

Economic Update

Baker College - Flint

Federal Reserve Bank of Chicago
January 10, 2017

Paul Traub
Senior Business Economist



Main Economic Indicators

Year-over-year Comparison

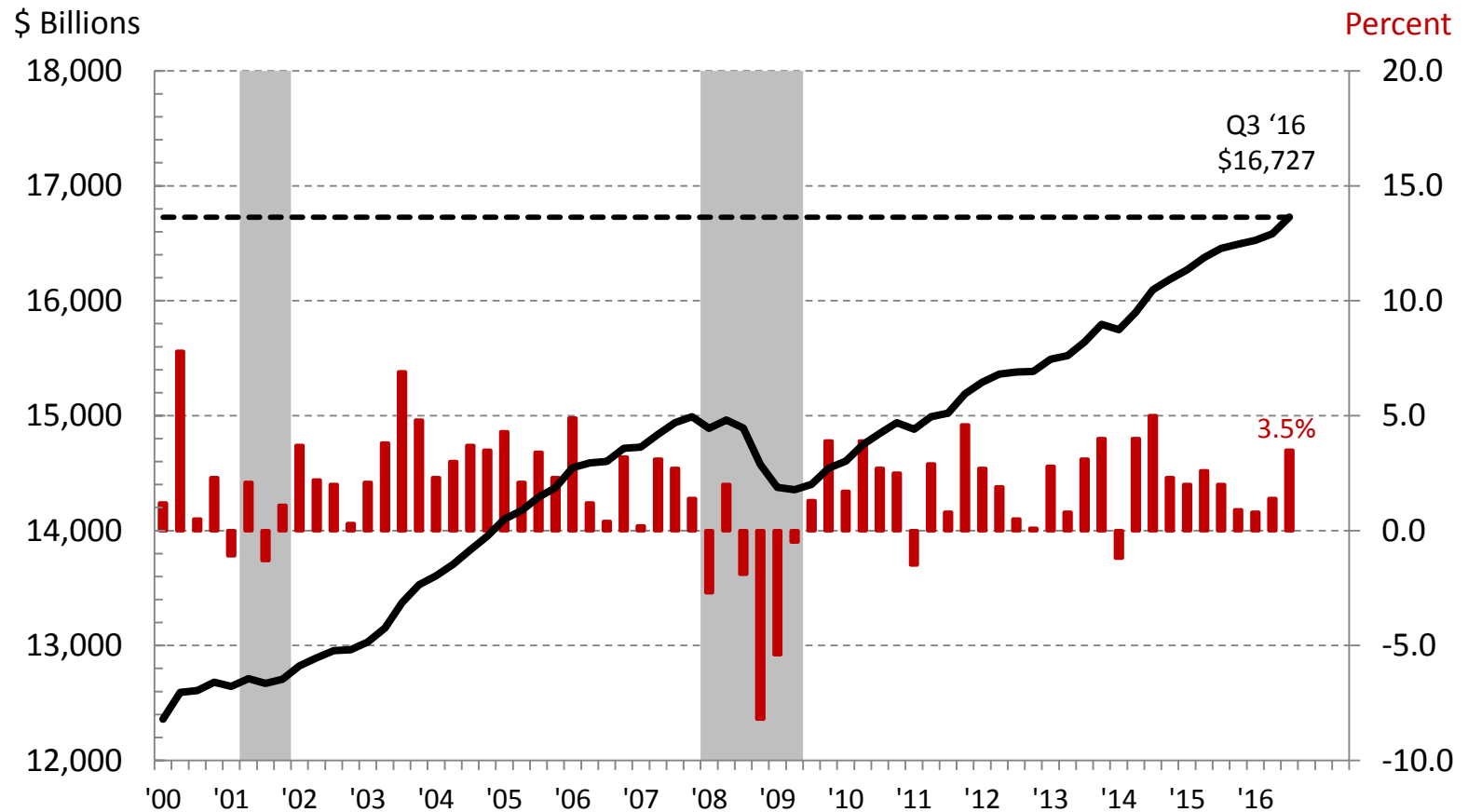
	<u>Actual 2014</u>	<u>2015</u>	<u>2016</u>
GDP – Annual Growth Rate ¹	2.4%	2.2%	1.6%
Unemployment Rate ²	6.2%	5.3%	4.9%
Participation Rate ²	62.9%	62.7%	62.8%
Nonfarm Job Growth ³	251,300	228,700	189,800
PCE Core Inflation Yr. / Yr. ⁵	1.6%	1.4%	1.7%

1. Year-over-year 2015 & 2016, Q3/Q3
2. Annual Average
3. Monthly Average
4. Annual Average, January through November

Source: U.S. Bureau of Economic Analysis, Census Bureau and Bureau of Labor Statistics

U.S. Real GDP

Billions Chained \$2009, % Change Q/Q at SAAR

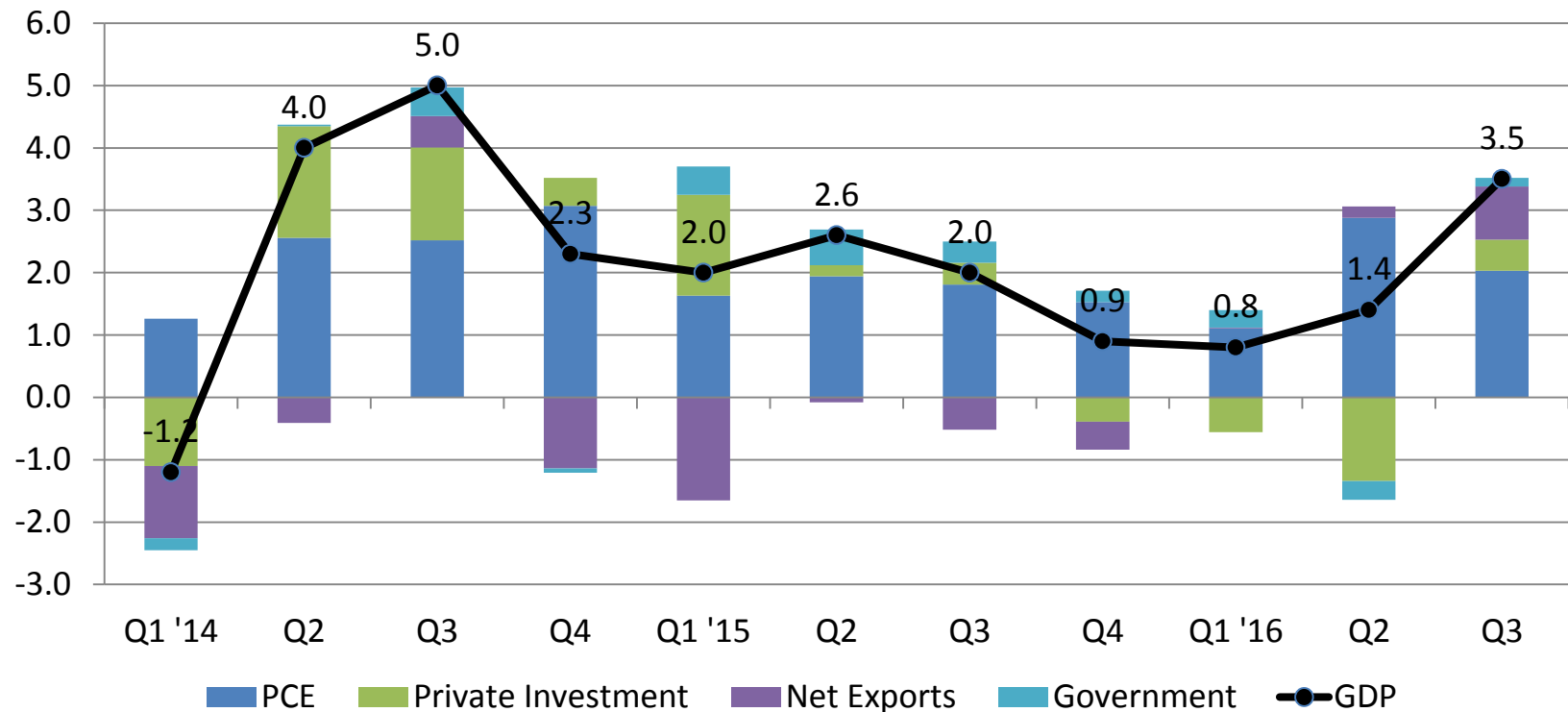


Source: U.S. Bureau of Economic Analysis

U.S. Real GDP

GDP and Contribution to Percent Change, Q/Q at SAAR

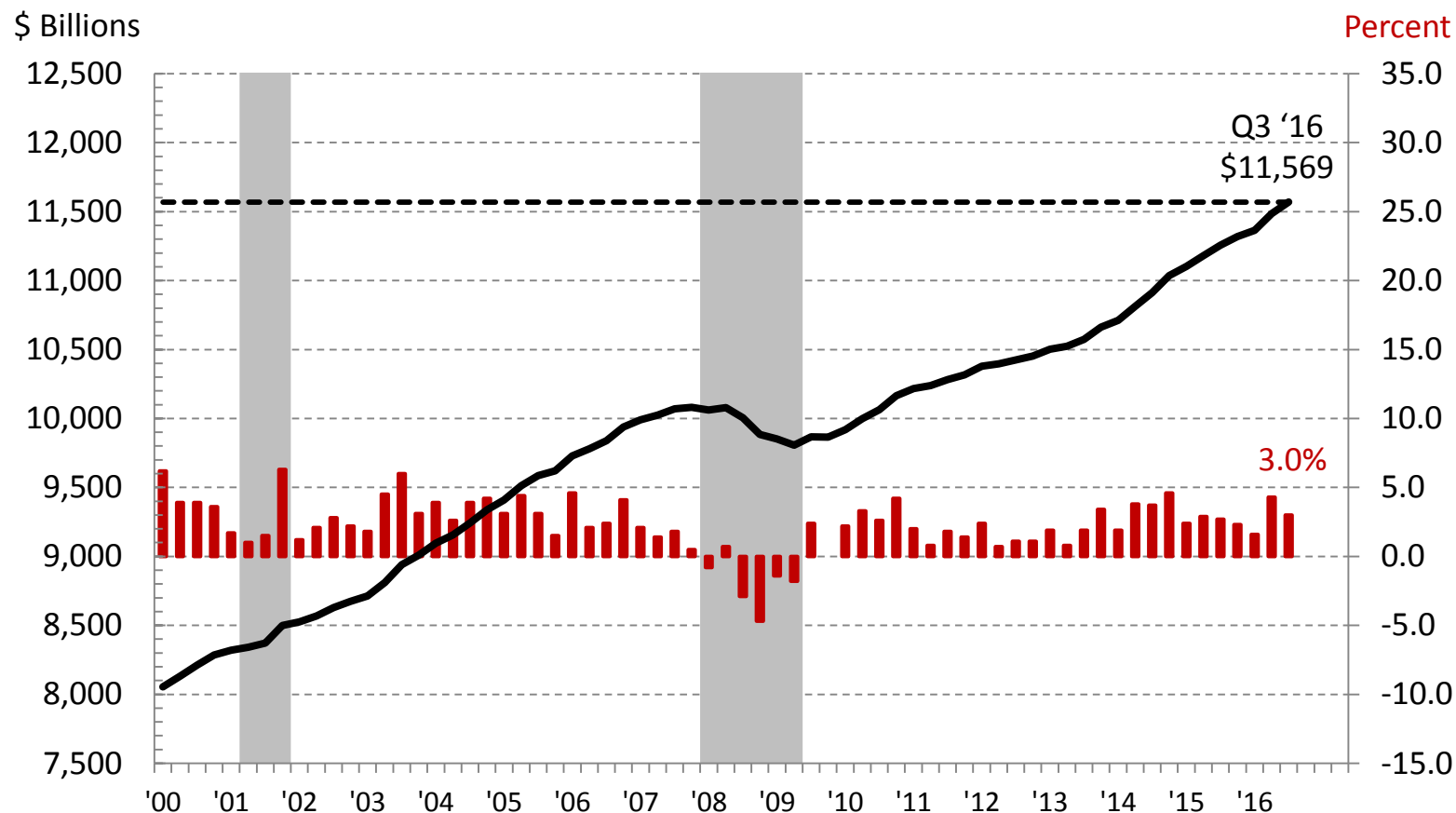
Percent



Source: U.S. Bureau of Economic Analysis, September 2016 Blue Chip Economic Indicators.

Real Personal Consumption Expenditures

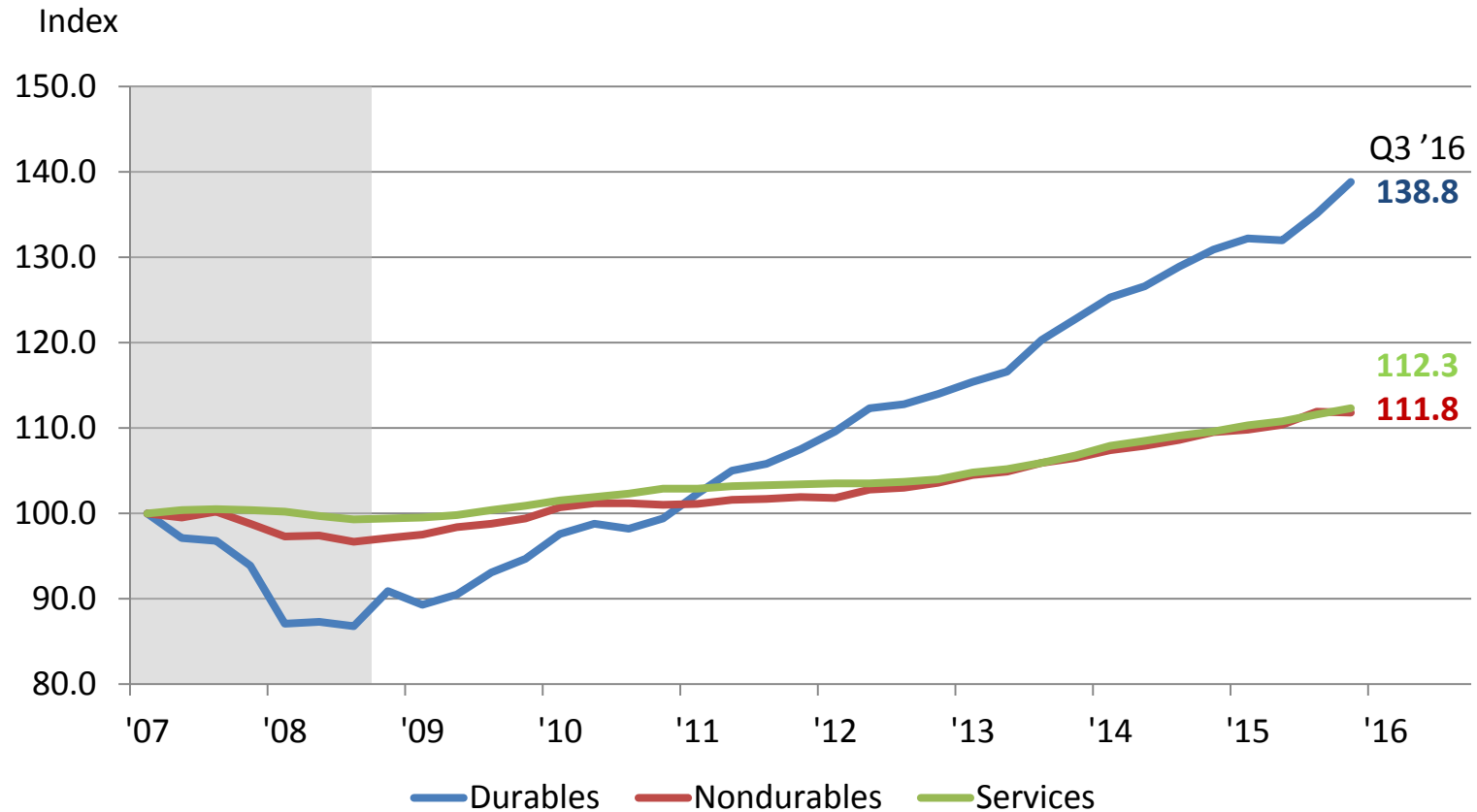
Billions Chained \$2009, % Change Q/Q at SAAR



Source: U.S. Bureau of Economic Analysis

Real Personal Consumption Expenditures

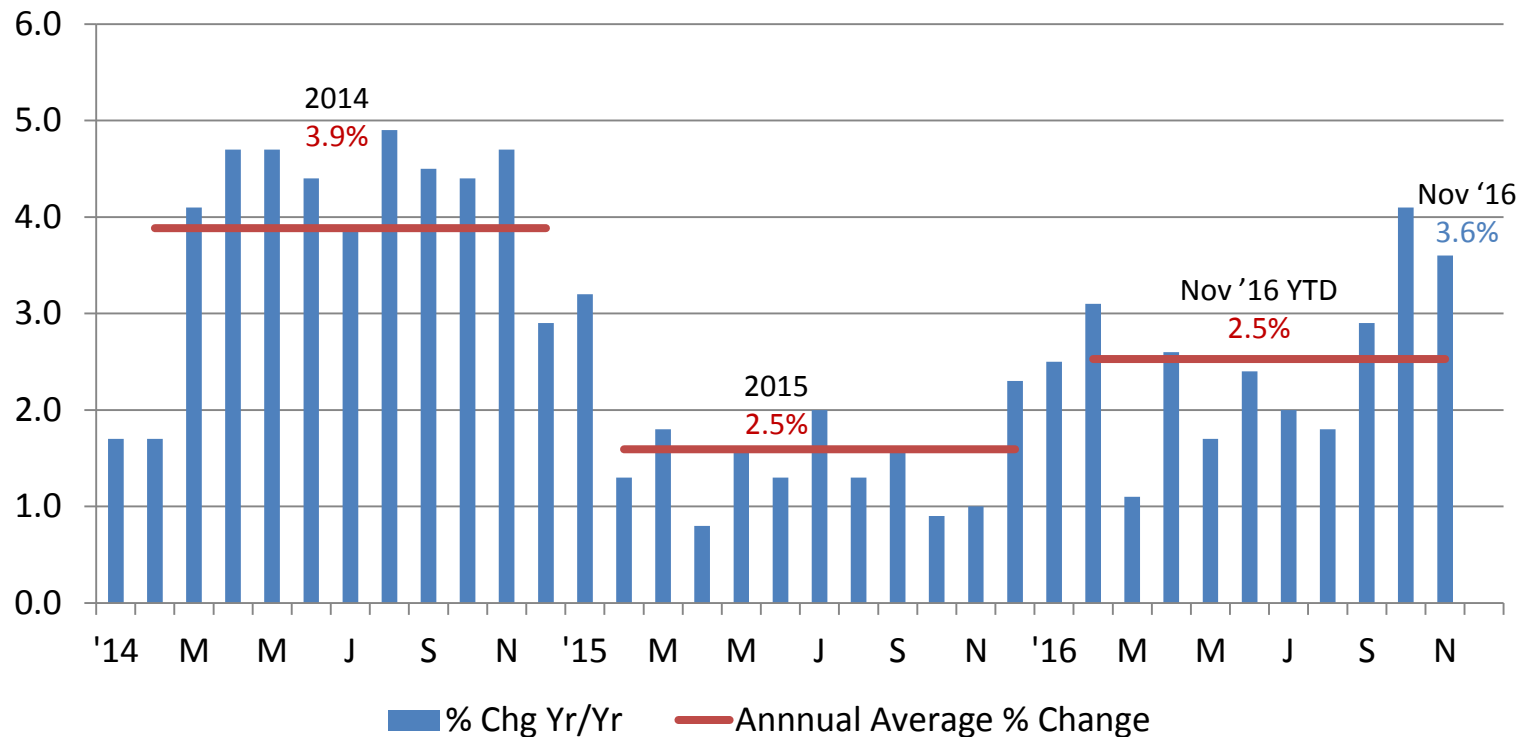
Index, Q4 2007 = 100



Source: Author's calculations using data from the BEA

Real Retail Sales

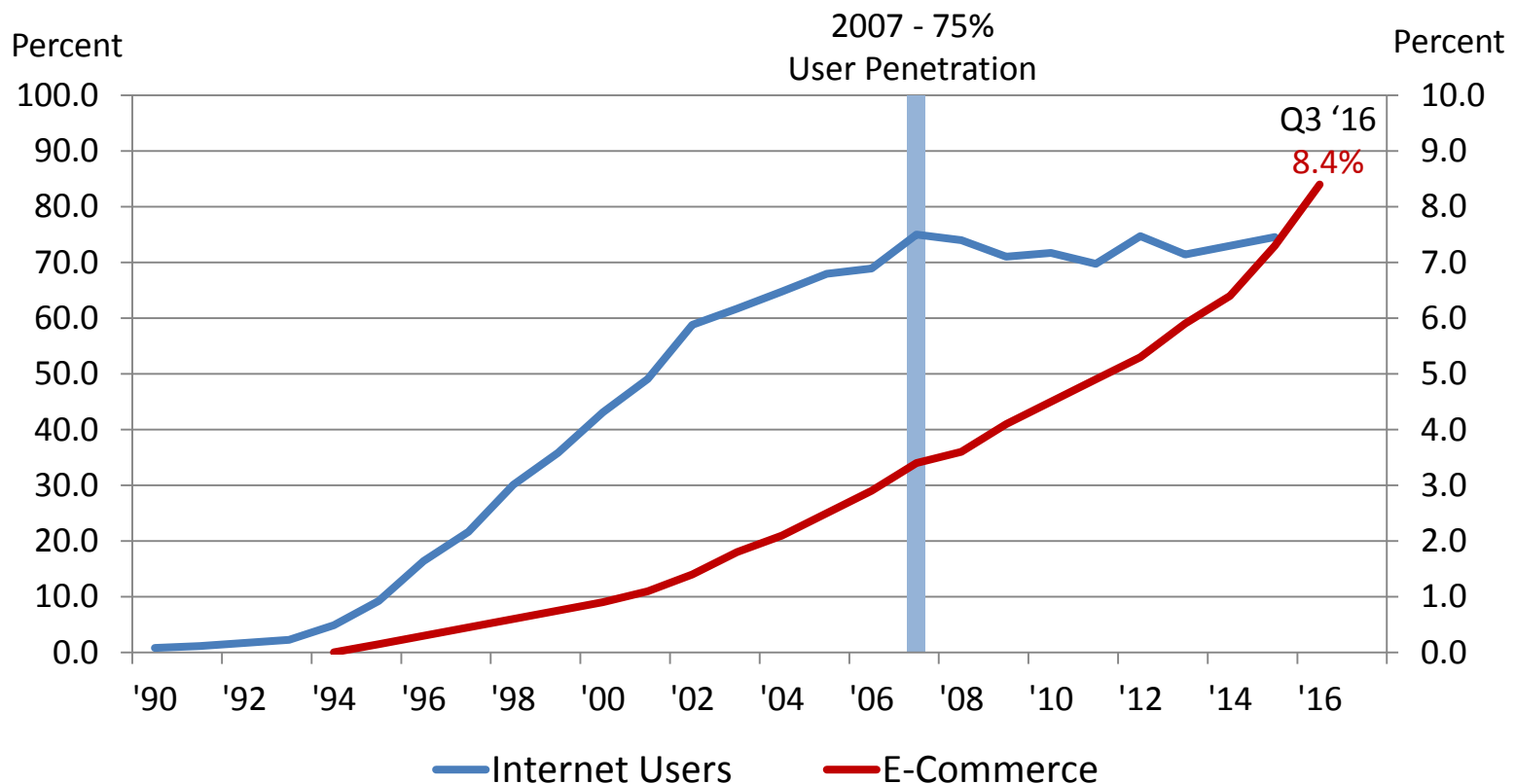
Excluding Food Services - % Change Yr./Yr.



Source: Bureau of the Census

Internet Users & E-Commerce

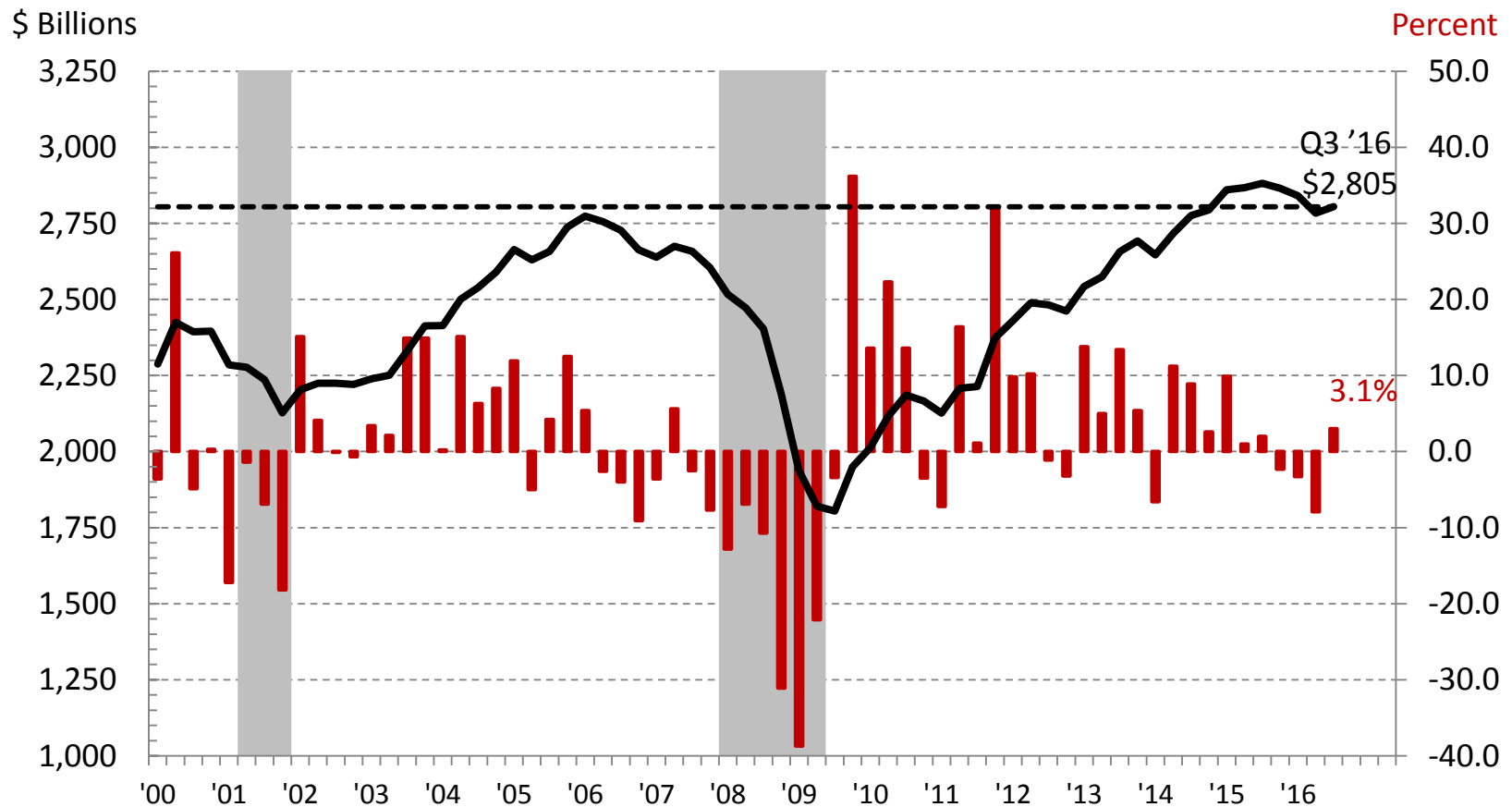
User per 100 People and E-Commerce as % of Total Sales



Source: World Bank and Bureau of the Census

Real Gross Private Domestic Investment

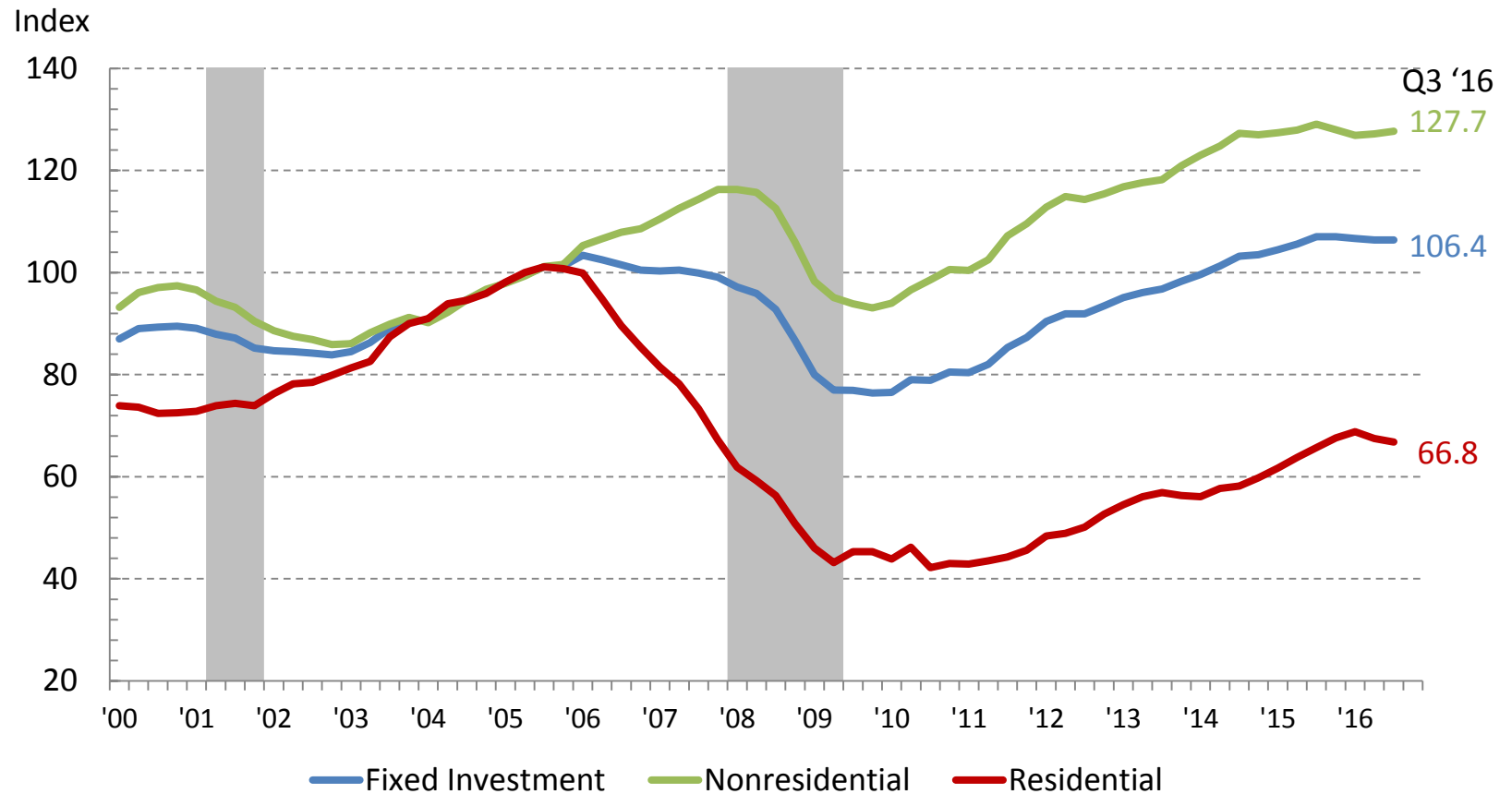
Billions Chained \$2009, % Change Q/Q at SAAR



Source: U.S. Bureau of Economic Analysis

Real Domestic Fixed Investment

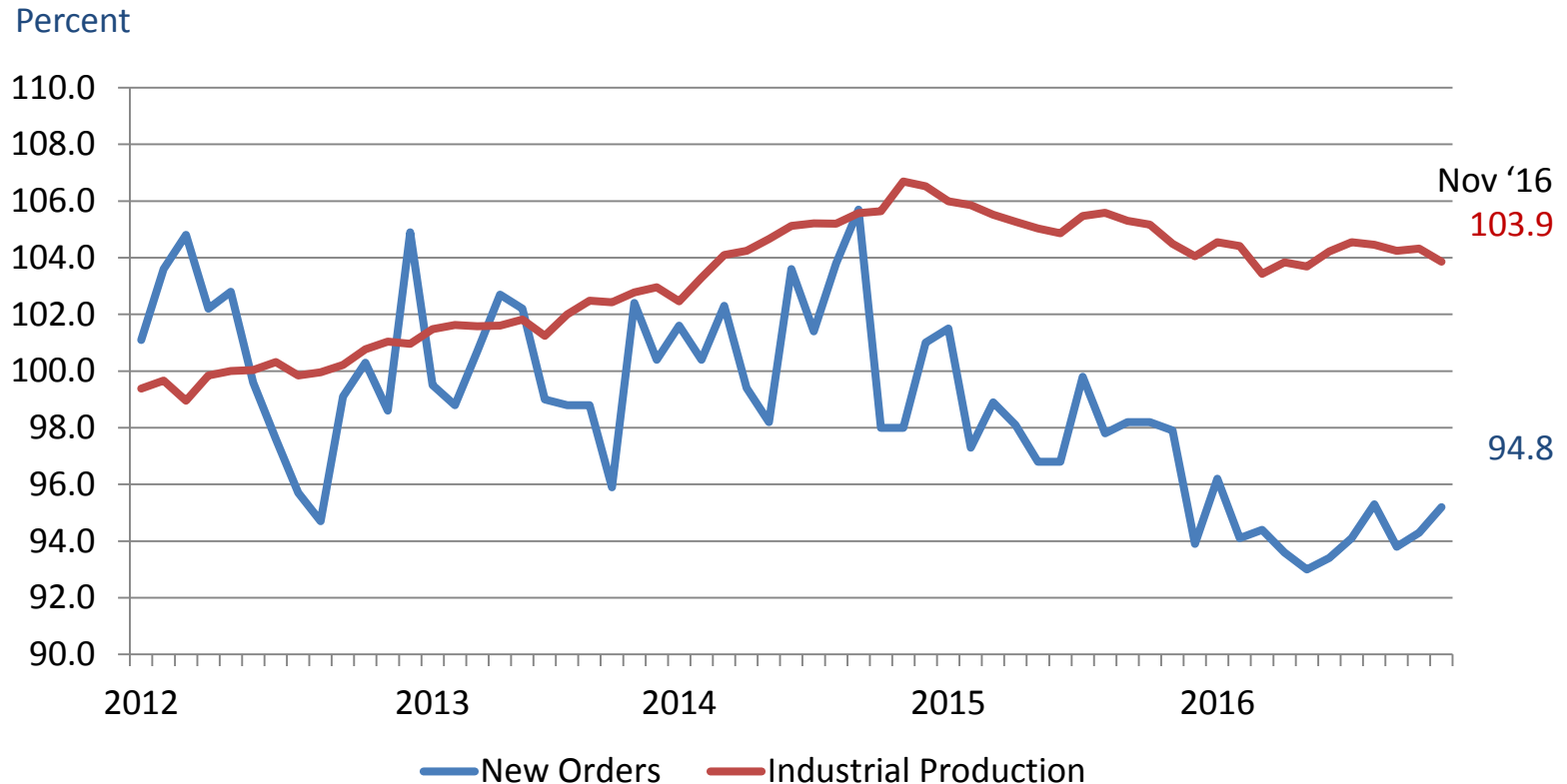
Billions Chained \$2009, Index – 2005 = 100



Source: U.S. Bureau of Economic Analysis

New Orders & Industrial Production

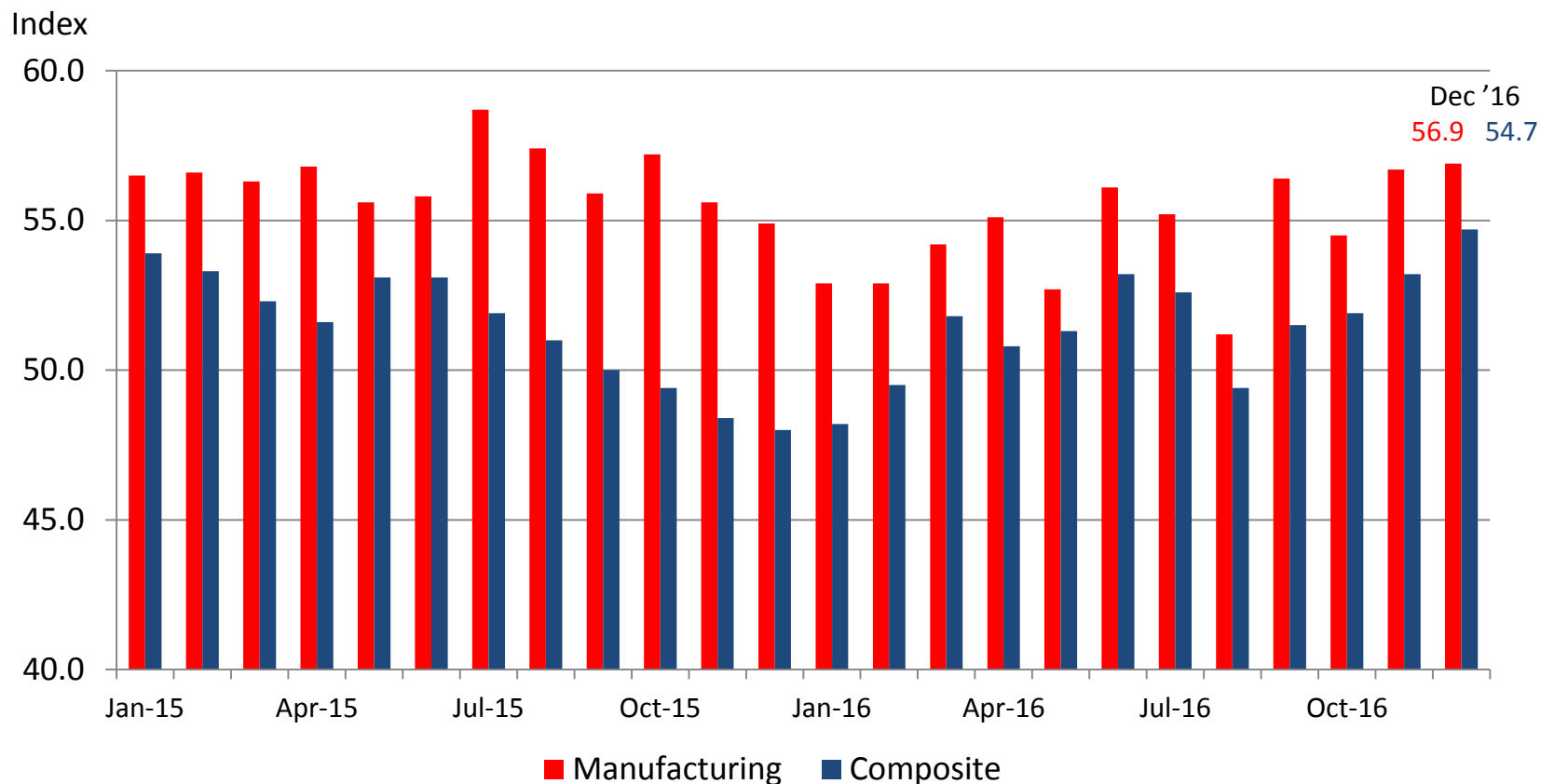
Index – 2012 = 100



Note: Manufacturers' New Orders Nondefense Capital Goods Excluding Aircraft.

ISM Purchasing Managers Index

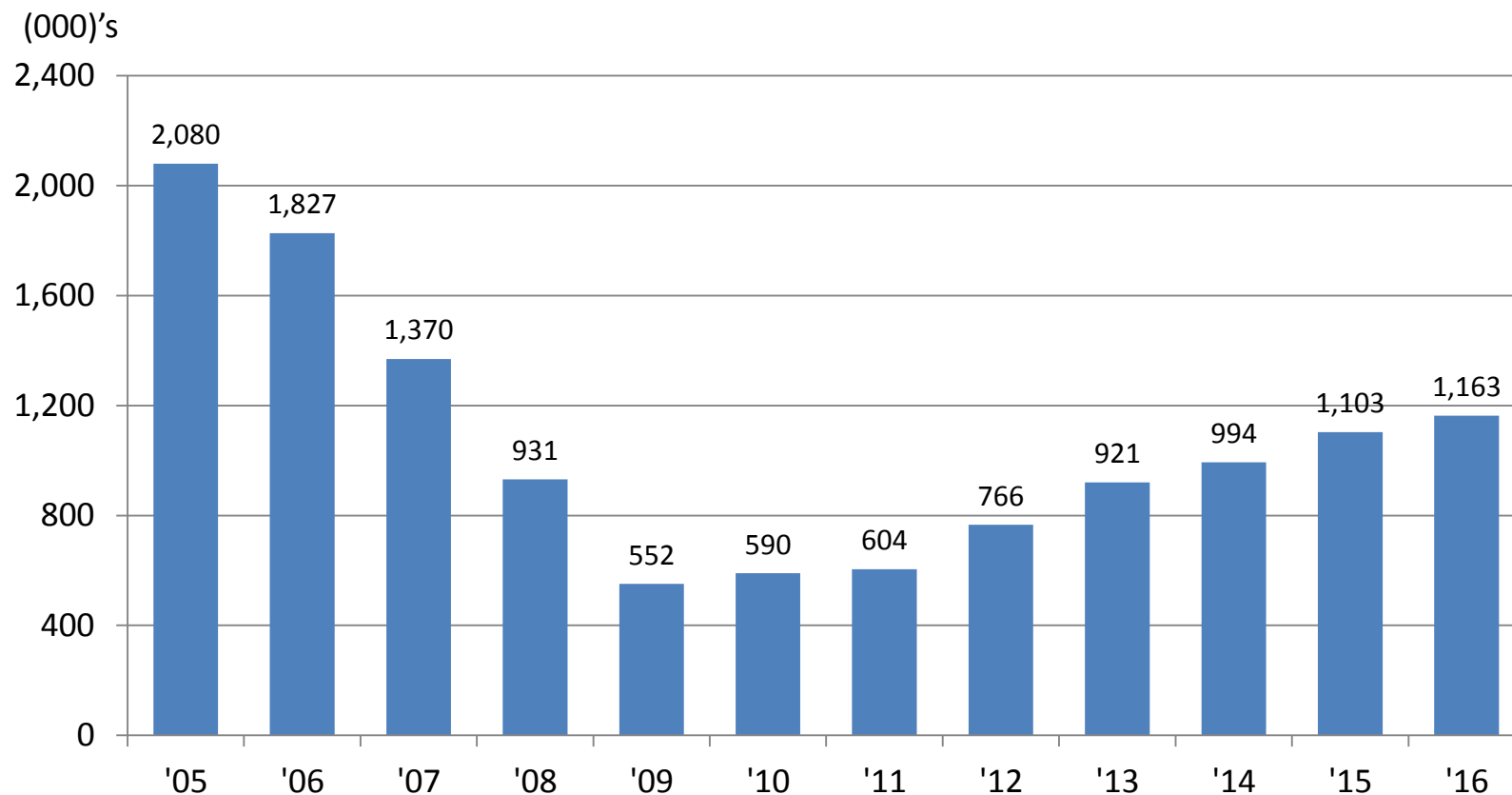
Manufacturing and Composite, SA - Greater than 50 = Expansion



Source: Institute for Supply Management , Haver Analytics and FRED

U.S. Housing Starts

In Thousands of Units (SAAR) – November Average YTD Data

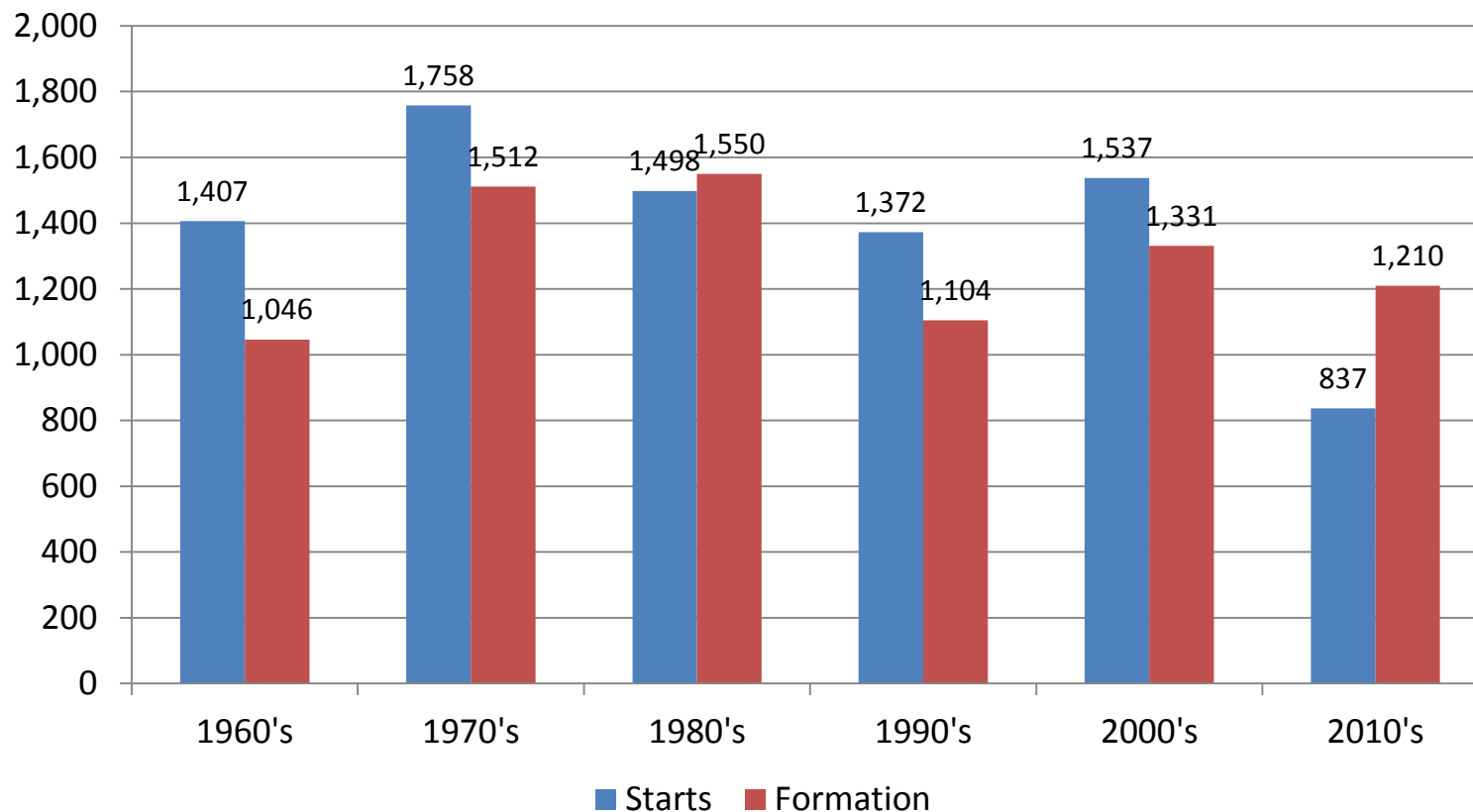


Note: The United States averaged 1.5 million housing starts per year 1990 to 2004.

Source: U.S. Census Bureau

U.S. Housing Starts & Household Formation

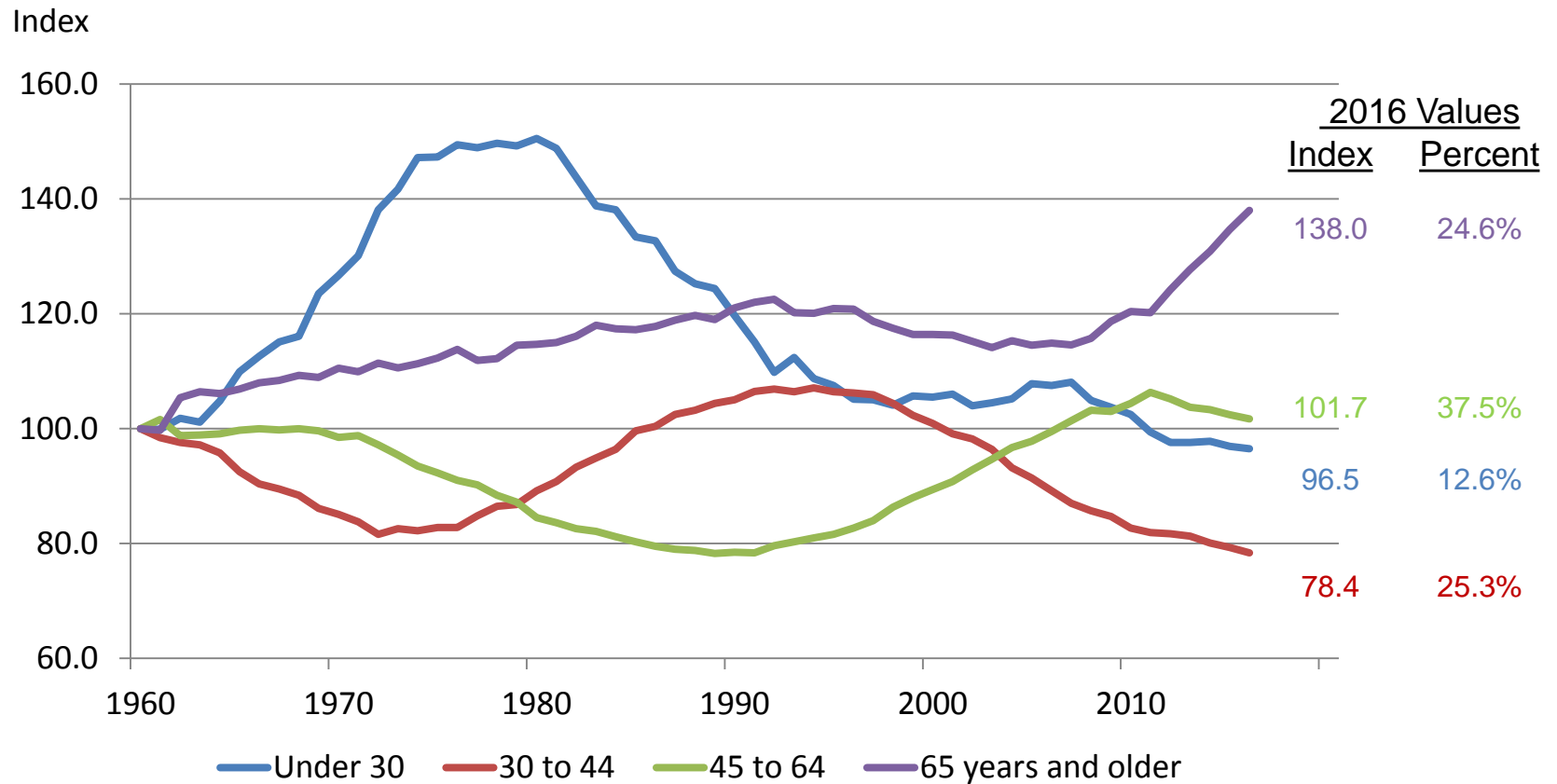
In Thousands of Units – Averages by Decade



Source: U.S. Census Bureau – Single Family Starts and Households by Age

Households by Age

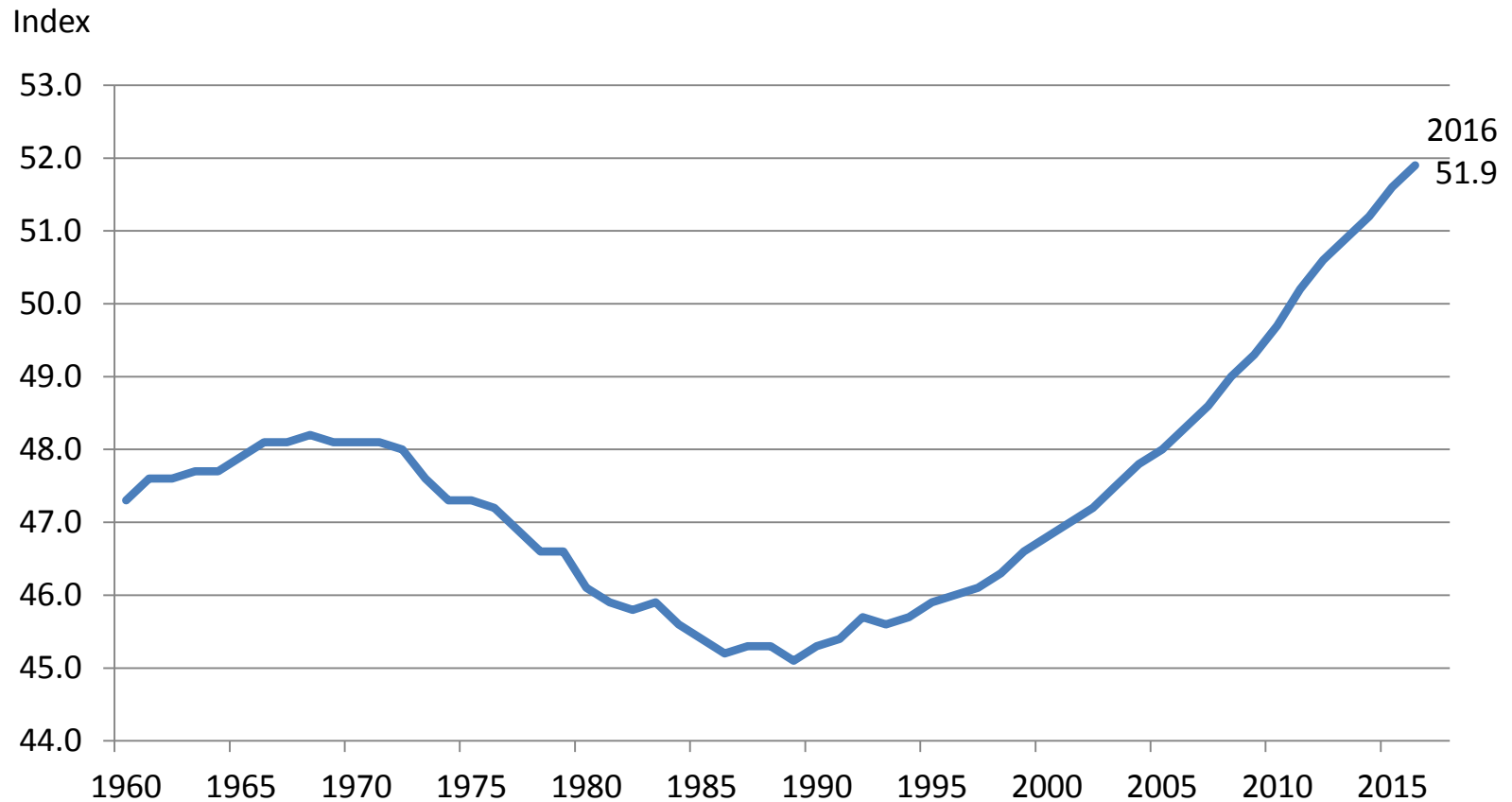
Percent of Total, Index – 1960 = 100



Source: U.S. Census Bureau – Table HH-3, Households by Age

Median Age of Householder

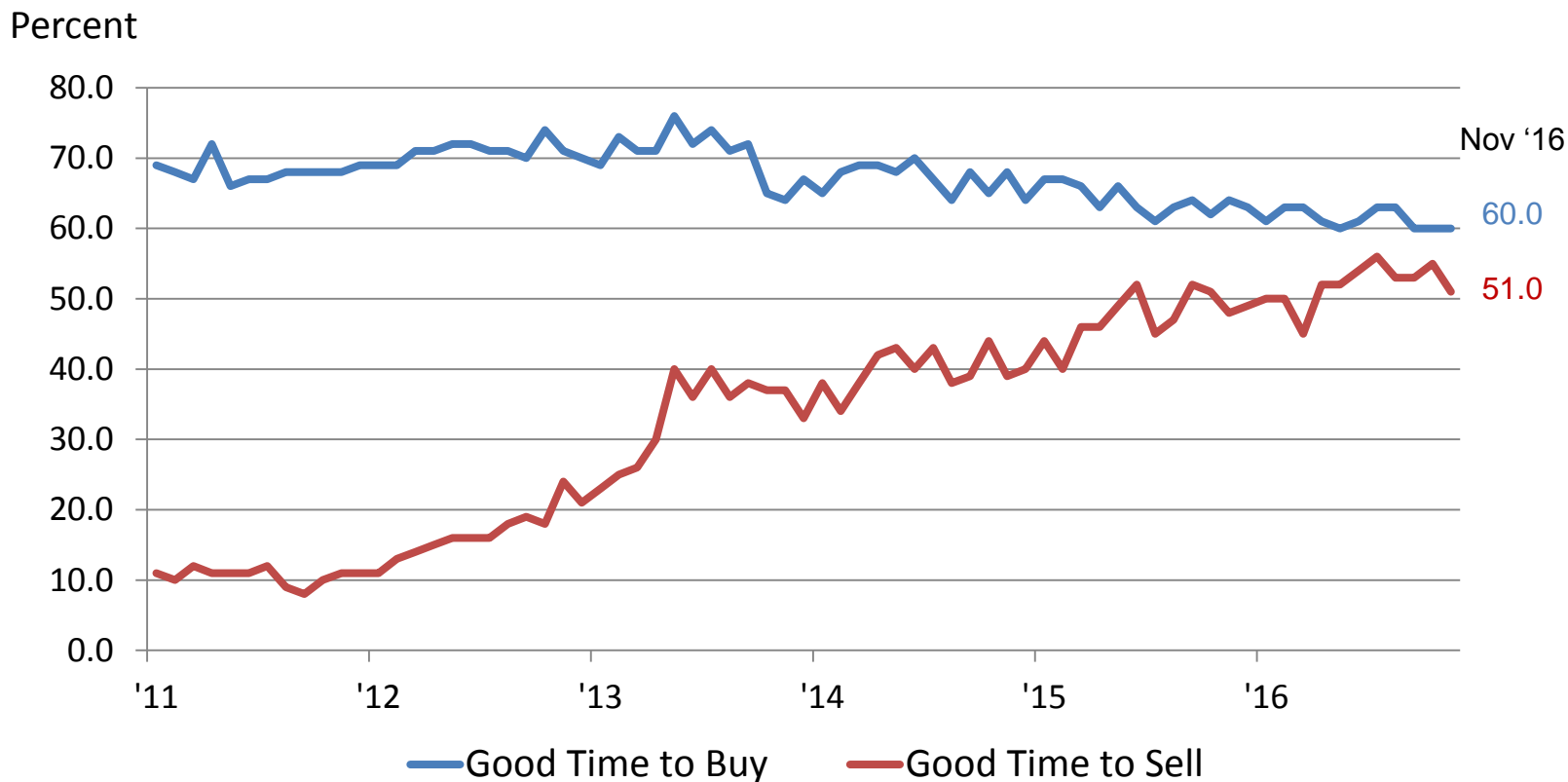
Annual Average 1960 to 2016



Source: U.S. Census Bureau – Table HH-3, Households by Age

Good Time to Buy / Sell

Fannie Mae Home Purchase Sentiment Survey

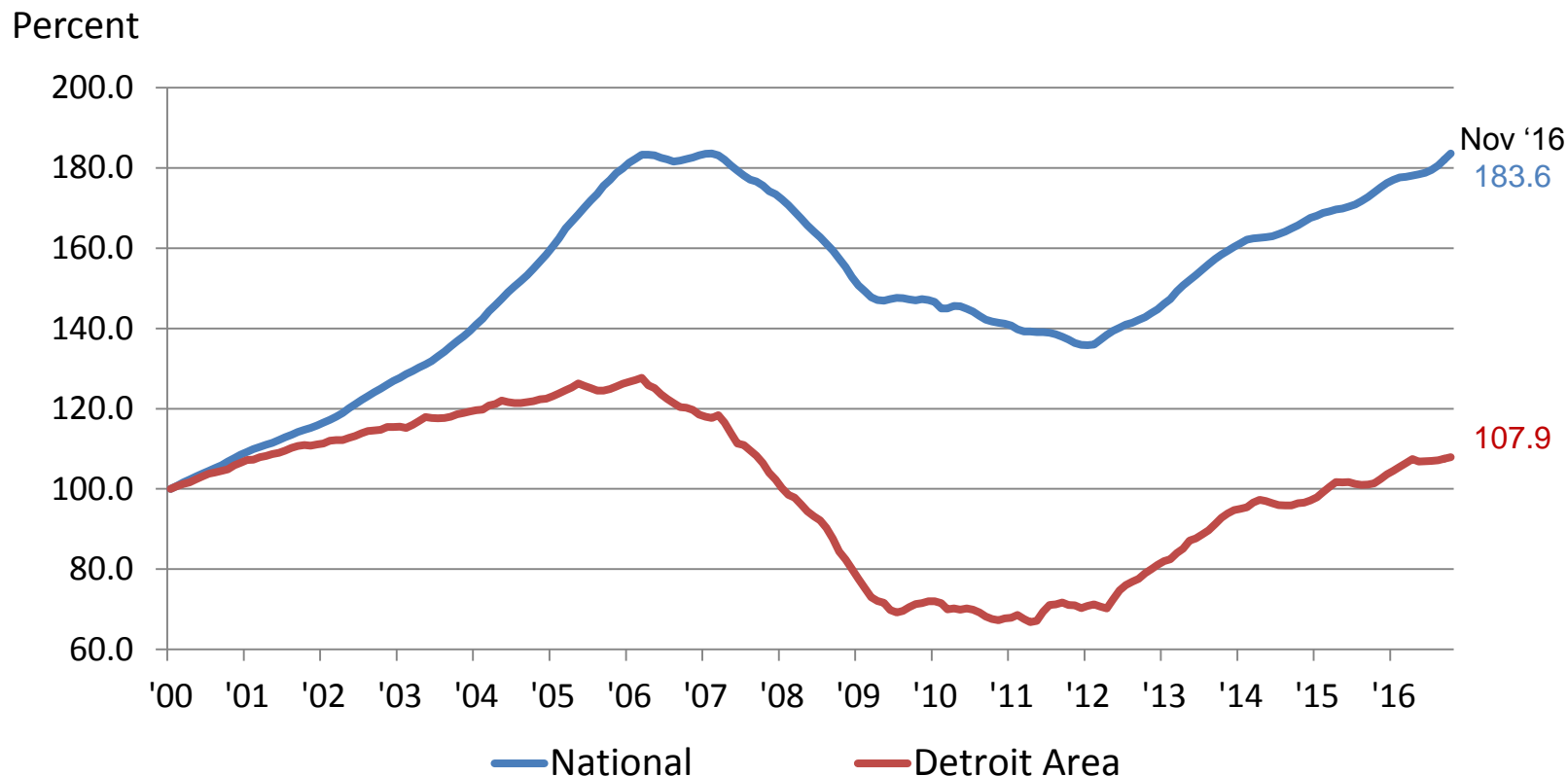


Percent of respondents that say it is a good time to buy / sell.

Source: Fannie Mae and Haver Analytics

Single Family Home Prices

S&P CoreLogic Case-Shiller Index, January 2000 = 100 - SA

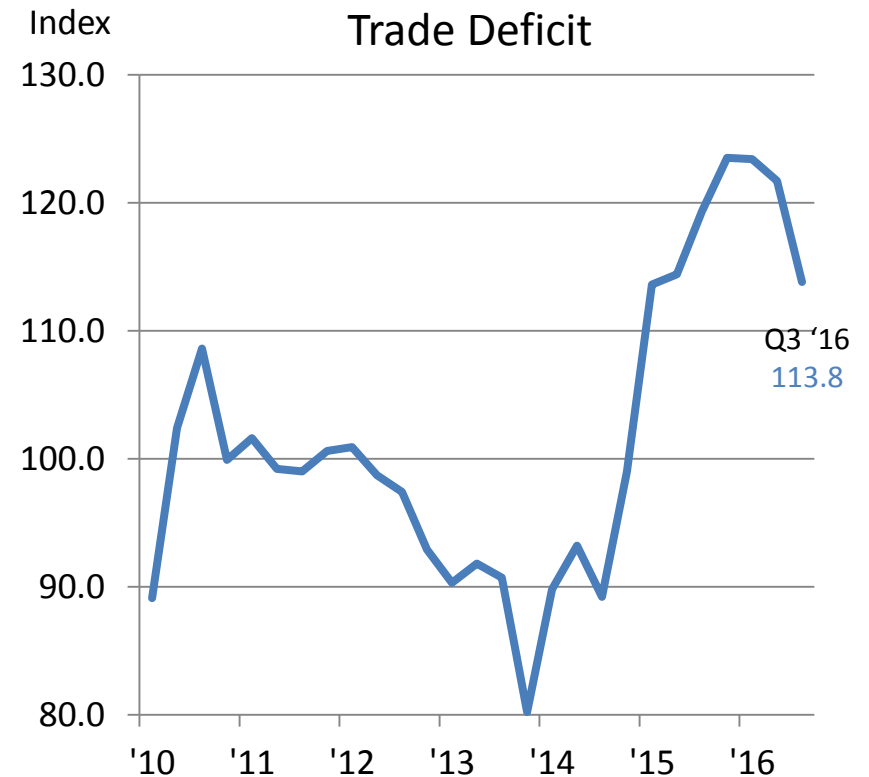
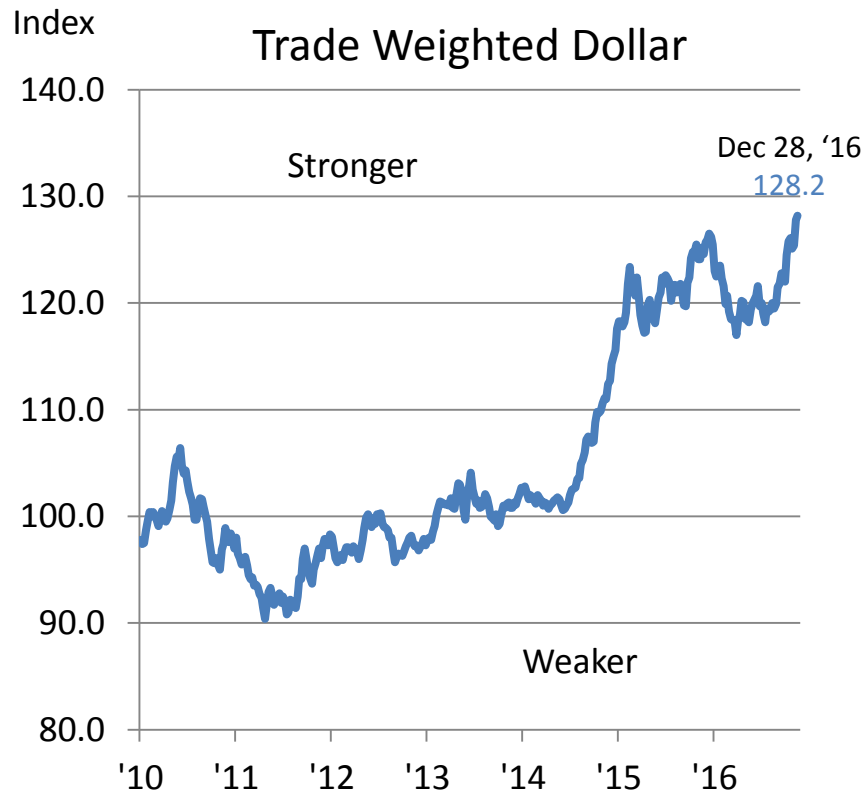


Detroit-Warren-Dearborn, Metropolitan Statistical Area (MSA)

Source: Fannie Mae and Haver Analytics

The U.S. Dollar & The Trade Deficit

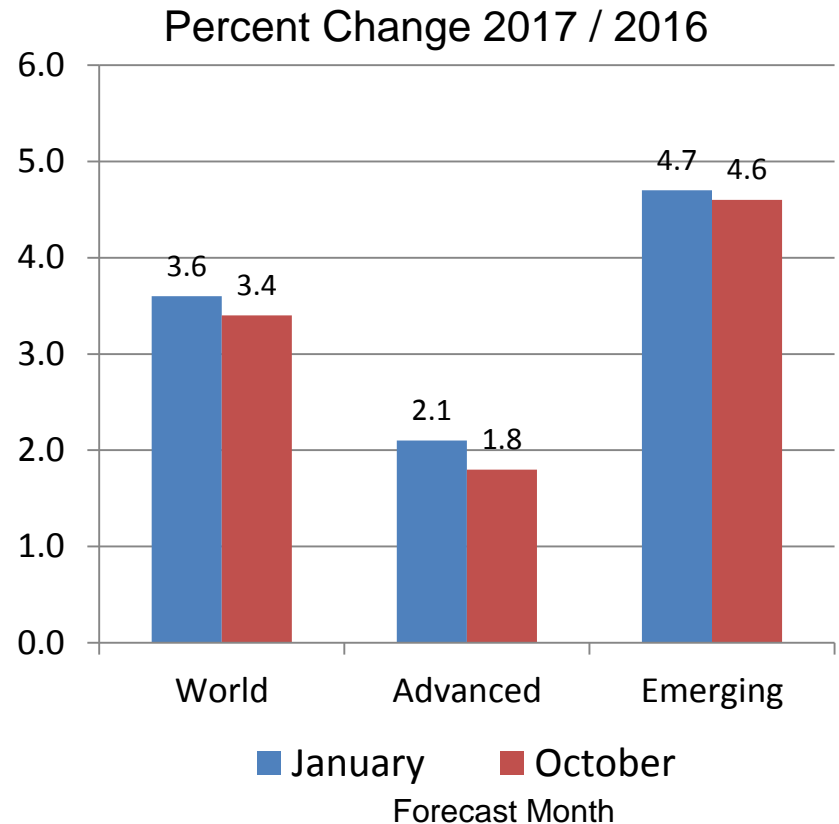
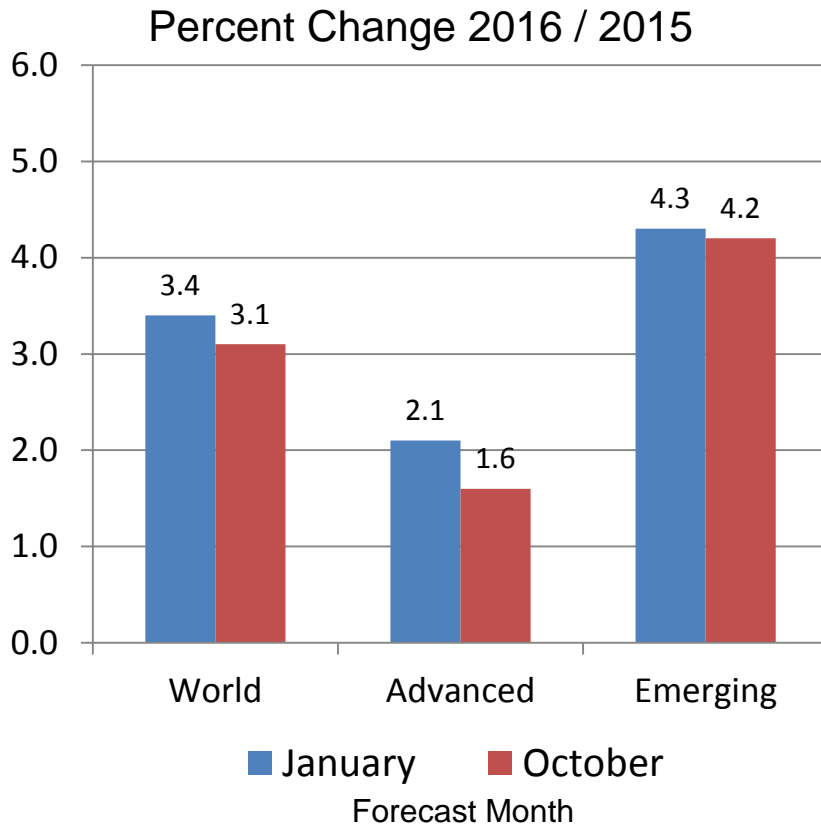
Trade Weighted Dollar- Index 2010 = 100, Trade Deficit – Index 2010 = 100



Source: Federal Reserve Board and Haver Analytics

Global Outlook for 2016 & 2017

IMF Forecast for Growth, % Chg. Yr./Yr.

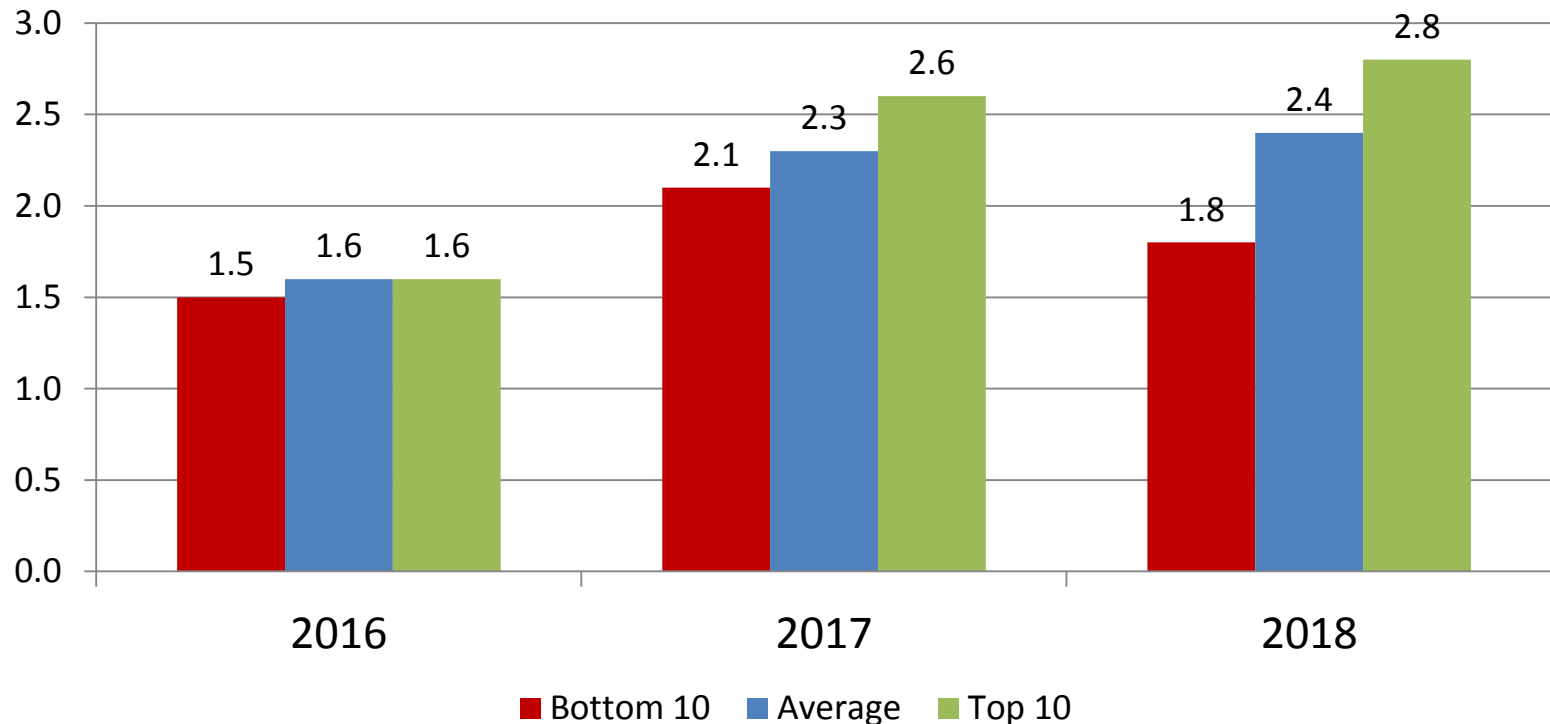


Source: IMF World Economic Outlook

U.S. Real GDP Blue Chip Forecast

Annual Percent Change – Chained \$2009

Percent



Source: Blue Chip Economic Indicators

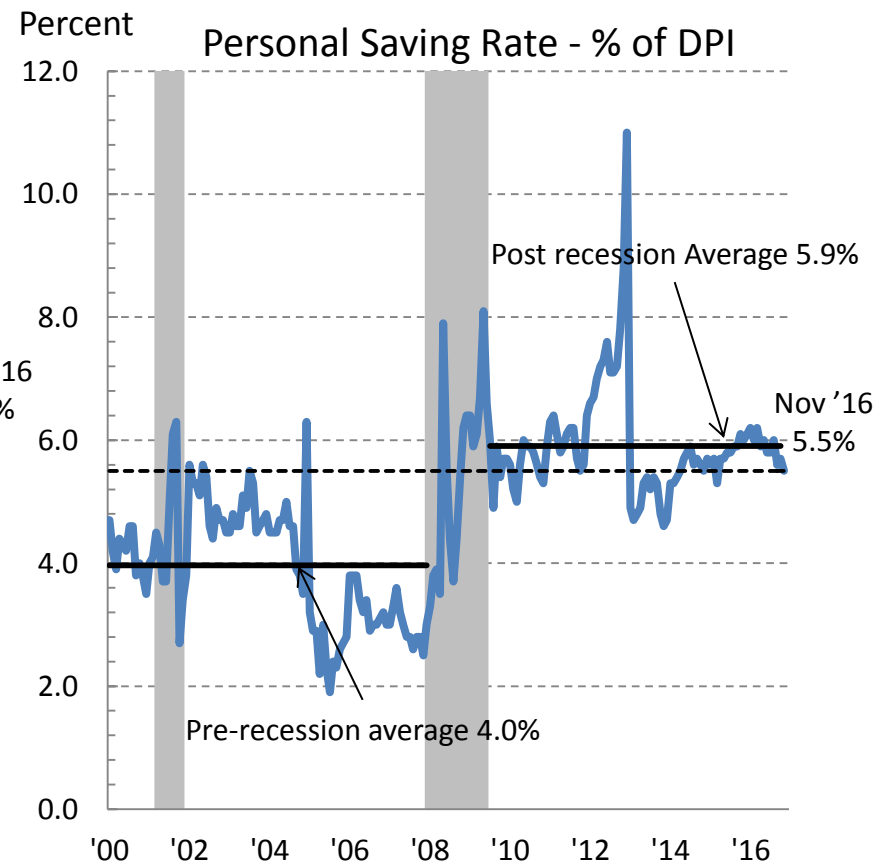
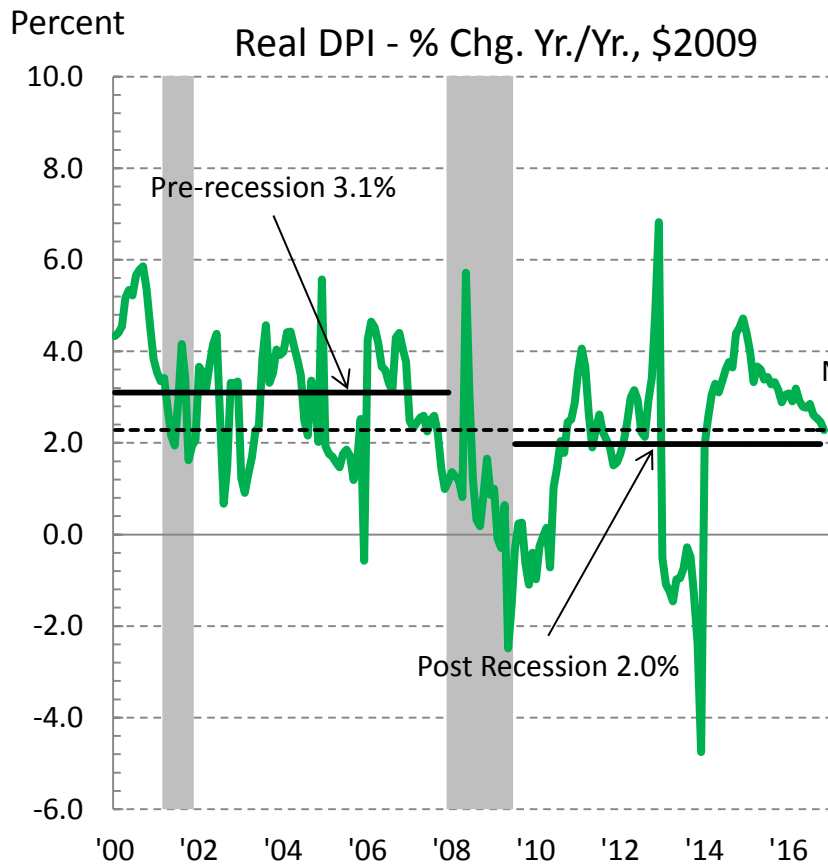
Fiscal Stimulus Likely, But Large Uncertainties

- President elect's plan includes large tax cuts and increased spending
 - Details still lacking in many areas
 - Final package depends on Administration and Congressional priorities
- Estimates of fiscal impact range from 0.5 to 1.0 percent on level of GDP by end of 2018, falling to zero by 2020
- Potential offsets to long-run growth from other policies
 - Trade restrictions
 - Immigration legislation
 - Affordable Care Act
 - Federal Reserves response to stronger demand and higher inflation

U.S. Consumer

Income and Savings Rate

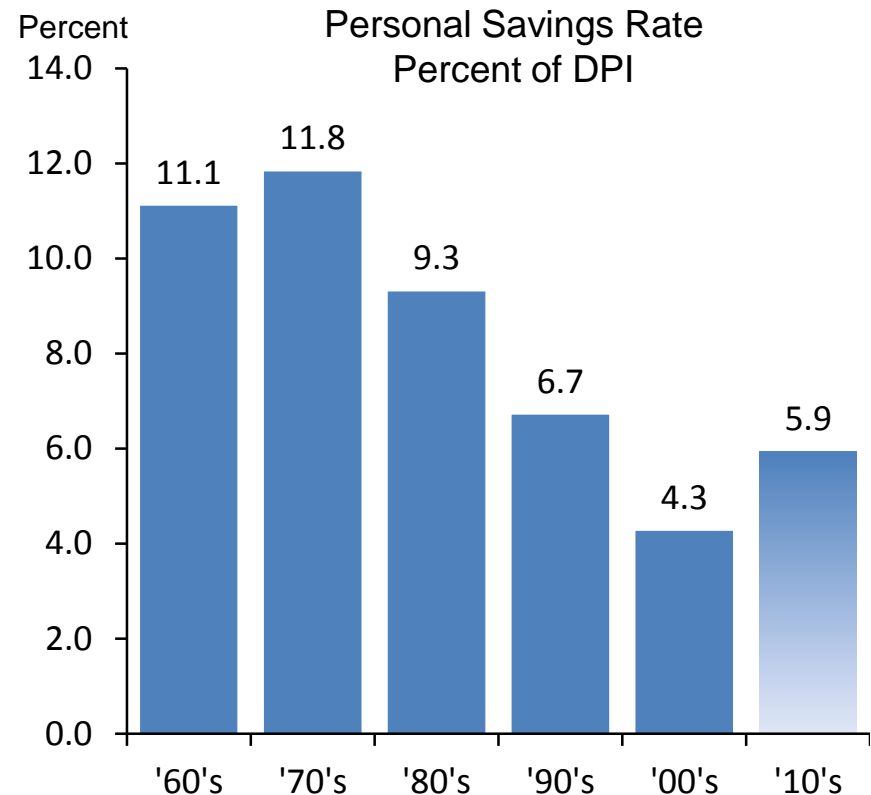
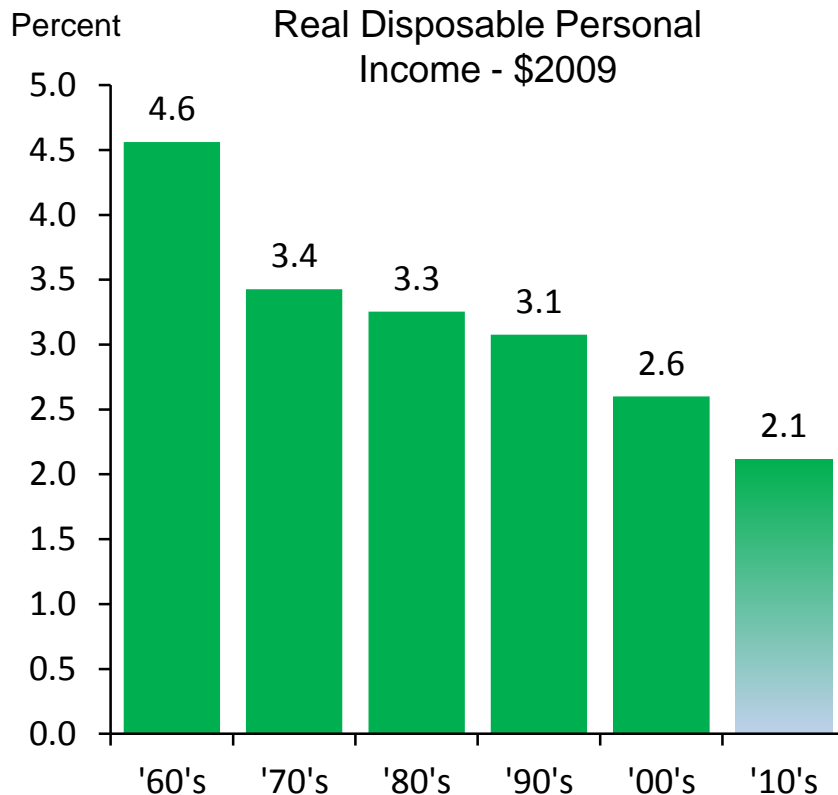
Percent Change and Percent of DPI



Source: U.S. Bureau of Economic Analysis

Real DPI & Personal Savings Rate

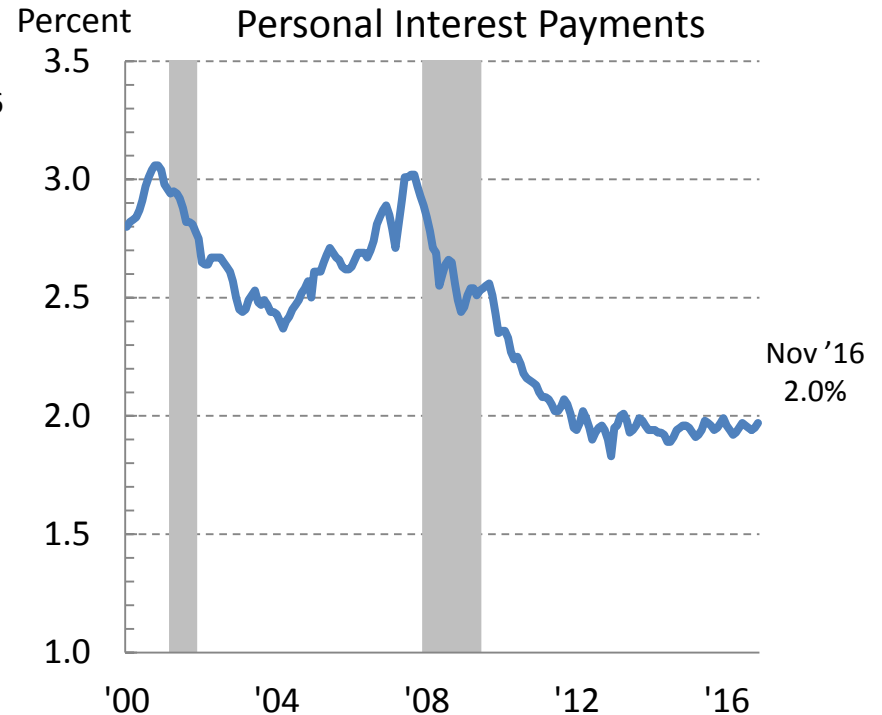
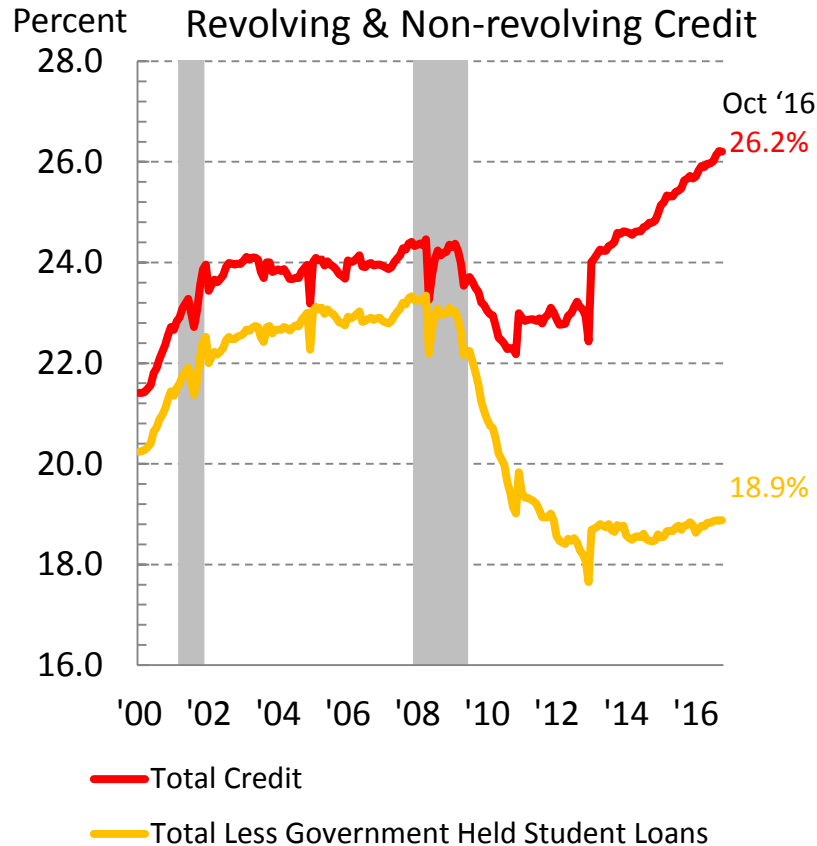
As Percent of Personal Income



Source: U.S. Bureau of Economic Analysis

Consumer Credit and Interest Payments

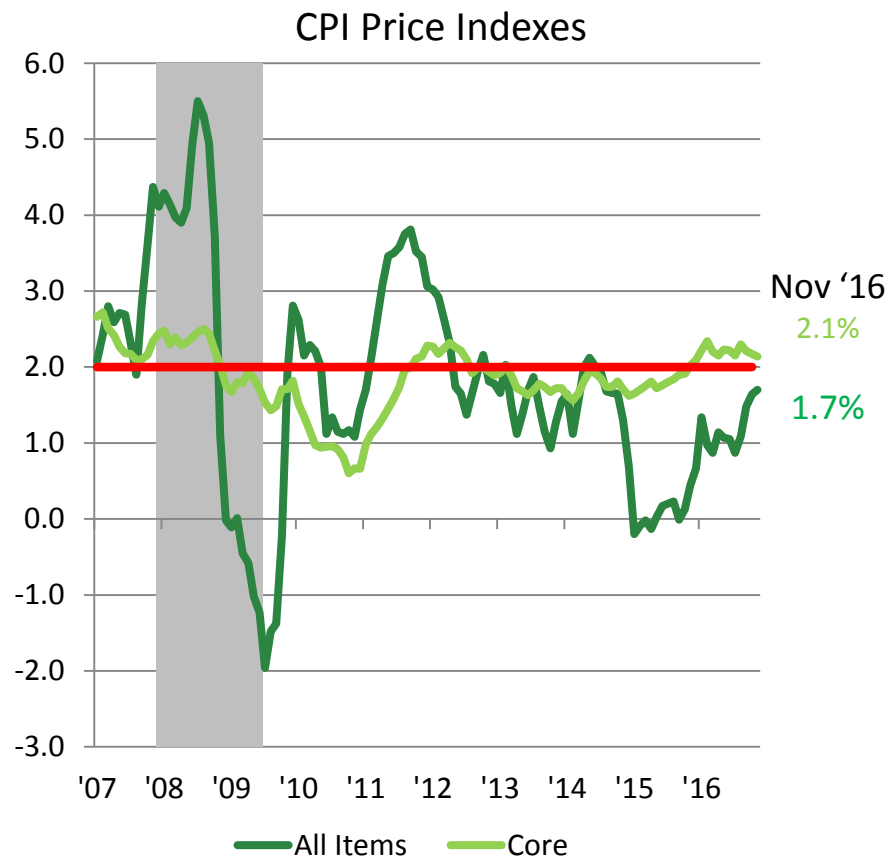
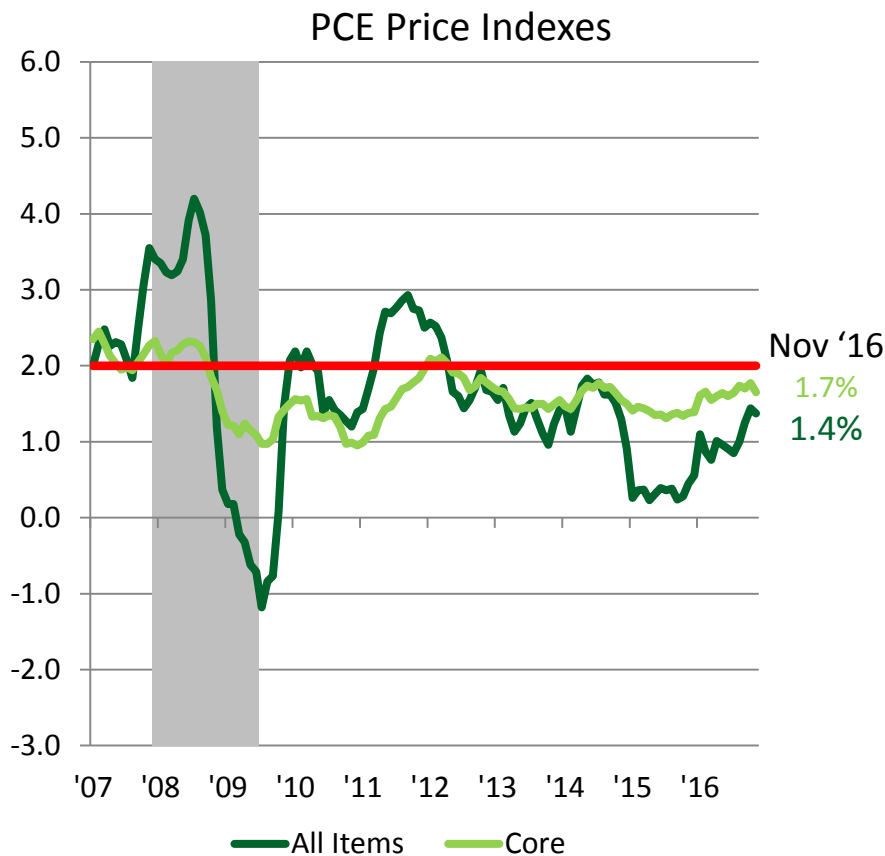
As a Percent of Disposable Personal Income



Source: Federal Reserve Bank - Board of Governors

Inflation – PCE & CPI Price Index

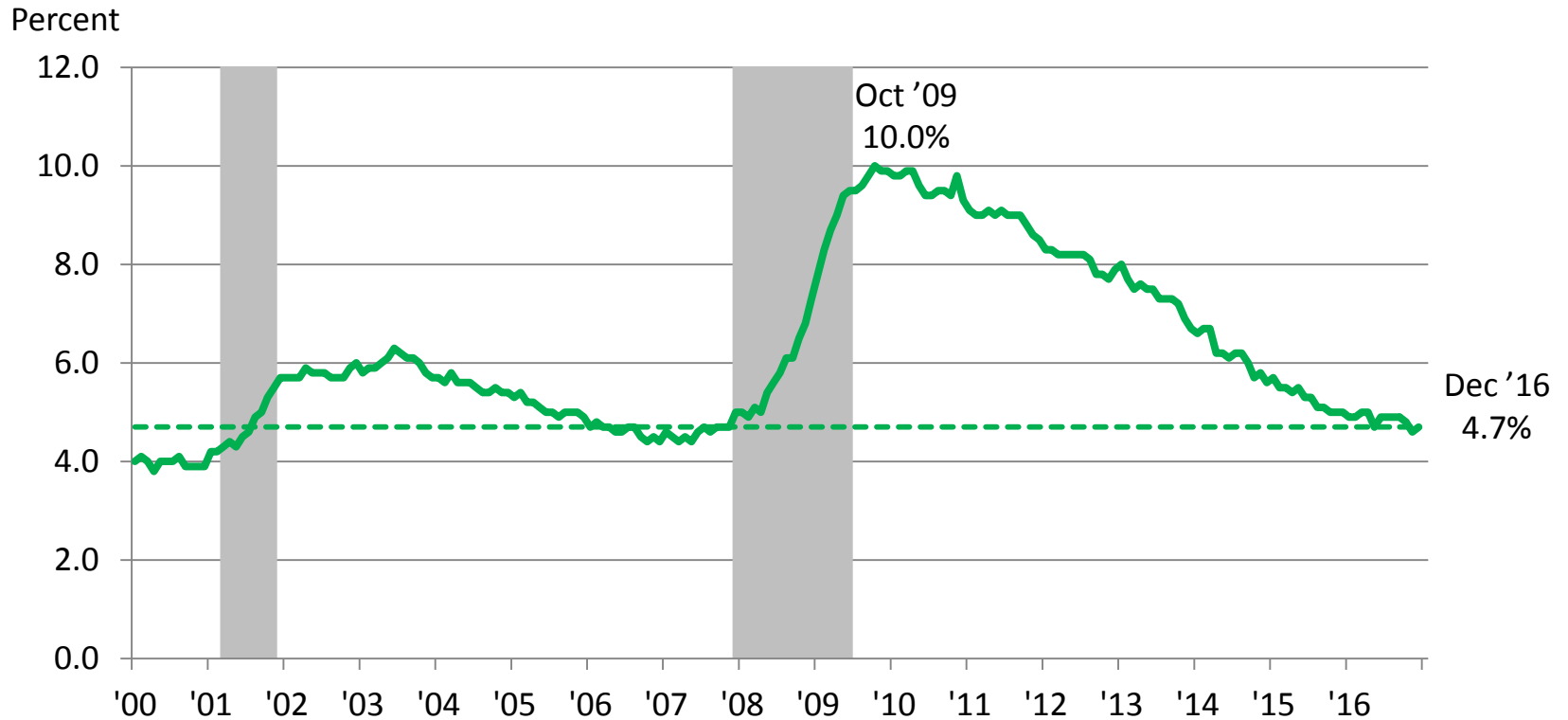
Percent Change Yr / Yr



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

Unemployment Rate

Percent of Labor Force



Source: U.S. Bureau of Labor Statistics

Initial Unemployment Claims

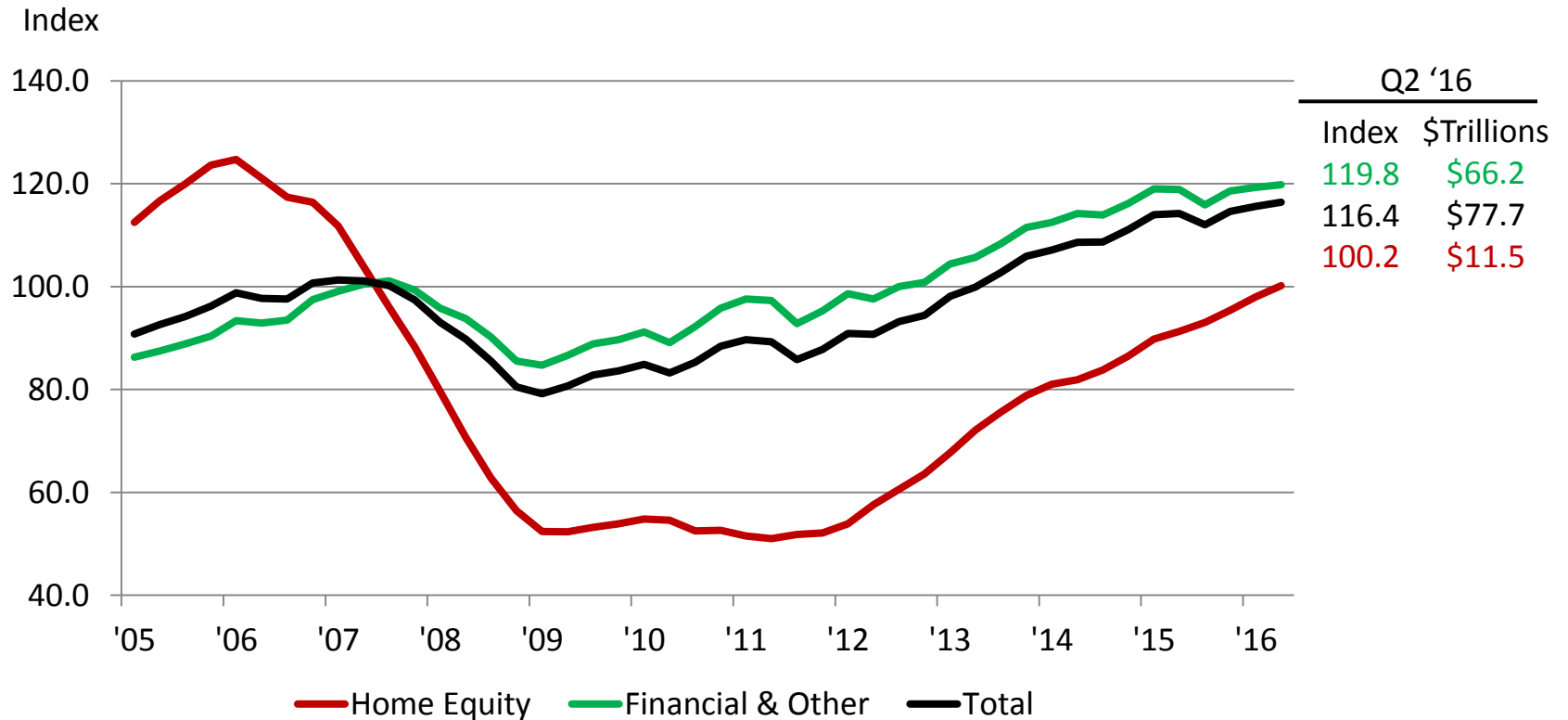
Monthly Average as Percent of Nonfarm Employment



Source: U.S. Bureau of Labor Statistics

Real Household Net Worth

Home Equity and Financial & Other - Index 2007 = 100, \$2009

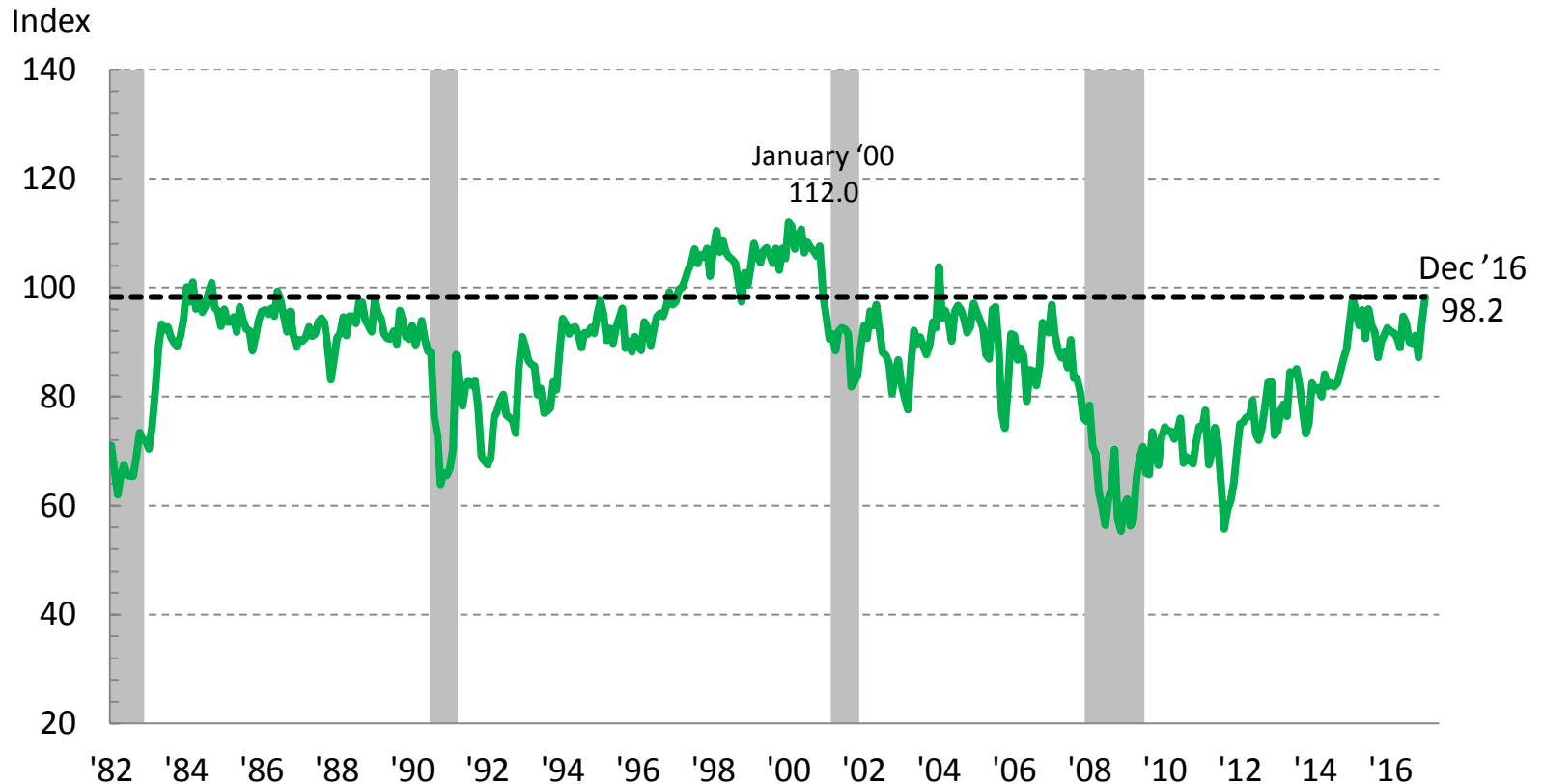


Note: Total Household Net Worth in Current Dollars is \$85.9 Trillion.

Source: Author's calculations using Federal Reserve data.

Consumer Sentiment

University of Michigan



Source: Thomson Reuters / University of Michigan

Monetary Policy Employment & Inflation

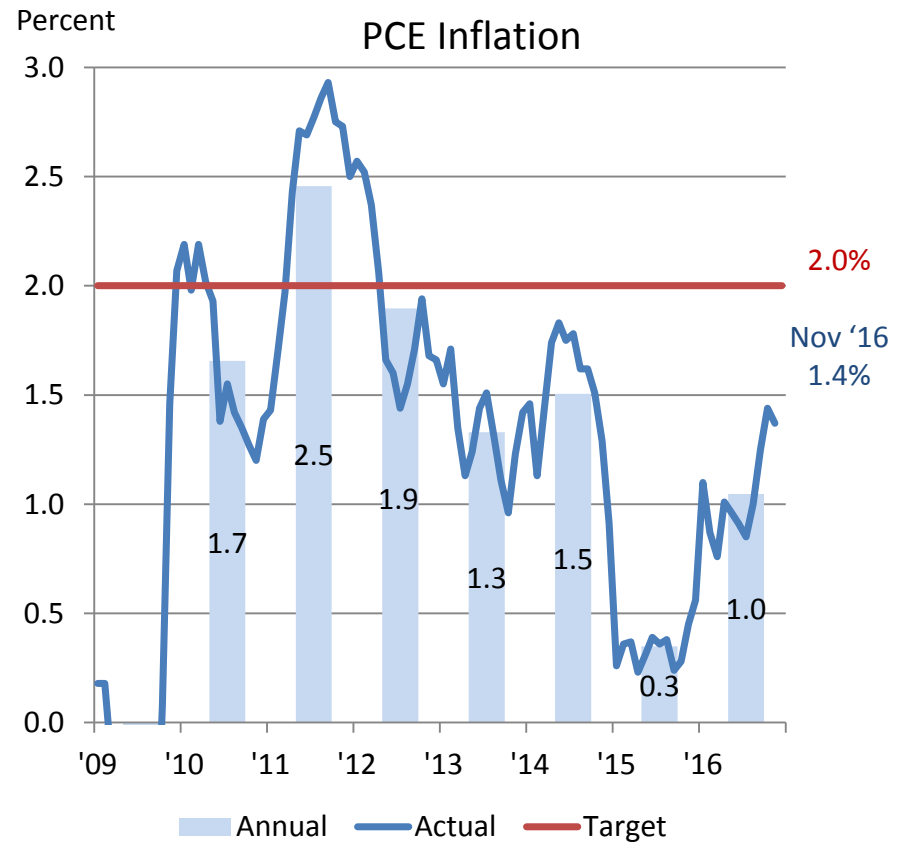
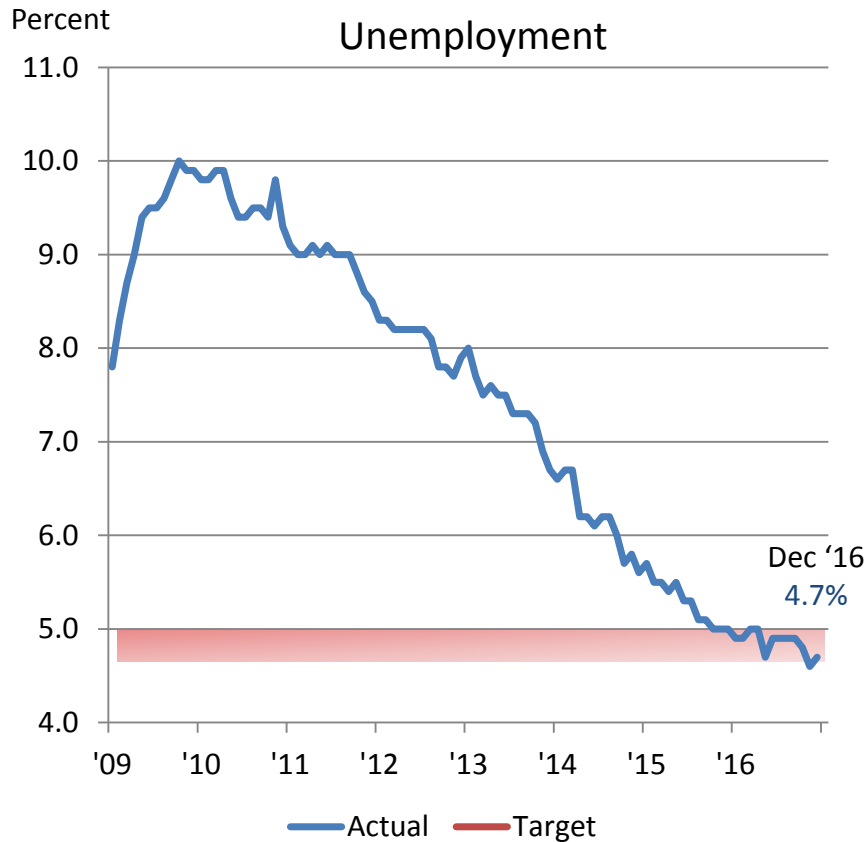
F.O.M.C Statement

December 21, 2016

1. Information since the F.O.M.C. met in November indicates that the labor market has continued to strengthened and that economic activity has been expanding at a moderate pace since mid-year.
2. Job gains have been solid in recent months and the unemployment rate has declined.
3. Household spending has been rising moderately but fixed investment has remained soft.
4. Inflation has increased since earlier this year but is still below the Committee's 2 percent longer-run objective, partly reflecting earlier declines in energy prices and in prices of non-energy imports.
5. Market-based measures of inflation compensation have moved up considerably but are still low; most surveyed based measures of longer-term inflation expectations are little changed, on balance, in recent months.

Unemployment Rate & PCE Inflation

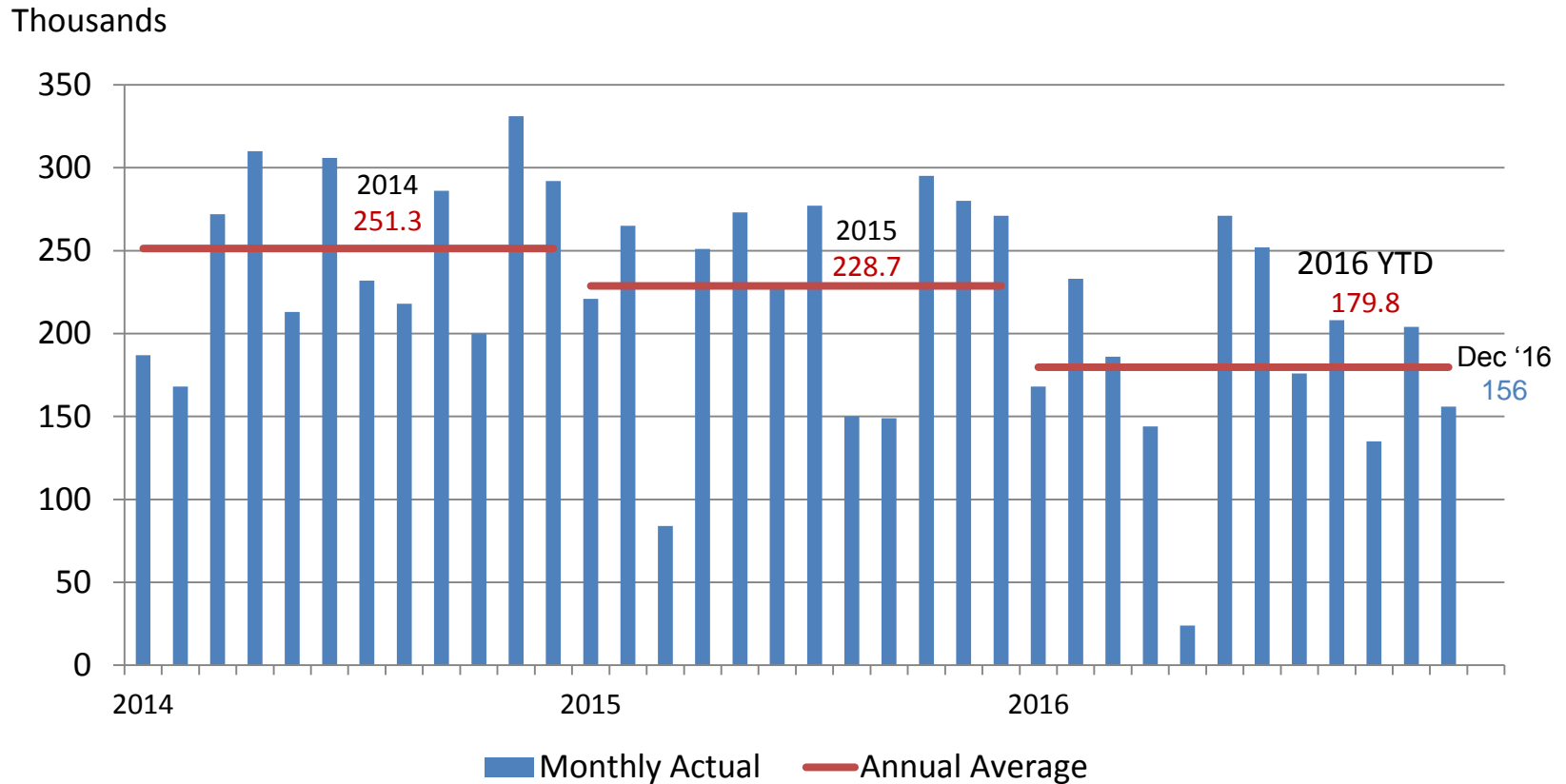
Percent Unemployed, PCE % Change Yr./Yr.



Source: U.S. Department of Labor: Bureau of Labor Statistics, Bureau of Economic Analysis and the Federal Reserve

U.S. Nonfarm Payrolls

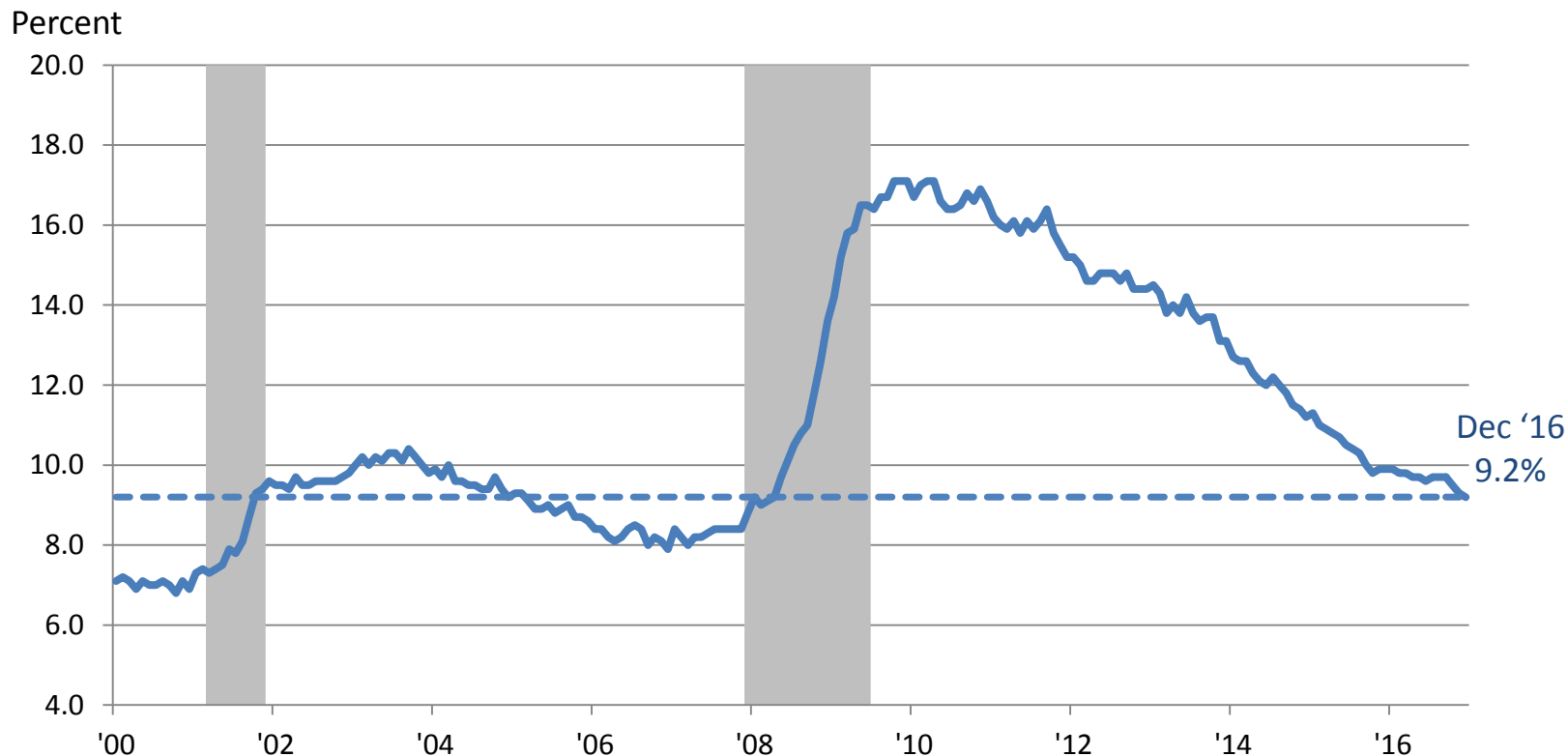
Monthly and Annual Average Job Change – In Thousands



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

Underutilization of Labor

U6 Unemployment Rate - SA

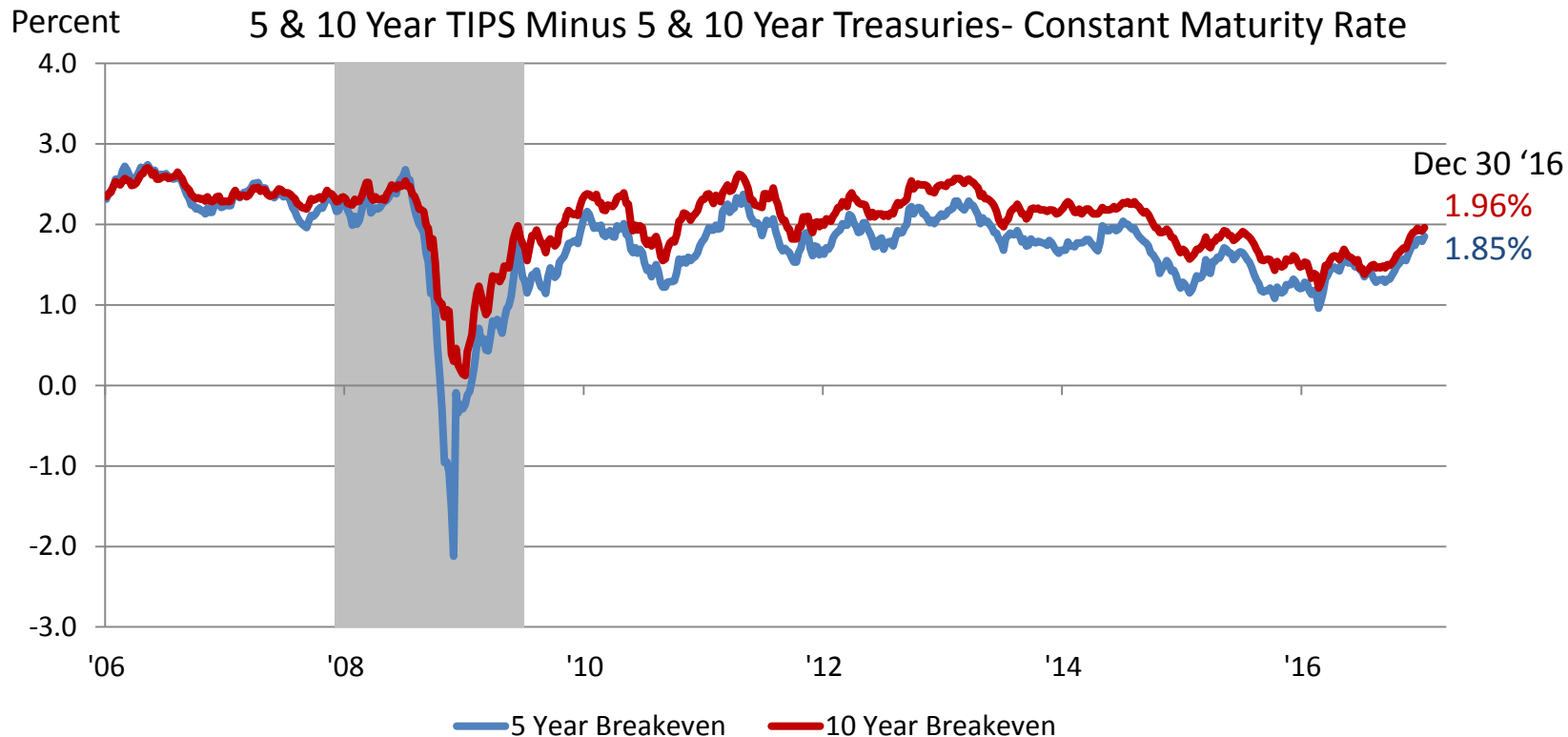


Includes total unemployed plus marginally attached workers plus employed part-time for economic reasons.

Source: U.S. Department of Labor: Bureau of Labor Statistics , Bureau of Economic Analysis and the Federal Reserve

Inflation Compensation

5 Year and 10 Year Inflation Expectations

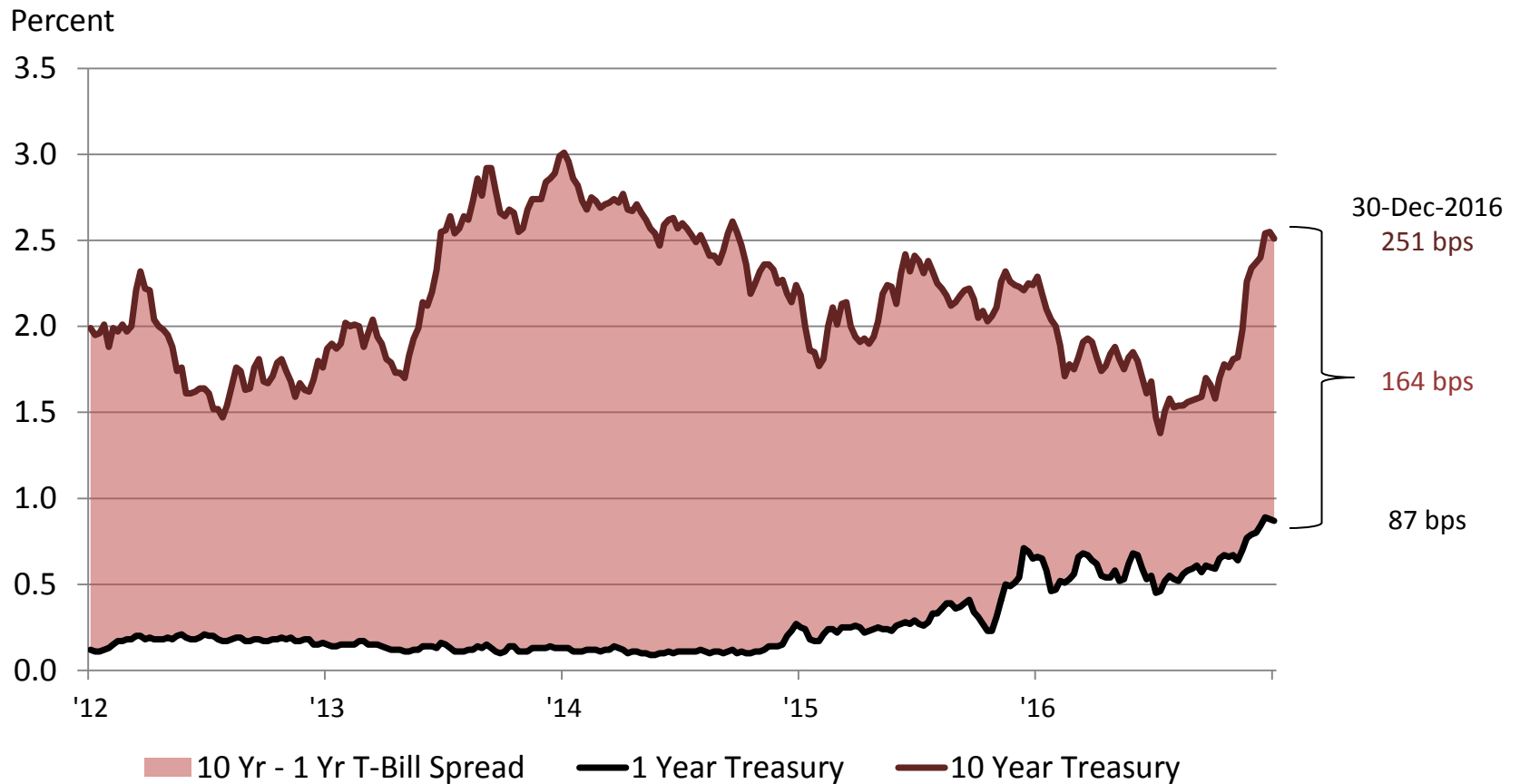


Source: Author's calculation using Federal Reserve System data.

Source: U.S. Department of Labor: Bureau of Labor Statistics, Bureau of Economic Analysis and the Federal Reserve

Yield Curve

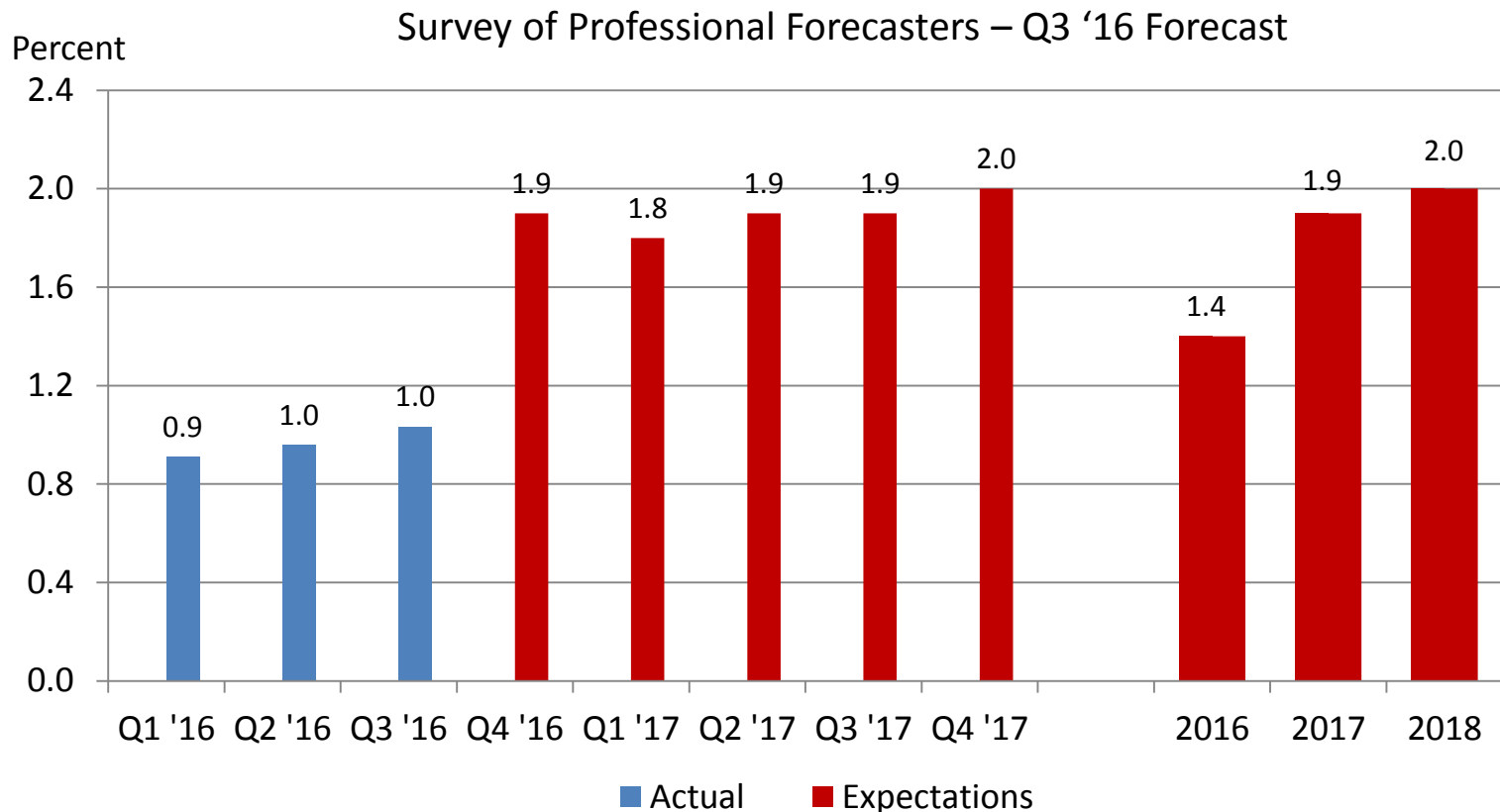
10 Year – 1 Year Treasuries in Basis Points



Source: Board of Governors – Federal Reserve System

Inflation Expectations

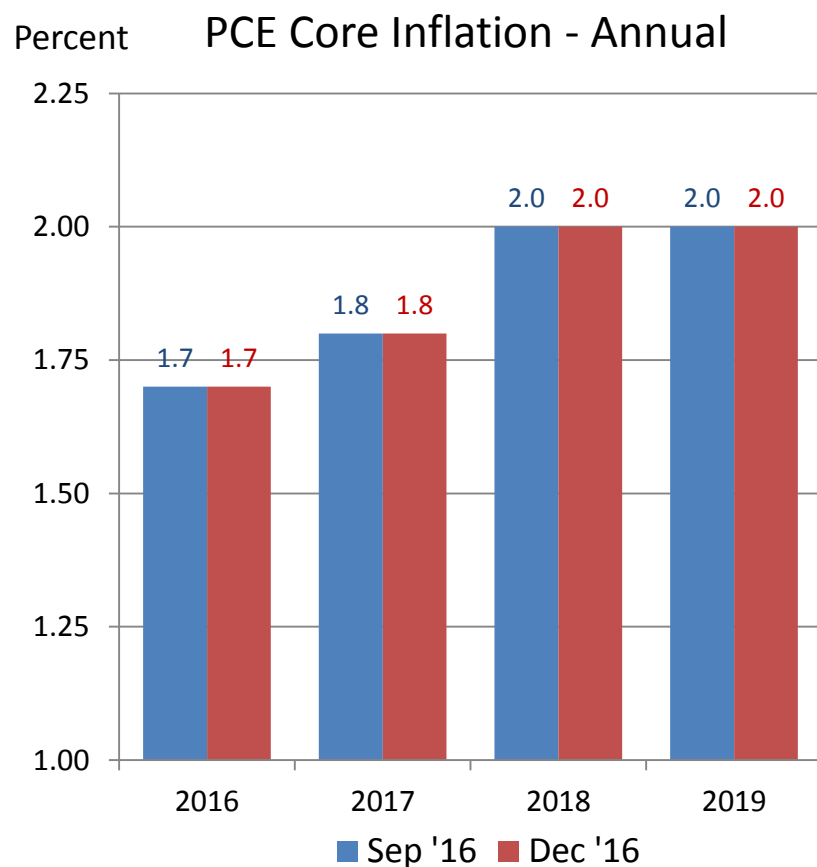
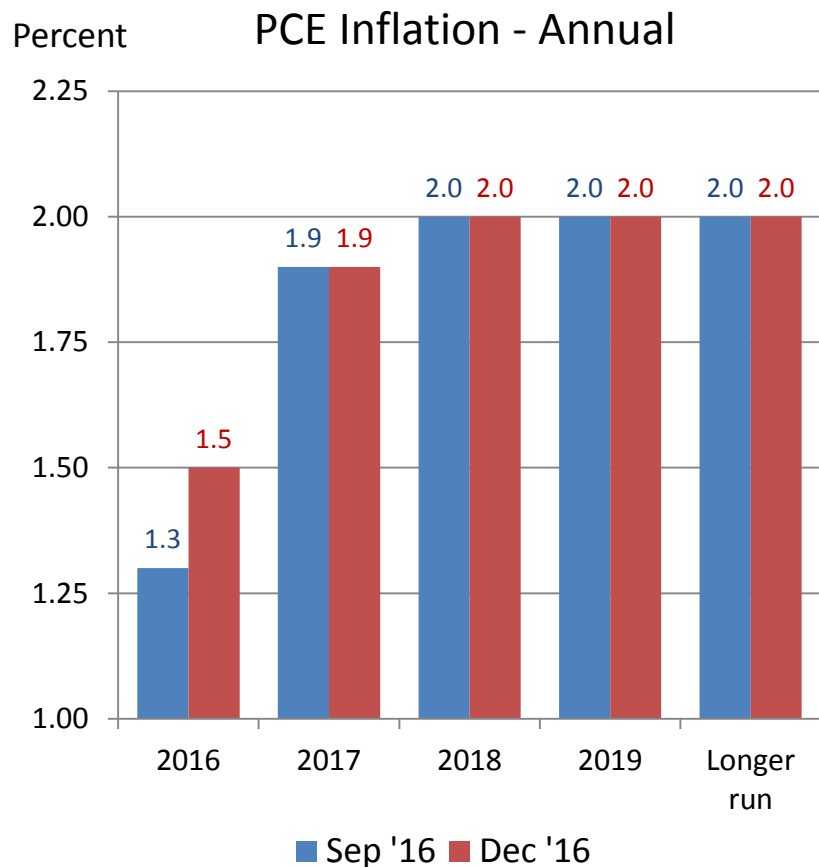
Headline PCE Inflation – Yr./Yr. & Q4/Q4



Source: Bureau of Economic Analysis and FRB Philadelphia Q1 '16 Survey

Economic Projections Comparisons

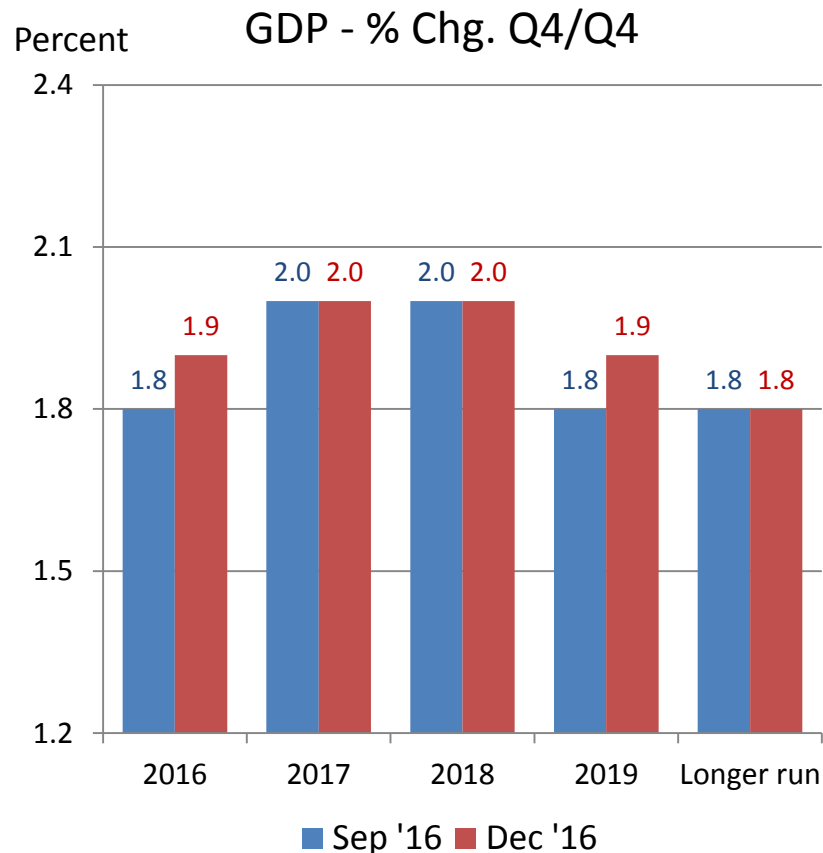
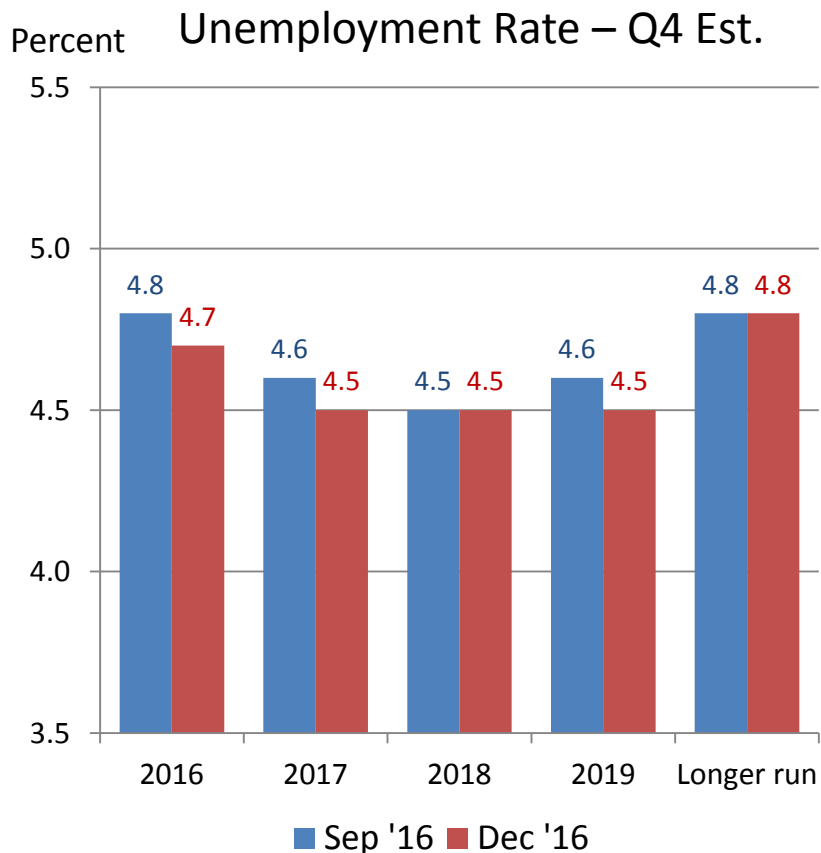
September 2015 versus September 2016



Source: Board of Governors – Federal Reserve System, September 2015 & September 2016

Economic Projections Comparisons

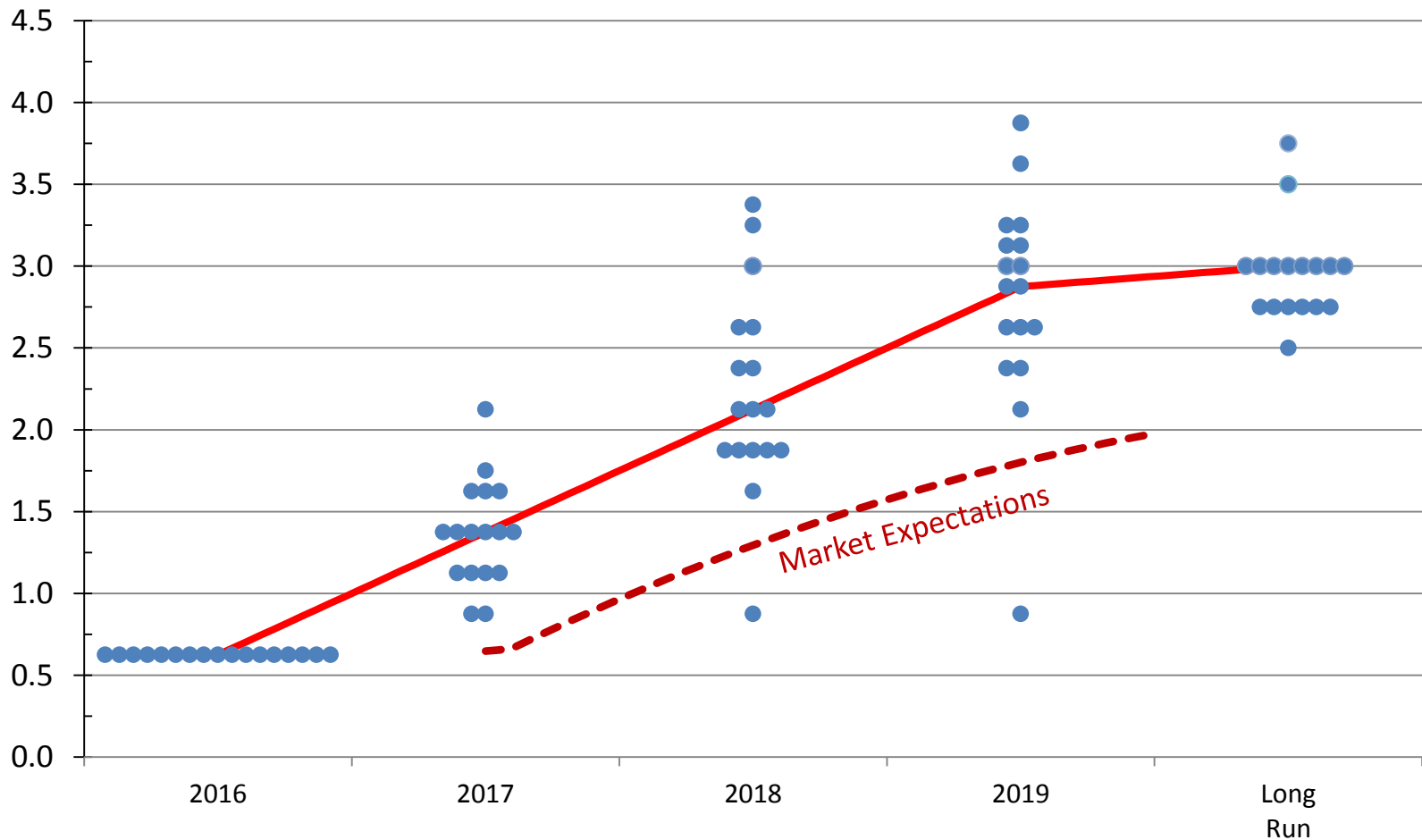
September 2015 versus September 2016



Source: Board of Governors – Federal Reserve System, September 2015 & September 2016

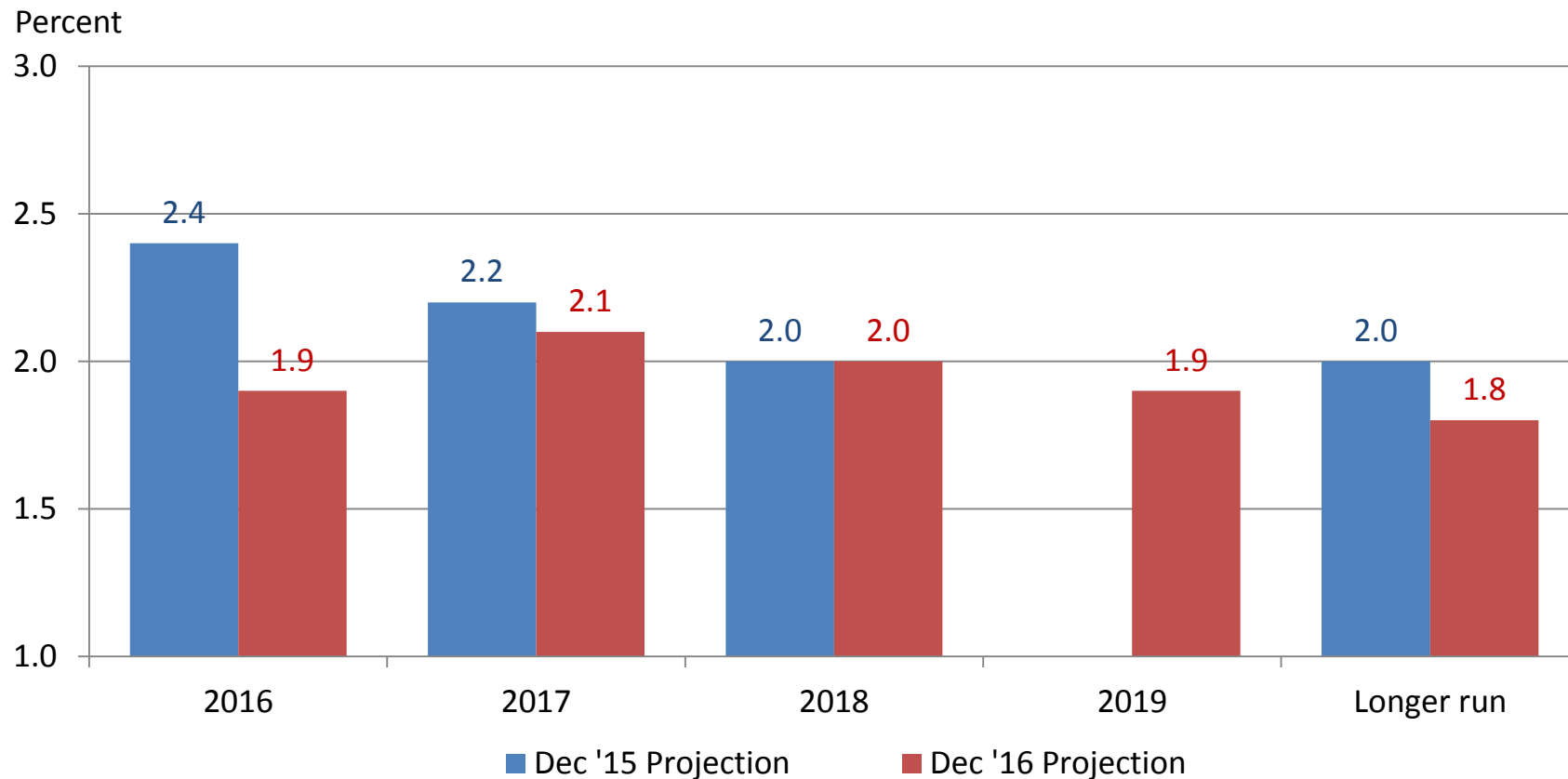
Appropriate pace of policy firming

Fed Funds Rate – Year End Projections



Economic Projections Comparisons

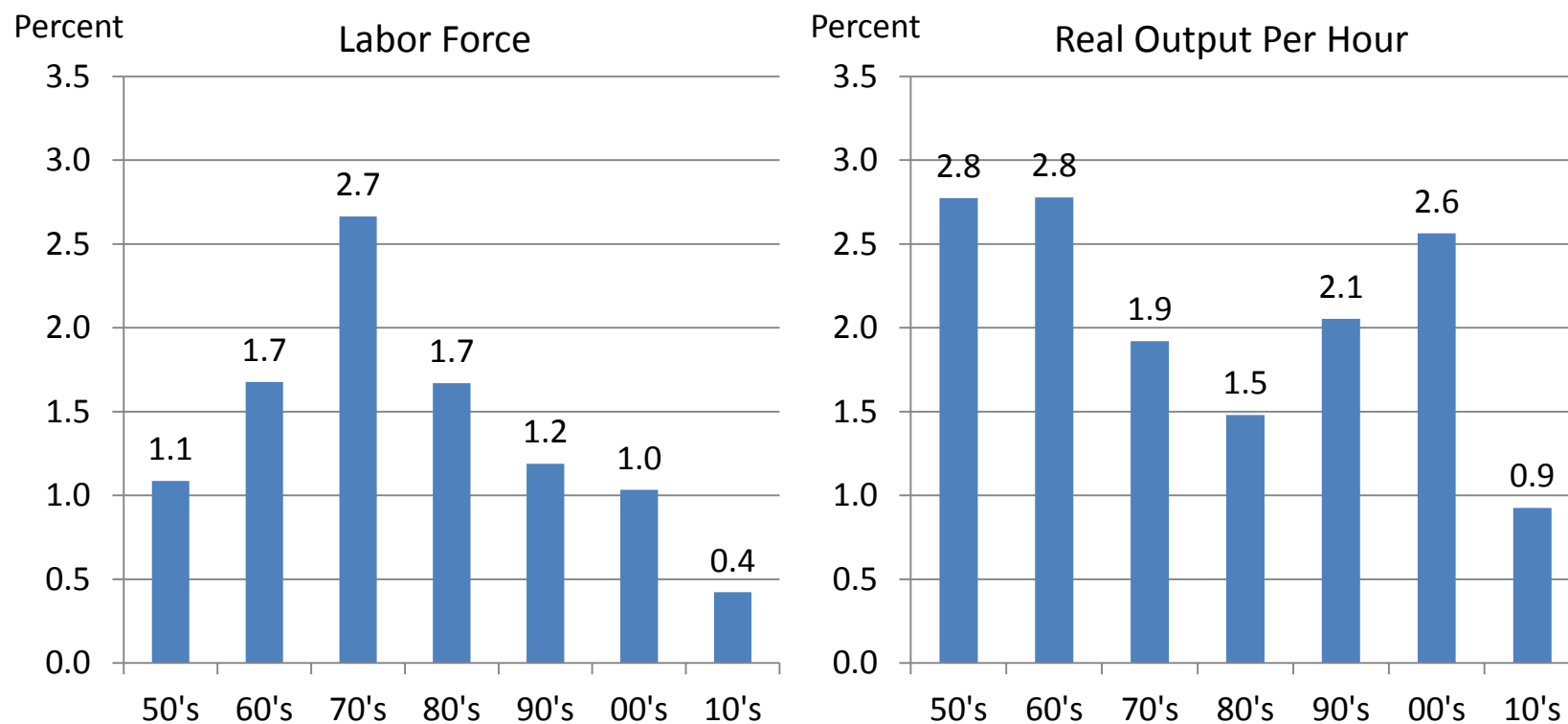
Real GDP Percent Change Q4/Q4 Sep '15 versus Sep '16



Source: Board of Governors – Federal Reserve System, June 2016 & September 2016 Median Predictions

Labor and Productivity Growth

Labor Force and Real Output Per Hour – Average Annual Growth



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

Importance of an Independent Fed

- Policymakers, academics, and other informed observers around the world agree that the goals of monetary policy should be established by the political authorities, but the conduct of monetary policy in pursuit of those goals should be free from political influence.*
- The Fed has congressionally mandated goals of price stability, maximum employment, and moderate long-term interest rates.
- Many studies support that central banks able to conduct day-to-day monetary policy operations free of political pressure tend to deliver better inflation outcomes, without compromising economic growth.
- Achieving monetary goals can at times take substantial time, this requires that monetary policy makers take a longer-term perspective when making their decisions.

* Source: Board of Governors of the Federal Reserve

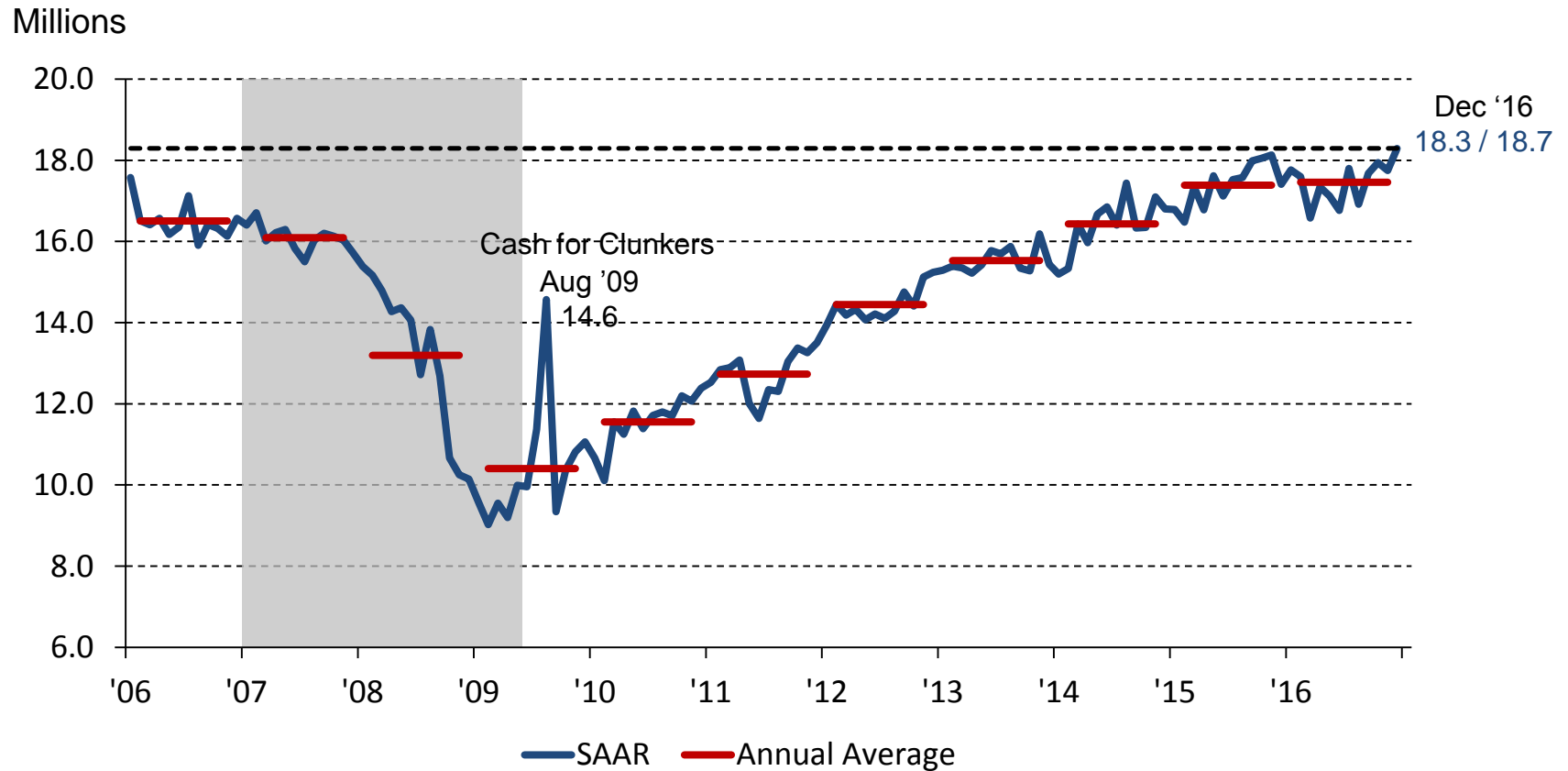
Importance of an Independent Fed (con't)

- In contrast, short-term political influences may cause pressure to over stimulate the economy resulting in output and employment gains that exceed the economy's underlying potential.
- Such gains may look good at first, but they are not sustainable and will likely create an inflationary environment that is detrimental to longer-term economic growth.
- In short, monetary policy interference can generate boom-bust cycles with high inflation and less stable economic activity.
- Additionally, a government that controls the central bank could abuse the central bank's money-creation powers to help finance government budget deficits which would inevitably lead to high inflation and interest rates and a volatile economy.

U.S. Auto Industry

U.S. Light Vehicle Sales

S.A.A.R – Millions of Units



Note: Total 2016 Light Vehicle Sales: 17,465,020 / Including M/H: 17,866,260.

Source: Ward's Automotive and BEA

U.S. Light Vehicle Incentives

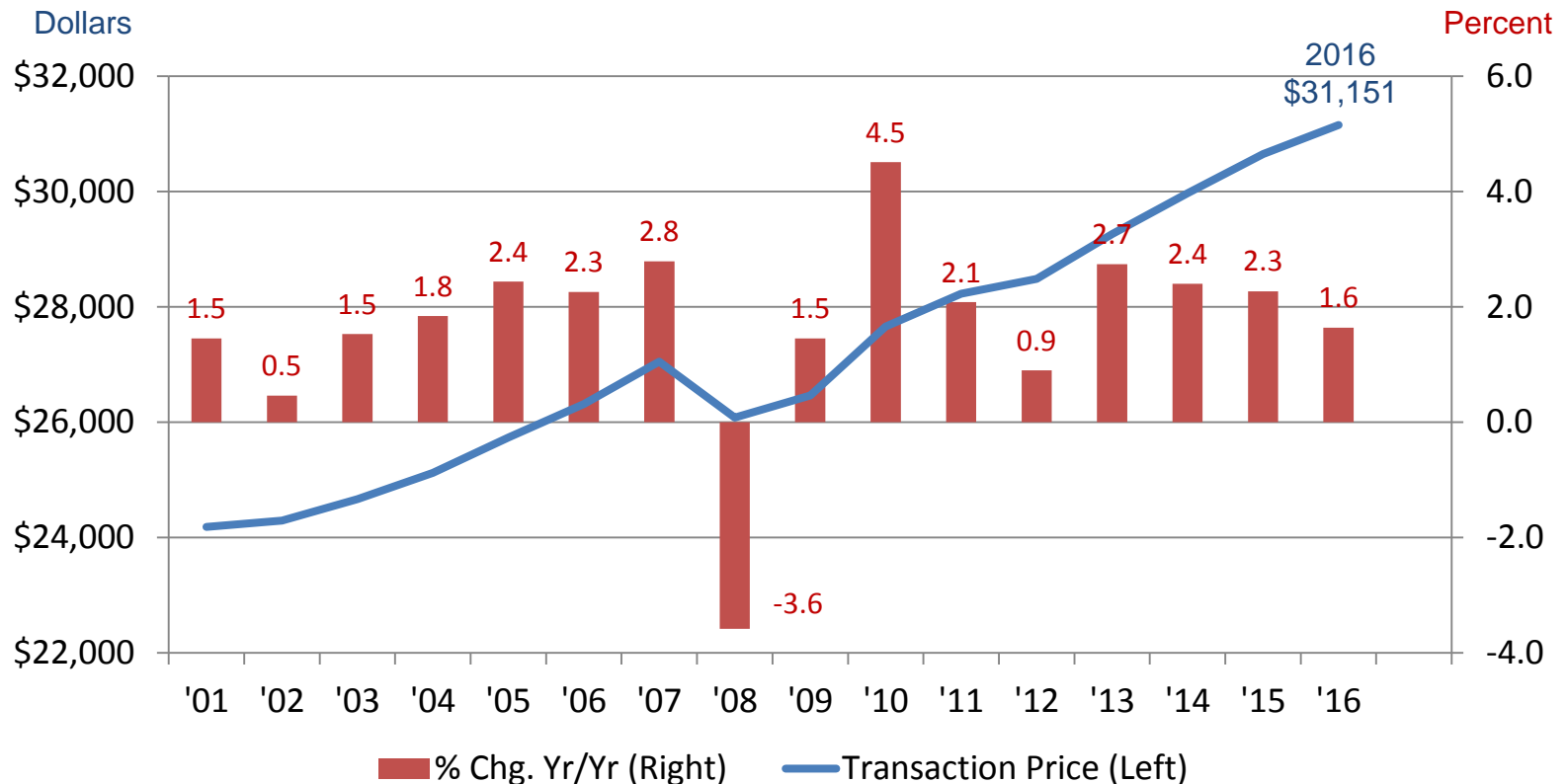
As Percent of Transaction Price - SA



Source: Author's calculation using Ward's Automotive and J.D Power data.

Light Vehicle Transaction Price

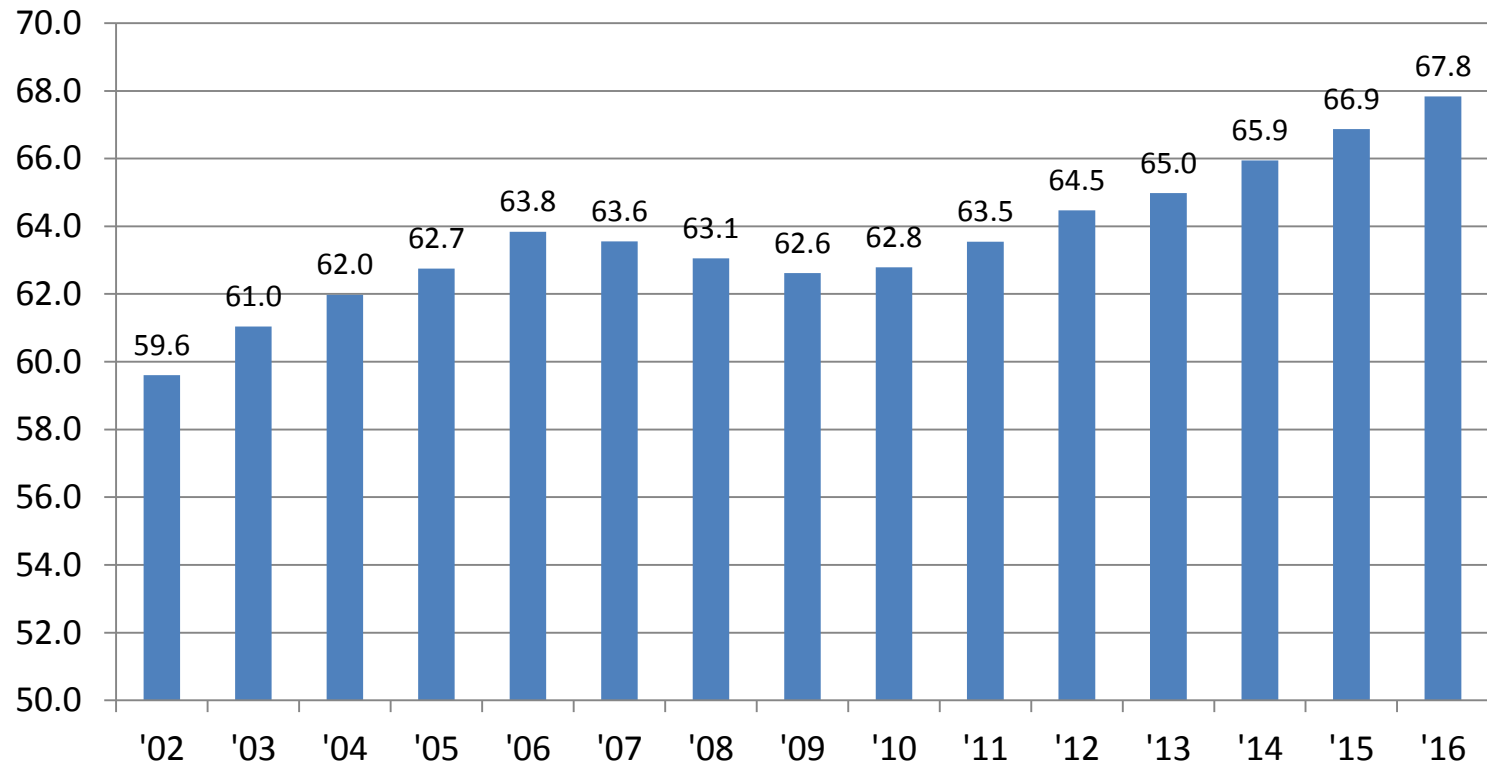
Annual Average & Percent Change Yr./Yr.



Source: Author's calculation using J.D Power data.

Finance Term

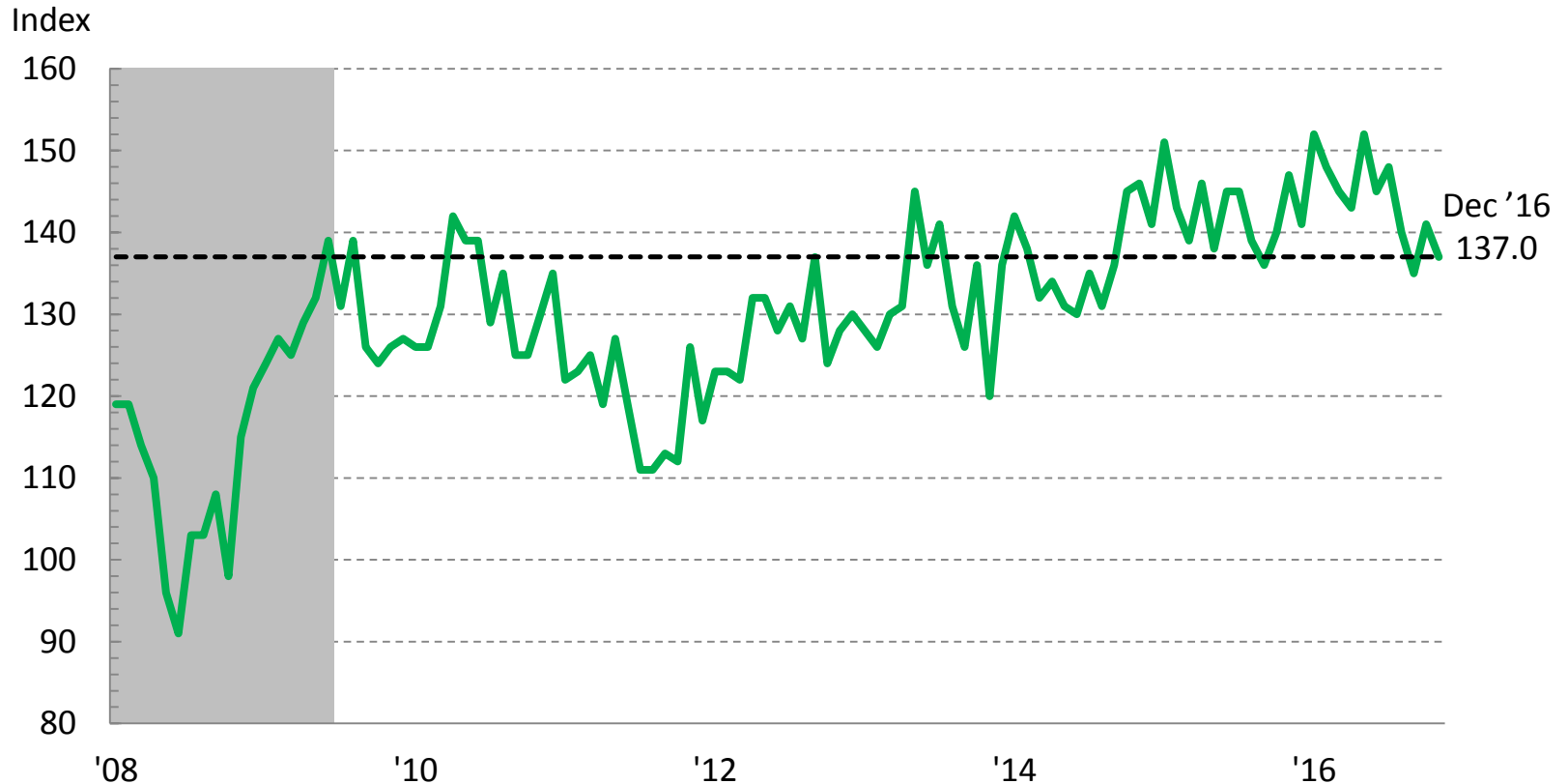
Length of Loan in Months



Source: J.D Power data.

Buying Conditions for Vehicles

University of Michigan

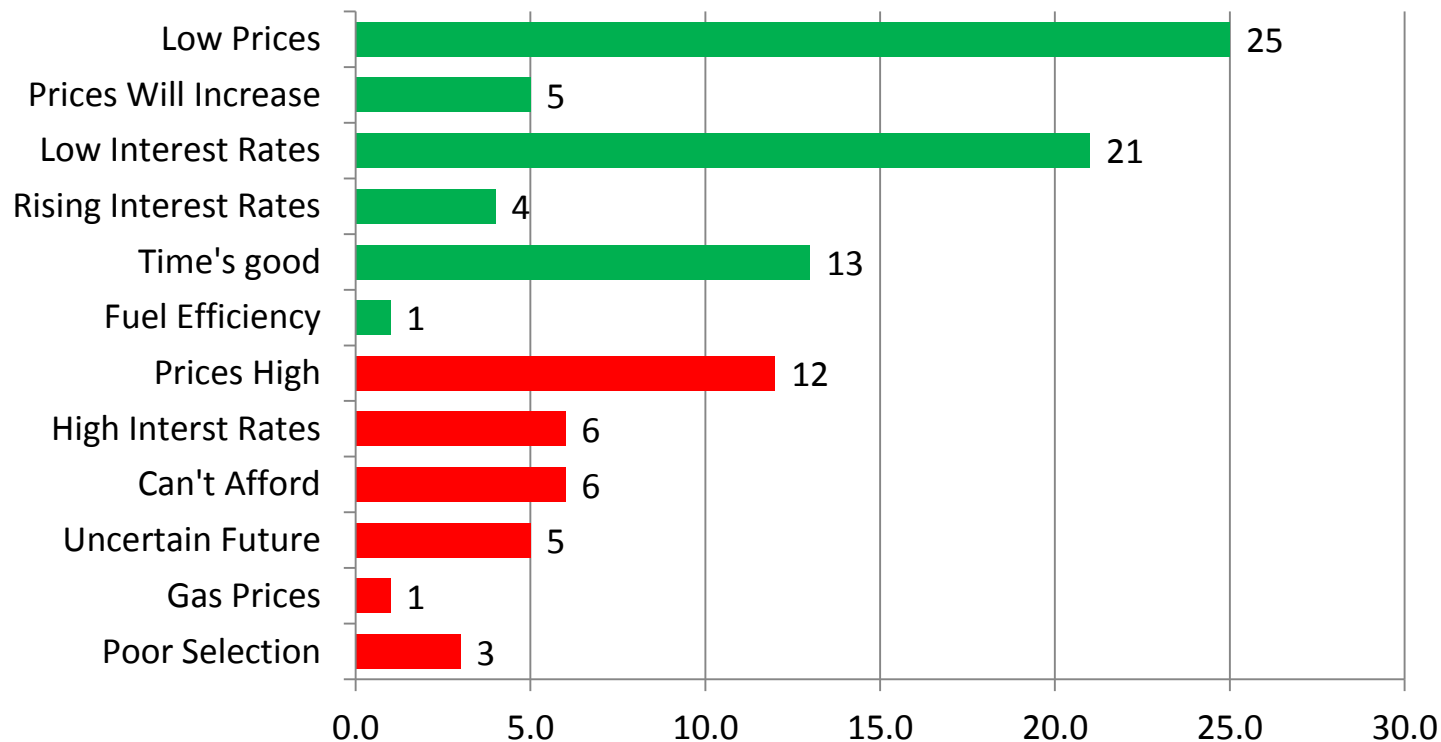


Source: Thomson Reuters / University of Michigan

Reasons for Buying Conditions for Vehicles

University of Michigan

Good / Bad Reason: *Why do you say so?*



Note: May add to more than a 100 due to multiple mentions.

Source: University of Michigan Survey of Consumers

Thank You!

