

Accessible Material

August 2009 Bluebook and Greenbook Tables and Charts

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August 2009 Bluebook Tables and Charts[†]

Recent Developments

Chart 1 Interest Rate Developments

Figure: Expected federal funds rates

Line chart, by percent, 2009 to 2011. There are two series, "August 6, 2009" and "June 23, 2009". These two series track closely together throughout the chart. They begin at about 0.25 and generally increase to end at about 2.9.

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

Bar chart, by percent, 0.00 to 4.50. There are two series, "Recent: 8/6/2009" and "Last FOMC: 6/23/2009". Recent: 8/6/2009 begins at about 2.5 and generally increases to about 45 by 0.25. It then generally decreases to about 10 by 0.75, and generally increases to about 20 by 1.00. It then generally decreases to about 0 by 1.25, and generally increases to about 2.5 by 1.50. It then generally decreases to about 0 by 2.00, and generally increases to about 2.5 by 3.75. It then generally decreases to end at about 0. Last FOMC: 6/23/2009 begins at about 2 and generally increases to about 52 by 0.25. It then generally decreases to end at about 0.

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

Source. CME Group.

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

Bar chart, by percent, 2010:Q1 to 2012:Q2. There are two series, "Recent: 17 respondents" and "Last FOMC: 14 respondents". Recent: 17 respondents begins at about 0 and generally increases to about 23 by 2010:Q2. It then generally decreases to about 0 by 2011:Q3, and generally increases to about 12 by 2012:Q1. It then generally decreases to end at about 0. Last FOMC: 14 respondents begins at about 7 and generally increases to about 29 by 2010:Q2. It then generally decreases to about 7 by 2010:Q3, and generally increases to about 21 by 2010:Q4. It then generally decreases to about 0 by 2011:Q3, and generally increases to about 8 by 2012:Q1. It then generally decreases to end at about 0.

Source. Federal Reserve Bank of New York.

Figure: Nominal Treasury yields

Line chart, by percent, 2007 to August 6, 2009. Data are daily. The June 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 end at about 4. It is at about 4 at the time of the June 2009 FOMC meeting. 2-year begins at about 4.8 and generally decreases to about 1.5 by 2008. It then generally increases to 3 by 2008, and generally decreases to about 0.4 by late 2008. It then generally increases to end at about 1.2. It is at about 1.2 at the time of the June 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 August 6, 2009. Data are daily. The June 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 2.25 and generally decreases to about -1.5 by late 2008. It then generally increases to end at about 1.25. It is at about 1.25 at the time of the June 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 3.2. It is at about 2.8 at the time of the June 2009 FOMC meeting.

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

Source. Barclays, PLC.; Staff estimates.

Figure: Survey measures of inflation expectations

Line chart, by percent, 2002 to July 2009. Data are monthly. There are two series, "Michigan Survey 1-year" and "Michigan Survey 10-year". Michigan Survey 1-year begins at about 1.9 and generally increases to about 3.1 by 2003. It then generally decreases to about 1.7 by 2003, and generally increases to about 4.6 by late 2005. It then generally decreases to about 2.9 by late 2006, and generally increases to about 5.2 by 2008. It then generally decreases to about 1.7 by late 2008, and generally increases to end at about 3. Michigan Survey 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 2008. It then generally decreases to about 2.7 by early 2009, and generally increases to end at about 3.

Source. Reuters/University of Michigan.

Chart 2

Asset Market Developments

Figure: Equity prices

Line chart, 2008 to August 6, 2009. January 2, 2008 = 100. Data are daily. The June 2009 FOMC meeting is marked in the time series. There are three series, "S&P 500", "Bank ETF", and "Insurance ETF". S&P 500 begins at about 98 and generally decreases to about 48 by 2009. It then generally increases to end at about 70. It is at about 62 at the time of the June 2009 FOMC meeting. Bank ETF begins at about 98 and generally increases to about 111 by 2008. It then generally decreases to about 59 by 2008, and generally increases to about 90 by 2008. It then generally decreases to about 21 by 2009, and generally increases to end at about 52. It is at about 41 at the time of the June 2009 FOMC meeting. Insurance ETF begins at about 98 and generally decreases to about 35 by late 2008. It then generally increases to about 57 by early 2009, and generally decreases to about 28 by 2009. It then generally increases to end at about 62. It is at about 50 at the time of the June 2009 FOMC meeting.

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

Source. Bloomberg, Keefe Bruyette & Woods.

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

Line chart, by percent, 2002 to August 6, 2009. Data are daily. The June 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 8 by late 2006, and generally increases to about 80 by late 2008. It then generally decreases to end at about 24. It is at about 30 at the time of the June 2009 FOMC meeting.

Source. Chicago Board Options Exchange.

Figure: Corporate bond spreads

Line chart, 2002 to August 6, 2009. Unit is basis points. Data are daily. The June 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 176 and generally increases to about 310 by late 2002. It then generally decreases to about 90 by 2005, and generally increases to about 655 by late 2008. It then generally decreases to end at about 260. It is at about 350 at the time of the June 2009 FOMC meeting. 10-year High-Yield begins at about 500 and generally increases to about 800 by 2002. It then generally decreases to about 255 by early 2005, and generally increases to about 1625 by late 2008. It then generally decreases to end at about 700. It is at about 775 at the time of the June 2009 FOMC meeting.

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

Source. Merrill Lynch and staff estimates.

Figure: CMBX spreads

Line chart, May 2008 to August 5, 2009. Unit is basis points. Data are daily. The June 2009 FOMC meeting is marked in the time series. There are two series, "AAA" and "AJ". AAA begins at about 100 and generally increases to about 800 by November 2008. It then generally decreases to end at about 300. It is at about 500 at the time of the June 2009 FOMC meeting. AJ begins at about 350 and generally increases to about 2000 by November 2008. It then generally decreases to about 1460 by early January 2009, and generally increases to about 2300 by April 2009. It then generally decreases to about 1260 by May 2009, and generally increases to about 2000 by June 2009. It then generally decreases to end at about 1250. It is at about 1950 at the time of the June 2009 FOMC meeting.

Source. JPMorgan.

Figure: Selected interest rates

Line chart, by percent, January to August 2009. The June 2009 FOMC meeting is marked in the time series. There are three series, "FRM", "MBS yield", and "On-the-run 10-yr treasury". FRM begins at about 5 and generally increases to about 5.2 by early February. It then generally decreases to about 4.8 by late March, and generally increases to about 5.6 by June. It then generally decreases to end at about 5.2 by August 5. It is at about 5.4 at the time of the June 2009 FOMC meeting. MBS yield begins at about 4.1 and generally decreases to about 3.7 by January. It then generally increases to about 5 by June, and generally decreases to about 4.4 by early July. It then generally increases to end at about 4.7 by August 6. It is at about 4.7 at the time of the June 2009 FOMC meeting. On-the-run 10-yr treasury begins at about 2.5 and generally decreases to about 2.2 by mid-January. It then generally increases to about 4 by June, and generally decreases to about 3.3 by July. It then generally increases to end at about 3.8 by August 6. It is at about 3.7 at the time of the June 2009 FOMC meeting.

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

Source. Bloomberg.

Figure: Gross ABS Issuance

Bar chart, by billions of dollars, 2006 to July 2009. Data are monthly rates. There are three series, "Credit Card", "Auto", and "Student Loan". Approximate values are: 2006: Credit Card 5, Auto 8, and Student Loan 6.5. 2007: Credit Card 7.5, Auto 7, and Student Loan 5.5. 2008:H1: Credit Card 8, Auto 5.5, and Student Loan 3.5. 2008:H2: Credit Card 1.5, Auto 1, and Student Loan 1.5. 2009:Q1: Credit Card 0.5, Auto 3, and Student Loan 1. April 2009: Credit Card 1, Auto 4, and Student Loan 5. May 2009: Credit Card 7, Auto 4.5, and Student Loan 2.5. June 2009: Credit Card 13, Auto 7, and Student Loan 0.5. July 2009 (actual issuance as of July 30): Credit Card 3, Auto 10, and Student Loan 3.

Note. Auto ABS include car loans and leases and financing for buyers of motorcycles.

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

Chart 3 Market Functioning

Figure: Spreads of Libor over OIS

Line chart, January 2007 to August 6, 2009. Unit is basis points. Data are daily. The June 2009 FOMC meeting is marked in the time series. There are three series, "1-month", "3-month" and "6-month". 1-month begins at about 10 and remains about constant until about August 2007. It then generally increases to about 110 by December 2007, and generally decreases to about 10 by January 2008. It then generally increases to about 340 by October 2008, and generally decreases to about 90 by late November 2008. It then generally increases to about 155 by early December 2008, and generally decreases to end at about 10. It is at about 10 at the time of the June 2009 FOMC meeting. 3-month begins at about 10 and remains about constant until about August 2007. It then generally increases to about 105 by December 2008, and generally decreases to about 40 by January 2008. It then generally increases to about 360 by October 2008, and generally decreases to end at about 25. It is at about 40 at the time of the June 2009 FOMC meeting. 6-month begins at about 10 and remains about constant until about August 2007. It then generally increases to about 100 by December 2007, and generally decreases to about 50 by late January 2008. It then generally increases to about 324 by October 2008, and generally decreases to end at about 65. It is at about 88 at the time of the June 2009 FOMC meeting.

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

Source. Bloomberg.

Figure: Spreads on 30-day commercial paper

Line chart, July 2007 to August 5, 2009. Unit is basis points. Data are daily. The June 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 January 2008, and generally increases to about 400 by early October 2008. It then generally decreases to end at about 10. It is at about 20 at the time of the June 2009 FOMC meeting. A2/P2 begins at about 10 and generally increases to about 150 by December 2007. It then generally decreases to about 45 by January 2008, and generally increases to about 610 by January 2009. It then generally decreases to end at about 48. It is at about 50 at the time of the June 2009 FOMC meeting.

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

Source. Depository Trust & Clearing Corporation.

Figure: Treasury on-the-run premium

Line chart, 2001 to August 2009. Unit is basis points. Data are monthly averages. There are two series, "10-year note" and "2-year". 10-year note begins at about 15 and generally increases to about 28 by 2002. It then generally decreases to about 6 by late 2006, and generally increases to about 60 by early 2009. It then generally decreases to end at about 31. 2-year begins at about 8 and generally increases to about 10 by 2001. It then generally decreases to about -3 by 2003, and generally increases to about 8 by 2008. It then generally decreases to about -4 by late 2008, and generally increases to about 13 by 2009. It then generally decreases to about -1 by 2009, and generally increases to end at about 3.

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

Source. Staff estimates.

Figure: CIT stock price and CDS spread

Line chart, January to August 2009. Data are daily. The June 2009 FOMC meeting is marked in the time series. There are two series, "Stock price", which is by price (\$), and "5-year CDS spread", which is by basis points. These two series use two different scales. Stock price begins at about 4.7 and generally increases to about 5 by January. It then generally decreases to about 1.8 by February, and generally increases to about 4.3 by April. It then generally decreases to about 2.2 by late April, and generally increases to about 3.9 by early June. It then generally decreases to about 0.3 by July, and generally increases to end at about 1.8 by August 6. It is at about 2.5 at the time of the June 2009 FOMC meeting. 5-year CDS spread begins at about 800 and generally increases to about 1950 by early March. It then generally decreases to about 1000 by April, and generally increases to about 2000 by April. It then generally decreases to about 1000 by early June, and generally increases to about 6000 by July. It then generally decreases to about 2900 by July, generally increases to about 5200 by early August, and generally decreases to end at about 4500 by August 5. It is at about 1800 at the time of the June 2009 FOMC meeting.

Source. Bloomberg; Markit.

Figure: Average range of CDS dealer contributions

Line chart showing Investment-grade: Financial, January 2007 to August 5, 2009. Unit is basis points. Data are daily. The June 2009 FOMC meeting is marked in the time series. The series begins at about 2 and generally increases to about 30 by July 2008. It then generally decreases to about 14 by September 2008, and generally increases to about 60 by November 2008. It then generally decreases to about 29 by January 2009, and generally increases to about 65 by March 2009. It then generally decreases to end at about 10. It is at about 20 at the time of the June 2009 FOMC meeting.

Source: Markit.

Figure: Pricing in the secondary market for leveraged loans

Line chart, January 2007 to August 5, 2009. Data are daily. The June 2009 FOMC meeting is marked in the time series. There are two series, "Average bid price", which is by percent of par value, and "Average bid-asked spread", which is by basis points. These two series use two different scales. Average bid price begins at about 98 and generally decreases to about 60 by December 2008. It then generally increases to end at about 78. It is at about 75 at the time of the June 2009 FOMC meeting. Average bid-asked spread begins at about 55 and generally increases to about 415 by January 2009. It then generally decreases to end at about 230. It is at about 265 at the time of the June 2009 FOMC meeting.

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

[Box:] Balance Sheet Developments During the Intermeeting Period

Federal Reserve Balance Sheet
Billions of dollars

	Change since last FOMC	Current (8/5/2009)	Maximum level	Date of maximum level
Total assets	-22	1,992	2,256	12/17/2008
Selected assets:				
Liquidity programs for financial firms	-117	344	1,247	11/06/2008
Primary, secondary, and seasonal credit	-6	34	114	10/28/2008
Term auction credit (TAF)	-49	234	493	03/11/2009
Foreign central bank liquidity swaps	-46	76	586	12/04/2008
Primary Dealer Credit Facility (PDCF)	0	0	156	09/29/2008
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)	-17	0	152	10/01/2008
Lending through other credit facilities	-60	91	351	01/23/2009
Net portfolio holdings of Commercial Paper Funding Facility LLC (CPFF)	-65	61	351	01/23/2009
Term Asset-Backed Securities Loan Facility (TALF)	5	30	31	07/24/2009
Support for specific institutions	-1	104	118	04/02/2009
Credit extended to AIG	-1	41	91	10/27/2008
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	0	62	75	12/30/2008
Securities held outright*	149	1,356	1,356	08/05/2009
U.S. Treasury securities	60	705	791	08/14/2007
Agency securities	14	108	108	08/05/2009
Agency mortgage-backed securities**	76	543	546	07/24/2009
Memo: Term Securities Lending Facility (TSLF)	-4	3	236	10/01/2008
Total liabilities	-38	1,941	2,213	12/04/2008
Selected liabilities:				
Federal Reserve notes in circulation	6	872	873	07/08/2009
Reserve balances of depository institutions	-39	725	955	05/20/2009
U.S. Treasury, general account	-70	62	137	10/23/2008
U.S. Treasury, supplemental financing account	0	200	559	10/22/2008
Other deposits	-3	3	53	04/14/2009

Total capital	2	50	51	08/04/2009
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* Par value. [Return to table](#)

** Includes only mortgage-backed security purchases that have already settled. Over the intermeeting period, the Open Market Desk committed to purchase \$126.6 billion of MBS, on net. [Return to table](#)

Chart 4

International Financial Indicators

Figure: Nominal trade-weighted dollar indexes

Line chart, 2006 to August 6, 2009. December 30, 2005 = 100. Data are daily. The June 2009 FOMC meeting is marked in the time series. There are three series, "Broad", "Major Currencies", and "Other Important Trading Partners". Broad begins at about 100 and generally decreases to about 85 by 2008. It then generally increases to about 103 by 2009, and generally decreases to end at about 92. It is at about 95 at the time of the June 2009 FOMC meeting. Major Currencies begins at about 100 and generally decreases to about 81 by 2008. It then generally increases to about 100 by 2009, and generally decreases to end at about 86.5. It is at about 90.5 at the time of the June 2009 FOMC meeting. Other important Trading Partners begins at about 100 and generally decreases to about 88 by 2008. It then generally increases to about 107 by early 2009, and generally decreases to end at about 97.5. It is at about 99 at the time of the June 2009 FOMC meeting.

Source: FRBNY and Bloomberg.

Figure: Stock price indexes: Industrial countries

Line chart, 2006 to August 6, 2009. December 29, 2005 = 100. Data are daily. The June 2009 FOMC meeting is marked in the time series. There are three series, "UK (FTSE-350)", "Euro Area (DJ Euro)", and "Japan (Topix)". UK begins at about 101 and generally increases to about 120 by mid-2007. It then generally decreases to about 63 by 2009, and generally increases to end at about 85. It is at about 78 at the time of the June 2009 FOMC meeting. Euro Area begins at about 104 and generally increases to about 118 by early 2006. It then generally decreases to about 103 by mid 2006, and generally increases to about 141 by 2007. It then generally decreases to about 56 by 2009, and generally increases to end at about 79. It is at about 70 at the time of the June 2009 FOMC meeting. Japan begins at about 100, and fluctuates between about 88 and 110 through early 2007. It then generally decreases to about 42 by 2009, and generally increases to end at about 58. It is at about 56 at the time of the June 2009 FOMC meeting.

Source: Bloomberg.

Figure: Nominal ten-year government bond yields

Line chart, by percent, 2006 to August 6, 2009. Data are daily. The June 2009 FOMC meeting is marked in the time series. There are three series, "UK", "Germany", and "Japan". UK and Germany use the same scale and Japan uses another. UK begins at about 4.1 and generally increases to about 5.52 by mid-2007. It then generally decreases to about 4.3 by early 2008, and generally increases to about 5.25 by 2008. It then generally decreases to about 3.0 by early 2009, and generally increases to end at about 3.75. Germany begins at about 3.3 and generally increases to about 4.65 by mid-2007. It then generally decreases to about 3.75 by early 2008, and generally increases to about 4.6 by 2008. It then generally decreases to about 2.9 by early 2009, and generally increases to about 3.75 by 2009. It then generally decreases to end at about 3.8. Japan begins at about 1.5 and generally increases to about 2.0 by 2006. It then generally decreases to about 1.25 by early 2008, and generally increases to about 1.9 by 2008. It then generally decreases to end at about 1.4.

Source: Bloomberg.

Figure: Stock price indexes: Emerging market economies

Line chart, 2006 to August 6, 2009. December 29, 2005 = 100. Data are daily. The June 2009 FOMC meeting is marked in the time series. There are three series, "Brazil (Bovespa)", "Korea (KOSPI)", and "Mexico (Bolsa)". Brazil begins at about 100 and generally increases to about 125 by 2006. It then generally decreases to about 105 by 2006, and generally increases to about 220 by 2008. It then generally decreases to about 87.5 by late 2008, and generally increases to end at about 165. It is at about 152 at the time of the June 2009 FOMC meeting. Korea begins at about 102 and generally decreases to about 88 by 2006. It then generally increases to about 150 by late 2007, and generally decreases to about 64 by 2008. It then generally increases to end at about 112.5. It is at about 100 at the time of the June 2009 FOMC meeting. Mexico begins at about 100 and generally increases to about 123 by 2006. It then generally decreases to about 90 by 2006, and generally increases to about 178 by late 2007. It then generally decreases to about 90 by 2008, and generally increases to end at about 160. It is at about 137 at the time of the June 2009 FOMC meeting.

Source: Bloomberg.

Chart 5

Debt and Money

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

Total	Business	Household	Government

2007	8.7	13.5	6.6	6.1
2008	5.9	5.1	0.4	17.5
Q1	5.4	7.5	3.0	6.7
Q2	3.2	6.1	0.4	4.4
Q3	8.4	5.0	0.1	28.6
Q4	6.2	1.5	-2.0	26.7
2009				
Q1	4.1	-0.3	-1.1	18.0
Q2 _p	5.6	-0.1	-1.3	23.3

Source. Flow of Funds.

p Projected. [Return to table](#)

Figure: Growth of debt of household sector

Line chart, by percent, 1991 to 2009:Q2p. Data are quarterly, s.a.a.r. There are two series, "Consumer credit" and "Home mortgage". Consumer credit begins at about 0.5 and generally decreases to about -2 by 1991. It then generally increases to about 16.5 by late 1994, and generally decreases to about 2 by early 1998. It then generally increases to about 13 by late 2000, and generally decreases to end at about -5.5. Home mortgage begins at about 8 and generally decreases to about 3 by 1991. It then generally increases to about 15.5 by 2003, and generally decreases to about -2.5 by 2008. It then generally increases to end at about -0.5.

Source. Flow of Funds, Federal Reserve G.19 release. 2009:Q2 is projected.

Figure: Growth of house prices

Line chart, by percent, 1996 to 2009:Q1. Data are s.a.a.r. There are two series, "FHFA purchase-only index" and "S&P Case-Shiller national index". FHFA purchase-only index begins at about 5 and generally decreases to about 3 by late 1996. It then generally increases to about 10 by late 2004, and generally decreases to about -12 by late 2008. It then generally increases to end at about -2. S&P Case-Shiller national index begins at about 2.5 and generally increases to about 17 by early 2005. It then generally decreases to end at about -25.

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

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

Bar chart, by billions of dollars, 2006 to July 2009. Data are monthly rates. There are three series, "C&I loans", "Commercial paper", and "Bonds". There is also a "Sum" series plotted as a curve which sums the total of the other series. Approximate values are: 2006: Bonds 18, C&I loans 12, Commercial paper 2, Sum 32. 2007: Bonds 25, C&I loans 23, Sum 48. 2008:Q1: Bonds 15, C&I loans 27, Commercial paper 7, Sum 49. 2008:Q2: Bonds 30, C&I loans 12, Commercial paper -7, Sum 35. 2008:Q3: Bonds 9, C&I loans 16, Commercial paper 5, Sum 30. 2008:Q4: Bonds 17, Commercial paper 0.5, C&I loans -7, Sum 10.5. 2009:Q1: Bonds 48, C&I loans -15, Commercial paper -15, Sum 18. 2009:Q2: Bonds 31, C&I loans -19, Commercial paper -11, Sum 1. July 2009 (preliminary): Bonds 18, C&I loans -20, Commercial paper -2, Sum -4.

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

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

Figure: Bank Credit

Line chart, February 2007 to July 2009 (estimated value). January 2008 = 100. Data are monthly averages. The series begins at about 91 and generally increases to about 104.5 by December 2008. It then generally decreases to end at about 100.

Source. Federal Reserve.

Figure: Growth of M2

Bar chart, by percent, 2006 to July 2009 (estimated value). Data are s.a.a.r. The series begins at about 5.5 and generally increases to about 8.5 by 2008:Q1. It then generally decreases to about 4 by 2008:Q3, and generally increases to about 14.2 by 2008:Q4. It then generally decreases to end at about -3.5.

Source. Federal Reserve.

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

Last update: April 1, 2015

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 inflations begins at about 4.5 and generally decreases to about -0.1 by 1992. It then generally increases to about 5 by 2000, and generally decreases to about -0.8 by 2004. It then generally increases to about 3 by 2006, and generally decreases to end at about -1.5. Greenbook-consistent measure begins at about 4 and generally decreases to about 3.5 by late 1998. It then generally increases to about 5.6 by 2000, and generally decreases to about 0 by 2003. It then generally increases to about 3 by 2007, and generally decreases to about -4 by early 2009. It then generally increases to end at about -2.8. 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 -2.3 and 4, decreases to about -3.5 and 2.2 by early 1991. It then generally increases to about 2.5 and 4.5 by early 1999, generally decreases to about -0.5 and 1.5 by late 2001, generally increases to about 1 and 3.2 by late 2005, and generally decreases to end at about -4.3 and -2.3.

Short-Run and Medium-Run Measures

	Current Estimate	Previous Bluebook
Short-Run Measures		
Single-equation model	-2.4	-1.4
Small structural model	-3.0	-3.5
EDO model	-2.3	-3.8
FRB/US model	-4.1	-5.5
Confidence intervals for four model-based estimates		
70 percent confidence interval	-4.6 to -1.3	
90 percent confidence interval	-5.5 to -0.3	
Greenbook-consistent measures		
EDO model	-5.0	-3.9
FRB/US model	-2.7	-2.7
Medium-Run Measures		
Single-equation model	1.2	1.5
Small structural model	1.5	1.5
Confidence intervals for two model-based estimates		
70 percent confidence interval	0.4 to 2.3	
90 percent confidence interval	-0.2 to 2.8	
TIPS-based factor model	2.0	2.0
Memo		
Actual real federal funds rate	-1.5	-1.6

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

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

Figure: Nominal Federal Funds Rate

Line chart, by percent, 2009 to 2013. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained" and "Previous Bluebook: Unconstrained". Current Bluebook: Constrained begins at about 0.2 and remains about constant until mid-2012. It then generally increases to end at about 2. Current Bluebook: Unconstrained begins at about 0.2 and generally decreases to about -6.3 by 2010. It then generally increases to end at about 5. Previous Bluebook: Unconstrained begins at about 0.2 and generally decreases to about -6.8 by 2010. It then generally increases to end at about 4.8.

Figure: Real Federal Funds Rate

Line chart, by percent, 2009 to 2013. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained" and "Previous Bluebook: Unconstrained". Current Bluebook: Constrained begins at about -1.5 and generally increases to end at about 0.4. Current Bluebook: Unconstrained begins at about -1.5 and generally decreases to about -7.7 by 2010. It then generally increases to end at about 3.1. Previous Bluebook: Unconstrained begins at about -1.5 and generally decreases to about -8.1 by mid-2010. It then generally increases to end at about 3.

Figure: Civilian Unemployment Rate

Line chart, by percent, 2009 to 2013. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained" and "Previous Bluebook: Unconstrained". Current Bluebook: Constrained begins at about 8.1 and generally increases to about 10 by late 2009. It then generally decreases to end at about 3.7. Current Bluebook: Unconstrained begins at about 8.1 and generally increases to about 9.8 by 2009. It then generally decreases to end at about 3.6. Previous Bluebook: Unconstrained begins at about 8.1 and generally increases to about 9.6 by 2009. It then generally decreases to end at about 3.7.

Figure: Core PCE Inflation

Line chart, by percent, 2009 to 2013. Data are four-quarter averages. There are three series, "Current Bluebook: Constrained", "Current Bluebook: Unconstrained" and "Previous Bluebook: Unconstrained". Current Bluebook: Constrained begins at about 1.75 and generally decreases to about 1.1 by 2010. It then generally increases to end at about 1.6. Current Bluebook: Unconstrained begins at about 1.75 and generally decreases to about 1.45 by 2009. It then generally increases to about 1.7 by early 2010, and generally decreases to about 1.5 by 2010. It then generally increases to end at about 1.8. Previous Bluebook: Unconstrained begins at about 1.75 and generally increases to about 1.95 by 2009. It then generally decreases to about 1.25 by 2011, and generally increases to end at about 1.65.

Chart 8

The Policy Outlook in an Uncertain Environment

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

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

Note: There is dark and light shading that represents the 70 and 90 percent confidence intervals respectively. The 70 percent interval covers about 2.7 to 5.6 and the 90 percent interval covers about 1.7 to 6.5 by the end of the chart.

Figure: Information from Financial Markets

Line chart, by percent, 2009 to 2013. There are two series, "Current Bluebook" and "Previous Bluebook". Current Bluebook begins at about 0.2 and generally increases to end at about 4.1. Previous Bluebook begins at about 0.4 and generally increases to end at about 4.

Note: There is dark and light shading that represents the 70 and 90 percent confidence intervals respectively. The 90 percent interval covers about 1.4 to 7.1 and the 70 percent interval covers about 2 to 5.7. In the previous Bluebook, the 90 percent interval covers about 1.5 to 7.2 and the 70 percent interval covers about 2.2 to 5.7. The results labeled as "Previous Bluebook" have been generated using the revised estimation procedure noted in the text.

Near-Term Prescriptions of Simple Policy Rules

	Constrained Policy		Unconstrained Policy	
	2009Q3	2009Q4	2009Q3	2009Q4
Taylor (1993) rule	0.13	0.13	-0.95	-0.84
Previous Bluebook	0.13	0.13	-0.03	-0.12
Taylor (1999) rule	0.13	0.13	-4.80	-4.72
Previous Bluebook	0.13	0.13	-3.21	-3.34

First-difference rule	0.13	0.13	-0.28	-0.48
<i>Previous Bluebook</i>	<i>0.13</i>	<i>0.13</i>	<i>-0.51</i>	<i>-0.90</i>
Estimated outcome-based rule	0.13	0.13	-0.79	-1.81
<i>Previous Bluebook</i>	<i>0.13</i>	<i>0.13</i>	<i>-0.56</i>	<i>-1.26</i>
Estimated forecast-based rule	0.13	0.13	-0.74	-1.76
<i>Previous Bluebook</i>	<i>0.13</i>	<i>0.13</i>	<i>-0.61</i>	<i>-1.46</i>

Memo

	2009Q3	2009Q4
Greenbook assumption	0.13	0.13
Fed funds futures	0.18	0.21
Median expectation of primary dealers	0.13	0.13
Blue Chip forecast (August 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](#)

Last update: April 1, 2015

August 2009 Bluebook Tables and Charts

Policy Alternatives

Table 1: Overview of Alternative Language for the August 11-12, 2009 FOMC Announcement

June FOMC		August Alternatives			
		A	B / B'	C	
Forward Guidance on Funds Rate Path					
	"for an extended period"	same as in June or "at least through mid-2010"	"for an extended period"	"at least through the end of this year"	
Treasury Securities Purchases					
Total Amount	up to \$300 billion	"full amount" of \$450 billion	\$300 billion	"roughly \$300 billion"	
Pace	-----	-----	pace will "gradually slow"	pace will "gradually slow"	
Completion	by autumn	by year-end	by the end of October	by the end of October	
Agency MBS Purchases					
Total Amount	up to \$1.25 trillion	"full amount" of \$1.25 trillion	up to \$1.25 trillion	"will cumulate to about \$1 trillion"	
Pace	-----	-----	-----	pace will "gradually slow"	
Completion	by year-end	by year-end	by year-end	by year-end	
Agency Debt Purchases					
Total Amount	up to \$200 billion	up to \$200 billion	up to \$200 billion	"will cumulate to... about \$150 billion"	
Pace	-----	-----	-----	pace will "gradually slow"	
Completion	by year-end	by year-end	by year-end	by year-end	
Evaluation of LSAP Timing and Overall Amounts					
	adjustments to all LSAPs will continue to be evaluated	adjustments to all LSAPs will continue to be evaluated	adjustments to agency debt and agency MBS will continue to be evaluated	"prepared to consider resuming" Treasury purchases; adjustments to agency debt and agency MBS will continue to be evaluated	adjustments to all LSAPs will continue to be evaluated

Long-Run Projections of the Balance Sheet and Monetary Base

Growth Rates for Monetary Base

Date	Baseline	Alternative A	Alternative C	Memo: June Baseline
	Percent, annual rate			
	Monthly			
Jun-09	-31.0	-31.0	-31.0	-52.1
Jul-09	-16.4	-16.4	-16.4	-0.4
Aug-09	96.8	102.7	59.3	99.3
Sep-09	116.4	115.9	70.9	97.3
Oct-09	59.7	75.4	44.1	103.1
Nov-09	57.6	88.5	48.7	95.7
Dec-09	80.2	97.6	74.1	102.1
Jan-10	42.9	48.7	34.5	49.8
Feb-10	8.6	7.5	-2.3	-6.4
Mar-10	29.9	27.6	21.1	-6.4
	Quarterly			
Q2 2009	27.4	27.4	27.4	24.9
Q3 2009	23.9	25.2	10.2	22.7
Q4 2009	82.6	99.7	58.6	108.2
Q1 2010	44.7	53.5	35.6	48.0
Q2 2010	11.3	10.3	8.1	-7.1
Q3 2010	-2.6	-2.4	0.4	-15.6
Q4 2010	-10.8	-10.2	-8.7	-19.0
	Annual-Q4 to Q4			
2009	58.9	65.0	46.1	65.9
2010	10.5	12.6	8.8	0.7
2011	-7.7	-7.7	-7.6	-7.7
2012	-10.2	-10.8	-10.7	-12.1
2013	-7.1	-7.4	-7.3	-10.2
2014	-8.3	-8.8	-8.5	-10.1
2015	-6.6	-7.0	-6.7	-7.8
2016	-8.7	-10.0	-4.4	-8.1

Note: Not seasonally adjusted.

Baseline Scenario

Figure: Federal Reserve Assets

Stacked line chart, 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 750, Repurchase agreements 20, SDR and other assets 35. 2008: Treasury securities 700, Repurchase agreements 20, TAF 20, Central bank swaps 5, Other loans and facilities 5, SDR and other assets 35. 2009: Treasury

securities 498, Agency MBS 5, TAF 440, Central bank swaps 350, Other loans and facilities 500, SDR and other assets 25. 2010: Treasury securities 750, Agency debt 200, Agency MBS 1200, TAF 20, Central bank swaps 5, TALF 40, Other loans and facilities 50, SDR and other assets 55, 2011: Treasury securities 750, Agency debt 50, Agency MBS 1100, TAF 5, TALF 50, Other loans and facilities 45, SDR and other assets 55. 2012: Treasury securities 750, Agency debt 50, Agency MBS 1040, TAF 5, TALF 50, Other loans and facilities 45, SDR and other assets 55. 2013: Treasury securities 700, Agency debt 50, Agency MBS 1000, TAF 5, TALF 25, Other loans and facilities 10, SDR and other assets 60. 2014: Treasury securities 680, Agency debt 20, Agency MBS 950, TAF 5, TALF 10, Other loans and facilities 5, SDR and other assets 60. 2015: Treasury securities 600, Agency debt 10, Agency MBS 860, TAF 5, TALF 1, SDR and other assets 60. 2016: Treasury securities 550, Agency debt 10, Agency MBS 860, TAF 5, SDR and other assets 60.

Figure: Federal Reserve Liabilities and Capital

Stacked line chart, 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 740, Reserve balances 10, Reverse repurchase agreements 10, Reserve balances 5, Capital 20. 2007: Federal Reserve notes 750, Reverse repurchase agreements 20, Reserve balance 5, Capital 20. 2008: Federal Reserve notes 760, Reverse repurchase agreements 40, Deposits, other than reserve balances 2, Reserve balances 5, Capital 30. 2009: Federal Reserve notes 800, Reverse repurchase agreements 100, Deposits, other than reserve balances 150, Reserve balances 650, Capital 10. 2010: Federal Reserve notes 850, Reverse repurchase agreements 25, Deposits, other than reserve balances 100, Reserve balances 1400, Capital 35. 2011: Federal Reserve notes 900, Reverse repurchase agreements 25, Deposits, other than reserve balances 2, Reserve balances 1282, Capital 50. 2012: Federal Reserve notes 950, Reverse repurchase agreements 20, Deposits, other than reserve balances 2, Reserve balances 1100, Capital 50. 2013: Federal Reserve notes 1000, Reverse repurchase agreements 20, Deposits, other than reserve balances 2, Reserve balances 800, Capital 50. 2014: Federal Reserve notes 1050, Reverse repurchase agreements 20, Deposits, other than reserve balances 2, Reserve balances 600, Capital 75. 2015: Federal Reserve notes 1500, Reverse repurchase agreements 20, Deposits, other than reserve balances 2, Reserve balances 400, Capital 75. 2016: Federal Reserve notes 1200, Reverse repurchase agreements 20, Deposits, other than reserve balances 2, Reserve balances 250, Capital 80.

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

Alternative A

Figure: Federal Reserve Assets

Stacked line chart, 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 700, Repurchase agreements 25, TAF 25, Central bank swaps 2, Other loans and facilities 2, SDR and other assets 50. 2009: Treasury securities 498, Agency debt 15, Agency MBS 20, TAF 440, Central bank swaps 290, Other loans and facilities 440, SDR and other assets 25. 2010: Treasury securities 950, Agency debt 100, Agency MBS 1050, TAF 50, Central bank swaps 10, TALF 100, Other loans and facilities 75, SDR and other assets 60. 2011: Treasury securities 900, Agency debt 100, Agency MBS 1050, TAF 5, TALF 120, Other loans and facilities 70, SDR and other assets 70. 2012: Treasury securities 850, Agency debt 50, Agency MBS 1000, TAF 5, TALF 100, Other loans and facilities 60, SDR and other assets 70. 2013: Treasury securities 750, Agency debt 50, Agency MBS 1000, TAF 5, TALF 25, Other loans and facilities 10, SDR and other assets 70. 2014: Treasury securities 750, Agency debt 50, Agency MBS 1000, TAF 5, TALF 20, Other loans and facilities 2, SDR and other assets 75. 2015: Treasury securities 650, Agency debt 25, Agency MBS 1000, TAF 5, SDR and other assets 75. 2016: Treasury securities 600, Agency debt 20, Agency MBS 1000, TAF 5, SDR and other assets 75.

Figure: Federal Reserve Liabilities and Capital

Stacked line chart, 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, Deposits, other than reserve balances 2, Reserve balances 5, Capital 20. 2007: Federal Reserve notes 750, Reverse repurchase agreements 20, Deposits, other than reserve balances 3, Reserve balances 5, Capital 25. 2008: Federal Reserve notes 750, Reverse repurchase agreements 25, Deposits, other than reserve balances 2, Reserve balances 10, Capital 25. 2009: Federal Reserve notes 800, Reverse repurchase agreements 50, Deposits, other than reserve balances 150, Reserve balances 700, Capital 15. 2010: Federal Reserve notes 800, Reverse repurchase agreements 10, Deposits, other than reserve balances 100, Reserve balances 1575, Other liabilities 2, Capital 20. 2011: Federal Reserve notes 900, Reverse repurchase agreements 10, Deposits, other than reserve balances 2, Reserve balances 1485, Other liabilities 2, Capital 25. 2012: Federal Reserve notes 980, Reverse repurchase agreements 10, Deposits, other than reserve balances 2, Reserve balances 1260, Other liabilities 2, Capital 25. 2013: Federal Reserve notes 1000, Reverse repurchase agreements 10, Deposits, other than reserve balances 2, Reserve balances 980, Other liabilities 2, Capital 30. 2014: Federal Reserve notes 1100, Reverse repurchase agreements 10, Deposits, other than reserve balances 2, Reserve balances 620, Other liabilities 2, Capital 45. 2015: Federal Reserve notes 1150, Reverse repurchase agreements 10, Deposits, other than reserve balances 2, Reserve balances 500, Other liabilities 2, Capital 50. 2016: Federal Reserve notes 1150, Reverse repurchase agreements 10, Deposits, other than reserve balances 2, Reserve balances 250, Other liabilities 2, Capital 55.

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

Alternative C

Figure: Federal Reserve Assets

Stacked line chart, 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 25. 2007: Treasury securities 760, Repurchase agreements 15, SDR and other assets 25. 2008: Treasury securities 720, Repurchase agreements 15, TAF 15, Central bank swaps 5, Other loans and facilities 5, SDR and other assets 25. 2009: Treasury securities 495, Agency debt 10, Agency MBS 15, TAF 450, Central bank swaps 350, Other loans and facilities 500, SDR and other facilities 15. 2010: Treasury securities 750, Agency debt 100, Agency MBS 830, TAF 60, Central bank swaps 5, TALF 80, Other loans and facilities 70, SDR and other assets 85. 2011: Treasury securities 750, Agency debt 80, Agency MBS 860, TAF 5, TALF 100, Other loans and facilities 50, SDR and other assets 90. 2012: Treasury securities 740, Agency debt 50, Agency MBS 860, TAF 5, TALF 60, Other loans and facilities 25, SDR and other assets 90. 2013: Treasury securities 700, Agency debt 35, Agency MBS 860, TAF 5, TALF 25, Other loans and facilities 15, SDR and other assets 90. 2014: Treasury securities 650, Agency debt 25, Agency MBS 860, TAF 5, TALF 15, Other loans and facilities 10, SDR and other facilities 100. 2015: Treasury securities 600, Agency debt 20, Agency MBS 860, TAF 5, TALF 5, Other loans and facilities 2, SDR and other assets 100. 2016: Treasury securities 600, Agency debt 10, Agency MBS 860, TAF 10, SDR and other assets 100.

Figure: Federal Reserve Liabilities and Capital

Stacked line chart, 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 740, Reverse repurchase agreements 15, Deposits, other than reserve balances 2, Reserve balances 10, Capital 20. 2007: Federal Reserve notes 750, Reverse repurchase agreements 20, Deposits, other than reserve balances 2, Reserve balances 10, Capital 20. 2008: Federal Reserve notes 750, Reverse repurchase agreements 20, Deposits, other than reserve balances 2, Reserve balances 10, Capital 20. 2009: Federal Reserve notes 800, Reverse repurchase agreements 40, Deposits, other than reserve balances 120, Reserve balances 700, Other liabilities 2, Capital 25. 2010: Federal Reserve notes 850, Reverse repurchase agreements 20, Deposits, other than reserve balances 100, Reserve balances 1550, Other liabilities 5, Capital 30. 2011: Federal Reserve notes 950, Reverse repurchase agreements 20, Deposits, other than reserve balances 5, Reserve balances 1460, Other liabilities 5, Capital 35. 2012: Federal Reserve notes 980, Reverse repurchase agreements 20, Deposits, other than reserve balances 5, Reserve balances 1230, Other liabilities 5, Capital 40. 2013: Federal Reserve notes 1000, Reverse repurchase agreements 20, Deposits, other than reserve balances 5, Reserve balances 910, Other liabilities 5, Capital 45. 2014: Federal Reserve notes 1050, Reverse repurchase agreements 20, Deposits, other than reserve balances 5, Reserve balances 680, Other liabilities 5, Capital 50. 2015: Federal Reserve notes 1100, Reverse repurchase agreements 20, Deposits, other than reserve balances 5, Reserve balances 420, Other liabilities 5, Capital 60. 2016: Federal Reserve notes 1150, Reverse repurchase agreements 20, Deposits, other than reserve balances 5, Reserve balances 260, Other liabilities 5, Capital 80.

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

August 2009 Bluebook Tables and Charts

Bank Credit, Debt, and Money Forecast

Growth Rates for M2

(percent, annual rate)

Greenbook Forecast*			
Monthly Growth Rates			
	Jan-09		12.1
	Feb-09		4.0
	Mar-09		10.4
	Apr-09		-7.7
	May-09		9.2
	Jun-09		3.6
	Jul-09		-3.5
	Aug-09		-4.9
	Sep-09		-1.8
	Oct-09		0.2
	Nov-09		0.4
	Dec-09		0.5
	Jan-10		0.5
	Feb-10		0.5
	Mar-10		0.6
	Apr-10		0.8
	May-10		1.0
	Jun-10		1.5
Quarterly Growth Rates			
	2008 Q3		4.0
	2008 Q4		14.3
	2009 Q1		12.9
	2009 Q2		2.6
	2009 Q3		-0.6
	2009 Q4		-0.7
	2010 Q1		0.5
	2010 Q2		0.8
Annual Growth Rates			
	2008		8.3
	2009		3.5
	2010		2.2
Growth	From	To	
	Jul-09	Dec-09	-1.1
	2008 Q2	2009 Q2	8.7
	2009 Q2	2009 Q4	-0.7

* This forecast is consistent with nominal GDP and interest rates in the Greenbook forecast. Actual data through July 27, 2009; projections thereafter. [Return to table](#)

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	-1.5	-2.7	-0.9
Lagged headline inflation	0.3	-2.6	-0.9
Projected headline inflation	-1.4	-2.8	-1.1

August 2009 Bluebook Tables and Charts[†]

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

Individual Balance Sheet Item Profiles

Note: All values are in billions of dollars.

Asset purchases and Federal Reserve liquidity programs and credit facilities

Figure: Temporary Holdings of Longer-term Treasuries

Line chart, 2009 to 2016. There are three series, "Baseline and Alternative C", "Alternative A", and "June baseline". Baseline and Alternative C and June baseline track closely together beginning at about 0 and generally increasing to about 300 by late 2009. They then generally decrease to end at about 60. Alternative A begins at about 0 and generally increases to about 450 by early 2010. It then generally decreases to end at about 98.

Figure: Agency Debt

Line chart, 2009 to 2016. There are two series, "Current" and "June". Current begins at about 20 and generally increases to about 150 by early 2010. It then generally decreases to end at about 38. June begins at about 20 and generally increases to about 200 by early 2010. It then generally decreases to end at about 25.

Figure: Agency MBS

Line chart, 2009 to 2016. There are three series, "Baseline and Alternative C", "Alternative C" and "June". Baseline and Alternative C begins at about 0 and generally increases to about 1250 by 2010. It then generally decreases to end at about 800. Alternative C begins at about 0 and generally increases to about 950 by 2010. It then generally decreases to end at about 620. June begins at about 0 and generally increases to about 1250 by early 2010. It then generally decreases to end at about 800.

Figure: Primary and Secondary Credit

Line chart, 2009 to 2016. There are two series, "Current" and "June". These two series track closely together throughout the chart. They begin at about 95 and generally decrease to about 0 by late 2010. They then remain constant until the end, ending at about 0.

Figure: TAF

Line chart, 2009 to 2016. There are two series, "Current" and "June". Current begins at about 425 and generally increases to about 495 by 2009. It then generally decreases to about 190 by late 2009, and generally increases to about 250 by early 2010. It then generally decreases to about 25 by early 2011, and remains constant until the end. June begins at about 450 and generally increases to about 495 by 2009. It then generally decreases to about 0 by early 2011, and remains constant until the end.

Figure: Foreign Central Bank Liquidity Swaps

Line chart, 2009 to 2016. There are two series, "Current" and "June". Current begins at about 550 and generally decreases to about 0 by 2010. It remains about constant until the end. June begins at about 550 and generally decreases to about 0 by late 2010. It then remains about constant until the end.

Figure: Credit Extended to AIG

Line chart, 2009 to 2016. There are two series, "Current" and "June". Current begins at about 40 and generally increases to about 45 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

constant until the end. June begins at about 39 and generally increases to about 45 by 2009. It then generally decreases to about 0 by early 2015, and remains about constant until the end.

Figure: Maiden Lanes

Line chart, 2009 to 2011. There are three series, "Maiden Lane LLC", "Maiden Lane II LLC", and "Maiden Lane III LLC". Maiden Lane LLC begins at about 26 and generally decreases to end at about 1. Maiden Lane II LLC begins at about 20, generally decreases to about 0 by early 2015, and remains about constant until the end. Maiden Lane III LLC begins at about 26, generally decreases to about early 2015, and remains about constant until the end.

Figure: TALF

Line chart, 2009 to 2016. There are two series, "Current" and "June". Current begins at about 0 and generally increases to about 165 by 2010. It then generally decreases to about 0 by early 2016, and remains about constant until the end. June begins at about 0 and generally increases to about 175 by early 2011. It then generally decreases to about 0 by early 2016, and remains about constant until the end.

Figure: CPFF

Line chart, 2009 to 2016. There are two series, "Current" and "June". Current begins at about 340 and generally decreases to about 0 by mid-2010. They remain constant until the end. June begins at about 340 and generally decreases to about 0 by early 2011. It then remains constant until the end.

Figure: AMLF

Line chart, 2009 to 2016. There are two series, "Current" and "June". Current begins at about 24 and generally decreases to about 4 by 2009. It then generally increases to about 26 by 2009, and generally decreases to about 0 by late 2010. It then remains about constant until the end. June begins at about 24 and generally decreases to about 4 by 2009. It then generally increases to about 26 by 2009, and generally decreases to about 0 by late 2010. It then remains about constant until the end.

Federal Reserve liabilities and capital

Figure: Federal Reserve Notes

Line chart, 2009 to 2016. There are two series, "Current" and "June". These two series track closely together throughout the chart. They begin at about 850 and generally increase to end at about 1225.

Figure: TGA and SFP

Line chart, 2009 to 2016. There are four series, "Current TGA", "June TGA", "Current SFP", and "June SFP". Current TGA and June TGA begin at about 105 and generally decrease to about 25 by 2009. They then generally increase to about 140 by 2009, and generally decrease to about 15 by 2009. They then generally increase to about 118 by 2009, and generally decrease to about 5 by late 2009. They then remain about constant until the end. Current SFP and June SFP begin at about 260, and generally decrease to about 170 by 2009. They then generally increase to about 200 by 2009 and then generally decrease to about 0 by 2010. They then remain about constant until the end.

Figure: Capital

Line chart, 2009 to 2016. There are two series, "Current" and "June". They begin at about 45 and generally increase to end. Current ends at about 132 and June ends at about 128.

Figure: Reserve Balances

Line chart, 2009 to 2016. There are four series, "Baseline", "Alternative A", "Alternative C", and "June baseline". They begin at about 800. Baseline generally increases to about 1550 by 2010 and generally decreases to end at about 100. Alternative A generally increases to about 1700 by 2010 and generally decreases to end at about 125. Alternative C generally increases to about 1260 by 2010 and generally decreases to end at about 0. June baseline generally increases to about 1750 by early 2010 and generally decreases to end at about 0.

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

	End-of-Year									
	Jul 31, 2009	2009	2010	2011	2012	2013	2014	2015	2016	
	\$Billions									
Total assets	1,997	2,599	2,377	2,222	1,989	1,870	1,726	1,627	1,499	
Selected assets:										
Liquidity programs for financial firms	346	310	21	21	21	21	21	21	21	
Primary, secondary, and seasonal credit	36	25	1	1	1	1	1	1	1	
Term auction credit (TAF)	234	255	20	20	20	20	20	20	20	
Foreign central bank liquidity swaps	76	30	-	-	-	-	-	-	-	
Primary Dealer Credit Facility (PDCF)	-	-	-	-	-	-	-	-	-	
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)	1	-	-	-	-	-	-	-	-	
Lending through other credit facilities	97	150	155	129	48	44	20	-	-	
Net portfolio holdings of Commercial Paper Funding Facility (CPFF)	66	40	-	-	-	-	-	-	-	
Term Asset-Backed Securities Loan Facility (TALF)	31	110	155	129	48	44	20	-	-	
Support for specific institutions	104	73	70	55	36	14	3	2	1	
Credit extended to AIG	42	18	29	23	13	-	-	-	-	
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	62	55	41	32	23	14	3	2	1	
Securities held outright	1,354	1,941	2,006	1,891	1,759	1,665	1,557	1,479	1,351	
U.S. Treasury securities	705	775	765	742	680	656	618	595	535	
Agency securities	106	150	124	91	79	64	49	47	32	
Agency mortgage-backed securities	543	1,016	1,117	1,058	1,000	945	890	837	785	
Memo: TSLF	3	75	-	-	-	-	-	-	-	
Repurchase agreements	0	0	0	0	0	0	0	0	0	
Special drawing rights certificate account	2	27	27	27	27	27	27	27	27	
Total liabilities	1,947	2,549	2,320	2,155	1,913	1,782	1,626	1,511	1,366	
Selected liabilities										
Federal Reserve notes in circulation	869	879	912	949	1,017	1,084	1,130	1,176	1,228	
Reserve balances of depository institutions	704	1,423	1,361	1,160	849	651	449	288	91	
U.S. Treasury, general account	93	5	5	5	5	5	5	5	5	
U.S. Treasury, supplemental financing account	200	200	-	-	-	-	-	-	-	
Total capital	50	50	58	66	76	87	101	116	133	

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

August 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:Q3, 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 June and current Greenbooks are the same.

Figure: Federal Funds Rate

Line chart, by percent, 2005 to 2010. Data are quarterly averages. There are three series, "Current Greenbook", "June Greenbook", and "Market forecast". They track closely together throughout the chart. They begin at about 2.5 and generally increase to about 5.2 by mid-2006. They remain about constant until late 2007. They then generally decrease to about 0.1 by early 2009. Current Greenbook and June Greenbook remain at 0.1 to the end. Market forecast generally increases to end at about 1.6.

Figure: Long-Term Interest Rates

Line chart, by percent, 2005 to 2010. Data are quarterly averages. There are six series, "BBB corporate rate", "Conforming mortgage rate" and "10-year Treasury rate". The June Greenbook is also marked separately for each series. BBB corporate rate and the June Greenbook begin at about 5.5, and generally increase to about 9.4. BBB corporate rate generally decreases to end at about 6.5, and June Greenbook generally decreases to end at about 6.8. Conforming mortgage rate and the June Greenbook begin at about 5.8 and then generally increase to about 6.6 by 2006. They continue to track closely together, generally decreasing, until early 2009 at about 5. Conforming mortgage rate and June Greenbook generally increase to end at about 5.5. 10-year Treasury rate and June Greenbook begin at about 4.4 and then generally decrease to about 4.3 by 2005. They then 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, 2005 to 2010. 2005:Q1 = 100, ratio scale. Data are quarter-end. There are two series, "Dow Jones Total Stock Market Index" and "June Greenbook". They begin at about 100 and generally increase to about 131 by 2007. They then generally decrease to about 70 by early 2009, and track closely together, generally increasing until they reach about 80 by 2009. Dow Jones Total Stock Market Index generally increases to end at about 110 and June Greenbook generally increases to end at about 99.

Figure: House Prices

Line chart, 2005 to 2010. 2005:Q1 = 100, ratio scale. Data are quarterly. There are two series, "LoanPerformance index" and "June Greenbook". They begin at about 100 and generally increase to about 110 by early 2006. LoanPerformance index generally decreases to end at about 75 and June Greenbook generally decreases to end at about 74.

Note: The projection period begins in 2009:Q2.

Figure: Crude Oil Prices

Line chart, by dollars per barrel, 2005 to 2010. Data are quarterly averages. There are two series, "West Texas intermediate" and "June Greenbook". They begin at about 50 and generally increase to about 70 by 2006. They then generally decrease to about 60 by early 2007, and generally increase to about 122 by 2008. They then generally decrease to about 42 by early 2009. West Texas intermediate generally increases to end at about 80 and June Greenbook generally increases to end at about 77.

Figure: Broad Real Dollar

Line chart, 2005 to 2010. 2005:Q1 = 100. Data are quarterly averages. There are two series, "Broad Real Dollar" and "June Greenbook". They begin at about 100 and generally increase to about 104 by late 2005. They then generally decrease to about 88 by 2008, and generally increase to about 100 by early 2009. Broad Real Dollar generally decreases to end at about 91, and June Greenbook generally decreases to end at about 92.5.

Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

Measure	2009:Q2		2009:Q3	
	June Greenbook	August Greenbook	June Greenbook	August Greenbook
Real GDP	-1.0	-1.5	.7	.8
Private domestic final purchases	-2.3	-3.5	-1.2	-1.0
Personal consumption expenditures	-.4	-1.2	.8	.9
Residential investment	-22.1	-30.1	-13.3	-9.8
Business fixed investment	-10.3	-10.7	-12.5	-11.9
Government outlays for consumption and investment	3.7	6.1	2.9	2.9
	Contribution to growth (percentage points)			
Inventory investment	-.9	-.9	1.1	1.4
Net exports	1.1	1.1	-.0	-.3

Projections of Real GDP

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

Measure	2009		2010
	H1	H2	
Real GDP	-4.0	1.2	3.1
Previous Greenbook	-3.3	1.1	3.0
Final sales	-2.3	-.2	2.6
Previous Greenbook	-1.6	-.6	2.6
Personal consumption expenditures	-.3	1.0	2.6
Previous Greenbook	.6	1.1	2.8
Residential investment	-34.3	-8.3	9.3
Previous Greenbook	-30.5	-12.2	10.7
Business fixed investment	-26.3	-12.2	3.5
Previous Greenbook	-25.0	-12.2	3.0
Government purchases	1.7	3.1	1.6
Previous Greenbook	.3	3.1	1.9
Exports	-18.7	7.3	5.3
Previous Greenbook	-19.0	3.0	4.0
Imports	-25.4	6.8	4.8
Previous Greenbook	-25.3	6.7	5.4
	Contribution to growth (percentage points)		
Inventory change	-1.6	1.4	.5
Previous Greenbook	-1.6	1.8	.4
Net exports	1.9	-.1	-.1
Previous Greenbook	1.8	-.6	-.3

The Outlook for the Labor Market

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

Measure	2007	2008	2009	2010
Output per hour, nonfarm business	2.8	1.0	2.3	1.7
Previous Greenbook	2.6	2.2	2.2	1.4
Nonfarm private payroll employment	.8	-2.1	-4.1	1.5

Previous Greenbook	.8	-2.1	-3.9	1.5
Household survey employment	.4	-1.5	-3.0	1.2
Previous Greenbook	.4	-1.5	-3.0	1.0
Labor force participation rate ¹	66.0	65.9	65.6	65.3
Previous Greenbook	66.0	65.9	65.6	65.3
Civilian unemployment rate ¹	4.8	6.9	10.0	9.6
Previous Greenbook	4.8	6.9	10.0	9.7
MEMO				
GDP gap ²	-.5	-4.6	-7.8	-6.8
Previous Greenbook	-.4	-3.6	-6.5	-5.6

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)

Measure	2007	2008	2009	2010
PCE chain-weighted price index	3.6	1.7	1.1	1.3
Previous Greenbook	3.5	1.9	1.4	1.1
Food and beverages	4.7	6.8	-.3	1.6
Previous Greenbook	4.5	6.3	1.5	1.9
Energy	19.7	-9.1	-1.3	5.4
Previous Greenbook	19.1	-8.5	1.3	4.5
Excluding food and energy	2.5	2.0	1.4	1.0
Previous Greenbook	2.2	1.9	1.4	.8
Consumer price index	4.0	1.5	1.3	1.5
Previous Greenbook	4.0	1.5	1.4	1.4
Excluding food and energy	2.3	2.0	1.7	1.1
Previous Greenbook	2.3	2.0	1.5	1.0
GDP chain-weighted price index	2.7	1.9	1.0	1.1
Previous Greenbook	2.6	2.0	1.3	1.1
ECI for compensation of private industry workers ¹	3.0	2.4	1.0	1.2
Previous Greenbook	3.0	2.4	1.4	1.2
Compensation per hour, nonfarm business sector	3.6	2.6	-.4	1.2
Previous Greenbook	3.6	3.9	2.6	1.2
Prices of core goods imports ²	3.5	3.8	-1.6	1.2
Previous Greenbook	3.4	3.5	-1.6	1.1

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

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

The Long-Term Outlook

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

Measure	2008	2009	2010	2011	2012	2013
Real GDP	-1.9	-1.4	3.1	4.7	5.5	4.6
Civilian unemployment rate ¹	6.9	10.0	9.6	8.5	6.2	5.0
PCE prices, total	1.7	1.1	1.3	1.3	1.2	1.4

Core PCE prices	2.0	1.4	1.0	.9	1.0	1.3
Federal funds rate ¹	.5	.1	.1	.1	2.5	4.2

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

Alternative Scenarios

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

Measure and scenario	2009		2010	2011	2012-13
	H1	H2			
Real GDP					
Extended Greenbook baseline	-4.0	1.2	3.1	4.7	5.1
Intensified financial fragility	-4.0	-1.2	.4	5.1	5.6
Higher saving rate	-4.0	-1.4	1.0	4.7	5.3
Faster pace of financial recovery	-4.0	1.9	4.7	5.9	4.5
Higher inflation expectations	-4.0	1.2	3.2	5.0	4.8
Greater disinflation	-4.0	1.2	3.1	4.5	5.1
Labor market damage	-4.0	.6	2.2	4.7	5.8
Unemployment rate ¹					
Extended Greenbook baseline	9.2	10.0	9.6	8.5	5.0
Intensified financial fragility	9.2	10.3	10.9	9.9	5.7
Higher saving rate	9.2	10.3	10.8	9.8	6.1
Faster pace of financial recovery	9.2	9.9	9.0	7.5	4.4
Higher inflation expectations	9.2	10.0	9.6	8.4	5.1
Greater disinflation	9.2	10.0	9.6	8.5	5.0
Labor market damage	9.2	10.4	10.9	9.9	5.1
Core PCE inflation					
Extended Greenbook baseline	1.6	1.2	1.0	.9	1.2
Intensified financial fragility	1.6	1.2	.8	.4	1.0
Higher saving rate	1.6	1.2	.7	.4	.7
Faster pace of financial recovery	1.6	1.2	1.1	1.0	1.3
Higher inflation expectations	1.6	1.2	1.5	1.9	2.4
Greater disinflation	1.6	.5	.1	.0	.6
Labor market damage	1.6	1.3	1.1	1.0	1.4
Federal funds rate ¹					
Extended Greenbook baseline	.2	.1	.1	.1	4.2
Intensified financial fragility	.2	.1	.1	.1	2.7
Higher saving rate	.2	.1	.1	.1	1.4
Faster pace of financial recovery	.2	.1	.1	2.2	5.3
Higher inflation expectations	.2	.1	.1	1.1	5.5
Greater disinflation	.2	.1	.1	.1	3.5
Labor market damage	.2	.1	.1	.1	5.8

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

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

Measure	2009	2010	2011	2012	2013
---------	------	------	------	------	------

Real GDP (percent change, Q4 to Q4)					
Projection	-1.4	3.1	4.7	5.5	4.6
Confidence interval					
Greenbook forecast errors	-2.2 - -.6	1.4-4.9	...	...	...
FRB/US stochastic simulations	-2.2 - -.6	1.8-4.7	3.2-6.5	3.6-7.1	2.8-6.6
Civilian unemployment rate (percent, Q4)					
Projection	10.0	9.6	8.5	6.2	5.0
Confidence interval					
Greenbook forecast errors	9.7-10.3	8.8-10.3	...	...	...
FRB/US stochastic simulations	9.7-10.3	8.9-10.2	7.5-9.2	5.3-7.1	4.1-5.8
PCE prices, total (percent change, Q4 to Q4)					
Projection	1.1	1.3	1.3	1.2	1.4
Confidence interval					
Greenbook forecast errors	.6-1.6	.2-2.4	...	...	...
FRB/US stochastic simulations	.7-1.5	.5-2.1	.4-2.2	.3-2.2	.4-2.4
PCE prices excluding food and energy (percent change, Q4 to Q4)					
Projection	1.4	1.0	.9	1.0	1.3
Confidence interval					
Greenbook forecast errors	1.0-1.7	.3-1.7	...	...	...
FRB/US stochastic simulations	1.1-1.7	.3-1.6	.2-1.7	.3-1.8	.6-2.1
Federal funds rate (percent, Q4)					
Projection	.1	.1	.1	2.5	4.2
Confidence interval					
FRB/US stochastic simulations	.1-.1	.1-.1	.1-2.0	.2-4.6	2.4-6.1

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

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

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

Forecast Confidence Intervals and Alternative Scenarios

Confidence Intervals Based on FRB/US Stochastic Simulations

Figure: Real GDP

Line chart, by 4-quarter percent change, 2007 to 2013. There are seven series, "Extended Greenbook baseline", "Intensified financial fragility", "Higher saving rate", "Faster pace of financial recovery", "Higher inflation expectations", "Greater disinflation", and "Labor market damage". They begin at about 2 and generally decrease to about 1.5 by 2007. They then generally increase to about 2.8 by 2007, and generally decrease to about -4 by 2009. Extended Greenbook baseline generally increases to about 5.9 by early 2013, and generally decreases to end at about 4.8. Intensified financial fragility generally increases to about 6.6 by 2012, and generally decreases to end at about 5. Higher saving rate generally increases to about 5.8 by early 2013, and generally decreases to end at about 5.4. Faster pace of financial recovery generally increases to about 5.9 by late 2011, and generally decreases to end at about 4. Higher inflation expectations generally increases to about 5.5 by early 2013, and generally decreases to end at about 4.5. Greater disinflation generally increases to about 5.9 by early 2013, and generally decreases to end at about 4.8. Labor market damage generally increases to about 7 by early 2013, and generally decreases to end at about 5.5. There is a 90 percent confidence interval shown, which ranges from about 1.95 to 7.8 and a 70 percent confidence interval, which ranges from about 3 to 6.6.

Figure: Unemployment Rate

Line chart, by percent, 2007 to 2013. There are seven series, "Extended Greenbook baseline", "Intensified financial fragility", "Higher saving rate", "Faster pace of financial recovery", "Higher inflation expectations", "Greater disinflation", and "Labor market damage". They begin at about 4.5 and generally increase together until they reach about 10.0 by 2009. Extended Greenbook baseline generally decreases to end at about 5.0. Intensified financial fragility generally increases to about 10.9 by 2010, and generally decreases to end at about 5.75. Higher saving rate generally increases to about 10.8 by 2010, and generally decreases to end at about 6.25. Faster pace of financial recovery generally increases to about 9.9 by late 2009 and generally decreases to end at about 4.5. Higher inflation expectations generally decreases to end at about 5.1. Greater disinflation generally decreases to end at about 5.1. Labor market damage generally increases to about 11.0 by 2010, and generally decreases to end at about 5.15. There is a 90 percent confidence interval shown, which ranges from about 3.6 to 6.4 and a 70 percent

Nominal GDP

2008:	Q1	3.5	1.0	.9	-.7	3.6	3.7	2.3	2.4	4.9	4.9
	Q2	4.1	3.5	2.8	1.5	4.3	3.9	2.2	2.4	5.4	5.4
	Q3	3.4	1.4	-.5	-2.7	5.0	4.7	2.4	2.6	6.0	6.0
	Q4	-5.8	-5.4	-6.3	-5.4	-4.9	-5.0	.9	.8	6.9	6.9
2009:	Q1	-3.0	-4.6	-5.5	-6.4	-1.0	-1.5	1.5	1.1	8.1	8.1
	Q2	-1.6	-1.2	-1.0	-1.5	1.5	1.3	2.3	2.0	9.3	9.2
	Q3	2.2	1.6	.7	.8	3.5	2.4	1.0	1.2	9.8	9.8
	Q4	3.2	2.9	1.6	1.7	1.7	2.2	.8	1.2	10.0	10.0
2010:	Q1	3.7	3.7	2.3	2.5	1.5	1.5	.8	1.0	10.0	10.0
	Q2	4.1	4.2	2.8	3.0	1.2	1.3	.8	1.0	9.9	9.9
	Q3	4.2	4.6	3.2	3.4	.9	1.1	.7	1.0	9.8	9.8
	Q4	4.3	4.6	3.4	3.6	.9	1.0	.7	1.0	9.7	9.6
<i>Two-quarter</i> ³											
2008:	Q2	3.8	2.2	1.8	.4	3.9	3.8	2.2	2.4	.6	.6
	Q4	-1.3	-2.1	-3.5	-4.0	.0	-.3	1.7	1.7	1.5	1.5
2009:	Q2	-2.3	-3.0	-3.3	-4.0	.3	-.1	1.9	1.6	2.4	2.3
	Q4	2.7	2.2	1.1	1.2	2.6	2.3	.9	1.2	.7	.8
2010:	Q2	3.9	4.0	2.6	2.8	1.4	1.4	.8	1.0	-.1	-.1
	Q4	4.3	4.6	3.3	3.5	.9	1.1	.7	1.0	-.2	-.3
<i>Four-quarter</i> ⁴											
2007:Q4		4.9	5.3	2.3	2.5	3.5	3.6	2.2	2.5	.4	.4
2008:Q4		1.2	.1	-.8	-1.9	1.9	1.7	1.9	2.0	2.1	2.1
2009:Q4		.2	-.4	-1.1	-1.4	1.4	1.1	1.4	1.4	3.1	3.1
2010:Q4		4.1	4.3	3.0	3.1	1.1	1.3	.8	1.0	-.3	-.4
<i>Annual</i>											
2007		4.8	5.1	2.0	2.1	2.6	2.7	2.2	2.4	4.6	4.6
2008		3.3	2.6	1.1	.4	3.3	3.3	2.2	2.4	5.8	5.8
2009		-1.0	-1.7	-2.5	-3.0	.5	.1	1.6	1.5	9.3	9.3
2010		3.3	3.2	2.1	2.2	1.6	1.6	.9	1.1	9.9	9.8

1. Because the core PCE price index was redefined as part of the comprehensive revisions to the NIPA, the current and previous projection lines are not strictly comparable. [Return to table](#)
2. Level, except for two-quarter and four-quarter intervals. [Return to table](#)
3. Percent change from two quarters earlier; for unemployment rate, change is in percentage points. [Return to table](#)
4. Percent change from four quarters earlier; for unemployment rate, change is in percentage points. [Return to table](#)

Changes in Real Gross Domestic Product and Related Items

(Percent, annual rate except as noted)

Item	2008				2009				2010				2008 ¹	2009 ¹	2010 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	-.7	1.5	-2.7	-5.4	-6.4	-1.5	.8	1.7	2.5	3.0	3.4	3.6	-1.9	-1.4	3.1
<i>Previous Greenbook</i>	.9	2.8	-.5	-6.3	-5.5	-1.0	.7	1.6	2.3	2.8	3.2	3.4	-.8	-1.1	3.0
Final sales	-.5	2.7	-2.9	-4.7	-4.1	-.5	-.5	.2	1.8	2.6	2.9	3.3	-1.4	-1.3	2.6
<i>Previous Greenbook</i>	.9	4.4	-1.3	-6.2	-3.1	-.1	-.4	-.8	1.1	3.2	3.4	2.8	-.7	-1.1	2.6
Priv. dom. final purch.	-1.7	-.5	-4.4	-6.3	-7.2	-3.5	-1.0	-.7	1.5	2.7	3.4	4.1	-3.2	-3.1	2.9
<i>Previous Greenbook</i>	-.3	.7	-4.1	-7.5	-5.8	-2.3	-1.2	-.5	1.3	2.9	3.7	4.5	-2.8	-2.5	3.1
Personal cons. expend.	-.6	.1	-3.5	-3.1	.6	-1.2	.9	1.2	2.1	2.4	2.8	3.2	-1.8	.4	2.6
<i>Previous Greenbook</i>	.9	1.2	-3.8	-4.3	1.6	-.4	.8	1.4	2.1	2.7	3.1	3.4	-1.5	.8	2.8
Durables	-8.9	-5.7	-11.7	-20.3	3.9	-7.1	5.0	.6	8.5	8.7	6.3	6.7	-11.8	.5	7.5

Nondurables	-3.0	2.2	-5.6	-4.9	1.9	-2.5	.2	1.2	1.5	2.0	2.2	2.6	-2.9	.2	2.1
Services	1.8	.4	-1.3	.5	-.3	.1	.5	1.2	1.4	1.7	2.5	2.8	.3	.4	2.1
Residential investment	-28.2	-15.8	-15.9	-23.2	-38.2	-30.1	-9.8	-6.8	-3.1	10.4	13.0	18.1	-21.0	-22.4	9.3
<i>Previous Greenbook</i>	-25.1	-13.3	-16.0	-22.8	-38.0	-22.1	-13.3	-11.1	-2.2	12.4	13.6	20.1	-19.4	-21.9	10.7
Business fixed invest.	1.9	1.4	-6.1	-19.5	-39.2	-10.7	-11.9	-12.5	-2.3	2.8	6.0	8.0	-6.0	-19.5	3.5
<i>Previous Greenbook</i>	2.4	2.5	-1.7	-21.7	-37.3	-10.3	-12.5	-12.0	-4.6	1.3	6.1	9.7	-5.2	-18.9	3.0
Equipment & software	-.5	-5.0	-9.4	-25.9	-36.4	-8.3	-5.7	-4.2	2.7	7.7	10.5	12.0	-10.7	-14.8	8.2
<i>Previous Greenbook</i>	-.6	-5.0	-7.5	-28.1	-33.6	-13.0	-6.8	-6.1	-.2	6.3	11.4	15.3	-11.0	-15.7	8.0
Nonres. structures	6.8	14.5	-.1	-7.2	-43.6	-14.6	-22.1	-26.6	-11.6	-6.8	-3.2	-.6	3.2	-27.6	-5.7
<i>Previous Greenbook</i>	8.6	18.5	9.7	-9.4	-42.9	-5.7	-21.6	-21.8	-12.6	-7.7	-3.8	-1.2	6.3	-24.2	-6.4
Net exports ²	-551	-476	-479	-471	-386	-347	-357	-355	-357	-358	-362	-364	-494	-362	-360
<i>Previous Greenbook</i> ³	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Exports	-.1	12.1	-3.6	-19.5	-29.9	-5.6	10.1	4.6	5.0	5.0	5.4	5.8	-3.4	-6.6	5.3
Imports	-2.5	-5.0	-2.2	-16.7	-36.4	-12.5	10.5	3.2	4.5	4.2	5.1	5.2	-6.8	-10.7	4.8
Gov't. cons. & invest.	2.6	3.6	4.8	1.2	-2.6	6.1	2.9	3.2	3.3	2.1	.7	.5	3.0	2.4	1.6
<i>Previous Greenbook</i>	1.9	3.9	5.8	1.3	-3.0	3.7	2.9	3.3	3.4	2.3	1.1	.8	3.2	1.7	1.9
Federal	8.1	7.8	13.2	6.5	-4.3	10.9	6.6	6.8	6.6	3.4	.1	-.3	8.9	4.9	2.4
Defense	8.2	7.0	19.8	3.8	-5.1	13.3	6.2	6.1	4.1	2.1	1.2	.6	9.5	4.9	2.0
Nondefense	8.1	9.6	.1	12.7	-2.5	6.0	7.5	8.3	12.0	6.2	-2.1	-2.1	7.5	4.7	3.3
State & local	-.5	1.2	.1	-2.0	-1.5	3.3	.7	1.0	1.2	1.2	1.1	1.0	-.3	.8	1.1
Change in bus. inventories ²	1	-37	-30	-37	-114	-145	-103	-55	-32	-18	0	8	-26	-104	-10
<i>Previous Greenbook</i> ³	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nonfarm ²	14	-36	-24	-36	-115	-149	-108	-59	-37	-22	-3	4	-20	-108	-14
Farm ²	-13	-2	-5	-2	0	3	4	4	4	3	3	3	-5	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](#)

3. Not applicable, as the data in the previous Greenbook are in chained (2000) dollars. [Return to table](#)

Changes in Real Gross Domestic Product and Related Items

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

Item	2002	2003	2004	2005	2006	2007	2008	2009	2010
Real GDP	1.9	3.8	3.1	2.7	2.4	2.5	-1.9	-1.4	3.1
<i>Previous Greenbook</i>	1.9	3.7	3.1	2.7	2.4	2.3	-.8	-1.1	3.0
Final sales	.8	3.8	2.8	2.7	2.8	2.7	-1.4	-1.3	2.6
<i>Previous Greenbook</i>	.8	3.7	2.8	2.7	2.8	2.5	-.7	-1.1	2.6
Priv. dom. final purch.	1.1	4.2	4.2	3.1	2.5	1.4	-3.2	-3.1	2.9
<i>Previous Greenbook</i>	1.1	4.1	4.3	3.1	2.3	1.4	-2.8	-2.5	3.1
Personal cons. expend.	1.9	3.4	3.5	2.7	3.3	2.0	-1.8	.4	2.6
<i>Previous Greenbook</i>	1.9	3.4	3.7	2.6	3.2	2.2	-1.5	.8	2.8
Durables	1.5	8.9	5.5	2.1	6.3	4.6	-11.8	.5	7.5
Nondurables	2.1	3.9	3.0	3.3	3.2	1.5	-2.9	.2	2.1
Services	1.9	2.2	3.4	2.6	2.8	1.7	.3	.4	2.1
Residential investment	7.4	11.5	6.6	5.3	-15.7	-20.5	-21.0	-22.4	9.3
<i>Previous Greenbook</i>	7.0	11.7	6.7	5.4	-15.5	-19.0	-19.4	-21.9	10.7
Business fixed invest.	-6.2	5.9	7.0	4.4	7.8	7.9	-6.0	-19.5	3.5

<i>Previous Greenbook</i>	-6.5	4.9	7.5	4.9	6.5	6.4	-5.2	-18.9	3.0
Equipment & software	-2.7	7.5	8.8	6.1	6.0	3.2	-10.7	-14.8	8.2
<i>Previous Greenbook</i>	-3.4	6.6	9.4	7.0	4.2	2.8	-11.0	-15.7	8.0
Nonres. structures	-15.8	1.3	1.7	-.1	13.0	18.9	3.2	-27.6	-5.7
<i>Previous Greenbook</i>	-14.9	.2	2.3	-.5	12.8	14.5	6.3	-24.2	-6.4
Net exports ¹	-549	-604	-688	-723	-729	-648	-494	-362	-360
<i>Previous Greenbook</i> ²	...	...	...	...	...	...	...	...	...
Exports	4.0	6.2	7.1	6.7	10.2	10.2	-3.4	-6.6	5.3
Imports	9.7	5.1	10.9	5.2	4.1	.9	-6.8	-10.7	4.8
Gov't. cons. & invest.	4.0	1.6	.6	.7	1.5	2.5	3.0	2.4	1.6
<i>Previous Greenbook</i>	4.0	1.7	.7	.6	2.1	2.4	3.2	1.7	1.9
Federal	8.2	5.7	2.3	1.2	2.2	3.4	8.9	4.9	2.4
Defense	8.7	8.4	2.4	.4	4.4	2.6	9.5	4.9	2.0
Nondefense	7.3	.7	2.3	2.6	-2.3	5.2	7.5	4.7	3.3
State & local	1.9	-.5	-.4	.4	1.2	1.9	-.3	.8	1.1
Change in bus. inventories ¹	13	17	66	50	59	19	-26	-104	-10
<i>Previous Greenbook</i> ²	...	...	...	...	...	...	...	...	...
Nonfarm ¹	16	17	58	50	63	20	-20	-108	-14
Farm ¹	-3	0	8	0	-4	-1	-5	3	3

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

2. Not applicable, as the data in the previous Greenbook are in chained (2000) dollars. [Return to table](#)

Contributions to Changes in Real Gross Domestic Product

(Percentage points, annual rate except as noted)

[illegible]

Net exports	.4	2.4	-.1	.5	2.6	1.1	-.3	.1	-.1	.0	-.1	-.1	.7	.9	-.1
<i>Previous Greenbook</i>	.8	2.9	1.1	-.2	2.1	1.1	.0	-1.1	-.7	.3	.2	-1.1	1.1	.7	-.3
Exports	.0	1.5	-.5	-2.7	-4.0	-.6	1.0	.5	.5	.5	.6	.6	-.4	-.8	.6
Imports	.4	.9	.4	3.1	6.6	1.7	-1.3	-.4	-.6	-.6	-.7	-.7	1.2	1.7	-.7
Gov't. cons. & invest.	.5	.7	1.0	.2	-.5	1.2	.6	.7	.7	.4	.2	.1	.6	.5	.3
<i>Previous Greenbook</i>	.4	.8	1.1	.3	-.6	.8	.6	.7	.7	.5	.2	.2	.6	.3	.4
Federal	.6	.6	.9	.5	-.3	.8	.5	.5	.5	.3	.0	.0	.6	.4	.2
Defense	.4	.3	.9	.2	-.3	.7	.3	.3	.2	.1	.1	.0	.5	.3	.1
Nondefense	.2	.2	.0	.3	-.1	.1	.2	.2	.3	.2	-.1	-.1	.2	.1	.1
State & local	-.1	.2	.0	-.3	-.2	.4	.1	.1	.1	.2	.1	.1	.0	.1	.1
Change in bus. inventories	-.2	-1.3	.3	-.6	-2.4	-.9	1.4	1.5	.7	.4	.6	.2	-.5	-.1	.5
<i>Previous Greenbook</i>	.0	-1.5	.8	-.1	-2.4	-.9	1.1	2.4	1.2	-.3	-.2	.7	-.2	.0	.4
Nonfarm	.1	-1.6	.4	-.7	-2.4	-1.0	1.3	1.5	.7	.5	.6	.2	-.4	-.2	.5
Farm	-.3	.3	-.1	.1	.1	.1	.1	.0	.0	.0	.0	.0	-.1	.1	.0

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

Changes in Prices and Costs

(Percent, annual rate except as noted)

Item	2008				2009				2010				2008 ¹ 2009 ¹ 2010 ¹		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
GDP chain-wt. price index	1.9	1.8	4.0	.1	1.9	.2	.8	1.2	1.1	1.2	1.1	1.0	1.9	1.0	1.1
<i>Previous Greenbook</i>	2.6	1.1	3.9	.5	2.7	-.6	1.6	1.6	1.4	1.2	1.0	.8	2.0	1.3	1.1
PCE chain-wt. price index	3.7	3.9	4.7	-5.0	-1.5	1.3	2.4	2.2	1.5	1.3	1.1	1.0	1.7	1.1	1.3
<i>Previous Greenbook</i>	3.6	4.3	5.0	-4.9	-1.0	1.5	3.5	1.7	1.5	1.2	.9	.9	1.9	1.4	1.1
Energy	21.3	20.4	29.8	-64.0	-36.7	-2.2	27.7	20.1	10.1	6.4	3.5	1.9	-9.1	-1.3	5.4
<i>Previous Greenbook</i>	19.0	27.4	31.7	-65.0	-35.9	-3.3	51.8	12.0	6.9	4.7	3.5	2.8	-8.5	1.3	4.5
Food ²	5.3	8.1	9.3	4.7	-1.1	-3.6	1.5	2.2	2.1	1.9	1.5	1.0	6.8	-.3	1.6
<i>Previous Greenbook</i>	4.9	6.4	8.5	5.6	.9	-.9	2.7	3.3	3.6	2.3	1.1	.7	6.3	1.5	1.9
Ex. food & energy ²	2.4	2.4	2.6	.8	1.1	2.0	1.2	1.2	1.0	1.0	1.0	1.0	2.0	1.4	1.0
<i>Previous Greenbook</i>	2.3	2.2	2.4	.9	1.5	2.3	1.0	.8	.8	.8	.7	.7	1.9	1.4	.8
CPI	4.5	4.5	6.2	-8.3	-2.4	1.3	3.6	2.7	1.9	1.6	1.3	1.1	1.5	1.3	1.5
<i>Previous Greenbook</i>	4.5	4.5	6.2	-8.3	-2.4	1.2	4.5	2.3	1.9	1.5	1.2	1.1	1.5	1.4	1.4
Ex. food & energy	2.5	2.0	2.8	.6	1.5	2.4	1.5	1.3	1.1	1.0	1.0	1.0	2.0	1.7	1.1
<i>Previous Greenbook</i>	2.5	2.0	2.8	.6	1.5	2.3	1.2	1.1	1.0	1.0	.9	.9	2.0	1.5	1.0
ECl, hourly compensation ³	2.7	2.6	2.6	1.9	.7	.7	1.3	1.3	1.3	1.2	1.1	1.1	2.4	1.0	1.2
<i>Previous Greenbook</i> ³	2.7	2.6	2.6	1.9	.7	1.8	1.7	1.5	1.3	1.3	1.2	1.1	2.4	1.4	1.2
Nonfarm business sector ⁴															
Output per hour	.0	3.2	-.1	.8	.3	5.3	2.2	1.3	1.8	1.4	1.9	1.9	1.0	2.3	1.7
<i>Previous Greenbook</i>	2.6	4.7	2.2	-.6	1.9	4.4	1.5	1.1	1.2	1.2	1.6	1.6	2.2	2.2	1.4
Compensation per hour	1.7	1.4	4.4	2.8	-2.6	-.8	.8	1.0	1.2	1.2	1.2	1.2	2.6	-.4	1.2
<i>Previous Greenbook</i>	3.7	1.7	5.7	4.5	4.6	3.2	1.6	1.3	1.3	1.2	1.2	1.2	3.9	2.6	1.2
Unit labor costs	1.7	-1.7	4.5	2.0	-2.8	-5.9	-1.3	-.3	-.6	-.2	-.7	-.7	1.6	-2.6	-.5
<i>Previous Greenbook</i>	1.1	-2.8	3.5	5.1	2.6	-1.2	.1	.2	.1	.0	-.4	-.5	1.7	.4	-.2
Core goods imports chain-wt. price index ⁵	8.5	11.7	5.5	-9.1	-9.4	-2.3	3.1	2.7	1.6	1.1	1.0	.9	3.8	-1.6	1.2
<i>Previous Greenbook</i> ⁵	8.5	10.6	4.6	-8.5	-9.3	-1.0	2.4	1.8	1.4	1.1	.9	.9	3.5	-1.6	1.1

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

2. Because the indexes for food prices and core PCE prices were redefined as part of the comprehensive revision to the NIPA, the current and previous projection lines are not strictly

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

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

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

[illegible]

GDP gap ⁴	-1.2	-1.5	-2.7	-4.6	-6.6	-7.4	-7.7	-7.8	-7.7	-7.4	-7.1	-6.8	-4.6	-7.8	-6.8
<i>Previous Greenbook</i> ⁴	-8	-7	-1.4	-3.6	-5.4	-6.1	-6.4	-6.5	-6.4	-6.2	-5.9	-5.6	-3.6	-6.5	-5.6
Industrial production ⁵	.2	-4.6	-9.0	-13.0	-19.1	-11.6	3.0	3.4	3.9	4.7	5.2	5.5	-6.7	-6.6	4.8
<i>Previous Greenbook</i> ⁵	.2	-4.6	-9.0	-13.0	-19.0	-11.5	3.2	2.6	3.8	4.5	4.9	5.3	-6.7	-6.7	4.6
Manufacturing industr. prod. ⁵	-1.2	-5.4	-9.3	-18.1	-22.1	-10.5	4.4	3.5	3.8	4.8	5.1	6.0	-8.7	-6.8	4.9
<i>Previous Greenbook</i> ⁵	-1.2	-5.4	-9.3	-18.1	-22.0	-10.0	4.1	3.0	3.9	4.6	4.8	5.7	-8.7	-6.9	4.7
Capacity utilization rate - mfg. ³	78.1	76.7	74.6	70.9	66.7	65.1	66.0	66.9	67.8	68.9	70.1	71.5	70.9	66.9	71.5
<i>Previous Greenbook</i> ³	78.1	76.7	74.6	70.9	66.7	65.2	66.1	66.8	67.8	68.9	70.0	71.3	70.9	66.8	71.3
Housing starts ⁶	1.1	1.0	.9	.7	.5	.5	.6	.6	.7	.8	.8	.9	.9	.6	.8
Light motor vehicle sales ⁶	15.2	14.0	12.8	10.4	9.5	9.6	10.2	10.4	11.3	12.0	12.5	13.1	13.1	9.9	12.2
<i>Income and saving</i>															
Nominal GDP ⁵	1.0	3.5	1.4	-5.4	-4.6	-1.2	1.6	2.9	3.7	4.2	4.6	4.6	.1	-.4	4.3
Real disposable pers. income ⁵	-2.4	9.8	-8.5	3.4	1.1	3.2	-2.5	.5	1.6	1.4	2.7	2.3	.3	.6	2.0
<i>Previous Greenbook</i> ⁵	-.7	10.7	-8.5	2.9	6.5	4.9	-3.7	.9	2.0	1.9	3.2	2.5	.9	2.1	2.4
Personal saving rate ³	1.2	3.4	2.2	3.8	4.0	5.2	4.5	4.4	4.3	4.1	4.0	3.9	3.8	4.4	3.9
<i>Previous Greenbook</i> ³	.2	2.5	1.3	3.2	4.4	5.7	4.7	4.7	4.7	4.5	4.6	4.4	3.2	4.7	4.4
Corporate profits ⁷	-10.2	-14.5	15.3	-64.4	22.8	6.6	6.9	-1.1	11.8	12.7	13.5	14.6	-25.1	8.5	13.1
Profit share of GNP ³	10.0	9.6	9.9	7.8	8.3	8.4	8.5	8.5	8.6	8.8	9.0	9.2	7.8	8.5	9.2
Net federal saving ⁸	-433	-797	-666	-674	-959	-1,291	-1,301	-1,368	-1,386	-1,359	-1,379	-1,365	-643	-1,230	-1,372
Net state & local saving ⁸	-20	-26	-59	-56	-37	-16	-23	16	24	23	40	47	-40	-15	33
Gross national saving rate ³	13.1	12.2	12.5	12.2	11.4	10.6	10.1	9.9	9.8	10.0	10.2	10.4	12.2	9.9	10.4
Net national saving rate ³	.7	-.4	-.1	-.7	-2.2	-3.0	-3.6	-4.0	-4.1	-3.9	-3.7	-3.4	-.7	-4.0	-3.4

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	2002	2003	2004	2005	2006	2007	2008	2009	2010
<i>Employment and production</i>									
Nonfarm payroll employment ¹	-.7	-.1	2.0	2.4	2.1	1.2	-2.3	-4.6	1.8
Unemployment rate ²	5.8	5.8	5.4	4.9	4.4	4.8	6.9	10.0	9.6
<i>Previous Greenbook</i> ²	5.8	5.8	5.4	4.9	4.4	4.8	6.9	10.0	9.7
GDP gap ³	-2.6	-1.7	-.8	-.4	-.4	-.5	-4.6	-7.8	-6.8
<i>Previous Greenbook</i> ³	-2.5	-1.7	-.8	-.3	-.2	-.4	-3.6	-6.5	-5.6
Industrial production ⁴	2.5	1.6	3.0	2.6	1.8	1.8	-6.7	-6.6	4.8
<i>Previous Greenbook</i> ⁴	2.5	1.6	3.0	2.6	1.8	1.8	-6.7	-6.7	4.6

Manufacturing industr. prod. ⁴	2.5	1.8	3.6	3.8	1.2	1.9	-8.7	-6.8	4.9
<i>Previous Greenbook</i> ⁴	2.5	1.8	3.6	3.8	1.2	1.9	-8.7	-6.9	4.7
Capacity utilization rate - mfg. ²	73.0	74.6	77.3	79.2	79.0	78.7	70.9	66.9	71.5
<i>Previous Greenbook</i> ²	73.0	74.6	77.3	79.2	79.0	78.7	70.9	66.8	71.3
Housing starts ⁵	1.7	1.8	2.0	2.1	1.8	1.4	.9	.6	.8
Light motor vehicle sales ⁵	16.7	16.6	16.8	16.9	16.5	16.1	13.1	9.9	12.2
<i>Income and saving</i>									
Nominal GDP ⁴	3.8	6.0	6.4	6.3	5.4	5.3	.1	-.4	4.3
Real disposable pers. income ⁴	3.2	3.9	3.5	.6	4.6	1.0	.3	.6	2.0
<i>Previous Greenbook</i> ⁴	2.9	3.7	4.1	.9	3.6	1.8	.9	2.1	2.4
Personal saving rate ²	3.1	3.6	3.6	1.5	2.5	1.5	3.8	4.4	3.9
<i>Previous Greenbook</i> ²	1.8	2.2	2.5	.8	.9	.4	3.2	4.7	4.4
Corporate profits ⁶	20.6	12.2	21.9	19.6	3.7	-5.7	-25.1	8.5	13.1
Profit share of GNP ²	8.6	9.1	10.5	11.8	11.6	10.3	7.8	8.5	9.2
Net federal saving ⁷	-253	-376	-379	-283	-204	-236	-643	-1230	-1372
Net state & local saving ⁷	-54	-39	-8	26	51	22	-40	-15	33
Gross national saving rate ²	14.2	14.3	14.3	15.5	16.3	13.8	12.2	9.9	10.4
Net national saving rate ²	2.3	2.5	2.7	3.5	4.2	1.6	-.7	-4.0	-3.4

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				2008				2009				2010			
	2007 ^a	2008 ^a	2009	2010	Q1 ^a	Q2 ^a	Q3 ^a	Q4 ^a	Q1 ^a	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget																
Receipts ¹	2568	2524	2112	2185	540	788	590	547	442	599	524	505	472	655	553	545
Outlays ¹	2729	2983	3549	3652	746	761	759	880	891	904	875	911	957	902	882	933
Surplus/deficit ¹	-161	-459	-1437	-1467	-206	27	-169	-332	-449	-305	-351	-405	-485	-247	-329	-388
<i>Previous Greenbook</i>	-161	-459	-1441	-1432	-206	27	-169	-332	-449	-304	-356	-416	-455	-239	-323	-397
On-budget	-342	-642	-1578	-1579	-237	-64	-171	-385	-468	-382	-343	-451	-489	-319	-321	-436
Off-budget	181	183	141	111	31	91	2	53	19	77	-7	45	3	71	-9	48
Means of financing																
Borrowing	206	768	1722	1295	200	-48	526	561	465	338	357	458	345	197	294	378
Cash decrease	-23	-296	101	220	11	-7	-318	5	98	-49	48	-0	125	55	40	15
Other ²	-23	-13	-386	-47	-5	29	-39	-233	-114	16	-54	-52	15	-5	-5	-5
Cash operating balance, end of period	75	372	270	50	46	53	372	367	269	318	270	270	145	90	50	35
NIPA federal sector																

Seasonally adjusted annual rates

Receipts	2634	2534	2283	2301	2591	2372	2490	2448	2261	2212	2212	2220	2301	2328	2354	2386
Expenditures	2845	3074	3339	3674	3024	3169	3155	3122	3220	3503	3513	3588	3687	3687	3733	3752
Consumption expenditures	833	914	972	1042	903	923	956	955	954	980	998	1018	1041	1054	1057	1059
Defense	565	620	657	695	610	622	655	649	643	662	673	684	694	699	703	706
Nondefense	268	294	315	347	294	301	301	307	311	317	325	334	347	354	354	353
Other spending	2011	2160	2368	2631	2121	2246	2199	2167	2266	2523	2515	2570	2646	2633	2676	2693
Current account surplus	-211	-540	-1056	-1373	-433	-797	-666	-674	-959	-1291	-1301	-1368	-1386	-1359	-1379	-1365
Gross investment	126	141	157	166	135	146	152	159	152	158	161	164	166	167	168	169
Gross saving less gross investment ³	-226	-563	-1090	-1412	-451	-824	-697	-712	-989	-1324	-1336	-1406	-1425	-1398	-1418	-1404
Fiscal indicators⁴																
High-employment (HEB) surplus/deficit	-235	-495	-652	-777	-411	-751	-546	-446	-598	-812	-752	-780	-786	-757	-784	-786
Change in HEB, percent of potential GDP	-0.3	1.7	0.9	0.7	0.9	2.3	-1.5	-0.7	1.0	1.4	-0.4	0.1	-0.0	-0.2	0.1	-0.0
Fiscal impetus (FI), percent of GDP	0.2	0.9	1.0	0.9	0.1	0.6	0.3	0.0	0.0	0.7	0.2	0.3	0.4	0.1	0.1	-0.0
<i>Previous Greenbook</i>	<i>0.2</i>	<i>0.8</i>	<i>0.8</i>	<i>0.9</i>	<i>0.1</i>	<i>0.5</i>	<i>0.7</i>	<i>-0.3</i>	<i>-0.1</i>	<i>0.7</i>	<i>0.1</i>	<i>0.2</i>	<i>0.4</i>	<i>0.1</i>	<i>0.1</i>	<i>0.0</i>

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

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

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

4. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the NAIRU. Quarterly figures for change in HEB and FI are not at annual rates. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionary changes in federal spending and taxes in chained (2000) dollars, scaled by real GDP. The annual FI estimates are on a calendar year basis. Also, for FI and the change in HEB, positive values indicate aggregate demand stimulus. [Return to table](#)

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									
2003	8.1	11.6	14.3	5.2	2.5	8.3	10.9	6.0	
2004	8.9	11.1	13.6	5.5	6.2	7.4	9.0	6.4	
2005	9.5	11.0	13.2	4.3	8.7	10.2	7.0	6.3	
2006	9.0	10.1	11.0	4.5	10.5	8.2	3.9	5.4	
2007	8.7	6.6	6.7	5.5	13.5	9.3	4.9	5.3	
2008	5.9	.4	-.5	1.7	5.1	1.9	24.2	.1	
2009	5.0	-1.2	-.6	-3.8	.6	6.8	25.5	-.4	
2010	4.5	.3	-.2	1.7	2.0	3.8	15.2	4.3	
Quarter									
2008:	1	5.4	3.0	2.4	4.7	7.5	3.5	8.1	1.0
	2	3.2	.4	-.3	3.9	6.1	.9	5.9	3.5
	3	8.4	.1	-2.4	1.4	5.0	3.3	39.2	1.4
	4	6.2	-2.0	-1.7	-3.1	1.5	-.3	37.0	-5.4
2009:	1	4.1	-1.1	-.0	-3.5	-.3	4.9	22.6	-4.6
	2	5.6	-1.3	-.5	-5.1	-.1	9.0	28.2	-1.2
	3	4.3	-1.5	-1.1	-4.0	1.4	5.3	19.5	1.6
	4	5.5	-1.1	-.9	-2.8	1.2	7.6	23.1	2.9
2010:	1	3.4	-.4	-.6	-.7	1.9	3.8	12.0	3.7
	2	4.6	.1	-.3	1.2	1.7	3.7	16.2	4.2

3	4.4	.6	.0	2.6	2.4	3.7	13.4	4.6
4	5.2	1.1	.3	3.8	2.2	3.7	16.1	4.6

Note. Quarterly data are at seasonally adjusted annual rates.

1. Data after 2009:Q1 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4. [Return to table](#)

2.6.3 FOF

Flow of Funds Projections: Highlights

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

Category	2007	2008	2009	2010	2008		2009				2010			
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Domestic nonfinancial sectors														
Net funds raised														
Total	1707.3	1492.4	1527.1	1435.3	2305.3	1657.7	1071.9	1894.7	1375.0	1766.6	1094.9	1465.8	1431.9	1748.7
Net equity issuance	-831.2	-380.8	-137.0	-145.0	-399.6	-386.0	-297.0	-11.2	-100.0	-140.0	-100.0	-160.0	-160.0	-160.0
Net debt issuance	2538.4	1873.2	1664.1	1580.3	2705.0	2043.7	1368.9	1905.8	1475.0	1906.6	1194.9	1625.8	1591.9	1908.7
Borrowing indicators														
Debt (percent of GDP) ¹	216.2	226.0	242.4	245.9	225.0	232.3	238.1	241.8	243.8	245.0	245.5	245.4	245.4	245.6
Borrowing (percent of GDP)	18.0	13.0	11.7	10.8	18.6	14.2	9.7	13.5	10.4	13.3	8.3	11.2	10.8	12.8
Households														
Net borrowing ²	854.9	49.1	-171.8	47.6	7.2	-273.4	-151.4	-177.7	-205.2	-152.7	-59.1	17.2	86.2	146.1
Home mortgages	655.7	-51.7	-67.7	-16.6	-253.0	-173.9	-5.2	-57.0	-113.9	-94.9	-61.7	-33.2	0.0	28.5
Consumer credit	133.6	43.7	-98.3	42.9	35.4	-82.4	-90.4	-131.2	-102.2	-69.2	-17.2	29.6	64.3	94.8
Debt/DPI (percent) ³	128.3	127.8	126.2	122.2	128.1	128.4	128.0	126.2	125.8	124.6	123.4	122.5	121.5	120.7
Business														
Financing gap ⁴	141.7	112.5	-233.3	-247.2	35.7	93.6	-135.3	-271.2	-271.1	-255.6	-240.1	-249.2	-246.3	-253.2
Net equity issuance	-831.2	-380.8	-137.0	-145.0	-399.6	-386.0	-297.0	-11.2	-100.0	-140.0	-100.0	-160.0	-160.0	-160.0
Credit market borrowing	1260.5	544.1	63.5	228.3	546.7	169.6	-28.3	-12.3	157.1	137.6	208.4	189.2	266.8	248.7
State and local governments														
Net borrowing	185.9	40.7	152.7	89.8	72.5	-7.7	109.1	202.3	121.8	177.8	89.8	89.8	89.8	89.8
Current surplus ⁵	258.2	211.7	209.9	251.8	197.6	205.2	219.3	197.7	191.0	231.6	240.4	240.4	258.7	267.7
Federal government														
Net borrowing	237.1	1239.2	1619.1	1214.7	2078.5	2155.2	1439.6	1893.6	1401.4	1744.0	955.7	1329.7	1149.1	1424.1
Net borrowing (n.s.a.)	237.1	1239.2	1619.1	1214.7	526.5	560.9	465.4	338.4	357.3	458.0	344.9	197.4	294.3	378.0
Unified deficit (n.s.a.)	187.9	680.5	1510.0	1450.1	168.9	332.5	448.9	304.9	350.8	405.4	485.4	247.4	329.3	388.0
Depository institutions														
Funds supplied	858.7	415.1	-187.9	-268.2	546.8	135.8	-507.8	130.2	-469.6	95.4	166.8	129.4	234.4	-1603.2

Note. Data after 2009:Q1 are staff projections.

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

2. Includes change in liabilities not shown in home mortgages and consumer credit. [Return to table](#)

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

4. For corporations, excess of capital expenditures over U.S. internal funds. [Return to table](#)

5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers. [Return to table](#)

n.s.a. Not seasonally adjusted. [Return to table](#)

2.6.4 FOF

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

Last update: April 1, 2015

International Developments

Summary of Staff Projections

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

Indicator	2008	2009		Projection	
		Q1	2009		2010
			Q2	H2	
Foreign output	-1.0	-8.7	.6	2.7	3.3
Previous GB	-1.0	-8.6	-1.4	1.7	3.1
Foreign CPI	3.3	-1.0	1.0	1.7	1.7
Previous GB	3.3	-1.0	1.5	2.0	1.6
	Contribution to growth (percentage points)				
U.S. net exports	.7	2.6	1.1	-.1	-.1
Previous GB	1.1	2.1	1.1	-.6	-.3

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

Staff Projections for Foreign GDP Growth by Region

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

Measure	2008	2009		Projection	
		Q1	2009		2010
			Q2	H2	
Emerging Market Economies	-.1	-9.8	4.4	4.8	4.6
Previous GB	-.1	-9.8	-.4	3.4	4.5
Advanced Foreign Economies	-1.6	-7.8	-2.2	1.0	2.2
Previous GB	-1.6	-7.6	-2.2	.3	1.9

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

Staff Projections of Selected Trade Prices

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

Trade category	2008	2009		Projection	
		Q1	2009		2010
			Q2	H2	
Imports					
Core goods	3.8	-9.4	-2.3	2.9	1.2
Previous GB	3.5	-9.3	-1.0	2.1	1.1
Oil (dollars per barrel)	68.52	41.58	53.52	69.48	75.17
Previous GB	68.73	41.59	56.60	69.70	73.47
Exports					
Core goods	-6	-15.3	3.0	3.1	1.4

Previous GB	-3	-12.1	1.0	2.5	1.0
-------------	----	-------	-----	-----	-----

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	2008	2009 Projection			
		Q1	2009		2010
			Q2	H2	
Real exports	-3.4	-29.9	-5.6	7.3	5.3
Previous GB	-1.8	-30.6	-5.4	3.0	4.0
Real imports	-6.8	-36.4	-12.5	6.8	4.8
Previous GB	-7.5	-36.3	-12.3	6.7	5.4

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

Alternative Scenario: Stronger Foreign Demand

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

Indicator and simulation	2009	2010		2011	2012-13
	H2	H1	H2		
U.S. real GDP					
Baseline	1.2	2.8	3.5	4.7	5.1
Stronger Foreign Demand	1.3	3.0	3.8	5.0	5.3
U.S. PCE prices excluding food and energy					
Baseline	1.2	1.0	1.0	1.0	1.2
Stronger Foreign Demand	1.2	1.0	1.1	1.1	1.4
U.S. federal funds rate (percent)					
Baseline	.1	.1	.1	.1	4.2
Stronger Foreign Demand	.1	.1	.1	.1	5.4
U.S. trade balance (percent share of GDP)					
Baseline	-3.0	-3.1	-3.1	-3.1	-3.2
Stronger Foreign Demand	-3.0	-3.0	-3.0	-2.9	-2.7

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 August 6, 2009. There are three series, "2008", "2009", and "2010". 2008 begins at about -6.7 and generally increases to end at about -4.9. 2009 begins at about -5.3 by September 12, 2007, and generally increases to about -4.1 by April 23, 2008. It then generally decreases to about -4.6 by June 18, 2008, and generally increases to about -3.0 by December 10, 2008. It then generally decreases to about -3.6 by March 12, 2009, and generally increases to end at about -3.0. 2010 begins at about -3.4 by September 10, 2008, and generally decreases to about -4.0 by March 12, 2009. It then generally increases to end at about -3.4.

Figure: Foreign Real GDP

Line chart, by percent change, Q4/Q4, January 24, 2007 to August 6, 2009. There are three series, "2008", "2009", and "2010". 2008 begins at about 3.4 and generally decreases to end at about -1. 2009 begins at about 3.2 by September 12, 2007, and generally increases to about 3.6 by April 23, 2008. It then generally decreases to about -2.3 by March 12, 2009, and generally increases to end at about -0.8. 2010 begins at about 3.5 by September 10, 2008, and generally decreases to about 2.3 by March 12, 2009. It then generally increases to end at about 3.3.

Figure: Core Import Prices

Line chart, by percent change, Q4/Q4, January 24, 2007 to August 6, 2009. There are three series, "2008", "2009", and "2010". 2008 begins at about 1 and generally increases to about 7.1. It then generally decreases to about 3.5 by January 22, 2009, and generally increases to end at about 3.9. 2009 begins at about 1 by September 12, 2007, and generally decreases to about -4.2 by March 12, 2009. It then generally increases to end at about -1.6.

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

Outlook for Foreign Real GDP and Consumer Prices: Selected Countries

(Percent changes)

Measure and country	Projected											
	2008				2009				2010			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
REAL GDP ¹	Quarterly changes at an annual rate											
Total Foreign	3.2	1.1	-0.4	-7.4	-8.7	0.6	2.8	2.6	2.9	3.1	3.4	3.6
Advanced Foreign Economies	1.1	-0.4	-0.8	-6.1	-7.8	-2.2	0.7	1.4	1.9	2.0	2.3	2.6
of which:												
Canada	-0.7	0.3	0.4	-3.7	-5.4	-2.9	0.6	1.6	2.5	2.5	2.8	3.2
Japan	1.5	-2.2	-2.9	-13.5	-14.2	3.7	3.3	2.6	2.0	1.8	1.8	1.8
United Kingdom	3.2	-0.2	-2.9	-7.0	-9.3	-3.1	0.8	1.6	2.1	1.8	2.4	2.7
Euro Area ²	2.9	-1.0	-1.5	-6.9	-9.7	-3.3	-0.0	0.7	1.1	1.5	2.0	2.2
Germany	6.2	-2.0	-2.1	-8.6	-14.4	-2.0	0.7	1.4	1.5	1.7	2.1	2.3
Emerging Market Economies	5.9	3.0	0.1	-8.9	-9.8	4.4	5.5	4.2	4.2	4.5	4.8	4.9
Asia	7.2	3.1	0.7	-9.6	-2.9	12.5	6.7	5.9	5.6	5.6	5.7	5.9
Korea	4.4	1.7	1.0	-18.8	0.5	9.7	3.6	3.4	3.4	4.3	4.3	4.3
China	10.3	10.9	5.3	1.6	6.5	18.5	12.0	10.0	8.8	7.8	8.0	8.2
Latin America	4.4	2.8	-0.8	-9.2	-16.8	-3.5	4.6	2.5	2.8	3.5	3.8	3.9
Mexico	4.7	1.0	-2.3	-9.8	-21.5	-5.5	5.7	2.5	2.7	3.7	4.0	4.2
Brazil	7.9	6.6	5.6	-13.8	-3.3	4.0	4.0	3.8	3.5	3.5	3.5	3.5
CONSUMER PRICES ³	Four-quarter changes											
Total Foreign	4.2	4.7	4.7	3.3	1.8	0.9	0.3	0.9	1.5	1.7	1.7	1.7
Advanced Foreign Economies	2.3	2.7	3.4	2.0	1.0	0.0	-0.5	0.3	1.0	1.3	1.1	1.1
of which:												
Canada	1.9	2.3	3.4	1.9	1.2	0.1	-0.5	0.6	1.2	1.5	1.4	1.6
Japan	1.0	1.4	2.2	1.0	-0.1	-1.0	-1.5	-0.6	0.1	0.4	0.0	-0.4
United Kingdom ⁴	2.4	3.4	4.8	3.8	3.0	2.1	1.1	1.5	2.1	1.9	1.7	1.5
Euro Area ²	3.4	3.6	3.8	2.3	1.0	0.2	-0.2	0.5	1.1	1.4	1.3	1.2
Germany	3.1	3.0	3.2	1.7	0.8	0.2	-0.2	0.6	1.0	1.3	1.3	1.2
Emerging Market Economies	6.0	6.6	6.0	4.6	2.7	1.6	1.0	1.4	2.0	2.1	2.2	2.2
Asia	6.7	7.1	5.9	3.7	1.0	-0.3	-0.8	0.0	1.2	1.5	1.7	1.8
Korea	3.8	4.8	5.5	4.5	3.9	2.8	2.0	2.2	2.2	2.1	2.1	2.2
China	8.1	7.7	5.1	2.7	-0.6	-1.5	-1.5	-0.7	0.6	0.9	1.2	1.3
Latin America	4.4	5.4	6.0	6.5	6.3	5.9	5.0	4.1	3.8	3.1	3.0	3.0
Mexico	3.9	4.9	5.5	6.2	6.2	6.0	5.2	4.2	3.7	2.8	2.6	2.6
Brazil	4.6	5.5	6.3	6.2	5.9	5.3	4.5	4.4	4.1	3.9	3.8	3.9

1. Foreign GDP aggregates calculated using shares of U.S. exports. [Return to table](#)
2. Harmonized data for euro area from Eurostat. [Return to table](#)
3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports. [Return to table](#)
4. CPI excluding mortgage interest payments, which is the targeted inflation rate. [Return to table](#)

Outlook for Foreign Real GDP and Consumer Prices: Selected Countries

(Percent, Q4 to Q4)

Measure and country	2002	2003	2004	2005	2006	2007	2008	Projected	
								2009	2010
REAL GDP ¹									
Total Foreign	3.1	2.9	3.8	4.1	4.0	4.2	-1.0	-0.8	3.3
Advanced Foreign Economies	2.5	1.8	2.6	2.8	2.5	2.5	-1.6	-2.0	2.2
of which:									
Canada	3.5	1.5	3.7	3.1	1.9	2.8	-1.0	-1.6	2.7
Japan	2.0	2.4	1.0	2.9	2.1	1.9	-4.4	-1.5	1.8
United Kingdom	2.4	3.2	2.4	2.4	2.8	2.4	-1.8	-2.6	2.3
Euro Area ²	1.2	1.2	1.8	2.1	3.4	2.2	-1.7	-3.2	1.7
Germany	0.0	0.2	0.2	1.6	4.1	1.7	-1.8	-3.8	1.9
Emerging Market Economies	3.9	4.5	5.5	5.8	5.9	6.4	-0.1	0.9	4.6
Asia	6.5	6.9	6.0	7.7	7.2	8.2	0.2	5.4	5.7
Korea	8.0	3.7	2.6	5.2	4.6	5.7	-3.4	4.2	4.1
China	8.6	10.3	9.9	10.3	10.8	12.3	6.9	11.7	8.2
Latin America	1.6	1.8	5.0	4.0	4.6	4.5	-0.8	-3.7	3.5
Mexico	2.0	1.3	4.5	3.5	3.9	3.6	-1.7	-5.3	3.6
Brazil	4.9	1.0	4.7	3.6	4.6	6.0	1.1	2.1	3.5
CONSUMER PRICES ³									
Total Foreign	2.5	2.1	2.8	2.3	2.1	3.7	3.3	0.9	1.7
Advanced Foreign Economies	2.1	1.3	1.8	1.6	1.4	2.2	2.0	0.3	1.1
of which:									
Canada	3.8	1.7	2.3	2.3	1.4	2.5	1.9	0.6	1.6
Japan	-0.5	-0.3	0.5	-1.0	0.3	0.5	1.0	-0.6	-0.4
United Kingdom ⁴	1.5	1.3	1.4	2.1	2.7	2.1	3.8	1.5	1.5
Euro Area ²	2.3	2.0	2.3	2.3	1.8	2.9	2.3	0.5	1.2
Germany	1.2	1.1	2.1	2.2	1.3	3.1	1.7	0.6	1.2
Emerging Market Economies	2.9	3.1	3.9	3.0	2.9	5.1	4.6	1.4	2.2
Asia	0.8	2.3	3.1	2.6	2.4	5.5	3.7	0.0	1.8
Korea	3.3	3.5	3.4	2.5	2.1	3.4	4.5	2.2	2.2
China	-0.6	2.7	3.3	1.4	2.1	6.7	2.7	-0.7	1.3
Latin America	6.4	4.9	5.6	3.8	4.1	4.2	6.5	4.1	3.0
Mexico	5.2	3.9	5.3	3.1	4.1	3.8	6.2	4.2	2.6
Brazil	10.7	11.5	7.2	6.1	3.2	4.3	6.2	4.4	3.9

1. Foreign GDP aggregates calculated using shares of U.S. exports. [Return to table](#)
2. Harmonized data for euro area from Eurostat. [Return to table](#)
3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports. [Return to table](#)
4. CPI excluding mortgage interest payments, which is the targeted inflation rate. [Return to table](#)

Outlook for U.S. International Transactions

	2002	2003	2004	2005	2006	2007	2008	Projected	
								2009	2010
NIPA REAL EXPORTS and IMPORTS									
Percentage point contribution to GDP growth, Q4/Q4									
Net Goods & Services	-0.9	-0.1	-0.9	-0.2	0.4	1.0	0.7	0.9	-0.1
Exports of G&S	0.4	0.6	0.7	0.7	1.1	1.2	-0.4	-0.8	0.6
Imports of G&S	-1.2	-0.7	-1.6	-0.8	-0.7	-0.2	1.2	1.7	-0.7
Percentage change, Q4/Q4									
Exports of G&S	4.0	6.2	7.1	6.7	10.2	10.2	-3.4	-6.6	5.3
Services	10.3	4.3	9.1	3.6	12.0	13.0	-3.5	-2.2	5.4
Computers	-1.1	11.3	5.8	14.2	8.4	1.3	-2.4	1.8	9.5
Semiconductors	10.1	38.3	-6.0	17.6	2.9	29.3	-13.8	-14.7	11.0
Core Goods ¹	1.0	4.8	7.2	7.2	9.9	8.4	-3.0	-8.8	4.9
Imports of G&S	9.7	5.1	10.9	5.2	4.1	0.9	-6.8	-10.7	4.8
Services	9.6	3.3	8.8	2.3	7.1	2.0	0.2	-5.1	3.7
Oil	2.9	1.3	10.7	1.3	-8.2	0.0	0.3	-11.9	-1.1
Natural Gas	19.5	1.3	4.9	13.7	-10.1	13.4	-24.0	8.6	9.1
Computers	13.2	17.1	23.2	12.5	14.3	8.8	-11.3	4.1	15.5
Semiconductors	11.0	-0.1	9.8	7.5	-0.3	3.8	-10.0	-7.1	5.0
Core Goods ²	9.9	5.3	10.9	5.8	5.8	0.2	-9.8	-13.5	5.8
Billions of Chained 2005 Dollars									
Net Goods & Services	-548.8	-603.9	-688.0	-722.7	-729.2	-647.7	-494.3	-361.6	-360.4
Exports of G&S	1099.2	1116.8	1222.8	1305.1	1422.0	1546.1	1629.3	1440.5	1512.0
Imports of G&S	1648.0	1720.7	1910.8	2027.8	2151.2	2193.8	2123.5	1802.2	1872.4
Billions of dollars									
US CURRENT ACCOUNT BALANCE	-459.1	-521.5	-631.1	-748.7	-803.5	-726.6	-706.1	-426.4	-476.9
Current Acct as Percent of GDP	-4.3	-4.7	-5.3	-5.9	-6.0	-5.2	-4.9	-3.0	-3.3
Net Goods & Services (BOP)	-421.6	-495.0	-610.0	-715.3	-760.4	-701.4	-695.9	-380.6	-442.2
Investment Income, Net	33.0	51.0	73.4	78.8	54.7	97.9	125.5	82.0	94.6
Direct, Net	102.4	112.7	150.9	173.2	174.0	236.7	249.9	204.2	225.0
Portfolio, Net	-69.4	-61.7	-77.5	-94.4	-119.4	-138.8	-124.3	-122.2	-130.4
Other Income & Transfers,Net	-70.5	-77.5	-94.5	-112.2	-97.9	-123.1	-135.7	-127.7	-129.4

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

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

Outlook for U.S. International Transactions

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Net Goods & Services	0.4	0.2	-0.4	-0.7	0.4	0.0	-0.7	1.9	-0.3	0.7	1.4	2.2
Exports of G&S	0.8	0.9	0.0	1.0	1.6	0.7	0.1	1.8	0.4	0.6	2.0	1.6
Imports of G&S	-0.4	-0.7	-0.4	-1.8	-1.2	-0.7	-0.8	0.1	-0.7	0.1	-0.6	0.6
Percentage change from previous period, s.a.a.r.												
Exports of G&S	7.6	8.8	0.1	10.5	16.5	6.9	0.6	17.8	3.5	5.2	18.5	14.5
Services	5.9	-1.7	2.9	7.4	13.6	5.6	1.5	29.1	4.7	2.8	27.2	19.2
Computers	16.8	27.9	8.3	5.2	18.1	8.9	-9.6	19.0	11.6	-15.4	11.5	0.0
Semiconductors	-5.2	11.7	30.7	38.0	20.3	16.1	-5.6	-15.0	15.9	23.7	20.5	61.7
Core Goods ¹	8.8	13.1	-3.1	10.8	17.7	6.9	1.1	14.6	1.9	6.5	14.6	11.1
Imports of G&S	2.3	4.5	2.5	11.7	7.8	4.5	4.9	-0.5	4.3	-0.5	3.7	-3.6
Services	-3.7	2.6	1.2	9.5	16.1	1.8	1.3	10.0	0.4	2.1	8.6	-2.9
Oil	-7.3	-2.4	-0.1	16.6	-20.8	5.0	22.1	-30.1	0.8	14.7	-3.4	-10.4
Natural Gas	58.6	-14.1	111.1	-41.9	-50.2	80.0	26.1	-42.2	52.8	54.0	36.5	-48.5
Computers	3.2	11.6	20.4	15.4	24.8	13.0	17.3	3.1	39.0	-15.4	-2.2	21.6
Semiconductors	-9.2	7.7	14.0	20.0	0.2	-0.5	17.7	-15.8	1.2	6.7	1.0	6.4
Core Goods ²	5.0	6.0	-0.1	12.8	14.1	3.1	0.6	5.7	3.3	-3.7	4.1	-2.5
Billions of Chained 2005 Dollars, s.a.a.r.												
Net Goods & Services	-714.8	-709.4	-721.4	-745.3	-732.6	-732.8	-756.5	-694.9	-705.0	-683.4	-638.4	-564.0
Exports of G&S	1276.2	1303.5	1303.9	1336.7	1388.8	1412.1	1414.1	1473.2	1485.9	1504.8	1569.9	1624.0
Imports of G&S	1991.0	2012.9	2025.2	2082.0	2121.3	2144.9	2170.5	2168.1	2190.8	2188.1	2208.3	2188.0
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-697.9	-716.2	-741.4	-839.3	-794.6	-808.3	-859.2	-752.1	-796.4	-762.1	-686.5	-661.3
Current Account as % of GDP	-5.6	-5.7	-5.8	-6.5	-6.0	-6.1	-6.4	-5.5	-5.8	-5.4	-4.8	-4.6
Net Goods & Services (BOP)	-665.3	-686.9	-724.9	-783.9	-766.5	-764.7	-797.2	-713.1	-712.2	-710.2	-685.9	-697.4
Investment Income, Net	88.6	77.8	88.7	59.9	62.4	57.7	44.0	54.6	45.8	58.2	120.7	167.0
Direct, Net	170.2	168.5	187.8	166.3	173.9	175.2	163.1	183.9	186.7	204.4	252.7	303.0
Portfolio, Net	-81.6	-90.7	-99.0	-106.5	-111.5	-117.5	-119.1	-129.3	-140.9	-146.2	-132.0	-136.0
Other Inc. & Transfers, Net	-121.2	-107.1	-105.2	-115.2	-90.5	-101.3	-106.0	-93.6	-130.0	-110.1	-121.3	-130.9

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

	Projected											
	2008				2009				2010			
	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	2.4	-0.1	0.5	2.6	1.1	-0.3	0.1	-0.1	-0.0	-0.1	-0.1
Exports of G&S	-0.0	1.5	-0.5	-2.7	-4.0	-0.6	1.0	0.5	0.5	0.5	0.6	0.6
Imports of G&S	0.4	0.9	0.4	3.1	6.6	1.7	-1.3	-0.4	-0.6	-0.6	-0.7	-0.7
Percentage change from previous period, s.a.a.r.												
Exports of G&S	-0.1	12.1	-3.6	-19.5	-29.9	-5.6	10.1	4.6	5.0	5.0	5.4	5.8
Services	-9.0	7.8	-7.7	-4.3	-13.6	-2.3	3.8	4.2	4.7	5.1	5.8	6.2

Computers	8.7	33.5	1.3	-38.3	-14.0	-5.3	20.4	9.5	9.5	9.5	9.5	9.5
Semiconductors	4.6	-6.8	21.3	-53.4	-64.1	15.3	15.2	11.0	11.0	11.0	11.0	11.0
Core Goods ¹	4.0	14.4	-2.7	-23.5	-36.3	-8.1	13.2	4.5	4.7	4.6	4.9	5.3
Imports of G&S	-2.5	-5.0	-2.2	-16.7	-36.4	-12.5	10.5	3.2	4.5	4.2	5.1	5.2
Services	3.0	-7.1	6.1	-0.9	-11.5	-11.6	2.4	1.3	5.4	-0.3	4.6	4.9
Oil	-1.5	-9.3	2.7	10.3	-15.9	-33.2	13.0	-5.0	-2.6	1.1	-3.5	0.7
Natural Gas	-5.0	-38.2	12.2	-49.5	5.9	67.4	9.0	-28.0	27.0	3.3	35.2	-20.1
Computers	12.7	8.6	-15.9	-39.9	-22.3	11.8	17.0	15.5	15.5	15.5	15.5	15.5
Semiconductors	-3.3	14.4	-4.5	-37.9	-47.7	17.9	14.7	5.0	5.0	5.0	5.0	5.0
Core Goods ²	-5.0	-3.2	-5.2	-24.2	-46.7	-11.1	12.2	5.5	4.9	5.7	6.3	6.4
Billions of Chained 2005 Dollars, s.a.a.r.												
Net Goods & Services	-550.9	-476.0	-479.2	-470.9	-386.5	-347.4	-357.5	-355.2	-357.5	-358.4	-361.6	-364.1
Exports of G&S	1623.4	1670.4	1655.2	1568.0	1434.5	1414.0	1448.6	1465.1	1482.9	1501.1	1521.1	1542.8
Imports of G&S	2174.3	2146.5	2134.4	2038.9	1821.0	1761.4	1806.0	1820.3	1840.4	1859.5	1882.7	1906.8
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-717.2	-750.9	-736.7	-619.5	-406.0	-405.6	-435.1	-458.8	-482.6	-468.9	-477.8	-478.5
Current Account as % of GDP	-5.0	-5.2	-5.1	-4.3	-2.9	-2.9	-3.1	-3.2	-3.3	-3.2	-3.2	-3.2
Net Goods & Services (BOP)	-730.6	-731.4	-743.8	-578.0	-364.8	-340.9	-397.8	-419.1	-434.2	-439.7	-445.3	-449.4
Investment Income, Net	154.0	112.3	143.7	92.1	84.3	71.8	86.5	85.4	90.6	95.7	96.0	96.0
Direct, Net	284.6	241.9	268.0	205.1	208.0	195.1	205.2	208.3	215.1	223.5	228.7	232.6
Portfolio, Net	-130.6	-129.6	-124.2	-113.0	-123.7	-123.3	-118.7	-122.9	-124.5	-127.7	-132.7	-136.6
Other Inc. & Transfers, Net	-140.6	-131.8	-136.7	-133.6	-125.5	-136.5	-123.8	-125.1	-139.0	-124.9	-128.5	-125.1

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

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

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

Last update: April 1, 2015

August 2009 Greenbook Part 2 Tables and Charts[†]

Domestic Nonfinancial Developments

Changes in Employment

(Thousands of employees; seasonally adjusted)

Measure and sector	2008				2009		
	2008	2008	2008	2008	2009	2009	2009
		Q4	Q1	Q2	Apr.	May	June
	Average monthly change				Monthly change		
Nonfarm payroll employment (establishment survey)	-257	-553	-691	-436	-519	-322	-467
Private	-270	-552	-695	-440	-592	-312	-415
Natural resources and mining	4	-2	-12	-11	-14	-11	-8
Manufacturing	-73	-140	-202	-147	-150	-156	-136
Ex. motor vehicles	-58	-121	-176	-121	-124	-129	-110
Construction	-57	-97	-124	-77	-103	-48	-79
Residential	-35	-51	-53	-28	-40	-12	-31
Nonresidential	-22	-45	-71	-49	-63	-36	-48
Wholesale trade	-16	-32	-36	-21	-31	-18	-16
Retail trade	-44	-80	-55	-24	-33	-18	-21
Financial activities	-19	-35	-51	-34	-46	-30	-27
Temporary help services	-44	-70	-73	-33	-54	-8	-38
Nonbusiness services ¹	19	-19	-25	22	-23	63	25
Total government	14	-1	4	4	73	-10	-52
Federal government	3	2	10	0	68	-20	-49
Total employment (household survey)	-246	-564	-817	-230	120	-437	-374
Memo:							
Aggregate hours of private production workers (percent change) ²	-3.3	-7.4	-8.9	-7.9	-.6	-.3	-.8
Average workweek (hours) ³	33.6	33.4	33.2	33.1	33.1	33.1	33.0
Manufacturing (hours)	40.8	40.2	39.6	39.5	39.6	39.4	39.5

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

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

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

Figure: Changes in Private Payroll Employment

Line chart, by thousands, 1999 to June 2009. Data are 3-month moving averages. The series begins at about 240 and generally increases to about 300 by late 1999. It then generally decreases to about -310 by late 2001, and generally increases to about 300 by 2004. It then generally decreases to about -700 by early 2009, and generally increases to end at about -450.

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

Figure: Aggregate Hours and Workweek of Production and Nonsupervisory Workers

Line chart, 1999 to June 2009. There are two series, "Workweek", which is by hours, and "Aggregate hours", which is an index, 2002 = 100. Workweek begins at about 34.4 and generally decreases to about 33.55 by early 2003. It then fluctuates but generally increases to about 34.0 by late 2006, and generally decreases to end at about 33.0. Aggregate hours begins at about 100.8 and generally increases to about 104 by 2000. It then generally decreases to about 98.1 by 2003, and

generally increases to about 108 by late 2007. It then generally decreases to end at about 99.

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

Selected Unemployment and Labor Force Participation Rates

(Percent; seasonally adjusted)

Rate and group	2008	2008			2009		
		Q4	Q1	Q2	Apr.	May	June
Civilian unemployment rate							
Total	5.8	6.9	8.1	9.2	8.9	9.4	9.5
Teenagers	18.7	20.7	21.3	22.7	21.5	22.7	24.0
20-24 years old	10.2	11.3	13.0	15.0	14.7	15.0	15.2
Men, 25 years and older	4.8	6.0	7.4	8.8	8.3	9.0	9.2
Women, 25 years and older	4.4	5.2	6.2	6.9	6.6	7.0	7.0
Labor force participation rate							
Total	66.0	65.9	65.6	65.8	65.8	65.9	65.7
Teenagers	40.2	38.7	38.3	38.4	38.1	38.5	38.6
20-24 years old	74.4	74.1	73.7	74.1	75.0	73.7	73.4
Men, 25 years and older	75.4	75.2	74.6	74.9	74.6	75.1	75.0
Women, 25 years and older	60.0	60.1	60.0	60.3	60.3	60.3	60.3

Figure: Unemployment Rate

Line chart, by percent, 2000 to June 2009. The NBER peak is marked in the time series. The series begins at about 4 and generally increases to about 6.3 by 2003. It then generally decreases to about 4.5 by late 2006, and generally increases to end at about 9.5. It is at about 4.9 at the time of the NBER peak.

Note: Shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research (NBER): March 2001-November 2001. The NBER peak is the last business cycle peak as defined by the NBER (December 2007).

Figure: Labor Force Participation Rate

Line chart, by percent, 2000 to June 2009. The NBER peak is marked in the time series. The series begins at about 67.4 and generally decreases to about 65.8 by 2004. It then generally increases to about 66.35 by late 2006, and generally decreases to about 65.5 by early 2009. It then generally increases to end at about 65.75. It is at 66.1 at the time of the NBER peak.

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

Figure: Persons Working Part Time for Economic Reasons

Line chart, by percent of household employment, 2000 to June 2009. The series begins at about 2.4 and generally increases to about 3.5 by 2003. It then generally decreases to about 2.75 by 2006, and generally increases to end at about 6.5.

Figure: Job Losers Unemployed Less Than 5 Weeks

Line chart, by percent of household employment, 2000 to June 2009. There are two series, "Job Losers Unemployed Less Than 5 Weeks", and the "3-month moving average" of that series. These two series track closely together throughout the chart. They begin at about 0.85 and generally increase to about 1.22 by late 2001. They then generally decrease to about 0.85 by 2007, and then generally increase to end at about 1.5.

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

Labor Market Indicators

Figure: Layoffs and Initial Claims

Line chart, 1999 to 2009. There are two series, "Layoffs and discharges", which is by percent of private employment, and "Initial claims", which is by thousands. These two series use two different scales. Layoffs and discharges begins at about 1.6 by late 2000, and generally increases to about 2.1 by early 2001. It then generally decreases to about 1.5 by 2001, and generally increases to about 2.05 by late 2005. It then fluctuates but generally decreases to about 1.25 by early 2006, and generally increases to about 2.2 by 2009. It then generally decreases to end at about 2.0 by May. Initial claims begins at about 340 and generally decreases to about 265 by 2000. It then generally increases to about 490 by late 2001, and generally decreases to about 288 by early 2006. It then generally increases to about 655 by 2009, and generally decreases to end at about 552 by August 1.

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: Insured Unemployment

Line chart, by millions, 1999 to 2009. There are two series, "Incl. extended and emergency benefits" and "Regular state programs". Incl. extended and emergency benefits begins at about 0 and generally increases to about 5 by 2002. It is also 0 from about early 2005 to mid-2008, and then generally increases to about 9.8 by 2009, and generally decreases to end at about 9.4 by July 18. Regular state programs begins at about 2.3 and generally decreases to about 2 by 2000. It then generally increases to about 3.7 by 2003, and generally decreases to about 2.5 by 2006. It then generally increases to about 6.9 by 2009, and generally decreases to end at about 6.3 by July 25.

Note: 4-week moving averages.

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

Figure: Job Openings

Line chart, 1999 to 2009. There are two series, "Job openings", which is by percent of private employment plus job openings, and "Composite Help Wanted Index", 1980 = 100. These two series use two different scales. Job openings begins at about 3.9 by late 2000, and generally decreases to about 2.5 by 2003. It then generally increases to about 3.6 by 2006, and generally decreases to end at about 2.0 by May. Composite Help Wanted Index begins at about 90 and generally decreases to about 83 by 1999. It then generally increases to about 91 by early 2000, and generally decreases to about 48 by 2003. It then generally increases to about 74 by late 2006, and generally decreases to end at about 40 by July.

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

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

Figure: Job Availability and Hard-to-Fill Positions

Line chart, 1999 to 2009. There are two series, "Job availability", which is an index, and "Hard-to-fill", which is by percent. Hard-to-fill data are 3-month moving averages. These two series use two different scales. Job availability begins at about 135 and generally increases to about 143 by early 2000. It then generally decreases to about 77 by 2003, and generally increases to about 110 by 2007. It then generally decreases to end at about 54 by July. Hard-to-fill begins at about 30 and generally increases to about 34 by 2000. It then generally decreases to about 16 by 2003, and generally increases to about 27 by 2006. It then generally decreases to end at about 9 by June.

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

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

Figure: Net Hiring Plans

Line chart, by percent, 1999 to 2009. There are two series, "Manpower, Inc." and "NFIB net hiring plans". NFIB net hiring plans data are 3-month moving averages. Manpower, Inc. begins at about 21 and generally increases to about 25 by 2000. It then generally decreases to about 7 by early 2002, and generally increases to about 15 by 2002. It then generally decreases to about 7.5 by 2003, and generally increases to about 21 by early 2005. It then generally decreases to end at about -2 by 2009:Q3. NFIB net hiring plans begins at about 16 and generally increases to about 19 by late 1999. It then generally decreases to about 6 by early 2003, and generally increases to about 17 by late 2006. It then generally decreases to about -5.5 by early 2009, and generally increases to end at about -2.5 by June.

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

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

Figure: Expected Labor Market Conditions

Line chart, by index, 1999 to July 2009. There are two series, "Conference Board" and "Reuters/Michigan". Conference Board begins at about 99 and generally increases to about 110 by 2000. It then generally decreases to about 84 by early 2001, and generally increases to about 108 by 2002. It then generally decreases to about 84 by early 2003, and generally increases to about 106 by late 2003. It then generally decreases to about 60 by early 2009, and generally increases to end at about 90. Reuters/Michigan begins at about 90 and generally increases to about 100 by 1999. It then generally decreases to about 49 by 2001, and generally increases to about 108 by 2004. It then generally decreases to about 62 by 2005, and generally increases to about 87 by early 2007. It then generally decreases to about 37.5 by late 2008, and generally increases to end at about 64.

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

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

Output per Hour

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

Sector	2007:Q2 to 2008:Q2	2008:Q2 to 2009:Q2	2008		2009	
			Q3	Q4	Q1	Q2
Nonfarm business						
All persons	2.6	1.6	-.1	.8	.3	5.3
All employees ¹	2.1	1.4	-.6	-1.0	1.0	6.1

Note: All figures are staff estimates.

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

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

Selected Components of Industrial Production

(Percent change from preceding comparable period)

Component	Proportion 2008 (percent)	2008 ¹	2009		2009		
			Q1	Q2	Apr.	May	June
			Annual rate		Monthly rate		
Total	100.0	-6.7	-19.1	-11.6	-7	-1.2	-.4
Previous	100.0	-6.7	-19.0	...	-7	-1.1	...
Manufacturing	79.0	-8.7	-22.1	-10.5	-6	-1.1	-6
Ex. motor veh. and parts	74.5	-7.8	-18.4	-10.4	-6	-.8	-.5
Ex. high-tech industries	70.3	-7.8	-18.0	-10.5	-7	-.7	-.4
Mining	10.6	.8	-12.3	-21.3	-2.1	-1.9	-.5
Utilities	10.4	.3	-4.1	-10.4	-.3	-1.3	.8
Selected industries							
Energy	23.9	1.3	-6.8	-13.9	-.8	-1.9	.0
High technology	4.2	-6.9	-24.0	-7.5	.9	-2.6	-1.0
Computers	1.0	-11.9	-27.3	-25.7	-2.6	-2.2	-1.8
Communications equipment	1.3	10.4	-3.0	-19.6	-.7	-3.5	.9
Semiconductors ²	1.8	-15.0	-37.4	19.4	4.4	-2.0	-2.2
Motor vehicles and parts	4.5	-23.3	-69.5	-13.9	-1.1	-8.2	-2.6
Aircraft and parts	2.3	-13.2	65.5	-16.4	-1.8	-2.4	-.6
Total ex. selected industries	65.1	-8.3	-21.2	-10.7	-.7	-.5	-.4
Consumer goods	20.7	-4.2	-9.1	-4.9	-.7	.0	-.4
Durables	3.5	-14.7	-25.8	-13.0	.0	-1.1	-.1
Nondurables	17.1	-1.8	-5.6	-3.4	-.9	.1	-.4
Business equipment	6.6	-4.8	-23.5	-20.9	-1.5	-1.4	-1.0
Defense and space equipment	1.1	-2.1	-4.9	6.3	.2	1.4	1.4
Construction supplies	4.8	-11.8	-34.4	-15.3	-1.5	-.4	-.2
Business supplies	7.3	-9.8	-24.8	-12.7	-.8	-.8	.0

Materials	24.6	-11.7	-27.1	-12.0	-.4	-.7	-.5
Durables	12.4	-11.4	-37.7	-24.0	-1.7	-1.8	-.3
Nondurables	12.2	-12.0	-15.1	.4	.8	.4	-.6

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

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

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

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

Capacity Utilization

(Percent of capacity)

Sector	1972-2008 average	1994-95 high	2001-02 low	2008		2009		
				Q4	Q1	Q2	May	June
Total industry	80.9	84.9	73.5	74.2	70.4	68.4	68.2	68.0
Manufacturing	79.6	84.5	71.4	70.9	66.7	65.1	64.9	64.6
Mining	87.6	89.1	84.9	89.6	86.7	81.7	81.3	81.0
Utilities	86.8	93.3	84.2	83.6	82.3	79.8	79.2	79.7
<i>Stage-of-process groups</i>								
Crude	86.6	89.9	81.7	83.8	80.7	78.1	78.1	77.5
Primary and semifinished	82.0	87.9	74.3	73.4	68.5	66.1	65.7	65.8
Finished	77.7	80.3	70.0	71.0	68.4	67.0	67.0	66.6

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

Indicators of High-Tech Manufacturing Activity

Figure: MPU Shipments and Intel Revenue

Line chart, by billions of dollars, ratio scale, 2002 to 2009:Q3. There are two series, "Intel revenue" and "Worldwide MPU shipments". Intel revenue begins at about 6.9 and generally decreases to about 6.5 by 2002. It then generally increases to about 9.8 by 2005, and generally decreases to about 8.5 by 2006. It then generally increases to about 10.3 by early 2008, and generally decreases to about 7.75 by early 2009. It then generally increases to about 8.25 by 2009, and generally decreases to end at about 8.0. Worldwide MPU shipments begins at about 6.3 and generally decreases to about 5.75 by 2002. It then generally increases to about 9.0 by 2005, and generally decreases to about 7.25 by 2006. It then generally increases to about 9.4 by 2007, and generally decreases to about 6.1 by late 2008. It then generally increases to end at about 8.1 by 2009:Q2.

Note: FRB seasonals. MPU is a microprocessor unit. Q3 Intel revenue is the midpoint of the range given by the company's guidance as of July 14, 2009.

Source: Intel; Semiconductor Industry Association.

Figure: Circuit Board Orders and Shipments

Line chart, by billions of dollars, 2002 to June 2009. There are two series, "Orders" and "Shipments". Orders begins at about 96 and generally decreases to about 68 by 2003. It then generally increases to about 128 by 2004, and generally decreases to about 74 by late 2004. It then generally increases to about 133 by 2005, and generally decreases to about 92 by late 2005. It then generally increases to about 122 by early 2006, and generally decreases to about 71 by 2009. It then generally increases to end at about 80. Shipments begins at about 91 and generally increases to about 100.5 by 2002. It then generally decreases to about 70 by 2003, and generally increases to about 112 by 2006. It then generally decreases to end at about 71.

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

Source: Institute for Printed Circuits.

Figure: U.S. Personal Computer and Server Absorption

Line chart, by millions of units, ratio scale, 2002 to 2009:Q2. There are two series, "Servers" and "PCs". These two series use two different scales. Servers begins at about 0.44 and generally increases to about 0.78 by 2008. It then generally decreases to end at about 0.51. PCs begins at about 11.3 and generally increases to about 16.7 by late 2007. It then generally decreases to about 15.9 by early 2009, and generally increases to end at about 16.3.

Note: FRB seasonals. PC and server units represent the most recent U.S. data available from IDC. Q2 PC units are from the Top 10 data release. Q2 server units are also from the Top 10 (with total servers implied from PC servers) data release.

Source: IDC.

Figure: High-Tech Spending Plans

Line chart, by a diffusion index, 2003 to 2009:Q2. 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 51.

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.

Figure: Capital Expenditures by Selected Telecommunications Service Providers

Line chart, by billions of dollars, ratio scale, 2001 to 2009:Q2. The series begins at about 73 and generally decreases to about 32.5 by 2003. It then generally increases to about 47.5 by early 2006, and generally decreases to end at about 34.5. The annual average is marked in the time series for each year. For 2001, it is marked at about 65, for 2002 it is marked at about 45, for 2003 it is marked at about 36, for 2004 it is marked at about 37, for 2005 it is marked at about 40.5, for 2006 it is marked at about 45, for 2007 it is marked at about 44, for 2008 it is at about 42.

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

Source: Securities and Exchange Commission filings.

Figure: Cisco Revenue and U.S. Sales of High-End Data Networking Equipment

Line chart, 2002 to 2009. 2006:Q1 = 100. There are two series, "Cisco" and "U.S. sales". Cisco begins at about 66 and generally decreases to about 62 by late 2002. It then generally increases to about 137 by 2008, and generally decreases to end at about 111 by early 2009:Q3. U.S. sales begins at about 72 and generally decreases to about 64 by early 2003. It then generally increases to about 123 by early 2008, and generally decreases to end at about 91 by 2009:Q1.

Note: FRB seasonals. Q3 Cisco revenue is the midpoint of the company's guidance as of August 5, 2009.

Source: Synergy Research Group and Cisco Systems.

Indicators of Industrial Activity

Figure: Weekly Production Index excluding Motor Vehicles

Bar chart, an index, October 2008 to July 2009. The bars, showing "Monthly aggregate of weekly index", begin at about 17.45 and generally decrease to end at about 15.6. There is also a curve, showing "Weekly index". It begins at about 17.5 and generally decreases to about 16.25 by early January 2009. It then generally increases to about 17.0 by January 2009, and generally decreases to about 15.3 by June. It then generally increases to about 16.4 by late June, and generally decreases to end at about 15.2.

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

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

Figure: Motor Vehicle Assemblies

Line chart, by millions of units, 2002 to July 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 12.9 by mid-2002. It then generally decreases to about 3.8 by early 2009, generally increases to about 5 by 2009, and generally decreases to end at about 4. July 2009 is marked at about 6. Medium and heavy trucks begins at about 0.2 and generally increases to about 0.3 by 2002. It then generally decreases to about 0.21 by early 2003, and generally increases to about 0.55 by 2006. It then generally decreases to about 0.1 by 2009, and generally increases to end at about 0.17. July 2009 is marked at about 0.19.

Note: July values are based on latest industry schedules.

Source: Ward's Communications.

Figure: IP Diffusion Index

Line chart, an index, 1975 to June 2009. The NBER peak is marked in the time series. The series begins at about 16 and generally increases to about 80 by 1977. It then fluctuates between 21 and 85 until early 2000, when it is at about 67. It then generally decreases to about 31 by early 2001, and generally increases to about 68 by late 2003. It then generally decreases to about 16 by early 2009, and generally increases to end at about 30. It is at about 50 at the time of the NBER peak.

Note: The diffusion index equals the percentage of series that increased relative to 3 months earlier plus one-half the percentage that were unchanged. Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): November 1973-March 1975, January 1980-July 1980, July 1981-November 1982, July 1990-March 1991, and March 2001-November 2001. A vertical line indicates the NBER peak in December 2007.

Figure: Boeing Commercial Aircraft Completions: Actual [redacted]

Line chart, 2007 to mid-2009. Unit is an index, 2002 = 100. The series begins at about 106 and generally increases to about 130 by mid-2008. It then decreases to about 2 by late 2008 because of a Boeing strike, and increases to about 140 before the end of the year. It then generally decreases to end at about 125.

Note: 1998 price-weighted index. Actual completions equal deliveries plus the change in the stock of finished aircraft. [redacted]

Source: Boeing.

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

Line chart, 2002 to 2009. There are two series, "ISM", which is a diffusion index, and "RADGO", which is by percent. These two series use two different scales. ISM begins at about 55 and generally increases to about 64 by 2002. It then generally decreases to about 47 by early 2003, and generally increases to about 71 by late 2003. It then generally decreases to about 22 by late 2008, and generally increases to end at about 55 by July. RADGO begins at about -1 and generally increases to about 2.8 by 2003. It then generally decreases to about -2.1 by early 2004, and generally increases to about 2.7 by 2005. It then generally decreases to about -1.5 by early 2007, and generally increases to about 1 by 2007. It then generally decreases to about -5.1 by 2008, and generally increases to end at about 1.8 by June.

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: U.S. and Foreign Industrial Production Indexes

Line chart, 2002 to 2009. 2002 = 100. There are two series, "Foreign" and "Domestic". Foreign begins at about 98.5 and generally increases to about 120 by 2008. It then generally decreases to about 106 by May. Domestic begins at about 98.5 and generally increases to about 112.5 by late 2007. It then generally decreases to end at about 95 by June.

Note: The foreign IP index is a fixed-weighted average of IP indexes from Canada, Mexico, Japan, China, the United Kingdom, Germany, France, Taiwan, and Italy.

Source: Federal Reserve, G.17 Statistical Release, "Industrial Production and Capacity Utilization." The foreign IP index is a staff calculation based on IP indexes reported by the included countries.

Production of Domestic Light Vehicles

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

Item	2008	2009				2009		
	Q4	Q1	Q2	Q3	Apr.	May	June	July
U.S. production ¹	7.1	4.4	4.4	6.4	4.9	4.2	4.0	5.8
Autos	3.3	1.7	1.8	2.7	1.9	1.8	1.8	2.3
Light trucks	3.7	2.8	2.5	3.7	3.0	2.4	2.2	3.4
Days' supply ²	96	93	70	n.a.	89	76	70	55
Autos	94	93	78	n.a.	88	84	76	55
Light trucks	98	93	64	n.a.	91	70	64	55
Inventories ³	2.41	2.05	1.63	n.a.	1.99	1.83	1.63	1.50
Autos	1.08	.92	.82	n.a.	.90	.88	.82	.75
Light trucks	1.33	1.13	.81	n.a.	1.09	.95	.81	.75
Memo: U.S. production, total motor vehicles ⁴	7.3	4.6	4.5	6.6	5.0	4.3	4.1	6.0

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

1. Production rates for July and the third 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 July 2009. The series begins at about 2.9 and generally decreases to about 2.5 by 1998. It then generally increases to about 3.35 by 2000, and generally decreases to about 2.45 by late 2001. It then generally increases to about 3.45 by 2004, and generally decreases to about 2.6 by 2005. It then generally increases to about 3.05 by 2006, and generally decreases to end at about 1.5.

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

Figure: Days' Supply of Light Vehicles

Line chart, by days, 1998 to July 2009. There are two series, "Using sales in current month" and "Using 3-month moving average of sales". These two series track closely together throughout the chart. They begin at about 68 and generally increase to about 70 by 1998. They then generally decrease to about 55 by 1998, and generally increase to about 78 by late 2000. They then generally decrease to about 40 by 2001, and generally increase to about 83 by mid-2004. They then generally decrease to about 49 by 2005, and generally increase to about 100 by early 2009. They then generally decrease to end at about 55.

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

Sales of Light Vehicles

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

Category	2008	2008		2009			
		Q4	Q1	Q2	May	June	July
Total	13.1	10.4	9.5	9.6	9.8	9.7	11.2
Autos	6.7	5.3	4.8	4.9	4.9	5.0	6.2
Light trucks	6.4	5.1	4.7	4.7	5.0	4.7	5.1
North American ¹	9.8	7.7	6.8	7.1	7.4	7.2	8.3
Autos	4.5	3.6	3.1	3.2	3.2	3.3	4.2
Light trucks	5.3	4.2	3.7	3.9	4.1	3.9	4.2
Foreign-produced	3.3	2.7	2.7	2.4	2.5	2.5	2.9
Autos	2.2	1.7	1.7	1.6	1.6	1.7	2.0
Light trucks	1.1	.9	1.0	.8	.8	.8	.9
Memo:							
Detroit Three domestic market share (percent) ²	48.3	48.0	44.1	46.8	47.4	46.3	44.7

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. Domestic market share excludes sales of foreign brands affiliated with the Detroit Three. [Return to table](#)

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

[Content redacted.]

[Content redacted.]

Figure: Car-Buying Attitudes

Line chart, 2002 to July 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 152 and generally decreases to about 140 by early 2003. It then generally increases to about 160 by late 2003, and fluctuates but 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 131. Good time to buy: low prices begins at about 36 and generally decreases to about 31 by 2002. It then generally increases to about 42 by mid-2002, and generally decreases to about 27 by early 2005. It then generally increases to about 56 by 2005, and generally decreases to about 30 by 2006. It then generally increases to about 65 by mid-2009, and generally decreases to end at about 57.

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 August 2, 2009. The series begins at about 2200 and generally increases to about 2850 by 2004. It then generally decreases to about 1120 by 2005, and generally increases to about 1600 by 2006. It then generally decreases to about 1050 by late 2006, and generally increases to about 2450 by late 2008. It then generally decreases to about 1750 by 2009, and generally increases to end at about 2250.

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		
	2008	Q1	Q2	Apr.	May	June
	Annual rate			Monthly rate		
Total real PCE	-2	.6	-1.2	-2	.0	-1
Durables	-4.5	3.9	-7.1	-1.4	1.2	-2
Nondurables	-8	1.9	-2.5	-5	-1	-4
Services	.7	-.3	.1	.1	-1	.0
Memo:						
Personal saving rate ¹	3.8	4.0	5.2	4.7	6.2	4.6

1. The annual value is the Q4 level. [Return to table](#)

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

Figure: Change in Real PCE Goods

Line chart, by percent, annual rate, 1990 to 2009:Q2. The NBER peak is marked in the time series. The series begins at about 5.5 and generally decreases to about -6.4 by late 1990. It then generally increases to about 9 by 1992, and generally decreases to about -2.4 by 1995. It then generally increases to about 13.5 by late 1998, and generally decreases to about 1 by early 2001. It then generally increases to about 14 by late 2001, and generally decreases to about -10 by early 2009. It then generally increases to about 2.2 by 2009, and generally decreases to end at about -4. It is at about 3 at the time of the NBER peak.

There is a second line chart, by percent, 2007 to June 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 -1.0 by early 2009. It then generally increases to end at about 0.1. Monthly begins at about 0.2 and generally decreases to about -0.5 by 2007. It then generally increases to about 0.8 by 2007, and generally decreases to about -1.9 by 2008. It then generally increases to about 1.8 by early 2009, and generally decreases to about -0.8 by 2009. It then generally increases to about 0.4 by 2009, and generally decreases to end at about -0.4.

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

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

Figure: Change in Real PCE Services

Line chart, by percent, annual rate, 1990 to 2009:Q2. The NBER peak is marked in the time series. The series begins at about 1.8 and generally increases to about 5.3 by 1990. It then generally decreases to about -1.2 by late 1990, and generally increases to about 5.7 by 1992. It then generally decreases to about 1.7 by 1993, and generally increases to about 6.3 by 2000. It then generally decreases to about -1.5 by 2008, and generally increases to about 0.7 by late 2008. It then generally decreases to end at about 0. It is at about 0.8 at the time of the NBER peak.

There is a second line chart, by percent, 2007 to June 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 0.28 and generally decreases to about -0.1 by 2008. It then generally increases to end at about -0.0. Monthly begins at about 0.5 and generally decreases to about -0.2 by 2007. It then generally increases to about 0.42 by 2007, and generally decreases to about -0.3 by 2007. It then generally increases to about 0.3 by early 2008, and generally decreases to about -0.32 by 2008. It then generally increases to about 0.29 by 2008, and generally decreases to end at about 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. The NBER peak is the last business cycle peak as defined by the NBER (December 2007).

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

Fundamentals of Household Spending

Figure: Household Net Worth and Dow Jones Total Market Index

Line chart, 1999 to 2009. There are two series, "Ratio of household net worth to DPI", which is by ratio, and "Total Market Index", which is an index. These two series use two different scales. Ratio of household net worth to DPI begins at about 5.7 and generally increases to about 6.1 by late 1999. It then generally decreases to about 4.9 by 2002, and generally increases to about 6.25 by 2007. It then generally decreases to about 4.75 by 2009:Q2. Total Market Index begins at about 11,500 and generally increases to about 14500 by 2000. It then generally decreases to about 7800 by 2002, and generally increases to about 15600 by 2007. It then generally decreases to about 7600 by early 2009, and generally increases to end at about 10300 by August 5.

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 June 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 0.8 by late 2002. It then generally increases to about 4.4 by 2003, and generally decreases 1 by 2005. It then generally increases to about 5 by 2006, and generally decreases to about -0.6 by early 2008. It then generally increases to about 5 by 2008, and generally decreases 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 June 2009. The series begins at about 4.6 and generally decreases to about 2 by 1999. It then generally increases to about 4.9 by 2001, and generally decreases to about 1 by 2001. It then generally increases to about 4.3 by 2002, and generally decreases to about 1 by 2008. It then generally increases to about 6 by 2008, generally decreases to about 1.8 by 2008, and generally increases to end at about 5.

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

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

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

Line chart, by percent, 1999 to August 5, 2009. There are two series, "Treasury yield" and "Federal funds rate". Treasury yield begins at about 4.8 and generally increases to about 6.8 by early 2000. It then generally decreases to about 3.4 by 2003, and generally increases to about 5.1 by 2006. It then generally decreases to about 2.1 by early 2009, and generally increases to end at about 3.8. 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, by index, 1990 to July 2009. The NBER peak is marked in the time series. There are two series, "Reuters/Michigan", 1966=100, and "Conference Board", 1985=100. These two series use two different scales. Reuters/Michigan begins at about 93 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 2008. It then generally increases to end at about 66. It is at about 77 at the time of the NBER peak. Conference Board begins at about 105 and generally decreases to about 48 by 1992. It then generally increases to about 142 by early 2000, and generally decreases to about 60 by 2003. It then generally increases to about 112 by 2007, and generally decreases to about 25 by early 2009. It then generally increases to end at about 48. It is at about 90 at the time of the NBER peak.

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

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	Apr.	May	June
All units						
Starts	.91	.53	.54	.48	.56	.58
Permits	.91	.53	.53	.50	.52	.57
Single-family units						
Starts	.62	.36	.42	.39	.41	.47

Permits	.58	.36	.41	.38	.41	.43
Adjusted permits ¹	.58	.37	.42	.39	.42	.45
New homes						
Sales	.49	.34	.36	.34	.35	.38
Months' supply ²	10.68	11.61	9.88	10.69	10.16	8.78
Existing homes						
Sales	4.35	4.12	4.24	4.17	4.22	4.32
Months' supply ²	9.98	9.69	8.78	9.18	8.77	8.39
Multifamily units						
Starts	.284	.170	.118	.091	.151	.112
Built for rent	.217	.140	n.a.	n.a.	n.a.	n.a.
Built for sale	.068	.030	n.a.	n.a.	n.a.	n.a.
Permits	.330	.170	.123	.120	.112	.137
Condos and co-ops						
Existing home sales	.563	.467	.520	.490	.500	.570

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 June 2009. There are three series, "Single-family starts", "Single-family adjusted permits", and "Multifamily starts". Single-family starts and Single-family adjusted permits track closely together throughout the chart, beginning at about 1.3 and generally decrease to about 1.12 by 2000. They then generally increase to about 1.82 by late 2005, and generally decrease to end at about .48. Multifamily start begins at about .4 and generally decreases to about .3 by 1999. It then generally increases to about .5 by 2000, and fluctuates but generally decreases 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 June 2009. There are two series, "Total" and "Large homebuilders". These two series use two different scales. Total begins at about 0.92 and generally decreases to about 0.85 by 2001. It then generally increases to about 1.4 by 2005, and generally decreases to end at about 0.4. Large homebuilders begins at about 0.23 and generally increases to about 0.42 by 2005. It then generally decreases to end at about 0.12.

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 June 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 298 and generally increases to about 575 by 2006. It then generally decreases to end at about 280. Months' supply begins at about 3.8 and generally increases to about 4.2 by 2001. It then generally decreases to about 3.7 by 2003, and generally increases to about 11.1 by early 2009. It then generally decreases to end at about 9.5.

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", which is an index (2001=100). These two series use two different scales. Existing home sales begins at about 4.55 and generally increases to about 6.4 by 2005. It then generally decreases to end at about 4.3. Pending home sales begins at about 102 and generally decreases to about 90 by 2001. It then generally increases to about 127 by 2005, and generally decreases to about 80 by early 2009. It then generally increases to end at about 95.

Source: National Association of Realtors.

Figure: Mortgage Rates

Line chart showing 30-year conforming FRM, by percent, 2001 to August 5, 2009. The series begins at about 7.0 and generally decreases to about 5.25 by 2003. It then generally increases to about 6.75 by 2006, and generally decreases to about 4.75 by 2009. It then generally increases to end at about 5.25.

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 May 2009. There are three series, "Monthly FHFA purchase-only index", "LP price index", and "20-city S&P/Case-Shiller monthly price index". Monthly FHFA purchase-only index begins at about 7.5 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 -6. LP price index begins at about 7.5 and generally increases to about 15 by 2005. It then generally decreases to about -12 by late 2008, and generally increases to end at about -9. 20-city S&P/Case-Shiller monthly price index begins at about 12.5 and generally decreases to about 7.5 by early 2002. It then generally increases to about 17 by 2004, and generally decreases to end at about -17.5.

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, by a diffusion index, 2007 to July 2009. There are two series, "5 years ahead" and "1 year ahead". 5 years ahead begins at about 64 and generally decreases to about 44 by 2008. It then generally increases to about 62 by 2009, and generally decreases to end at about 48. 1 year ahead begins at about 30 and generally decreases to about -20 by 2009. It then generally increases to end at about 0.

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

Source: Reuters/University of Michigan Surveys of Consumers.

Orders and Shipments of Nondefense Capital Goods

(Percent change; seasonally adjusted current dollars)

Category	2009				
	Q1	Q2	Apr.	May	June
	Annual rate		Monthly rate		
Shipments	-28.1	-18.3	-2.8	-1.0	.4
Excluding aircraft	-35.4	-15.3	-2.9	-.4	.7
Computers and peripherals	-.8	-7.9	-.4	-.5	.5
Communications equipment	-47.3	-7.0	-4.5	-.7	7.9
All other categories ¹	-36.7	-16.7	-2.9	-.4	.0
Orders	-49.1	10.0	-3.5	9.1	-2.3
Excluding aircraft	-44.2	2.2	-3.5	4.3	2.6
Computers and peripherals	-18.4	6.1	-7.3	15.9	-3.9
Communications equipment	-58.7	44.7	-5.2	7.2	8.4
All other categories ¹	-44.7	-1.6	-2.9	2.9	2.7
Memo:					
Shipments of complete aircraft ²	40.3	36.8	38.5	36.2	35.8

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

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

Source: Census Bureau.

Figure: Communications Equipment

Line chart, by billions of chained (2000) dollars, ratio scale, 2000 to June 2009. There are two series, "Shipments" and "Orders". Shipments begins at about 8.5 and generally increases to about 10 by late 2000. It then generally decreases to about 5 by 2003, and generally increases to about 7.5 by 2006. It then generally decreases to end at about 5.5. Orders begins at about 9.5 and generally increases to about 14 by 2000. It then generally decreases to about 2.5 by 2002, and generally increases to about 8.5 by early 2006. It then generally decreases to about 4.5 by early 2009, and generally increases to end at about 6.

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

Source: Census Bureau.

Figure: Non-High-Tech, Nontransportation Equipment

Line chart, by billions of chained (2000) dollars, ratio scale, 2000 to June 2009. There are two series, "Orders" and "Shipments". Orders begins at about 44 and generally increases to about 46 by 2000. It then generally decreases to about 35 by early 2002, and generally increases to about 49 by 2006. It then generally decreases to about 33 by 2009, and generally increases to end at about 35. Shipments begins at about 44 and generally decreases to about 37.5 by late 2001. It then 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 pre-benchmark revision quality-adjusted price indexes of the BEA.

Source: Census Bureau.

Figure: Computers and Peripherals

Line chart, 2000 to June 2009. There are two series, "Industrial production", 2000=100, and "Real M3 shipments", which is by billions of chained (2000) dollars, ratio scale. Industrial production begins at about 97 and generally increases to about 230 by 2008. It then generally decreases to end at about 158. Real M3 shipments begins at about 8.4 and generally increases to about 11.7 by 2003. It then generally decreases to about 9.6 by 2004, and generally increases to about 16.2 by 2006. It then generally decreases to about 12.7 by late 2006, and generally increases to about 18 by early 2008. It then generally decreases to end at about 15.8.

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 BEA.

Source: Census Bureau; FRB Industrial Production.

Figure: Medium and Heavy Trucks

Line chart, by thousands of units, ratio scale, 2000 to June 2009. There are two series, "Net new orders of class 5-8 trucks" and "Sales of class 4-8 trucks". Net new orders of class 5-8 trucks begins at about 400 and generally decreases to about 290 by late 2001. It then generally increases to about 540 by 2002, and generally decreases to about 250 by 2002. It then generally increases to about 960 by 2006, and generally decreases to about 310 by 2007. It then generally increases to about 500 by late 2007, and generally decreases to about 150 by early 2009. It then generally increases to end at about 185. Sales of class 4-8 trucks begins at about 535 and generally decreases to about 300 by 2003. It then generally increases to about 570 by late 2006, and generally decreases to about 200 by early 2009. It then generally decreases to end at about 210.

Note: Annual rate, FRB seasonals.

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

Fundamentals of Equipment and Software Investment

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

Figure: Real Business Output

Line chart, by 4-quarter percent change, 1995 to 2009:Q2. The NBER peak is marked in the time series. The series begins at about 3 and generally increases to about 6 by 2000. It then generally decreases to about 0 by 2001, and generally increases to about 5 by 2004. It then generally decreases to end at about -5.2. It is at about 2.2 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. The NBER peak is marked in the time series. The series begins at about -3 and generally increases to about 0 by 1990. It then generally decreases to about -5.5 by 1992, and generally increases to about 7.5 by late 1994. It then generally decreases to about -9 by 2003, and generally increases to about 7.5 by late 2008. It then generally decreases to end at about 3. It is at about -2 at the time of the NBER peak.

Source: Staff calculation.

Figure: Corporate Bond Yields

Line chart, by percent, 1990 to August 2009. The NBER peak 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 14.5 and generally decreases to about 9 by late 1997. It then generally increases to about 13.8 by late 2000, and generally decreases to about 7.2 by early 2005. It then generally increases to about 17.9 by late 2008, and generally decreases to end at about 11. It is at about 9.2 at the time of the

NBER peak. 10-year BBB begins at about 10.1 and generally decreases to about 7 by early 1994. It then generally increases to about 9 by late 1994, and generally decreases to about 6.8 by late 1998. It then generally increases to about 8.8 by early 2000, and generally decreases to about 5.2 by late 2004. It then generally increases to about 10 by late 2008, and generally decreases to about 7. It is at about 6.4 at the time of the NBER peak.

Note: End of month. August value as of August 5.

Source: Merrill Lynch.

Figure: NFIB: Survey on Loan Availability

Line chart, by percent, 1990 to June 2009. The NBER peak is marked in the time series. There are two series, "Credit expected to be tighter", and "Credit more difficult to obtain". These two series use two different scales. Credit expected to be tighter begins at about 7.5 and generally increases to about 12.5 by late 1990. It then generally decreases to about 0 by early 1998, and generally increases to about 16.5 by late 2008. It then generally decreases to end at about 14. It is at about 14.5 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 -0.6 by early 1999, and generally increases to about 8 by 2001. It then generally decreases to about 0 by early 2003, and generally increases to end at about 15. 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, by diffusion index, 1990 to July 2009. The NBER peak is marked in the time series. There are two series, "ISM" and "Philadelphia Fed". ISM begins at about 47 and generally increases to about 50 by 1990. It then generally decreases to about 40 by early 1991, and generally increases to about 59 by late 1994. It then generally decreases to about 44 by early 2001, and generally increases to about 62 by 2004. It then generally decreases to about 35 by early 2009, and generally increases to end at about 48. It is at about 50 at the time of the NBER peak. Philadelphia Fed begins at about 46 and generally decreases to about 26 by late 1990. It then generally increases to about 70 by early 1994, and generally decreases to about 40 by 1995. It then generally increases to about 65 by 1995, and generally decreases to about 32 by early 2001. It then generally increases to about 67 by early 2004, and generally decreases to about 30 by early 2009. It then generally increases to end at about 48. 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)

Figure: Total Structures

Line chart, by billions of chained (2000) dollars, 1999 to June 2009. The series begins at about 322 and generally increases to about 361 by 2000. It then generally decreases to about 250 by 2005, and generally increases to about 362 by 2008. It then generally decreases to about 320 by early 2009, and generally increases to end at about 330.

Note: Nominal Construction Put in Place (CPIP) deflated by the revised prices of the Bureau of Economic Analysis (BEA) through Q2.

Source: Census Bureau.

Figure: Office, Commercial, Communication, and Other

Line chart, by billions of chained (2005) dollars, 1999 to June 2009. There are four series, "Other", "Commercial", "Office", and "Communication". Other begins at about 90 and generally decreases to about 74 by 2005. It then generally increases to about 108 by 2008, and generally decreases to end at about 96. Commercial begins at about 75 and generally increases to about 85 by early 2000. It then generally decreases to about 65 by early 2003, and generally increases to about 79 by 2007. It then generally decreases to end at about 50. Office begins at about 60 and generally decreases to about 55 by early 2000. It then generally increases to about 74 by late 2000, and generally decreases to about 34 by 2003. It then generally increases to about 49 by early 2008, and generally decreases to end at about 35. Communication begins at about 18 and generally increases to about 27 by 2000. It then generally decreases to about 15 by early 2004, and generally increases to about 25 by 2008. It then generally decreases to end at about 17.

Note: Nominal CPIP deflated through Q1 by BEA prices from the Q1 final release and by staff projection for Q2. 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 June 2009. There are two series, "Power" and "Manufacturing". Power begins at about 32 and generally increases to about 38 by 1999. It then generally decreases to about 22 by 1999, and generally increases to about 45 by late 2000. It then generally decreases to about 25 by early 2001, and generally increases to about 53 by late 2001. It then generally decreases to about 23 by 2004, and generally increases to about 32.5 by 2004. It then generally decreases to about 25 by 2005, and generally increases to end at about 64. Manufacturing begins at about 50 and generally decreases

to about 41 by late 1999. It then generally increases to about 52.5 by early 2001, and generally decreases to about 22.5 by early 2003. It then generally increases to end at about 67.5.

Note: Nominal CPIP deflated through Q1 by BEA prices from the Q1 final release and by staff projection for Q2.

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 12.2 by 2002, and generally increases to about 32.5 by late 2008. It then generally decreases to end at about 14 by June. Drilling rigs in operation begins at about 600 and generally decreases to about 520 by 1999. It then generally increases to about 1275 by 2001, and generally decreases to about 790 by 2002. It then generally increases to about 1990 by 2008, and generally decreases to end at about 900 by July.

Note: The July readings for drilling rigs are based on data through July 31, 2009. Both series are seasonally adjusted by FRB staff.

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

Figure: Vacancy Rates

Line chart, by percent, 1999 to 2009:Q1. There are three series, "Office", "Industrial", and "Retail". Office begins at about 9.5 and generally decreases to about 8 by 2000. It then generally increases to about 16.9 by early 2003, and generally decreases to about 12.5 by 2007. It then generally increases to end at about 14.8. Industrial begins at about 7.8 and generally decreases to about 6.8 by 2000. It then generally increases to about 12 by early 2004, and generally decreases to about 9.6 by 2007. It then generally increases to end at about 12.3. Retail begins at about 8 and generally decreases to about 7.2 by late 2000. It then generally increases to about 8.5 by 2002, and generally decreases to about 7.3 by early 2006. It then generally increases to end at about 11.

Note: Industrial space includes both manufacturing structures and warehouses.

Source: Torto Wheaton Research.

Figure: Architectural Billings and Nonresidential Construction Employment

Line chart, 1999 to June 2009. There are two series, "Billings", a diffusion index, and "Change in employment", which is by percent. These two series use two different scales. Billings begins at about 54.9 and generally decreases to about 53 by 1999. It then generally increases to about 56 by early 2000, and generally decreases to about 43 by late 2001. It then generally increases to about 59 by late 2005, and generally decreases to about 51 by 2006. It then generally increases to about 58 by 2007, and generally decreases to about 34 by early 2009. It then generally increases to end at about 41.8. Change in employment begins at about 0.0 by 2001, and generally decreases to about -0.8 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 -1.1.

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	Apr.	May	June
Real inventory investment (chained 2000 dollars)						
Total nonfarm business	-35.7	-114.9	-148.6 ^e	...	...	...
Motor vehicles	-.7	-63.6	-47.1	...	...	...
Nonfarm ex. motor vehicles	-35.0	-51.3	-101.5 ^e	...	...	...
Book-value inventory investment (current dollars)						
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	-155.9	-143.2	n.a.	-147.7	-108.5	n.a.
Manufacturing	-65.2	-77.3	-57.3	-73.4	-48.4	-50.1
Wholesale trade ex. motor vehicles & parts	-55.7	-47.3	n.a.	-48.4	-35.4	n.a.
Retail trade ex. motor vehicles & parts	-34.9	-18.6	n.a.	-26.0	-24.8	n.a.

... 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, BEA; 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 1.7 by 2000. It then generally increases to about 1.76 by late 2001, and generally decreases to about 1.53 by late 2007. It then generally increases to end at about 1.68 by June. 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 2008, and generally increases to end at about 1.36 by May.

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 July 2009. The series begins at about 47 and generally increases to about 56 by early 2001. It then generally decreases to about 37 by 2004, and fluctuates but generally increases to about 57.5 by late 2008. It then generally decreases to end at about 42.5.

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

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

Federal Government Budget

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

Figure: Surplus or Deficit (-)

Line chart, by billions of dollars, 1995 to June 2009. Data are 12-month moving sums. The series begins at about -200 and generally increases to about 290 by 2001. It then generally decreases to about -440 by 2004, and generally increases to about -150 by 2007. It then generally decreases to end at about -1000. There is a second series (thin line) that begins at about -490 by 2008, and generally decreases to end at about -1150.

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

Figure: Outlays and Receipts

Line chart, by percent change from year earlier, 1995 to June 2009. Data are 12-month moving sums. There are two series, "Receipts" and "Outlays". Receipts begins at about 8 and generally decreases to about 6.5 by 1996. It then generally increases to about 10.5 by early 1998, and generally decreases to about 5 by 1999. It then generally increases to about 11.5 by 2000, and generally decreases to about -12.5 by 2002. It then generally increases to about 15 by 2005, and generally decreases to end at about -15. Outlays begins at about 2.5 and generally increases to about 5.5 by 1995. It then generally decreases to about 1.5 by 1998, and generally increases to about 8.8 by 2006. It then generally decreases to about 3 by 2007, and generally increases to end at about 9.

Recent Federal Outlays and Receipts

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

Function or source	Sum of April-June			12 months ending in June		
	2008	2009	Percent change	2008	2009	Percent change
Outlays	762.4	841.7	10.4	2,904.7	3,175.6	9.3
Net interest	58.6	53.9	-8.1	245.6	212.7	-13.4
National defense	153.1	163.1	6.5	603.6	657.7	9.0
Major transfers ¹	437.7	498.7	14.0	1,610.0	1,816.8	12.9
Other	113.0	126.0	11.5	445.6	488.4	9.6
Receipts	787.9	598.8	-24.0	2,556.2	2,178.4	-14.8
Individual income and payroll taxes	611.9	489.9	-19.9	2,002.8	1,803.8	-9.9
Corporate income taxes	107.0	45.7	-57.3	327.2	169.7	-48.1
Other	68.9	63.2	-8.3	226.3	204.9	-9.4
Surplus or deficit (-)	25.5	-242.9	...	-348.5	-997.2	...
Memo:						
Unadjusted surplus or deficit (-)	26.9	-304.9	...	-326.4	-1,255.2	...

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

... Not applicable.

Effects of Recent Stimulus Actions on Federal Unified Budget

(Billions of dollars, effect on deficit)

Component	2009	
	Q1	Q2
Deficit	23	91
Outlays	17	64
Unemployment benefits	8	12
Social Security and veterans' one-time payments, food stamps, student aid	0	17
Grants for Medicaid and education	9	21
Other expenditures	0	14
Taxes	6	27
Individual income taxes	1	12
Corporate income taxes	5	15

Note: Includes effects of the American Recovery and Reinvestment Act and all payments by the emergency unemployment compensation program.

Source: Recovery.gov; Monthly Treasury Statement; U.S. Congress, Joint Committee on Taxation; staff estimates.

State and Local Indicators

Figure: Real Spending on Consumption and Investment

Line chart, by percent change, annual rate, 1999 to 2009:Q2. There are two series, "Spending" and "4-quarter moving average". Spending begins at about 3.7 and generally increases to about 4.8 by 1999. It then generally decreases to about 2.7 by 1999, and generally increases to about 5 by late 1999. It then generally decreases to about 0 by 2000, and generally increases to about 8.8 by 2001. It then generally decreases to about -2.9 by 2001, and generally increases to about 9 by late 2001. It then generally decreases to about -1.5 by 2004, and generally increases to about 3.1 by early 2007. It then generally decreases to about -2 by late 2008, and generally increases to end at about 2.5. 4-quarter moving average begins at about 5.6 and generally decreases to about 2 by late 2000. It then generally increases to about 5 by late 2001, and generally decreases to about -1 by 2005. It then generally increases to about 2 by early 2007, and generally decreases to end at about -0.4.

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:Q2. The series begins at about 39 and generally decreases to about 24 by 2000. It then generally increases to about 45 by 2001, and generally decreases to about 1 by 2003. It then generally increases to about 23 by 2008, and generally decreases to about -7 by early 2009. It then generally increases to end at about 4.

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

Figure: Real Construction

Line chart, by billions of chained (2005) dollars, annual rate, 1999 to 2009:Q2. The series begins at about 196 and generally increases to about 238 by early 2002. It then generally decreases to about 215 by late 2004, and generally increases to about 232 by late 2007. It then generally decreases to about 218 by early 2009, and generally increases to end at about 229.

Note: Nominal CPIP deflated by BEA prices.

Source: Census Bureau, Construction Spending.

Figure: State Revenues

Line chart, by percent change from year earlier, 1999 to 2009:Q1. There are two series, "Individual and corporate income taxes" and "Total revenues". Individual and corporate income taxes begins at about 8 and generally decreases to about 4 by 1999. It then generally increases to about 17.5 by 2000, and generally decreases to about -20.5 by 2002. It then generally increases to about 27.5 by 2005, and generally decreases to end at about -18. Total revenues begins at about

6 and generally decreases to about 4 by 1999. It then generally increases to about 12.5 by early 2000, and generally decreases to about -10 by 2002. It then generally increases to about 16 by 2005, and generally decreases to end at about -12.

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

Figure: Local Revenues

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

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

Price Measures

(Percent change)

Measures	12-month change		3-month change		1-month change	
	June 2008	June 2009	Annual rate		Monthly rate	
			Mar. 2009	June 2009	May 2009	June 2009
CPI						
Total	5.0	-1.4	2.2	3.3	.1	.7
Food	5.3	2.1	-.8	-1.5	-.2	.0
Energy	24.7	-25.5	7.9	22.1	.2	7.4
Ex. food and energy	2.4	1.7	2.2	2.4	.1	.2
Core goods	.2	1.5	3.8	4.1	.2	.3
Core services	3.3	1.8	1.5	1.8	.1	.1
Shelter	2.5	1.3	.1	1.4	.1	.0
Other services	4.3	2.6	2.6	2.1	.1	.2
Memo: core ex. tobacco	2.4	1.5	1.7	2.0	.1	.2
Chained CPI (n.s.a.) ¹	4.2	-1.3	...	...	...	...
Ex. food and energy ¹	2.1	1.3	...	...	...	...
PCE prices						
Total	4.1	-.4	1.5	2.7	.1	.5
Food and bev. at home ²	5.5	1.6	-2.7	-2.9	-.4	.1
Energy	25.4	-26.3	7.4	26.5	.2	8.3
Ex. food and energy	2.6	1.5	1.6	2.0	.1	.2
Core market-based	2.4	2.0	2.5	2.0	.1	.2
PPI						
Total finished goods	9.1	-4.6	-.9	9.5	.2	1.8
Food	8.2	-2.2	-8.5	4.2	-1.6	1.1
Energy	27.2	-25.2	-2.4	44.7	2.9	6.6
Ex. food and energy	2.9	3.3	1.9	2.1	-.1	.5
Core consumer goods	3.3	3.8	3.1	2.7	-.1	.5
Capital equipment	2.5	2.6	.3	1.3	-.1	.5
Intermediate materials	14.7	-12.5	-9.4	6.8	.3	1.9
Ex. food and energy	8.8	-6.6	-6.6	-3.0	-.2	.4
Crude materials	43.6	-40.0	-28.7	55.2	3.6	4.6

Ex. food and energy	32.8	-35.6	-1.6	40.3	6.7	2.6
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1. Higher-frequency figures are not applicable for data that are not seasonally adjusted (n.s.a.). [Return to table](#)

2. All PCE prices for food and beverages at home 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)

Figure: PCE Prices

Line chart, by percent, 2000 to June 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 by 2005. It then generally decreases to about 1.5 by 2006, and generally increases to about 4.5 by 2008. It then generally decreases to end at about -0.4. Core PCE begins at about 1.6 and generally increases to about 2.5 by 2002. It then generally decreases to about 1.3 by 2003, and generally increases to about 2.7 by 2008. It then generally decreases to end at about 1.5.

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

Figure: CPI and PCE ex. Food and Energy

Line chart, by percent, 2000 to June 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 by 2003, and generally increases to about 3 by 2006. It then generally decreases to end at about 1.7. PCE begins at about 1.5 and generally increases to about 2 by 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 2008. It then generally decreases to end at about 1.5. CPI chained begins at about 1.9 by early 2001 and generally decreases to about 2.2 by 2002. It then generally decreases to about 0.7 by late 2003, and generally increases to about 2.6 by 2006. It then generally decreases to end at about 1.4.

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

Figure: PCE excluding Food and Energy

Line chart, by percent, 2000 to June 2009. There are two series, "PCE excluding Food and Energy" and "Market-based components". PCE excluding Food and Energy begins at about 1.6 and generally increases to about 2 by 2001. It then generally decreases to about 1.2 by 2001, and generally increases to about 2.5 by 2002. It then generally decreases to about 1.4 by 2003, and generally increases to about 2.7 by 2008. It then generally decreases to about 1.5. Market-based components begins at about 1.3 and generally increases to about 1.9 by 2001. It then generally decreases to about 1.2 by 2003, and generally increases to about 2.7 by 2008. It then generally decreases to end at about 2.

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

Figure: CPI Goods and Services

Line chart, by percent, 2000 to June 2009. There are two series, "Services ex. energy" and "Goods ex. food and energy". Services ex. energy begins at about 3 and generally increases to about 4 by late 2001. It then generally decreases to about 2.5 by early 2004, and generally increases to about 3.8 by 2006. It then generally decreases to end at about 1.8. Goods ex. food and energy begins at about 0 and generally increases to about 1 by 2000. It then generally decreases to about -2.6 by late 2003, and generally increases to about 0.9 by early 2005. It then generally decreases to about -0.8 by 2007, and generally increases to about 0.7 by 2008. It then generally decreases to about -0.5 by late 2008, and generally increases to end at about 1.5.

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

Figure: PCE excluding Food and Energy

Line chart, by percent, 2000 to June 2009. There are two series, "PCE excluding Food and Energy" and "3-month change, annual rate". PCE excluding Food and Energy begins at about 1.7 and generally increases to about 2 by 2001. It then generally decreases to about 1 by 2001, and generally increases to about 2.7 by 2002. It then generally decreases to about 1.5 by 2003, and generally increases to about 2.7 by 2008. It then generally decreases to end at about 1.5. 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 3.9 by late 2001. It then generally decreases to about 0.8 by early 2003, and generally increases to about 3.3 by 2005. It then generally decreases to about 0.2 by early 2009, and generally decreases to end at about 2.

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

Figure: CPI excluding Food and Energy

Line chart, by percent, 2000 to June 2009. There are two series, "CPI excluding Food and Energy" and "3-month change, annual rate". CPI excluding Food and Energy begins at about 2 and generally increases to about 2.8 by 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 1.8. 3-month change, annual rate begins at about 2.7 and fluctuates but generally decreases to about 0.1 by 2003. It then generally increases to about 3.1 by 2005, and generally decreases to about 1 by 2005. It then generally increases to about 3.6 by 2006, and generally decreases to about 0.1 by early 2009. It then generally increases to end at about 2.4.

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

Energy and Food Price Indicators

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

Figure: Total Gasoline Margin

Line chart, by cents per gallon, 2005 to August 3, 2009. Data are retail price less average spot crude price (regular grade seasonally adjusted by FRB staff, less average spot crude price: 60% West Texas intermediate, 40% Maya heavy crude; includes gasoline taxes). The series begins at about 100 and generally decreases to about 80 by 2005. It then generally increases to about 155 by 2005, and generally decreases to about 95 by 2006. It then generally increases to about 165 by 2007, and generally decreases to about 72 by 2008. It then generally increases to about 158 by 2008, and generally decreases to end at about 84.

Figure: Gasoline Price Decomposition

Line chart, by cents per gallon, 2005 to August 3, 2009. There are three series, "Retail price", "Rack price", and "Average spot crude price". Retail price begins at about 159 and generally increases to about 300 by 2005. It then generally decreases to about 230 by 2006, and generally increases to about 405 by 2008. It then generally decreases to about 180 by late 2008, and generally increases to end at about 250. Rack price begins at about 140 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 2008. It then generally decreases to about 122 by late 2008, and generally increases to end at about 200. Average spot crude price begins at about 100 and generally increases to about 170 by 2006. It then generally decreases to about 110 by early 2007, and generally increases to about 330 by 2008. It then generally decreases to about 75 by late 2008, and generally increases to end at about 170.

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 July 31, 2009. Data are adjusted for ethanol use. The series begins at about 197 and generally increases to about 232 by early 2007. It then generally decreases to about 198 by 2007, and generally increases to about 241 by 2008. It then generally decreases to about 195 by 2008, and generally increases to end at about 219.

Note: Bounds are defined as the monthly mean over the preceding five years, plus or minus the standard deviation for each month. The bounds generally track the series throughout the chart, typically being about 20 million barrels wide, with the series typically being toward the center of the bounds. Monthly data through May 2009, weekly data thereafter. The RBOB component of total motor gasoline inventories is adjusted for ethanol use after 2006, boosting reported stocks; estimated by FRB staff.

Figure: Natural Gas Prices

Line chart, by dollars per million BTU, 2005 to August 5, 2009. The series begins at about 5.5 and generally increases to about 14.6 by late 2005. It then generally decreases to about 4.2 by 2006, and generally increases to about 13 by 2008. It then generally decreases to about 5.5 by 2008, and generally increases to about 11.9 by early 2009. It then generally decreases to end at about 3.5.

Note: National average spot price.

Source: Bloomberg.

Figure: PCE: Food at Home and Core Prices

Line chart, by 12-month percent change, 2005 to June 2009. There are two series, "Food and beverages" and "Ex. food and energy". Food and beverages begins at about 2.7 and generally increases to about 3 by 2005. It then generally decreases to about 0.9 by 2006, and generally increases to about 7 by 2008. It then generally decreases to end at about 1.6. Ex. food and energy begins at about 2.3 and generally increases to about 2.7 by 2008. It then generally decreases to end at about 1.5.

Note: All food and beverages values are staff estimates.

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

Figure: Spot Agricultural Commodity Prices

Line chart, by dollars per bushel, 2005 to August 4, 2009. There are three series, "Corn", "Soybeans" and "Wheat". There are two different scales, Soybeans and Wheat share one and Corn uses the other. Corn begins at about 1.9 and generally increases to about 7 by 2008. It then generally decreases to end at about 3.2.

Soybeans begins at about 5.4 and generally increases to about 5 by 2005. It then generally decreases to about 5 by 2006, and generally increases to about 16 by 2008. It then generally decreases to about 8 by late 2008, and generally increases to about 12.6 by 2009. It then generally decreases to end at about 11.2. Wheat begins at about 4 and generally increases to about 15.9 by 2008. It then generally decreases to about 8 by late 2008, and generally increases to about 12.3 by 2009. It then generally decreases to end at about 11.1.

Source: Commodity Research Bureau.

Broad Measures of Inflation

(Percent change, Q2 to Q2)

Measure	2006	2007	2008	2009
<i>Product prices</i>				
GDP price index	3.6	3.0	1.9	1.5
Less food and energy	3.6	2.7	2.4	.9
Nonfarm business chain price index	3.5	2.4	1.1	1.7
<i>Expenditure prices</i>				
Gross domestic purchases price index	3.9	2.8	3.5	-.1
Less food and energy	3.4	2.6	2.8	.9
PCE price index	3.2	2.4	3.8	-.2
Less food and energy	2.3	2.2	2.5	1.6
PCE price index, market-based components	3.3	2.3	3.7	.0
Less food and energy	2.2	2.0	2.3	2.1
CPI	3.9	2.6	4.3	-.9
Less food and energy	2.5	2.3	2.3	1.8
Chained CPI	3.6	2.4	3.8	-1.2
Less food and energy	2.2	1.8	2.0	1.4
Median CPI	2.8	3.1	3.0	2.4
Trimmed mean CPI	2.6	2.7	3.0	1.9

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

Surveys of Inflation Expectations

(Percent)

Period		Actual CPI inflation ¹	Reuters/Michigan Survey				Professional forecasters (10 years) ⁴	
			1 year ²		5 to 10 years ³		CPI	PCE
			Mean	Median	Mean	Median		
2007:	Q3	2.4	4.1	3.2	3.5	3.0	2.4	2.1
	Q4	4.0	4.1	3.3	3.3	2.9	2.4	2.1
2008:	Q1	4.1	4.2	3.8	3.3	3.0	2.5	2.2
	Q2	4.4	6.4	5.0	3.8	3.3	2.5	2.2
	Q3	5.3	5.4	4.7	3.6	3.1	2.5	2.2
	Q4	1.6	3.0	2.8	2.9	2.8	2.5	2.2
2009:	Q1	.0	2.4	2.0	3.3	2.9	2.4	2.2
	Q2	-1.2	3.4	2.9	3.1	2.9	2.5	2.3
2009:	Mar.	-.4	2.4	2.0	2.9	2.6	...	...
	Apr.	-.7	3.1	2.8	3.1	2.8	...	...
	May	-1.3	3.2	2.8	3.1	2.9	2.5	2.3
	June	-1.4	3.9	3.1	3.2	3.0	...	...
	July	n.a.	3.6	2.9	3.4	3.0	...	...

1. Percent change from the same period in the preceding year. [Return to table](#)
2. Responses to the question, By about what percent do you expect prices to go up, on average, during the next 12 months? [Return to table](#)
3. Responses to the question, By about what percent per year do you expect prices to go up, on average, during the next 5 to 10 years? [Return to table](#)
4. Median CPI and PCE price projections. [Return to table](#)
- ... Not applicable.
- n.a. Not available.

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

Measures of Expected Inflation

Figure: Survey Measures (Reuters/University of Michigan)

Line chart, by percent, late 1977 to 2009:Q2. 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 1981, and generally decreases to about 4.8 by 1985. There is no data from late 1985 to mid-1990, where it begins at about 4.4 by 1990 and generally decreases to end at about 3. Median, next 12 months begins at about 6, and generally increases to about 10.2 by 1980. It then generally decreases to about 2.5 by 1983, and generally increases to about 4.9 by late 1990. It then generally decreases to about 1 by late 2001, and generally increases to about 5 by 2008. It then generally decreases to end at about 3.

There is a second line chart, by percent, 2005 to July 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 2.7 and generally increases to about 3.4 by 2008. It then generally decreases to about 2.6 by late 2008, and generally increases to end at about 3. Median, next 12 months begins at about 2.9 and generally increases to about 4.7 by late 2005. It then generally decreases to about 3 by late 2006, and generally increases to about 5.2 by 2008. It then generally decreases to about 1.7 by early 2009, and generally increases to end at about 3.

Source: Reuters/University of Michigan Surveys of Consumers.

Figure: Inputs to Models of Inflation

Line chart, by percent, 1971 to 2009:Q2. Data are quarterly. There are two series, "FRB/US long-run expectations measure for PCE inflation" and "Distributed lag of core PCE inflation". FRB/US long-run expectations measure for PCE inflation begins at about 3.1 and generally increases to about 7.8 by 1981. It then generally decreases to end at about 2.4. Distributed lag of core PCE inflation begins at about 5 and generally decreases to about 3.3 by 1973. It then generally increases to about 8.6 by 1981, and generally decreases to about 3.6 by 1987. It then generally increases to about 4.5 by 1990, and generally decreases to about 1.5 by 2000. It then generally increases to end at about 2.

There is a second line chart, by percent, 2005 to 2009:Q2. Data are quarterly. There are two series, "FRB/US long-run expectations measure for PCE inflation" and "Distributed lag of core PCE inflation". FRB/US long-run expectations measure for PCE inflation begins at about 2 and remains about constant until mid-2007. It then generally increases to end at about 2.3. 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 end at about 1.9.

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

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

Figure: Inflation Compensation from TIPS

Line chart, by percent, 2001 to 2009:Q2. Data are quarterly. There are two series, "5 to 10 years ahead" and "Next 5 years". 5 to 10 years ahead begins at about 2.1 and generally increases to about 3.1 by late 2003. It then generally decreases to about 2.5 by 2005, and generally increases to about 3 by early 2008. It then generally decreases to about 2.5 by early 2009, and generally increases to end at about 2.7. 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 late 2002, and generally increases to about 2.7 by early 2005. It then generally decreases to about -0.6 by late 2008, and generally increases to end at about 0.8.

There is a second line chart, by percent, 2005 to August 4, 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 decreases to about 2.4 by 2005. It then generally increases to about 3.5 by late 2008, and generally decreases to about 2.1 by late 2008. It then generally increases to end at about 3.1. Next 5 years begins at about 2.7 and generally increases to about 2.9 by 2005. It then generally decreases to about 1.9 by early 2008, and generally increases to about 2.5 by 2008. It then generally decreases to about -1.6 by late 2008, and generally increases to end at about 1.1.

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

Source: FRB staff calculations.

Commodity Price Indexes

Figure: Journal of Commerce

Line chart, 1991 to August 4, 2009. Ratio scale, 2006 = 100. There are two series, "Industrials" and "Metals". Industrials begins at about 58 and generally decreases to about 50 by late 1991. It then generally increases to about 70 by early 1995, and generally decreases to about 47 by early 1999. It then generally increases to about 64 by 2000, and generally decreases to about 50 by late 2001. It then generally increases to about 136 by 2008, and generally decreases to about 62 by late 2008. It then generally increases to end at about 93. Metals begins at about 49 and generally decreases to about 38 by 1993. It then generally increases to about 55 by early 1995, and generally decreases to about 38 by early 1999. It then generally increases to about 48 by early 2000, and generally decreases to about 35 by late 2001. It then generally increases to about 159 by 2008, and generally decreases to about 61 by early 2009. It then generally increases to end at about 100.

Note: The Journal of Commerce (JOC) industrial price index is based almost entirely on industrial commodities, with a small weight given to energy commodities. Copyright for JOC data is held by CIBCR, 1994.

Figure: Commodity Research Bureau

Line chart, 1991 to August 4, 2009. Ratio scale, 1967 = 100. There are two series, "Spot industrials" and "Futures". Spot industrials begins at about 300 and generally decreases to about 250 by 1993. It then generally increases to about 355 by 1995, and generally decreases to about 215 by late 2001. It then generally increases to about 570 by 2008, and generally decreases to about 320 by late 2008. It then generally increases to end at about 440. Futures begins at about 215 and generally decreases to about 200 by early 1993. It then generally increases to about 260 by 1996, and generally decreases to about 185 by early 1999. It then generally increases to about 230 by 2000, and generally decreases to about 190 by late 2001. It then generally increases to about 510 by 2008, generally decreases to about 345 by late 2008, and generally increases to end at about 420.

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 6/16/09 ²	6/16/09 ² to 8/4/09	52-week change to 8/4/09
JOC industrials	-41.4	25.1	12.4	-27.6
JOC metals	-48.2	41.8	15.9	-26.9
CRB spot industrials	-34.3	22.4	9.7	-8.7
CRB spot foodstuffs	-14.1	9.2	-3.0	-23.4
CRB futures	-24.7	15.0	5.6	-18.4

1. From the last week of the preceding year to the last week of the year indicated. [Return to table](#)
2. June 16, 2009, is the Tuesday preceding publication of the June Greenbook. [Return to table](#)

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

Measure	2008			2009	
	June	Sept.	Dec.	Mar.	June
	Quarterly change (compound annual rate) ¹				
Total hourly compensation	2.6	2.6	1.9	.7	.7
Wages and salaries	3.0	2.6	1.8	.7	.7
Benefits	1.5	2.3	1.5	.7	.7
	12-month change				
Total hourly compensation	3.0	2.8	2.4	1.9	1.5
Wages and salaries	3.1	2.9	2.6	2.0	1.6
Benefits	2.6	2.4	2.0	1.6	1.3

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 June 2009. The series begins at about 12.3 and generally decreases to about -0.3 by late 1995. It then generally increases to about 11.8 by 2002, and generally decreases to end at about 4.9.

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

Figure: Nonproduction Bonuses

Line chart, by percent, 1990 to June 2009. The series begins at about 14 and generally decreases to about -2 by 1992. It then generally increases to about 10 by 1994, and generally decreases to about -8.8 by early 1999. It then generally increases to about 12 by early 2000, and generally decreases to about -7.5 by 2002. It then generally increases to about 10 by late 2005, and generally decreases to about -2 by 2006. It then generally increases to about 8 by 2007, and generally decreases to end at about -7.5.

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

Figure: Retirement and Savings

Line chart, by percent, 1990 to June 2009. The series begins at about 5.5 and generally decreases to about 2.5 by early 1991. It then generally increases to about 11 by late 1994, and generally decreases to about 1.5 by 1999. It then generally increases to about 26.5 by late 2004, and generally decreases to about -5.5 by early 2007. It then generally increases to about 7.5 by early 2008, and generally decreases to end at about -1.

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

Figure: Workers' Compensation Insurance

Line chart, by percent, 1990 to June 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.

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](#)

Hourly Compensation and Unit Labor Costs

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

Category	2007:Q2 to 2008:Q2	2008:Q2 to 2009:Q2	2008		2009	
			Q3	Q4	Q1	Q2
Compensation per hour						
Nonfarm business	2.7	.9	4.4	2.8	-2.6	-.8
Output per hour						
Nonfarm business	2.6	1.6	-.1	.8	.3	5.3
Unit labor costs						
Nonfarm business	.1	-.6	4.5	2.0	-2.8	-5.9

Note: All figures are staff estimates.

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

Figure: Compensation per Hour

Line chart, by percent change from year-earlier period, 1983 to 2009:Q2. There are two series, "ECI" and "Productivity and costs". ECI begins at about 6.5 and

generally decreases to about 3 by 1987. It then generally increases to about 5.2 by 1990, and generally decreases to about 2.5 by late 1995. It then generally increases to about 4.8 by 2000, and generally decreases to end at about 1.5. Productivity and costs begins at about 4.8 and generally decreases to about 3.3 by late 1983. It then generally increases to about 5.5 by 1986, and generally decreases to about 2 by 1989. It then generally increases to about 7 by 1990, and generally decreases to about 1.1 by early 1995. It then generally increases to about 8 by 2000, and generally decreases to end at about 1.

Note: All productivity and costs values are staff estimates.

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

Figure: Unit Labor Costs

Line chart, by percent change from year-earlier period, 1996 to 2009:Q2. The series begins at about 1 and generally increases to about 4 by 1998. It then generally decreases to about 1.2 by 1999, and generally increases to about 5 by 2000. It then generally decreases to about -1.8 by early 2002, and generally increases to about 3.8 by early 2007. It then generally decreases to about 0 by 2008, generally increases to about 1.9 by 2008, and generally decreases to end at about -0.7.

Note: All values are staff estimates.

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 June 2009. The series begins at about 3.2 and generally decreases to about 3 by 1996. It then generally increases to about 4.4 by 1998, and generally decreases to about 1.4 by early 2004. It then generally increases to about 4.3 by early 2007, and generally decreases to end at about 2.7.

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

Appendix: Comprehensive Revision of the National Income and Product Accounts

Comprehensive Revision to the National Income and Product Accounts

(Data from national income and product accounts)

Figure: Real GDP

Line chart, by 4-quarter percent change, 1996 to 2009. There are two series, "Previous (through 2009:Q1)" and "Revised (through 2009:Q2)". They begin at about 2.5 and track closely together, generally increasing, until they reach 4 by 1998. Previous then continues to generally increase to about 5 by 2000, and generally decreases to about 0.2 by late 2001. It then generally increases to about 4.3 by 2004, and generally decreases to end at about -2.4. Revised continues to generally increase to about 5.4 by 2000, and generally decreases to about 0.4 by late 2001. It then generally increases to about 4 by 2004, and generally decreases to end at about -4.

Figure: Statistical Discrepancy

Line chart, by percent of GDP, 2004 to 2009. There are two series, "Previous (through 2009:Q1)" and "Revised (through 2009:Q2)". Previous begins at about .3 and generally decreases to about -1.5 by late 2006. It then generally increases to about 1.45 by late 2008, and generally decreases to end at about 1.2. Revised begins at about .25 and generally decreases to about -1.8 by 2006. It then generally increases to end at about 1.0.

Figure: Real DPI

Line chart, by 4-quarter percent change, 2004 to 2009. There are two series, "Previous (through 2009:Q1)" and "Revised (through 2009:Q2)". Previous begins at about 4.2 and generally decreases to about 2.7 by 2004. It then generally increases to about 4 by late 2004, and generally decreases to about 0.9 by 2005. It then generally increases to about 4 by 2006, and generally decreases to about 0.8 by early 2008. It then generally increases to about 3.4 by 2008, and generally decreases to about 0.3 by 2008. It then generally increases to end at about 2.5. Revised begins at about 4 and generally decreases to about 0.6 by late 2005. It then generally increases to about 4.7 by late 2006, and generally decreases to about -0.6 by 2008. It then generally increases to about 1.3 by early 2009, and generally decreases to end at about -0.2.

Figure: Personal Saving Rate

Line chart, by percent, 2004 to 2009. There are two series, "Previous (through 2009:Q1)" and "Revised (through 2009:Q2)". Previous begins at about 2.2 and generally decreases to about 1.8 by 2004. It then generally increases to about 2.5 by late 2004, and generally decreases to about -0.6 by 2005. It then generally increases to about 1.1 by early 2007, and generally decreases to about 0.1 by early 2008. It then generally increases to end at about 4.2. Revised begins at about

3.4 and generally increases to about 3.6 by late 2004. It then generally decreases to about 1.2 by 2005, and generally increases to about 2.6 by late 2006. It then generally decreases to about 1.2 by early 2008, and generally increases to end at about 4.

Figure: Profits as a Share of GNP

Line chart, by percent, 2004 to 2009. There are two series, "Previous (through 2009:Q1)" and "Revised (through 2009:Q2)". Previous begins at about 10.1 and generally increases to about 11.8 by 2005. It then generally decreases to about 10.4 by 2006, and generally increases to about 12.7 by 2006. It then generally decreases to about 8.6 by late 2008, and generally increases to end at about 9. Revised begins at about 10 and generally increases to about 12 by 2006. It then generally decreases to about 7.5 by late 2008, and generally increases to end at about 8.1.

Comprehensive Revision to the National Income and Product Accounts

(4-quarter percent change; data from national income and product accounts)

Figure: NFB Output per Hour

Line chart, 2004 to 2009. There are two series, "Previous (through 2009:Q1)" and "Revised (through 2009:Q2)". Previous begins at about 4 and generally decreases to about 0 by early 2007. It then generally increases to about 3.4 by early 2008, and generally decreases to end at about 2. Revised begins at about 4.6 and generally decreases to about 0.1 by 2006. It then generally increases to about 2.9 by 2007, and generally decreases to about 0.9 by late 2008. It then generally increases to end at about 1.7.

Note: Staff estimates. NFB is nonfarm business.

Figure: Compensation per Hour

Line chart, 2004 to 2009. There are two series, "Previous (through 2009:Q1)" and "Revised (through 2009:Q2)". They begin at about 4.5 and generally decrease to about 3.5 by 2004. They then generally increase to about 4.5 by early 2005, and track closely together until they reach about 3 by 2006. Previous generally increases to about 4.8 by 2007, and generally decreases to about 3.5 by early 2008. It then generally increases to end at about 4. Revised generally increases to about 4.6 by 2007, and generally decreases to end at about 1.

Note: Staff estimates.

Figure: Unit Labor Costs

Line chart, 2004 to 2009. There are two series, "Previous (through 2009:Q1)" and "Revised (through 2009:Q2)". They begin at about 0.1 and generally decrease to about -0.3 by 2004. Previous generally increases to about 4.2 by early 2007, and generally decreases to about 0 by early 2008. It then generally increases to end at about 2.2. Revised generally increases to about 3.8 by early 2007, and generally decreases to about 0 by 2008. It then generally increases to about 1.8 by 2008, and generally decreases to end at about -0.7.

Note: Staff estimates.

Figure: PCE Prices

Line chart, 2004 to 2009. There are two series, "Previous (through 2009:Q1)" and "Revised (through 2009:Q2)". The two series track closely together throughout the chart. They begin at about 2 and generally increase to about 3.3 by 2006. They then generally decrease 1.9 by late 2006, and generally increase to about 4.5 by 2008. Previous generally decreases to end at about 0.9, and Revised generally decreases to end at about -0.8.

Figure: Core PCE Prices

Line chart, 2004 to 2009. There are two series, "Previous (through 2009:Q1)" and "Revised (through 2009:Q2)". Previous begins at about 1.75 and generally increases to about 2.4 by 2006. It then generally decreases to about 2.0 by 2007, and generally increases to about 2.3 by 2008. It then generally decreases to end at about 1.75. Revised begins at about 7.75 and generally increases to about 2.6 by 2008. It then generally decreases to end at about 1.6.

Figure: Market-Based Core PCE Prices

Line chart, 2004 to 2009. There are two series, "Previous (through 2009:Q1)" and "Revised (through 2009:Q2)". Previous begins at about 1.2 and generally increases to about 2.15 by 2006. It then generally decreases to about 1.6 by 2007, and generally increases to about 2.15 by 2008. It then generally decreases to

end at about 1.75. Revised begins at about 1.45 and generally increases to about 2.5 by 2006. It then generally decreases to about 1.8 by 2007, and generally increases to about 2.65 by 2008. It then generally decreases to end at about 2.15.

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

Last update: April 1, 2015

August 2009 Greenbook Part 2 Tables and Charts[†]

Domestic Financial Developments

Selected Financial Market Quotations

(One-day quotes in percent except as noted)

Instrument	2007	2009			Change to Aug. 4 from selected dates (percentage points)		
	Aug. 6	Apr. 28	June 22	Aug. 4	2007 Aug. 6	2009 Apr. 28	2009 June 22
<i>Short-term</i>							
FOMC intended federal funds rate	5.25	.13	.13	.13	-5.12	.00	.00
Treasury bills ¹							
3-month	4.74	.13	.20	.18	-4.56	.05	-.02
6-month	4.72	.31	.34	.28	-4.44	-.03	-.06
Commercial paper (A1/P1 rates) ²							
1-month	5.26	.31	.30	.22	-5.04	-.09	-.08
3-month	5.29	.55	.63	.34	-4.95	-.21	-.29
Large negotiable CDs ¹							
3-month	5.34	.80	.40	.31	-5.03	-.49	-.09
6-month	5.27	1.38	.68	.45	-4.82	-.93	-.23
Eurodollar deposits ³							
1-month	5.33	.90	.65	.45	-4.88	-.45	-.20
3-month	5.35	1.40	1.05	.75	-4.60	-.65	-.30
Bank prime rate	8.25	3.25	3.25	3.25	-5.00	.00	.00
<i>Intermediate- and long-term</i>							
U.S. Treasury ⁴							
2-year	4.49	.92	1.17	1.19	-3.30	.27	.02
5-year	4.52	2.04	2.71	2.68	-1.84	.64	-.03
10-year	4.82	3.38	4.04	3.98	-.84	.60	-.06
U.S. Treasury indexed notes ⁵							
5-year	2.43	1.55	1.45	1.53	-.90	-.02	.08
10-year	2.48	1.92	2.10	1.96	-.52	.04	-.14
Municipal general obligations (Bond Buyer) ⁶							
	4.51	4.57	4.86	4.69	.18	.12	-.17
Private instruments							
10-year swap	5.44	3.07	3.97	3.93	-1.51	.86	-.04
10-year FNMA ⁷	5.34	3.88	4.40	4.32	-1.02	.44	-.08
10-year AA ⁸	6.12	6.33	5.94	5.47	-.65	-.86	-.47
10-year BBB ⁸	6.57	8.49	7.58	6.79	.22	-1.70	-.79
10-year high yield ⁸	9.21	12.79	12.13	10.75	1.54	-2.04	-1.38
Home mortgages (FHLMC survey rate)							
30-year fixed	6.59	4.78	5.42	5.25	-1.34	.47	-.17

1-year adjustable	5.65	4.77	4.93	4.80	-85	.03	-13
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Stock exchange index	Record high		2009			Change to Aug. 4 from selected dates (percent)		
	Level	Date	Apr. 28	June 22	Aug. 4	Record high	2009 Apr. 28	2009 June 22
Dow Jones Industrial	14,165	10-9-07	8,017	8,339	9,320	-34.20	16.26	11.77
S&P 500 Composite	1,565	10-9-07	855	893	1,006	-35.75	17.60	12.61
Nasdaq	5,049	3-10-00	1,674	1,766	2,011	-60.16	20.16	13.88
Russell 2000	856	7-13-07	473	493	571	-33.31	20.70	15.81
D.J. Total Stock Index	15,807	10-9-07	8,754	9,130	10,355	-34.49	18.29	13.42

1. Secondary market. [Return to table](#)

2. Financial commercial paper. [Return to table](#)

3. Bid rates for Eurodollar deposits collected around 9:30 a.m. eastern time. [Return to table](#)

4. Derived from a smoothed Treasury yield curve estimated using off-the-run securities. [Return to table](#)

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

6. Most recent Thursday quote. [Return to table](#)

7. Constant-maturity yields estimated from Fannie Mae domestic noncallable coupon securities. [Return to table](#)

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

NOTES:

August 6, 2007, is the day before the August 2007 FOMC meeting.

April 28, 2009, is the day before the April 2009 FOMC monetary policy announcement.

June 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, June 23 to August 5, 2009. There are two series, "10-year Treasury yield" and "Mar. 2010 Eurodollar". These two series use two different scales. 10-year Treasury yield begins at about 3.75 and generally decreases to about 3.3 by July 9. It then generally increases to about 3.7 by July 20, and generally decreases to about 3.5 by July 22. It then generally increases to about 3.78 by July 27, and generally decreases to about 3.5 by August 3. It then generally increases to end at about 3.69. March 2010 Eurodollar begins at about 1.3 and generally decreases to about 0.9 by July 10. It then generally increases to about 1.1 by July 15, and generally decreases to about 0.92 by July 21. It then generally increases to end at about 1.08. The FOMC statement is marked in the time series at about late June 24. Employment report is marked in the time series at about July 2. Retail sales PPI is marked in the time series at about July 14. CPI is marked in the time series at about July 15. Chairman's testimony is marked in the time series at about July 21. Existing home sales is marked in the time series at about July 23. ISM manufacturing data is marked in the time series at about August 3.

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

Source: Bloomberg.

Figure: Implied Federal Funds Rate

Line chart, by percent, May 2009 to October 2011. There are two series, "August 4, 2009" and "June 23, 2009". These two series track closely together throughout the chart. They begin at about 0.25 and generally increase to end at about 2.9.

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

Source: Chicago Mercantile Exchange; Chicago Board of Trade.

Figure: Treasury Yield Curve

Line chart, by percent, 1 to 20 years ahead. There are two series, "August 4, 2009" and "June 23, 2009". These two series track closely together throughout the chart. They begin at about 0.25 and generally increase to end at about 4.5.

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

Source: Federal Reserve Bank of New York.

Figure: 10-Year Treasury Implied Volatility

Line chart, by percent, January 2007 to August 4, 2009. Data are daily. The June 2009 FOMC meeting is marked in the time series. The series begins at about 4.6 and generally decreases to about 3.5 by May 2007. It then generally increases to about 10 by March 2008, and generally decreases to about 7 by August 2008. 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 early June 2009, and generally decreases to end at about 9.2. It is at about 10.1 at the time of the June 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 August 4, 2009. Data are daily. The June 2009 FOMC meeting is marked in the series. There are two series, "5 to 10 years ahead" and "Next 5 years". 5 to 10 years ahead begins at about 2.5 and generally increases to about 3.6 by late October 2008. It then generally decreases to about 2 by December 2008, and generally increases to end at about 3.1. 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 July 2008, and generally decreases to about -1.5 by December 2008. It then generally increases to about 1.6 by early June 2009, and generally decreases to end at about 1.1. It is at about 1.2 at the time of the June 2009 FOMC meeting.

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

Source: Federal Reserve Bank of New York.

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

Figure: S&P Bank Equity Index

Line chart, July 2007 to August 4, 2009. July 2, 2007 = 100. Data are daily. The June 2009 FOMC meeting is marked in the time series. The series begins at about 100 and generally decreases to about 32 by July 2008. It then generally increases to about 59 by September 2008, and generally decreases to about 15 by early March 2009. It then generally increases to end at about 30. It is at about 28 at the time of the June 2009 FOMC meeting.

Source: Bloomberg.

Figure: CDS Spreads for Selected Bank Holding Companies

Line chart, July 2007 to August 4, 2009. Unit is basis points. Data are daily. The June 2009 FOMC meeting is marked in the time series. The series begins at about 15 and generally increases to about 205 by March 2008. It then generally decreases to about 70 by May 2008, and generally increases to about 290 by late September 2008. It then generally decreases to about 150 by January 2009, and generally increases to about 370 by March 2009. It then generally decreases to end at about 125. It is at about 200 at the time of the June 2009 FOMC meeting.

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

Source: Markit.

Figure: CIT Stock Price and CDS Spread

Line chart, January 20 to August 4, 2009. Data are daily. The June 2009 FOMC meeting is marked in the time series. There are two series, "Stock price", which is an index (January 2, 2009 = 100), and "5-year CDS", which is by basis points. These two series use two different scales. Stock price begins at about 4.7 and generally increases to about 5 by January. It then generally decreases to about 1.8 by February, and generally increases to about 4.3 by April. It then generally decreases to about 2.1 by late April, and generally increases to about 3.8 by late May. It then generally decreases to about 0.2 by July, and generally increases to end at about 1. It is at about 2.5 at the time of the June 2009 FOMC meeting. 5-year CDS begins at about 750 and remains about constant until mid-February. It then generally increases to about 2000 by late April, and generally decreases to about 1000 by late May. It then generally increases to about 6010 by July, and generally decreases to about 3000 by July. It then generally increases to end at about 5200.

Source: Bloomberg; Markit.

Figure: Libor over OIS Spread

Line chart, July 2007 to August 5, 2009. Unit is basis points. Data are daily. The June 2009 FOMC meeting is marked in the times series. There are three series, "1-month", "3-month", and "6-month". 1-month begins at about 10 and generally increases to about 100 by early December 2007. It then generally decreases to about 20 by January 2008. It then generally increases to about 330 by October 2008, and generally decreases to end at about 10. It is at about 10 at the time of the June 2009 FOMC meeting. 3-month begins at about 10 and generally increases to about 110 by late November 2007. It then generally decreases to about 40 by January 2008, and generally increases to about 355 by October 2008. It then generally decreases to end at about 30. It is at about 40 at the time of the June 2009 FOMC meeting. 6-month begins at about 10 and generally increases to about 100 by early December 2007. It then generally decreases to about 50 by January 2008, and generally increases to about 330 by October 2008. It then generally decreases to end at about 75. It is at about 90 at the time of the June 2009 FOMC meeting.

Source: British Bankers' Association and Prebon.

Figure: Spreads on 30-day Commercial Paper

Line chart, July 2007 to August 4, 2009. Unit is basis points. Data are daily. The June 2009 FOMC meeting is marked in the time series. There are two series, "ABCP" and "A2/P2". They begin at about 5 and generally increase to about 200 by December 2007. They then generally decrease to about 45 by January 2008, and generally increase together until about 350 by late September 2008. ABCP generally decreases to end at about 25. It is at about 40 at the time of the June 2009 FOMC meeting. A2/P2 generally increases to about 600 by early January 2009, and generally decreases to end at about 40. It is at about 60 at the time of

the June 2009 FOMC meeting.

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

Source: Depository Trust & Clearing Corporation.

Figure: Federal Reserve Credit Outstanding

Line chart, by billions of dollars, August 2007 to August 4, 2009. Data are daily. The June 2009 FOMC meeting is marked in the time series. There are five series, "Primary credit", "TAF", "PDCF", "AMLF", and "CPFF". Primary credit begins at about 0 and remains about constant until late March. It then generally increases to about 110 by late October 2008, and generally decreases to end at about 35. It is at about 35 at the time of the June 2009 FOMC meeting. TAF begins at about 0 and generally increases to about 495 by early March 2009. It then generally decreases to end at about 235. It is at about 280 at the time of the June 2009 FOMC meeting. PDCF begins at about 0 and remains about constant until March 2008. It then generally increases to about 150 by late October 2008, and generally decreases to end at about 0. AMLF begins at about 0 and remains about constant until September 2008. It then generally decreases to about 0 by late April 2009, generally increases to about 30 by May 2009, and generally decreases to end at about 0. It is at about 20 at the time of the June 2009 FOMC meeting. CPFF begins at about 0 and remains about constant until late October 2008. It then generally increases to about 350 by January 2009, and generally decreases to end at about 50.

Source: Federal Reserve.

Corporate Yields, Risk Spreads, and Stock Prices

Figure: Selected Stock Price Indexes

Line chart, June 2008 to August 4, 2009. June 23, 2009 = 100. Data are daily. The June 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 215 and generally decreases to about 55 by March 2009. It then generally increases to end at about 120. S&P 500 begins at about 155 and generally decreases to about 75 by March 2009. It then generally increases to end at about 113. They are at about 105 at the time of the June 2009 FOMC meeting.

Source: Standard & Poor's.

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

Line chart, by percent, 1990 to August 4, 2009. Data are monthly. There are two series, "Expected 10-year real equity return" and "Expected real yield on 10-year Treasury". Expected 10-year real equity return begins at about 7.6 and generally increases to about 9.5 by 1990. It then generally decreases to about 2 by late 1999, and generally increases to about 12 by late 2008. It then generally decreases to end at about 9.2. Expected real yield on 10-year Treasury begins at about 4.5 and generally decreases to about 2 by late 1993. It then generally increases to about 4.8 by early 1995, and generally decreases to about 1 by 2003. It then generally increases to about 2.9 by 2007, and generally decreases to end at about 1.2.

Note: Expected real yield on 10-year Treasury is the off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation. There are two marks on the chart, at about 8.9 for expected 10-year real equity return and about 1.7 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 August 4, 2009. Data are weekly, as measured on Fridays or the most recent business day. The June 2009 FOMC meeting is marked in the time series. The series begins at about 21 and generally increases to about 31 by 2002. It then generally decreases to about 12 by late 2006, and generally increases to about 78 by 2008. It then generally decreases to end at about 25. It is at about 28 at the time of the June 2009 FOMC meeting.

Source: Chicago Board of Exchange.

Figure: Corporate Bond Yields

Line chart, by percent, 2002 to August 4, 2009. Data are daily. The June 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 19.8 by late 2008, and generally decreases to end at about 11. It is at about 12 at the time of the June 2009 FOMC meeting. 10-year BBB begins at about 7.2 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 6.9. It is at about 7.9 at the time of the June 2009 FOMC meeting.

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

Figure: Corporate Bond Spreads

Line chart, 2002 to August 4, 2009. Unit is basis points. Data are daily. The June 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 280 by early 2005. It then generally increases to about 1640 by late 2008, and generally decreases to end at about 700. It

is at about 800 at the time of the June 2009 FOMC meeting. 10-year BBB begins at about 200 and generally increases to about 300 by late 2002. It then generally decreases to about 100 by early 2005, and generally increases to about 650 by late 2008. It then generally decreases to end at about 290. It is at about 350 at the time of the June 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 August 4, 2009. Unit is basis points. Data are daily. The June 2009 FOMC meeting is marked in the time series. There are two series, "High-yield" and "Investment-grade". High-yield begins at about 125 and generally increases to about 225 by late 2005. It then generally decreases to about 100 by early 2008, and generally increases to about 365 by late 2008. It then generally decreases to end at about 120 by 2009, and generally increases to about 340 by 2009. It then generally decreases to end at about 140. It is at about 150 at the time of the June 2009 FOMC meeting. Investment-grade begins at about 80 and generally increases to about 110 by 2005. It then generally decreases to about 50 by late 2006, and generally increases to about 155 by 2008. It then generally decreases to end at about 100. It is at about 100 at the time of the June 2009 FOMC meeting.

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

Corporate Earnings and Credit Quality

Figure: S&P 500 Earnings Per Share

Line chart, by percent, 1998 to 2009:Q2. Data are change from 4 quarters earlier. There are two series, "All firms" and "Nonfinancial firms". All firms begins at about 1 and generally decreases to about -6 by 1998. It then generally increases to about 23 by 1999, and generally decreases to about -25 by 2001. It then generally increases to about 26 by early 2004, and generally decreases to about -67 by late 2008. It then generally increases to end at about -23. Nonfinancial firms begins at about -1 and generally increases to about 24 by early 2000. It then generally decreases to about -28 by 2001, and generally increases to about 34 by 2004. It then generally decreases to about -31 by early 2009, and generally increases to end at about -28.

Note: 2009:Q2 values are estimated.

Source: Thomson Financial.

Figure: Revisions to Expected S&P 500 Earnings

Line chart, by percent, 2002 to mid-July 2009. Data are monthly. There are two series, "All firms" and "Nonfinancial firms". These two series track closely together throughout the chart, beginning at about -1 and generally increase to about 1 by 2002. They then generally decrease to about -3.5 by late 2002, and generally increase to about 2 by 2004. Then generally decrease to about -17.5 by early 2009, and generally increase to end at about 0.5.

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

Source: Thomson Financial.

Figure: Financial Ratios for Nonfinancial Corporations

Line chart, by ratio, 1989 to 2009:Q1. There are two series, "Debt over total assets" and "Liquid assets over total assets". These two series use two different scales. Debt over total assets begins at about 0.334 by 1990, and generally decreases to about 0.28 by 1996. It then generally increases to about 0.315 by 1999, and generally decreases to about 0.29 by 2000. 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 end at about 0.295. Liquid assets over total assets begins at about 0.053 and generally decreases to about 0.05 by 1990. It then generally increases to about 0.103 by 2004, and generally decreases to about 0.088 by 2008. It then generally increases to end at about 0.098.

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

Source: Calculated using Compustat data.

Figure: Bond Ratings Changes of Nonfinancial Companies

Bar chart, by percent of outstandings, 1991 to 2009:Q2. Data are annual rates. There are two series, "Upgrades" and "Downgrades". Upgrades begins at about 12 and generally decreases to about 8 by 1994. It then generally increases to about 20 by 1995, and generally decreases to about 10 by 1997. It then generally increases to about 14 by 1998, and generally decreases to about 3 by 2002. It then generally increases to about 10 by 2007, and generally decreases to about 3 by 2008:H2. It then generally increases to end at about 7. 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 9 by 2008:H1, and generally increases to about 39 by 2009:Q1. It then generally increases to end at about 19.

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

Figure: Expected Nonfinancial Year-Ahead Defaults

Line chart, by percent of liabilities, 1994 to July 2009. Data are monthly. The series begins at about 0.5 and generally decreases to about 0.2 by early 1998. It then generally increases to about 4.5 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 end at about 2.6.

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

Source: Calculated using Moody's KMV.

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 8.1 by early 1991. It then generally decreases to about 1.6 by late 1997, and generally increases to about 3.9 by 2002. It then generally decreases to about 1.2 by late 2006, and generally increases to end at about 4.3 by June. Bond default rate begins at about 1.7 and generally increases to about 3.2 by early 1991. It then generally decreases to about 0 by late 1993, and generally increases to about 3.8 by early 2003. It then generally decreases to about 0 by early 2008, and generally increases to about 7.3 by late 2008. It then generally decreases to about 2.5 by early 2009, and generally increases to end at about 4.4 by 2009:Q1.

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

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

Business Finance

Gross Issuance of Securities by U.S. Corporations

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

Type of security	2005	2006	2007	2008		2009		
				H1	H2	Q1	Q2	July P
Nonfinancial corporations								
Stocks ¹	4.6	4.7	5.5	3.5	4.0	2.7	7.8	2.1
Initial public offerings	1.7	1.8	1.6	.6	.1	.3	.2	.1
Seasoned offerings	2.8	2.9	3.8	2.9	3.9	2.4	7.6	2.0
Bonds ²	18.7	29.3	35.1	36.0	19.4	56.7	42.1	20.5
Investment grade	8.7	13.1	17.5	24.9	14.2	42.5	22.8	6.8
Speculative grade	5.2	6.2	7.5	3.1	.4	3.0	7.5	2.9
Other (sold abroad/unrated)	4.8	10.1	10.0	8.0	4.8	11.2	11.8	10.9
Memo								
Net issuance of commercial paper ³	-2	2.4	-4	-5	3.7	-12.7	-12.2	-3.7
Change in C&I loans at commercial banks ³	10.1	11.2	21.2	20.7	5.2	-15.8	-18.2	-16.0
Financial corporations								
Stocks ¹	5.0	5.3	8.6	17.2	9.9	.9	30.8	3.2
Bonds ²	170.4	180.6	151.7	66.2	24.6	38.9	48.3	32.2

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

Bar chart, by billions of dollars, 2005 to July 2009. Data are monthly rate, nonfinancial firms. There are three series, "Commercial paper", "C&I loans" and "Bonds". There is also a "Total" series presented as a line chart which sums the total of the other series. Approximate values are: 2005: Bonds 5, C&I loans 9, Commercial paper 0, Total 14. 2006: Bonds 18, C&I loans 11, Commercial paper 2, Total 31. 2007: Bonds 28, C&I loans 20, Commercial paper 0, Total 48. 2008:H1: Bonds 24, C&I loans 20, Commercial paper 0, Total 44. 2008:H2: Bonds 12, C&I loans 5, Commercial paper 4, Total 21. 2009:Q1: Bonds 48, C&I loans -15, Commercial paper -13, Total 20. 2009:Q2: Bonds 32, C&I loans -19, Commercial paper -11, Total 2. July 2009: Bonds 15, C&I loans -16, Commercial paper -4, Total -5.

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

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

Figure: Components of Net Equity Issuance

Bar chart, by billions of dollars, 2005 to 2009:Q1. Data are monthly rate, nonfinancial firms. There are four series, "Public issuance", "Private issuance", "Repurchases", and "Cash mergers". There is also a "Total" series presented as a line chart which sums the total of the other series. Approximate values are: 2005: Private issuance 8, Public issuance 3, Repurchases -28, Cash mergers -16, Total -33. 2006: Private issuance 10, Public issuance 4, Repurchases -36, Cash mergers -24, Total -46. 2007: Private issuance 14, Public issuance 6, Repurchases -46, Cash mergers -38, Total -64. 2008:H1: Private issuance 18, Public issuance 3, Repurchases -35, Cash mergers -14, Total -28. 2008:H2: Private issuance 18, Public issuance 4, Repurchases -28, Cash mergers -15, Total -21. 2009:Q1: Private issuance 17, Public issuance 3, Repurchases -12, Cash mergers -3, Total 5.

Note: 2009:Q1 values are staff estimates.

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

Commercial Real Estate

Figure: Commercial Mortgage Debt

Line chart, by percent change, annual rate, 2000 to 2009:Q1. Data are quarterly. The series begins at about 11.5 and generally decreases to about 7 by 2002. It then generally increases to about 16 by late 2005, and generally decreases to about 9 by 2007. It then generally increases to about 15 by 2007, and generally decreases to end at about 0.

Source: Federal Reserve.

Figure: Commercial Real Estate Sales

Line chart, 2001 to July 2009. There are two series, "Dollar value of all sales", which is by billions of dollars, and "% of properties sold at nominal loss", which is by percent. These two series use two different scales. Dollar value of all sales begins at about 8 and generally increases to about 72 by 2007. It then generally decreases to end at about 6. % of properties sold at nominal loss begins at about 5 and generally increases to about 17 by late 2001. It then generally decreases to about 6 by 2002, and generally increases to about 13 by early 2004. It then generally decreases to about 7 by late 2006, and generally increases to about 16 by 2007. It then generally decreases to about 8 by 2008, and generally increases to end at about 46.

Note: Three-month moving averages shown.

Source: Real Capital Analytics.

Figure: Prices of Commercial Real Estate

Line chart, 1994 to 2009. Index, 2001:Q1=100. There are two series, "NCREIF TBI", data are quarterly, and "Moody's index", data are monthly. NCREIF TBI begins at about 75 and generally increases to about 206 by 2007. It then generally decreases to end at about 137 by 2009:Q2. Moody's index begins at about 100 by early 2001, and generally increases to about 188 by late 2007. It then generally decreases to end at about 125 by May.

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

Figure: Delinquency Rates on Commercial Mortgages on Existing Properties

Line chart, by percent, 1996 to 2009. There are three series, "At commercial banks", "CMBS", and "At life insurance companies". At commercial banks begins at about 3.4 and generally decreases to about 1.3 by 2000. It then generally increases to about 1.8 by late 2001, and generally decreases to about 1 by 2006. It then generally increases to end at about 3.6 by 2009:Q1. CMBS begins at about 0.4 by early 1999, and generally increases to about 1.9 by late 2003. It then generally decreases to about 0.3 by 2007, and generally increases to end at about 4.2 by June. At life insurance companies begins at about 2.4 and generally increases to about 2.6 by 1996. It then generally decreases to about 0.1 by late 2001, and generally increases to about 0.4 by early 2003. It then generally decreases to about 0 by 2006, and generally increases to end at about 0.1 by 2009:Q1.

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

Source: Citigroup; Call Reports; ACLI.

Figure: Delinquency Rates on Construction Loans at Banks

Line chart, by percent, 2007:Q1 to 2009:Q1. Data are quarterly. There are two series, "Residential construction" and "Commercial construction". Residential construction begins at about 2.8 and generally increases to end at about 21.2. Commercial construction begins at about 2 and generally increases to end at about 12.

Source: Call Reports.

Figure: Commercial Mortgage CDS Index Prices (CMBX)

Line chart, by percent, April 2007 to July 30, 2009. Data are daily, by rating. The June 2009 FOMC meeting is marked in the time series. There are three series, "Senior AAA", "Junior AAA", and "BBB-". Senior AAA begins at about 100 and generally decreases to about 84 by early March 2008. It then generally increases to

about 95 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 75 at the time of the June 2009 FOMC meeting. Junior AAA begins at about 99 by early January 2008 and generally decreases to about 66 by early March 2008. It then generally increases to about 90 by May 2008, and generally decreases to about 24 by April 2009. It then generally increases to end at about 46. It is at about 30 at the time of the June 2009 FOMC meeting. BBB- begins at about 100 and generally increases to about 104 by May 2007. It then generally decreases to about 10 by April 2009, and generally increases to end at about 15. It is at about 10 at the time of the June 2009 FOMC meeting.

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

Source: JPMorgan Chase & Co.

Residential Mortgages

Figure: Mortgage Rate and MBS Yield

Line chart, by percent, October 2006 to 2009. Data are weekly. The June 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 increases to about 6.4 by late October 2006. It then generally decreases to about 6.1 by December 2006, and generally increases to about 6.75 by June 2007. It then generally decreases to about 5.5 by late January 2008, and generally increases to about 6.6 by late July 2008. It then generally decreases to about 4.8 by April 2009, generally increases to about 5.6 by early June 2009, and generally decreases to end at about 5.25. It is at about 5.4 at the time of the June 2009 FOMC meeting. MBS yield begins at about 6.0 and generally decreases to about 5.5 by November 2006. It then generally increases to about 6.4 by June 2007, and generally decreases to about 5.35 by January 2008. It then generally increases to about 6.1 by July 2008, and generally decreases to about 3.7 by January 2009. It then generally increases to about 5.05 by early June 2009, and generally decreases to end at about 4.5. It is at about 4.75 at the time of the June 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 July 29, 2009. Unit is basis points. Data are weekly. The June 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 about 250 by August 2008, and generally decreases to about 80 by May 2009. It then generally increases to end at about 130. It is at about 145 at the time of the June 2009 FOMC meeting. 5/1 ARM to 2-yr Treasury begins at about 140 and generally decreases to about 110 by late January 2007. It then generally increases to about 400 by March 2008, and generally decreases to about 295 by June 2008. It then generally increases to about 525 by December 2008, and generally decreases to end at about 350. It is at about 380 at the time of the June 2009 FOMC meeting.

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

Source: Bloomberg; Freddie Mac.

Figure: Agency and Non-Agency MBS Issuance

Bar chart, by billions of dollars, 2002 to May 2009. Data are monthly rates. There are three series, "Non-agency", "GSEs", and "Ginnie Mae". There are three series, "Non-agency", "GSEs", and "Ginnie Mae". Approximate values are: 2002: Ginnie Mae 12.5, GSEs 107.5, and Non-agency 30. 2003: Ginnie Mae 20, GSEs 160, and Non-agency 40. 2004: Ginnie Mae 10, GSEs 75, and Non-agency 65. 2005: Ginnie Mae 5, GSEs 75, and Non-agency 90. 2006: Ginnie Mae 4, GSEs 71, and Non-agency 85. 2007:H1: Ginnie Mae 4, GSEs 86, and Non-agency 80. 2007:H2: Ginnie Mae 10, GSEs 92, and Non-agency 23. 2008:H1: Ginnie Mae 15, GSEs 100, and Non-agency 0. 2008:Q3: Ginnie Mae 25, GSEs 55, and Non-agency 0. 2008:Q4: Ginnie Mae 25, GSEs 15, and Non-agency 0. January 2009: Ginnie Mae 28, GSEs 32, and Non-agency 0. February 2009: Ginnie Mae 28, GSEs 72, and Non-agency 0. March 2009: Ginnie Mae 30, GSEs 140, and Non-agency 0. April 2009: Ginnie Mae 35, GSEs 95, and Non-agency 0. May 2009: Ginnie Mae 40, GSEs 102, and Non-agency 0.

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

Figure: Prices of Existing Homes

Line chart, by percent change from a year earlier, 2002 to May 2009. Data are monthly. There are three series, "FHFA price index", "LoanPerformance price index", and "20-city S&P/Case-Shiller price index". FHFA price index begins at about 6.5 and generally increases to about 10 by 2005. It then generally decreases to about -9 by late 2008, and generally increases to end at about -5. LoanPerformance price index begins at about 8 and generally increases to about 15 by 2005. It then generally decreases to about -12 by late 2008, and generally increases to end at about -9. 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 -19 by late 2008, and generally increases to end at about -17.5.

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

Figure: Delinquencies on Prime Mortgages

Line chart, by percent of loans, 2001 to June 2009. Data are monthly. There are two series, "Variable-rate" and "Fixed-rate". Variable-rate begins at about 2.5 and generally increases to about 2.9 by late 2001. It then generally decreases to about 1 by 2005, and generally increases to end at about 13. Fixed-rate begins at about 1.5 and remains about constant until 2007. It then generally increases to end at about 4.

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 Mortgages

Line chart, by percent of loans, 2001 to May 2009. Data are monthly. There are two series, "Variable-rate" and "Fixed-rate". Variable-rate begins at about 8 and generally increases to about 10 by 2001. It then generally decreases to about 5 by 2005, and generally increases to end at about 40. Fixed-rate begins at about 7.5 and generally increases to about 10 by late 2002. It then generally decreases to about 5 by 2007, and generally increases to end at about 15.5.

Note: Percent of loans 90 or more days past due or in foreclosure. Rates are for securitized loans.

Source: LoanPerformance, a division of First American CoreLogic.

Consumer Credit and Household Wealth

Figure: Gross Consumer ABS Issuance

Bar chart, by billions of dollars, 2005 to July 2009. Data are monthly. There are two series, "TALF facilitated" and "Non-TALF". Approximate values are: 2005: Non-TALF 19, TALF facilitated 0. 2006: Non-TALF 19, TALF facilitated 0. 2007: Non-TALF 19.5, TALF facilitated 0. 2008:H1: Non-TALF 18, TALF facilitated 0. 2008:Q3: Non-TALF 6.5, TALF facilitated 0. 2008:Q4: Non-TALF 1, TALF facilitated 0. January 2009: Non-TALF 1.5, TALF facilitated 0. February 2009: Non-TALF 1.8, TALF facilitated 0. March 2009: TALF facilitated 8, Non-TALF 2. April 2009: TALF facilitated 3, Non-TALF 6.5. May 2009: TALF facilitated 12.5, Non-TALF 1.5. June 2009: TALF facilitated 14, Non-TALF 6.5. July 2009: TALF facilitated 12, Non-TALF 4.

Note: Credit card, auto, and student loan ABS. July 2009 goes through July 29.

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

Figure: AAA ABS Spreads over Swaps

Line chart, May 2007 to August 7, 2009. Unit is basis points. Data are weekly. The June 2009 FOMC meeting is marked in the time series. There are two series, "2-year credit card" and "2-year auto". 2-year credit card begins at about 0 and generally increases to about 110 by April 2008. It then generally decreases to about 50 by June 2008, and generally increases to about 550 by December 2008. It then generally decreases to end at about 100. It is at about 130 at the time of the June 2009 FOMC meeting. 2-year auto begins at about 0 and generally increases to about 150 by April 2008. It then generally decreases to about 80 by June 2008, and generally increases to about 460 by November 2008. It then generally decreases to end at about 90. It is at about 100 at the time of the June 2009 FOMC meeting.

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

Figure: Consumer Loan Rates

Line chart, by percent, 2007 to 2009. The June 2009 FOMC meeting is marked in the time series. There are two series, "Credit cards all accounts" and "New auto loans". Credit cards all accounts begins at about 13.3 and generally increases to about 13.5 by 2007. It then generally decreases to about 12 by 2008, and generally increases to end at about 13.2. It is at about 13.2 at the time of the June 2009 FOMC meeting. New auto loans begins at about 8 and generally decreases to about 7 by 2007. It then generally increases to about 7.7 by 2007, and generally decreases to about 5.2 by 2008. It then generally increases to about 7.3 by early 2009, and generally decreases to end at about 6. It is at about 5.9 at the time of the June 2009 FOMC meeting.

Source: For credit cards, Federal Reserve; for new auto loans, PIN.

Figure: Delinquencies on Consumer Loans

Line chart, by percent, 1997 to 2009. There are three series, "Credit card loans in securitized pools", "Nonrevolving consumer loans at commercial banks", and "Auto loans at captive finance companies". Credit card loans in securitized pools begins at about 5.4 and generally increases to about 5.7 by 1997. It then generally decreases to about 4.6 by 2000, and generally increases to about 5.4 by early 2003. It then generally decreases to about 3.3 by late 2005, and generally increases to end at about 6.3 by May. Nonrevolving consumer loans at commercial banks begins at about 3.1 and generally increases to about 3.3 by early 1999. It then generally decreases to about 2 by 2005, and generally increases to end at about 3.5 by 2009:Q1. Auto loans at captive finance companies begins at about 3.2 and generally increases to about 3.6 by 1997. It then generally decreases to about 1.9 by 2004, and generally increases to end at about 3.2 by May.

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 ^e	June
Total long-term funds	11.8	-49.9	0.5	46.1	44.5	6,358
Equity funds	-3.6	-36.0	-14.4	14.1	9.0	4,010
Domestic	-5.0	-20.8	-7.8	9.7	1.6	3,032

International	1.3	-15.3	-6.5	4.4	7.4	978
Hybrid funds	1.7	-4.9	-2.9	2.3	2.0	526
Bond funds	13.8	-8.9	17.8	29.8	33.6	1,822
High-yield	-0.2	0.1	2.7	2.9	1.9	153
Other taxable	11.1	-7.4	11.2	21.2	25.5	1,278
Municipals	2.9	-1.6	3.9	5.7	6.2	391
Money market funds	56.1	59.6	0.1	-55.2	-49.9	3,673

Note: Excludes reinvested dividends.

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

Source: Investment Company Institute.

Treasury Finance

Figure: Treasury Auction Amounts

Line chart, by billions of dollars, 2005:Q1 to 2009:Q3. Data are quarterly. There are four series, "2-year", "3-year", "5-year", and "10-year". 2-year begins at about 73 and generally decreases to about 50 by 2007:Q3. It then generally increases to about 123 by late 2009:Q1, and generally decreases to end at about 112.5. 3-year begins at about 23 and generally decreases to about 0 by 2007:Q4. It remains about constant until early 2008:Q4, and generally increases to end at about 105. 5-year begins at about 45 and generally decreases to about 39 by 2007:Q4. It then generally increases to end at about 124 by 2009:Q2. 10-year begins at about 25 and remains about constant until 2008:Q1. It then generally increases to end at about 60.

Note: 2009:Q2 values are estimated.

Source: U.S. Treasury Dept.

Figure: Foreign Participation in Treasury Auctions

Line chart, by percent of total issue, 2000 to 2009. Data are 6-month moving averages. The June 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 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 39 by July 31. It is at about 34 at the time of the June 2009 FOMC meeting. Actual foreign allotment begins at about 10 and generally increases to about 26 by 2004. It then generally decreases to about 15 by 2006, and generally increases to end at about 20.

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 August 4, 2009. Unit is basis points. Data are daily. The June 2009 FOMC meeting is marked in the time series. The series begins at about 3 and generally decreases to about 1 by 2007. It then generally increases to about 22.5 by late 2008, and generally decreases to end at about 3. There is a peak to about 13 by 2001. It is at about 5 at the time of the June 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 August 2009. Data are monthly averages. The series begins at about 75 and generally increases to about 170 by 2007. It then generally decreases to about 100 by 2007, and generally increases to about 200 by early 2008. It then generally decreases to about 75 by late 2008, and generally increases to end at about 110.

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

Source: Bloomberg.

Figure: Treasury On-the-Run Premium

Line chart showing 10-year note, 2001 to August 2009. Unit is basis points. Data are monthly averages. The June 2009 FOMC meeting is marked in the time series. The series begins at about 14 and generally increases to about 27 by 2002. It then generally decreases to about 6 by late 2006, and generally increases to about 60 by early 2009. It then generally decreases to end at about 32. It is at about 38 at the time of the June 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. July observation is the month-to-date average.

Source: Federal Reserve Bank of New York.

Figure: Treasury Fails-to-Deliver

Line chart, by billions of dollars, January 2007 to July 22, 2009. Data are weekly. The June 2009 FOMC meeting is marked in the time series. The series begins at about 250 and generally decreases to about 0 by late January 2007. It then generally increases to about 1200 by April 2008, and generally decreases to about 0 by July 2008. It then generally increases to about 2700 by October 2008, and generally decreases to end at about 0. It is at about 10 at the time of the June 2009 FOMC meeting.

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

State and Local Government Finance

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

Type of security	2005	2006	2007	2008		2009		
				H1	H2	Q1	Q2	July ^p
Total	38.4	36.1	40.4	41.7	33.1	30.5	42.3	31.7
Long-term ¹	34.2	32.5	35.5	38.1	26.6	28.7	36.9	24.3
Refundings ²	15.6	10.6	12.6	18.0	11.0	10.5	14.3	6.4
New capital	18.6	21.9	22.9	20.1	15.6	18.2	22.6	17.9
Short-term	4.2	3.7	4.9	3.6	6.5	1.8	5.3	7.4
Memo: Long-term taxable	2.1	2.5	2.4	2.7	1.8	1.1	7.8	4.5

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 July 30, 2009. [Return to table](#)

Source: Thomson Financial.

Figure: Ratings Changes

Line chart, by number of rating changes, 1991 to 2009:Q2. Data are annual rates. There are two series, "Upgrades" and "Downgrades". Upgrades begins at about 200 and generally increases to about 400 by 1992. It then generally decreases to about 300 by 1993, and generally increases to about 1000 by 2000. It then generally decreases to about 400 by 2002, and generally increases to about 2300 by 2006. It then generally decreases to about 1650 by 2008:H1, and generally increases to about 3000 by 2009:Q1. It then generally decreases to end at about 2400. Downgrades begins at about 700 and generally decreases to about 200 by 1997. It then generally increases to about 750 by 2003, and generally decreases to about 400 by 2004. It then generally increases to about 1400 by 2007, and generally decreases to about 100 by 2008:H1. It then generally increases to about 800 by 2009:Q1, and generally decreases to end at about 300.

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-da SIFMA swap index". 20-year general obligation begins at about 4.5 and generally increases to about 4.7 by 2006. It then generally decreases to about 4 by late 2006, and generally increases to about 6 by 2008. It then generally decreases to end at about 4.7 by July 30. 7-day SIFMA swap index 1.5 and generally increases to about 3.9 by early 2007. 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 0.4 by July 29.

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

Source: Municipal Market Advisors; Bond Buyer.

Figure: Municipal Bond Yield Ratio

Line chart showing 20-year, by ratio (General Obligation over Treasury), 1994 to July 30, 2009. Data are weekly. The series begins at about 0.82 and generally increases to about 0.95 by late 1998. It then generally decreases to about 0.85 by 1999, and generally increases to about 1.88 by early 2009. It then generally decreases to end at about 1.04 by July 30.

Source: Bond Buyer.

M2 Monetary Aggregate

(Based on seasonally adjusted data)

Aggregate and components	Percent change (annual rate) ¹						Level (billions of dollars), July (€)
	2007	2008	2009				
			Q1	Q2	June	July (€)	
M2	5.9	8.3	12.9	2.6	3.6	-3.5	8,346
Components ²							
Currency	2.0	5.8	16.0	6.9	4.5	0.6	854
Liquid deposits ³	4.3	6.8	20.6	12.6	17.8	7.3	5,295
Small time deposits	4.4	11.7	0.2	-16.3	-17.6	-26.0	1,253
Retail money market funds	20.2	12.9	-7.6	-23.9	-42.8	-36.0	939
Memo:							
Institutional money market funds	40.2	24.6	29.9	6.3	-7.7	-7.0	2,507
Monetary base	2.0	70.4	65.4	24.2	-60.7	-6.1	1,672

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	H2 2008	Q1 2009	Q2 2009	June 2009	July 2009 ^e	Level ¹ July 2009 ^e
Total	9.8	5.1	4.6	-5.5	-3.2	-1.3	-12.6	9,339
Loans ²								
Total	10.7	4.6	2.1	-7.1	-6.6	-9.5	-17.8	6,985
Core	9.6	5.2	2.7	-3.0	-5.7	-7.8	-9.7	6,181
To businesses								
Commercial and industrial	19.0	16.6	11.3	-13.3	-15.1	-18.4	-7.7	1,494
Commercial real estate	9.3	6.0	2.9	-.7	-2.1	-4.1	-6.0	1,696
To households								
Residential real estate	5.6	-3.0	-5.2	-1.4	-1.4	-4.6	-13.0	2,139
Revolving home equity	5.7	13.0	13.0	9.9	2.6	-4.1	-5.9	608
Closed-end mortgages	5.5	-7.9	-11.2	-5.6	-3.0	-4.7	-15.9	1,532
Consumer	6.7	7.2	7.4	8.1	-6.3	-4.6	-12.0	851
Memo: Originated ³	6.5	5.7	4.4	1.4	-3.8	-4.9	-5.2	1,259
Other	18.7	.5	-1.5	-34.3	-13.6	-21.4	-77.0	805
Securities								
Total	7.0	6.9	12.9	-.2	7.6	24.3	3.4	2,354
Treasury and agency	-6.1	18.6	32.4	5.8	-5.6	28.2	4.5	1,394
Other ⁴	28.2	-7.0	-11.2	-9.4	28.5	18.7	1.8	960

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

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

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

3. Includes an estimate of outstanding loans securitized by commercial banks. [Return to table](#)

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

e Estimated. [Return to table](#)

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 April 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 56 and generally decreases to about -20 by 1993. It then generally increases to about 60 by early 2003, and generally decreases to about -25 by 2005. It then generally increases to about 85 by late 2008, and generally decreases to end at about 32. It is at about 42 at the time of the April 2009 survey. Loans to small firms begins at about 51 and generally decreases to about -12 by early 1994. It then generally increases to about 48 by early 2001, and generally decreases to about -22 by 2005. It then generally increases to about 75 by late 2008, and generally decreases to end at about 33. It is at about 40 at the time of the April 2009 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 April 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 -56 by 1994, and generally increases to about 60 by late 2001. It then generally decreases to about -69 by 2005, and generally increases to about 100 by late 2008. It then generally decreases to end at about 60. It is at about 80 at the time of the April 2009 survey. Loans to small firms begins at about 8 and generally increases to about 36 by early 1991. It then generally decreases to about -40 by late 1997, and generally increases to about 40 by 2001. It then generally decreases to about -55 by 2005, and generally increases to about 92 by late 2008. It then generally decreases to end at about 68. It is at about 78 at the time of the April 2009 survey.

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

Line chart, by percent, 1991 to 2009. The April 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 -30 and generally increases to about 39 by 1994. It then generally decreases to about -69 by late 2001, and generally increases to about 47 by early 2005. It then generally decreases to about -60 by early 2009, and generally increases to end at about -44. It is at about -60 at the time of the April 2009 survey. Loans to small firms begins at about -25 and generally increases to about 37 by 1994. It then generally decreases to about -48 by late 2002, and generally increases to about 40 by 2004. It then generally decreases to about -65 by early 2009, and generally increases to end at about -54. It is at about -65 at the time of the April 2009 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 April 2009 survey is marked in the time series. The series begins at about 68 and generally decreases to about -10 by 1997. It then generally increases to about 48 by late 1998, and generally decreases to about 7 by 1999. 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 89 by late 2008, and generally decreases to end at about 46. It is at about 68 at the time of the April 2009 survey.

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

Line chart, by percent, 1995 to 2009. The April 2009 survey is marked in the time series. The series begins at about 12 and generally increases to about 27 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 2004. It then generally decreases to end at about -63. It is at about -66 at the time of the April 2009 survey.

Measures of Supply and Demand for Residential Mortgage Loans

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

Line chart showing all residential, by percent, 1990 to early 2007. The series begins at about 10 and generally increases to about 32 by early 1991. It then generally decreases to about -15 by late 1993, and generally increases to about 10 by early 2003. It then generally decreases to about -9 by 2006, and generally increases to end at about 15.

There is a second line chart, by percent, 2007:Q2 to 2009:Q3. There are three series, "Prime", "Nontraditional", and "Subprime". Prime begins at about 15 and generally increases to about 72 by 2008:Q3. It then generally decreases to end at about 38. Nontraditional begins at about 45 and generally decreases to about 40 by 2007:Q3. It then generally increases to about 90 by 2008:Q4, and generally decreases to about 48 by 2009:Q1. It then generally increases to about 64 by 2009:Q2, and generally decreases to end at about 47. Subprime begins at about 55 and generally increases to about 100 by 2008:Q4. It then generally decreases to end at about 49 by 2009:Q1.

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

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

Line chart showing all residential, by percent, 1990 to early 2007. The series begins at about -48 and generally increases to about 60 by 1991. It then generally decreases to about -75 by early 1995, and generally increases to about 50 by 1995. It then generally decreases to about -20 by 1996, and generally increases to about 64 by 1998. It then generally decreases to about -62 by early 2000, and generally increases to about 48 by 2001. It then generally decreases to about -38 by early 2004, and generally increases to about 20 by 2005. It then generally decreases to about -60 by late 2006, and generally increases to end at about -36.

There is a second line chart, by percent, 2007:Q2 to 2009:Q3. There are three series, "Prime", "Nontraditional", and "Subprime". Prime begins at about -20 and generally increases -10 by 2007:Q3. It then generally decreases to about -60 by 2008:Q1, and generally increases to about -25 by 2008:Q2. It then generally decreases to about -51 by 2008:Q4, and generally increases to about 38 by 2009:Q2. It then generally decreases to end at about 15. Nontraditional begins at about -16 and generally decreases to about -68 by 2008:Q1. It then generally increases to about -30 by 2008:Q2, and generally decreases to about -71 by 2008:Q4. It then generally increases to about -12 by 2009:Q2, and generally decreases to end at about -18. Subprime begins at about -20 and generally decreases to about -70 by 2008:Q1. It then generally increases to about -30 by 2008:Q3, and generally decreases to about -110 by 2008:Q4. It then generally increases to end at about -50 by 2009:Q1.

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

Measures of Supply and Demand for Consumer Loans

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

Line chart, by percent, 1996 to 2009. The April 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 25 and generally increases to about 50 by 1996. It then generally decreases to about -2 by 2000, and generally increases to about 20 by late 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 35. It is at about 60 at the time of the April 2009 survey. Other consumer loans begins at about 15 and generally decreases to about 12. It then generally increases to about 24 by 1996, and generally decreases to about -2 by early 1999. It then generally increases to about 20 by 2002, and generally decreases to about -9 by 2005. It then generally increases to about 68 by 2008, and generally decreases to end at about 34. It is at about 48 at the time of the April 2009 survey.

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

Line chart, by percent, 1990 to 2009. The April 2009 survey is marked in the time series. The series begins at about 9 and generally increases to about 11 by 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 -6 by 1996, and generally increases to about 14 by 1999. It then generally decreases to about -9 by late 2001, and generally increases to about 21 by 2005. It then generally decreases to about -47 by late 2008, and generally increases to end at about -7. It is at about -7 at the time of the April 2009 survey.

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

Line chart, by percent, late 1991 to 2009. The series begins at about -28 and generally increases to about 37 by 1994. It then generally decreases to about -33 by early 2001, and generally increases to about 32 by 2003. It then generally decreases to about -45 by late 2006, and generally increases to about -19 by 2008. It then generally decreases to about -49 by late 2008, and generally increases to end at about -20. It is at about -20 at the time of the April 2009 survey.

Figure: When respondents expect their C&I lending standards to return to longer-run norms

Bar chart, by percent. There are two series, "Investment-grade firms" and "Below-investment-grade firms". Approximate values are: By the end of 2009: Investment-grade firms 2, Below-investment-grade firms 0. In the first half of 2010: Investment-grade firms 11, Below-investment-grade firms 4. In the second half of 2010: Investment-grade firms 36, Below-investment-grade firms 29. In 2011: Investment-grade firms 5, Below-investment-grade firms 31. Tighter than longer-run average levels for the foreseeable future: Investment-grade firms 21, Below-investment-grade firms 23. Current level is not tighter than average level over past decade: Investment-grade firms 25, Below-investment-grade firms 13.

Figure: When respondents expect their CRE lending standards to return to longer-run norms

Bar chart, by percent. There are two series, "Investment-grade firms" and "Below-investment-grade firms". Approximate values are: By the end of 2009: Investment-grade firms 0, Below-investment-grade firms 0. In the first half of 2010: Investment-grade firms 2, Below-investment-grade firms 0. In the second half of 2010: Investment-grade firms 22, Below-investment-grade firms 10. In 2011: Investment-grade firms 20, Below-investment-grade firms 29. Tighter than longer-run average levels for the foreseeable future: Investment-grade firms 40, Below-investment-grade firms 53. Current level is not tighter than average level over past decade: Investment-grade firms 16, Below-investment-grade firms 8.

Figure: When respondents expect their residential real estate (RRE) lending standards to return to longer-run norms

Bar chart, by percent. There are two series, "Prime household borrowers" and "Nonprime household borrowers". Approximate values are: By the end of 2009: Prime household borrowers 2, Nonprime household borrowers 0. In the first half of 2010: Prime household borrowers 6, Nonprime household borrowers 4. In the second half of 2010: Prime household borrowers 27, Nonprime household borrowers 12. In 2011: Prime household borrowers 13, Nonprime household borrowers 15. Tighter than longer-run average levels for the foreseeable future: Prime household borrowers 42, Nonprime household borrowers 58. Current level is not tighter than average level over past decade: Prime household borrowers 10, Nonprime household borrowers 12.

Figure: When respondents expect their credit card (CC) lending standards to return to longer-run norms

Bar chart, by percent. There are two series, "Prime household borrowers" and "Nonprime household borrowers". Approximate values are: By the end of 2009: Prime household borrowers 3, Nonprime household borrowers 0. In the first half of 2010: Prime household borrowers 10, Nonprime household borrowers 6. In the second half of 2010: Prime household borrowers 13, Nonprime household borrowers 6. In 2011: Prime household borrowers 26, Nonprime household borrowers 11. Tighter than longer-run average levels for the foreseeable future: Prime household borrowers 32, Nonprime household borrowers 67. Current level is not tighter than average level over past decade: Prime household borrowers 16, Nonprime household borrowers 11.

Figure: When respondents expect their other consumer standards to return to longer-run norms

Bar chart, by percent. There are two series, "Prime household borrowers" and "Nonprime household borrowers". Approximate values are: By the end of 2009: Prime household borrowers 2, Nonprime household borrowers 0. In the first half of 2010: Prime household borrowers 6, Nonprime household borrowers 4. In the second half of 2010: Prime household borrowers 23, Nonprime household borrowers 7. In 2011: Prime household borrowers 19, Nonprime household borrowers 14. Tighter than longer-run average levels for the foreseeable future: Prime household borrowers 25, Nonprime household borrowers 57. Current level is not tighter than average level over past decade: Prime household borrowers 25, Nonprime household borrowers 18.

Figure: Percent of respondents that expect their lending standards to remain tighter than average for the foreseeable future

Bar chart, by percent. There are two series, "Weighted by loans on balance sheet" and "Unweighted". Approximate values are: C&I: Weighted by loans on balance sheet 24, Unweighted 20. CRE: Weighted by loans on balance sheet 41, Unweighted 40. RRE: Weighted by loans on balance sheet 77, Unweighted 42. CC: Weighted by loans on balance sheet 78, Unweighted 32. Other: Weighted by loans on balance sheet 63, Unweighted 25.

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

Last update: April 1, 2015

International Developments

Trade in Goods and Services

	Annual rate				Monthly rate		
	2008	2008	2009		2009		
		Q4	Q1	Q2 ^e	Mar.	Apr.	May
	Percent change						
<i>Nominal <u>BOP</u></i>							
Exports	-3.4	-38.0	-38.7	-8.5	-2.0	-2.0	1.6
Imports	-7.3	-46.2	-54.7	-14.0	-.0	-1.5	-.6
<i>Real <u>NIPA</u></i>							
Exports	-3.4	-19.5	-29.9	-7.0	...	...	...
Imports	-6.8	-16.7	-36.4	-15.1	...	...	...
	Billions of dollars						
<i>Nominal <u>BOP</u></i>							
Net exports	-695.9	-578.0	-364.8	-328.5	-28.5	-28.8	-26.0
Goods, net	-840.2	-715.3	-496.1	-463.5	-39.2	-39.9	-37.3
Services, net	144.3	137.3	131.4	135.0	10.7	11.1	11.4

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; NIPA data are BEA's advance estimate. [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 May 2009. The series begins at about -220 and generally decreases to about -800 by 2006. It then generally increases to end at about -335. May 2009 is marked at about -350.

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

Bar chart, by percentage points, annual rate, 1999 to 2009. The series begins at about -1.6 and generally increases to about -0.25 by 1999. It then generally decreases to about -1.5 by early 2000, and generally increases to about 0.3 by 2001. It then generally decreases to about -1.35 by late 2002, and generally increases to about 0.4 by 2003. It then generally decreases to about -1.75 by 2004, and generally increases to about 0.45 by late 2005. It then generally decreases to about -0.75 by 2006, and generally increases to about 2.0 by 2006. It then generally decreases to about -0.3 by early 2007, and generally increases to about 2.35 by 2008. It then generally decreases to about -0.1 by 2008, and generally increases to about 2.6 by late 2008. It then generally decreases to end at about 1.4.

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", "Aircraft".

Capital goods ex. aircraft begins at about 245 and generally increases to about 325 by 2000. It then generally decreases to about 230 by early 2002, and generally increases to about 350 by 2008. It then generally decreases to end at about 300. Industrial supplies begins at about 125 and generally increases to about 170 by 2000. It then generally decreases to about 130 by late 2001, and generally increases to about 400 by 2008. It then generally decreases to end at about 238. Consumer goods begins at about 75 and generally increases to about 168 by 2008. It then generally decreases to end at about 145. Aircraft begins at about 54 and generally decreases to about 46 by 2003. It then generally increases to end at about 75.

Figure: Selected Imports

Line chart, by billions of dollars, annual rate, 1999 to 2009. There are four series, "Capital goods", "Consumer goods", "Industrial supplies", and "Oil". Capital goods begins at about 278 and generally increases to about 370 by 2000. It then generally decreases to about 275 by late 2001, and generally increases to about 470 by 2008. It then generally decreases to end at about 349. Consumer goods begins at about 230 and generally increases to about 490 by 2008. It then generally decreases to end at about 425. Industrial supplies begins at about 140 and generally increases to about 185 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 180. Oil begins at about 45 and generally increases to about 125 by 2000. It then generally decreases to about 80 by early 2002, and generally increases to about 330 by 2006. It then generally decreases to about 275 by late 2006, and generally increases to about 525 by 2008. It then generally decreases to end at about 212.

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

U.S. Exports and Imports of Goods and Services

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

	Levels				Change ¹			
	2009		2009		2009		2009	
	Q1	Q2 ^e	Apr.	May	Q1	Q2 ^e	Apr.	May
Exports of goods and services	1501.2	1468.3	1456.9	1479.7	-195.4	-32.9	-30.3	22.8
Goods exports	997.5	972.3	960.0	984.6	-164.8	-25.2	-30.9	24.6
Gold	13.8	12.5	10.7	14.3	.4	-1.3	-3.3	3.6
Other goods	983.7	959.8	949.3	970.3	-165.2	-23.8	-27.6	21.0
Capital goods	393.8	371.3	370.5	372.1	-42.3	-22.5	-12.7	1.6
Aircraft & parts	79.0	73.1	73.8	72.3	14.7	-6.0	1.4	-1.5
Computers & accessories	36.9	35.7	35.2	36.1	-2.4	-1.2	-1.1	.9
Semiconductors	33.4	34.1	34.0	34.2	-10.6	.7	.4	.1
Other capital goods	244.5	228.5	227.5	229.5	-44.0	-16.0	-13.4	2.1
Automotive	70.2	67.3	70.0	64.7	-38.9	-2.8	-2.0	-5.3
Ind. supplies (ex. ag., gold)	240.2	241.0	229.8	252.2	-59.3	.8	-11.9	22.4
Consumer goods	146.0	143.9	142.5	145.3	-10.1	-2.1	-5.7	2.7
Agricultural	94.4	99.6	98.5	100.7	-8.6	5.2	2.5	2.3
All other goods	39.1	36.7	38.1	35.3	-6.0	-2.4	-9.6	-2.7
Services exports	503.7	496.0	496.9	495.1	-30.6	-7.7	.6	-1.8
Imports of goods and services	1866.0	1796.8	1802.4	1791.3	-408.6	-69.2	-27.2	-11.1
Goods imports	1493.6	1435.8	1439.1	1432.6	-383.9	-57.8	-22.5	-6.5
Oil	208.9	212.1	215.7	208.4	-132.9	3.2	3.8	-7.3
Gold	7.3	6.9	7.0	6.7	.7	-.4	-1.8	-.3
Other goods	1277.5	1216.9	1216.3	1217.5	-251.7	-60.5	-24.5	1.2
Capital goods	366.3	345.3	343.7	347.0	-60.5	-21.0	-11.0	3.2
Aircraft & parts	30.2	31.3	32.5	30.1	-2.0	1.1	1.1	-2.4
Computers & accessories	80.6	82.1	80.5	83.6	-7.0	1.4	-.7	3.2
Semiconductors	19.0	20.2	19.7	20.7	-4.0	1.3	.4	1.0
Other capital goods	236.5	211.7	211.0	212.4	-47.5	-24.8	-11.8	1.4

Automotive	129.4	124.2	125.6	122.8	-70.1	-5.2	-1.8	-2.9
Ind. supplies (ex. oil, gold)	212.9	181.7	181.8	181.6	-74.8	-31.2	-11.5	-.2
Consumer goods	423.6	426.1	426.5	425.6	-32.9	2.5	4.7	-1.0
Foods, feeds, beverages	81.7	81.0	80.7	81.3	-7.1	-.6	-.9	.7
All other goods	63.7	58.6	58.0	59.2	-6.3	-5.1	-4.0	1.3
Services imports	372.3	361.0	363.3	358.7	-24.7	-11.4	-4.7	-4.6
Memo:								
Oil quantity (mb/d)	13.78	11.61	12.39	10.84	.19	-2.14	-1.14	-1.55
Oil import price (\$/bbl)	41.61	50.17	47.68	52.65	-27.83	8.58	4.78	4.97

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 -1.1 and generally increases to about 1.5 by early 2000. It then generally decreases to about -3.7 by early 2002, and generally increases to about 8.8 by 2008. It then generally decreases to end at about -5.2. Non-oil goods begins at about -2.4 and generally increases to about 2.2 by early 2001. It then generally decreases to about -5.2 by early 2002, and generally increases to about 8 by 2008. It then generally decreases to end at about -6.8.

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 and generally increases to about 7 by 2000. It then generally decreases to about -10.5 by early 2002, and generally increases to about 13.5 by 2004. It then generally decreases to about 5 by 2005, and generally increases to about 19 by 2008. It then generally decreases to end at about -16. Finished goods begins at about -0.5 and generally increases to about 2.5 by 2005. It then generally decreases to about 0 by early 2006, and generally increases to about 4 by 2008. It then generally decreases to end at about 0.

Figure: Oil

Line chart, by dollars per barrel, 1999 to 2009. There are two series, "Spot West Texas intermediate" and "Import unit value". Spot West Texas intermediate begins at about 11 and generally increases to about 35 by late 2000. It then generally decreases to about 20 by 2001, and generally increases to about 75 by 2006. It then generally decreases to about 52 by early 2007, and generally increases to about 135 by 2008. It then generally decreases to about 39 by early 2009, and generally increases to end at about 65. Import unit value begins at about 10 and generally increases to about 30 by 2000. It then generally decreases to about 15 by late 2001, and generally increases to about 126 by 2008. It then generally decreases to about 37 by early 2009, and generally increases to end at about 52.

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. These two series use two different scales. Import price index begins at about 60 and generally decreases to about 50 by 1999. It then generally increases to about 220 by early 2001, and generally decreases to about 55 by early 2002. It then generally increases to about 275 by late 2005, and generally decreases to about 120 by 2006. It then generally increases to about 285 by 2008, and generally decreases to end at about 98. Spot Henry Hub begins at about 2 and generally increases to about 9.5 by late 2000. It then generally decreases to about 2.5 by 2001, and generally increases to about 14 by 2005. It then generally decreases to about 4.5 by 2006, and generally increases to about 13 by 2008. It then generally decreases to end at about 3.

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 3.1 by early 2000. It then generally decreases to about -2.2 by early 2002, and generally increases to about 13.9 by 2008. It then generally decreases to end at about -7.5. 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 10.5 by 2008. It then generally decreases to end at about -6.8.

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 7.5 by 2000. It then generally decreases to about -7 by late 2001, and generally increases to about 24.5 by 2008. It then generally decreases to end at about -17. Finished goods begins at about 0 and generally increases to about 3 by 2008. It then generally decreases to end at about 2.

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

Prices of U.S. Imports and Exports

(Percentage change from previous period)

	Annual rate			Monthly rate		
	2008	2009		2009		
	Q4	Q1	Q2	Apr.	May	June
	BLS prices					
Merchandise imports	-47.8	-24.3	14.9	1.1	1.4	3.2
Oil	-93.2	-72.6	244.5	10.1	9.3	20.3
Non-oil	-11.9	-10.9	-3.4	-2	.1	.2
Core goods ¹	-11.6	-11.3	-1.2	.0	.3	.2
Finished goods	-1.0	-1.2	-.6	.1	.0	.1
Cap. goods ex. comp. & semi.	-.2	-.7	-1.6	.1	-.1	.1
Automotive products	-.6	-.5	.0	.0	.2	.1
Consumer goods	-1.6	-1.8	-.4	.2	.0	.1
Material-intensive goods	-29.4	-30.1	-2.6	-.2	.9	.6
Foods, feeds, beverages	-16.9	-9.6	1.2	1.5	.2	.5
Industrial supplies ex. fuels	-32.6	-35.4	-3.8	-.8	1.2	.5
Computers	-7.2	-8.3	-4.2	-.2	.2	-.6
Semiconductors	-2.4	-10.9	7.1	2.3	-.3	-.4
Natural gas	-69.2	-61.0	-75.3	-15.1	-4.1	2.9
Merchandise exports	-21.5	-8.8	2.8	.5	.5	1.1
Core goods ²	-24.9	-11.1	3.1	.5	.7	1.4
Finished goods	1.5	1.6	.5	.0	.1	.2
Cap. goods ex. comp. & semi.	1.7	3.1	2.6	.4	.1	.3
Automotive products	1.1	.5	-.6	-.1	.0	-.1
Consumer goods	1.5	-1.2	-3.5	-.8	.4	.5
Material-intensive goods	-46.1	-24.4	6.2	1.1	1.3	2.9
Agricultural products	-53.1	-12.3	20.8	3.7	3.7	4.8
Industrial suppl es ex. ag.	-44.5	-28.4	2.0	.3	.5	2.2
Computers	-8.6	-9.1	-2.6	.2	.3	.0
Semiconductors	-13.8	7.4	12.3	2.0	.3	.0
	NIPA prices					
Chain price index						
Imports of goods & services	-34.3	-28.3	4.3	...	...	...
Non-oil merchandise	-10.7	-10.5	-4.0	...	...	...
Core goods ¹	-9.1	-9.4	-2.3	...	...	...
Exports of goods & services	-21.4	-12.6	.4	...	...	...

Total merchandise	-25.4	-14.8	2.4	...	...	...
Core goods ²	-26.8	-15.3	3.0	...	...	...

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	May	June
Official financial flows	451.1	-54.6	-108.9	-286.5	313.5	315.9	102.8	115.4
1. Change in foreign official assets in the U.S. (increase, +)	475.2	479.9	117.5	-17.9	70.7	128.2	34.8	56.1
a. G-10 countries + ECB	36.8	-8.4	8.9	-16.0	-7.4	15.5	-6.9	20.5
b. OPEC	33.0	45.5	16.1	-3.4	-5.0	-0.3	2.4	-1.3
c. All other countries	405.5	430.0	92.5	-11.4	83.1	113.0	39.3	36.9
2. Change in U.S. official assets (decrease, +) ¹	-24.1	-534.6	-226.4	-268.7	242.8	187.8	67.9	59.3
Private financial flows	212.5	559.7	252.0	374.9	-266.4	n.a.	...	...
Banks								
3. Change in net foreign positions of banking offices in the U.S. ²	-86.1	-46.3	-96.7	298.1	-249.7	-160.4	-72.6	-91.6
Securities ³								
4. Foreign net purchases (+) of U.S. securities	673.9	70.9	-24.1	52.7	3.7	18.3	10.4	57.0
a. Treasury securities	67.1	197.0	79.1	81.6	55.4	17.4	-7.2	47.6
b. Agency bonds	-8.6	-185.0	-70.1	-21.5	-45.2	-13.8	2.3	-2.4
c. Corporate and municipal bonds	384.7	2.5	-35.4	-3.8	-12.5	-21.0	-0.9	-4.5
d. Corporate stocks ⁴	230.7	56.4	2.4	-3.6	6.0	35.7	16.3	16.3
5. U.S. net acquisitions (-) of foreign securities	-366.8	60.5	79.6	68.6	-33.1	-89.3	-29.5	-35.0
a. Bonds	-218.5	64.2	65.5	37.0	-31.8	-52.5	-17.1	-20.6
b. Stock purchases	-136.4	3.4	14.1	35.8	0.6	-36.8	-12.3	-14.4
c. Stock swaps ⁴	-11.9	-7.1	0.0	-4.3	-1.9	0.0	0.0	0.0
Other flows ⁵								
6. U.S. direct investment (-) abroad	-398.6	-332.0	-54.1	-84.5	-24.0	n.a.	...	...
7. Foreign direct investment in the U.S.	275.8	319.7	62.8	96.8	35.3	n.a.	...	...
8. Net derivatives (inflow, +)	6.2	-28.9	-4.1	-14.5	8.4	n.a.	...	...
9. Foreign acquisitions of U.S. currency	-10.7	29.2	5.8	29.9	11.8	n.a.	...	...
10. Other (inflow, +) ⁶	118.8	486.6	282.9	-72.2	-18.9	n.a.	...	...
U.S. current account balance⁵	-726.6	-706.1	-184.2	-154.9	-101.5	n.a.	...	...
Capital account balance⁷	-1.9	1.0	3.0	-0.7	-0.7	n.a.	...	...
Statistical discrepancy⁵	64.9	200.1	38.1	67.2	55.1	n.a.	...	...

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

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

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

3. Includes commissions on securities transactions and therefore does not match exactly the data on U.S. international transactions published by the Department of Commerce. [Return to table](#)
 4. Includes (4d) or represents (5c) stocks acquired through nonmarket means such as mergers and reincorporations. [Return to table](#)
 5. Quarterly data; seasonally adjusted. [Return to table](#)
 6. Transactions by nonbanking concerns and other banking and official transactions not shown elsewhere plus amounts resulting from adjustments made by the Department of Commerce and revisions (in lines 1 through 5 and 8) since publication of the quarterly data in the Survey of Current Business. [Return to table](#)
 7. Seasonally adjusted; consists of transactions in nonproduced nonfinancial assets and capital transfers. [Return to table](#)
 - G-10 Group of Ten (Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, United Kingdom, United States). [Return to table](#)
 - ECB European Central Bank. [Return to table](#)
 - OPEC Organization of the Petroleum Exporting Countries. [Return to table](#)
 - n.a. Not available.
 - ... Not applicable.
- Source: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Treasury International Capital reports with staff adjustments.

Foreign Official Financial Inflows (+) through June 2009

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

Figure: Total

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 17 and generally decreases to about 4 by 2005. It then generally increases to about 37 by 2005, and generally decreases to about 5 by 2005. It then generally increases to about 64 by mid-2006, and generally decreases to about -19 by 2007. It then generally increases to about 110 by early 2008, and generally decreases to about -11 by late 2008. It then generally increases to end at about 57. 6-month moving average begins at about 28 and generally decreases to about 18 by 2005. It then generally increases to about 49 by 2007, and generally decreases to about 22 by 2007. It then generally increases to about 67 by 2008, and generally decreases to about 9 by early 2009. It then generally increases to end at about 32.

Figure: Treasury Securities

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 10 and generally increases to about 12 by 2005. It then fluctuates but generally decreases to about -10 by 2005, and generally increases to about 32 by early 2006. It then generally decreases to about -30 by 2007, and generally increases to about 80 by 2008. It then generally decreases to about 21 by early 2009, and generally increases to end at about 59. 6-month moving average begins at about 16 and generally decreases to about 9 by 2005. It then generally increases to about 20 by 2006, and generally decreases to about 0 by 2007. It then generally increases to about 55 by early 2009, and generally decreases to end at about 43.

Figure: Agency Securities

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 7 and generally decreases to about 0 by 2005. It then generally increases to about 35 by 2007, and generally decreases to about -3 by 2007. It then generally increases to about 37 by early 2008, and generally decreases to about -40 by 2008. It then generally increases to about 10 by early 2009, and generally decreases to end at about -5. 6-month moving average begins at about 6 and generally increases to about 27 by 2007. It then generally decreases to about 5 by late 2007, and generally increases to about 30 by mid-2008. It then generally decreases to about -19 by late 2008, and generally increases to end at about -1.

Figure: Foreign Official Balances Held at the Federal Reserve Bank of New York, Daily through July 31, 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 1980. Agency securities begins at about 600 and generally increases to about 990 by 2008. It then generally decreases to end at about 800.

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

Private Securities Flows through June 2009

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

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

Figure: Total

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 45 and generally increases to about 58 by 2005. It then generally decreases to about 9 by 2006, and generally increases to about 80 by 2007. It then generally decreases to about 1 by early 2008, and generally increases to about 150 by 2007. It then fluctuates but generally decreases to about -80 by early 2009, and generally increases to end at about 58. 6-month moving average begins at about 40 and generally increases to about 90 by 2007. It then generally decreases to end at about 0.

Figure: Treasury Securities

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 12 and generally increases to about 42 by 2005. It then fluctuates but generally decreases to about -39 by 2006, and generally increases to about 92 by late 2008. It then generally decreases to about -40 by early 2009, and generally increases to end at about 49. 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 30 by late 2008. It then generally decreases to about 0 by 2009, and generally increases to end at about 12.

Figure: Agency Bonds

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 10 and generally decreases to about -8 by 2005. It then generally increases to about 15 by 2006, and generally decreases to about -20 by early 2007. It then generally increases to about 16 by 2007, and generally decreases to about -46 by mid-2008. It then generally increases to end at about -1. 6-month moving average begins at about 10 and generally decreases to about -28 by 2008. It then generally increases to end at about -10.

Figure: Corporate and Municipal Bonds

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 12 and generally increases to about 88 by 2007. It then generally decreases to about -8 by mid-2007, and generally increases to about 44 by 2008. It then generally decreases to about -20 by 2008, and generally increases to about 32 by late 2008. It then generally decreases to about -15 by 2009, and generally increases to end at about 0. 6-month moving average begins at about 25 and generally decreases to about 20 by 2005. It then generally increases to about 60 by early 2007, and generally decreases to about -12 by late 2008. It then generally increases to about 1 by 2009, and generally decreases to end at about -5.

Figure: Corporate Stocks

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about 12 and generally decreases to about 2 by 2005. It then generally increases to about 24 by early 2006, and generally decreases to about -10 by early 2007. It then generally increases to about 43 by 2007, and generally decreases to about -30 by 2007. It then generally increases to about 40 by 2007, and generally decreases to about -5 by early 2009. It then generally increases to end at about 17. 6-month moving average begins at about 10 and generally decreases to about 7 by 2005. It then generally increases to about 26 by mid-2007, and generally decreases to about 0 by late 2008. It then generally increases to end at about 8.

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

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

Figure: Total

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about -12 and generally increases to about -30 by 2005. It then generally increases to about -10 by 2005, and generally decreases to about -60 by 2007. It then generally increases to about 32 by 2008, and generally decreases to end at about -35. 6-month moving average begins at about -15 and generally decreases to about -44 by 2007. It then generally increases to about 28 by late 2008, and generally decreases to end at about -20.

Figure: Bonds

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about -3 and generally decreases to about -12 by 2005. It then generally increases to about 15 by 2005, and generally decreases to about -44 by early 2007. It then generally increases to about 35 by 2008, and generally decreases to end at about -20. 6-month moving average begins at about -10 and generally increases to about -3 by late 2005. It then generally decreases to about -28 by 2007, and generally increases to about 20 by late 2008. It then generally decreases to end at about -12.

Figure: Stock Purchases & Swaps

Line chart, 2005 to 2009. There are two series, "Monthly" and "6-month moving average". Monthly begins at about -9 and generally decreases to about -24 by late 2005. It then generally increases to about 5 by 2006, and generally decreases to about -33 by late 2006. It then generally increases to about 19 by 2008, and generally decreases to end at about -12. 6-month moving average begins at about -5 and generally decreases to about -19 by late 2005. It then generally increases to about -4 by 2006, and generally decreases to about -20 by early 2007. It then generally increases to about 10 by late 2008, and generally decreases to end at about -7.

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

Exchange Value of the Dollar and Stock Market Indexes

Latest		Percent change since June Greenbook
Exchange rates*		
Euro (\$/euro)	1.4400	-3.8
Yen (¥/\$)	95.4	-0.3
Sterling (\$/£)	1.6932	-3.8
Canadian dollar (C\$/ \$)	1.0685	-6.0
Nominal dollar indexes*		
Broad index	102.7	-2.8
Major currencies index	74.4	-4.0
OITP index	134.1	-1.7
Stock market indexes		
DJ Euro Stoxx	247.1	12.0
TOPIX	959.0	3.9
FTSE 100	4671.4	9.2
S&P 500	1005.7	10.4

* 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 three series, "Major currencies index", "Euro", and "Yen". Major currencies index begins at about 100 and generally increases to about 106 by late 2005. It then generally decreases to about 87 by early 2008, and generally increases to about 107 by 2009. It then generally decreases to end at about 93. Euro begins at about 100 and generally increases to about 114 by late 2005. It then generally decreases to about 85 by mid-2008, and generally increases to about 105 by late 2008. It then generally decreases to end at about 93. Yen begins at about 100 and generally increases to about 118 by 2007. It then generally decreases to about 86 by early 2009, and generally increases to end at about 91.

There is a second line chart, April to August 2009. June 17, 2009 = 100. Data are daily. The June 2009 Greenbook is marked in the time series. There are three series, "Major currencies index", "Euro", and "Yen". Major currencies index begins at about 107.5 and generally decreases to about 97 by early June. It then generally increases to about 101 by June, and generally decreases to end at about 96. Euro begins at about 105 and generally decreases to about 103 by April. It then generally increases to about 107 by April, and generally decreases to about 97 by early June. It then generally increases to about 101 by June, and generally decreases to end at about 96.5. Yen begins at about 104 and generally increases to about 105 by April. It then generally decreases to about 101 by late April, and generally increases to about 104 by early May. It then generally decreases to about 99 by May, and generally increases to about 103 by June. It then generally decreases to about 96.5 by July, and generally increases to end at about 100. They are at about 100 at the time of the June 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 160 by 2007. It then generally decreases to about 68 by 2009, and generally increases to end at about 90. TOPIX begins at about 100 and generally increases to about 150 by 2006. It then generally decreases to about 100 by 2008, and generally increases to about 120 by 2008. It then generally decreases to about 60 by 2009, and generally increases to end at about 85. S&P 500 begins at about 100 and generally increases to about 130 by 2007. It then generally decreases to about 58 by early 2009, and generally increases to end at about 85.

There is a second line chart, April to August 2009. June 17, 2009 = 100. Data are daily. The June 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 86 and generally increases to about 107 by early June. It then generally

decreases to about 97 by July, and generally increases to end at about 113. TOPIX begins at about 87 and generally increases to about 104 by June. It then generally decreases to about 93 by July, and generally increases to end at about 104. S&P 500 begins at about 86 and generally increases to about 104 by late May. It then generally decreases to about 96 by July, and generally increases to end at about 110. They are at about 101 at the time of the June 2009 Greenbook.

Industrial Countries: Nominal and Real Interest Rates

Percent

	3-month Libor		10-year nominal		10-year indexed	
	Latest	Change since Jun. Greenbook	Latest	Change since Jun. Greenbook	Latest	Change since Jun. Greenbook
Germany	0.85	-0.39	3.35	-0.14	1.33	-0.14
Japan	0.41	-0.08	1.44	-0.03	2.49	-0.79
United Kingdom	0.88	-0.37	3.85	0.07	1.33	0.26
Canada	0.60	-0.03	3.53	0.09	...	...
United States	0.47	-0.14	3.70	0.02	1.97	-0.16

... 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 3.1 by 2005. It then generally increases to about 4.7 by 2008, and generally decreases 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 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 mid-2006, and generally decreases to about 2.2 by late 2008. It then generally increases to end at about 3.7.

There is a second line chart, April to August 2009. Data are daily. The June 2009 Greenbook is marked in the time series. There are three series, "Germany", "Japan", and "United States". Germany begins at about 3 and generally increases to about 3.7 by early June. It then generally decreases to about 3.3 by July, and generally increases to about 3.5 by July. It then generally decreases to end at about 3.4. It is at about 3.5 at the time of the June 2009 Greenbook. Japan begins at about 1.4 and generally increases to about 1.5 by early June. It then generally decreases to about 1.3 by July, and generally increases to end at about 1.5. It is at about 1.5 at the time of the June 2009 Greenbook. United States begins at about 2.7 and generally increases to about 4 by June. It then generally decreases to about 3.4 by July, and generally increases to end at about 3.7. It is at about 3.8 at the time of the June 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 2.5 by mid-2007, and generally decreases to about 1.1 by 2008. It then generally increases to about 2.9 by late 2008, and generally decreases to end at about 1.1. Japan begins at about 0.7 and generally decreases to about 0.4 by 2005. It then generally increases to about 5 by late 2008, and generally decreases to end at about 2.7. United States begins at about 1.6 and generally increases to about 2.9 by 2007. It then generally decreases to about 1.1 by 2008, and generally increases to about 3.5 by late 2008. It then generally decreases to end at about 2.

There is a second line chart, April to August 2009. Data are daily. The June 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 decreases to about 1.15 by May. It then generally increases to about 1.68 by early June, and generally decreases to end at about 1.8. It is at about 1.4 at the time of the June 2009 Greenbook. Japan begins at about 3.25 and generally decreases to about 3.1 by early May. It then generally increases to about 3.6 by late May, and generally decreases to end at about 2.5. It is at about 3.25 at the time of the June 2009 Greenbook. United States begins at about 1.6 and generally increases to about 2.1 by early May. It then generally decreases to about 1.8 by May, and generally increases to about 2.25 by June. It then generally decreases to end at about 2.0. It is at about 2.15 at the time of the June 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". These two series track closely together throughout the chart. They begin at about 10 and generally decreases to about 5 by 2007. It then generally increases to about 27 by late 2008, and generally decreases to end at about 12.5.

There is a second line chart, April to August 2009. Data are daily. There are two series, "1-month" and "3-month". They begin at about 18, and generally decrease to about 13 by April. They then generally increase to about 16 by early June. 1-month generally decreases to about 11 by late July, and generally increases to end at about 12.2. It is at about 13.5 at the time of the June 2009 Greenbook. 3-month begins at about 12 by late July, and generally increases to end at about 12.8. It

is at about 14 at the time of the June 2009 Greenbook.

Note: 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 decreases to about 6 by 2007. It then generally increases to about 34 by late 2008, and generally decreases to end at about 15.

There is a second line chart, April to August 2009. Data are daily. The June 2009 Greenbook is marked in the time series. There are two series, "1-month" and "3-month". 1-month begins at about 17 and generally decreases to about 14.4 by April. It then generally increases to about 17 by early May, and generally decreases to about 12.2 by May. It then generally increases to about 15.7 by June, and generally decreases to about 13.4 by late June. It then generally increases to about 15.5 by July, and generally decreases to end at about 14. 3-month begins at about 16.4 and generally decreases to about 12.1 by May. It then generally increases to about 15.4 by early June, and generally decreases to about 13.4 by early July. It then generally increases to about 15.5 by July, and generally decreases to end at about 14.2.

Note: 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". They begin at about 10. DJ Euro Stoxx begins at about 22 by 2006, and generally decreases to about 9 by late 2006. It then generally increases to about 62 by late 2008, and generally decreases to end at about 23. TOPIX begins at about 13 and generally increases to about 25 by 2006. It then generally decreases to about 10 by mid-2007, and generally increases to about 64 by late 2008. It then generally decreases to end at about 20. S&P 500 begins at about 10 and generally increases to about 25 by 2008. It then generally decreases to about 18 by 2008, and generally increases to about 74 by late 2008. It then generally decreases to end at about 24.

There is a second line chart, April to August 2009. Data are daily. The June 2009 Greenbook is marked in the time series. There are three series, "DJ Euro Stoxx", "TOPIX", and "S&P 500". DJ Euro Stoxx begins at about 36 and generally decreases to end at about 22.5. It is at about 28.5 at the time of the June 2009 Greenbook. TOPIX begins at about 32 and generally decreases to about 28 by late April. It then generally increases to about 30 by May, and generally decreases to end at about 20. It is at about 25 at the time of the June 2009 Greenbook. S&P 500 begins at about 40.4 and generally decreases to end at about 22. It is at about 27.5 at the time of the June 2009 Greenbook.

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

Figure: Realized 10-Year Bond Volatility

Line chart, by percent, 2005 to 2009. Data are weekly. There are three series, "Germany", "Japan", and "United States". Germany begins at about 4 and generally increases to about 5.5 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 7.8. Japan begins at about 4 and generally increases to about 5.5 by 2006. It then generally decreases to about 3 by mid-2007, and generally increases to about 6.5 by mid-2008. It then generally decreases to end at about 2.5. United States begins at about 6 and generally increases to about 1.7 by 2008. It then generally decreases to about 7.9 by 2008, and generally increases to about 16.2 by late 2008. It then generally decreases to end at about 13.8.

There is a second line chart, April to August 2009. Data are daily. The June 2009 Greenbook is marked in the time series. There are three series, "Germany", "Japan", and "United States". Germany begins at about 10 and generally decreases to end at about 7. It is at about 8 at the time of the June 2009 Greenbook. Japan begins at about 3, then remains about constant until June, and generally decreases to end at about 2.5. It is at about 3 at the time of the June 2009 Greenbook. United States begins at about 15 and generally decreases to about 13.5 by May. It then generally increases to about 15 by June, and generally decreases to about 11.5 by June. It then generally increases to end at about 13.5. It is at about 12 at the time of the June 2009 Greenbook.

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

Emerging Markets: Exchange Rates and Stock Market Indexes

Exchange value of the dollar			Stock market index	
Latest	Percent change since		Latest	Percent change since
	Jun. Greenbook*			
Mexico	13.1025	-2.7	27870	15.4
Brazil	1.8326	-7.7	56038	9.8
Venezuela	2.14	0.0	46179	6.0
China	6.8302	-0.1	3471	23.5
Hong Kong	7.7500	-0.0	20796	15.0
Korea	1219.9	-3.9	1566	12.6

Taiwan	32.65	-0.9	6956	12.3
Thailand	33.96	-0.5	641	9.4

* 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 103 and generally decreases to about 90 by 2008. It then generally increases to about 138 by early 2009, and generally decreases to end at about 120. Brazil begins at about 103 and generally decreases to about 60 by 2008. It then generally increases to about 92 by late 2008, and generally decreases to end at about 70. Korea begins at about 103 and generally decreases to about 88 by 2007. It then generally increases to about 150 by 2009, and generally decreases to end at about 120. China begins at about 103 and generally decreases to end at about 80.

There is a second line chart, April to August 2009. June 17, 2009 = 100. Data are daily. The June 2009 Greenbook is marked in the time series. There are four series, "Mexico", "Brazil", "Korea", and "China". Mexico begins at about 103 and generally decreases to about 97 by April. It then generally increases to about 104.8 by late April, and generally decreases to about 95 by May. It then generally increases to about 103 by July, and generally decreases to end at about 97.5. Brazil begins at about 115 and generally decreases to about 96 by June. It then generally increases to about 101 by July, and generally decreases to end at about 92. Korea begins at about 108 and generally decreases to about 97.5 by early June. It then generally increases to about 101 by late June, and generally decreases to end at about 96.5. China begins at about 100 and remains about constant until the end. It is at about 100 at the time of the June 2009 Greenbook. Mexico, Brazil, and Korea are at about 99 at the time of the June 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". They begin at about 100. Mexico generally increases to about 250 by mid-2007, and generally decreases to about 130 by early 2009. It then generally increases to end at about 219. Brazil generally increases to about 280 by 2008, and generally decreases to about 128 by late 2008. It then generally increases to end at about 220. Korea generally increases to about 228 by late 2007, and generally decreases to about 115 by late 2008. It then generally increases to end at about 175. Hong Kong generally increases to about 223 by late 2007, and generally decreases to about 80 by 2009. It then generally increases to end at about 148.

There is a second line chart, April to August 2009. June 17, 2009 = 100. Data are daily. The June 2009 Greenbook is marked in the time series. There are four series, "Mexico", "Brazil", "Korea", and "Hong Kong". Mexico begins at about 85 and generally increases to about 107 by early June. It then generally decreases to about 96 by July, and generally increases to end at about 115. Brazil begins at about 85 and generally increases to about 105 by June. It then generally decreases to about 95 by July, and generally increases to end at about 110. Korea begins at about 90 and generally increases to about 104 by May. It then generally decreases to about 99 by June, and generally increases to end at about 112. Hong Kong begins at about 80 and generally increases to about 105 by June. It then generally decreases to about 97 by July, and generally increases to end at about 114. It is at about 101 at the time of the June 2009 Greenbook.

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

	Short-term interest rates*		Dollar-denominated bond spreads**	
	Latest	Change since Jun. Greenbook	Latest	Change since Jun. Greenbook
Mexico	4.48	-0.56	1.94	-0.54
Brazil	8.60	-0.40	2.40	-0.49
Argentina	13.06	-0.06	8.82	-2.61
China	...	...	1.02	0.06
Korea	2.10	0.00	...	...
Taiwan	1.07	-0.03	...	...
Singapore	0.31	0.00	...	...
Hong Kong	0.07	-0.03	...	...

* 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 3.5. Mexico begins at about 1.7 and generally decreases to about 0.8 by 2007. It then generally increases to about 5.2 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 6 by 2008. It then generally

decreases to end at about 2.5.

There is a second line chart, April to August 2009. Data are daily. The June 2009 Greenbook is marked in the time series. There are three series, "Overall", "Mexico", and "Brazil". Overall begins at about 6.4 and generally decreases to end at about 3.4. It is at about 4.8 at the time of the June 2009 Greenbook. Mexico begins at about 3.7 and generally decreases to about 2.1 by early June. It then generally increases to about 3 by July, and generally decreases to end at about 1.9. It is at about 2.7 at the time of the June 2009 Greenbook. Brazil begins at about 4.2 and generally decreases to about 2.8 by June. It then generally increases to about 3.2 by July, and generally decreases to end at about 2.3. It is at about 3 at the time of the June 2009 Greenbook.

Figure: EMBI Global Spreads

Line chart, by percent, 2005 to 2009. Data are weekly. There are three series, "China", "Malaysia", and "Indonesia". China begins at about 0.8 and remains about constant until mid-2007. It then generally increases to about 3 by late 2008, and generally decreases to end at about 1. Malaysia begins at about 0.9 and remains about constant until about 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 1.8 by mid-2007. It then generally increases to about 10.2 by 2008, and generally decreases to end at about 3.

There is a second line chart, April to August. Data are daily. The June 2009 Greenbook is marked in the time series. There are three series, "China", "Malaysia", and "Indonesia". China begins at about 2 and generally decreases to about 0.8 by June. It then generally increases to about 1.8 by July, and generally decreases to end at about 1. It is at about 1 at the time of the June 2009 Greenbook. Malaysia begins at about 3.2 and generally decreases to end at about 1.7. It is at about 2 at the time of the June 2009 Greenbook. Indonesia begins at about 7.2 and generally decreases to about 3.8 by June. It then generally increases to about 4.9 by June, and generally decreases to end at about 3. It is at about 4.5 at the time of the June 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 3.5 and generally increases to about 5.5 by 2000. It then generally decreases to about -0.6 by 2001, and generally increases to about 3.8 by 2003. It then generally decreases to end at about -7.9.

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 0.3 and generally decreases to about -1.3 by late 1999. It then generally increases to about -0.1 by late 2000, and generally decreases to about -1.6 by early 2002. It then generally increases to about 0.9 by late 2004, and generally decreases to about -1.4 by late 2005. It then generally increases to about 2.4 by 2008, and generally decreases to end at about -1.7. Euro area begins at about 0.8 and generally increases to about 3.1 by 2001. It then generally decreases to about 1.6 by early 2004, and generally increases to about 4 by 2008. It then generally decreases to end at about -0.5. Canada begins at about 1 and generally increases to about 3.9 by 2001. It then generally decreases to about 0.6 by late 2001, and generally increases to about 4.6 by early 2003. It then generally decreases to about 0.7 by 2004, and generally increases to about 3.4 by 2005. It then generally decreases to about 0.6 by 2006, and generally increases to about 3.5 by 2008. It then generally decreases to end at about -0.4. United Kingdom begins at about 1.6 and generally decreases to about 0.5 by 2000. It then generally increases to about 3.1 by 2007, and generally decreases to about 1.7 by 2007. It then generally increases to about 5.2 by 2008, and generally decreases to end at about 1.8.

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 late 1999. It then generally increases to about 0.3 by 2000, generally decreases to about 0 by early 2001 and remains about constant until mid-2006. It then generally increases to about 0.5 by early 2007, and generally decreases to end at about 0.1. Euro area begins at about 3 and generally decreases to about 2.5 by 1999. It then generally increases to about 4.7 by 2000, and generally decreases to about 2 by 2003. It remains about constant until late 2005, and generally increases to about 4.4 by 2008. It then generally decreases to end at about 1. Canada begins at about 5 and generally decreases to about 4.5 by 1999. It then generally increases to about 5.7 by 2000, and generally decreases to about 2 by early 2002. It then generally increases to about 3.3 by 2003, and generally decreases to about 2 by 2004. It then generally increases to about 4.5 by 2007, and generally decreases to end at about 0.2. United Kingdom begins at about 6.2 and generally decreases to about 5 by 1999. It then generally increases to about 6 by early 2000, and generally decreases to about 3.5 by 2003. It then generally increases to about 5.7 by 2007, and generally decreases to end at about 0.5.

Source: Bloomberg.

Japanese Real GDP

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

Component	2007 ¹	2008 ¹	2008			2009
			Q2	Q3	Q4	Q1
GDP	1.9	-4.4	-2.2	-2.9	-13.5	-14.2
Total domestic demand	.5	-1.8	-4.4	-2.7	-1.3	-8.8
Consumption	.2	-.2	-3.8	.5	-3.1	-4.2
Private investment	-1.7	-8.6	-10.5	-12.0	-17.3	-29.3
Public investment	-4.4	-5.0	-2.9	3.9	-.3	.3
Government consumption	3.3	.2	-3.5	-.6	6.5	.1
Inventories ²	.4	.1	.6	-.6	2.3	-.6
Exports	10.1	-12.5	-3.2	4.0	-47.1	-70.0
Imports	1.7	2.8	-15.7	6.3	13.1	-47.8
Net exports ²	1.3	-2.3	1.3	.0	-10.5	-7.8

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

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

Source: Haver Analytics.

Japan

Figure: Economic Activity

Line chart, 2000 to 2009. 2005 = 100. There are two series, "Industrial production" and "Tertiary services". Industrial production begins at about 95 and generally increases to about 103 by late 2000. It then generally decreases to about 87 by 2001, and generally increases to about 110 by early 2008. It then generally decreases to about 68 by early 2009, and generally increases to end at about 81. Tertiary services begins at about 93 and generally increases to about 104 by 2007. It then generally decreases to end at about 95.

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 73 and generally increases to about 82 by 2000. It then generally decreases to about 66 by late 2001, and generally increases to about 133 by early 2008. It then generally decreases to about 77 by early 2009, and generally increases to end at about 93. Real imports begins at about 79 and generally increases to about 90 by 2000. It then generally decreases to about 81 by late 2001, and generally increases to about 111 by early 2007. It then generally decreases to about 82 by early 2009, and generally increases to end at about 86.

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 by ratio. These two series use two different scales. Unemployment rate begins at about 4.6 and generally increases to about 5.55 by 2002. It then generally decreases to about 3.52 by mid-2007, and generally increases to end at about 5.4. Job openings to applications begins at about 0.49 and generally increases to about 0.65 by late 2000. It then generally decreases to about 0.5 by early 2002, and generally increases to about 1.08 by late 2006. It then generally decreases to end at about 0.43.

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 -1.25 by late 2000. It then generally increases to about -0.3 by early 2001, and generally decreases to about -1.7 by early 2002. It then generally increases to about 1 by late 2004, and generally decreases to about -1.2 by late 2005. It then generally increases to about 2.4 by 2008, and generally decreases to end at about -1.7. Core begins at about -0.2 and generally decreases to about -1.2 by early 2001. It then generally increases to about -0.2 by 2003, and generally decreases to about -0.9 by 2004. It then generally increases to about 0.1 by 2008, and generally decreases to end at about -0.6.

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

Source: Haver Analytics.

Economic Indicators

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

Indicator	2008	2009		2009			
	Q4	Q1	Q2	Mar.	Apr.	May	June
Housing starts	-8.3	-10.6	-15.7	2.6	-12.3	-2.7	-1.2
Machinery orders ¹	-15.1	-9.9	n.a.	-1.3	-5.4	-3.0	n.a.
Household expenditures	-1.5	-1.8	n.a.	.8	.6	.6	n.a.
New car registrations	-14.8	-12.7	13.5	-3.4	12.4	4.5	8.1
Business sentiment ²	-24.0	-46.0	-45.0	...	...	...	...
Wholesale prices ³	2.6	-1.8	-5.4	-2.5	-4.0	-5.5	-6.6

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
			Q2	Q3	Q4	Q1
GDP	2.2	-1.7	-1.0	-1.5	-6.9	-9.7
Total domestic demand	2.0	-.4	-2.2	1.3	-2.9	-7.6
Consumption	1.2	-.7	-1.2	-.1	-1.8	-1.8
Investment	3.2	-5.4	-5.1	-4.2	-15.4	-15.4
Government consumption	2.0	2.2	3.5	2.0	1.4	.8
Inventories ²	.2	.7	-.9	1.6	1.1	-3.6
Exports	3.9	-6.6	-1.3	-2.4	-26.1	-30.9
Imports	3.5	-3.9	-3.9	3.8	-19.1	-27.0
Net exports ²	.2	-1.3	1.1	-2.7	-4.1	-2.2
Memo: GDP of selected countries						
France	2.2	-1.7	-1.6	-.8	-5.7	-4.8
Germany	1.7	-1.8	-2.0	-2.1	-8.6	-14.4
Italy	.2	-3.0	-2.2	-3.1	-8.3	-10.1

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

Source: Haver Analytics.

Euro Area

Figure: Nominal Exports and Imports

Line chart, by billions of U.S. dollars, 2000 to 2009. There are two series, "Exports" and "Imports". These two series track closely. They begin at about 75 and generally increase to about 225 by 2008. They then generally decrease to end at about 168.

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 -2 and generally increases to about 3 by 2000. It then generally increases to about -21 by 2003, and generally increases to about 0 by 2007. It then generally

decreases to -35 by 2009, and generally increases to end at about -25. Industrial confidence begins at about -2 and generally increases to about 6 by 2000. It then generally decreases to about -17 by late 2001, and generally increases to about 6 by 2007. It then generally decreases to about -38 by 2009, and generally increases to end at about -33.

Source: Haver Analytics.

Figure: Unemployment Rate

Line chart, by percent, 2000 to 2009. The series begins at about 8.75 and generally decreases to about 7.8 by early 2001. It then generally increases to about 9.0 by 2005, and generally 7.2 by late 2007. It then generally increases to end at about 9.5.

Source: Haver Analytics.

Figure: Consumer Price Inflation

Line chart, by percent, 12-month basis, n.s.a., 2000 to 2009. There are two series, "Consumer price inflation" and "Core". Consumer price inflation begins at about 1.4 and generally increases to about 3.2 by 2001. It then generally decreases to about 1.6 by early 2004, and generally increases to about 2.7 by 2005. It then generally decreases to about 1.5 by late 2006, and generally increases to about 4.1 by 2008. It then generally decreases to end at about -0.6. Core begins at about 0.8 and generally increases to about 2.5 by 2002. It then generally decreases to about 1.3 by early 2006, and generally increases to about 2 by early 2007. It then generally decreases to end at about 1.5.

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

Source: Haver Analytics.

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

Indicator	2008	2009		2009			
	Q4	Q1	Q2	Mar.	Apr.	May	June
Industrial production ¹	-6.2	-7.4	n.a.	-1.0	-1.4	.5	n.a.
Retail sales volume ²	-.8	-.9	n.a.	-.1	.2	-.5	-.2
New car registrations	-6.4	1.6	n.a.	4.2	-.1	6.8	n.a.
Employment	-.4	-.9	n.a.	...	...	...	...
Producer prices ³	2.6	-1.9	n.a.	-3.0	-4.1	-5.3	n.a.
M3 ³	9.2	6.5	4.7	5.9	5.7	4.3	4.2

1. Excludes construction. [Return to table](#)
2. Excludes motor vehicles. [Return to table](#)
3. Eurostat harmonized definition. Percent change from year earlier. [Return to table](#)

n.a. Not available.

... Not applicable.

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

Source: Haver Analytics.

U.K. Real GDP

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

Component	2007 ¹	2008 ¹	2008		2009	
			Q3	Q4	Q1	Q2
GDP	2.4	-1.8	-2.9	-7.0	-9.3	-3.1
Total domestic demand	3.1	-2.9	-3.1	-8.7	-9.5	n.a.
Consumption	2.2	-.5	-1.3	-4.3	-5.3	n.a.
Investment	4.9	-7.8	-10.7	-4.7	-26.9	n.a.
Government consumption	1.2	3.5	1.9	4.3	.9	n.a.
Inventories ²	.6	-2.0	-.8	-6.3	-1.5	n.a.
Exports	3.4	-3.8	-1.7	-15.6	-25.0	n.a.
Imports	5.6	-7.7	-2.8	-20.2	-24.1	n.a.

Net exports ²	- .8	1.4	.4	2.1	.4	n.a.
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1. Q4/Q4. [Return to table](#)

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

n.a. Not available.

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 1.2 and generally decreases to about 0.5 by 2000. It then generally increases to about 3.2 by early 2007, and generally decreases to about 1.8 by 2007. It then generally increases to about 5.5 by 2008, and generally decreases to end at about 1.8. Core begins at about 0.5 and generally decreases to about -0.5 by 2000. It then generally increases to about 1.4 by 2001, and generally decreases to about 0.6 by 2006. It then generally increases to about 1.8 by 2008, and generally decreases to about 0.6 by late 2008. It then generally increases to end at about 1.5.

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 4.7 by 2005. It then generally increases to end at about 7.6. Claimant count begins at about 4 and generally decreases to about 2.5 by early 2008. It then generally increases to end at about 4.9.

Source: Haver Analytics.

Figure: Purchasing Managers Survey

Line chart, 50+ = expansion, 1999 to 2009. There are two series, "Services" and "Manufacturing". Services begins at about 57 and generally increases to about 60 by late 1999. It then generally decreases to about 46 by 2001, and generally increases to about 60.5 by early 2007. It then generally decreases to about 40 by late 2008, and generally increases to end at about 53. Manufacturing begins at about 54 and generally increases to about 56.5 by early 2000. It then generally decreases to about 45.5 by late 2001, and generally increases to about 56 by early 2004. It then generally decreases to about 46 by 2005, and generally increases to about 56 by early 2007. It then generally decreases to about 35 by early 2009, and generally increases to end at about 50.5.

Source: Reuters.

Figure: Labor Costs

Line chart, by percent, 12-month basis, late 1999 to 2009. There are two series, "Unit wage costs" and "Average earnings". Unit wage costs -2.5 and generally increases to about 5 by 2002. It then generally decreases to about -5.2 by early 2004, and generally increases to about 12.5 by early 2009. It then generally decreases to end at about 5. Average earnings begins at about 5 and generally increases to about 6.5 by late 1999. It then generally decreases to about 2.5 by early 2002, and generally increases to about 6 by early 2008. It then generally decreases to about -2 by early 2009, and generally increases to end at about 2.5.

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	2008	2009			2009		
	Q4	Q1	Q2	Apr.	May	June	July
Producer input prices ¹	9.0	.7	-8.5	-5.7	-8.6	-11.0	n.a.
Industrial production	-4.6	-5.1	-.6	.1	-.6	.5	n.a.
Business confidence ²	-38.3	-45.0	-22.0	-32.0	-17.0	-17.0	-14.0
Consumer confidence ²	-28.1	-31.0	-19.9	-20.7	-20.8	-18.1	n.a.
Trade balance ³	-9.5	-11.9	n.a.	-4.5	-3.3	n.a.	n.a.
Current account ³	-13.7	-12.2	n.a.	...	...	...	...

1. Percent change from year earlier. [Return to table](#)

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

3. Level in billions of U.S. dollars. [Return to table](#)

n.a. Not available.

... Not applicable.

Source: Haver Analytics; FRB staff calculations.

Canadian Real GDP

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

Component	2007 ¹	2008 ¹	2008			2009
			Q2	Q3	Q4	Q1
GDP	2.8	-1.0	.3	.4	-3.7	-5.4
Total domestic demand	6.6	-1.1	2.9	.6	-6.1	-9.9
Consumption	5.4	.2	1.1	.6	-3.1	-1.6
Investment	4.5	-3.6	-.2	.6	-14.8	-20.6
Government consumption	3.7	3.1	4.6	.0	2.5	1.2
Inventories ²	1.7	-1.1	1.3	.1	-1.2	-4.3
Exports	-1.5	-7.3	-4.1	-4.1	-17.7	-30.4
Imports	8.5	-7.7	3.0	-3.4	-23.4	-37.8
Net exports ²	-4.2	.7	-2.4	-.4	2.2	3.6

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

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

Source: Haver Analytics.

Canada

Figure: Real Gross Domestic Product by Industry

Line chart, by percent change from year earlier, 2000 to 2009. The series begins at about 6.1 and generally increases to about 6.8 by late 1999. It then generally decreases to about 0.2 by 2001, and generally increases to about 4.5 by 2004. It then generally decreases to 2 by 2005, and generally increases to about 4.3 by early 2006. It then generally decreases to end at about -3.5.

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

Source: Haver Analytics.

Figure: Real Trade

Line chart, late 1999 to 2009. 2002 = 100. There are two series, "Real exports" and "Real imports". Real exports begins at about 96 and generally increases to about 105 by 2000. It then generally decreases to about 92 by 2003, and generally increases to about 114 by early 2007. It then generally decreases to end at about 79. Real imports begins at about 100 and generally increases to about 105 by 2000. It then generally decreases to about 94 by late 2001, and generally increases to about 145 by 2008. It then generally decreases to end at about 110.

Source: Haver Analytics.

Figure: Unemployment Rate

Line chart, by percent, late 1999 to 2009. It begins at about 7.2 and generally decreases to about 6.75 by 2000. It then generally increases to about 8.0 by early 2002, and generally decreases to about 5.8 by early 2008. It then generally increases to end at about 8.6.

Source: Haver Analytics.

Figure: Consumer Price Inflation

Line chart, by percent, 12-month basis, n.s.a., late 1999 to 2009. There are two series, "Consumer price inflation" and "Core". Consumer price inflation begins at about 2.3 and generally increases to about 4.1 by 2001. It then generally decreases to about 0.6 by 2001, and generally increases to about 4.7 by early 2003. It then generally decreases to about 0.6 by early 2004, and generally increases to about 3.5 by 2005. It then generally decreases to about 0.6 by 2006, and generally increases to about 3.5 by 2008. It then generally decreases to about -0.3. Core begins at about 1.5 and generally increases to about 4.3 by late 2002. It then

generally decreases to about 1 by 2004, and generally increases to about 2.4 by 2007. It then generally decreases to end at about 1.1.

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

Source: Haver Analytics.

Economic Indicators

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

Indicator	2008	2009		2009			
	Q4	Q1	Q2	Mar.	Apr.	May	June
Industrial production	-3.2	-4.9	n.a.	-1.7	-1.1	-1.9	n.a.
New manufacturing orders	-9.2	-12.8	n.a.	-3.1	-.4	-13.4	n.a.
Retail sales	-1.7	-1.1	n.a.	.7	-.4	.7	n.a.
Employment	.1	-1.4	-.4	-.4	.2	-.2	.0
Wholesale sales	-7.6	-7.2	n.a.	-1.1	.2	.0	n.a.
Ivey PMI ¹	43.8	41.5	53.4	43.2	53.7	48.4	58.2

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

n.a. Not available.

Source: Haver Analytics; Bank for International Settlements.

Chinese Economic Indicators

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

Indicator	2007	2008	2009				
			Q1	Q2	Apr.	May	June
Real GDP ¹	12.3	6.9	6.5	18.5	...	...	...
Industrial production	19.5	1.8	7.8	4.4	-.2	1.4	6.2
Consumer prices ²	6.5	1.2	-.6	-1.5	-1.5	-1.4	-1.7
Merch. trade balance ³	262.7	298.2	324.7	145.0	176.9	191.3	66.7

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

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

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

n.a. Not available.

... Not applicable.

Source: CEIC.

Indian Economic Indicators

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

Indicator	2007	2008	2009				
			Q1	Q2	Apr.	May	June
Real GDP ¹	9.3	5.8	7.8	n.a.	...	...	...
Industrial production	9.9	4.4	1.4	n.a.	1.5	.5	n.a.
Consumer prices ²	5.5	9.7	9.4	8.2	8.7	7.7	8.3
Wholesale prices ²	3.8	6.2	3.2	.4	1.3	1.2	-1.4
Merch. trade balance ³	-69.7	-114.5	-55.6	-60.2	-55.3	-52.8	-72.6
Current account ⁴	-11.3	-36.1	19.0	n.a.	...	...	...

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

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

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

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

n.a. Not available.

... Not applicable.

Source: CEIC.

China and India

Figure: Industrial Production

Line chart, 2003 to 2009. 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 162.5. India begins at about 114 and generally increases to end at about 178.

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 0.5 and generally increases to about 5.2 by 2004. It then generally decreases to about 1 by 2006, and generally increases to about 9 by early 2008. It then generally decreases to end at about -1.8. India begins at about 3.4 and generally increases to about 5 by 2003. It then generally decreases to about 2.2 by 2004, and generally increases to about 7.6 by 2007. It then generally decreases to about 5.5 by early 2008, and generally increases to about 10.8 by early 2009. It then generally decreases to end at about 8.5.

Source: China Statistic and Consultancy Service Center; CEIC.

Figure: Merchandise Trade Balances

Line chart, by billions of dollars, 2003 to 2009. Data are 3-month moving averages (n.s.a.). There are two series, "China" and "India". China begins at about 2 and generally increases to about 5 by late 2003. It then generally decreases to about 0 by 2004, and generally increases to about 44 by early 2009. It then generally decreases to end at about 13. India begins at about -1 and generally decreases to about -12 by 2008. It then generally increases to about -4.

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 remains about constant until late 2004. It then generally increases to about 7.5 by late 2007, and generally decreases to end at about 5.4. India begins at about 5.5 and generally increases to about 7.5 by 2003. It then generally decreases to about 4.5 by 2004, and generally increases to about 9 by 2008. It then generally decreases to end at about 4.7.

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 end at about 24.

Source: Bank for International Settlements; Haver Analytics.

Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to 2009. The India series begins at about 6, and generally increases to about 7.5 by 2003. It then generally decreases to about 4 by early 2004, and generally increases to end at about 20.

Source: Bank for International Settlements; CEIC.

Economic Indicators for Newly Industrialized Economies: Growth

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

	2007	2008	2009			
			Q1	Q2	Apr.	May
Real GDP ¹						

Hong Kong	7.1	-2.7	-16.1	n.a.	...	...	...
Korea	5.7	-3.4	.5	9.7	...	...	...
Singapore	5.8	-4.0	-14.6	n.a.	...	...	...
Taiwan	6.5	-8.5	-4.2	n.a.	...	...	...
<i>Industrial production</i>							
Hong Kong	-1.5	-6.6	-2.8	n.a.	...	...	...
Korea	7.0	3.0	-2.7	11.4	2.6	1.5	5.7
Singapore	5.9	-4.2	-7.5	n.a.	31.3	-2.6	n.a.
Taiwan	7.8	-1.8	-8.0	17.3	6.6	1.6	5.0

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

n.a. Not available.

... Not applicable.

Source: CEIC; Reuters.

Economic Indicators for Newly Industrialized Economies: Merchandise Trade Balance

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

	2007	2008	2009				
			Q1	Q2	Apr.	May	June
Hong Kong	-23.5	-25.9	-19.9	-15.5	-15.7	-11.6	-19.2
Korea	28.2	6.0	41.0	68.0	77.3	67.8	59.0
Singapore	36.2	18.4	11.6	26.8	33.6	23.3	23.5
Taiwan	16.8	4.4	28.5	23.9	21.7	30.3	19.6

n.a. Not available.

Source: CEIC.

Economic Indicators for Newly Industrialized Economies: Consumer Price Inflation

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

	2007 ¹	2008 ¹	2009				
			Q1	Q2	May	June	July
Hong Kong	3.8	2.1	1.7	-.1	.1	-.9	n.a.
Korea	3.6	4.1	3.9	2.8	2.7	2.0	1.6
Singapore	4.4	4.3	2.1	-.5	-.3	-.5	n.a.
Taiwan	3.3	1.3	.0	-.8	-.1	-2.0	n.a.

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

n.a. Not available.

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 increases to about 169 by late 2007. It then generally decreases to about 134 by late 2008, and generally increases to end at about 167. Singapore begins at about 100 and generally decreases to about 88 by 2003. It then generally increases to about 133 by late 2004, and generally decreases to about 100 by early 2005. It then generally increases to about 179 by 2007, and generally decreases to about 112 by 2009. It then generally increases to end at about 142. Hong Kong begins at about 79 and generally 85 by early 2006. It then generally decreases to end at about 72. Taiwan begins at about 105 and generally increases to about 153 by early 2008. It then generally decreases to about 95 by early 2009, and generally increases to end at about 123.

Figure: Consumer Prices

Source: CEIC; Bank of Korea; Reuters.

Figure: Merchandise Trade Balances

Source: CEIC.

Figure: Benchmark Interest Rates

Source: Bloomberg.

Figure: Gross External Debt

Source: Bank for International Settlements.

Figure: Short-Term External Debt

Source: Bank for International Settlements.

ASEAN-4 ¹ Economic Indicators: Growth

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

[illegible]

Indonesia ⁴	5.6	3.0	1.9	n.a.	-2.8	4.2	n.a.
Malaysia	2.1	.5	-4.5	n.a.	3.6	-.3	n.a.
Philippines	-2.7	.3	-15.4	n.a.	1.0	4.9	n.a.
Thailand	8.2	5.3	-9.0	10.1	5.6	.2	3.0

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

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

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

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

n.a. Not available.

... Not applicable.

Source: CEIC.

ASEAN-4 ¹ Economic Indicators: Merchandise Trade Balance

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

Indicator	2007	2008	2009				
			Q1	Q2	Apr.	May	June
Indonesia	39.6	32.4	28.1	36.6	41.9	34.5	33.4
Malaysia	29.2	42.7	38.1	n.a.	28.2	33.1	n.a.
Philippines	-5.0	-7.7	-8.7	n.a.	-2.3	-6.3	n.a.
Thailand	11.6	.2	32.6	22.6	21.0	34.8	12.2

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

n.a. Not available.

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

ASEAN-4 ¹ Economic Indicators: Consumer Price Inflation

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

Indicator	2007 ²	2008 ²	2009				
			Q1	Q2	May	June	July
Indonesia	5.8	11.1	8.6	5.6	6.0	3.7	n.a.
Malaysia	2.4	4.4	3.7	1.3	2.4	-1.4	n.a.
Philippines	3.9	8.0	6.9	3.2	3.3	1.5	n.a.
Thailand	3.2	.4	-.2	-2.8	-3.3	-4.0	-4.4

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

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

n.a. Not available.

Source: CEIC; IMF International Financial Statistics database.

ASEAN-4

Figure: Industrial Production

Line chart, 2003 to 2009. January 2000 = 100. There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand". Indonesia begins at about 138 and generally increases to about 165 by 2004. It then generally decreases to about 138 by late 2005, and generally increases to end at about 170. Malaysia begins at about 112 and generally increases to about 162.5 by early 2008. It then generally decreases to end at about 137.5. Philippines begins at about 100 and generally decreases to about 64 by early 2009. It then generally increases to end at about 76. Thailand begins at about 130 and generally increases to about 212 by early 2008. It then generally decreases to about 164 by late 2008, and generally increases to end at about 189.

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 2006. It then generally increases to about 12 by 2008, and generally decreases to end at about 3.8. Malaysia begins at about 1.8 and generally decreases to about 0.5 by 2003. It then generally increases to about 4.8 by 2006, and generally decreases to about 1 by 2007. It then generally increases to about 8 by 2008, and generally decreases to end at about -2. Philippines begins at about 2.8 and generally increases to about 8 by late 2004. It then generally decreases to about 2.5 by early 2007, and generally increases to about 12.5 by 2008. It then generally decreases to end at about 1.8. Thailand begins at about 2.5 and generally decreases to about 1 by early 2004. It then generally increases to about 6.2 by 2005, and generally decreases to about 1 by 2007. It then generally increases to about 9.8 by 2008, and generally decreases to end at about -4.5.

Source: IMF International Financial Statistics; CEIC.

Figure: Merchandise Trade Balances

Line chart, by billions of dollars, 2003 to 2009. Data are 3-month moving averages (n.s.a.). There are four series, "Indonesia", "Malaysia", "Philippines", and "Thailand". Indonesia begins at about 2 and generally increases to about 2.9 by 2004. It then generally decreases to about 2 by 2005, and generally increases to about 3.7 by late 2006. It then generally decreases to end at about 2. Malaysia begins at about 1.5 and generally increases to about 2.5 by 2005. It then generally decreases to about 2 by 2007, and generally increases to about 4.7 by 2008. It then generally decreases to end at about 2.8. Philippines begins at about -0.4 and generally increases to about -0.1 by late 2004. It then generally decreases to about -0.7 by 2005, and generally increases to about -0.1 by 2007. It then generally decreases to about -0.9 by early 2008, and generally increases to end at about -0.5. Thailand begins at about 0.2 and generally increases to about 0.8 by 2003. It then generally decreases to about -1.1 by 2005, and generally increases to about 1.4 by 2008. It then generally decreases to about -1.3 by 2008, and generally increases to about 2.9 by early 2009. It then generally decreases to end at about 2.

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 about 8 by late 2007. It then generally increases to about 9.7 by 2008, and generally decreases to end at about 7.5. Malaysia begins at about 2.5 and remains about constant until 2005. It then generally increases to about 4 by 2006, and remains about constant until late 2008. It then generally decreases to end at about 2. Philippines begins at about 7 and generally decreases to about 6.8 by 2003. It then remains about constant until 2005, and generally increases to about 7.5 by 2005. It then remains about constant until 2007, and generally decreases to end at about 4. Thailand 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 end at about 1.

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 24 by 2008. It then generally increases to end at about 33. 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 43. Philippines begins at about 75 and generally decreases to about 65 by late 2003. It then generally increases to about 71 by early 2004, and generally decreases to about 31 by late 2007. It then generally increases to end at about 36. Thailand begins at about 40 and generally decreases to about 22 by late 2007. It then generally increases to end at about 24.

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 37 by early 2004. It then generally increases to about 62 by 2005, and generally decreases to about 16 by 2006. It then generally increases to about 41 by late 2008, and generally decreases to end at about 35. Malaysia begins at about 30 and generally increases to about 33 by 2003. It then generally decreases to about 20 by early 2007, and generally increases to end at about 35. Philippines begins at about 48 and generally decreases to about 45 by late 2003. It then generally increases to about 57 by early 2004, and generally decreases to about 20 by early 2008. It then generally increases to about 27 by 2008, and generally decreases to end at about 19. Thailand begins at about 28 and generally decreases to about 20 by late 2004. It then generally increases to about 30 by 2006, and generally decreases to end at about 16.

Source: Bank for International Settlements.

Note: ASEAN is the Association of Southeast Asian Nations.

Mexican Economic Indicators

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



Indicator	2007	2008	2009				
			Q1	Q2	Apr.	May	June
Real GDP ¹	3.6	-1.7	-21.5	n.a.	...	...	...
Overall economic activity	3.1	1.0	-5.1	n.a.	-4	-1.0	n.a.
Industrial production	2.4	-.9	-4.7	n.a.	1.2	-2.2	n.a.
Unemployment rate ²	3.7	4.0	4.8	5.7	5.4	6.1	5.6
Consumer prices ³	3.8	6.5	6.2	6.0	6.2	6.0	5.7
Merch. trade balance ⁴	-10.1	-17.3	-12.0	-4.6	-3.5	-3.0	-7.3
Merchandise imports ⁴	281.9	308.6	228.3	216.6	217.3	210.0	222.6
Merchandise exports ⁴	271.9	291.3	216.2	212.0	213.8	206.9	215.3
Current account ⁵	-8.2	-15.6	-4.3	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, annual rate. [Return to table](#)
5. Billions of U.S. dollars, not seasonally adjusted, annual rate. [Return to table](#)

n.a. Not available.

... Not applicable.

Source: Haver Analytics; Bank of Mexico.

Brazilian Economic Indicators

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

Indicator	2007	2008	2009				
			Q1	Q2	May	June	July
Real GDP ¹	6.0	1.1	-3.3	n.a.	...	...	...
Industrial production	6.0	3.1	-7.7	3.4	1.2	.2	n.a.
Unemployment rate ²	9.3	7.9	8.5	8.3	8.5	7.9	n.a.
Consumer prices ³	4.5	5.9	5.8	5.2	5.2	4.8	n.a.
Merch. trade balance ⁴	40.0	24.8	21.1	43.3	32.0	50.5	23.4
Current account ⁵	1.6	-28.2	-19.8	-8.5	-20.9	-6.4	n.a.

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

n.a. Not available.

... Not applicable.

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

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 2003. It then generally increases to about 143 by 2008, and generally decreases to about 114 by late 2008. It then generally increases to end at about 124. Mexico begins at about 97 and generally increases to about 115 by early 2008. It then generally decreases to end at about 101.

Source: Fundacion de Investigaciones Economicas Latinoamericanas; Haver Analytics.

Figure: Consumer Prices

Line chart, by percent change from year earlier, 2003 to 2009. There are two series, "Brazil" and "Mexico". Brazil begins at about 14.9 and generally increases to about 17.5 by 2003. It then generally decreases to about 5 by 2004, and generally increases to about 8 by 2005. It then generally decreases to about 2.8 by late 2006, and generally increases to about 6.5 by 2008. It then generally decreases to end at about 5. Mexico begins at about 5.2 and generally increases to about 5.5 by 2003. It then generally decreases to about 2.8 by late 2005, and generally increases to about 7 by late 2008. It then generally decreases to end at about 5.8.

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

Figure: Merchandise Trade Balances

Line chart, by billions of dollars, 2003 to 2009. Data are 3-month moving averages (n.s.a.). There are two series, "Brazil" and "Mexico". Brazil begins at about 1.6 and generally increases to about 4.3 by early 2006. It then generally decreases to about 1.3 by 2008, and generally increases to about 3.7 by 2009. It then generally decreases to end at about 2.9. Mexico begins at about -0.3 and generally increases to about 0 by 2003. It then generally decreases to about -1.4 by early 2005, and generally increases to about 0.4 by early 2006. It then generally decreases to about -2 by 2008, and generally increases to end at about -0.4.

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 25.8 and generally increases to about 26.4 by 2003. It then generally decreases to about 16 by 2004, and generally increases to about 20 by 2005. It then generally decreases to about 11 by 2007, and generally increases to about 13.8 by 2008. It then generally decreases to end at about 8.8. Mexico begins at about 9.5 and generally decreases to about 4.5 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 50 by 2008. It then generally increases to end at about 62.5. Mexico begins at about 25 and generally decreases to about 15 by 2008. It then generally increases to end at about 24.

Source: Haver Analytics; Bank for International Settlements.

Figure: Short-Term External Debt

Line chart, by percent of reserves, 2003 to 2009. There are two series, "Brazil" and "Mexico". Brazil begins at about 81 and generally decreases to about 25 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 25 by 2006. It then generally increases to about 33 by early 2007, and generally decreases to about 26 by late 2008. It then generally increases to end at about 28.

Source: Bank for International Settlements.

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

Last update: April 1, 2015

Supplemental Notes

The Domestic Nonfinancial Economy

Changes in Employment

(Thousands of employees; seasonally adjusted)

Measure and sector	2008				2009		
	2008	2008			2009		
		Q4	Q1	Q2	May	June	July
	Average monthly change				Monthly change		
Nonfarm payroll employment (establishment survey)	-257	-553	-691	-422	-303	-443	-247
Private	-270	-552	-695	-426	-292	-395	-254
Natural resources and mining	4	-2	-12	-10	-9	-6	0
Manufacturing	-73	-140	-202	-142	-146	-131	-52
Ex. motor vehicles	-58	-121	-176	-119	-123	-109	-80
Construction	-57	-97	-124	-82	-57	-86	-76
Residential	-35	-51	-53	-29	-14	-33	-27
Nonresidential	-22	-45	-71	-53	-43	-53	-49
Wholesale trade	-16	-32	-36	-20	-15	-14	-19
Retail trade	-44	-80	-55	-27	-28	-21	-44
Financial activities	-19	-35	-51	-34	-27	-29	-13
Temporary help services	-44	-70	-73	-29	-1	-31	-10
Nonbusiness services ¹	19	-19	-25	22	63	26	28
Total government	14	-1	4	5	-11	-48	7
Federal government	3	2	10	4	-16	-41	12
Total employment (household survey)	-246	-564	-817	-230	-437	-374	-155
Memo:							
Aggregate hours of private production workers (percent change) ²	-3.3	-7.4	-8.9	-7.8	-.3	-.7	.0
Average workweek (hours) ³	33.6	33.4	33.2	33.1	33.1	33.0	33.1
Manufacturing (hours)	40.8	40.2	39.6	39.5	39.4	39.5	39.8

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

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

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

Figure: Changes in Private Payroll Employment

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

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

Figure: Aggregate Hours and Workweek of Production and Nonsupervisory Workers

Line chart, 1999 to July 2009. There are two series, "Aggregate hours", 2002 = 100, and "Workweek", which is by hours. These two series use two different scales. Aggregate hours begins at about 100.9 and generally increases to about 104 by 2000. It then generally decreases to about 98.2 by 2003, and generally increases to about 107.9 by late 2007. It then generally decreases to end at about 99.2. Workweek begins at about 34.4 and generally decreases to about 33.58 by early 2003. It then generally increases to about 34.0 by late 2006, and generally decreases to end at about 33.1.

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

Selected Unemployment and Labor Force Participation Rates

(Percent; seasonally adjusted)

Rate and group	2008	2008			2009		
		Q4	Q1	Q2	May	June	July
Civilian unemployment rate							
Total	5.8	6.9	8.1	9.2	9.4	9.5	9.4
Teenagers	18.7	20.7	21.3	22.7	22.7	24.0	23.8
20-24 years old	10.2	11.3	13.0	15.0	15.0	15.2	15.3
Men, 25 years and older	4.8	6.0	7.4	8.8	9.0	9.2	9.0
Women, 25 years and older	4.4	5.2	6.2	6.9	7.0	7.0	6.9
Labor force participation rate							
Total	66.0	65.9	65.6	65.8	65.9	65.7	65.5
Teenagers	40.2	38.7	38.3	38.4	38.5	38.6	38.0
20-24 years old	74.4	74.1	73.7	74.1	73.7	73.4	73.5
Men, 25 years and older	75.4	75.2	74.6	74.9	75.1	75.0	74.8
Women, 25 years and older	60.0	60.1	60.0	60.3	60.3	60.3	60.1

Figure: Unemployment Rate

Line chart, by percent, 2000 to July 2009. The NBER peak is marked in the time series. The series begins at about 4 and generally decreases to about 3.9 by 2000. It then generally increases to about 6.4 by 2003, and generally decreases to about 4.5 by late 2006. It then generally increases to end at about 9.5. 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. The NBER peak is the last business cycle peak as defined by the NBER (December 2007).

Figure: Labor Force Participation Rate

Line chart, by percent, 2000 to July 2009. The NBER peak is marked in the time series. The series begins at about 67.35 and generally decreases to about 65.8 by 2004. It then generally increases to about 66.4 by late 2006, and generally decreases to end at about 65.5. 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, 2000 to July 2009. The series begins at about 2.3 and generally increases to about 3.55 by early 2003. It then generally decreases to about 2.75 by 2006, and generally increases to end at about 6.3.

Figure: Job Losers Unemployed Less Than 5 Weeks

Line chart, by percent of household employment, 2000 to July 2009. There are two series, "Job Losers Unemployed Less Than 5 Weeks", and the "3-month moving average" of that series. These two series track closely together throughout the chart. They begin at about 0.85 and generally increases to about 1.3 by 2001. It then generally decreases to about 0.88 by early 2007, and generally increases to end at about 1.5.

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

Real Personal Consumption Expenditures

(Percent change from preceding comparable period)

Category	2008	2009		2009		
		Q1	Q2	Apr.	May	June
		Annual rate		Monthly rate		
Total real PCE	-.2	.6	-1.2	-.2	.0	-.1
Motor vehicles	-13.6	6.7	-11.9	-3.4	3.6	-2.1
Goods ex. motor vehicles	.4	2.8	-5.0	-.6	.3	.6
Ex. energy	5.8	-1.0	-7.2	.2	-.5	1.5
Services	.7	-.3	.1	.1	-.1	.0
Ex. energy	.8	-.2	.5	.1	.0	.0
Memo:						
Personal saving rate ¹	3.8	4.0	5.2	4.7	6.2	4.6

1. The annual value is the Q4 level. [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, 1990 to June 2009. The NBER peak is marked in the time series. The series begins at about 0.57 and generally decreases to about -0.7 by late 1990. It then generally increases to about 0.9 by early 1999, and generally decreases to about -0.1 by 2001. It then generally increases to about 1.0 by 2003, and generally decreases to about -0.9 by late 2008. It then generally increases to end at about 0.1. It is at about 0.21 at the time of the NBER peak.

There is a second line chart, by percent, 2006 to June 2009. There are two series, "6-month moving average" and "Monthly". 6-month moving average begins at about 0.05 and generally increases to about 0.5 by 2006. It then generally decreases to about -1.0 by early 2009, and generally increases to end at about 0.1.

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

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 June 2009. The NBER peak is marked in the time series. The series begins at about 0.23 and generally increases to about 0.38 by 1990. It then generally decreases to about -0.06 by early 1991, and generally increases to about 0.5 by 2000. It then generally decreases to about 0.05 by 2001, and generally increases to about 0.33 by early 2005. It then generally decreases to about -0.09 by 2008, and generally increases to end at about 0.0. It is at about 0.08 at the time of the NBER peak.

There is a second line chart, by percent, 2006 to June 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 -0.0. Monthly begins at about -0.1 and generally increases to about 0.58 by 2006. It then fluctuates but generally decreases to about -0.35 by 2008, and generally increases to about 0.28 by 2008. It then generally decreases to end at about -0.0.

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

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

Price Measures

(Percent change)

Measures	12-month change		3-month change		1-month change	
	June 2008	June 2009	Annual rate		Monthly rate	
			Mar. 2009	June 2009	May 2009	June 2009
<i>CPI</i>						
Total	5.0	-1.4	2.2	3.3	.1	.7
Food	5.3	2.1	-.8	-1.5	-.2	.0

Energy	24.7	-25.5	7.9	22.1	.2	7.4
Ex. food and energy	2.4	1.7	2.2	2.4	.1	.2
Core goods	.2	1.5	3.8	4.1	.2	.3
Core services	3.3	1.8	1.5	1.8	.1	.1
Shelter	2.5	1.3	.1	1.4	.1	.0
Other services	4.3	2.6	2.6	2.1	.1	.2
Memo: core ex. tobacco	2.4	1.5	1.7	2.0	.1	.2
Chained CPI (n.s.a.) ¹	4.2	-1.3	...	...	...	...
Ex. food and energy ¹	2.1	1.3	...	...	...	...
<i>PCE prices</i>						
Total	4.1	-4	1.5	2.7	.1	.5
Food and bev. at home	5.5	1.6	-2.5	-2.8	-.4	.1
Energy	25.4	-26.3	7.4	26.5	.2	8.3
Ex. food and energy	2.6	1.5	1.6	2.0	.1	.2
Core goods	.0	1.5	3.8	2.7	.0	.2
Core services	3.5	1.5	.8	1.8	.1	.2
Housing services	2.9	2.1	2.5	1.4	.1	.0
Other services	3.7	1.4	.3	2.0	.1	.2
Memo: core ex. tobacco	2.6	1.3	1.1	1.6	.1	.2
Core market-based	2.4	2.0	2.5	2.0	.1	.2
Core non-market-based	3.8	-1.4	-3.6	1.9	.2	.2
<i>PPI</i>						
Total finished goods	9.1	-4.6	-9	9.5	.2	1.8
Food	8.2	-2.2	-8.5	4.2	-1.6	1.1
Energy	27.2	-25.2	-2.4	44.7	2.9	6.6
Ex. food and energy	2.9	3.3	1.9	2.1	-.1	.5
Core consumer goods	3.3	3.8	3.1	2.7	-.1	.5
Capital equipment	2.5	2.6	.3	1.3	-.1	.5
Intermediate materials	14.7	-12.5	-9.4	6.8	.3	1.9
Ex. food and energy	8.8	-6.6	-6.6	-3.0	-.2	.4
Crude materials	43.6	-40.0	-28.7	55.2	3.6	4.6
Ex. food and energy	32.8	-35.6	-1.6	40.3	6.7	2.6

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.

The Domestic Financial Economy

Commercial Bank Credit

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

Type of credit	2007	2008	H2 2008	Q1 2009	Q2 2009	June 2009	July 2009 ^e	Level ¹ July 2009 ^e
Total	9.8	5.1	4.6	-5.5	-3.2	-1.3	-13.6	9,331
<i>Loans²</i>								
Total	10.7	4.6	2.1	-7.1	-6.6	-9.5	-18.9	6,979

2-year	4.49	.92	1.17	1.22	-3.27	.30	.05
5-year	4.52	2.04	2.71	2.74	-1.78	.70	.03
10-year	4.82	3.38	4.04	4.06	-.76	.68	.02
U.S. Treasury indexed notes ⁵							
5-year	2.43	1.55	1.45	1.57	-.86	.02	.12
10-year	2.48	1.92	2.10	1.98	-.50	.06	-.12
Municipal general obligations (Bond Buyer) ⁶	4.51	4.57	4.86	4.65	.14	.08	-.21
Private instruments							
10-year swap	5.44	3.07	3.97	4.01	-1.43	.94	.04
10-year FNMA ⁷	5.34	3.88	4.40	4.38	-.96	.50	-.02
10-year AA ⁸	6.12	6.33	5.94	5.48	-.64	-.85	-.46
10-year BBB ⁸	6.57	8.49	7.58	6.78	.21	-1.71	-.80
10-year high yield ⁸	9.21	12.79	12.13	10.66	1.45	-2.13	-1.47
Home mortgages (FHLMC survey rate)							
30-year fixed	6.59	4.78	5.42	5.22	-1.37	.44	-.20
1-year adjustable	5.65	4.77	4.93	4.78	-.87	.01	-.15

Stock exchange index	Record high		2009			Change to Aug. 6 from selected dates (percent)		
	Level	Date	Apr. 28	June 22	Aug. 6	Record high	2009 Apr. 28	2009 June 22
Dow Jones Industrial	14,165	10-9-07	8,017	8,339	9,256	-34.65	15.46	11.00
S&P 500 Composite	1,565	10-9-07	855	893	997	-36.29	16.60	11.65
Nasdaq	5,049	3-10-00	1,674	1,766	1,973	-60.92	17.88	11.72
Russell 2000	856	7-13-07	473	493	558	-34.84	17.93	13.15
D.J. Total Stock Index	15,807	10-9-07	8,754	9,130	10,261	-35.08	17.22	12.39

1. Secondary market. [Return to table](#)

2. Financial commercial paper. [Return to table](#)

3. Bid rates for Eurodollar deposits collected around 9:30 a.m. eastern time. [Return to table](#)

4. Derived from a smoothed Treasury yield curve estimated using off-the-run securities. [Return to table](#)

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

6. Most recent Thursday quote. [Return to table](#)

7. Constant-maturity yields estimated from Fannie Mae domestic noncallable coupon securities. [Return to table](#)

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

NOTES:

August 6, 2007, is the day before the August 2007 FOMC meeting.

April 28, 2009, is the day before the April 2009 FOMC monetary policy announcement.

June 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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