

# **National Economic Indicators**

August 22, 2016



Richmond • Baltimore • Charlotte

# **Table of Contents**

OI C	Ontenta			
GDP		Release Date	Latest Period	Page
	Table: Real Gross Domestic Product	Jul-29-2016 08:30	Q2-2016	4
	Real Gross Domestic Product	Jul-29-2016 08:30	Q2-2016	5
	Decomposition of Real Gross Domestic Product	Jul-29-2016 08:30	Q2-2016	6
House	holds			
	Retail Sales	Aug-12-2016 08:34	Jul-2016	7
	Disposable Personal Income and Expenditures	Aug-02-2016 08:37	Jun-2016	8
	Sales of Automobiles and Light Trucks	Aug-02-2016 16:14	Jul-2016	9
	Personal Saving Rate	Aug-02-2016 08:37	Jun-2016	10
	Household Net Worth	Jun-09-2016 12:09	Q1-2016	11
	Existing Single-Family Home Sales	Jul-21-2016 10:00	Jun-2016	12
	New Single-Family Home Sales	Jul-26-2016 10:03	Jun-2016	13
	Private Single-Family Housing Starts & Permits	Jul-19-2016 08:32	Jun-2016	14
	Private Multi-Family Housing Starts & Permits	Jul-19-2016 08:32	Jun-2016	15
Busine	ess Investment			
	Real Investment in Nonresidential Structures	Jul-29-2016 08:30	Q2-2016	16
	Real Private Construction Put in Place	Aug-01-2016 10:00	Jun-2016	17
	Real Nonresidential Fixed Investment	Jul-29-2016 08:30	Q2-2016	18
	Real Investment in Equipment	Jul-29-2016 08:30	Q2-2016	19
	Real Investment in Intellectual Property	Jul-29-2016 08:30	Q2-2016	20
Trade				
	Balance of International Trade	Aug-05-2016 08:30	Jun-2016	21
	Exchange Value of the USD	Aug-01-2016 10:07	Jul-2016	22
Manuf	acturing			
	Industrial Production	Jul-15-2016 09:16	Jun-2016	23
	Capacity Utilization Rate: Manufacturing	Jul-15-2016 09:16	Jun-2016	24
	Indexes of Manufacturing Activity	Aug-01-2016 10:02	Jul-2016	25
	Indexes of Non-Manufacturing Activity	Aug-03-2016 10:01	Jul-2016	26
	Table: ISM Business Survey Indexes	Aug-01-2016 10:02	Jul-2016	27
	Manufacturers' New Orders	Aug-04-2016 10:03	Jun-2016	28
	Core Capital Goods	Aug-04-2016 10:03	Jun-2016	29
DANIK	Business Inventory/Sales Ratios	Aug-09-2016 10:01	Jun-2016	30



# **Table of Contents (continued)**

<b>\</b>					
Labor Market	Release Date	Latest Period	Page		
Nonfarm Payroll Employment	Aug-05-2016 08:31	Jul-2016	31, 32		
Unemployment Rate Measures	Aug-05-2016 08:31	Jul-2016	33,34		
Labor Market Flows	Aug-10-2016 10:03	Jun-2016	35		
Labor Force Participation	Aug-05-2016 08:31	Jul-2016	36		
Aggregate Weekly Hours Index	Aug-05-2016 08:31	Jul-2016	37		
Average Hourly Earnings	Aug-05-2016 08:31	Jul-2016	38		
Employment Cost Index	Jul-29-2016 08:31	Q2-2016	39		
Business Labor Productivity	Aug-09-2016 08:30	Q2-2016	40		
Unit Labor Costs, Nonfarm Business	Aug-09-2016 08:30	Q2-2016	41		
Inflation					
Table: Gauges of Inflation	Aug-03-2016 11:11	Jul-2016	42		
Expenditure Price Indexes	Aug-02-2016 08:37	Jun-2016	43, 44		
Consumer Price Indexes	Jul-15-2016 08:31	Jun-2016	45		
Producer Price Indexes	Aug-12-2016 08:33	Jul-2016	46		
Commodity Price Indexes	Aug-03-2016 11:11	Jul-2016	47		
Crude Oil Prices	Aug-15-2016	15-Aug-2016	48		
TIPS Inflation Compensation	Aug-12-2016 16:59	05-Aug-2016	49		
Monetary Policy & Financial Markets					
Federal Reserve System Assets	Aug-11-2016 16:31	10-Aug-2016	50		
Monetary Policy Instruments	Aug-14-2016 07:51	12-Aug-2016	51		
Real Federal Funds Rate	Aug-02-2016 08:37	Jul-2016	52		
FOMC Statement	Jun-15-2016		53, 54		
Eurodollar Futures	Aug-15-2016	15-Aug-2016	55		
SEP: Federal Funds Rate	Jun-15-2016 14:05		56		
Monetary Base	Aug-11-2016 16:31	03-Aug-2016	57		
M2	Aug-11-2016 16:31	Jul-2016	58		
Money Market Rates	Aug-14-2016 07:51	12-Aug-2016	59		
Capital Market Rates	Aug-14-2016 07:51	12-Aug-2016	60		
Treasury Yield Curve	Aug-12-2016 16:27	12-Aug-2016	61		
Risk Premium	Aug-14-2016 07:51	12-Aug-2016	62		

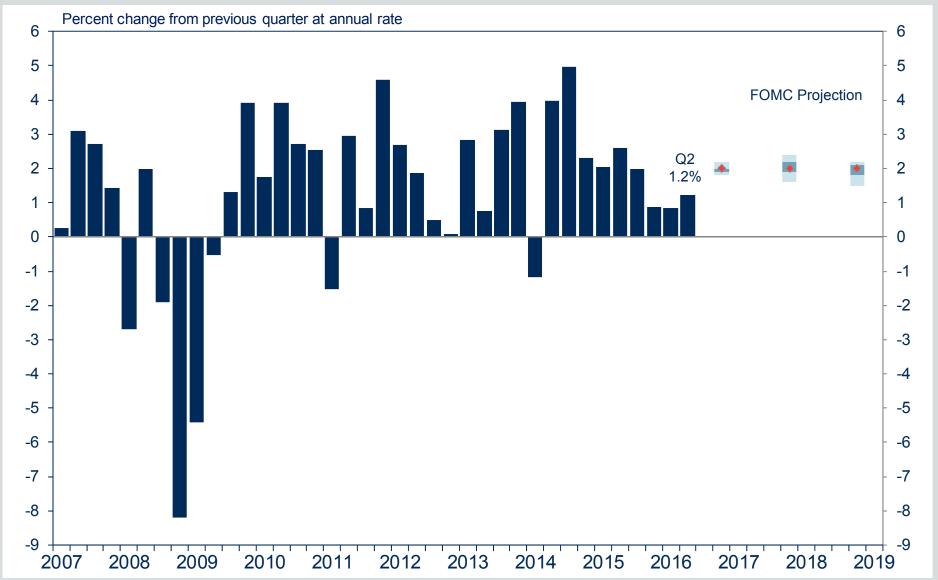


### **Real Gross Domestic Product**

		2015		201	6
	Q2	Q3	Q4	Q1	Q2
CHANGE FROM PREVIOUS QUARTER AT COMPOUND ANNUAL RATE [Percent]:					
Gross Domestic Product	2.6	2.0	0.9	8.0	1.2
Personal Consumption Expenditures	2.9	2.7	2.3	1.6	4.2
Nonresidential Fixed Investment Structures Equipment Intellectual Property	1.6 -2.7 -0.3 8.0	3.9 -4.3 9.1 2.1	-3.3 -15.2 -2.6 4.6	-3.4 0.1 -9.5 3.7	-2.2 -7.9 -3.5 3.5
Residential Fixed Investment	14.9	12.6	11.5	7.8	-6.1
Exports of Goods & Services Imports of Goods & Services	2.9 2.9	-2.8 1.1	-2.7 0.7	-0.7 -0.6	1.4 -0.4
Government Consumption Expenditures & Gross Investment	3.2	1.9	1.0	1.6	-0.9
Final Sales to Domestic Purchasers	3.2	3.0	1.7	1.2	2.1
LEVEL IN QUARTER AT SEASONALLY ADJUSTED ANNUAL RATE [Billions of Chained (2005) Dollars]:					
Change in Private Inventories	93.8	70.9	56.9	40.7	-8.1
Net Exports of Goods & Services	-524.9	-547.1	-566.6	-566.3	-556.3



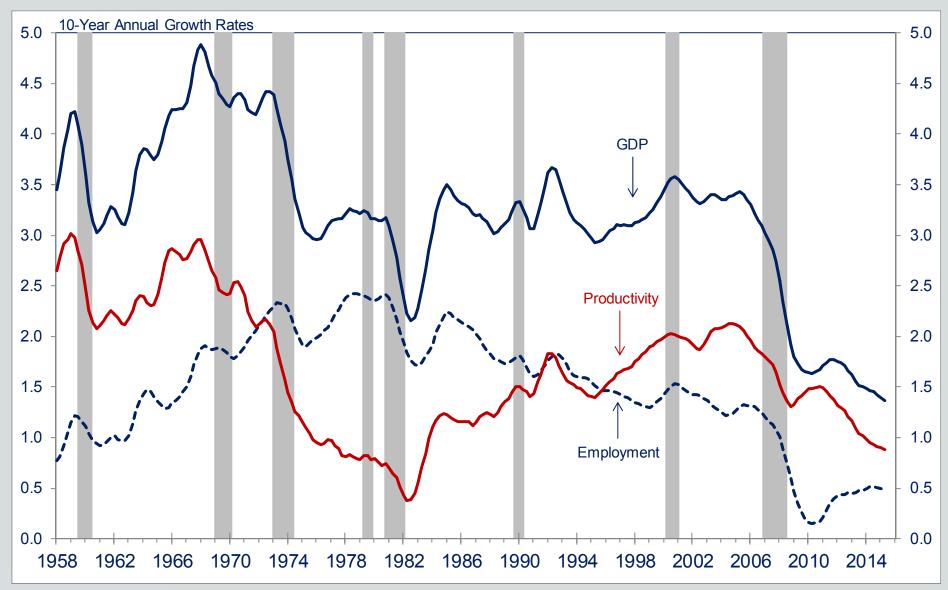
#### **Real Gross Domestic Product**



OF RICHMOND

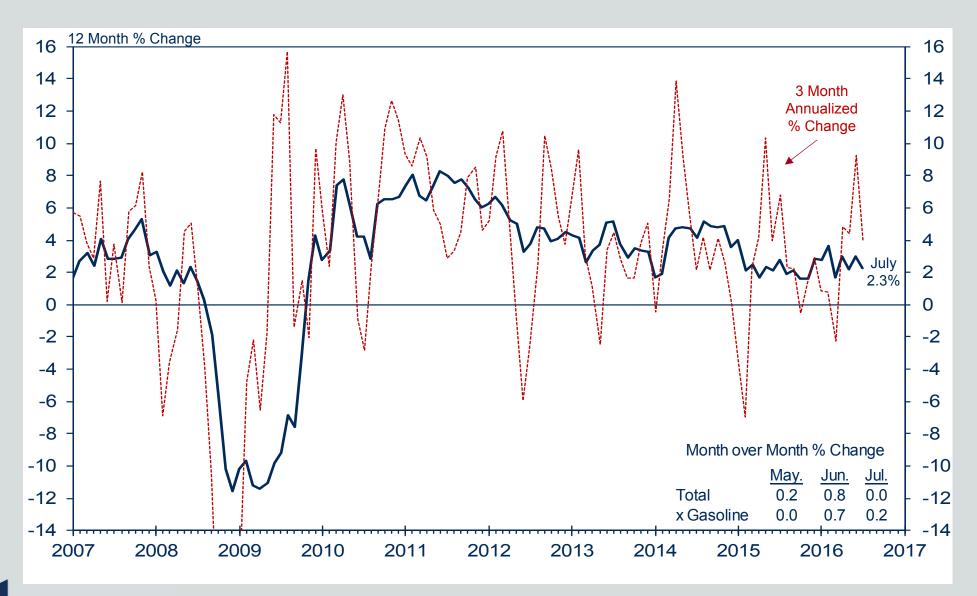
Note: Projection is the median, central tendency, and range from the June 2016 Summary of Economic Projections. Red dots indicate median projections. Projections of change in real gross domestic product (GDP) are from the fourth quarter of the previous year to the fourth quarter of the year indicated.

# **Decomposition of Real GDP**



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

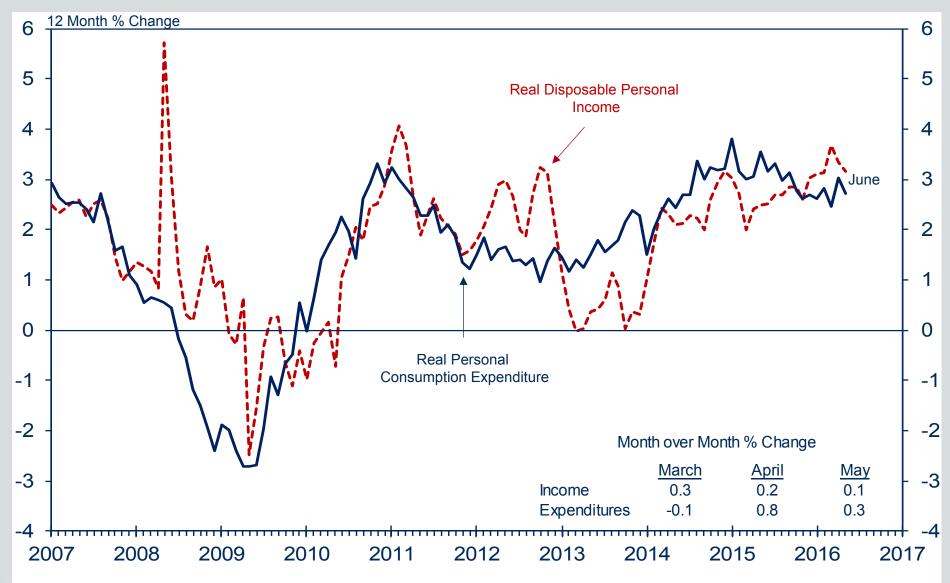
#### **Retail Sales**





Note: Retail sales includes food services.

# Disposable Personal Income & Expenditures



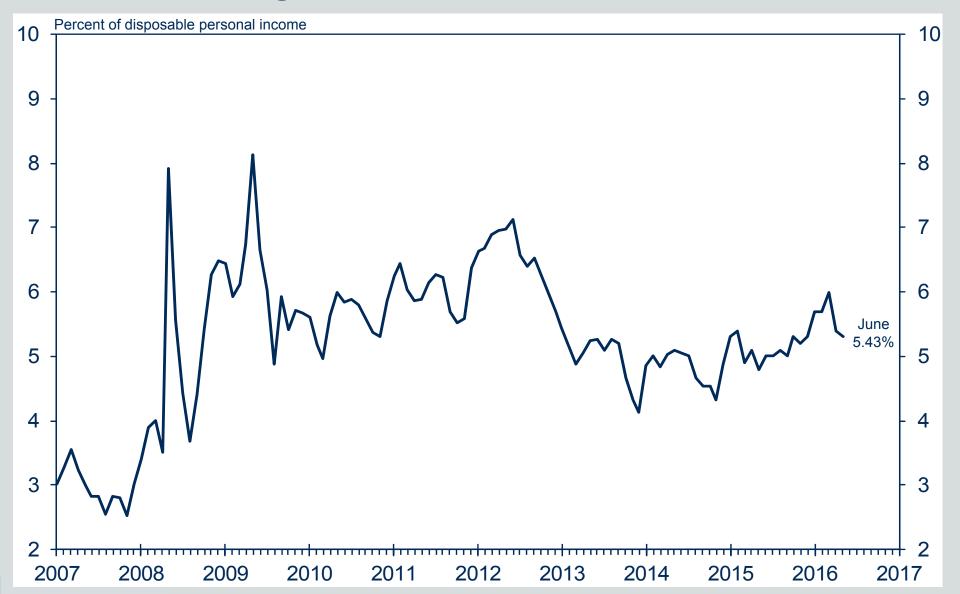


Note: Real disposable personal Income was adjusted to remove tax-induced income shifting near end of 2012.

# Sales of Automobiles & Light Trucks



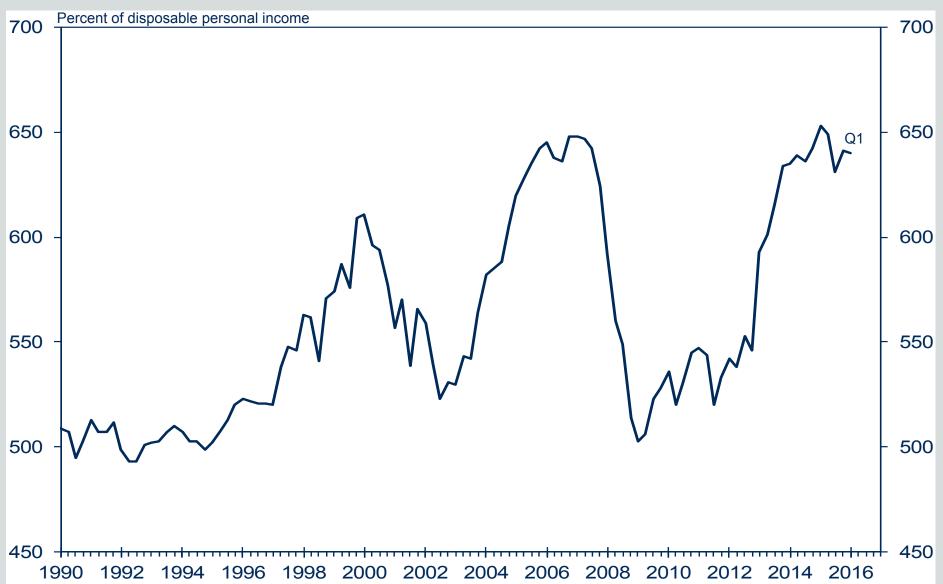
# **Personal Saving Rate**



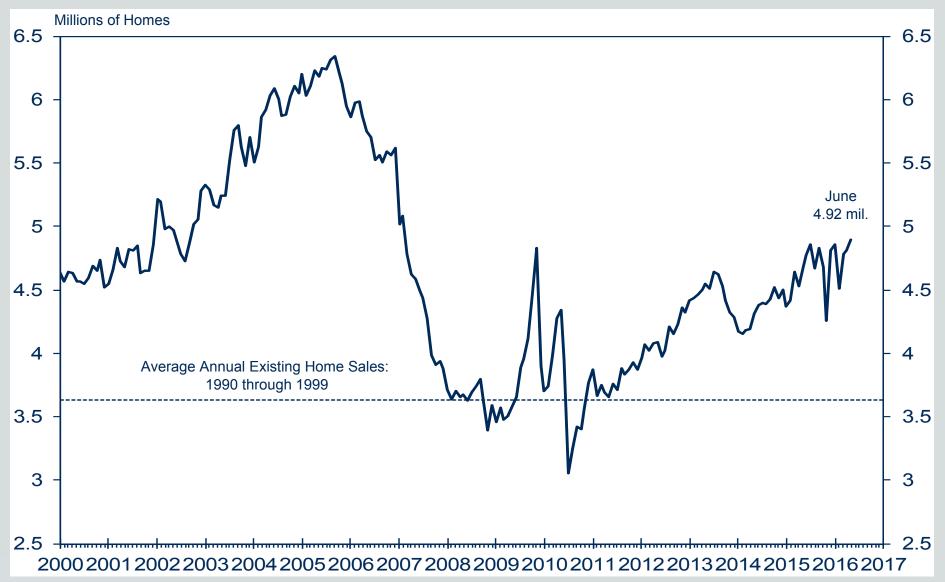


Note: The personal saving rate was adjusted to remove tax-induced income shifting near the end of 2012.

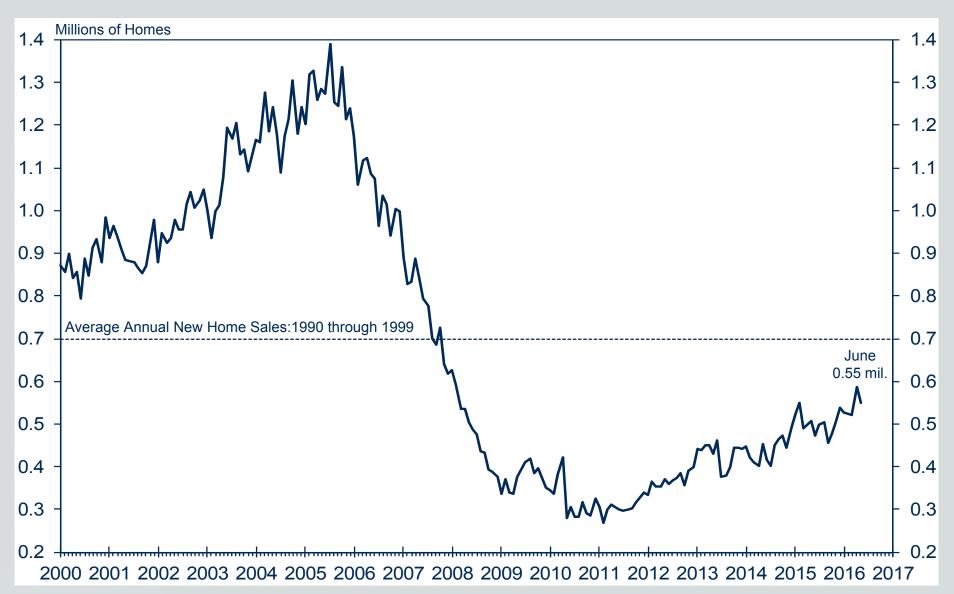
#### **Household Net Worth**



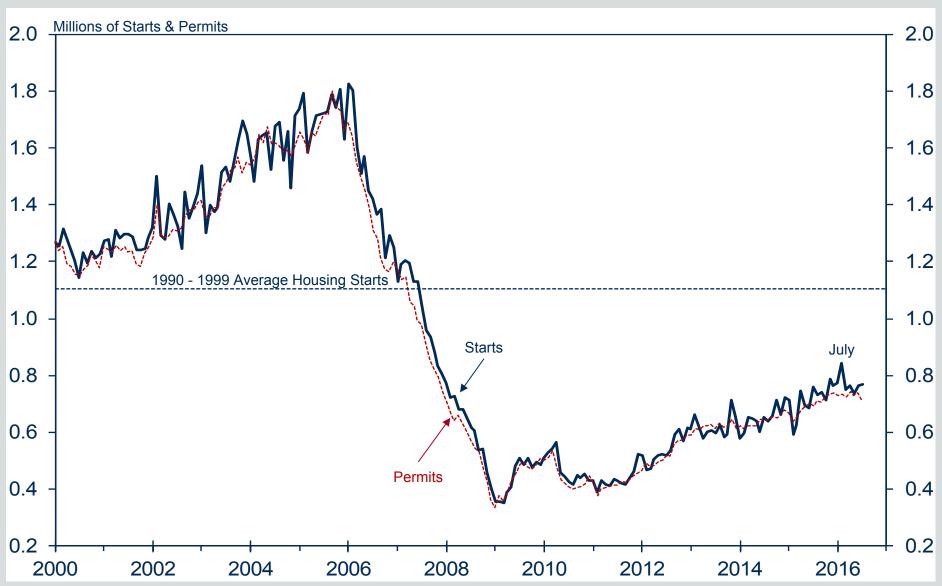
# **Existing Single-Family Home Sales**



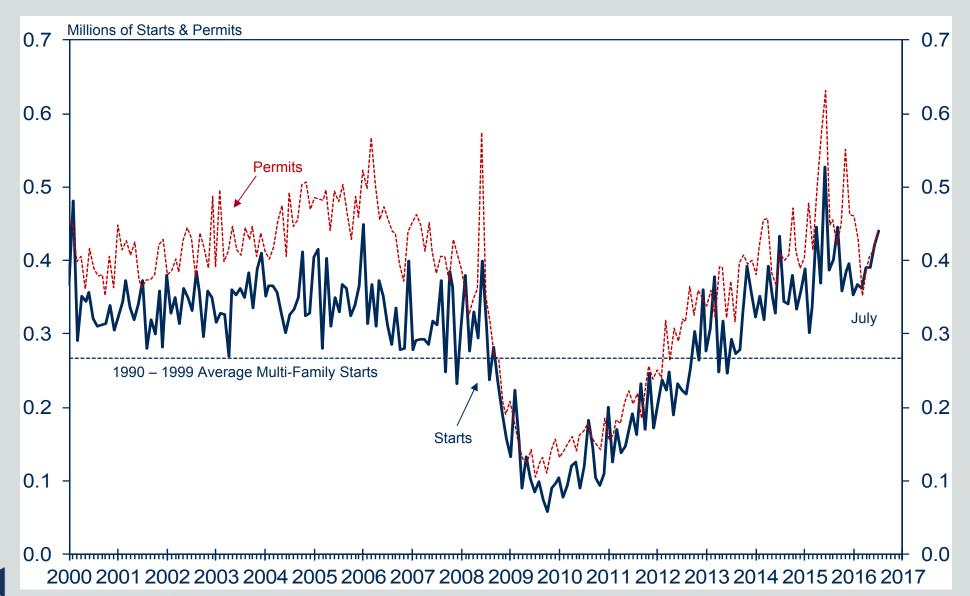
# **New Single-Family Home Sales**



# **Private Single-Family Housing Starts & Permits**



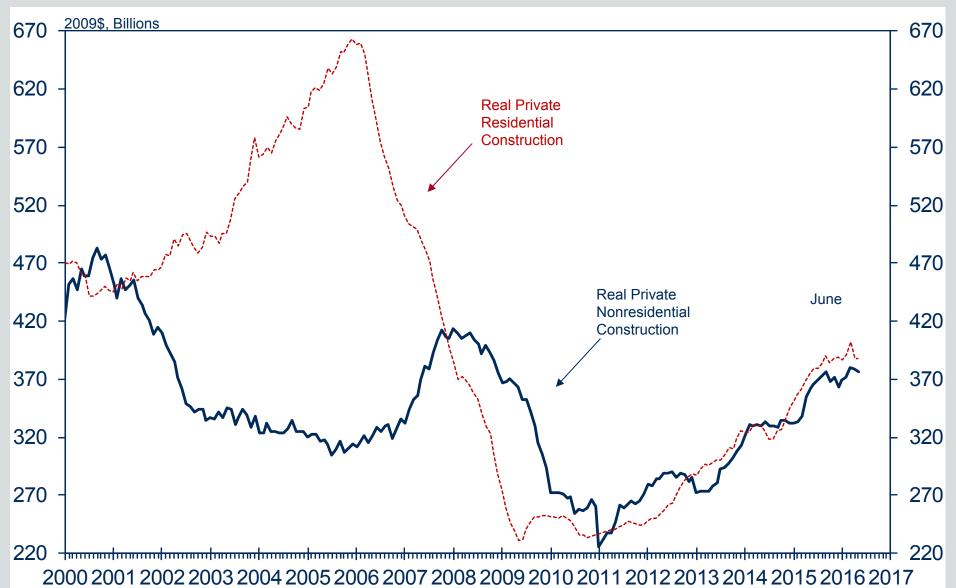
# **Private Multi-Family Housing Starts & Permits**



### **Real Investment in Nonresidential Structures**



#### **Real Private Construction Put In Place**

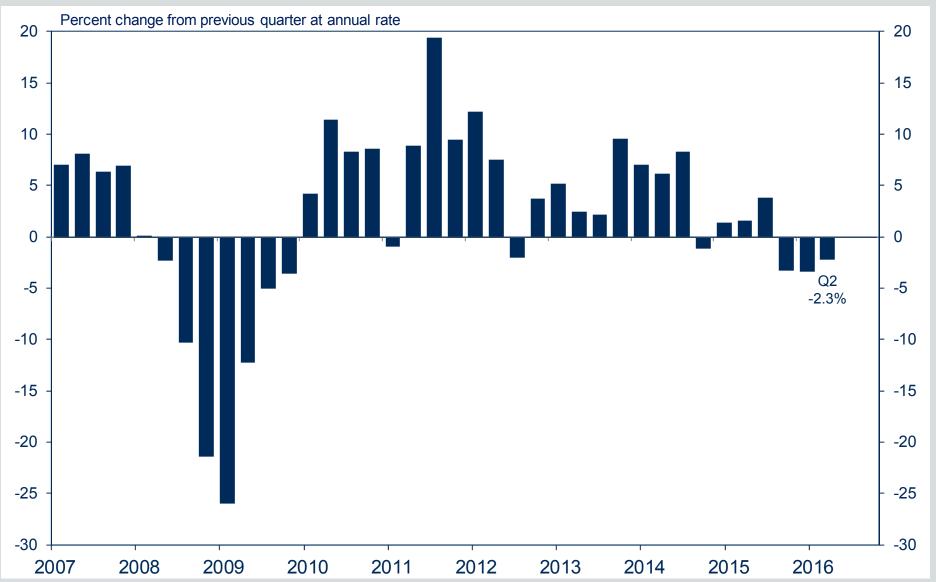


Notes: Private nonresidential construction deflated using the price index for private fixed investment in nonresidential structures and private residential construction deflated using the private residential investment chain price index.

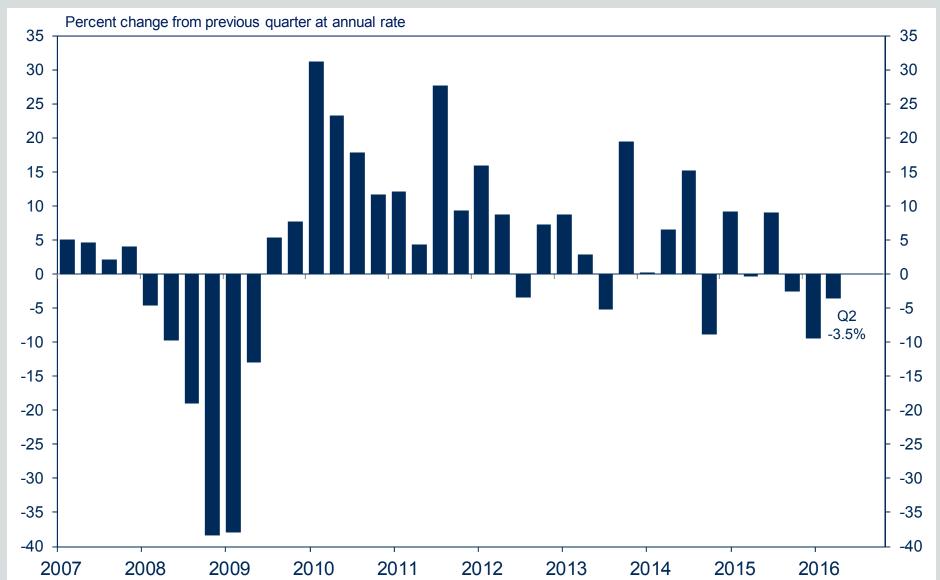
Source: Census Bureau via Haver Analytics 17

OF RICHMOND

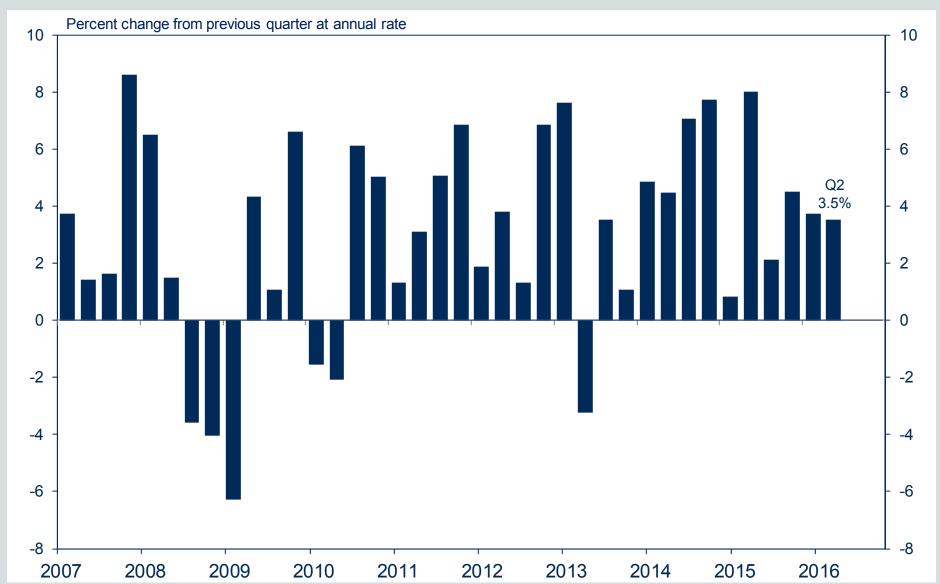
### **Real Nonresidential Fixed Investment**



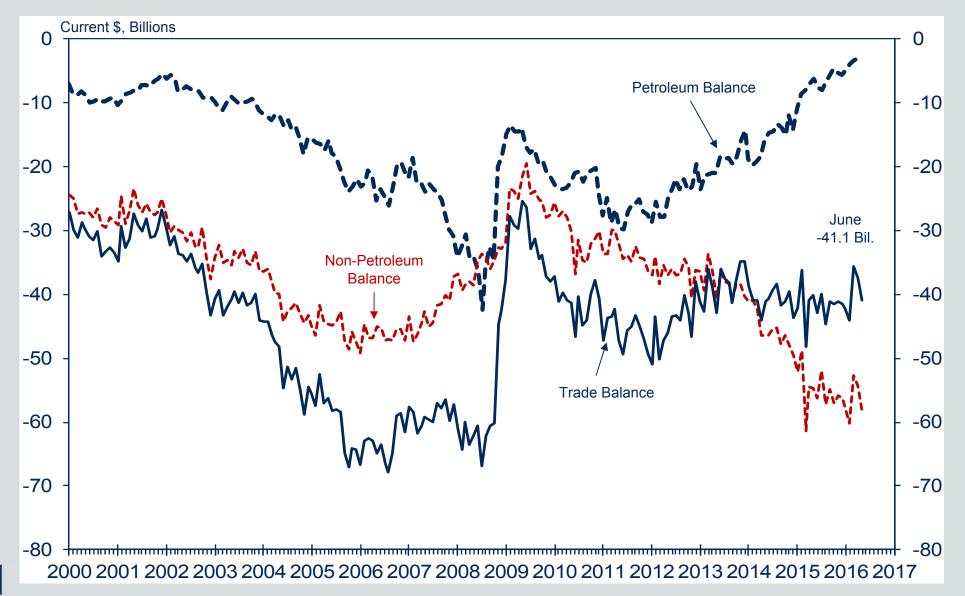
# **Real Investment in Equipment**



# Real Investment in Intellectual Property



### **Balance of International Trade**

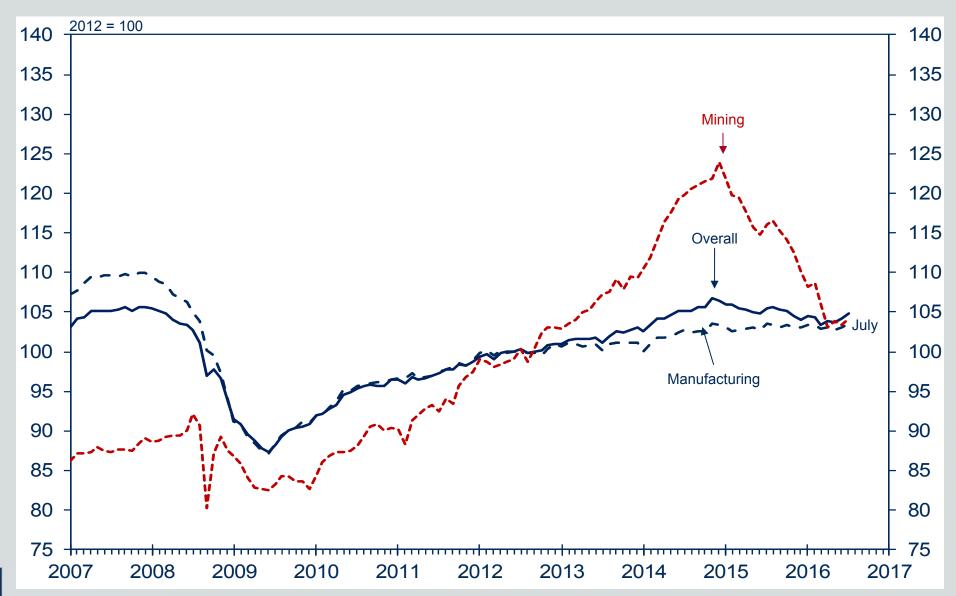


# **Exchange Value of the USD**

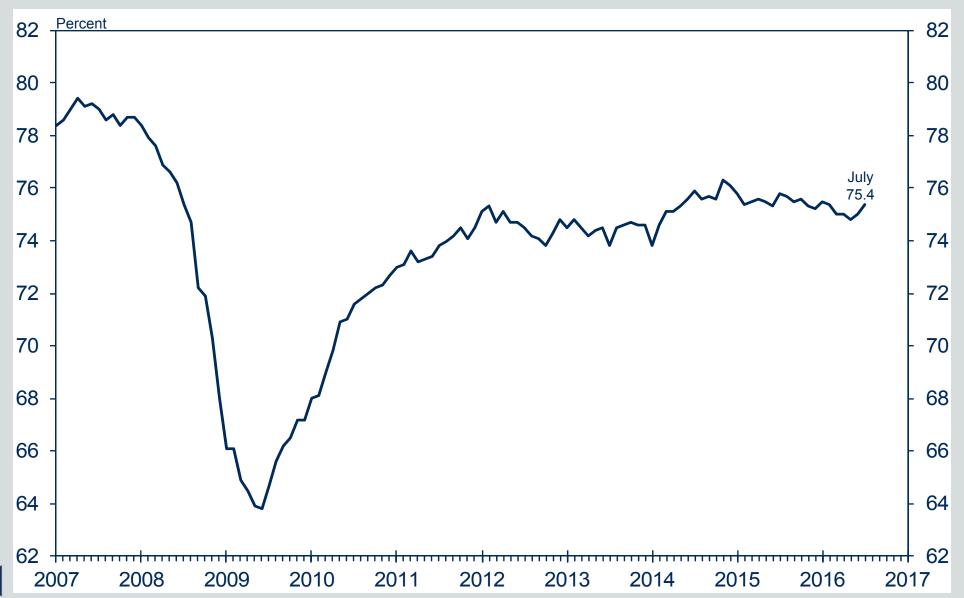


Notes: Measured as the real broad trade-weighted exchange value of the United States Dollar.

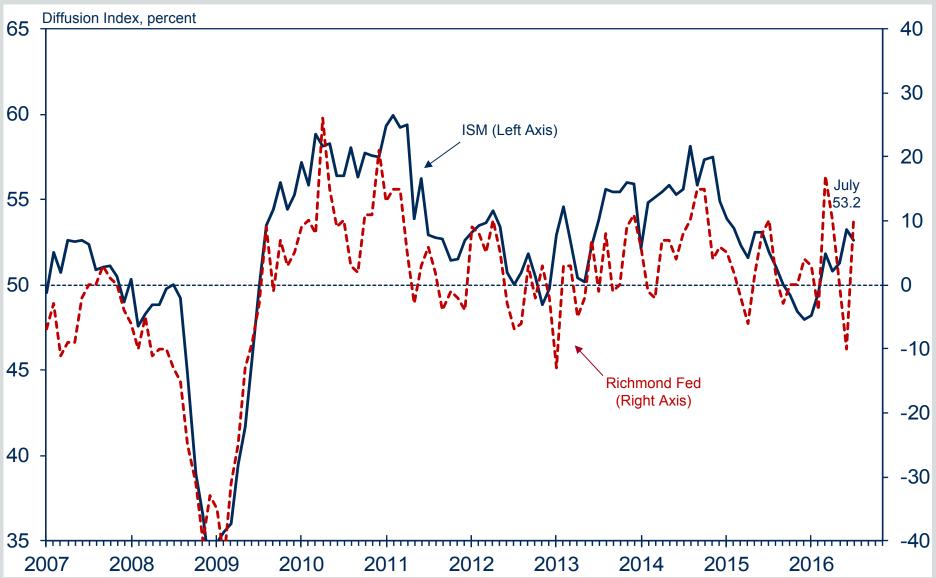
### **Industrial Production**



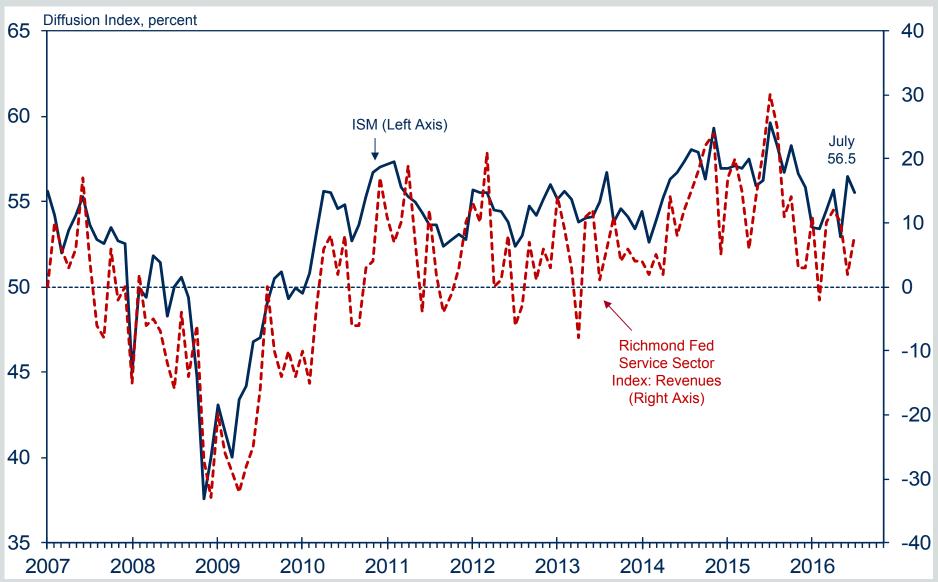
### **Capacity Utilization Rate: Manufacturing**



# **Indexes of Manufacturing Activity**



# **Indexes of Non-Manufacturing Activity**



# **ISM:** Business Survey Indexes

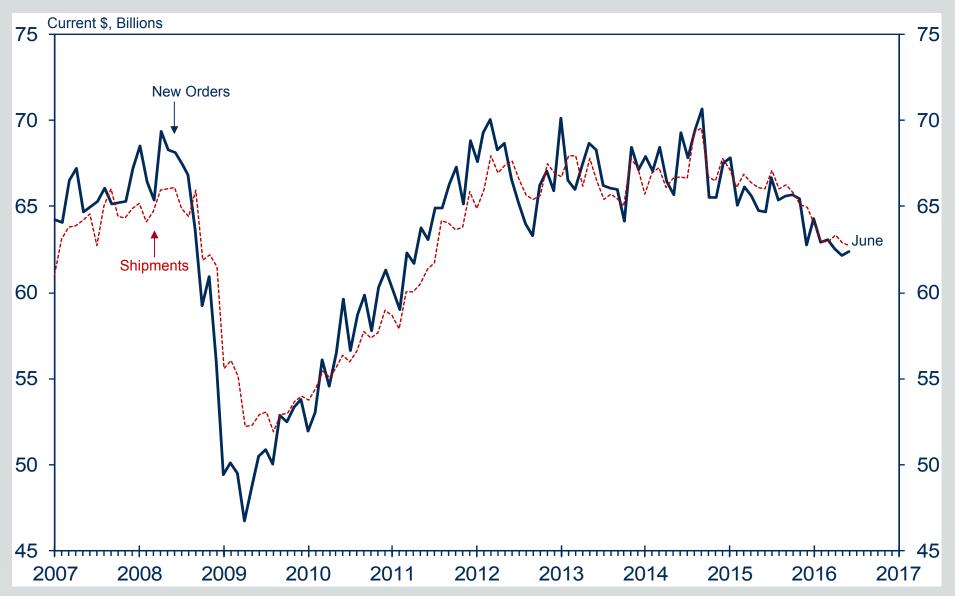
MANUFACTURING BUSINESS:			NON-MANUFACTURING BUSINESS:			
	<u>June</u>	<u>July</u>		<u>June</u>	<u>July</u>	
Purchasing Managers Index	53.2	52.6	Non-Manufacturing Index	56.5	55.5	
Production	54.7	55.4	Business Activity	59.5	59.3	
New Orders	57.0	56.9	New Orders	59.9	60.3	
Employment	50.4	49.4	Employment	52.7	51.4	
Supplier Deliveries	55.4	51.8	Supplier Deliveries	54.0	51.0	
Inventories	48.5	49.5	Inventories	55.5	54.0	
Prices	60.5	55.0	Prices	55.5	51.9	
Backlog of Orders	52.5	48.0	Backlog of Orders	47.5	51.0	
New Export Orders	53.5	52.5	New Export Orders	53.0	55.5	
Imports	52.0	52.0	Imports	54.0	53.0	

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

#### **Manufacturers' New Orders**

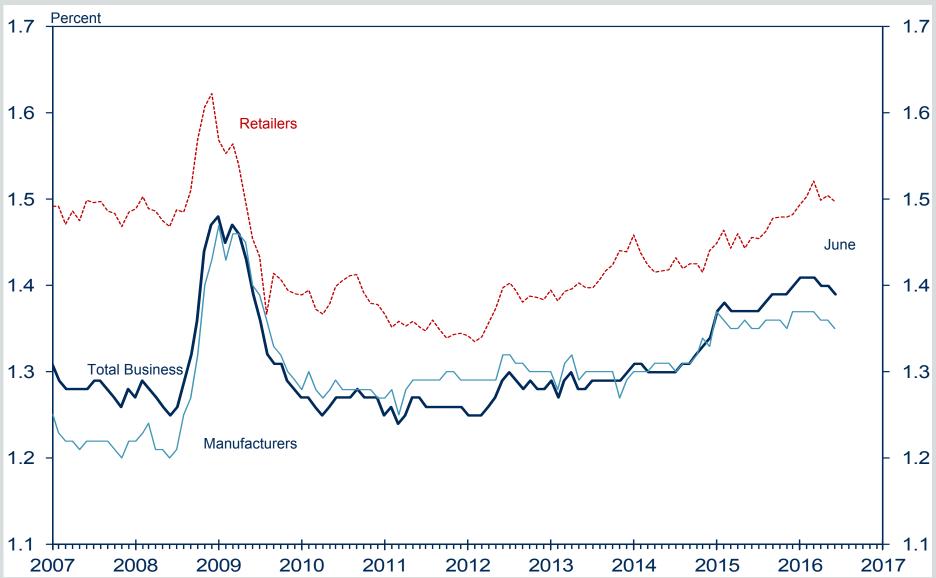


# **Core Capital Goods**

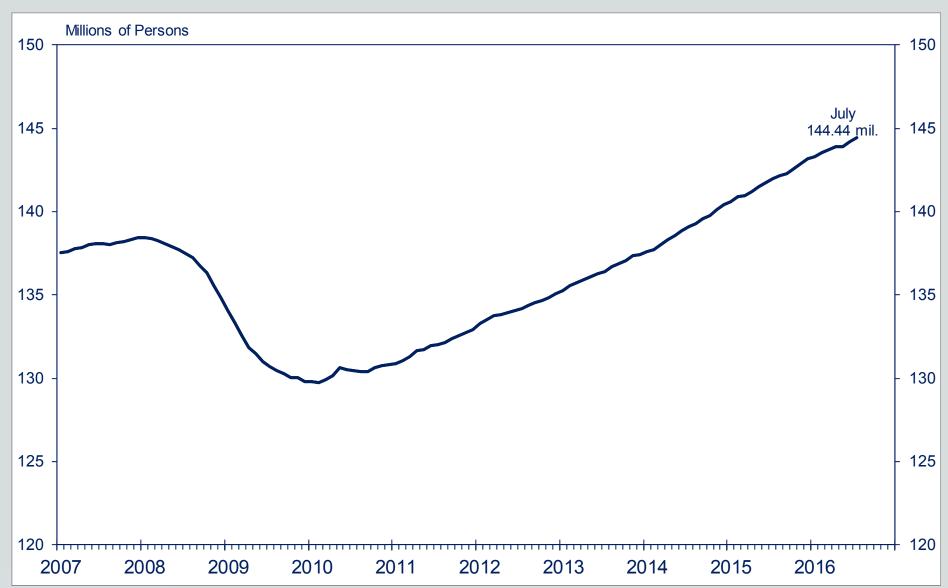


Notes: Core capital goods are nondefense capital goods excluding aircraft.

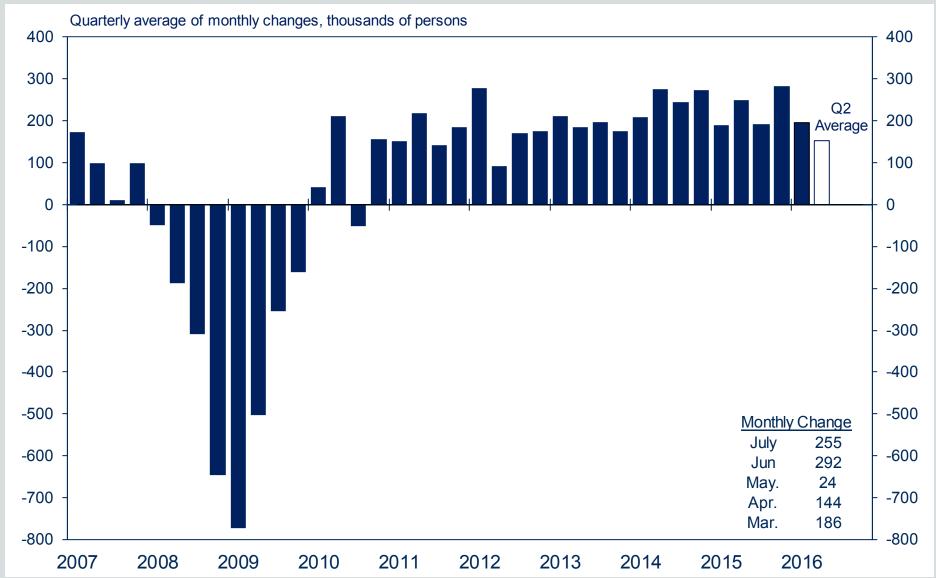
# **Business Inventory/Sales Ratio**



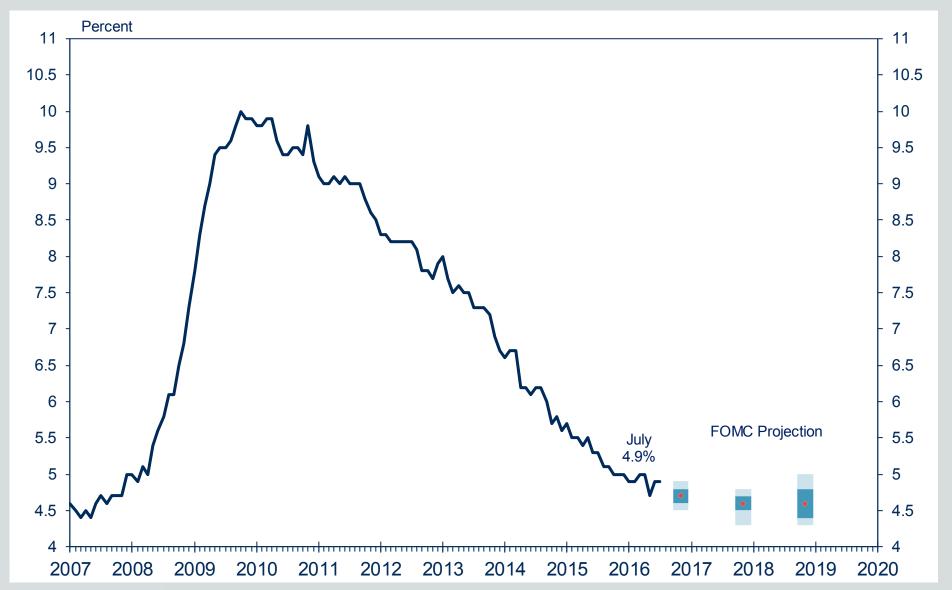
# **Nonfarm Payroll Employment**



# **Nonfarm Payroll Employment**

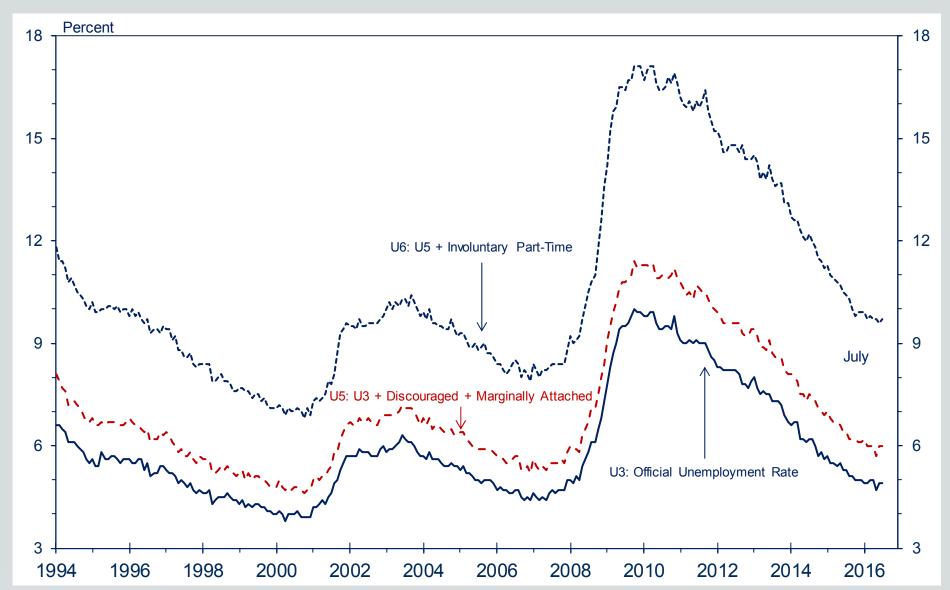


### **Unemployment Rate**

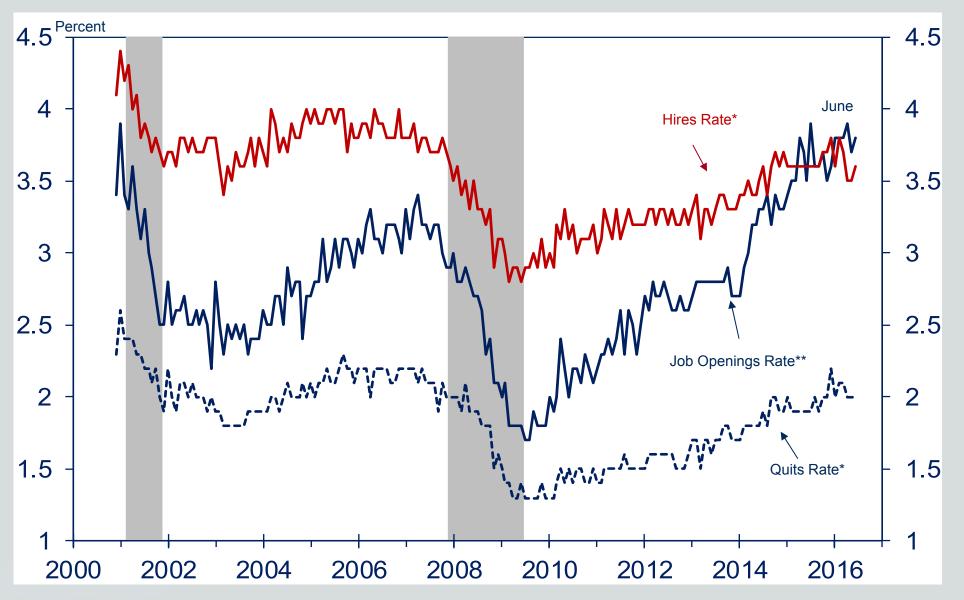


Notes: FOMC projection is the median, range, and central tendency for the Q4 levels, from the June 2016 meeting. Red dots indicate median projections

# **Measures of Labor Utilization**

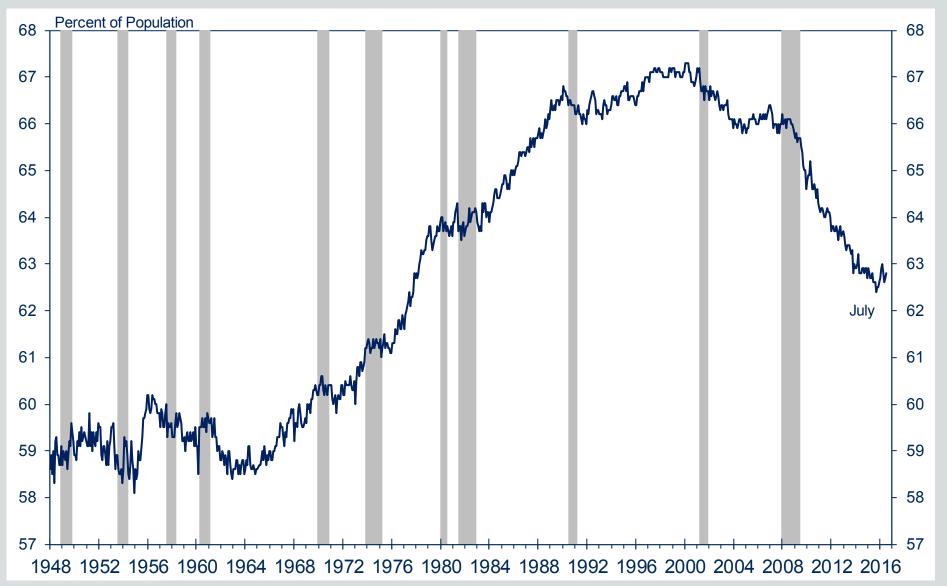


### **Labor Market Flows**

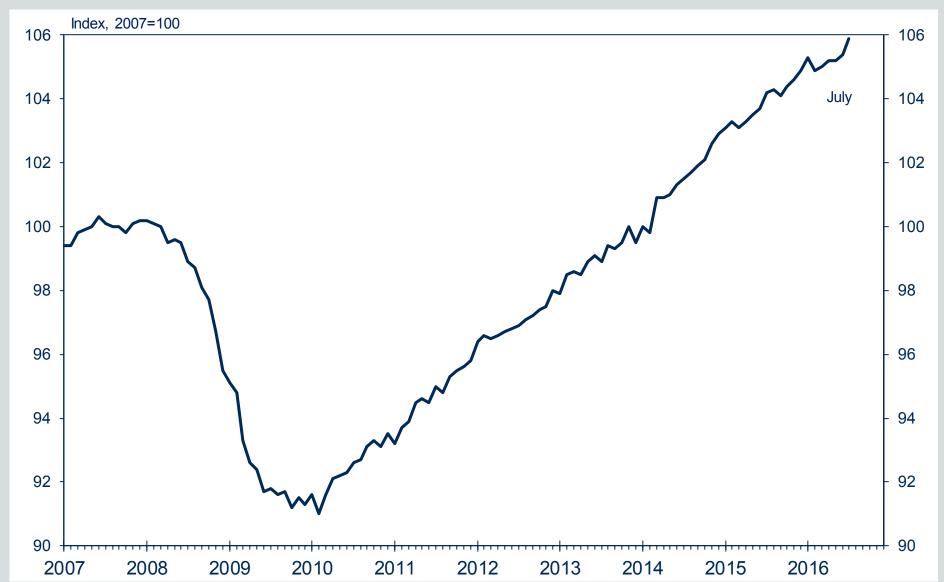


Note: \*Percent of total employment. \*\*Percent of total employment plus job openings.

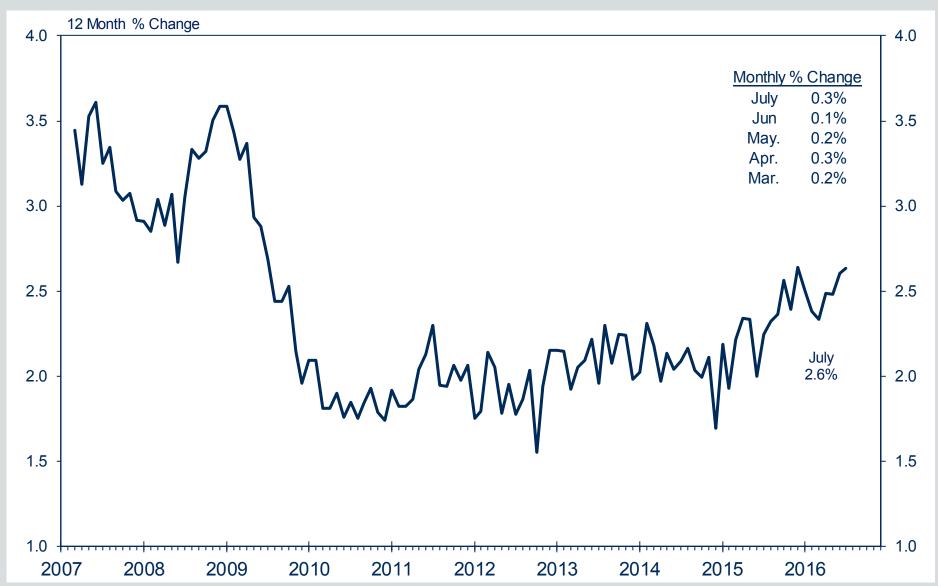
# **Labor Force Participation**



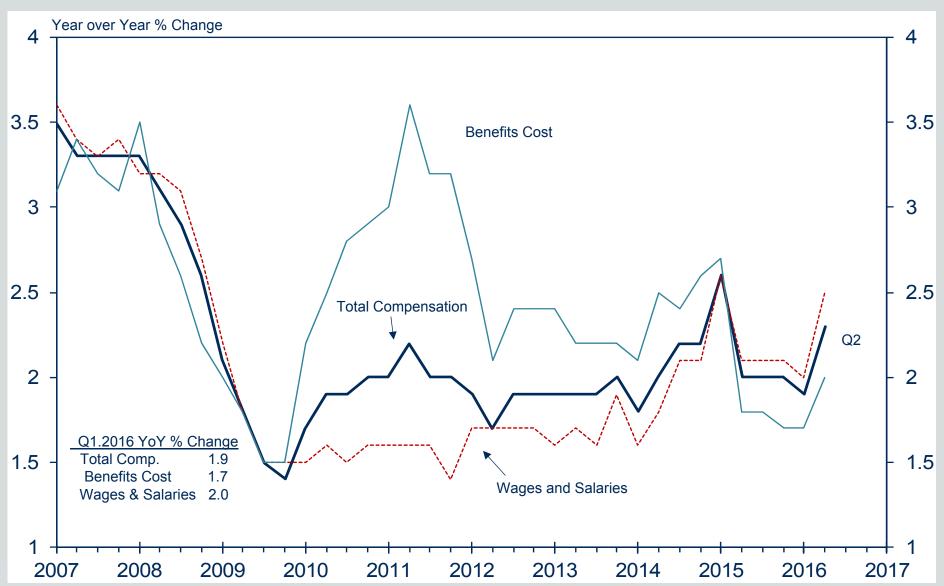
# **Aggregate Weekly Hours Index**



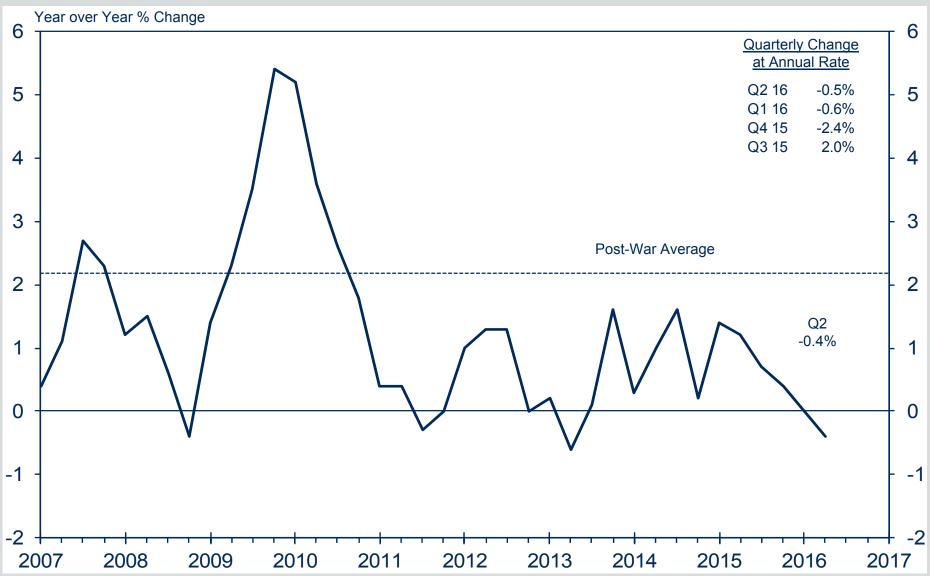
## **Average Hourly Earnings**



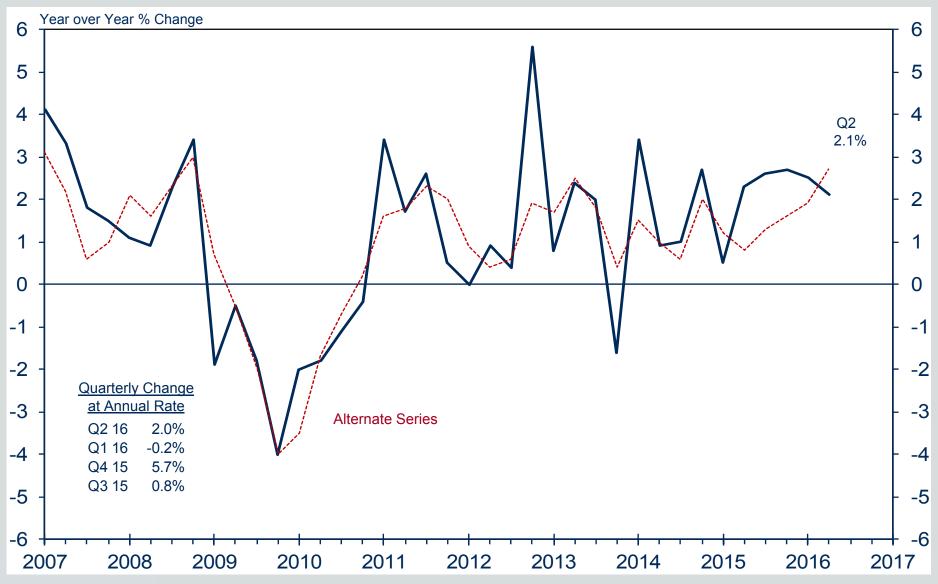
# **Employment Cost Index**



# **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 Annual Rate]:		
Personal Consumption Expenditures Core (excludes Food and Energy)	<b>May</b> 2.1 2.1		<b>YoY %</b> 0.9 1.6
Consumer Price Indexes	[Percent Change from Previous Month at Annual Rate]:		
All Items Core (excludes Food and Energy)	<b>June</b> 2.6 2.1	<b>July</b> -0.5 1.1	<b>YoY %</b> 0.8 2.2
Dundrian Duine Indoves	[Percent Change from Previous Month at Annual Rate]:		
Producer Price Indexes	[Percent Change from Previous Month at Anr	nual Rate]:	
Finished Goods Core (excludes Food and Energy) Core Intermediate Goods Crude Goods	June	<b>July</b> -5.5	-1.7
Finished Goods Core (excludes Food and Energy) Core Intermediate Goods	June 10.5 1.9 1.9	July -5.5 -1.8 1.3 -4.6	-2.1 1.0



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

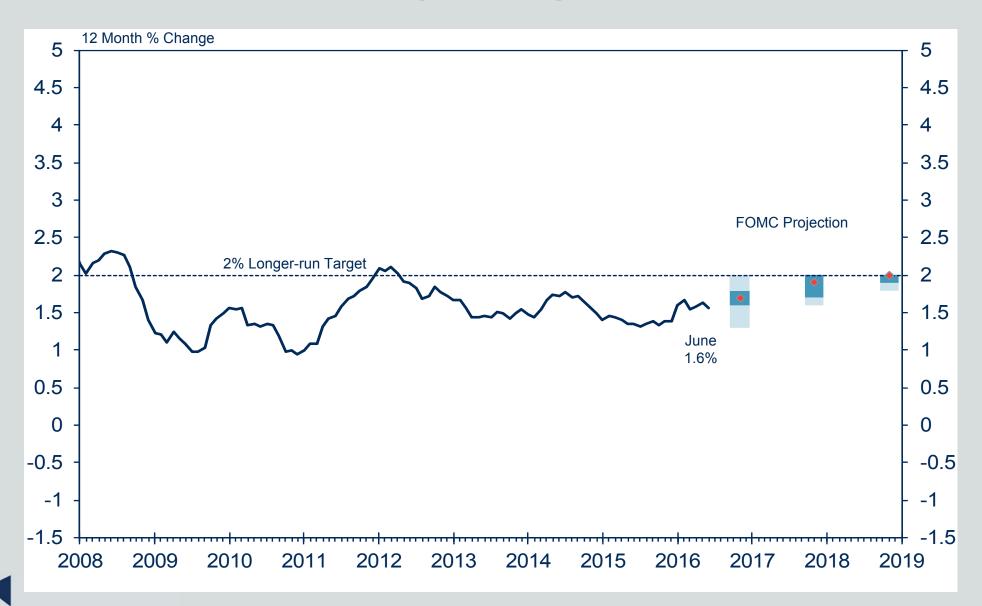
## **Personal Consumption Expenditure Price Index**



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

Source: Bureau of Economic Analysis & Board of Governors via Haver Analytics 43

## **Core Personal Consumption Expenditure Price Index**

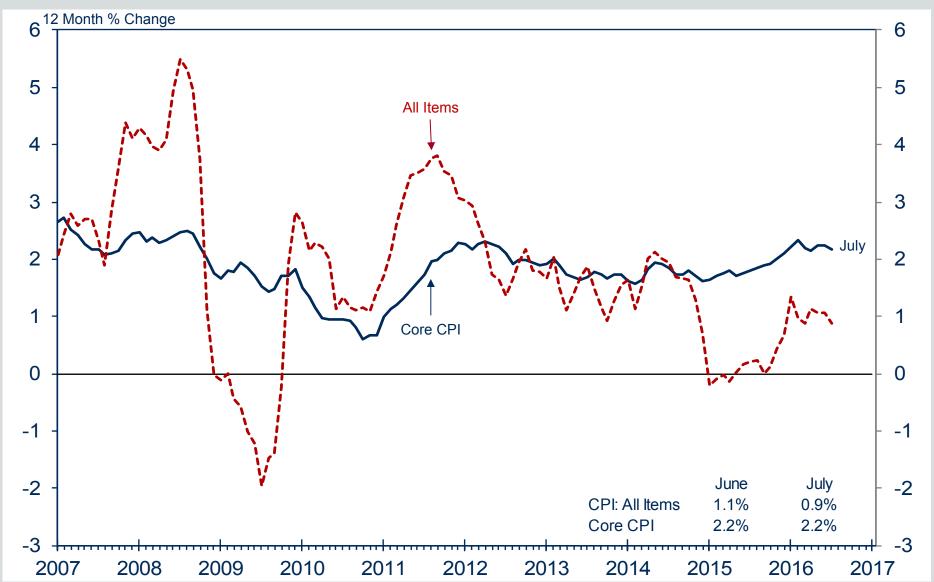




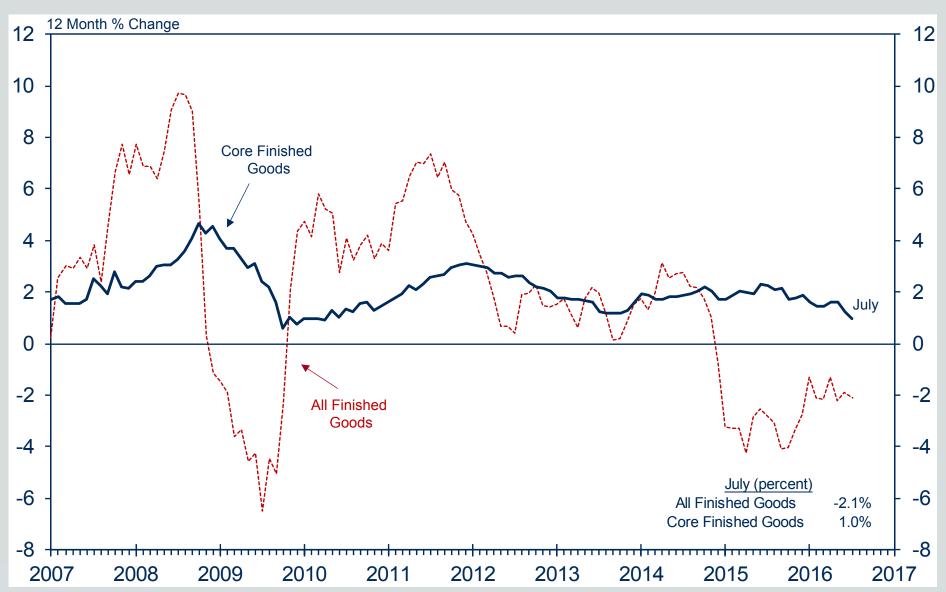
Notes: FOMC projection is the median, range, and central tendency for Q4/Q4 percent changes, from the June 2016 meeting. Red dots indicate median projections. Core PCE Price Index excludes expenditures on gasoline and food services.

Source: Bureau of Economic Analysis & Board of Governors via Haver Analytics

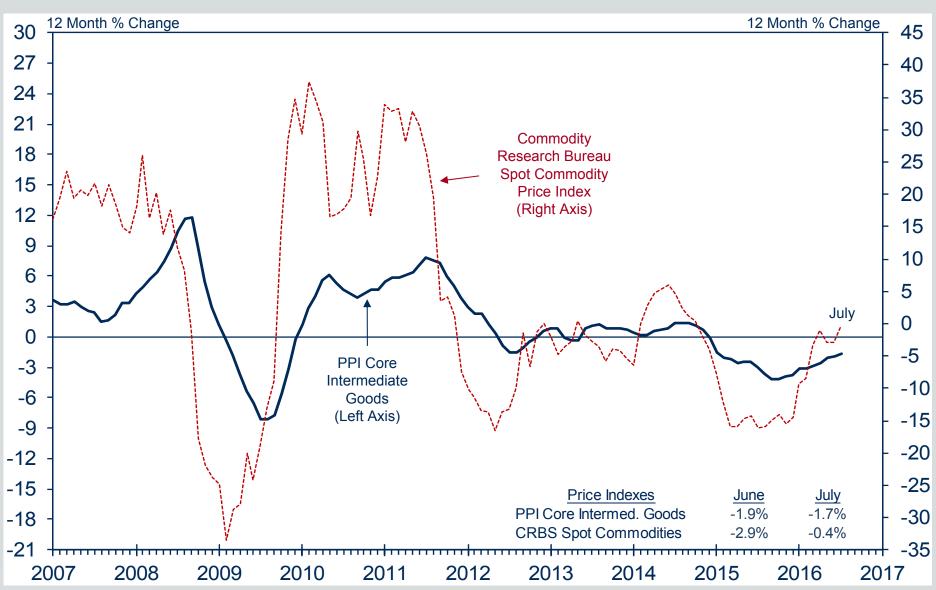
#### **Consumer Price Indexes**



#### **Producer Price Indexes**



## **Commodity Price Indexes**

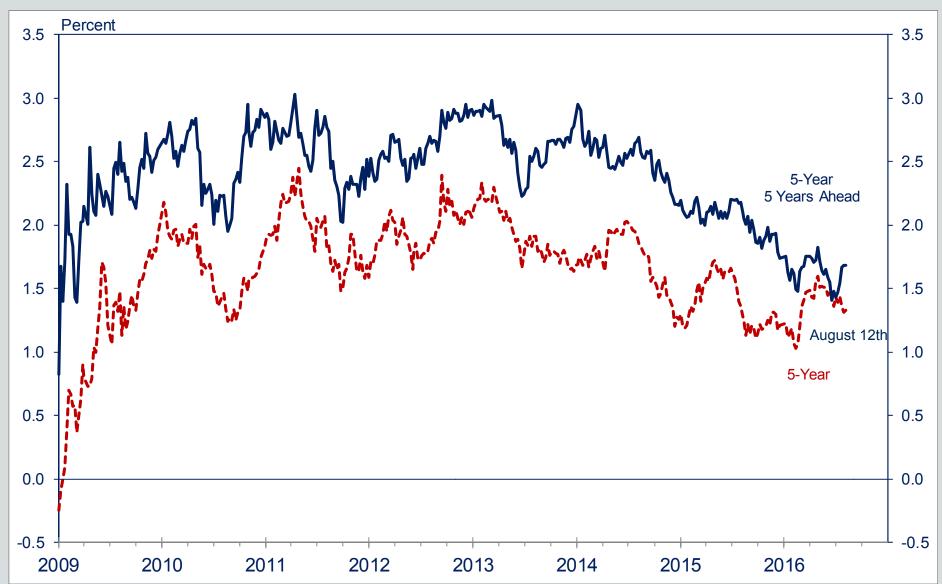


#### **Crude Oil Prices**

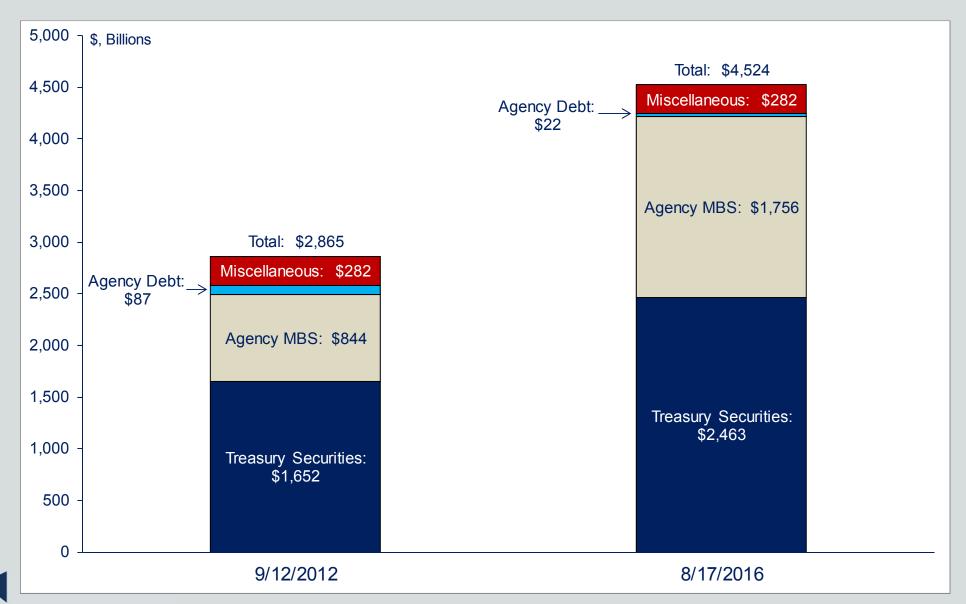


Notes: Spot and Futures Prices are for Brent Crude Oil.

# **TIPS Inflation Compensation**

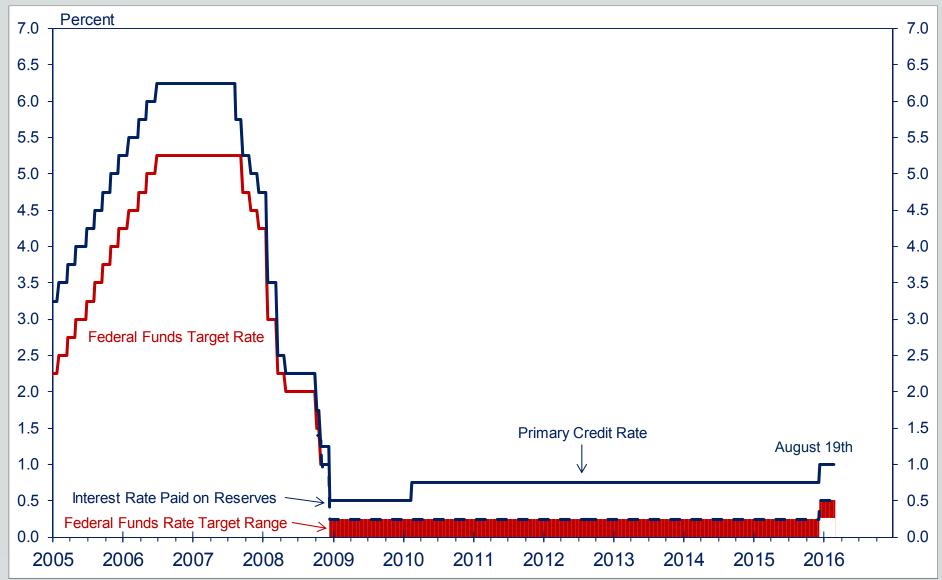


# **Federal Reserve System Assets**



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**

July 27, 2016

Information received since the Federal Open Market Committee met in June indicates that the labor market strengthened and that economic activity has been expanding at a moderate rate. Job gains were strong in June following weak growth in May. On balance, payrolls and other labor market indicators point to some increase in labor utilization in recent months. Household spending has been growing strongly but business fixed investment has been 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 currently expects that, with gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace and labor market indicators will strengthen. 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 have diminished. 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 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.

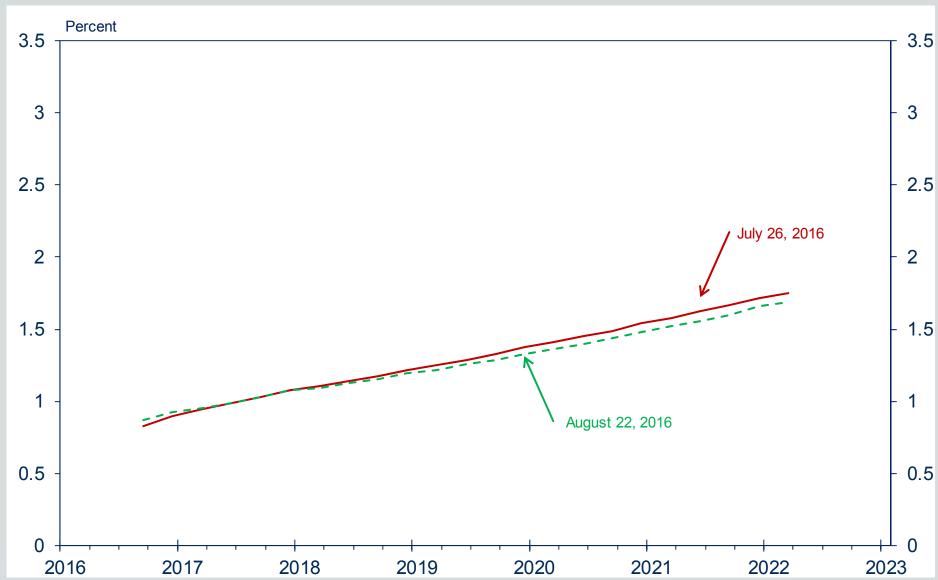
Voting for the FOMC monetary policy action were: Janet L. Yellen, Chair; William C. Dudley, Vice Chairman; Lael Brainard; James Bullard; Stanley Fischer; Loretta J. Mester; Jerome H. Powell; Eric Rosengren; and Daniel K. Tarullo. Voting against the action was Esther L. George, who preferred at this meeting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



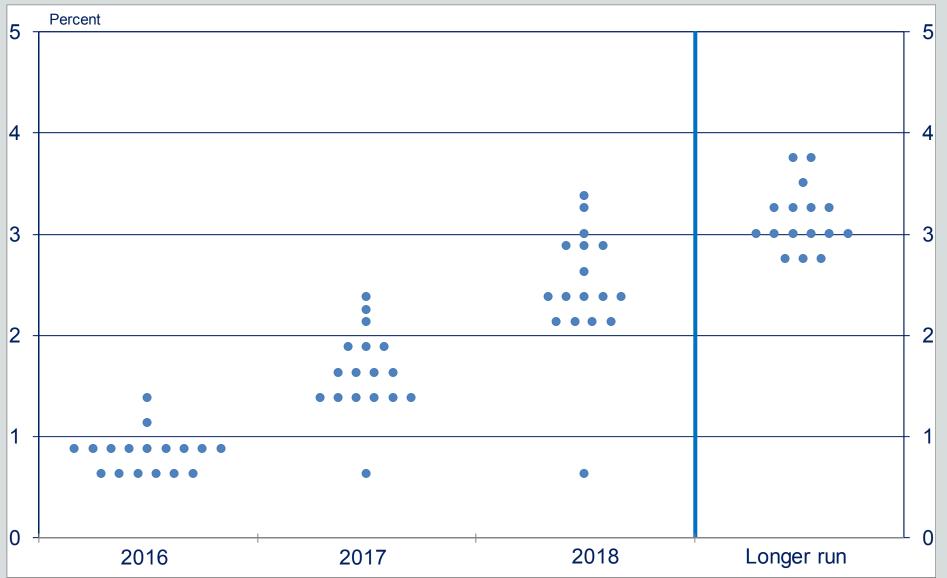
June 15, 2016

Source: Board of Governors

### **Eurodollar Futures**



### **Summary of Economic Projections: Federal Funds Rate**

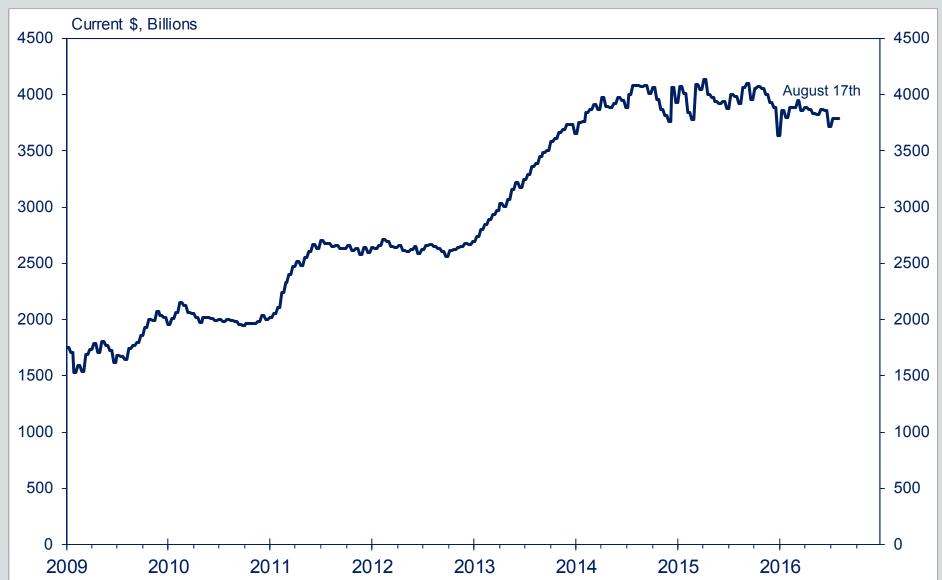


Note: Each dot in the chart represents the value of an FOMC participant's judgment of the midpoint of the appropriate target range (or the appropriate target level) for the federal funds rate at the end of the calendar year. Projections made for the June 2016 meeting.

Source: Board of Governors

OF RICHMOND

# **Monetary Base**

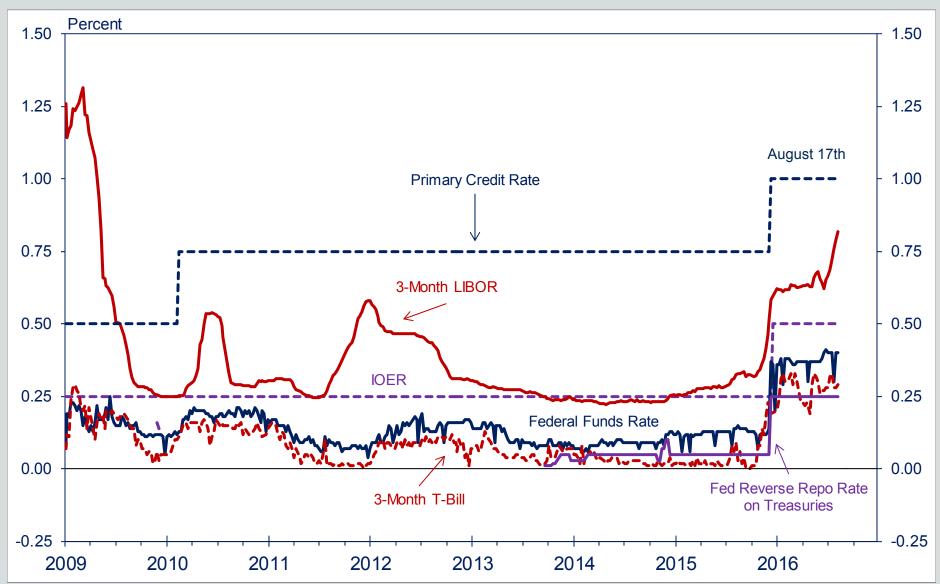


### **M2**





# **Money Market Rates**

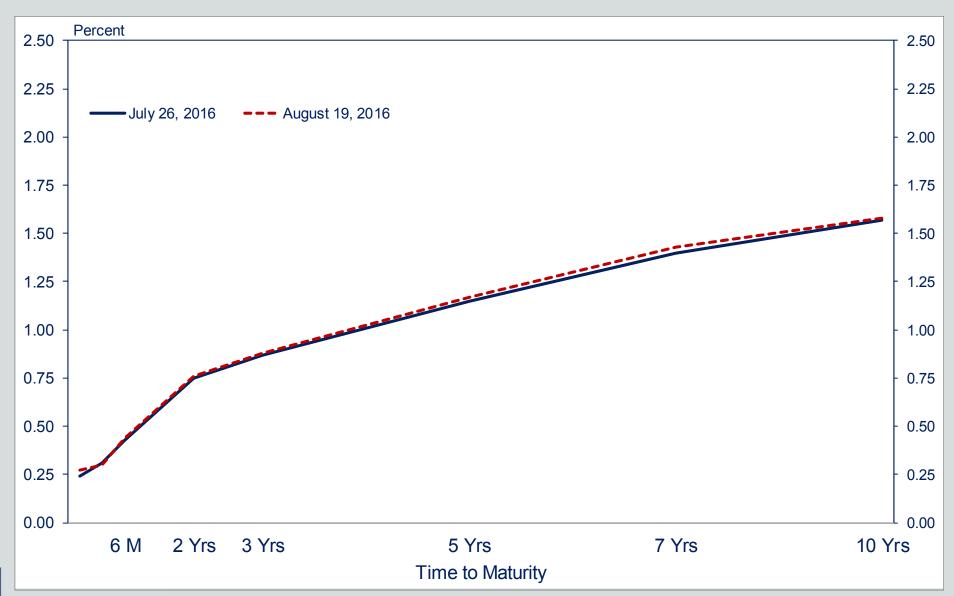




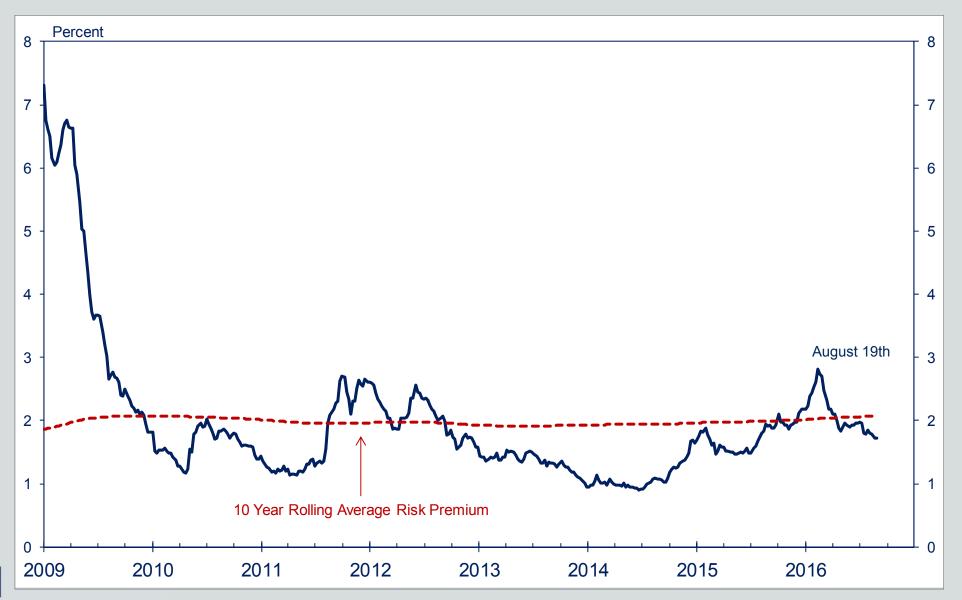
# **Capital Market Rates**



# **Treasury Yield Curve**



#### **Risk Premium**



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