

National Economic Indicators

October 31, 2016



Richmond • Baltimore • Charlotte

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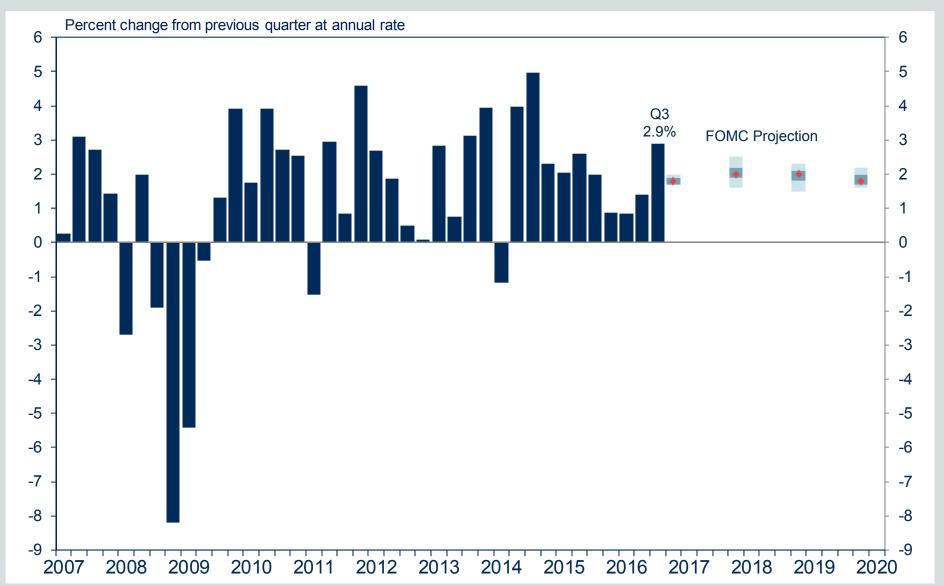
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Real Gross Domestic Product

	2015			2016		
	Q3	Q4	Q1	Q2	Q3	
CHANGE FROM PREVIOUS QUARTER AT COMPOUND ANNUAL RATE [Percent]:						
Gross Domestic Product	2.0	0.9	8.0	1.4	2.9	
Personal Consumption Expenditures	2.7	2.3	1.6	4.3	2.1	
Nonresidential Fixed Investment Structures Equipment Intellectual Property	3.9 -4.3 9.1 2.1	-3.3 -15.2 -2.6 4.6	-3.4 0.1 -9.5 3.7	1.0 -2.1 -2.9 9.0	1.2 5.4 -2.7 4.0	
Residential Fixed Investment	12.6	11.5	7.8	-7.7	-6.2	
Exports of Goods & Services Imports of Goods & Services	-2.8 1.1	-2.7 0.7	-0.7 -0.6	1.8 0.2	10.0 2.3	
Government Consumption Expenditures & Gross Investment	1.9	1.0	1.6	-1.7	0.5	
Final Sales to Domestic Purchasers	3.0	1.7	1.2	2.4	1.4	
LEVEL IN QUARTER AT SEASONALLY ADJUSTED ANNUAL RATE [Billions of Chained (2005) Dollars]:						
Change in Private Inventories	70.9	56.9	40.7	-9.5	12.6	
Net Exports of Goods & Services	-547.1	-566.6	-566.3	-558.5	-522.9	



Real Gross Domestic Product

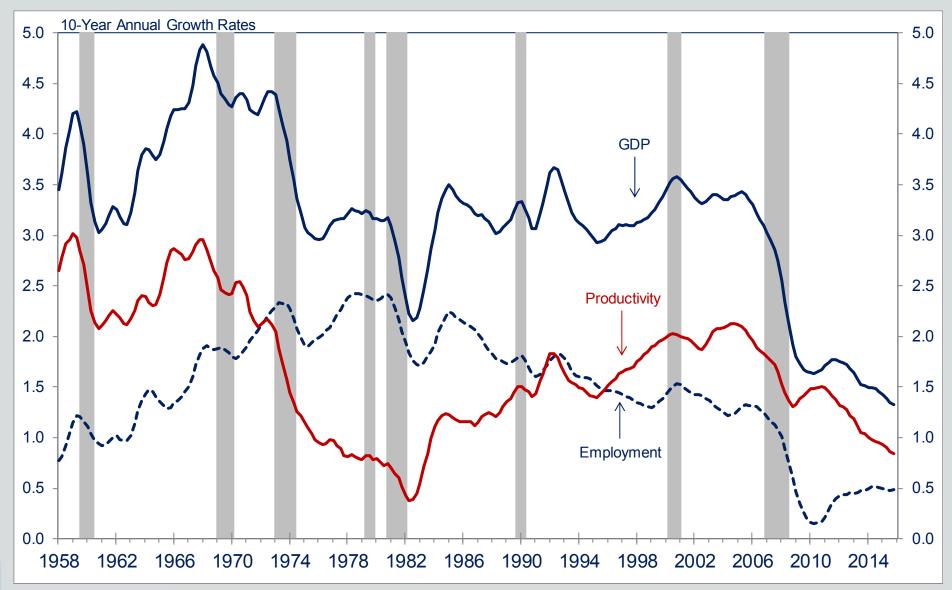




Note: Projection is the median, central tendency, and range from the September 2016 Summary of Economic Projections. Red dots indicate median projections. Projections of change in real gross domestic product (GDP) are from the fourth quarter of the previous year to the fourth quarter of the year indicated.

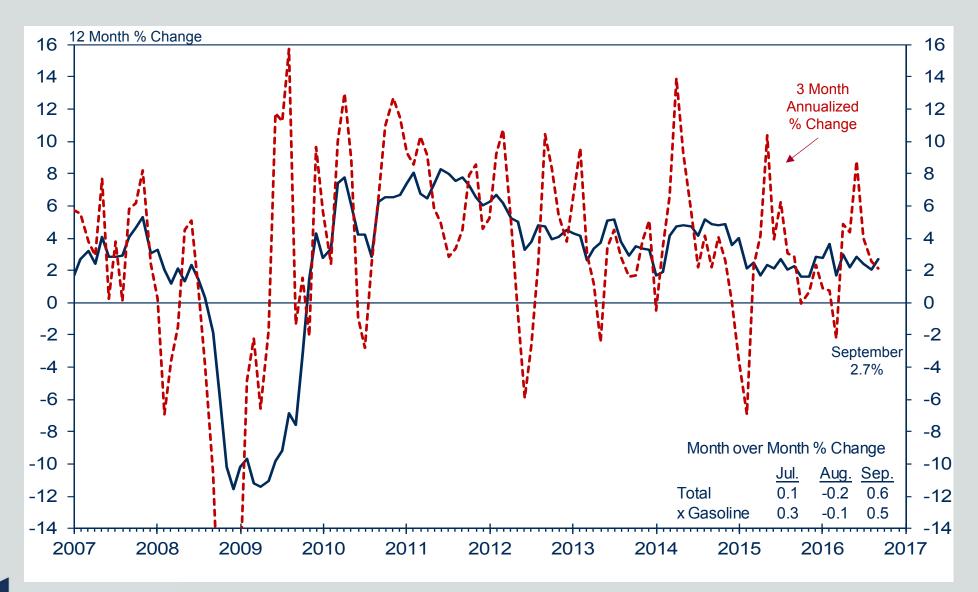
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Decomposition of Real GDP



Note: Productivity is calculated as real GDP per employee, from the Household Survey.

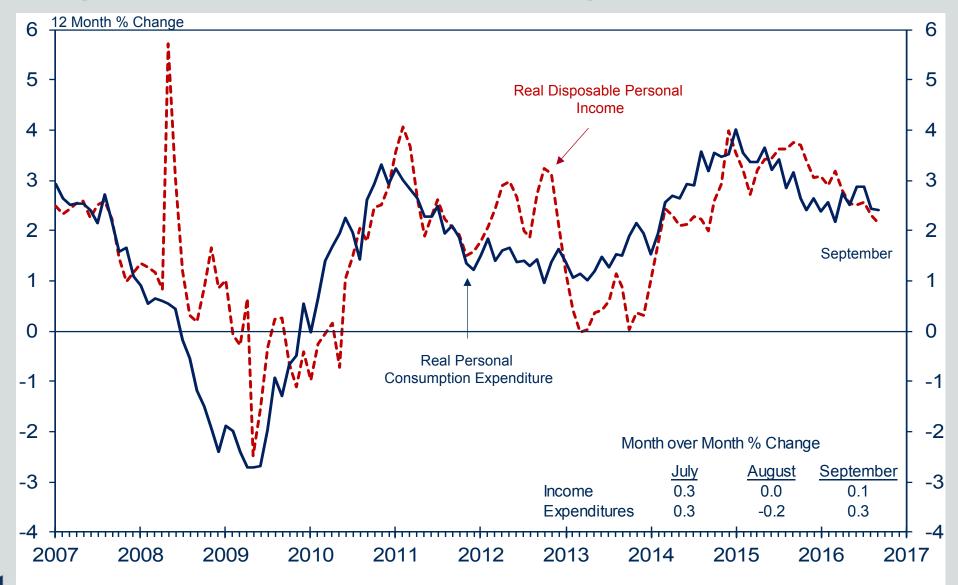
Retail Sales





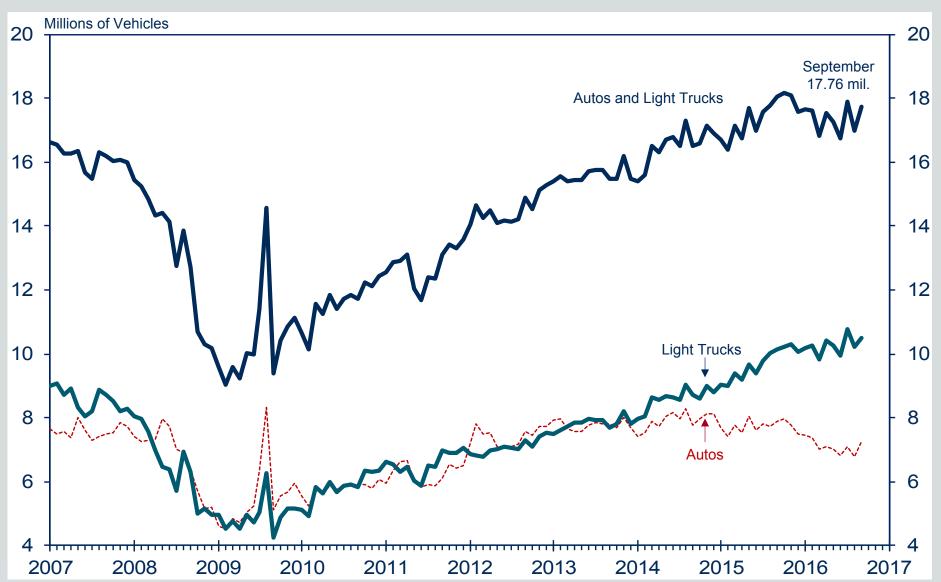
Note: Retail sales includes food services.

Disposable Personal Income & Expenditures

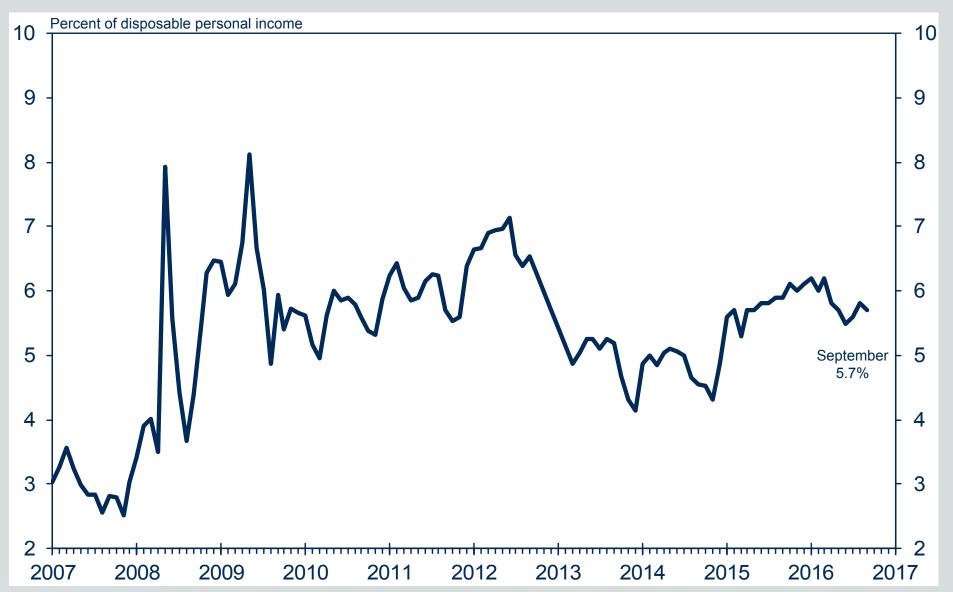




Sales of Automobiles & Light Trucks



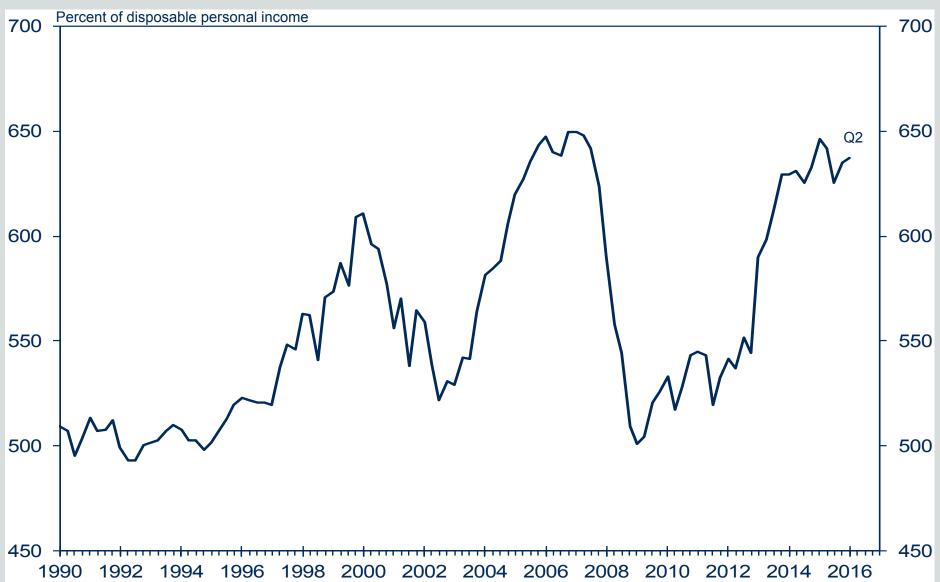
Personal Saving Rate



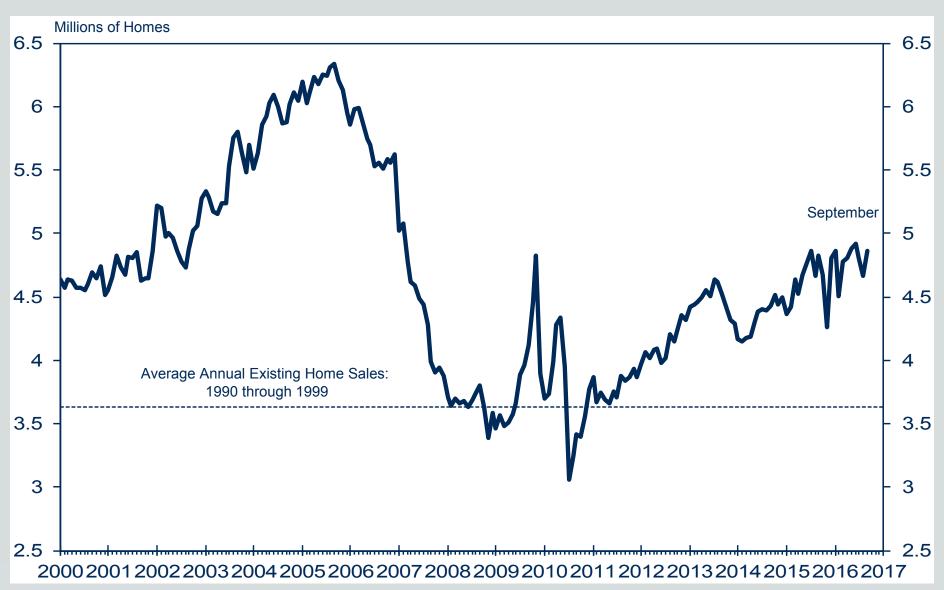


Note: The personal saving rate was adjusted to remove tax-induced income shifting near the end of 2012.

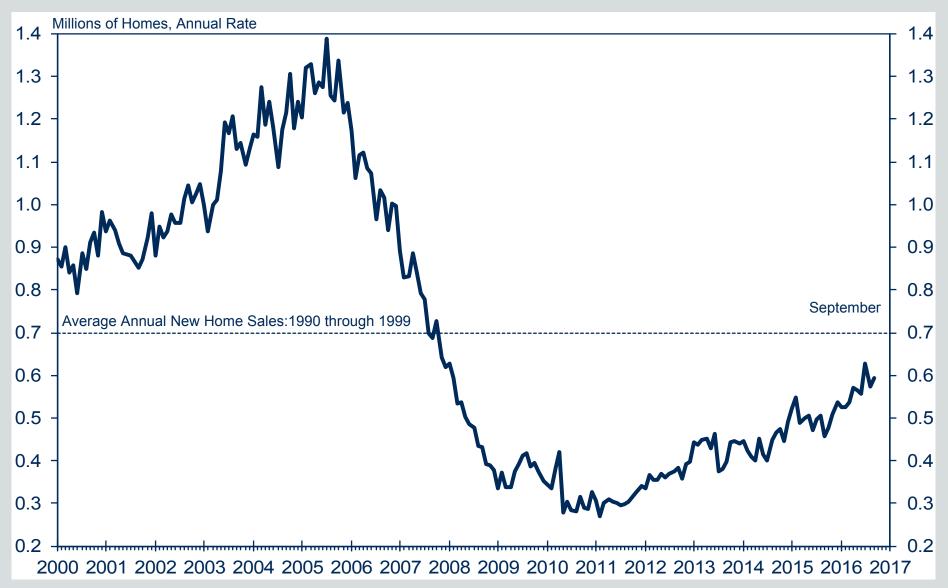
Household Net Worth



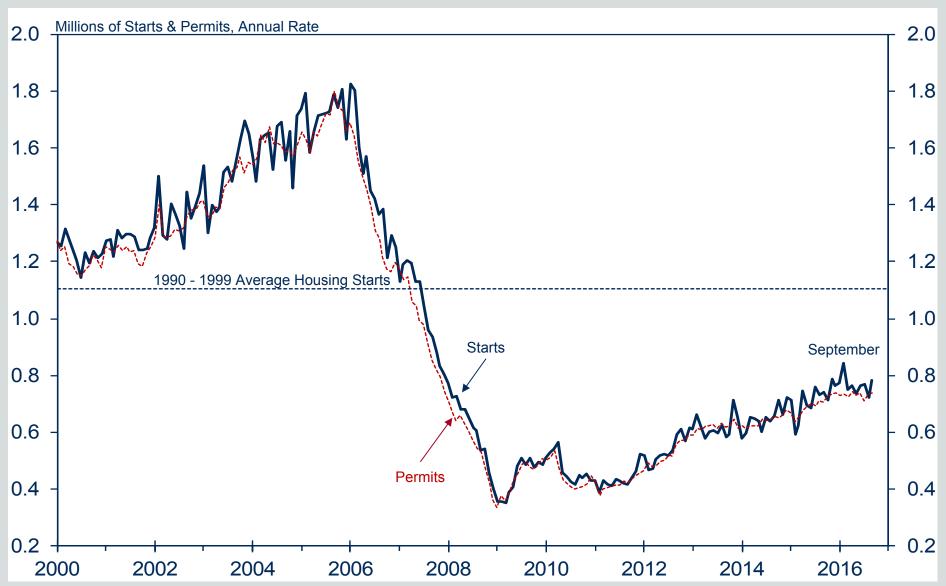
Existing Single-Family Home Sales



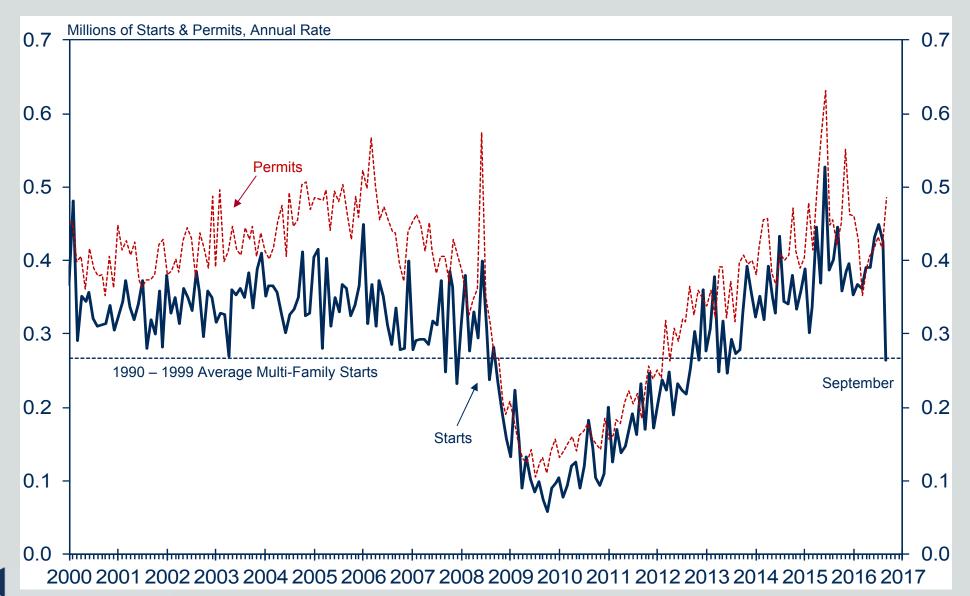
New Single-Family Home Sales



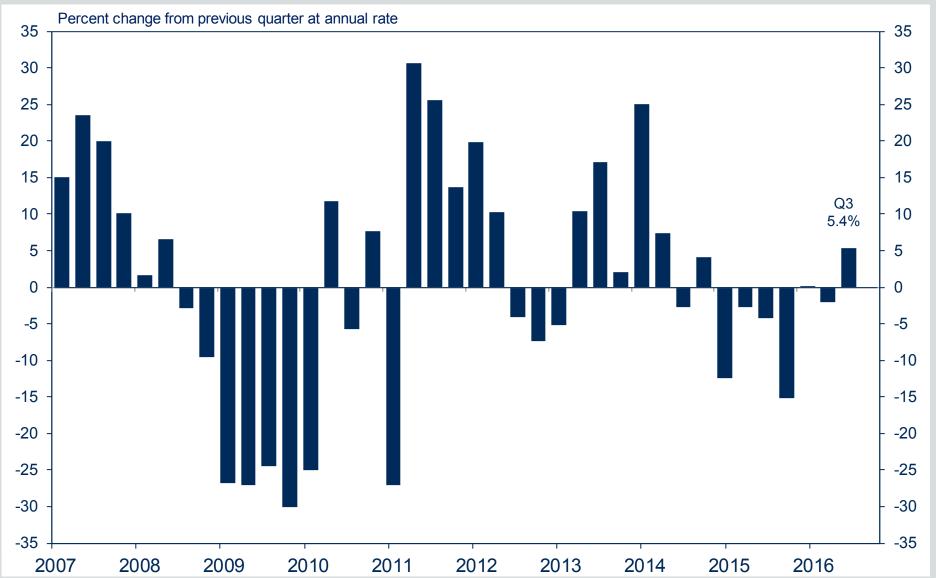
Private Single-Family Housing Starts & Permits



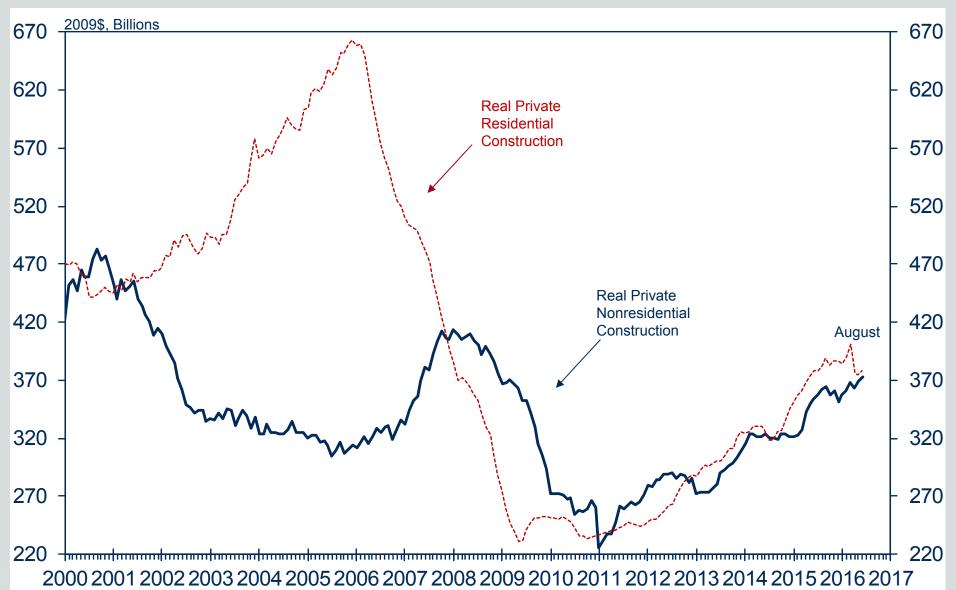
Private Multi-Family Housing Starts & Permits



Real Investment in Nonresidential Structures



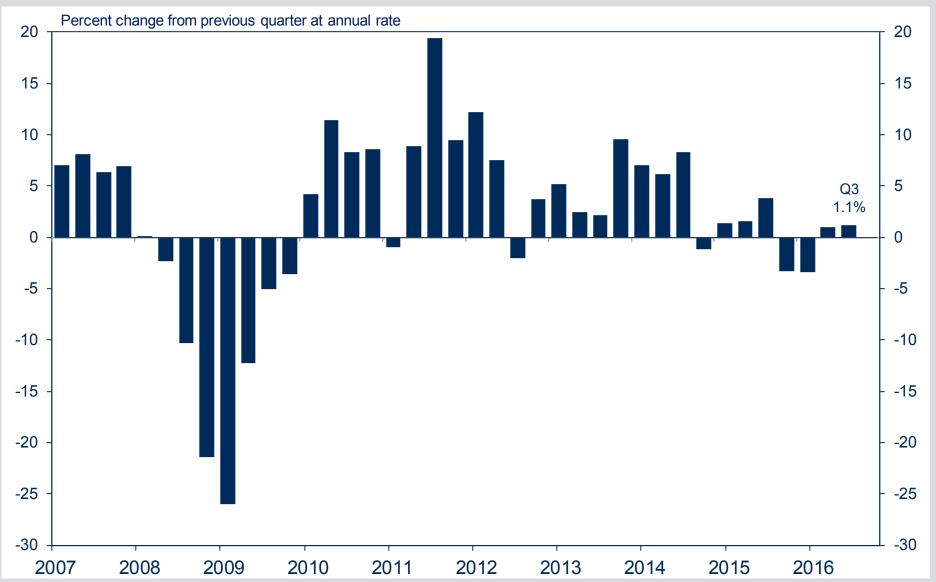
Real Private Construction Put In Place



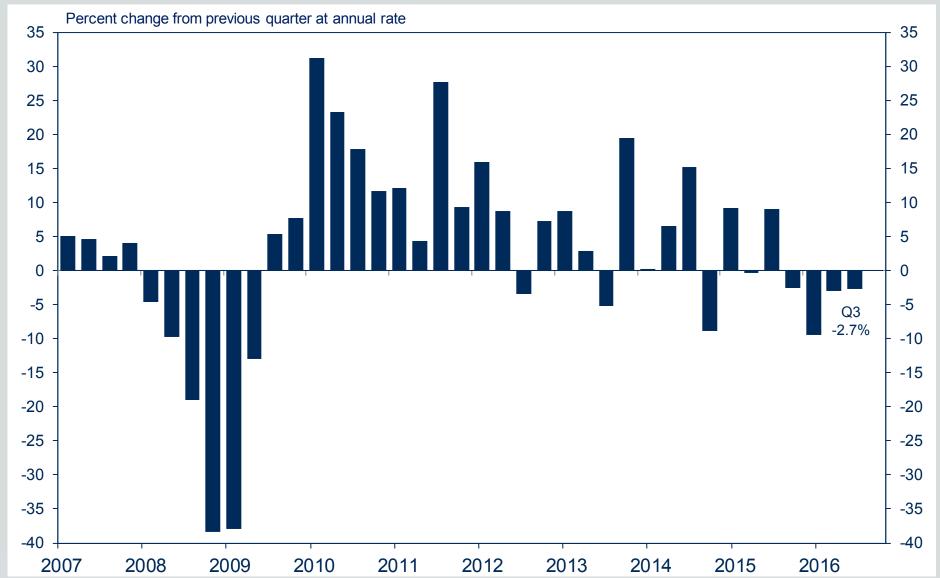
Notes: Private nonresidential construction deflated using the price index for private fixed investment in nonresidential structures and private residential construction deflated using the private residential investment chain price index.

OF RICHMOND

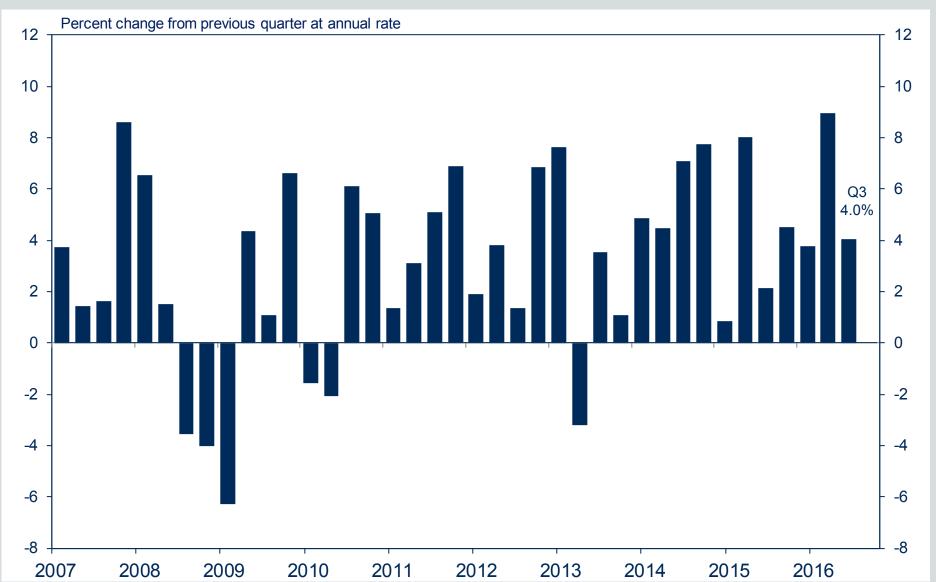
Real Nonresidential Fixed Investment



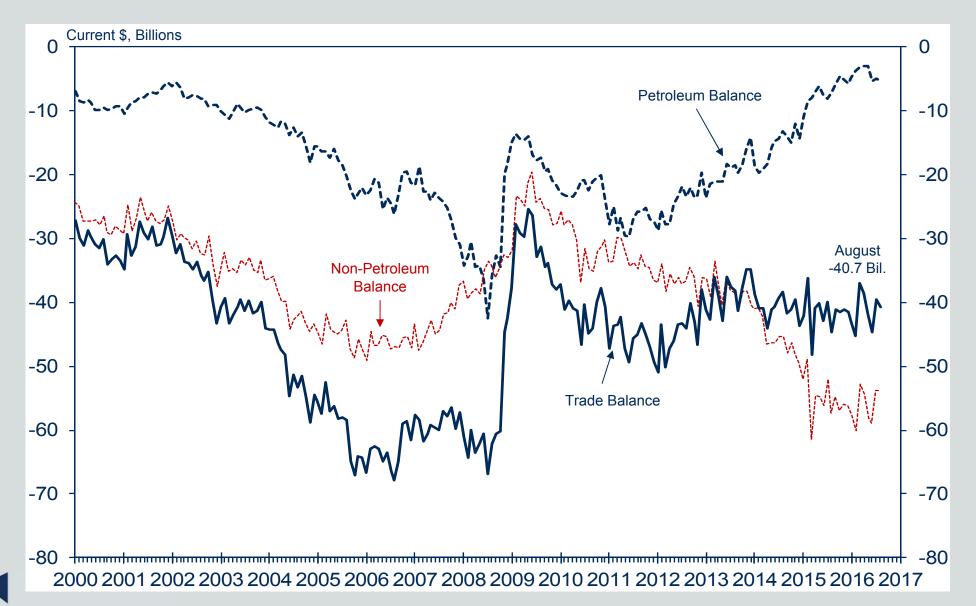
Real Investment in Equipment

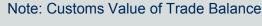


Real Investment in Intellectual Property



Balance of International Trade



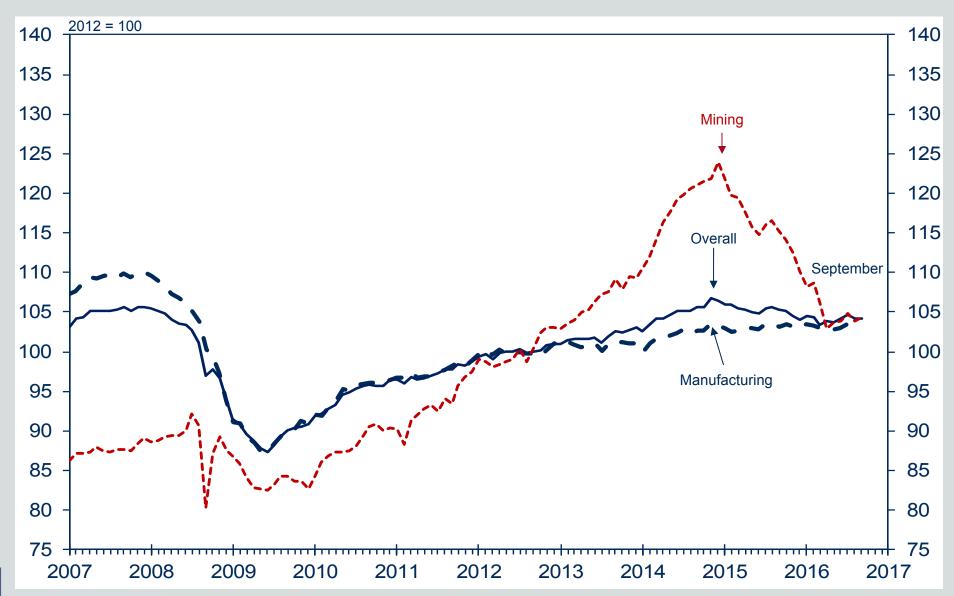


Exchange Value of the USD

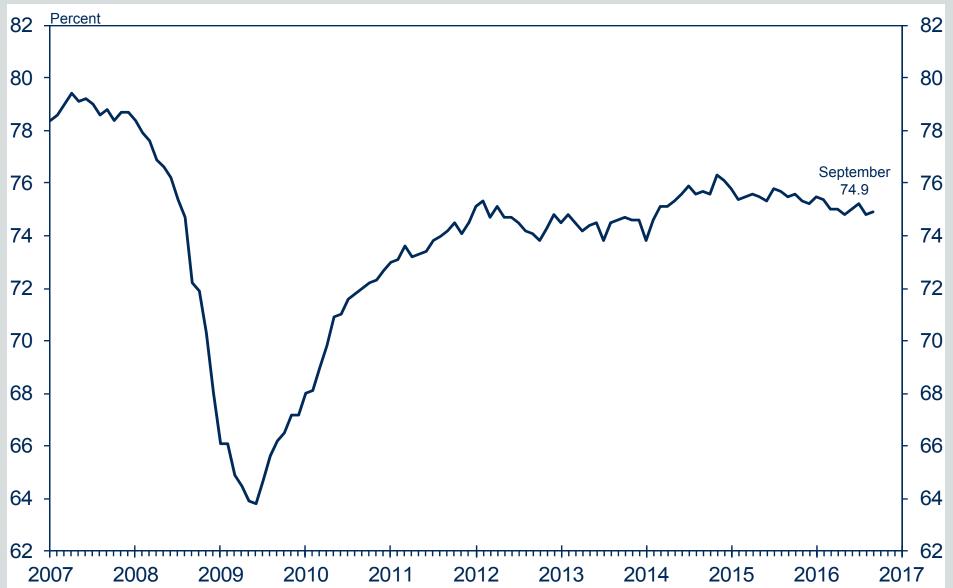


Notes: Measured as the real broad trade-weighted exchange value of the United States Dollar.

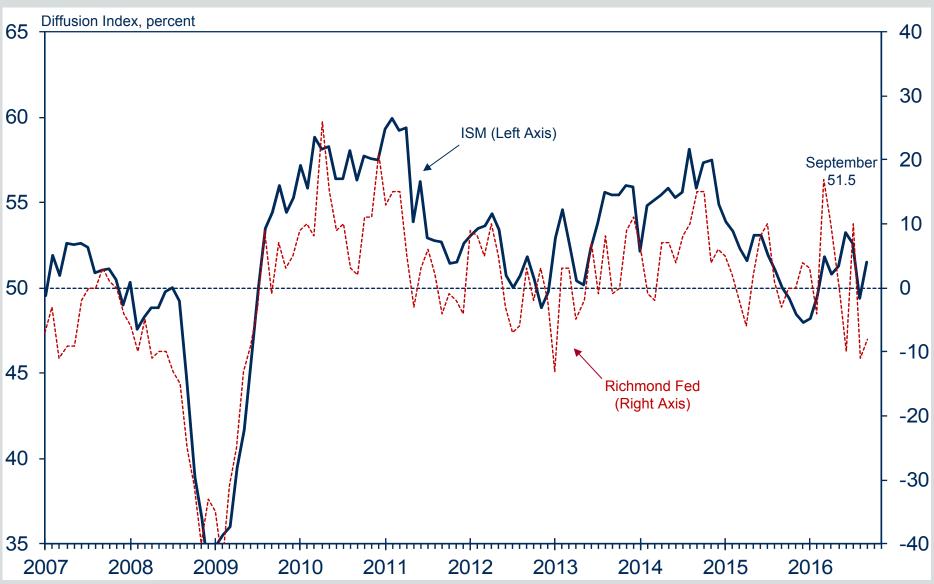
Industrial Production



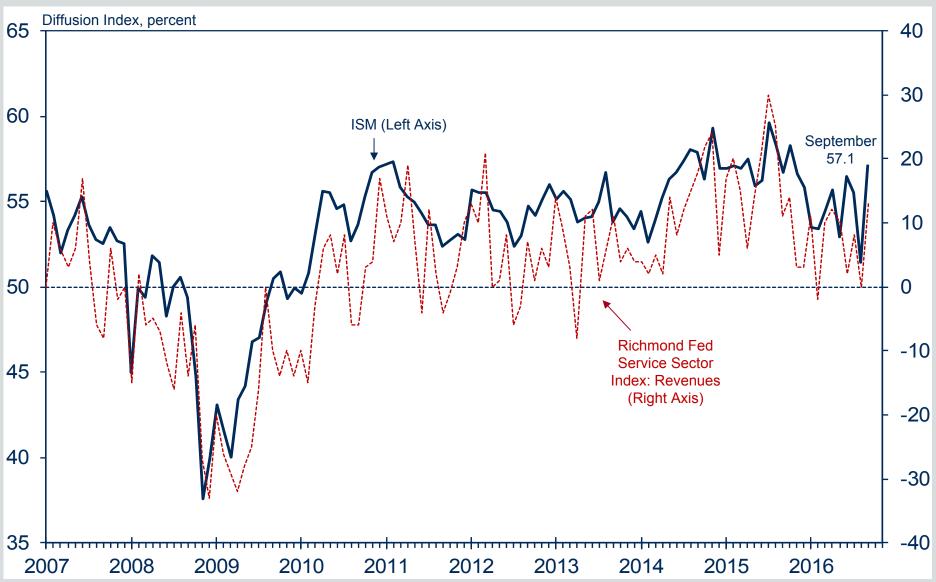
Capacity Utilization Rate: Manufacturing



Indexes of Manufacturing Activity



Indexes of Non-Manufacturing Activity



ISM: Business Survey Indexes

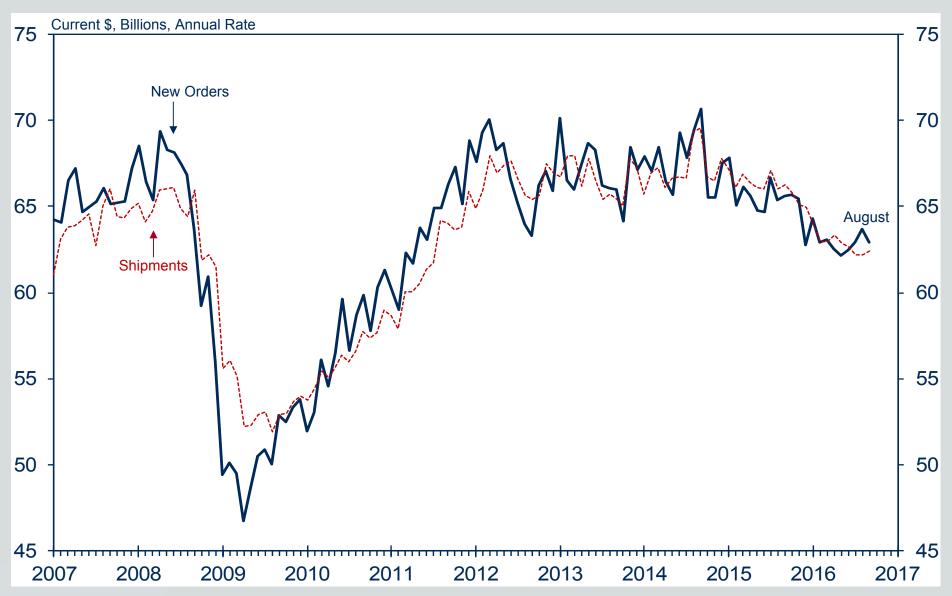
MANUFACTURING BUSINESS:			NON-MANUFACTURING BUSINESS:			
	Aug.	Sep.		Aug.	Sep.	
Purchasing Managers Index	49.4	51.5	Non-Manufacturing Index	51.4	57.1	
Production	49.6	52.8	Business Activity	51.8	60.3	
New Orders	49.1	55.1	New Orders	51.4	60.0	
Employment	48.3	49.7	Employment	50.7	57.2	
Supplier Deliveries	50.9	50.3	Supplier Deliveries	51.5	51.0	
Inventories	49.0	49.5	Inventories	48.0	51.5	
Prices	53.0	53.0	Prices	51.8	54.0	
Backlog of Orders	45.5	49.5	Backlog of Orders	49.5	52.0	
New Export Orders	52.5	52.0	New Export Orders	46.5	56.5	
Imports	47.0	49.0	Imports	50.5	51.0	

ESERVE BANK DIFFUSION INDEXES: Numbers above 50 percent indicate more favorable responses towards economic activity.

Manufacturers' New Orders

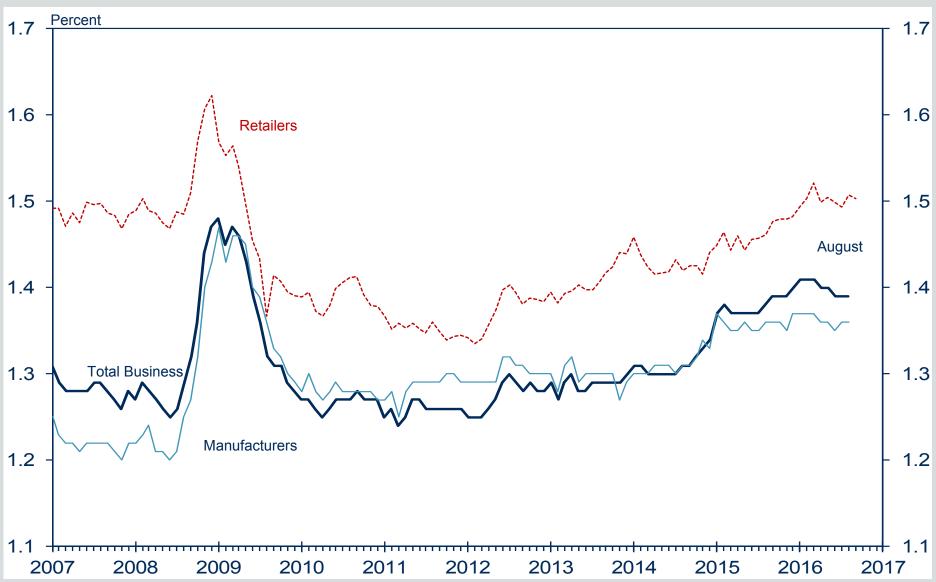


Core Capital Goods

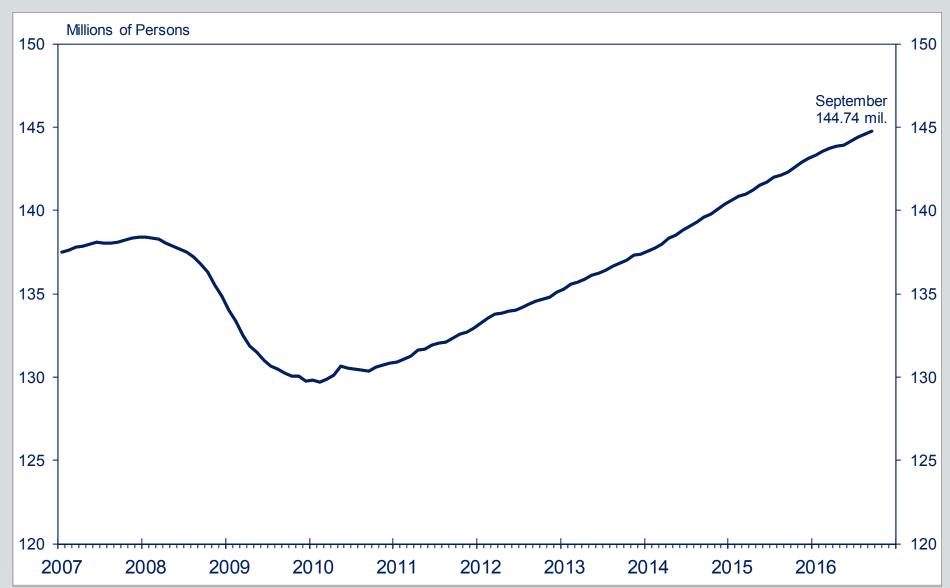


Notes: Core capital goods are nondefense capital goods excluding aircraft.

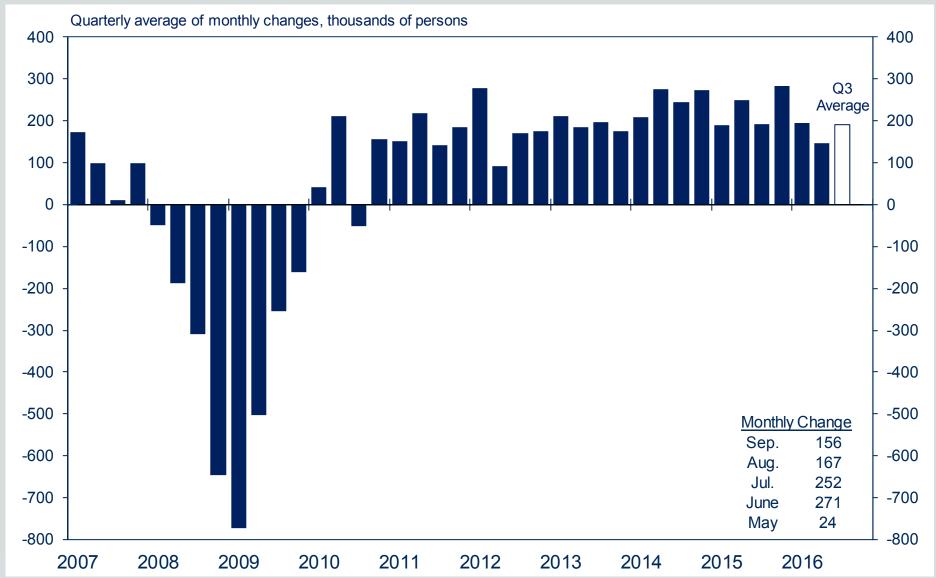
Business Inventory/Sales Ratio



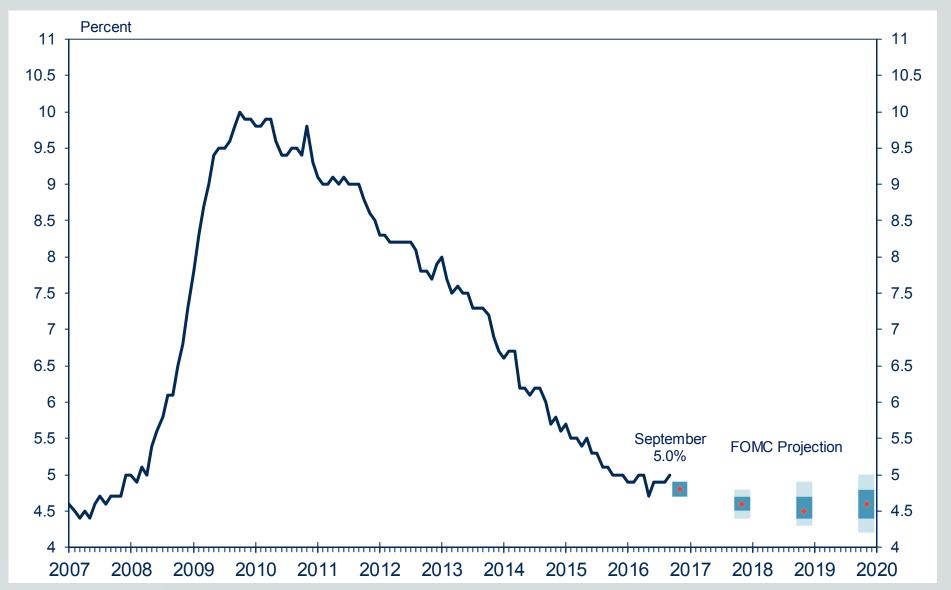
Nonfarm Payroll Employment



Nonfarm Payroll Employment

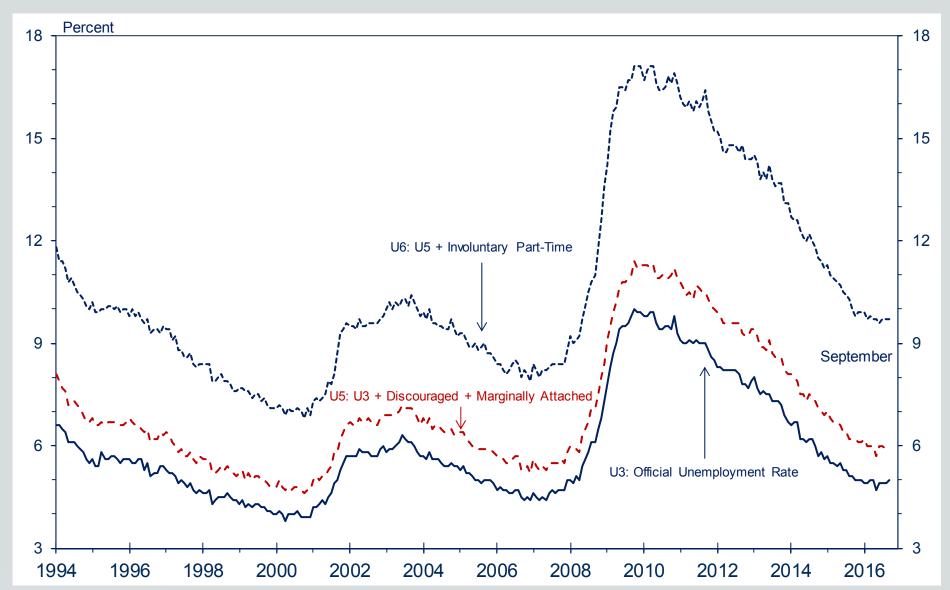


Unemployment Rate

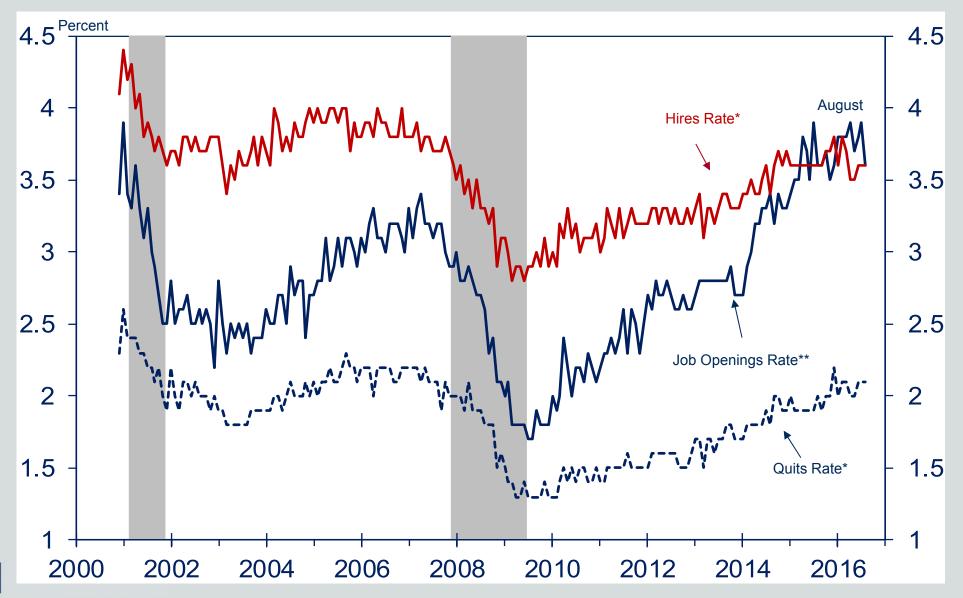


Notes: FOMC projection is the median, range, and central tendency for the Q4 levels, from the September 2016 meeting. Red dots indicate median projections

Measures of Labor Utilization

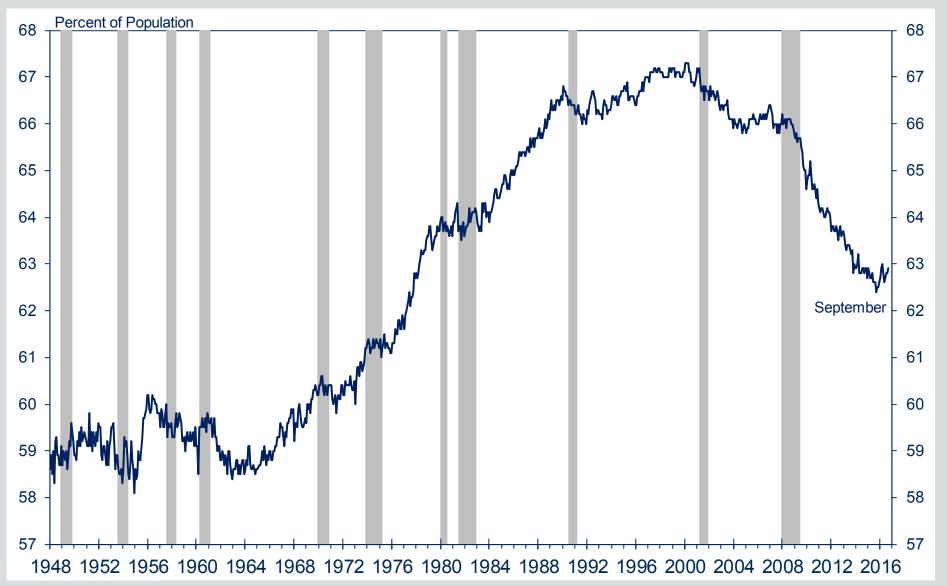


Labor Market Flows

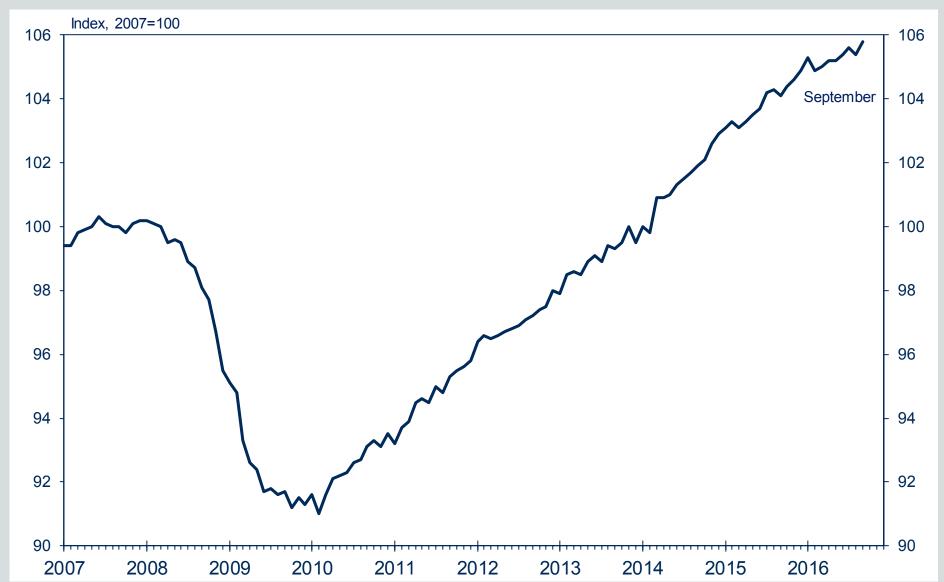




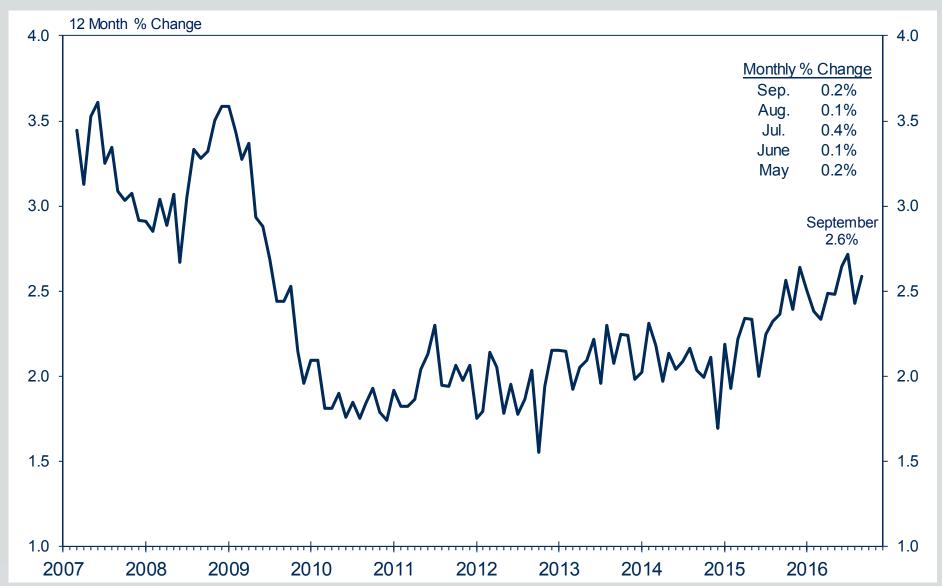
Labor Force Participation



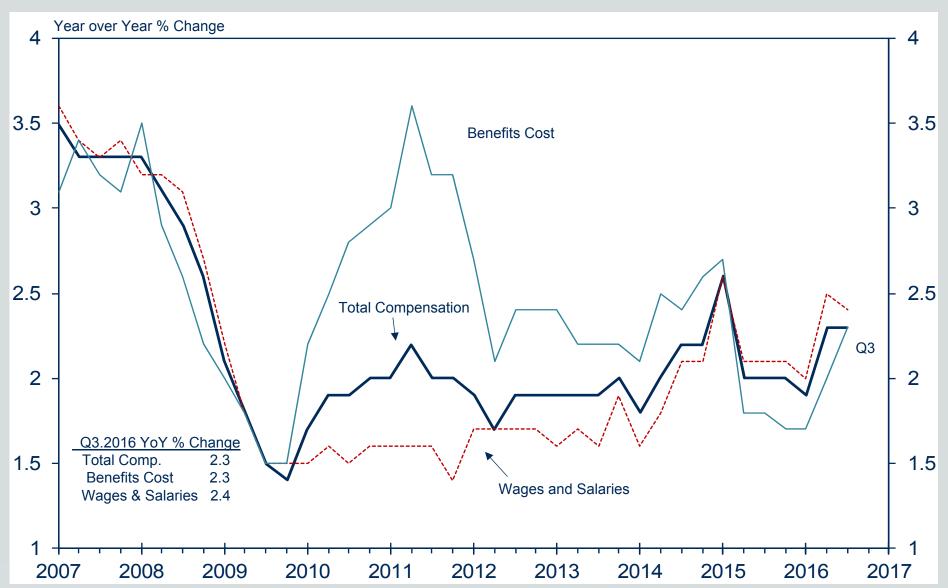
Aggregate Weekly Hours Index



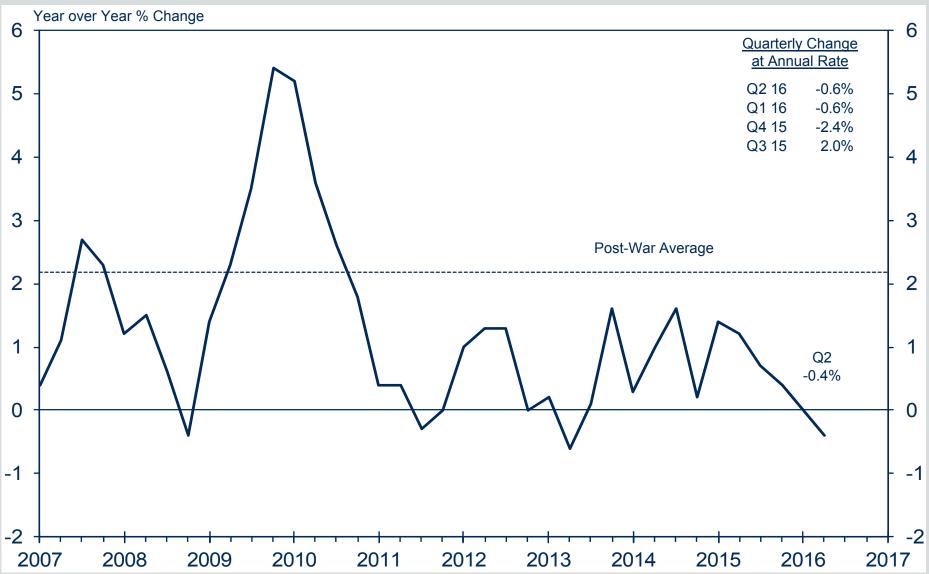
Average Hourly Earnings



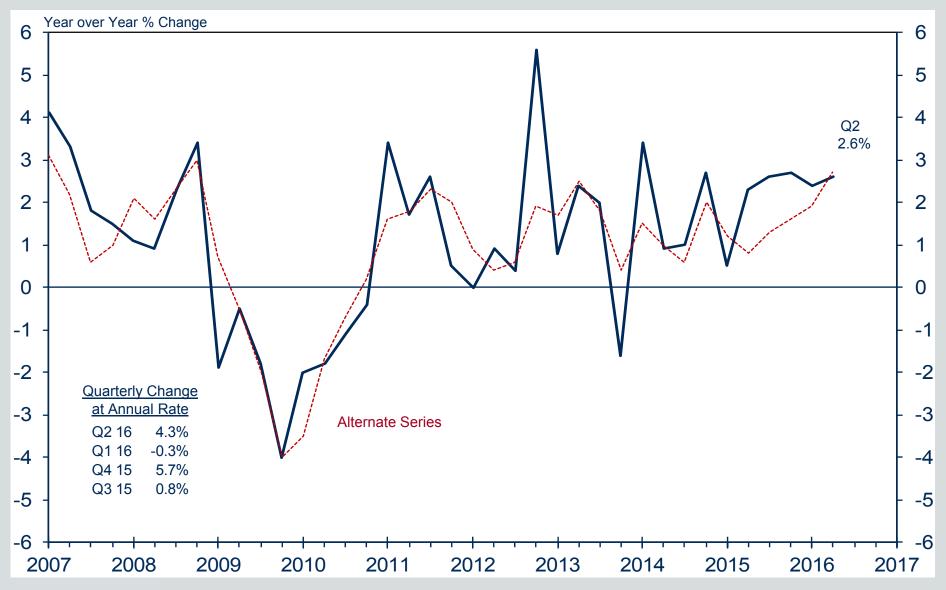
Employment Cost Index



Labor Productivity, Nonfarm Business



Unit Labor Cost, Nonfarm Business





Notes: Alternate series is derived from the Employment Cost Index.

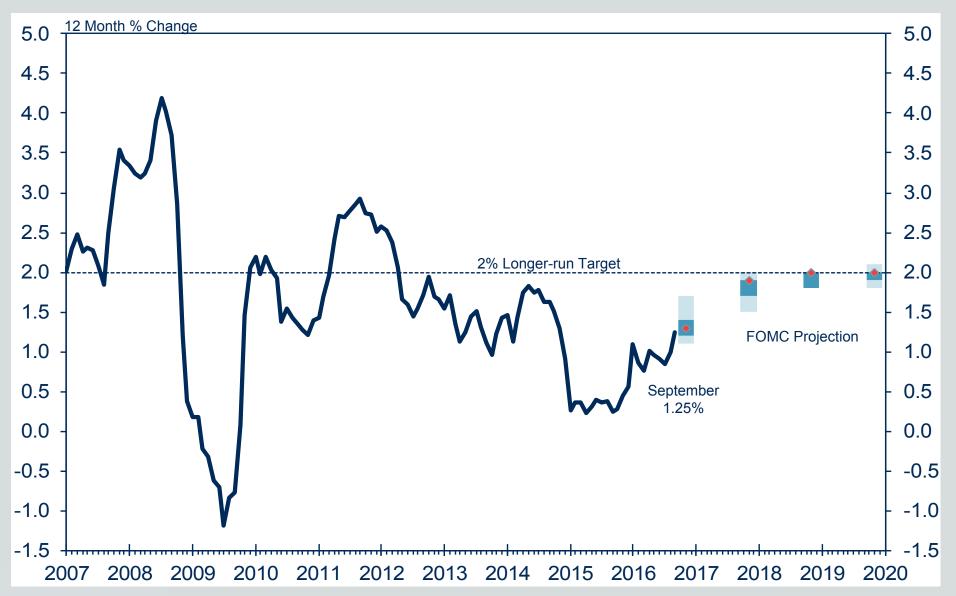
Gauges of Inflation

Expenditure Price Indexes	[Percent Change from Previous Month at Annua	Ratel:	
Personal Consumption Expenditures Core (excludes Food and Energy)		Aug. 1.7 2.2	YoY % 1.0 1.7
Consumer Price Indexes	[Percent Change from Previous Month at Annua	l Rate]:	
All Items Core (excludes Food and Energy)	July -0.5 1.1	Aug. 2.4 3.1	YoY % 1.1 2.3
Producer Price Indexes	[Percent Change from Previous Month at Annua	l Rate]:	
Finished Goods Core (excludes Food and Energy) Core Intermediate Goods Crude Goods	-5.5 -1.8 1.3	Aug. -3.1 1.9 3.3 -29.1	YoY % -1.9 1.1 -1.0 -8.1
Spot Commodity Price Index	[Percent Change from Previous N	/lonth]:	
CRB Spot Commodity Price Index	Aug. -1.3	Sep. -0.1	YoY % -0.2



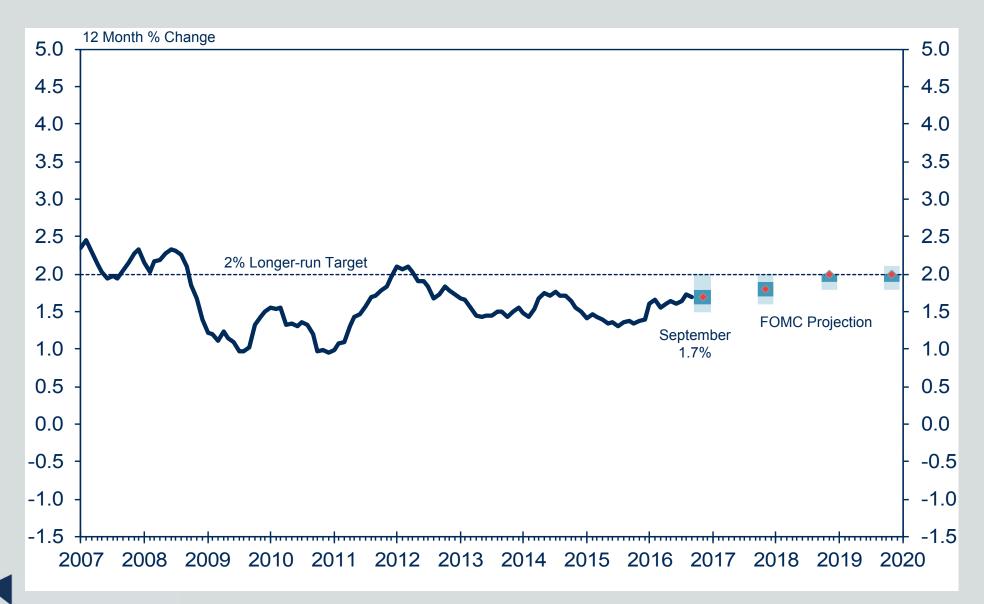
Notes: Core PCE Price Index includes expenditures on food services.

Personal Consumption Expenditure Price Index



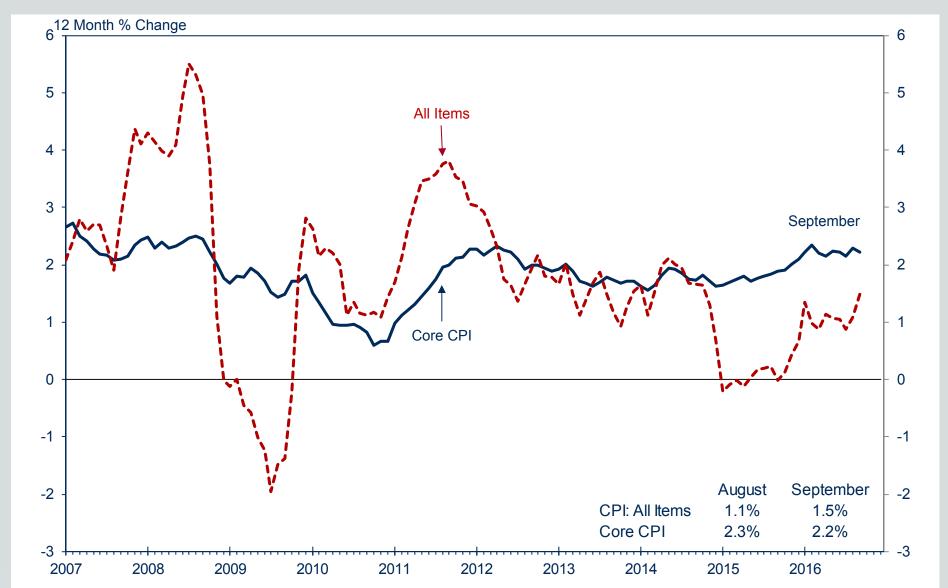
Notes: FOMC projection is the median, range, and central tendency for Q4/Q4 percent changes, from the September 2016 meeting. Red dots indicate median projections.

Core Personal Consumption Expenditure Price Index

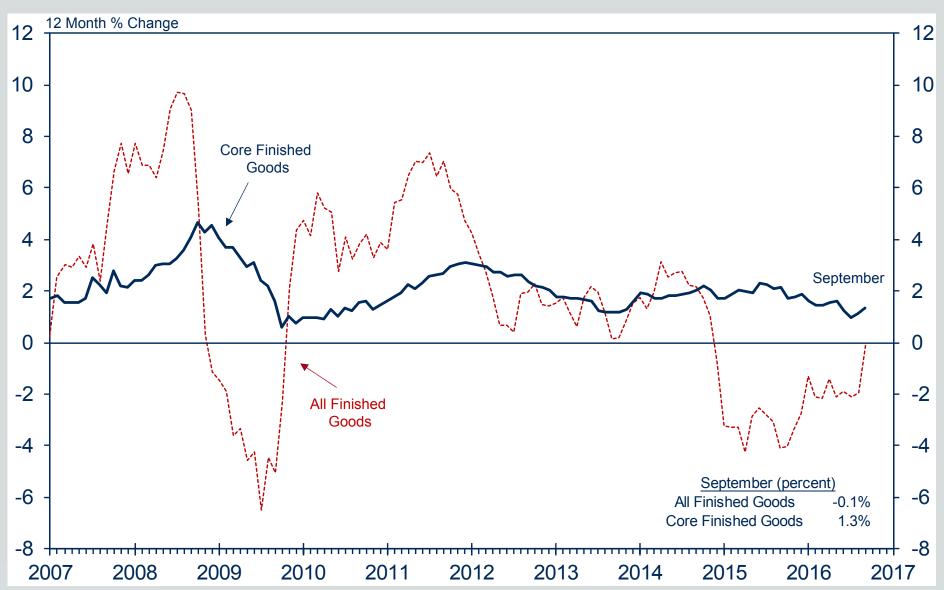




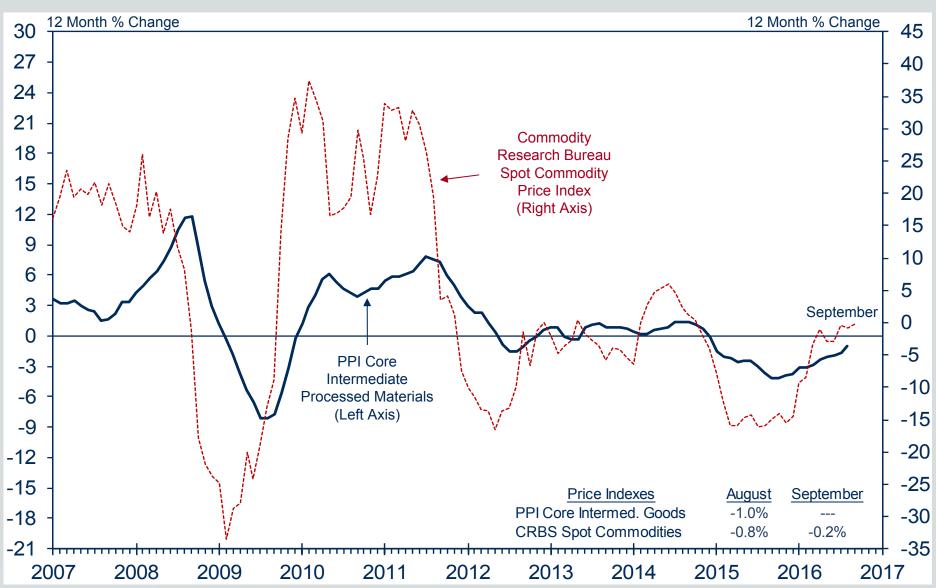
Consumer Price Indexes



Producer Price Indexes



Commodity Price Indexes

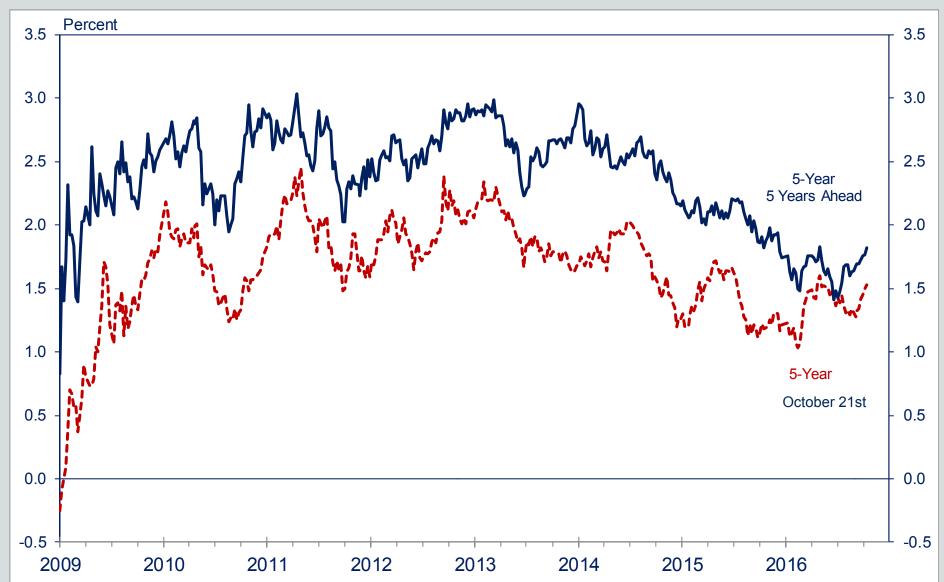


Crude Oil Prices

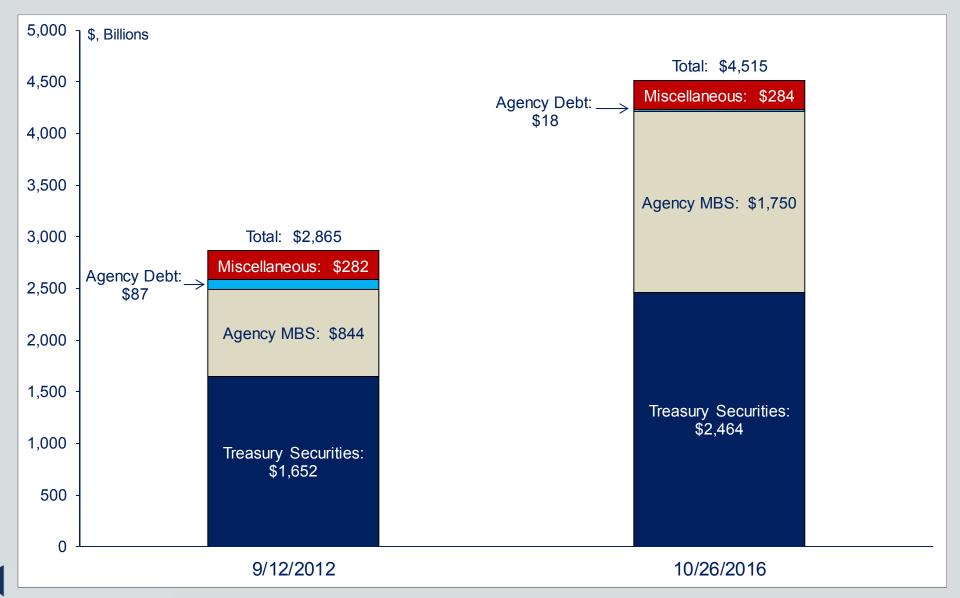


Notes: Spot and Futures Prices are for Brent Crude Oil.

TIPS Inflation Compensation

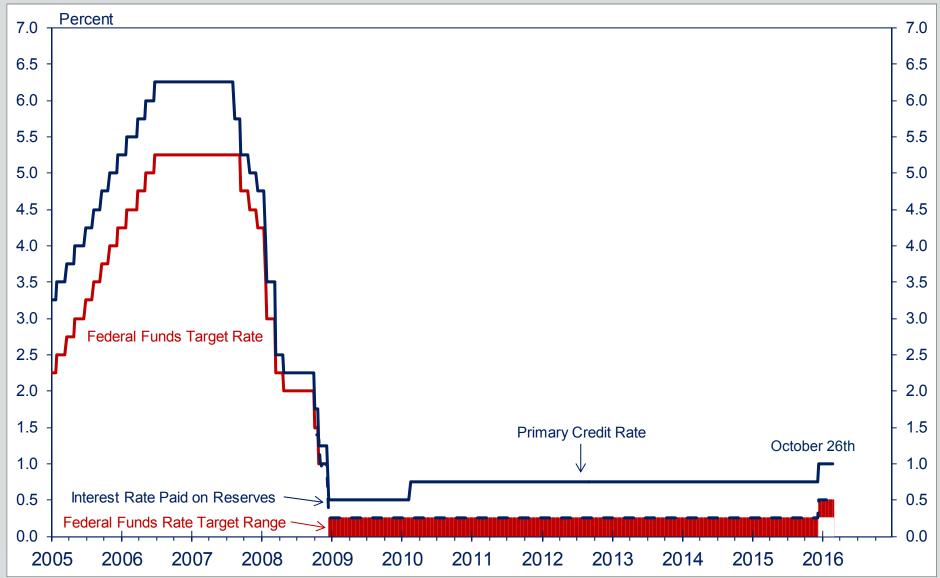


Federal Reserve System Assets

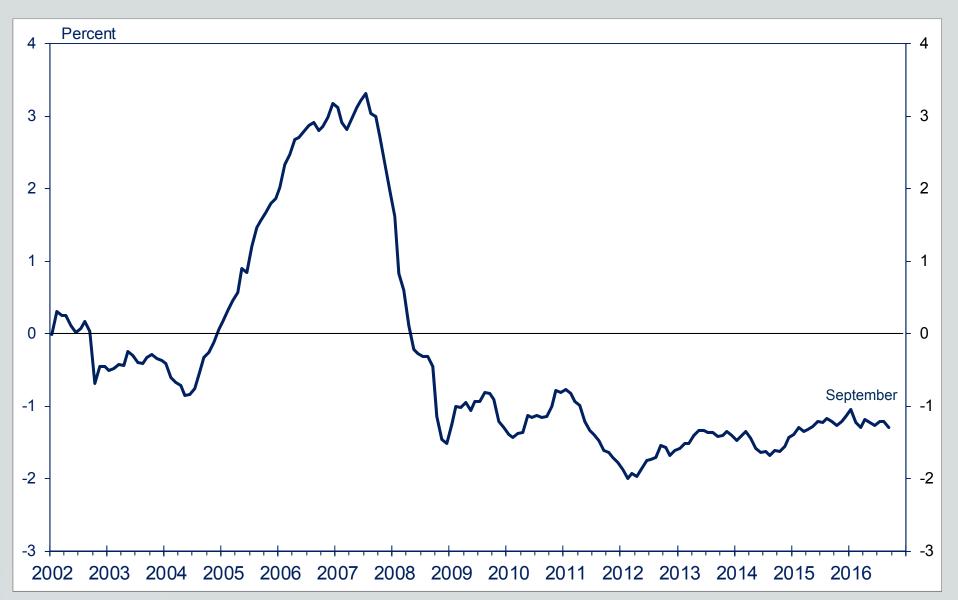


Note: Numbers may not add up due to rounding.

Monetary Policy Instruments



Real Federal Funds Rate



Note: The Real Federal Funds Rate is the difference between the effect Fed Funds rate and the lagged year-over-year change in the core PCE price index.

FOMC Statement

September 21, 2016

Information received since the Federal Open Market Committee met in July indicates that the labor market has continued to strengthen and growth of economic activity has picked up from the modest pace seen in the first half of this year. Although the unemployment rate is little changed in recent months, job gains have been solid, on average. Household spending has been growing strongly but business fixed investment has remained soft. Inflation has continued to run below the Committee's 2 percent longer-run objective, partly reflecting earlier declines in energy prices and in prices of non-energy imports. Market-based measures of inflation compensation remain low; most survey-based measures of longer-term inflation expectations are little changed, on balance, in recent months.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace and labor market conditions will strengthen somewhat further. Inflation is expected to remain low in the near term, in part because of earlier declines in energy prices, but to rise to 2 percent over the medium term as the transitory effects of past declines in energy and import prices dissipate and the labor market strengthens further. Near-term risks to the economic outlook appear roughly balanced. The Committee continues to closely monitor inflation indicators and global economic and financial developments.

Against this backdrop, the Committee decided to maintain the target range for the federal funds rate at 1/4 to 1/2 percent. The Committee judges that the case for an increase in the federal funds rate has strengthened but decided, for the time being, to wait for further evidence of continued progress toward its objectives. The stance of monetary policy remains accommodative, thereby supporting further improvement in labor market conditions and a return to 2 percent inflation.



Continued...

In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. In light of the current shortfall of inflation from 2 percent, the Committee will carefully monitor actual and expected progress toward its inflation goal. The Committee expects that economic conditions will evolve in a manner that will warrant only gradual increases in the federal funds rate; the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data.

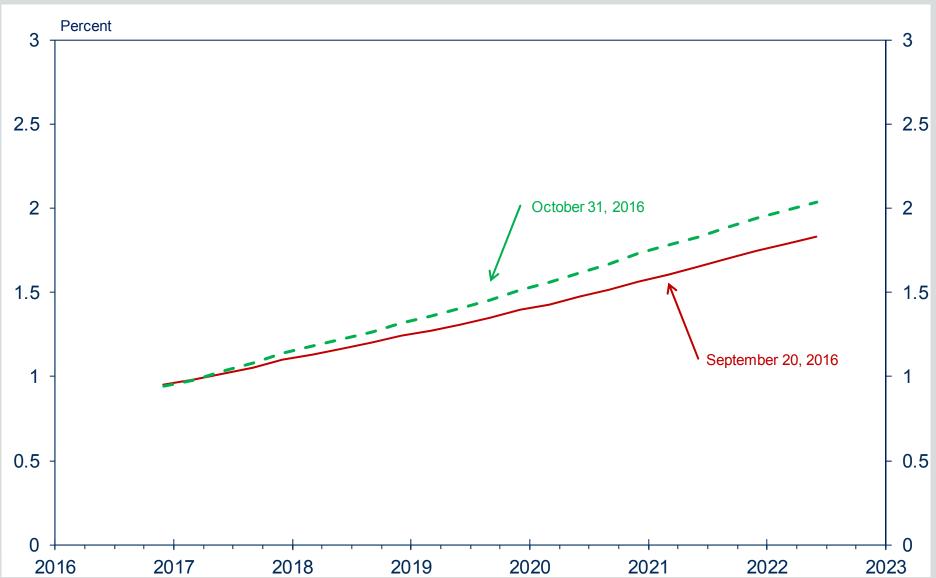
The Committee is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction, and it anticipates doing so until normalization of the level of the federal funds rate is well under way. This policy, by keeping the Committee's holdings of longer-term securities at sizable levels, should help maintain accommodative financial conditions.

Voting for the FOMC monetary policy action were: Janet L. Yellen, Chair; William C. Dudley, Vice Chairman; Lael Brainard; James Bullard; Stanley Fischer; Jerome H. Powell; and Daniel K. Tarullo. Voting against the action were: Esther L. George, Loretta J. Mester, and Eric Rosengren, each of whom preferred at this meeting to raise the target range for the federal funds rate to 1/2 to 3/4 percent.

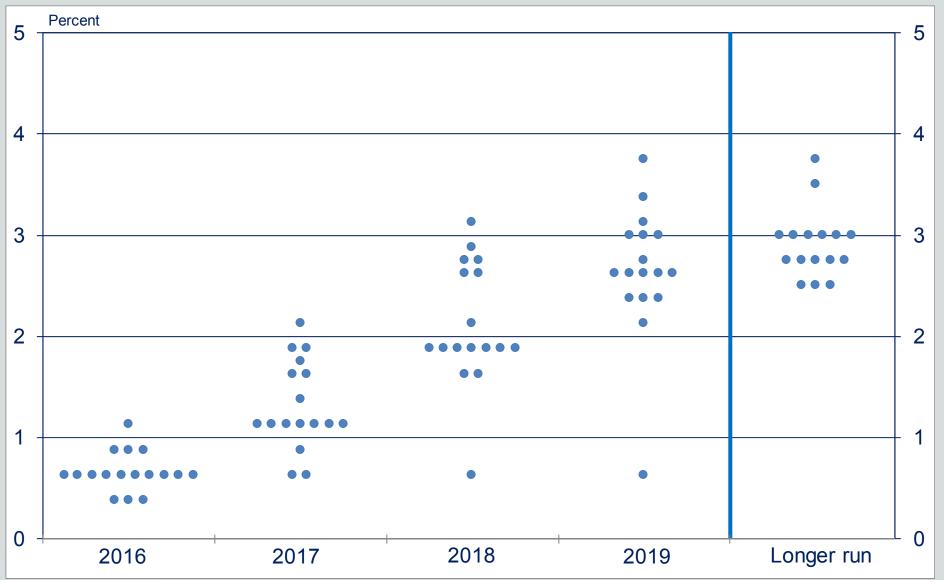


September 21, 2016
Source: Board of Governors

Eurodollar Futures



Summary of Economic Projections: Federal Funds Rate

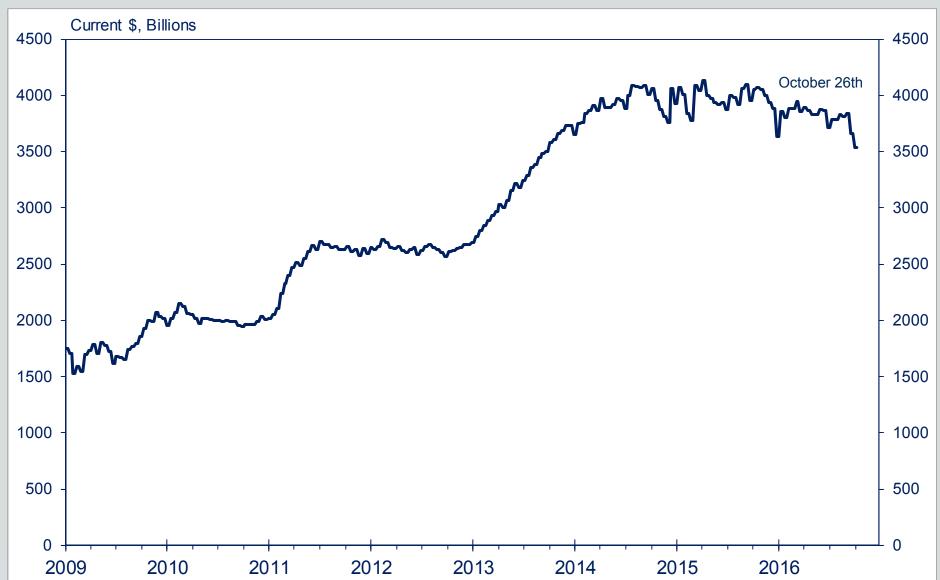


Note: Each dot in the chart represents the value of an FOMC participant's judgment of the midpoint of the appropriate target range (or the appropriate target level) for the federal funds rate at the end of the calendar year.

Projections made for the September 2016 meeting.

FEDERAL RESERVE BANK OF RICHMOND

Monetary Base

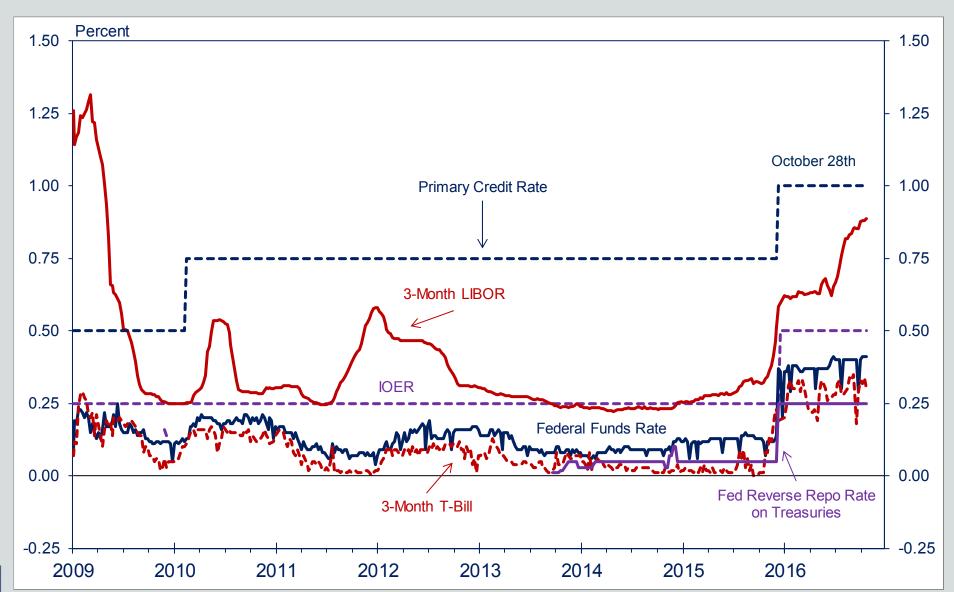


M2





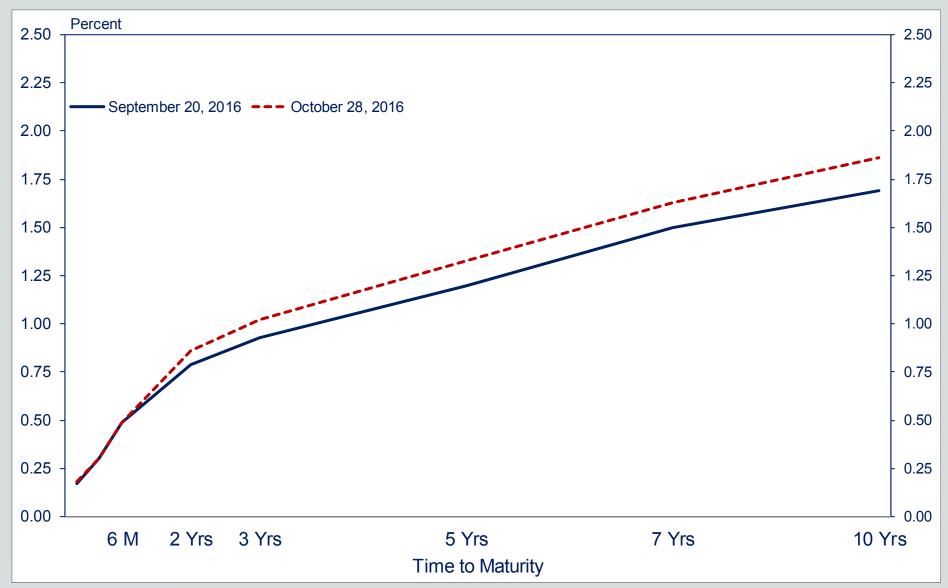
Money Market Rates



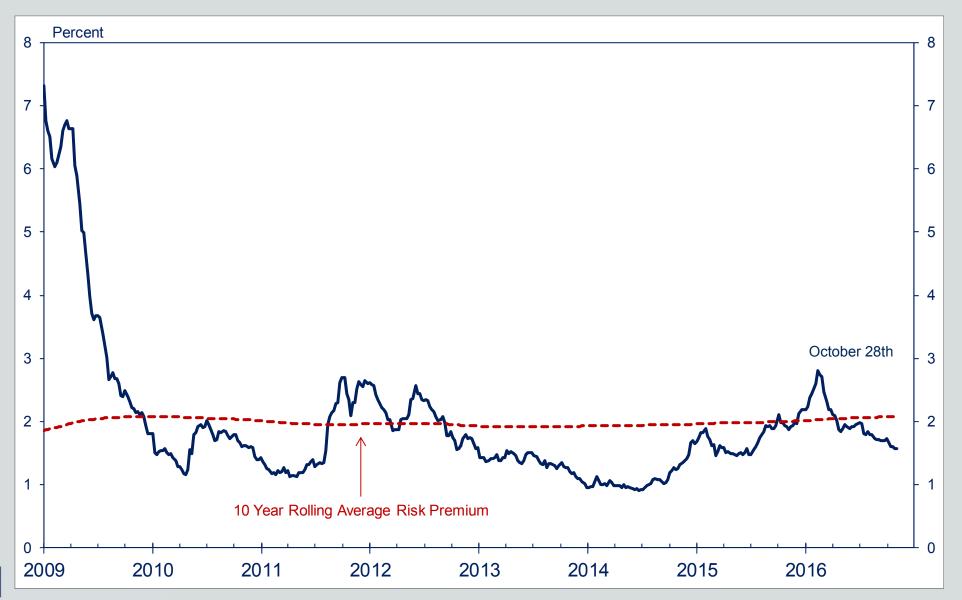
Capital Market Rates



Treasury Yield Curve



Risk Premium



Note: Risk Premium is defined as the difference in yields between BofA Merrill Lynch BBB and 10-year Treasury.