreases to end at about 65. Korea begins at about 104 and generally decreases to about 88 by late 2007. It then generally increases to about 150 by early 2009, and generally decreases to end at about 113. China begins at about 104 and generally decreases to about 80 by mid-2008. It then remains about constant until the end.

There is a second line chart, June to October 2009. September 15, 2009 = 100. Data are daily. The September 2009 Greenbook is marked in the time series. There are four series, "Mexico", "Brazil", "Korea", and "China". Mexico begins at about 99.5 and generally increases to about 102.8 by June. It then generally decreases to about 98 by late June, and generally increases to about 104 by July. It then generally decreases to about 96 by August, and generally increases to about 102.5 by early October. It then generally decreases to end at about 96. It is at about 100 at the time of the September 2009 Greenbook. Brazil begins at about 102.5 and generally increases to about 112.5 by July. It then generally decreases to about 94 by October, and generally increases to end at about 99. It is at about 100 at the time of the September 2009 Greenbook. Korea begins at about 101 and generally increases to about 107.6 by July. It then generally decreases to about 100 by early August, and generally increases to about 102.5 by late August. It then generally decreases to about 95 by October, and generally increases to end at about 98. It is at about 100 at the time of the September 2009 Greenbook. China begins at about 100 and remains about constant until the end. It is at about 100 at the time of the September 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 90 and generally increases to about 250 by 2007. It then generally decreases to about 128 by early 2009, and generally increases to end at about 225. Brazil begins at about 90 and generally increases to about 285 by 2008. It then generally decreases to about 128 by late 2008, and generally increases to end at about 250. Korea begins at about 100 and generally increases to about 230 by 2007. It then generally decreases to about 115 by late 2008, and generally increases to end at about 235. Hong Kong begins at about 100 and generally increases to about 220 by 2007. It then generally decreases to about 80 by early 2009, and generally increases to end at about 152.

There is a second line chart, June to October 2009. September 15, 2009 = 100. Data are daily. The September 2009 Greenbook is marked in the time series. There are four series, "Mexico", "Brazil", "Korea" and "Hong Kong". Mexico begins at about 86 and generally decreases to about 78 by June. It then generally increases to about 106 by October, and generally decreases to end at about 100. Brazil begins at about 93 and generally decreases to about 84 by July. It then generally increases to about 116 by October, and generally decreases to end at about 107. Korea begins at about 93 and generally decreases to about 83 by late June. It then generally increases to about 106 by September, and generally decreases to end at about 98. Hong Kong begins at about 92 and generally decreases to about 84 by July. It then generally increases to about 104 by September, and generally decreases to about 99 by early October. It then generally increases to about 109 by October and generally decreases to end at about 105. They are at about 102 at the time of the September 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 Sep. Greenbook	Latest	Change since Sep. Greenbook
Mexico	4.53	0.04	2.10	0.31
Brazil	8.60	-0.40	2.40	0.16
Argentina	11.94	-0.50	6.75	-0.72
China	...	...	0.80	-0.06
Korea	2.10	0.00	...	...
Taiwan	1.11	-0.02	...	...
Singapore	0.31	0.00	...	...
Hong Kong	0.07	-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 3.6 and generally decreases to about 1.3 by 2007. It then generally increases to about 8 by 2008, and generally decreases to end at about 3.1. Mexico begins at about 1.5 and generally decreases to about 0.8 by 2007. It then generally increases to about 5.9 by 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 1.5 by 2007, and generally increases to about 5.8 by 2008. It then generally decreases to end at about 2.2.

There is a second line chart, June to October 2009. Data are daily. The September 2009 Greenbook is marked in the time series. There are three series, "Overall", "Mexico", and "Brazil". Overall begins at about 4.4 and generally decreases to about 4 by June. It then generally increases to about 4.7 by June, and generally decreases to about 2.9 by October. It then generally increases to end at about 3.3. It is at about 3.3 at the time of the September 2009 Greenbook. Mexico begins at about 2 and generally increases to about 2.9 by July. It then generally decreases to about 1.8 by August, and generally increases to end at about 2.5 by late August. It then generally decreases to about 1.8 by September, and generally increases to end at about 2.1. It is at about 1.8 at the time of the September 2009 Greenbook. Brazil begins at about 2.8 and generally increases to about 3.1 by June. It then generally decreases to about 2.1 by September, and generally increases to end at about 2.4. It is at about 2.2 at the time of the September 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 1 and remains about constant until mid-2007. It then generally increases to about 3 by 2008, and generally decreases to end at about 1. Malaysia begins at about 1.2 and remains about constant until mid-2007. It then generally increases to about 5 by 2008, and generally decreases to end at about 1.8. Indonesia begins at about 2.5 and generally decreases to about 2 by 2005. It then generally increases to about 3 by 2005, and generally decreases to about 1.2 by 2007. It then generally increases to about 10.2 by late 2008, and generally decreases to end at about 2.5.

There is a second line chart, June to October 2009. Data are daily. The September 2009 Greenbook is marked in the time series. There are three series, "China", "Malaysia", and "Indonesia". China begins at about 1 and generally decreases to about 0.5 by June. It then generally increases to about 1.6 by July, and generally decreases to end at about 0.9. It is at about 1 at the time of the September 2009 Greenbook. Malaysia begins at about 2 and generally decreases to about 1.2 by early August. It then generally increases to end at about 1.7. It is at about 1.7 at the time of the September 2009 Greenbook. Indonesia begins at about 4.1 and generally decreases to about 3.6 by June. It then generally increases to about 4.7 by June, and generally decreases to about 2.3 by October. It then generally increases to end at about 2.8. It is at about 2.9 at the time of the September 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 3.6 and generally increases to about 5.5 by early 2000. It then generally decreases to about -5 by 2001, and generally increases to about 3.8 by early 2007. It then generally decreases to about -8 by early 2009, and generally increases to end at about -1.5.

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

Source: FRB staff calculations.

Figure: Consumer Prices

Line chart, by 12-month percent change, s.a., 1999 to 2009. Data are monthly. There are four series, "Japan", "Euro area", "Canada", and "United Kingdom". Japan begins at about 0.2 and generally decreases to about -1.5 by early 2002. It then generally increases to about 0.9 by 2004, and generally decreases to about -1.3 by late 2005. It then generally increases to about 2.4 by 2008, and generally decreases to end at about -2.3. Euro area begins at about 0.8 and generally increases to about 3 by 2001. It then generally decreases to about 1.4 by 2006, and generally increases to about 4 by 2008. It then generally decreases to end at about -0.2. Canada begins at about 0.8 and generally increases to about 4 by 2001. It then generally decreases to about 0.7 by late 2001, and generally increases to about 4.6 by early 2003. It then generally decreases to about 0.8 by 2006, and generally increases to about 3.4 by 2008. It then generally decreases to end at about -0.9. United Kingdom begins at about 1.6 and generally decreases to about 0.6 by 2000. It then generally increases to about 5.2 by 2008, and generally decreases to end at about 1.1.

Source: Haver Analytics.

Figure: Official or Targeted Interest Rates

Line chart, by percent, 1999 to 2009. There are four series, "Japan", "Euro area", "Canada", and "United Kingdom". Japan begins at about 0.3 and generally decreases to about 0 by early 2001. It remains about constant until mid-2006, and generally increases to about 0.5 by early 2007. It then generally decreases to end at about 0.1. Euro area begins at about 3 and generally decreases to about 2.5 by 1999. It then generally increases to about 4.8 by 2000, and generally decreases to about 2 by 2003. It remains about constant until about late 2005, and generally increases to about 4.3 by mid-2008. It then generally decreases to end at about 1. Canada begins at about 5 and generally decreases to about 4.5 by 1999. It then generally increases to about 5.7 by 2000, and generally decreases to about 2 by early 2002. It then generally increases to about 3.3 by 2003, and generally decreases to about 2 by 2004. It then generally increases to about 4.5 by mid-2007, and generally decreases to end at about 0.2. United Kingdom begins at about 6 and generally decreases to about 5 by 1999. It then generally increases to about 6 by early 2000, and generally decreases to about 3.5 by mid-2003. It then generally increases to about 5.8 by mid-2007, and generally decreases to end at about 0.6.

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, 2000 to 2009. 2005 = 100. There are two series, "Industrial production" and "Tertiary services". Industrial production begins at about 96 and generally increases to about 103 by late 2000. It then generally decreases to about 87 by late 2001, and generally increases to about 110 by early 2008. It then generally decreases to about 68 by early 2009, and generally increases to end at about 84. Tertiary services begins at about 94 and generally decreases to about 93 by 2000. It then generally increases to about 104 by mid-2007, and generally decreases to end at about 97.

Source: Haver Analytics.

Figure: Real Trade

Line chart, 2000 to 2009. 2005 = 100. There are two series, "Real exports" and "Real imports". Real exports begins at about 75 and generally increases to about 82 by mid-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 102. Real imports begins at about 80 and generally increases to about 110 by early 2007. It then generally decreases to about 82 by early 2009, and generally increases to end at about 98.

Source: Haver Analytics.

Figure: Labor Market

Line chart, 2000 to 2009. There are two series, "Unemployment rate", which is by percent, and "Job openings to applications", which is a ratio. These two series use two different scales. Unemployment rate begins at about 4.7 and generally increases to about 5.6 by 2002. It then generally decreases to about 3.55 by mid-2007, and generally increases to about 5.8 by mid-2009. It then generally decreases to end at about 5.5. Job openings to applications begins at about 0.51 and generally increases to about 0.65 by early 2001. It then generally decreases to about 0.5 by early 2002, and generally increases to about 1.08 by early 2007. It then generally decreases to end at about 0.42.

Source: Haver Analytics.

Figure: Consumer Price Inflation

Line chart, by percent, 12-month basis, n.s.a., 2000 to 2009. There are two series, "Consumer price inflation" and "Core". Consumer price inflation begins at about -0.7 and generally decreases to about -1.6 by early 2002. It then generally increases to about 2.4 by mid-2008, and generally decreases to end at about -2.3. Core begins at about -0.4 and generally decreases to about -1.2 by early 2001. It then generally increases to about 0 by 2008, and generally decreases to end at about -0.9.

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	2009			2009			
	Q1	Q2	Q3	June	July	Aug.	Sept.
Housing starts	-10.6	-15.7	--	-1.2	-.5	-9.3	n.a.
Machinery orders ¹	-9.9	-4.9	--	9.7	-9.3	.5	n.a.
Household expenditures	-1.9	.9	--	.2	.3	.2	n.a.
New car registrations	-12.0	14.4	19.0	7.4	10.9	-.0	3.1
Business sentiment ²	-46.0	-45.0	-38.0	...	...	...	...
Wholesale prices ³	-1.8	-5.5	-8.3	-6.7	-8.5	-8.5	-7.9

1. Private sector, excluding ships and electric power. [Return to table](#)

2. Tankan survey, diffusion index. Level. [Return to table](#)

3. Percent change from year earlier; not seasonally adjusted. [Return to table](#)

n.a. Not available.

... Not applicable.

Source: Haver Analytics.

Euro-Area Real GDP

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

Component	2007 ¹	2008 ¹	2008		2009	
			Q3	Q4	Q1	Q2
GDP	2.2	-1.8	-1.5	-7.1	-9.6	-.7
Total domestic demand	1.9	-.4	.8	-2.5	-7.3	-3.0
Consumption	1.2	-.7	.0	-1.8	-2.1	.3
Investment	3.2	-5.5	-5.7	-13.3	-19.8	-6.0
Government consumption	2.0	2.4	2.1	2.4	2.6	3.0
Inventories ²	.1	.6	1.4	.7	-2.5	-2.4
Exports	4.1	-6.6	-3.8	-25.3	-32.0	-6.0
Imports	3.4	-3.7	1.1	-17.1	-27.9	-11.3
Net exports ²	.3	-1.4	-2.2	-4.6	-2.3	2.3
Memo: GDP of selected countries						
France	2.1	-1.7	-1.1	-5.7	-5.4	1.1
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, 2000 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 220 by 2008. They then generally decrease to about 130 by early 2009, and generally increase to end at about 145.

Source: Haver Analytics.

Figure: Economic Sentiment

Line chart, by percent balance, 2000 to 2009. There are two series, "Consumer confidence" and "Industrial confidence". Consumer confidence begins at about 0 and generally increases to about 3 by 2000. It then generally decreases to about -22 by early 2003, and generally increases to about 0 by 2007. It then generally decreases to about -35 by early 2009, and generally increases to end at about -19. Industrial confidence begins at about 0 and generally increases to about 6 by 2000. It then generally decreases to about -17 by late 2001, and generally increases to about 16 by 2007. It then generally decreases to about -38 by early 2009, and generally increases to end at about -24.

Source: Haver Analytics.

Figure: Unemployment Rate

Line chart, by percent, 2000 to 2009. The series begins at about 8.6 and generally decreases to about 7.8 by late 2000. It then generally increases to about 9.0 by early 2005, and generally decreases to about 7.1 by early 2008. It then generally increases to end at about 9.65.

Source: Haver Analytics.

Figure: Consumer Price Inflation

Line chart, by percent, 12-month basis, n.s.a., 2000 to 2009. There are two series, "Consumer price inflation" and "Core". Consumer price inflation begins at about 1.9 and generally increases to about 3.3 by 2001. It then generally decreases to about 1.6 by early 2004, and generally increases to about 4.2 by 2008. It then generally decreases to about -0.9 by mid-2009, and generally increases to end at about -0.3. Core begins at about 1 and generally decreases to about 0.9 by 2000. It then generally increases to about 2.4 by early 2002, and generally decreases to end at about 1.3.

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	2009			2009			
	Q1	Q2	Q3	June	July	Aug.	Sept.
Industrial production ¹	-8.6	-1.1	--	.9	.2	1.1	n.a.
Retail sales volume ²	-8	-3	--	.0	-2	-2	n.a.
New car registrations	.9	12.2	1.4	2.1	-2.0	1.0	-9
Employment	-7	-5	--	...	...	...	...
Producer prices ³	-2.0	-5.2	--	-5.9	-7.6	-6.8	n.a.
M3 ³	6.5	4.7	2.8	4.2	3.5	3.0	2.0

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

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

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

n.a. Not available.

... Not applicable.

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

Source: Haver Analytics.

U.K. Real GDP

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

Component	2007 ¹ - 2008 ¹		2008		2009	
			Q4	Q1	Q2	Q3
GDP	2.4	-2.0	-6.9	-9.6	-2.3	-1.6
Total domestic demand	3.1	-3.3	-8.7	-9.9	-3.2	n.a.
Consumption	2.2	-8	-4.7	-6.0	-2.6	n.a.

Investment	4.9	-8.7	-8.4	-26.2	-19.3	n.a.
Government consumption	1.2	3.1	4.0	.3	2.4	n.a.
Inventories ²	.6	-1.9	-5.3	-1.5	1.3	n.a.
Exports	3.4	-3.5	-15.2	-25.5	-5.5	n.a.
Imports	5.6	-8.0	-20.2	-25.2	-8.4	n.a.
Net exports ²	-8	1.5	2.1	.6	1.0	n.a.

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., 2000 to 2009. There are two series, "Consumer price inflation" and "Core". Consumer price inflation begins at about 0.8 and generally decreases to about 0.5 by 2000. It then generally increases to about 5.3 by 2008, and generally decreases to end at about 1. Core begins at about -0.1 and generally decreases to about -0.4 by mid-2000. It then generally increases to about 1.8 by mid-2008, generally decreases to about 0.6 by late 2008, and 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, 2000 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 4.8 by mid-2004. It then generally increases to end at about 8. Claimant count begins at about 3.8 and generally decreases to about 2.4 by early 2008. It then generally increases to end at about 5.

Source: Haver Analytics.

Figure: Purchasing Managers Survey

Line chart, 2000 to 2009. 50+ = expansion. There are two series, "Services" and "Manufacturing". Services begins at about 57 and generally increases to about 58.5 by 2000. It then generally decreases to about 46 by late 2001, and generally increases to about 61 by late 2006. It then generally decreases to about 40 by late 2008, and generally increases to end at about 55. Manufacturing begins at about 52 and generally decreases to about 45.5 by late 2001. It then generally increases to about 56 by 2004, and generally decreases to about 35 by late 2008. It then generally increases to about 51 by mid-2009, and decreases to end at about 50.

Source: Reuters.

Figure: Labor Costs

Line chart, by percent, 12-month basis, 2000 to 2009. There are two series, "Unit wage costs" and "Average earnings". Unit wage costs begins at about -0.5 and generally decreases to about -3 by early 2000. It then generally increases to about 5 by 2002, and generally decreases to about -6 by 2003. It then generally increases to about 12 by early 2009, and generally decreases to about 2 by mid-2009. It then increases to end at about 4.5. Average earnings begins at about 6 and generally decreases to about 3 by late 2008. It then decreases to about -2 by early 2009, increases back to about 3 by mid-2009, and generally decreases to end at about 2.

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

Source: Haver Analytics.

Economic Indicators

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

Indicator	2009			2009			
	Q1	Q2	Q3	July	Aug.	Sept.	Oct.
Producer input prices ¹	.7	-8.9	-8.8	-12.2	-7.7	-6.5	n.a.
Industrial production	-5.1	-5	--	.6	-2.5	n.a.	n.a.
Business confidence ²	-45.0	-22.0	-7.0	-14.0	-5.0	-2.0	4.0
Consumer confidence ²	-31.0	-19.9	-14.1	-16.0	-16.2	-10.1	n.a.

Trade balance ³	-10.5	-13.3	--	-4.3	-3.8	n.a.	n.a.
Current account ³	-5.9	-17.7	--	...	...	...	...

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, 2000 to 2009. The series begins at about 7.7 and generally decreases to about 0.3 by 2001. It then generally increases to about 4.5 by 2004, and generally decreases to end at about -4.7.

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

Source: Haver Analytics.

Figure: Real Trade

Line chart, 2000 to 2009. Index, 2002 = 100. There are two series, "Real exports" and "Real imports". Real exports begins at about 100, and fluctuates between about 90 and 110 but generally increases until about late 2007. It then generally decreases to end at about 80. Real imports begins at about 100, dips to about 95 by late 2001, generally increases to about 145 by mid-2008, decreases to about 107 by early 2009, and increases to end at about 119.

Source: Haver Analytics.

Figure: Unemployment Rate

Line chart, by percent, 2000 to 2009. The series begins at about 6.72 and generally increases to about 8.0 by late 2001. It then generally decreases to about 5.8 by early 2008, and generally increases to about 8.7 by mid-2009. It then generally decreases to end at about 8.4.

Source: Haver Analytics.

Figure: Consumer Price Inflation

Line chart, by percent, 12-month basis, n.s.a., 2000 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 0.6 by early 2004. It then generally increases to about 3.6 by mid-2008, and generally decreases to end at about -0.8. Core begins at about 1.4 and generally increases to about 4.3 by late 2002. It then generally decreases to about 0.9 by 2004, and generally increases to about 2.4 by mid-2007. It then generally decreases to end at about 0.7.

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	2009			2009			
	Q1	Q2	Q3	June	July	Aug.	Sept.
Industrial production	-5.2	-4.7	--	-.7	-.4	n.a.	n.a.
New manufacturing orders	-12.0	-1.1	--	18.9	-16.0	7.9	n.a.
Retail sales	-1.1	.4	--	.4	-.1	.4	n.a.
Employment	-1.4	-.4	-.2	-.0	-.3	.2	.2
Wholesale sales	-7.3	.7	--	1.2	2.3	-.8	n.a.
Ivey PMI ¹	41.5	53.4	56.4	58.2	51.8	55.7	61.7

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				
			Q2	Q3	July	Aug.	Sept.
Real GDP ¹	12.3	6.9	18.5	9.8	...	...	...
Industrial production	19.5	1.8	4.4	5.4	-.7	1.7	1.3
Consumer prices ²	6.5	1.2	-1.5	-1.3	-1.8	-1.2	-.8
Merch. trade balance ³	262.7	298.1	142.7	100.9	69.6	133.8	99.3

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

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

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

... Not applicable.

Source: CEIC.

Indian Economic Indicators

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

Indicator	2007	2008	2009				
			Q2	Q3	July	Aug.	Sept.
Real GDP ¹	9.3	5.8	7.3	n.a.	...	...	...
Industrial production	9.9	4.4	3.5	n.a.	-.6	1.8	n.a.
Consumer prices ²	5.5	9.7	8.2	n.a.	10.9	10.7	n.a.
Wholesale prices ²	3.8	6.2	.5	-.2	-.7	-.3	.5
Merch. trade balance ³	-79.2	-121.9	-60.2	n.a.	-76.4	-93.6	n.a.
Current account ⁴	-11.3	-36.1	-23.2	n.a.	...	...	...

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

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

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

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

n.a. Not available.

... Not applicable.

Source: CEIC.

China and India

Figure: Industrial Production

Line chart, 2003 to 2009. January 2000 = 100. There are two series, "China" and "India". China begins at about 140 and generally increases to about 330 by 2008. It then generally decreases to about 300 by late 2008, and generally increases to end at about 373. India begins at about 114 and generally increases to end at about 190.

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 0.3 and generally increases to about 5.3 by mid-2004. It then generally decreases to about 0.8 by early 2006, and generally increases to about 9 by early 2008. It then generally decreases to about -1.9 by early 2009, and generally increases to end at about -0.7. India begins at about 3.5 and generally increases to about 5.2 by 2003. It then generally decreases to about 2.3 by 2004, and generally increases to about 10.5 by 2008. It then generally decreases to about 7.5 by 2009, and generally increases to end at about 10.9.

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 3 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 9. India begins at about -1 and generally decreases to about -14 by 2008. It then generally increases to about -4 by 2009, and generally decreases to end at about -6.

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 generally increases to about 7.5 by late 2007. It then generally decreases to end at about 5.4. India begins at about 5.5 and generally increases to about 7.6 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. The India series begins at about 22 and generally decreases to about 17 by 2006. It then generally increases to about 23 by late 2008, and generally decreases to end at about 22.

Source: Bank for International Settlements; Haver Analytics.

Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to 2009. The India series begins at about 6.5 and generally increases to about 7.5 by 2003. It then generally decreases to about 4 by early 2004, and generally increases to end at about 20.5.

Source: Bank for International Settlements; CEIC.

Economic Indicators for Newly Industrialized Economies: Growth

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

2007		2008		2009		
		Q2	Q3	July	Aug.	Sept.

<i>Real GDP¹</i>							
Hong Kong	7.1	-2.7	13.9	n.a.	...	...	...
Korea	5.7	-3.4	11.0	12.3	...	...	...
Singapore	5.8	-4.0	20.7	n.a.	...	...	...
Taiwan	6.5	-8.5	11.8	n.a.	...	...	...
<i>Industrial production</i>							
Hong Kong	-1.5	-6.6	-.3	n.a.	...	...	...
Korea	7.0	3.0	11.4	n.a.	2.1	-1.3	n.a.
Singapore	5.9	-4.2	15.4	8.0	26.2	-5.7	-13.9
Taiwan	7.8	-1.8	17.3	6.8	.9	-.2	6.5

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, annualized)

	2007	2008	2009				
			Q2	Q3	July	Aug.	Sept.
Hong Kong	-23.5	-25.9	-15.5	-39.3	-39.9	-33.7	-44.3
Korea	28.2	6.0	68.0	n.a.	61.0	55.4	n.a.
Singapore	36.2	18.4	26.8	21.9	33.6	30.1	1.9
Taiwan	16.8	4.4	21.7	24.4	23.0	27.9	22.3

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				
			Q2	Q3	July	Aug.	Sept.
Hong Kong	3.8	2.1	-.1	-.9	-1.5	-1.6	.5
Korea	3.6	4.1	2.8	2.0	1.6	2.2	2.2
Singapore	4.4	4.3	-.5	-.4	-.5	-.3	-.4
Taiwan	3.3	1.3	-.8	-1.3	-2.3	-.8	-.9

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

Source: CEIC.

Newly Industrialized Economies

Figure: Industrial Production

Line chart, 2003 to 2009. January 2000 = 100. There are four series, "Korea", "Singapore", "Hong Kong", and "Taiwan". Korea begins at about 115 and generally decreases to about 112 by mid-2003. It then generally increases to about 173 by early 2008, and generally decreases to about 134 by late 2008. It then generally increases to about 172 by mid-2009, and generally decreases to end at about 170. Singapore begins at about 100 and generally decreases to about 90 by early 2003. It then generally increases to about 180 by mid-2007, and generally decreases to about 114 by 2009. It then generally increases to about 165 by mid-2009, and generally decreases to end at about 134. Hong Kong begins at about 78 and generally increases to about 85 by mid-2005. It then generally decreases to end at about 73. Taiwan begins at about 104 and generally increases to about 151 by early 2008. It then generally decreases to about 96 by early 2009, and generally

increases to end at about 134.

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 5.7 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 0.4 and generally increases to about 2.4 by 2004. It then generally decreases to about -0.2 by 2005, and generally increases to about 7.6 by 2008. It then generally decreases to end at about -0.4. 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-2007, and generally decreases to about -2.7 by 2009. It then generally increases to end at about 0.5. Taiwan begins at about 1 and generally decreases to about -2 by early 2003. It then generally increases to about 3.8 by mid-2004, and generally decreases to about -1.2 by 2006. It then generally increases to about 6 by mid-2008, and generally decreases to about -1.6 by 2009. It then generally increases to end at about -0.9.

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 early 2003. It then generally increases to about 3.6 by early 2005, and generally decreases to about -1.1 by 2008. It then generally increases to about 6.3 by 2009, and generally decreases to end at about 5. Singapore begins at about 1.6 and generally decreases to end at about 1.9. Hong Kong begins at about -0.5 and generally decreases to about -1.8 by 2004. It then generally increases to about -0.6 by late 2004, and generally decreases to about -3.1 by mid-2008. It then generally increases to about -0.6 by early 2009, and generally decreases to end at about -3.3. Taiwan begins at about 1.4 and generally increases to about 1.7 by 2003. It then generally decreases to about -0.4 by late 2004, and generally increases to about 2.7 by 2007. It then generally decreases to about -0.1 by 2008, and generally increases to about 2.3 by early 2009. It then generally decreases to end at about 2.

Source: CEIC.

Figure: Benchmark Interest Rates

Line chart, by percent, 2003 to 2009. There are three series, "Korea", "Hong Kong", and "Taiwan". Korea begins at about 4.3 and generally decreases to about 3.2 by late 2004. It then generally increases to about 5.2 by 2008, and generally decreases to end at about 2. Hong Kong begins at about 2.8 and generally decreases to about 2.6 by 2003. It then generally increases to about 6.8 by 2006, and generally decreases to end at about 0.6. Taiwan begins at about 1.7 and generally decreases to about 1.3 by 2003. It then generally increases to about 3.7 by 2008, and generally decreases to end at about 1.2.

Source: Bloomberg.

Figure: Gross External Debt

Line chart, by percent of gross domestic product, 2003 to 2009. There are three series, "Korea", "Hong Kong", and "Taiwan". Korea begins at about 25 and remains about constant until 2006. It then generally increases to about 50 by late 2008, and generally decreases to end at about 49. Hong Kong begins at about 215 and generally increases to about 330 by late 2007. It then generally decreases to end at about 300. Taiwan begins at about 20 and generally increases to about 30 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 45 and generally decreases to about 30 by 2004. It then generally increases to about 78 by mid-2008, and generally decreases to end at about 65. Hong Kong begins at about 195 and generally increases to about 355 by late 2007. It then generally decreases to end at about 230. Taiwan begins at about 25 and generally increases to about 35 by mid-2006. It then generally decreases to end at about 25.

Source: Bank for International Settlements.

ASEAN-4 Economic Indicators: Growth

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

Indicator	2007	2008	2009				
			Q1	Q2	June	July	Aug.
<i>Real GDP¹</i>							
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	...	...	...
<i>Industrial production</i> ²							
Indonesia	5.6	3.0	1.9	-.6	-2.9	-1.6	4.4
Malaysia	2.1	.5	-4.5	2.0	.2	5.7	-1.4
Philippines	-2.7	.3	-20.3	12.4	.1	1.8	-1.5
Thailand	8.2	5.3	-8.7	9.6	2.3	1.8	-3.6

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

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

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

Note: Association of Southeast Asian Nations.

... Not applicable.

Source: CEIC.

ASEAN-4 Economic Indicators: Merchandise Trade Balance

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

Indicator	2007	2008	2009				
			Q1	Q2	June	July	Aug.
Indonesia	39.6	31.6	29.8	36.9	34.1	31.8	35.9
Malaysia	29.2	42.7	38.1	30.8	31.1	29.9	30.3
Philippines	-5.0	-7.7	-8.7	-5.0	-6.3	-7.0	.4
Thailand	12.8	.1	32.6	22.6	12.2	11.8	26.7

Note: Association of Southeast Asian Nations.

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

ASEAN-4 Economic Indicators: Consumer Price Inflation

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

Indicator	2007 ¹	2008 ¹	2009				
			Q2	Q3	July	Aug.	Sept.
Indonesia	5.8	11.1	5.6	2.8	2.7	2.8	2.8
Malaysia	2.4	4.4	1.3	-2.3	-2.4	-2.4	-2.0
Philippines	3.9	8.0	3.2	.3	.2	.1	.7
Thailand	3.2	.4	-2.8	-2.2	-4.4	-1.0	-1.0

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

Note: Association of Southeast Asian Nations.

Source: CEIC; IMF International Financial Statistics database.

ASEAN-4

Figure: Industrial Production

Line chart, 2003 to 2009. January 2000 = 100. There are four series, "Indonesia", "Malaysia", "Philippines" and "Thailand". Indonesia begins at about 138 and generally increases to about 170 by 2004. It then generally decreases to about 130 by late 2005, and generally increases to end at about 165. Malaysia begins at about 112 and generally increases to about 162.5 by early 2008. It then generally decreases to about 130 by early 2009, and generally increases to end at about 139. Philippines begins at about 100 and generally decreases to about 60 by early 2009. It then generally increases to end at about 75. Thailand begins at about 136 and generally increases to about 212 by early 2008. It then generally decreases to about 164 by late 2008, and generally increases to about 195 by mid-2009. It then generally decreases to end at about 187.

Source: CEIC; Bank of Philippines.

Figure: Consumer Prices

Line chart, by percent change from year earlier, 2003 to 2009. There are four series, "Indonesia", "Malaysia", "Philippines" and "Thailand". Indonesia begins at about 8 and generally decreases to about 4.5 by early 2004. It then generally increases to about 18 by late 2005, and generally decreases to about 5 by late 2006. It then generally increases to about 12 by 2008, and generally decreases to end at about 2.8. Malaysia begins at about 2 and generally decreases to about 1 by 2003. It then generally increases to about 5 by 2006, and generally decreases to about 2 by early 2007. It then generally increases to about 8.5 by mid-2008, and generally decreases to end at about -2. Philippines begins at about 3 and generally increases to about 8 by late 2004. It then generally decreases to about 2 by early 2007, and generally increases to about 12.5 by mid-2008. It then generally decreases to about 0 by mid-2009, and generally increases to end at about 0.8. Thailand begins at about 2.5 and generally decreases to about 1 by late 2003. It then generally increases to about 6.5 by late 2005, and generally decreases to about 1 by mid-2007. It then generally increases to about 9.5 by mid-2008, and generally decreases to about -4.8 by 2009. It then 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 2.1 by late 2008, and generally increases to about 3.2 by 2009. It then generally decreases to end at about 2.8. Malaysia begins at about 1.5 and generally increases to about 4.7 by mid-2008. It then generally decreases to end at about 2.7. Philippines begins at about -0.5 and generally increases to about -0.1 by early 2007. It then generally decreases to about -0.9 by early 2008, and generally increases to end at about -0.3. 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 late 2007. It then generally decreases to about -1.3 by late 2008, and generally increases to about 2.9 by early 2009. It then generally decreases to end at about 1.4.

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 12.8 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. Malaysia begins at about 7.5 and remains about constant until late 2005. It then generally increases to about 3.5 by 2006, and generally decreases to end at about 2.2. Philippines begins at about 7.2 and generally decreases to about 7 by mid-2003. It then generally increases to about 7.5 by 2005, and generally decreases to end at about 4. Thailand begins at about 2.3 and generally decreases to about 1.5 by mid-2003. It then generally increases to about 5 by mid-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 57 and generally decreases to about 25 by mid-2008. It then generally increases to about 33 by late 2008, and generally decreases to end at about 30. Malaysia begins at about 44 and generally increases to about 50 by 2003. It then generally decreases to about 30 by late 2007, and generally increases to end at about 44. Philippines begins at about 75 and generally decreases to about 30 by late 2007. It then generally increases to about 37 by early 2009, and generally decreases to end at about 33. Thailand begins at about 40 and generally decreases to about 22 by late 2007. It then generally increases to end at about 25.

Note: ASEAN is the Association of Southeast Asian Nations.

Source: CEIC; Bank for International Settlements.

Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to 2009. There are four series, "Indonesia", "Malaysia", "Philippines" and "Thailand". Indonesia begins at about 48 and generally decreases to about 38 by early 2004. It then generally increases to about 62 by 2005, and generally decreases to about 15 by 2006. It then generally increases to about 42 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 19 by early 2007, and generally increases to end at about 34. Philippines begins at about 48 and generally decreases to about 45 by late 2003. It then generally increases to about 57 by early 2004, and generally decreases to about 20 by early 2008. It then generally increases to about 27 by 2008, and generally decreases to end at about 17. Thailand begins at about 37 and generally decreases to about 20 by 2004. It then generally increases to about 29 by mid-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
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		Q2	Q3	July	Aug.	Sept.
Real GDP ¹	3.7	-1.7	-4.4	n.a.
Overall economic activity	3.1	1.0	-1.3	n.a.	2.5	n.a.
Industrial production	2.4	-9	-1.2	n.a.	2.8	-2
Unemployment rate ²	3.7	4.0	5.7	5.9	5.7	5.9
Consumer prices ³	3.8	6.5	6.0	5.1	5.4	5.1
Merch. trade balance ⁴	-10.1	-17.3	-4.8	-9.6	-12.8	-9.6
Merchandise imports ⁴	281.9	308.6	218.6	232.0	228.4	230.6
Merchandise exports ⁴	271.9	291.3	213.7	222.4	215.6	221.0
Current account ⁵	-8.2	-15.7	2.2	n.a.	...	...

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

2. Percent; counts as unemployed those working 1 hour a week or less. [Return to table](#)

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

4. Billions of U.S. dollars, annualized. [Return to table](#)

5. Billions of U.S. dollars, not seasonally adjusted, annualized. [Return to table](#)

n.a. Not available.

... Not applicable.

Source: Haver Analytics; Bank of Mexico.

Brazilian Economic Indicators

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

Indicator	2007	2008	2009				
			Q2	Q3	July	Aug.	Sept.
Real GDP ¹	6.1	1.2	7.8	n.a.	...	...	...
Industrial production	6.0	3.1	3.8	n.a.	2.2	1.2	n.a.
Unemployment rate ²	9.3	7.9	8.2	7.9	8.0	8.0	7.7
Consumer prices ³	4.5	5.9	5.2	4.4	4.5	4.4	4.3
Merch. trade balance ⁴	40.0	25.0	43.2	21.6	23.4	32.0	9.6
Current account ⁵	1.6	-28.2	-8.5	-19.2	-20.0	-9.9	-27.7

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

2. Percent. [Return to table](#)

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

4. Billions of U.S. dollars, annualized. [Return to table](#)

5. Billions of U.S. dollars, not seasonally adjusted, annualized. [Return to table](#)

n.a. Not available.

... Not applicable.

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

Latin America

Figure: Industrial Production

Line chart, 2003 to 2009. January 2000 = 100. There are two series, "Brazil" and "Mexico". Brazil begins at about 107 and generally decreases to about 105 by mid-2003. It then generally increases to about 144 by 2008, and generally decreases to about 113 by late 2008. It then generally increases to end at about 129. Mexico begins at about 115 and generally decreases to end at about 114.

Source: Fundacion de Investigaciones Economicas Lationamericanas; 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 2008. It then generally decreases to end at about 4.5. Mexico begins at about 5.2 and generally decreases to about 3 by late 2005. It then generally increases to about 7 by late 2008, and 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 1.4 by 2008, and generally increases to about 3.6 by 2009. It then generally decreases to end at about 2.1. Mexico begins at about -0.2 and generally increases to about 0 by 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 -2.1 by late 2008, and generally increases to about -0.4 by 2009. It then generally decreases to end at about -0.8.

Source: IMF International Financial Statistics, Bank of Mexico.

Figure: Benchmark Interest Rates

Line chart, by percent, 2003 to 2009. There are two series, "Brazil" and "Mexico". Brazil begins at about 25.5 and generally increases to about 26 by 2003. It then generally decreases to about 16 by 2004, and generally increases to about 20 by 2005. It then generally decreases to end at about 9. Mexico begins at about 9 and generally decreases to about 4 by 2003. It then generally increases to about 10 by 2005, and generally decreases to end at about 4.9.

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 2008. It then generally increases to about 62 by late 2008, and generally decreases to end at about 58. Mexico begins at about 25 and generally decreases to about 20 by 2008. It then generally increases to end at about 25.

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 33 by early 2007, and generally decreases to end at about 17. Mexico begins at about 48 and generally decreases to about 24 by 2006. It then generally increases to end at about 31.

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

Real Gross Domestic Product and Related Items

(Percent change from previous period at a compound annual rate; based on seasonally adjusted data, chain-type quantity indexes)

Item	2009:Q1 Third	2009:Q2 Third	2009:Q3 Advance
Gross Domestic Product	-6.4	-.7	3.5
Final sales	-4.1	.7	2.5
Consumer spending	.6	-.9	3.4
Goods	2.5	-3.1	8.1
Durables	3.9	-5.6	22.3
Nondurables	1.9	-1.9	2.0
Services	-.3	.2	1.2
Business fixed investment	-39.2	-9.6	-2.5
Nonresidential structures	-43.6	-17.3	-9.0
Equipment and software	-36.4	-4.9	1.1
Residential investment	-38.2	-23.3	23.4
Federal government	-4.3	11.4	7.9
State and local government	-1.5	3.9	-1.1
Exports of goods and services	-29.9	-4.1	14.7
Imports of goods and services	-36.4	-14.7	16.4
<i>ADDENDA:</i>			
Inventory investment ¹	-113.9	-160.2	-130.8
Net exports of goods and services ¹	-386.5	-330.4	-348.3
Nominal GDP	-4.6	-.8	4.3
Nominal GDI	-5.9	-2.6	<u>n.a.</u>
Statistical discrepancy ²	185.4	249.8	n.a.
Change in economic profits ²	59.1	43.8	n.a.
Profit share ³	8.3	8.6	n.a.
Real disposable personal income	.2	3.8	-3.4
Personal saving rate (percent)	3.7	4.9	3.3

1. Level, billions of chained (2005) dollars. [Return to table](#)

2. Billions of dollars. [Return to table](#)

3. Economic profits as a share of GNP. [Return to table](#)

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

Source: Bureau of Economic Analysis.

Output per Hour

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

Sector	2007:Q3 to	2008:Q3 to	2008	2009
				1

	2008:Q3	2009:Q3 ¹	Q4	Q1	Q2	Q3
Nonfarm business						
All persons	1.2	3.8	.8	.3	7.0	7.5
All employees ²	.8	3.7	-1.0	1.1	7.7	7.2

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

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

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

Real Personal Consumption Expenditures

(Percent change from preceding comparable period)

Category	2009			2009		
	Q1	Q2	Q3	July	Aug.	Sept.
	Annual rate			Monthly rate		
Total real PCE	.6	-.9	3.4	.2	1.0	-.6
Motor vehicles	9.5	-6.3	69.1	6.4	19.7	-23.0
Goods ex. motor vehicles	2.0	-2.8	3.9	.0	1.2	.3
Services	-.3	.2	1.2	.0	.2	.1
Ex. energy	-.2	.7	1.3	.1	.2	.1
Memo:						
Real PCE control ¹	1.3	-2.5	3.2	.0	.9	.3
Nominal retail control ²	1.9	-2.8	1.7	-.2	.7	.5

1. Durables excluding motor vehicles, nondurables excluding gasoline, and food services. [Return to table](#)

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

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

Figure: Change in Real PCE Goods

Line chart showing 6-month moving average, by percent, 1991 to September 2009. The series begins at about -0.52 and generally increases to about 0.72 by early 1999. It then generally decreases to -0.62 by late 2008, and generally increases to end at about -0.0. It is at about 0.2 at the time of the NBER peak.

There is a second line chart, by percent, 2006 to September 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 0.4 and generally decreases to about 0.2 by 2006. It then generally increases to about 0.4 by late 2006, and generally decreases to about -0.55 by late 2008. It then generally increases to end at about 0. Monthly begins at about 1.4 and generally decreases to about -2.0 by 2008. It then generally increases to about 2.8 by 2009, and generally decreases to end at about -2.0.

Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. A vertical line indicates the NBER Peak in December 2007. 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 September 2009. The series begins at about 0.38 and generally decreases to about -0.07 by early 1991. It then generally increases to about 0.5 by 2000, and generally decreases to about -0.09 by 2008. It then generally increases to end at about 0.09. It is at about -0.09 at the time of the NBER peak.

There is a second line chart, by percent, 2006 to September 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 0.18 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 0.09. Monthly begins at about 0.12 and generally increases to about 0.55 by early 2006. It then generally decreases to about -0.35 by 2008, and generally increases to about 0.26 by late 2008. It then generally decreases to about -0.12 by 2009, and generally increases to about 0.23 by 2009. It then generally decreases to end at about 1.2.

Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. A vertical line indicates the NBER Peak in December 2007. 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" and "Total Market Index". These two series use two different scales. Ratio of household net worth to DPI begins at about 5.75 and generally increases to about 6.18 by late 1999. It then generally decreases to about 5.0 by 2002, and generally increases to about 6.4 by early 2006. It then generally decreases to about 4.5 by early 2009, and generally increases to end at about 4.9 by 2009:Q3. Total Market Index begins at about 11500 and generally increases to about 14500 by 2000. It then generally decreases to about 7650 by 2002, and generally increases to about 15500 by late 2007. It then generally decreases to about 7600 by early 2009, and generally increases to end at about 1100 by October 29, 2009.

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

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

Figure: Change in Real Disposable Personal Income

Line chart, by 12-month percent change, 1999 to September 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 -0.4 by early 2008. It then generally increases to about 4.9 by 2008, and generally decreases to about -1.9. It then generally increases to end at about 1.

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 September 2009. The series begins at about 4.5 and generally decreases to about 1.9 by 1999. It then generally increases to about 4.8 by 2001, and generally decreases to about 1.7 by 2008. It then generally increases to about 5.9 by 2009, and generally decreases to end at about 3.3.

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 October 29, 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 late 1999. It then generally decreases to about 3.4 by 2003, and generally increases to about 5.2 by 2006. 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 4.8 and generally increases to about 6.5 by 2000. It then generally decreases to about 1 by 2003, and generally increases to about 5.3 by 2006. It then generally decreases to end at about 0.1.

Source: Federal Reserve Board.

Figure: Consumer Confidence

Line chart, 1990 to October 2009. There are two series, "Reuters/Michigan" (index, 1966 = 100) and "Conference Board" (index, 1985 = 100). These two series use two different scales. Reuters/Michigan begins at about 93.5 and generally decreases to about 64 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 71. It is at about 76 at the time of the NBER peak. Conference Board begins at about 108 and generally decreases to about 47 by early 1992. It then generally increases to about 145 by early 2000, and generally decreases to about 60 by 2003. It then generally increases to about 112 by mid-2007, and generally decreases to about 26 by early 2009. It then generally increases to end at about 48. It is at about 89 at the time of the NBER peak.

Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. A vertical line indicates the NBER Peak in December 2007. The NBER peak is the last business cycle peak as defined by the NBER.

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

Price Measures

(Percent change)

Measures	12-month change		3-month change	1-month change
	Sept. 2008	Sept. 2009	Annual rate	Monthly rate

<i>CPI</i>						
Total	4.9	-1.3	3.3	2.5	.4	.2
Food	6.2	-2	-1.5	-1.1	.1	-1
Energy	23.1	-21.6	22.1	21.1	4.6	.6
Ex. food and energy	2.5	1.5	2.4	1.3	.1	.2
Core goods	.5	1.6	4.1	.9	-.3	.3
Core services	3.2	1.5	1.8	1.4	.2	.1
Shelter	2.4	.7	1.4	-.1	.1	.1
Other services	4.5	2.6	2.1	4.0	.4	.3
Memo: core ex. tobacco	2.4	1.2	2.0	1.1	.1	.2
Chained CPI (n.s.a.) ¹	4.2	-1.4	...	...	...	...
Ex. food and energy ¹	2.0	1.1	...	...	...	...
<i>PCE prices</i>						
Total	4.1	-5	2.8	2.0	.3	.1
Food and bev. at home	7.0	-1.4	-2.8	-2.8	.1	-4
Energy	24.5	-22.6	26.9	23.6	5.1	.8
Ex. food and energy	2.5	1.3	2.0	1.3	.1	.1
Core goods	.6	1.3	2.7	.0	-.2	.3
Core services	3.2	1.3	1.8	1.7	.2	.1
Housing services	2.7	1.4	1.4	-.4	.1	-1
Other services	3.3	1.3	2.0	2.4	.2	.1
Memo: core ex. tobacco	2.5	1.0	1.7	1.2	.1	.1
Core market-based	2.6	1.6	2.0	1.1	.1	.1
Core non-market-based	2.1	-.7	2.6	2.4	.1	.2
<i>PPI</i>						
Total finished goods	8.8	-4.8	9.0	1.2	1.7	-6
Food	7.8	-4.2	4.4	-4.9	.4	-1
Energy	23.4	-22.1	40.8	12.0	8.0	-2.4
Ex. food and energy	4.0	1.8	2.1	.0	.2	-1
Core consumer goods	4.2	2.2	2.4	.0	.1	-1
Capital equipment	3.6	1.2	1.3	.0	.3	-1
Intermediate materials	15.3	-11.7	6.8	7.2	1.8	.2
Ex. food and energy	11.8	-7.5	-2.1	7.2	.6	.9
Crude materials	24.2	-31.5	54.4	-11.3	3.8	-2.1
Ex. food and energy	16.4	-19.7	37.3	63.3	6.0	3.6

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

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

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

Consumer Prices

Figure: PCE Prices

Line chart, by percent, 2000 to September 2009. There are two series, "Total PCE" and "Core PCE". Total PCE 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 4.5 by mid-2008. It then generally decreases to end at about -0.5. Core PCE begins at about 1.6 and generally increases to about 2.6 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 1.3.

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

Figure: Measures of Core PCE

Line chart, by percent, 2000 to September 2009. There are three series, "PCE excluding food and energy", "Market-based components" and "Trimmed mean". PCE excluding food and energy begins at about 1.5 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 mid-2008. It then generally decreases to end at about 1.3. Market-based components begins at about 1.2 and generally increases to about 1.9 by 2001. It then generally decreases to about 1.2 by 2003, and generally increases to about 2.7 by mid-2008. It then generally decreases to end at about 1.6. 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 1.5.

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 September 2009. There are three series, "CPI", "PCE", and "CPI chained". CPI begins at about 2 and generally increases to about 2.9 by late 2001. It then generally decreases to about 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 1.1 by 2001, and generally increases to about 2.7 by mid-2008. It then generally decreases to end at about 1.3. CPI chained begins at about 1.9 and generally increases to about 2.2 by early 2002. It then generally decreases to about 0.8 by late 2003, and generally increases to about 2.7 by 2006. It then 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 September 2009. There are two series, "Services ex. energy" and "Goods ex. food and energy". Services ex. energy begins at about 2.7 and generally increases to about 4.1 by 2002. It then generally decreases to end at about 1.3. Goods ex. food and energy begins at about -1 and generally increases to about 0 by early 2000. 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 September 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 early 2000. It then generally decreases to about 1 by early 2002, and generally increases to about 4.5 by mid-2008. It then generally decreases to end at about -1. 3-month change, annual rate begins at about 3 and generally increases to about 4.5 by early 2000. It then generally decreases to about -1.8 by 2001, and generally increases to about 8 by 2005. It then generally decreases to about -8 by late 2008, and generally increases to about 4 by mid-2009. It then generally decreases to end at about 2.

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

Figure: PCE excluding Food and Energy

Line chart, by percent, 2000 to September 2009. There are two series, "PCE excluding Food and Energy" and "3-month change, annual rate". PCE excluding Food and Energy begins at about 1.6 and generally increases to about 2.6 by 2002. It then generally decreases to about 1.4 by 2003, and generally increases to about 2.7 by mid-2008. It then generally decreases to end at about 1.4. 3-month change, annual rate begins at about 2.2 and generally increases to about 2.8 by early 2000. It then generally decreases to about -1.1 by 2001, and generally increases to about 3.9 by late 2001. It then generally decreases to about 0.9 by early 2003, and generally increases to about 3.3 by early 2005. It then generally decreases to about 0.2 by late 2008, and generally increases to about 2.2 by early 2009. It then generally decreases to end at about 1.4.

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

Broad Measures of Inflation

(Percent change, Q3 to Q3)

Measure	2006	2007	2008	2009
Product prices				

GDP price index	3.3	2.6	2.5	.7
Less food and energy	3.3	2.6	2.7	.3
Nonfarm business chain price index	3.0	2.1	1.9	.8
<i>Expenditure prices</i>				
Gross domestic purchases price index	3.4	2.6	4.0	-8
Less food and energy	3.2	2.6	2.9	.2
PCE price index	2.8	2.3	4.3	-6
Less food and energy	2.5	2.2	2.6	1.3
PCE price index, market-based components	2.9	2.0	4.6	-6
Less food and energy	2.5	1.9	2.6	1.7
CPI	3.3	2.3	5.2	-1.6
Less food and energy	2.8	2.1	2.5	1.5
Chained CPI	3.1	2.0	4.5	-1.6
Less food and energy	2.6	1.7	2.1	1.1
Median CPI	3.0	2.9	3.2	1.7
Trimmed mean CPI	2.8	2.5	3.6	1.1
Trimmed mean PCE	2.8	2.5	2.9	1.6

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

Surveys of Inflation Expectations

(Percent)

Period	Actual CPI inflation ¹	Reuters/Michigan Survey				Professional forecasters (10 years) ⁴	
		1 year ²		5 to 10 years ³		CPI	PCE
		Mean	Median	Mean	Median		
2007: Q4	4.0	4.1	3.3	3.3	2.9	2.4	2.1
2008: Q1	4.1	4.2	3.8	3.3	3.0	2.5	2.2
Q2	4.4	6.4	5.0	3.8	3.3	2.5	2.2
Q3	5.3	5.4	4.7	3.6	3.1	2.5	2.2
Q4	1.6	3.0	2.8	2.9	2.8	2.5	2.2
2009: Q1	.0	2.4	2.0	3.3	2.9	2.4	2.2
Q2	-1.2	3.4	2.9	3.1	2.9	2.5	2.3
Q3	-1.6	3.1	2.6	3.2	2.9	2.5	2.2
2009: June	-1.4	3.9	3.1	3.2	3.0	...	...
July	-2.1	3.6	2.9	3.4	3.0	...	...
Aug.	-1.5	3.0	2.8	3.1	2.8	2.5	2.2
Sept.	-1.3	2.8	2.2	3.2	2.8	...	...
Oct.	n.a.	3.2	2.9	3.2	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.

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

Hourly Compensation and Unit Labor Costs

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

Category	2007:Q3	2008:Q3	2008	2009		
	to 2008:Q3	to 2009:Q3 ^e	Q4	Q1	Q2 ^e	Q3 ^e
<i>Compensation per hour</i>						
Nonfarm business	3.1	.1	2.9	-4.7	.4	1.9
<i>Output per hour</i>						
Nonfarm business	1.2	3.8	.8	.3	7.0	7.2
<i>Unit labor costs</i>						
Nonfarm business	1.9	-3.6	2.0	-5.0	-6.2	-5.0

^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:Q3. There are two series, "Productivity and costs" and "ECI". Productivity and costs begins at about 3 and generally increases to about 8.4 by 2000. It then generally decreases to about 2.8 by early 2002, and generally increases to about 5.8 by late 2003. It then generally decreases to end at about 0. ECI begins at about 2.8 and generally increases to about 4.7 by 2000. It then generally decreases to end at about 1.1.

Note: Productivity and costs value for 2009:Q3 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:Q3. 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 -3.4 by early 2002. It then generally increases to about 3.7 by early 2007, and generally decreases to end at about -3.7.

Note: Value for 2009:Q3 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 September 2009. The series begins at about 3.25 and generally decreases to about 3.0 by early 1996. It then generally increases to about 4.4 by early 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 2.5.

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

Figure: Markup, Nonfarm Business

Line chart showing nonfarm business markup, 1996 to 2009:Q3. The markup is the ratio of output price to unit labor costs. The series begins at about 1.61 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 1.745. A horizontal line plots the average, 1968-present, at approximately 1.58.

Note: Value for 2009:Q3 is a staff estimate.

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

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

Measure	2008		2009		
	Sept.	Dec.	Mar.	June	Sept.
	Quarterly change (compound annual rate) ¹				
Total hourly compensation	2.6	1.9	.7	.7	1.8
Wages and salaries	2.6	1.8	.7	.7	1.8

Benefits	2.3	1.5	.7	.7	1.1
12-month change					
Total hourly compensation	2.8	2.4	1.9	1.5	1.2
Wages and salaries	2.9	2.6	2.0	1.6	1.4
Benefits	2.4	2.0	1.6	1.3	1.1

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

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

Change in ECI Benefits (unpublished)*

(Private-industry workers; 12-month change)

Figure: Health Insurance

Line chart, by percent, 1990 to September 2009. The series begins at about 12 and generally decreases to about 0 by 1995. It then generally increases to about 11.5 by 2002, and generally decreases to end at about 4.8.

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

Figure: Nonproduction Bonuses

Line chart, by percent, 1990 to September 2009. The series begins at about 14 and generally decreases to about -9 by early 1999. It then generally increases to about 12 by 2000, and generally decreases to about -7.5 by 2002. It then generally increases to about 10 by late 2005, and generally decreases to end at about -7.6.

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

Figure: Retirement and Savings

Line chart, by percent, 1990 to September 2009. The series begins at about 5 and generally decreases to about 2 by early 1991. It then generally increases to about 26.5 by late 2004, and generally decreases to about -5 by 2007. It then generally increases to about 7.5 by early 2008, and generally decreases to end at about -2.

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

Figure: Workers' Compensation Insurance

Line chart, by percent, 1990 to September 2009. The series begins at about 12 and generally decreases to about -6.5 by early 1998. It then generally increases to about 13 by early 2003, and generally decreases to end at about -1.5.

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

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

The Domestic Financial Economy

Commercial Bank Credit

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

Type of credit	2007	2008	H2 2008	H1 2009	July 2009	Aug. 2009	Sept. 2009	Oct. 2009 ^e	Level ¹ Oct. 2009 ^e
Total	10.0	4.9	4.6	-5.8	-7.1	-6.9	-12.5	-10.8	9,049

Short-term							
FOMC intended federal funds rate	2.00	.13	.13	.13	-1.87	.00	.00
Treasury bills ¹							
3-month	1.46	.18	.11	.06	-1.40	-.12	-.05
6-month	1.80	.28	.20	.17	-1.63	-.11	-.03
Commercial paper (A1/P1 rates) ²							
1-month	2.39	.22	.18	.19	-2.20	-.03	.01
3-month	2.75	.29	.21	.22	-2.53	-.07	.01
Large negotiable CDs ¹							
3-month	2.79	.32	.25	.22	-2.57	-.10	-.03
6-month	3.09	.46	.35	.32	-2.77	-.14	-.03
Eurodollar deposits ³							
1-month	2.60	.50	.40	.30	-2.30	-.20	-.10
3-month	3.00	.80	.55	.45	-2.55	-.35	-.10
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	1.20	.99	.99	-1.25	-.21	.00
5-year	2.97	2.70	2.44	2.44	-.53	-.26	.00
10-year	3.93	3.97	3.74	3.76	-.17	-.21	.02
U.S. Treasury indexed notes ⁵							
5-year	1.33	1.54	1.11	.76	-.57	-.78	-.35
10-year	1.77	1.89	1.69	1.51	-.26	-.38	-.18
Municipal general obligations (Bond Buyer) ⁶							
	4.54	4.65	4.20	4.39	-.15	-.26	.19
Private instruments							
10-year swap	4.26	3.98	3.67	3.65	-.61	-.33	-.02
10-year FNMA ⁷	4.36	4.35	4.12	4.09	-.27	-.26	-.03
10-year AA ⁸	6.62	5.41	5.11	5.16	-1.46	-.25	.05
10-year BBB ⁸	7.22	6.72	6.36	6.28	-.94	-.44	-.08
10-year high yield ⁸	10.66	10.61	9.90	9.59	-1.07	-1.02	-.31
Home mortgages (FHLMC survey rate)							
30-year fixed	5.78	5.29	5.04	5.03	-.75	-.26	-.01
1-year adjustable	5.03	4.72	4.52	4.57	-.46	-.15	.05

Stock exchange index	Record high		2009			Change to Oct. 29 from selected dates (percent)		
	Level	Date	Aug. 11	Sept. 22	Oct. 29	Record high	2009 Aug. 11	2009 Sept. 22
Dow Jones Industrial	14,165	10-9-07	9,241	9,830	9,963	-29.67	7.80	1.35
S&P 500 Composite	1,565	10-9-07	994	1,072	1,066	-31.88	7.22	-.52
Nasdaq	5,049	3-10-00	1,970	2,146	2,098	-58.45	6.49	-2.27
Russell 2000	856	7-13-07	562	621	580	-32.20	3.22	-6.52
D.J. Total Stock Index	15,807	10-9-07	10,243	11,083	10,924	-30.89	6.64	-1.43

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.

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

September 22, 2009, is the day before the most recent FOMC monetary policy announcement.

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

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