

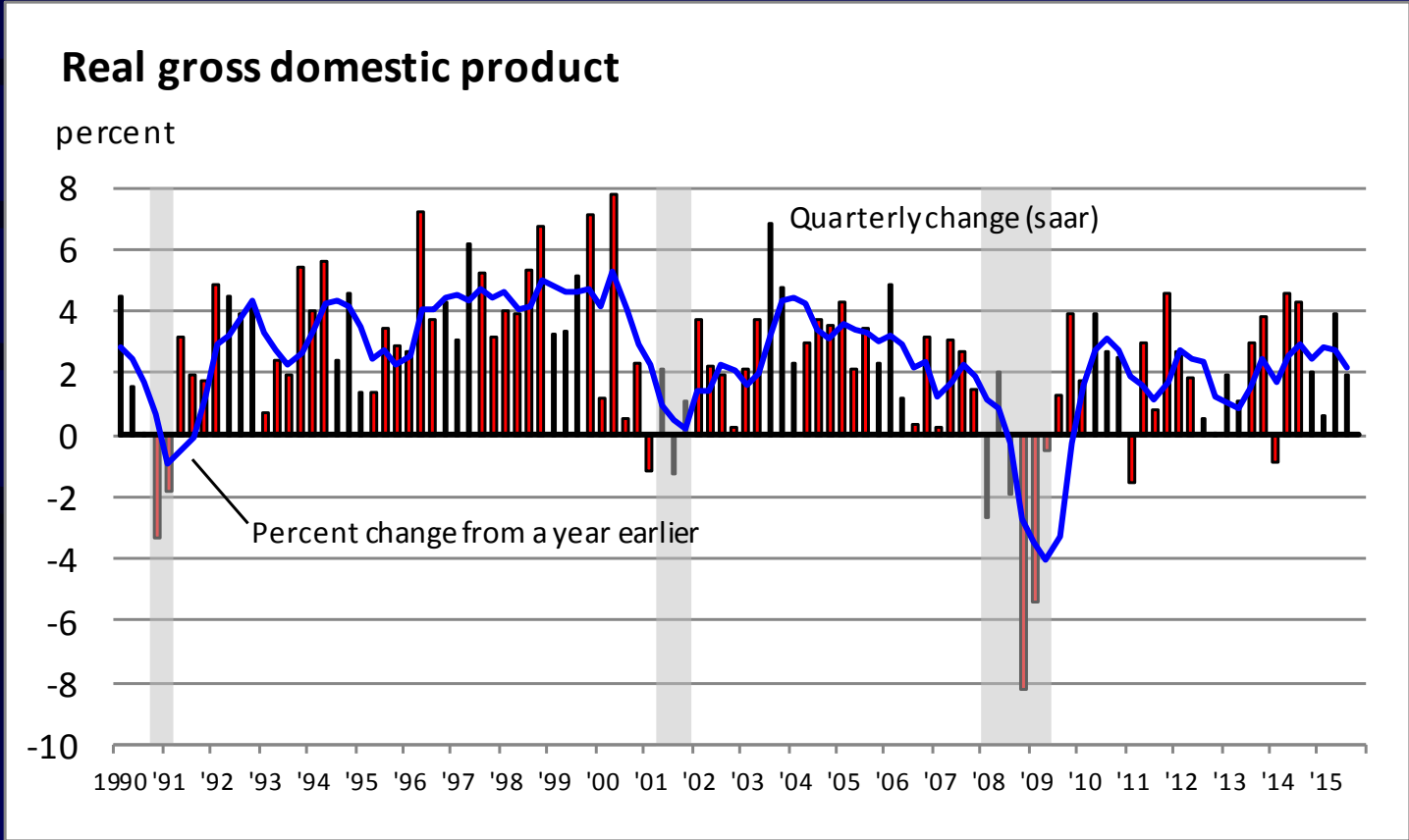
Economic Outlook

Midwest Association of Rail Shippers
Lombard, IL
January 13, 2016

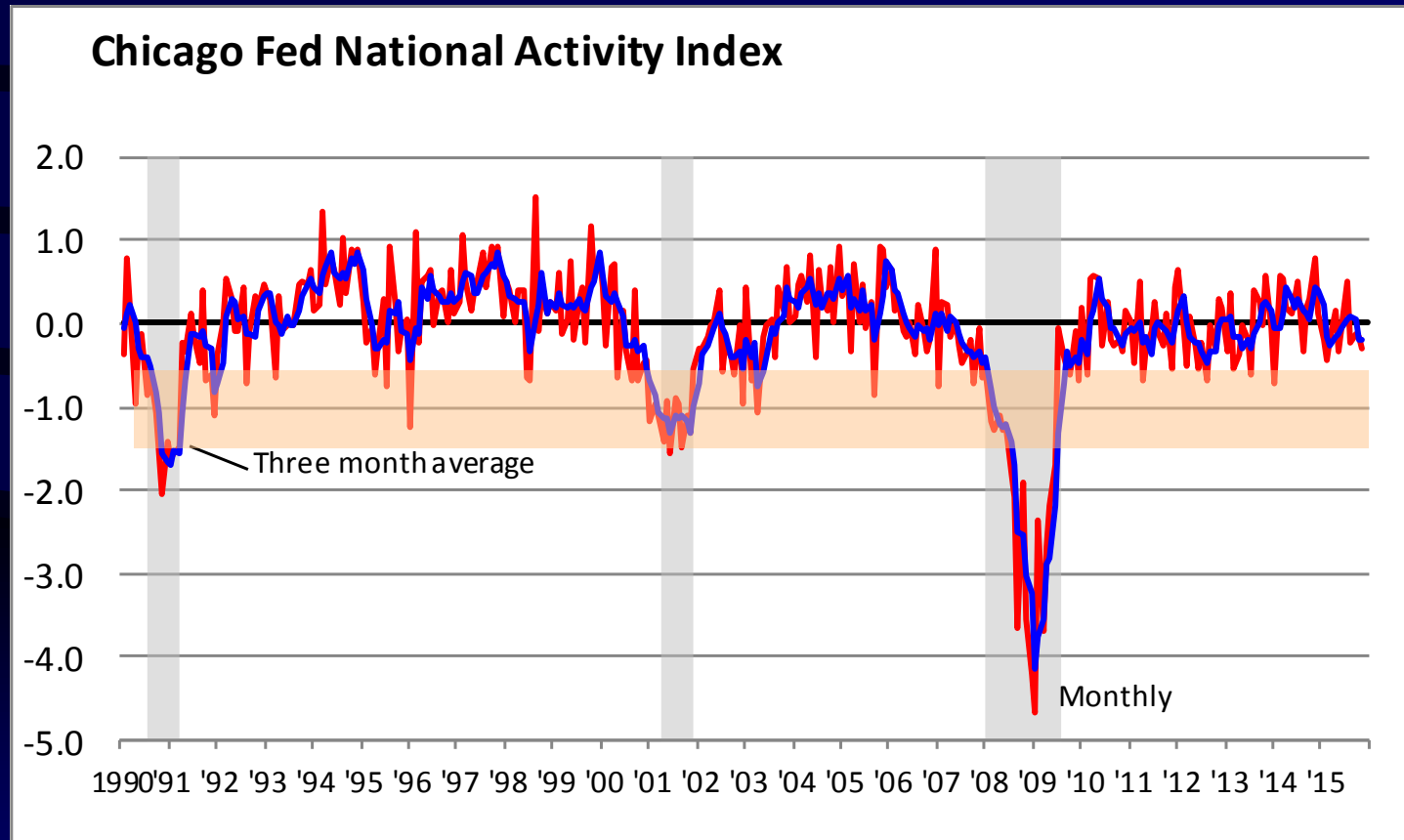
William Strauss
Senior Economist
and Economic Advisor
Federal Reserve Bank of Chicago



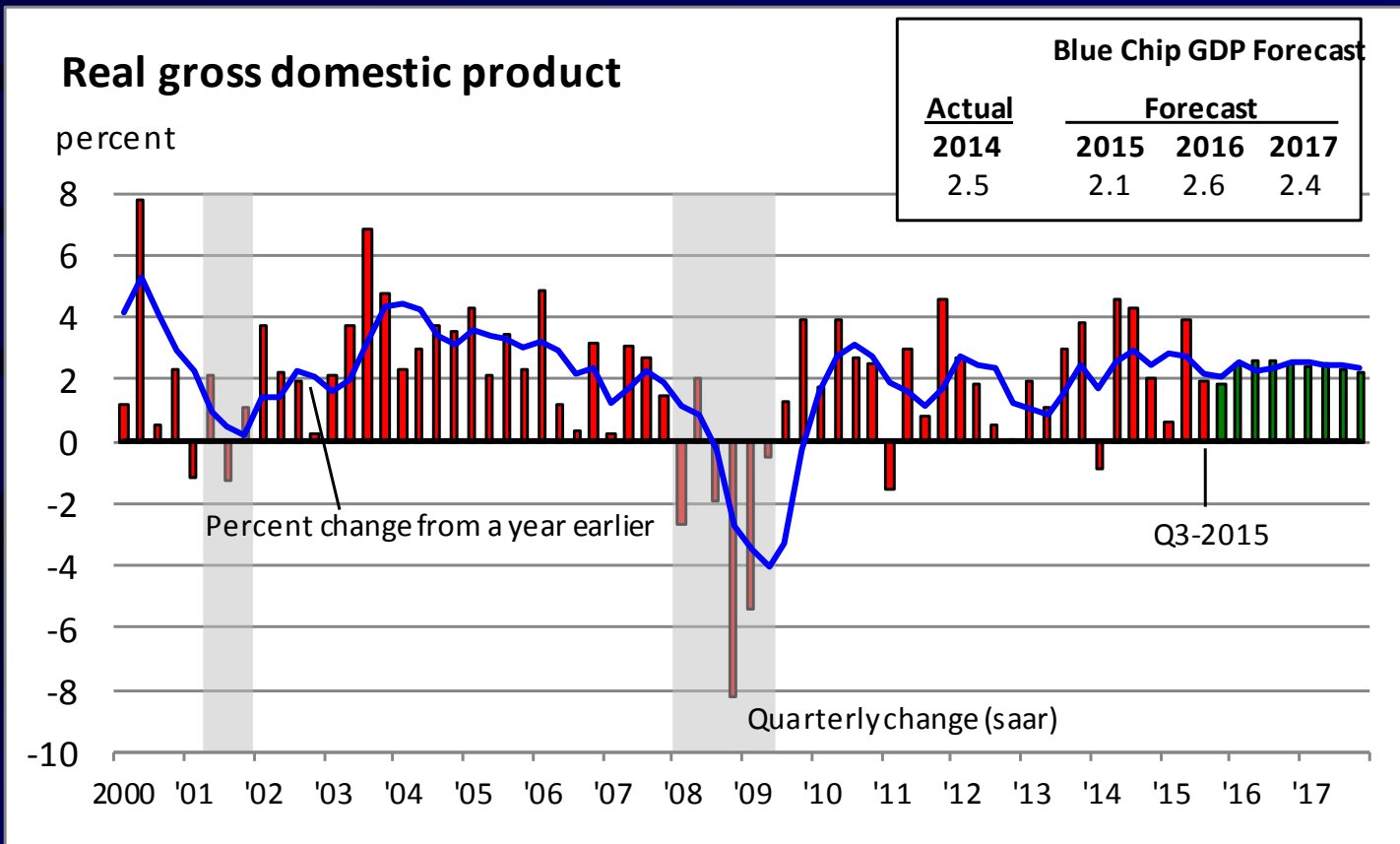
The “Great Recession” ended in June 2009 and GDP expanded by 2.1% over the past year



The Chicago Fed National Activity Index 3-month average is below zero



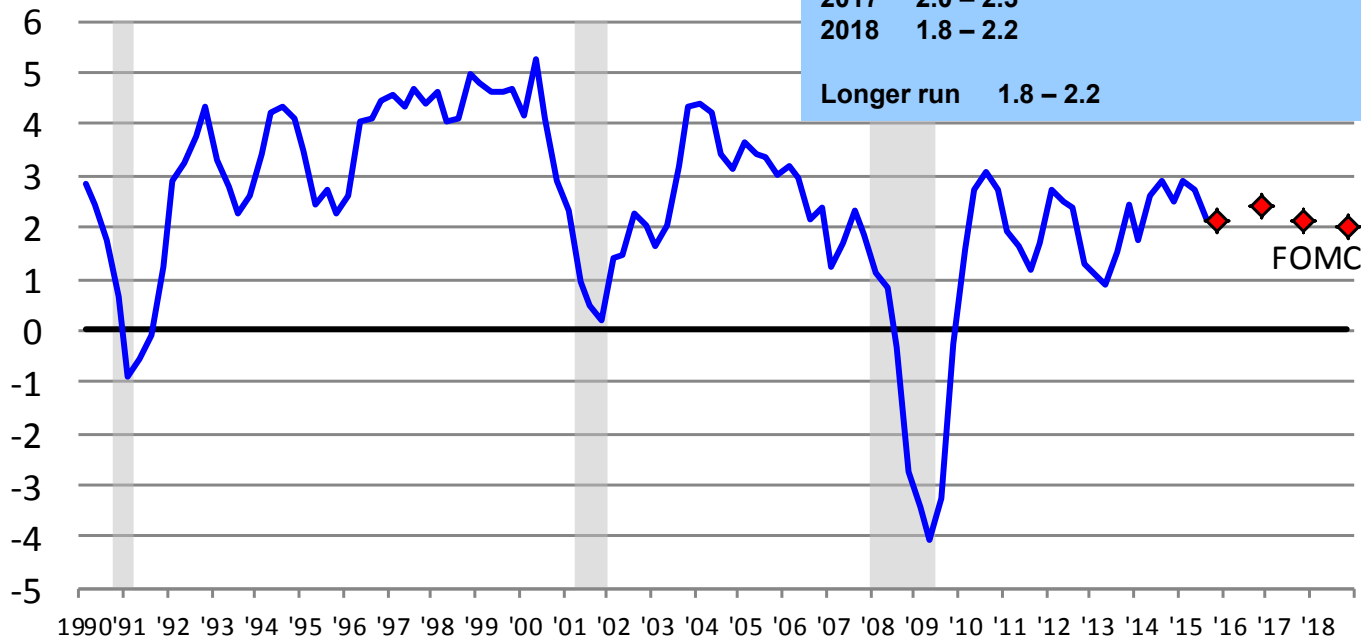
GDP is forecast to have grown around trend in 2015 and expected to grow slightly above trend in 2016



The Federal Open Market Committee (FOMC) expects GDP to grow slightly above trend this year

Real gross domestic product

percent change from a year earlier



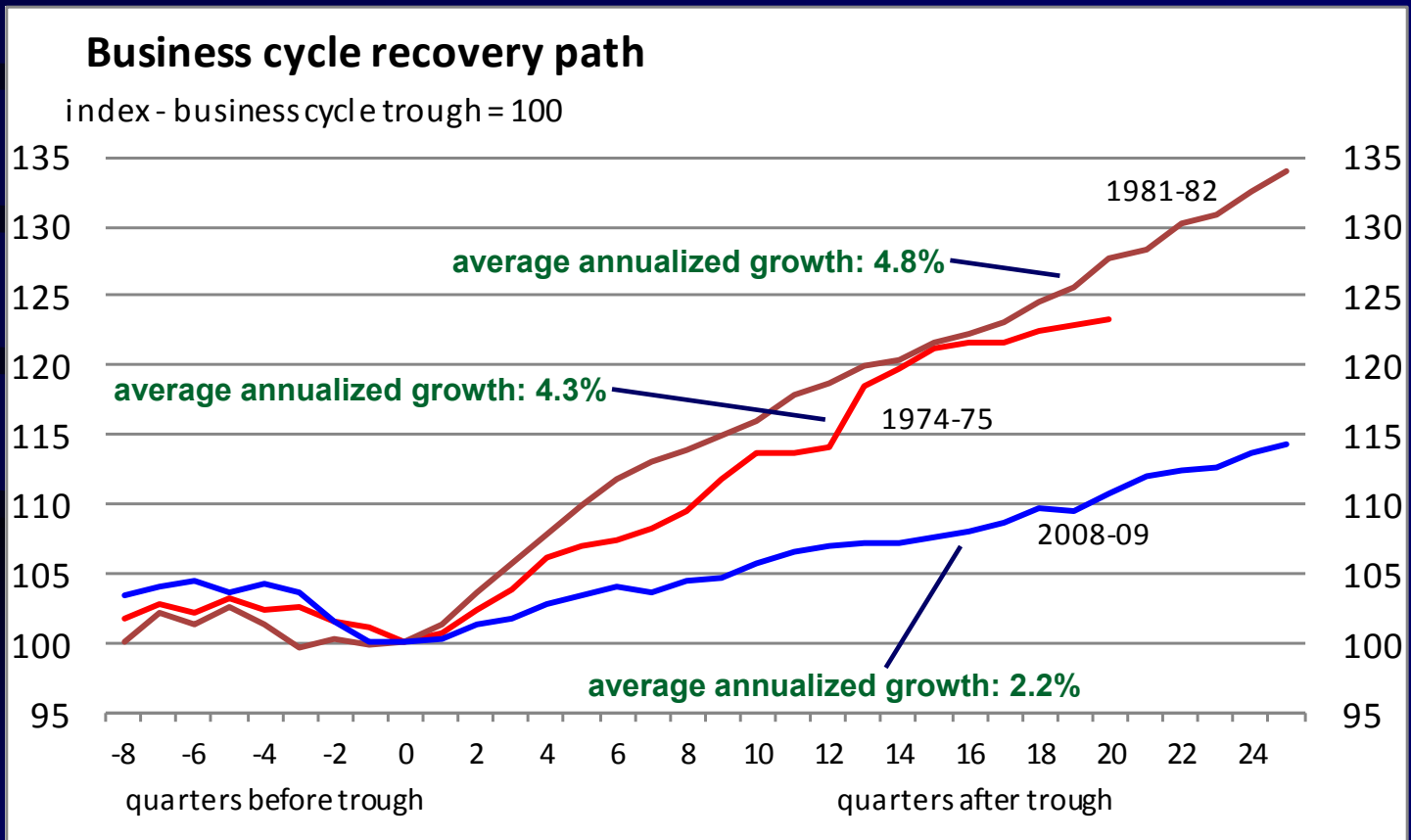
FOMC Central Tendency (December 2015)

2015	2.1
2016	2.3 – 2.5
2017	2.0 – 2.3
2018	1.8 – 2.2

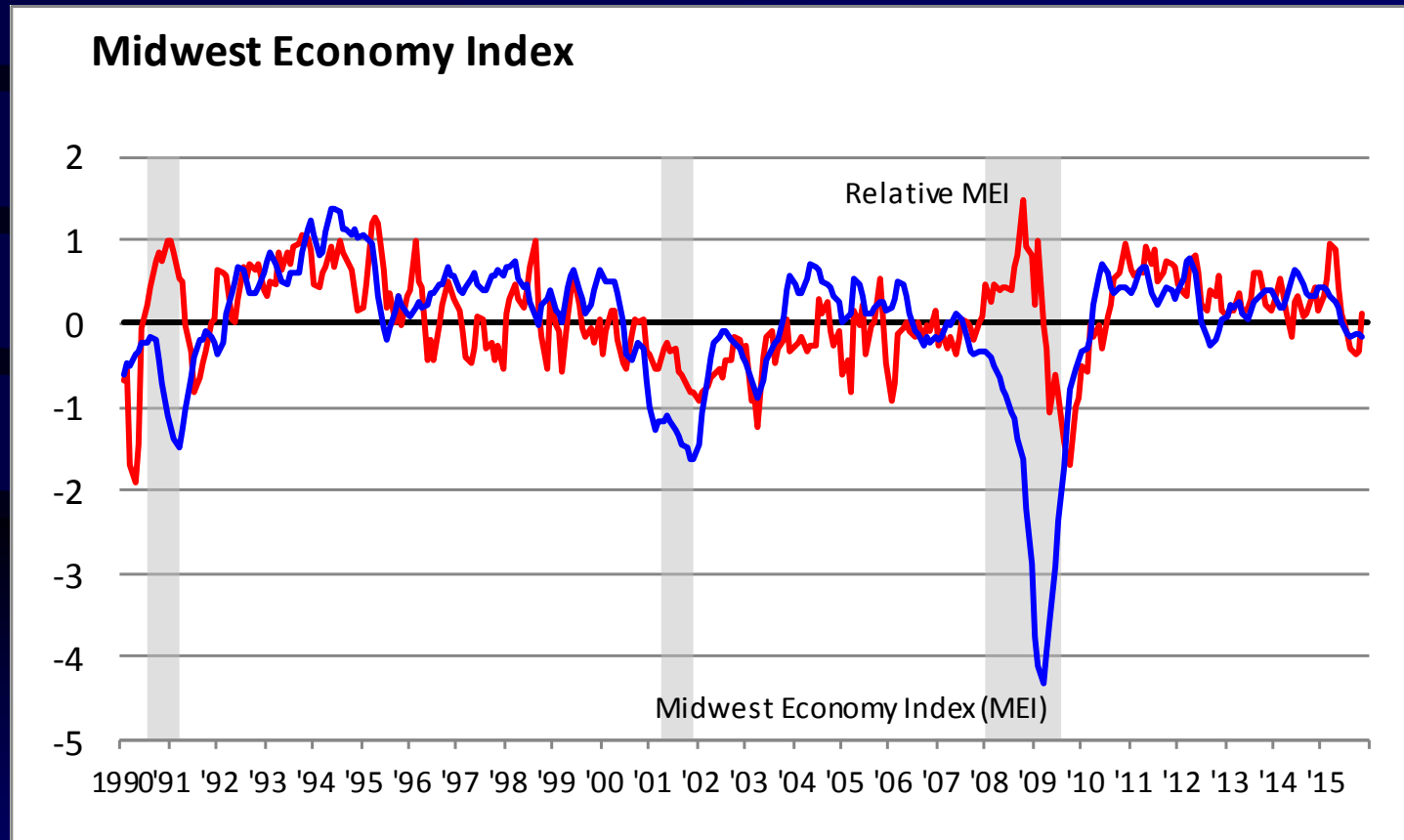
Longer run 1.8 – 2.2



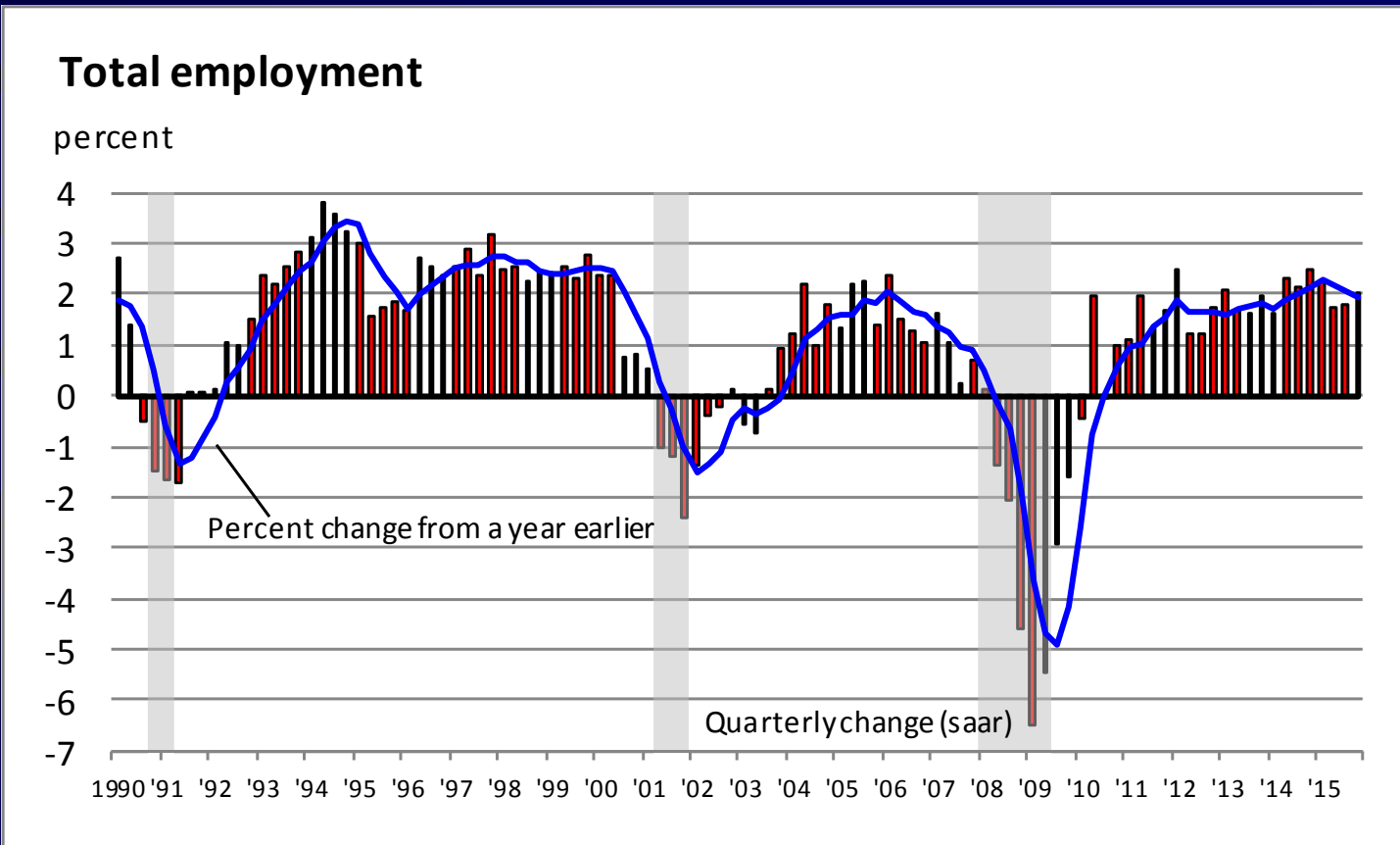
The path of the current recovery is restrained compared with past deep recession recovery cycles



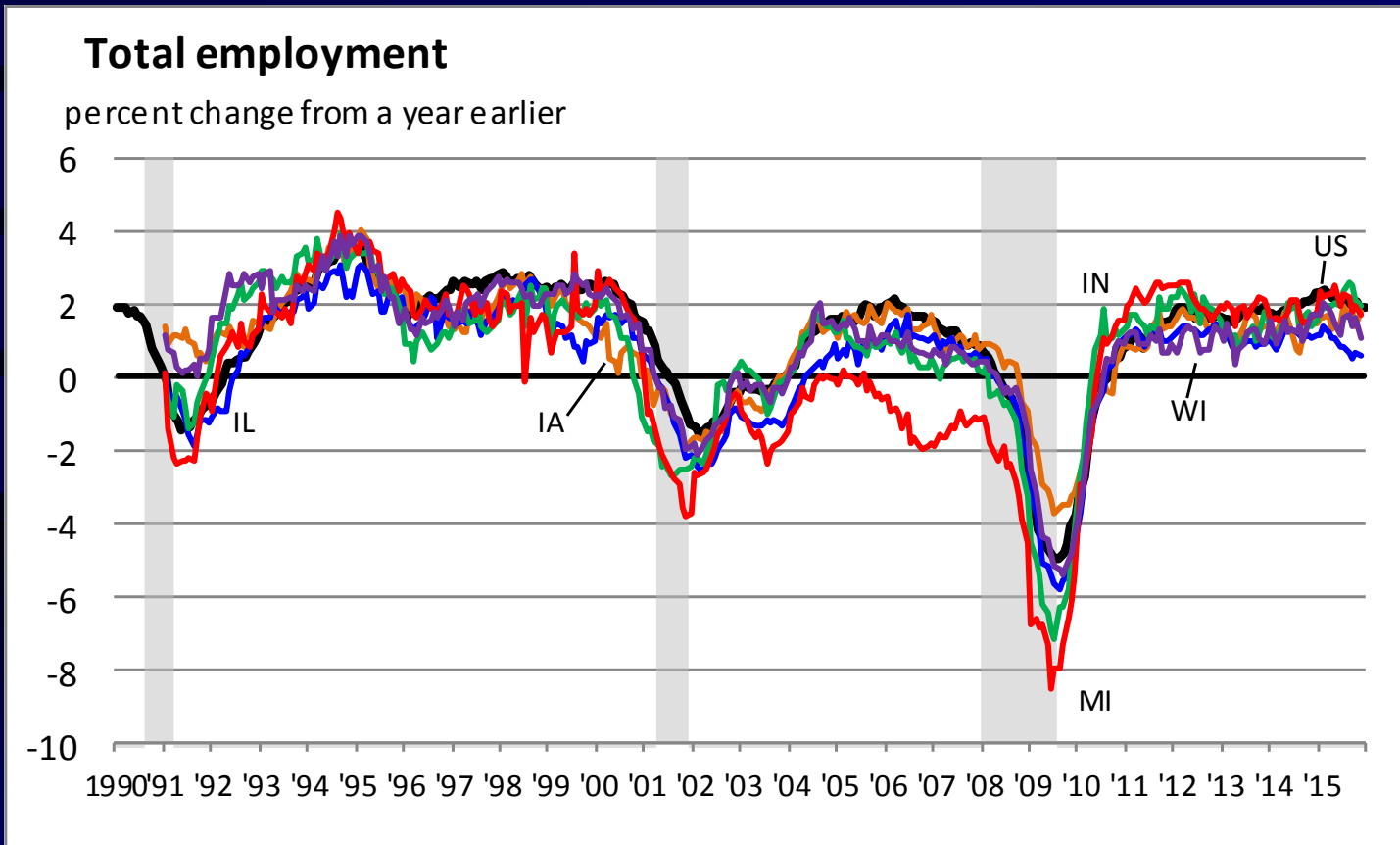
The “Midwest” economy’s performance has slowed



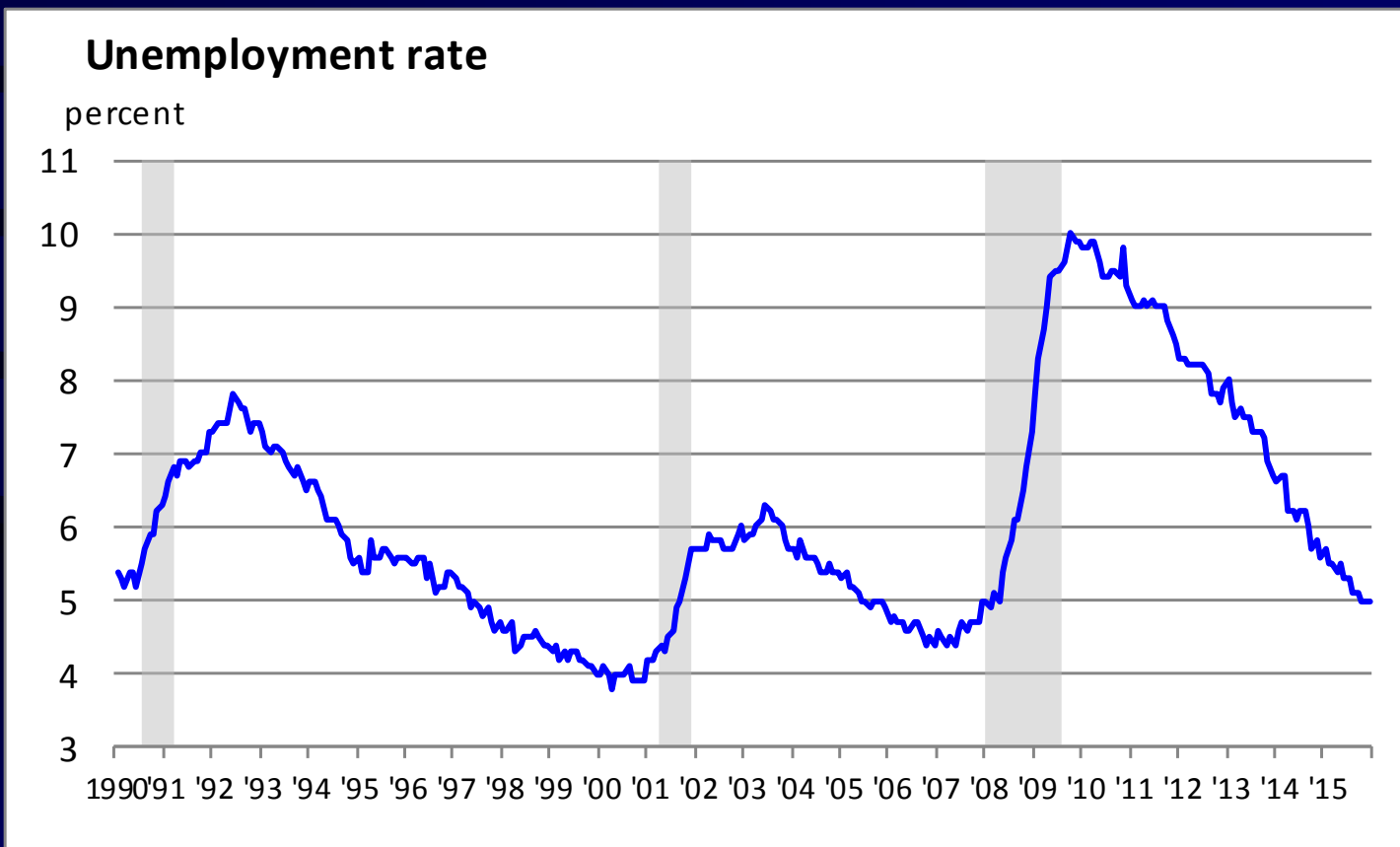
Employment grew by 2.65 million jobs in 2015



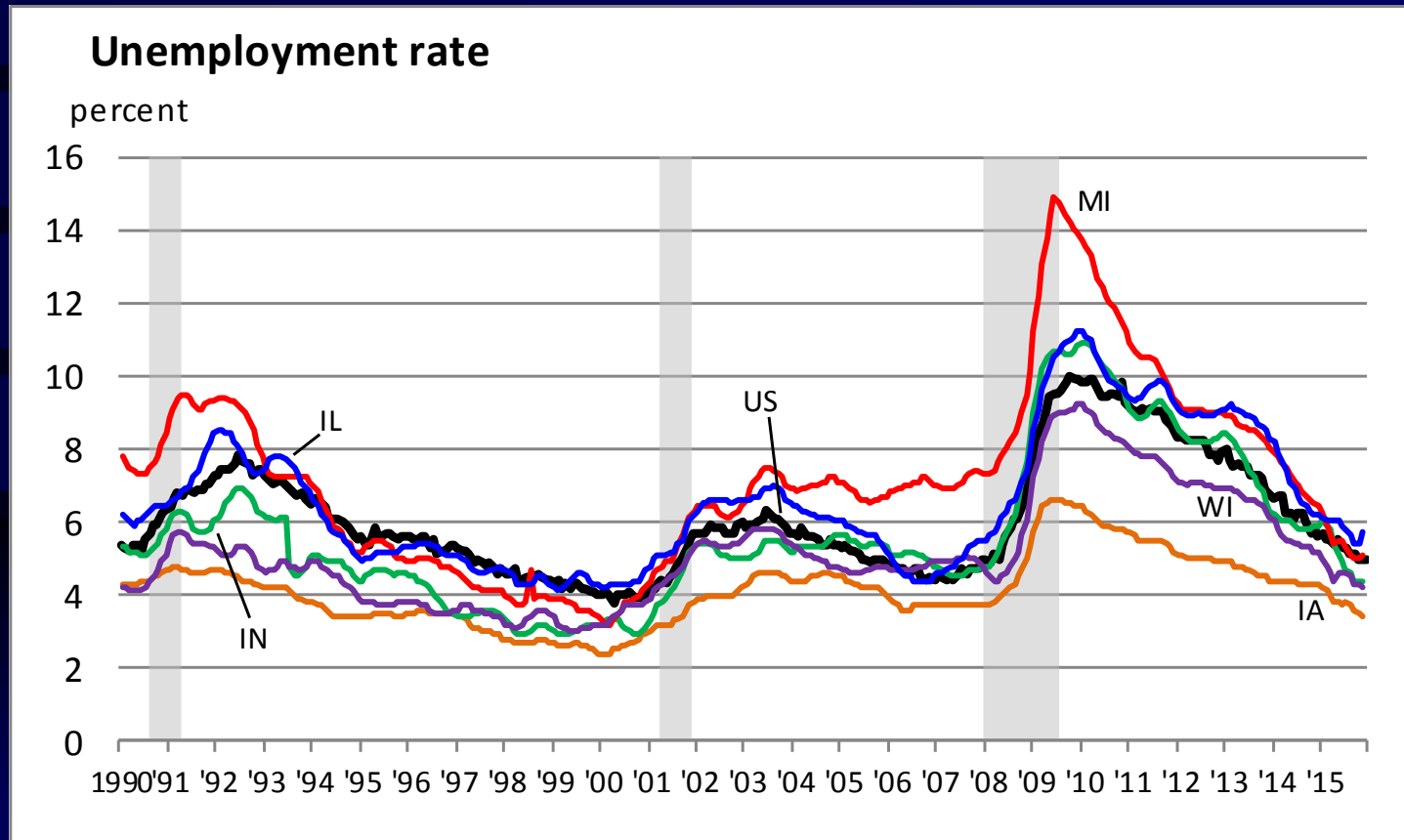
**With the exception of Illinois,
employment growth in the other District states
are close to the national average**



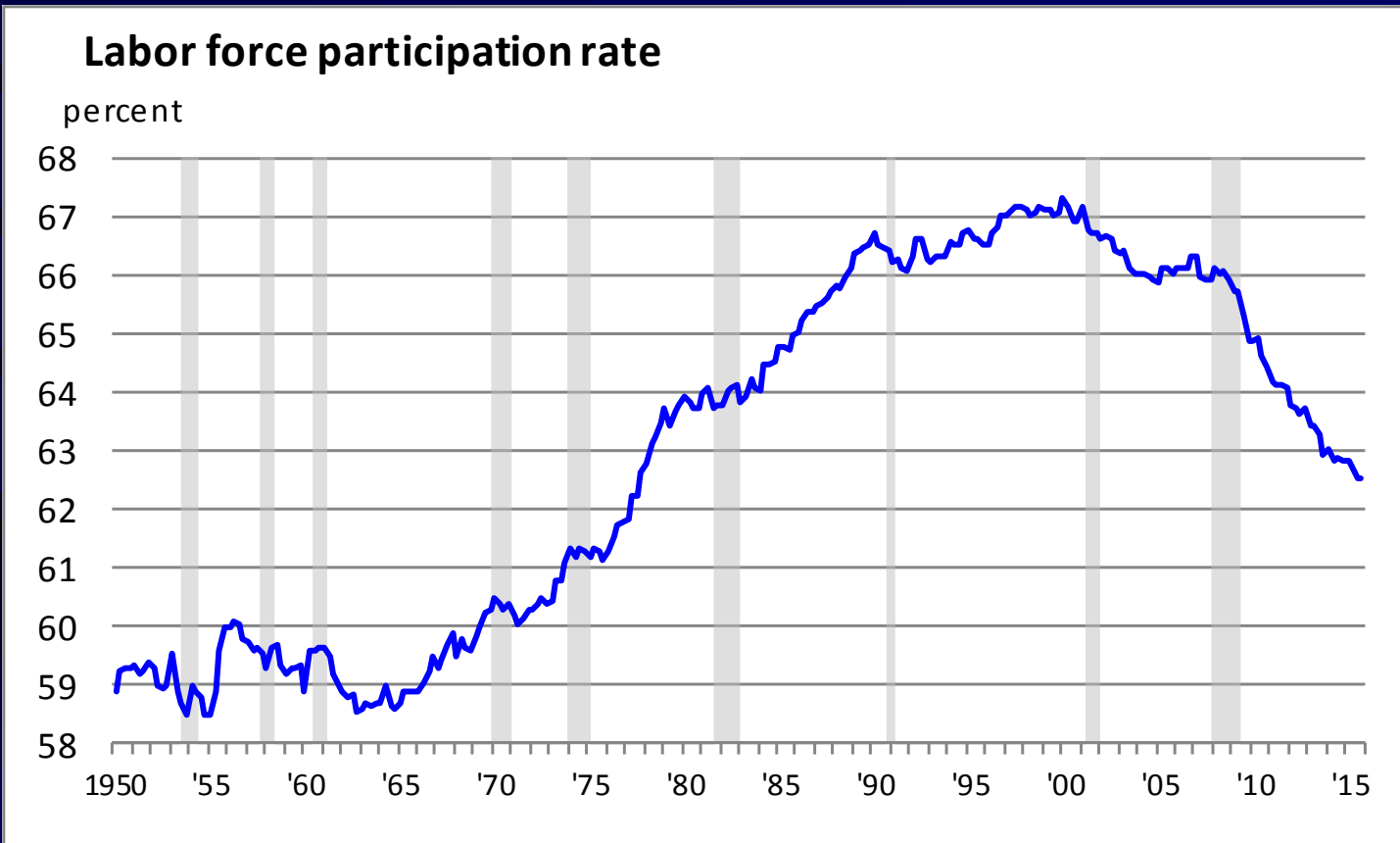
The unemployment rate has fallen to 5.0%



Unemployment rates for most of the Midwest states are close to or below the nation's



The labor force participation rate fell to a level last seen in 1977



Civilian Labor Force Participation Rate and Population Share 16 and Older by Age Category, United States, 2007 and 2015

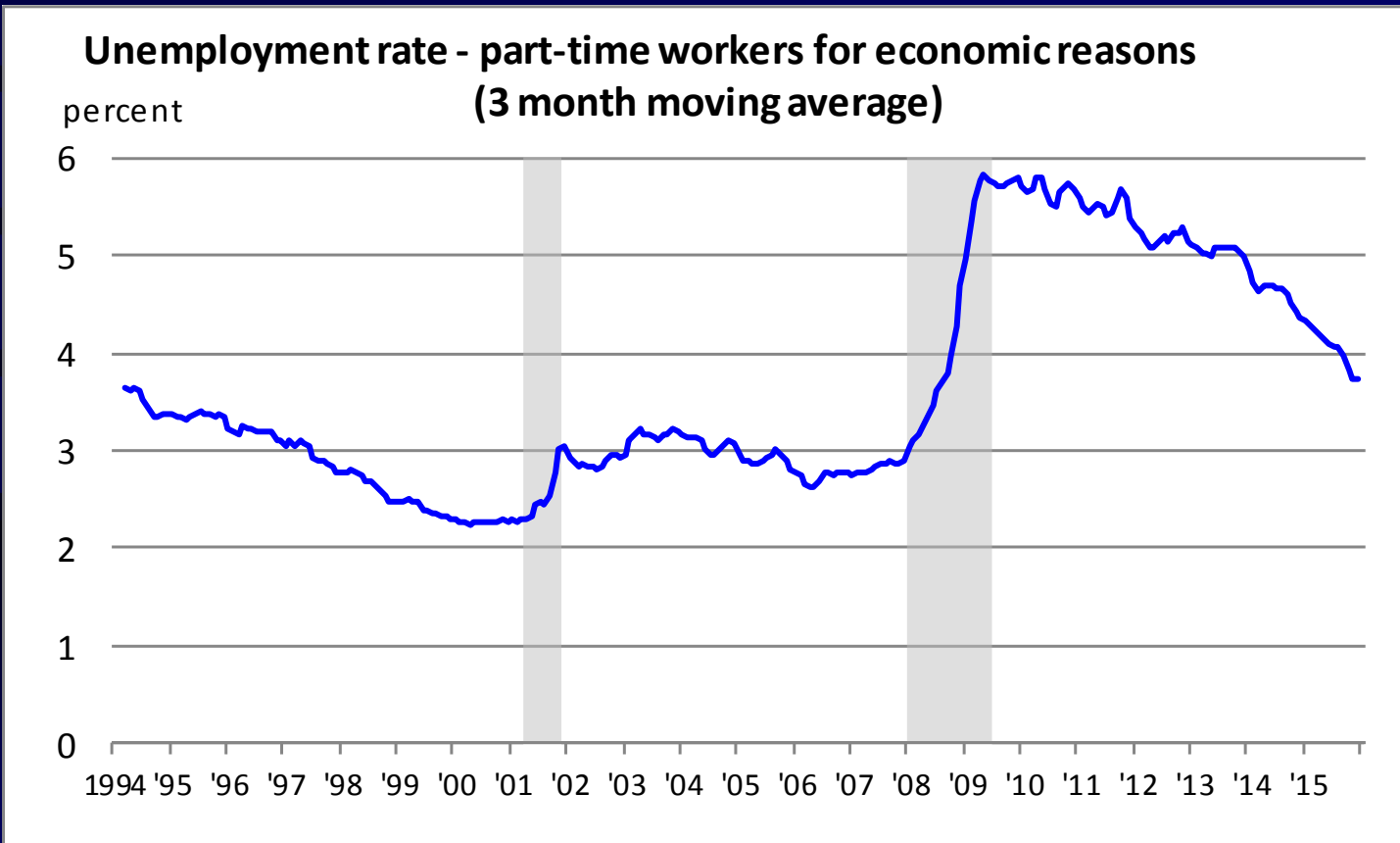
	Labor Force Participation Rate (%)			Population Share (%)		
	2015	2007	Change '07-'15	2015	2007	Change '07-'15
Population						
16 and older	62.7	66.1	-3.4	100.0	100.0	0.0
16 to 24	55.0	59.4	-4.4	15.4	16.1	-0.7
25 to 34	81.0	83.3	-2.3	17.1	17.1	-0.1
35 to 44	82.1	83.8	-1.7	15.8	18.3	-2.5
45 to 54	79.5	82.0	-2.5	17.0	18.8	-1.8
55 to 64	63.9	63.8	0.1	16.2	14.0	2.2
65 plus	18.9	16.0	2.9	18.5	15.6	2.9



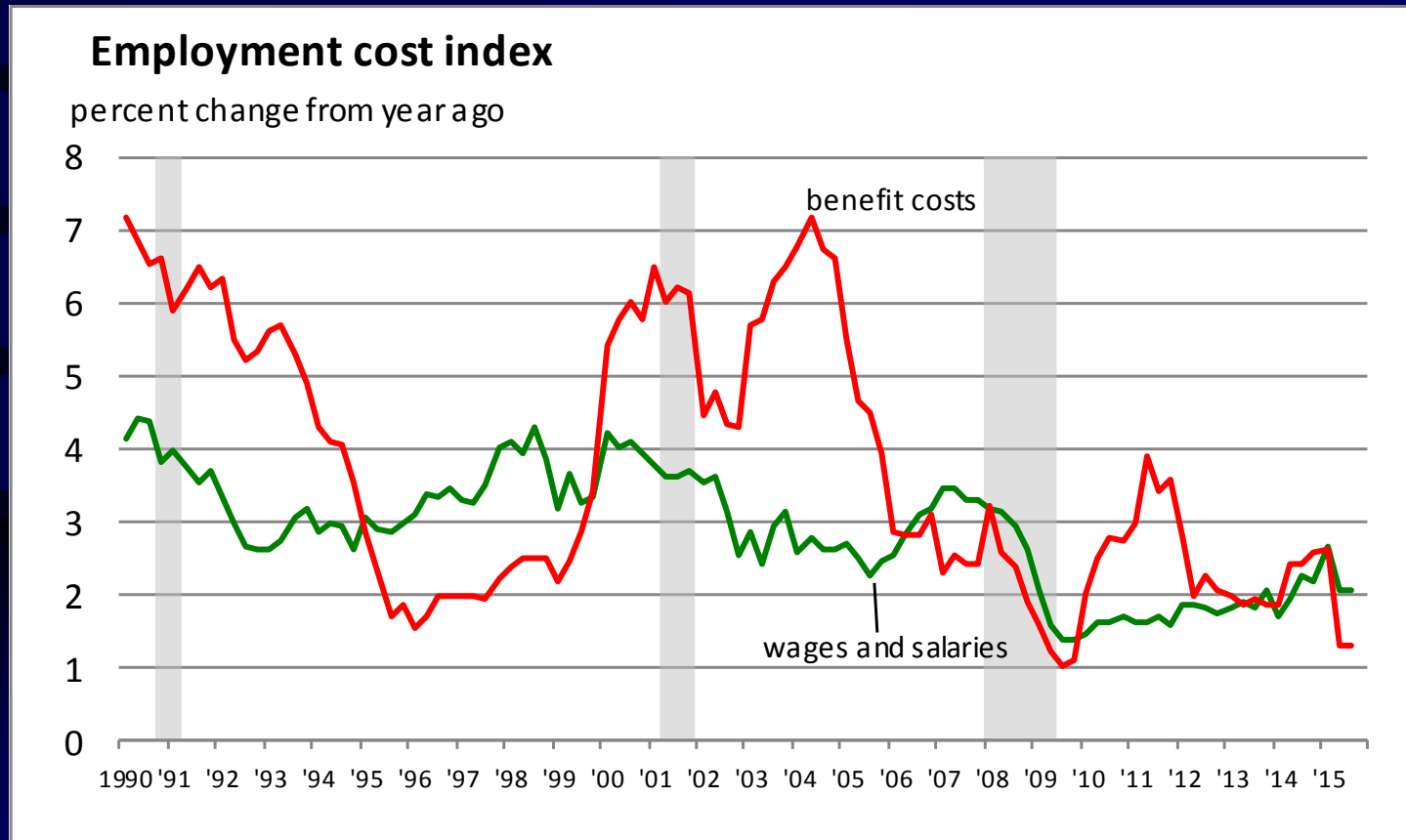
The share of those unemployed more than 6 months remains significantly high



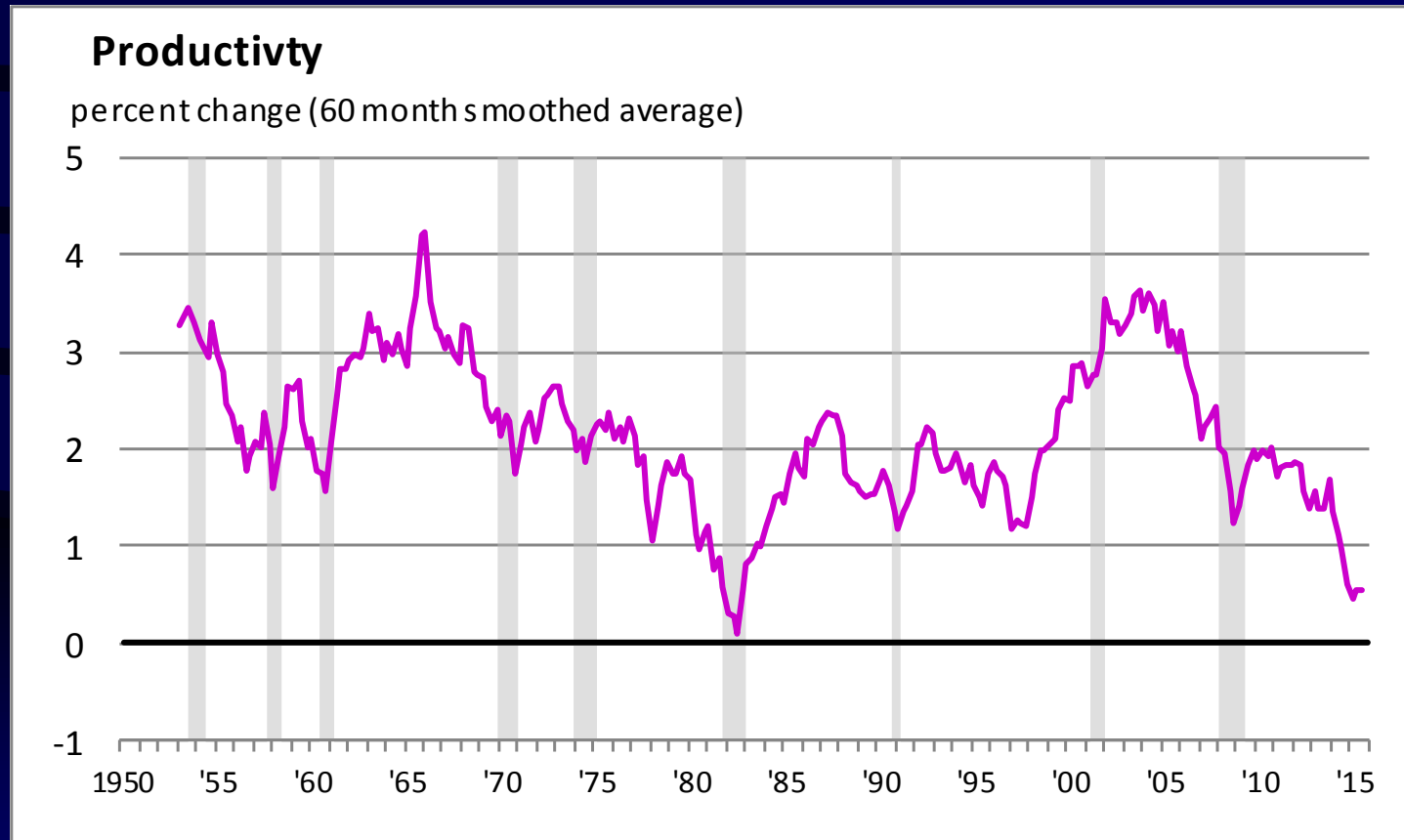
Employees working part time for economic reasons remains elevated



Wages and benefit costs continue to increase at a very slow pace

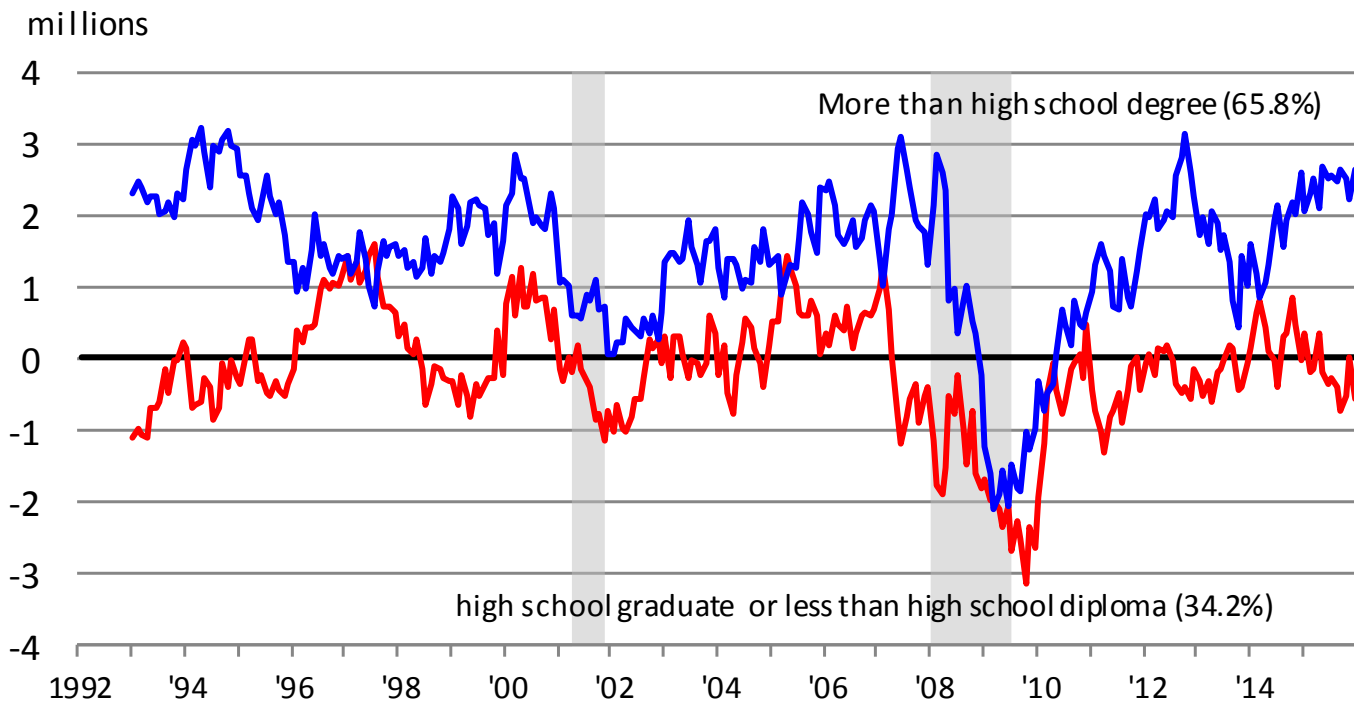


Slow productivity growth helps explain why relatively strong employment growth has not translated into higher income



Education matters

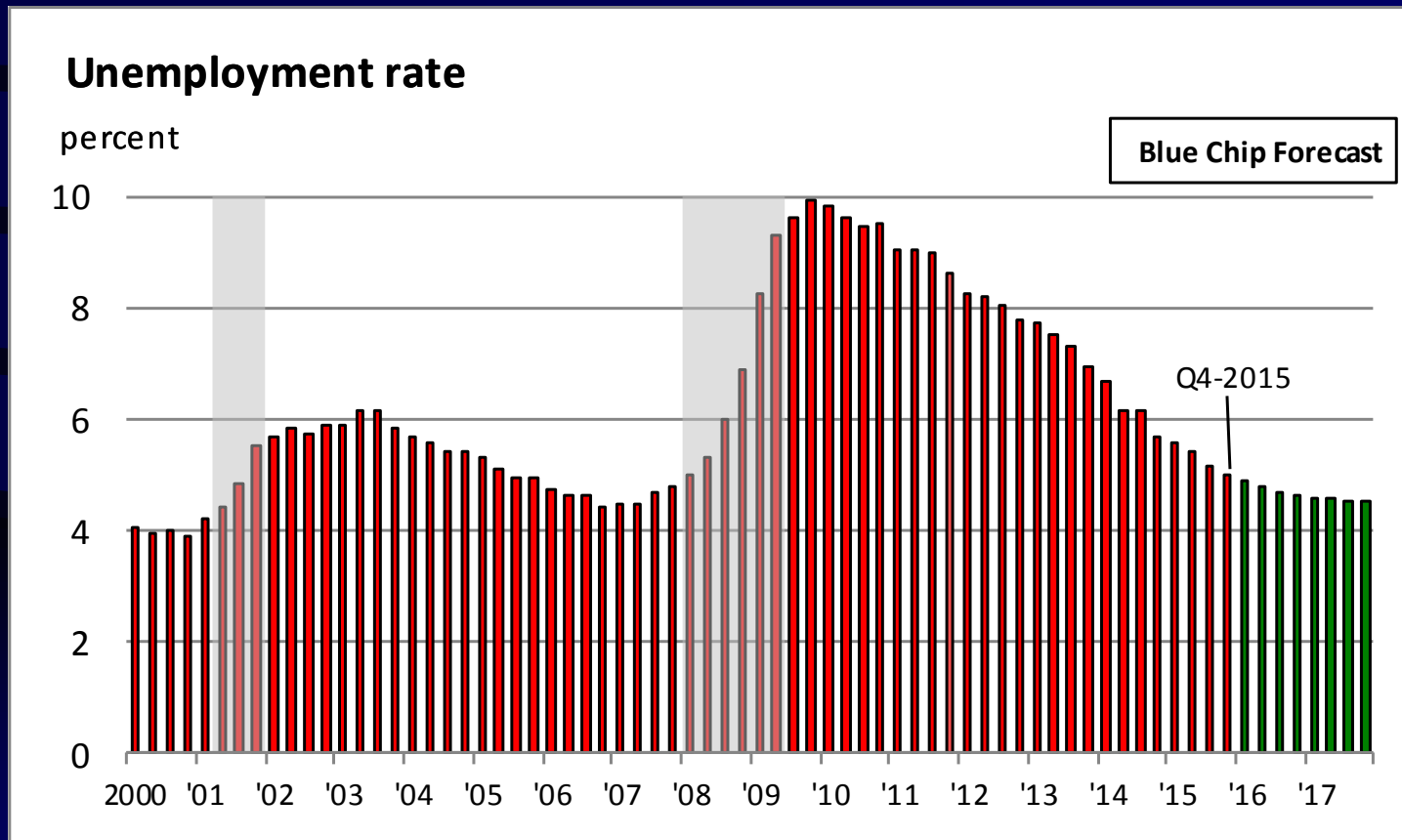
Employment change from a year earlier (25 years or older)



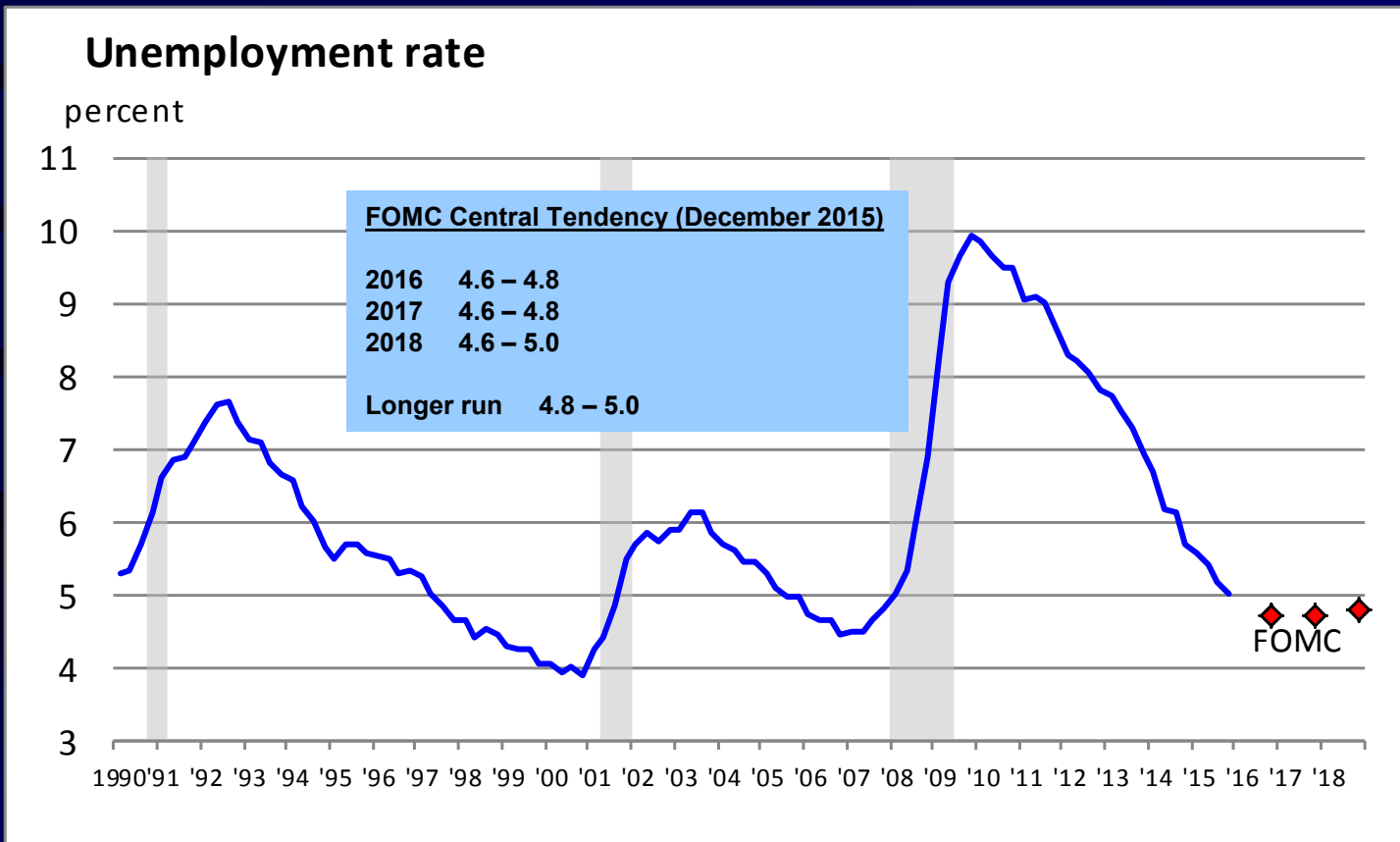
percentages in parenthesis are the share of total workers 25 years or older in 2014



The unemployment rate is close to the natural rate



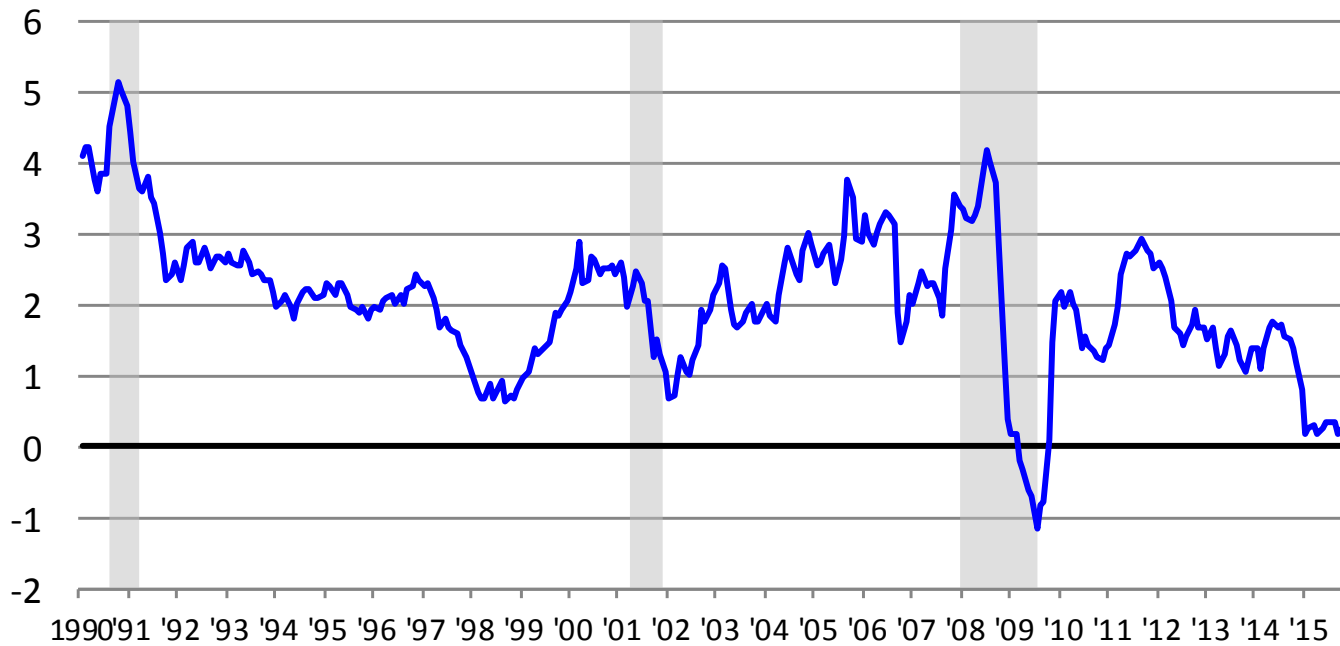
The FOMC indicates that the unemployment rate is close to the natural rate



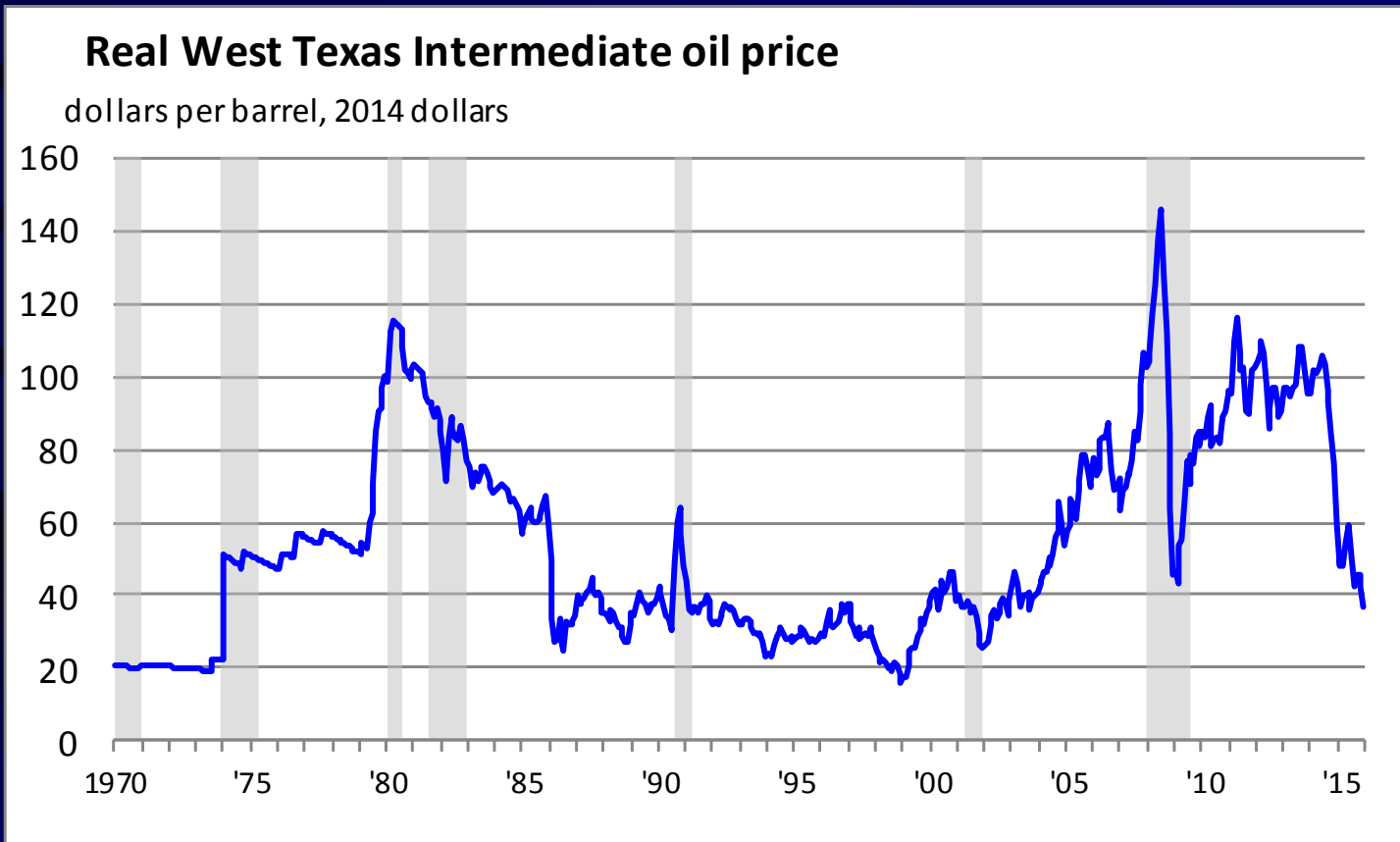
Inflation is very low

Personal consumption expenditure - chain price index

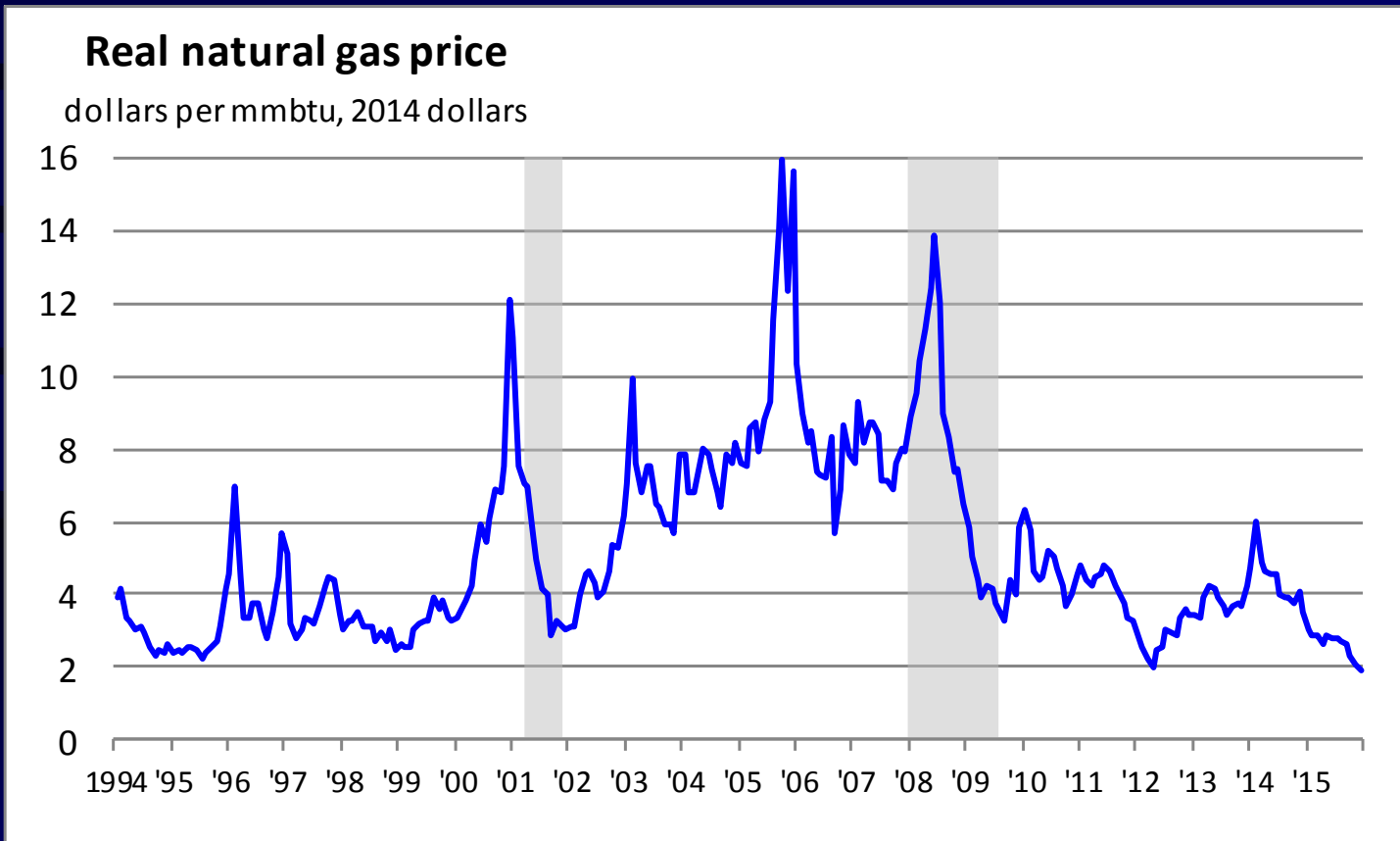
percent change from a year earlier



In large part due to the collapse of energy prices

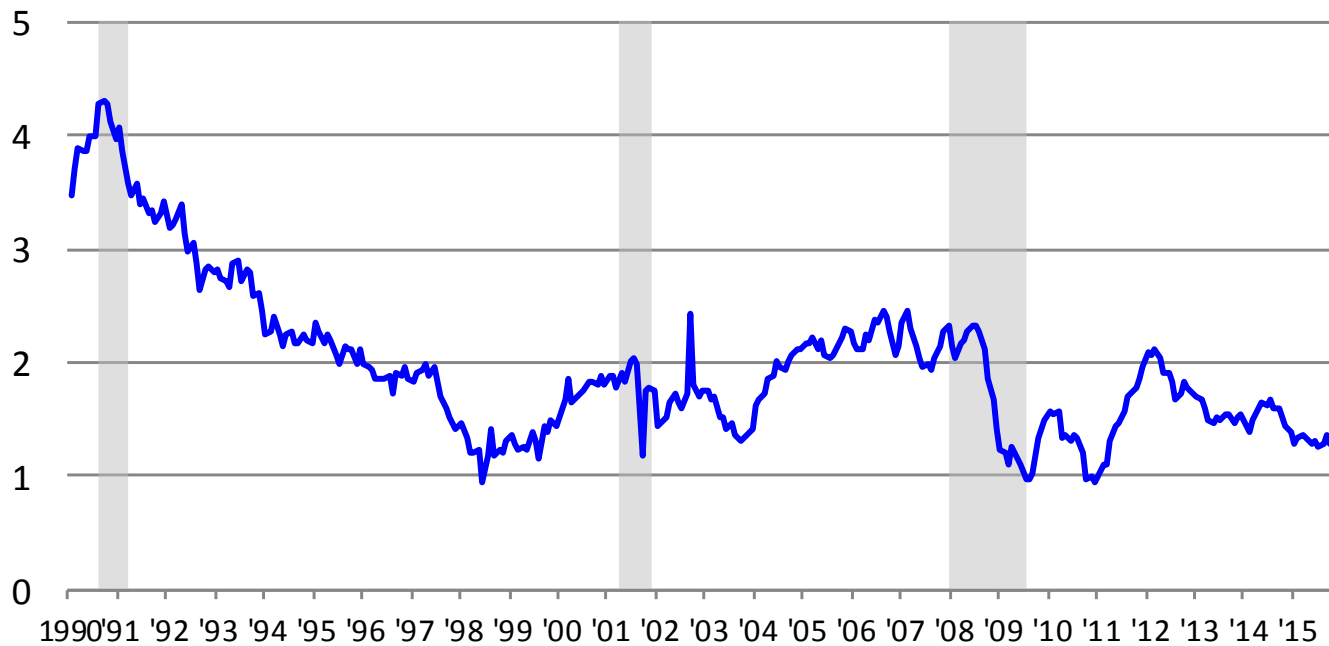


Natural gas prices have also declined and remains very low

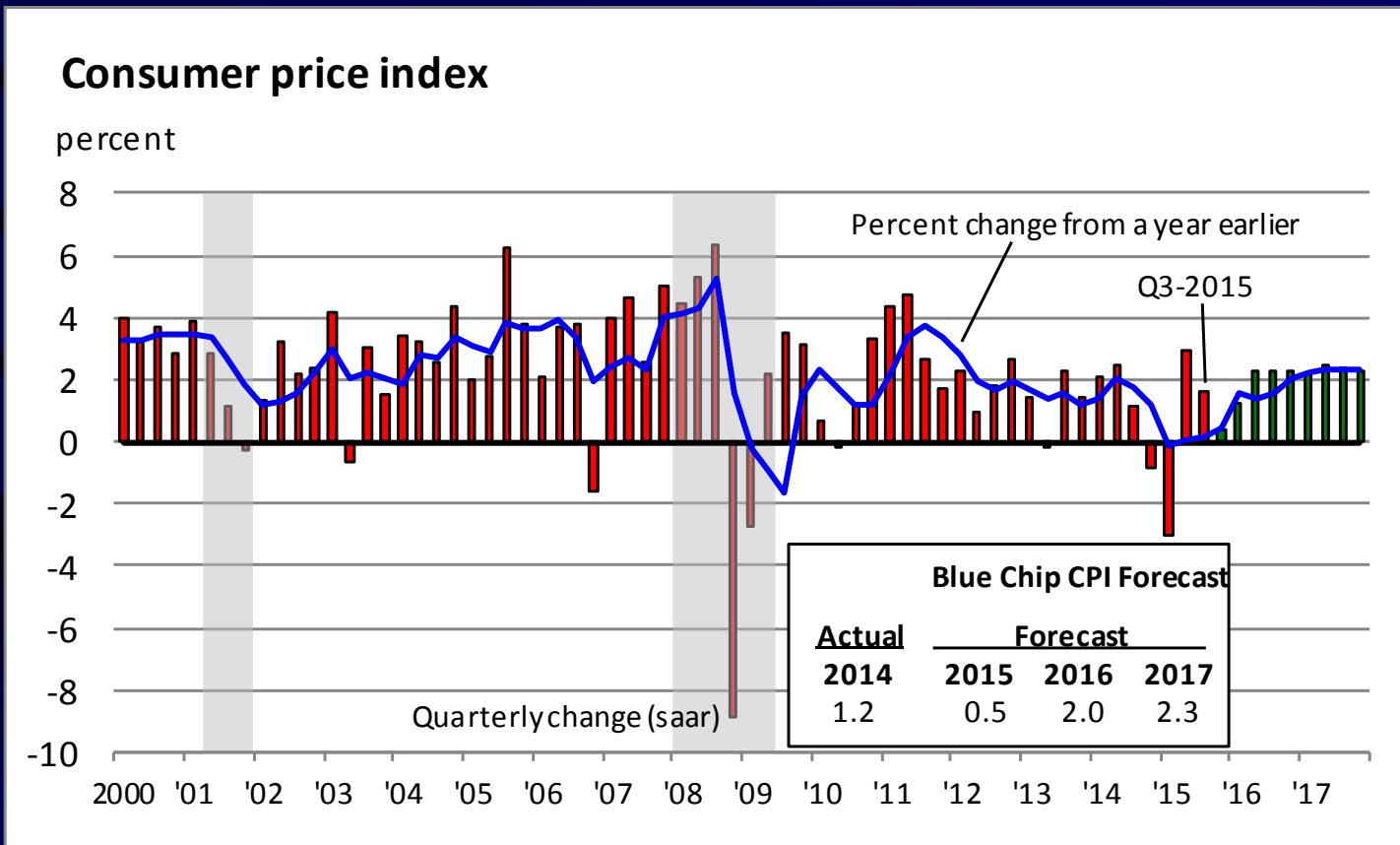


Removing the volatile food and energy components from the PCE, “core” inflation remains low

Personal consumption expenditure - less food and energy -
percent change from a year earlier chain price index



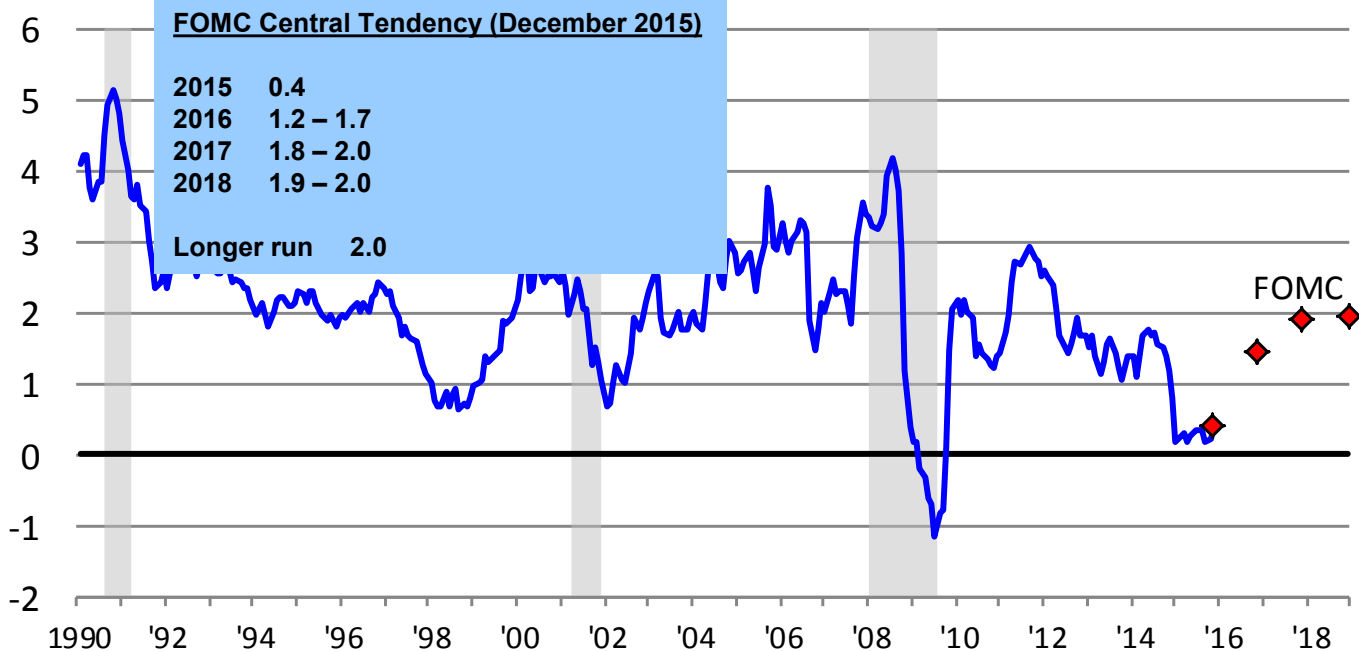
Prices are forecast to have increased 0.5 percent in 2015 and will rise 2.0 percent in 2016



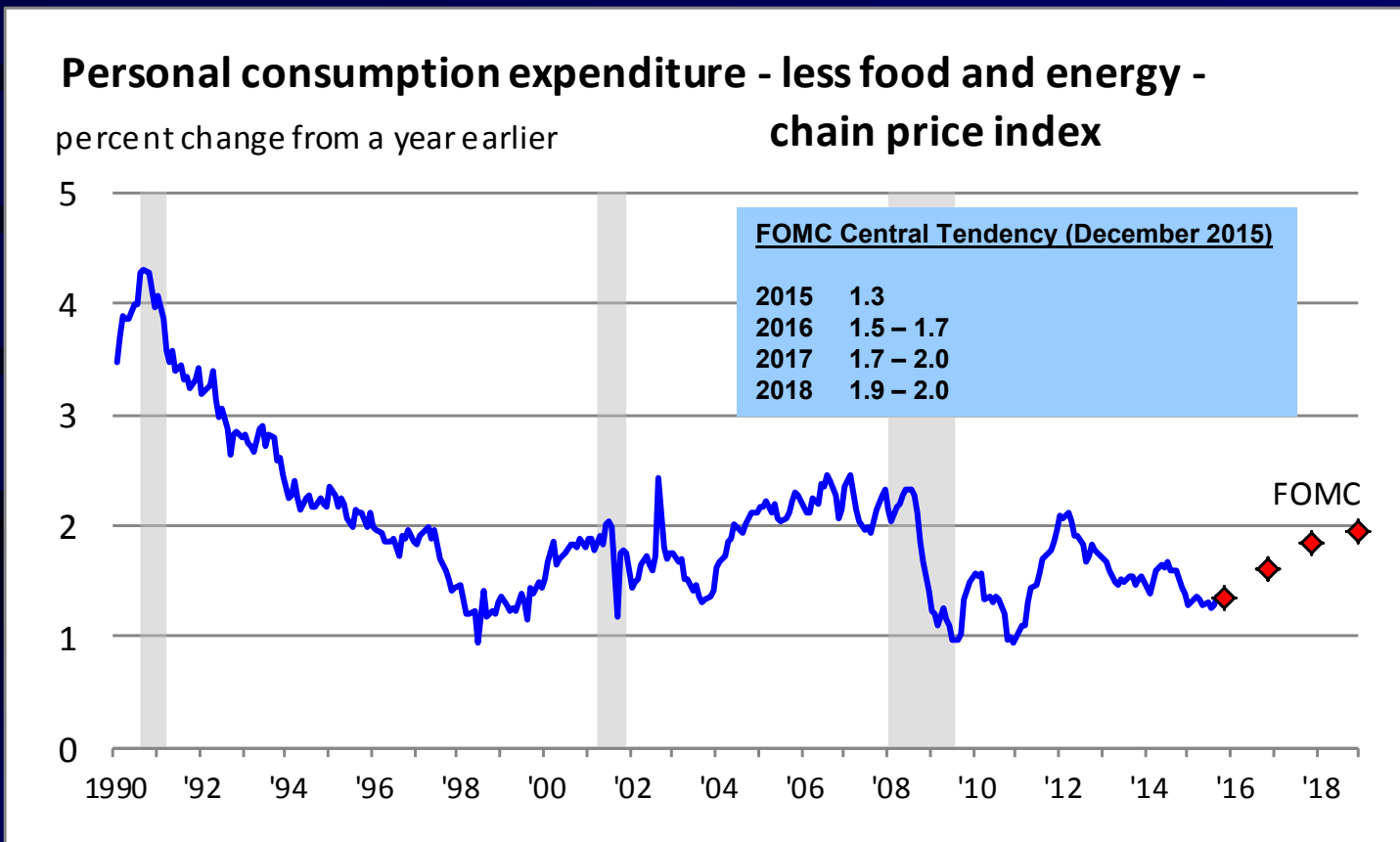
The FOMC anticipates that PCE inflation will be just under two percent by the end of 2018

Personal consumption expenditure - chain price index

percent change from a year earlier



The FOMC anticipates that “core” PCE inflation will remain below two percent through 2018



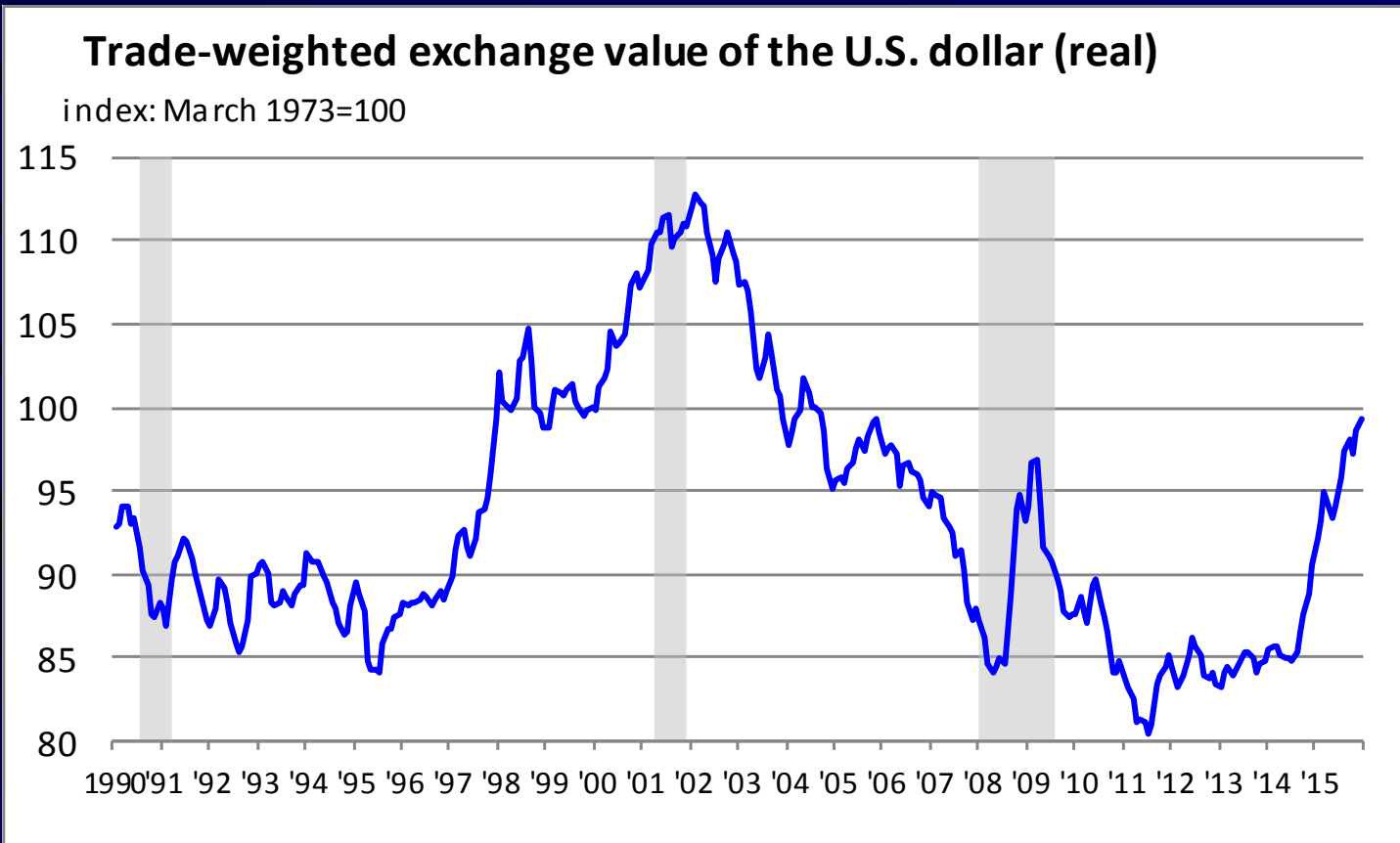
Blue Chip International Consensus Forecasts

	Real GDP % change Annual			Inflation % change Annual Consumer Prices			Exchange Rate Against US Dollar End of Year		Interest Rates 3-Month End of Year	
	2015	2016	2017	2015	2016	2017	2016	2017	2016	2017
	United States	2.5	2.5	2.5	0.2	1.6	2.3	-	-	0.70
Canada	1.3	1.9	2.2	1.0	2.0	2.0	1.34	1.29	0.89	1.63
Mexico	2.4	2.7	3.1	2.8	3.2	3.2	16.78	16.25	3.95	4.33
Japan	0.6	1.1	0.8	0.8	0.6	1.7	123.5	124.5	0.10	0.13
South Korea	2.6	2.8	3.0	0.7	1.5	2.0	1,216	1,198	1.64	2.03
United Kingdom	2.4	2.2	2.2	0.1	1.1	1.8	1.49	1.52	1.02	1.51
Germany	1.5	1.8	1.8	0.3	1.1	1.6	1.09	1.04	-0.02	0.01
France	1.1	1.4	1.5	0.1	0.8	1.4	1.09	1.04	-0.02	0.01
Euro Zone	1.5	1.7	1.8	0.1	0.9	1.5	1.09	1.04	-0.02	0.01
Brazil	-3.3	-2.4	1.1	8.9	7.6	5.7	4.18	4.13	13.79	12.11
Russia	-3.8	-0.4	1.7	15.0	8.1	6.1	67.1	65.3	8.60	7.46
China	6.9	6.4	6.2	1.5	1.8	2.2	6.63	6.60	2.84	3.00
India	7.4	7.6	7.7	5.1	5.5	5.3	67.6	67.0	7.07	7.09

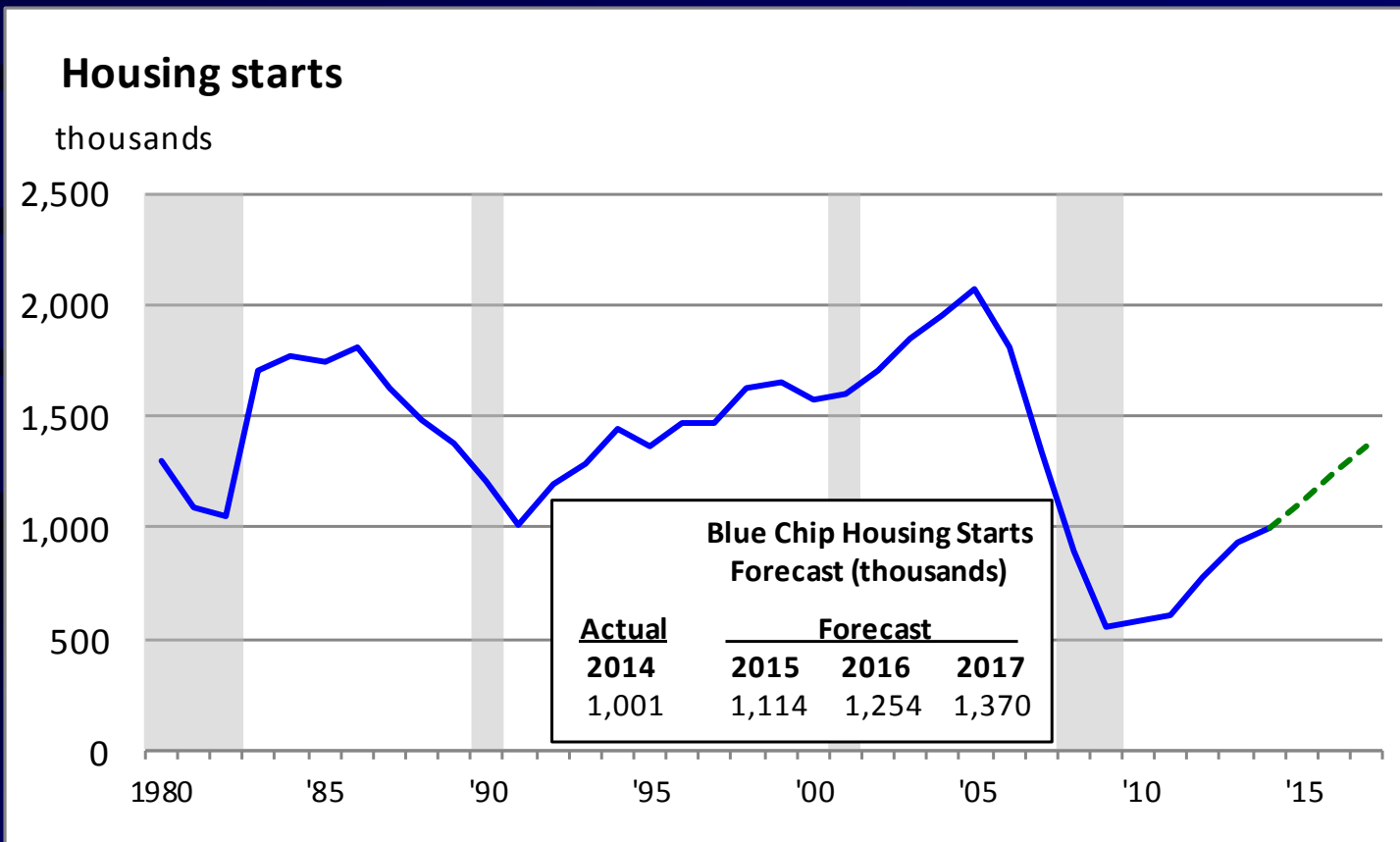
Blue Chip Economic Indicators Forecast January 10, 2016



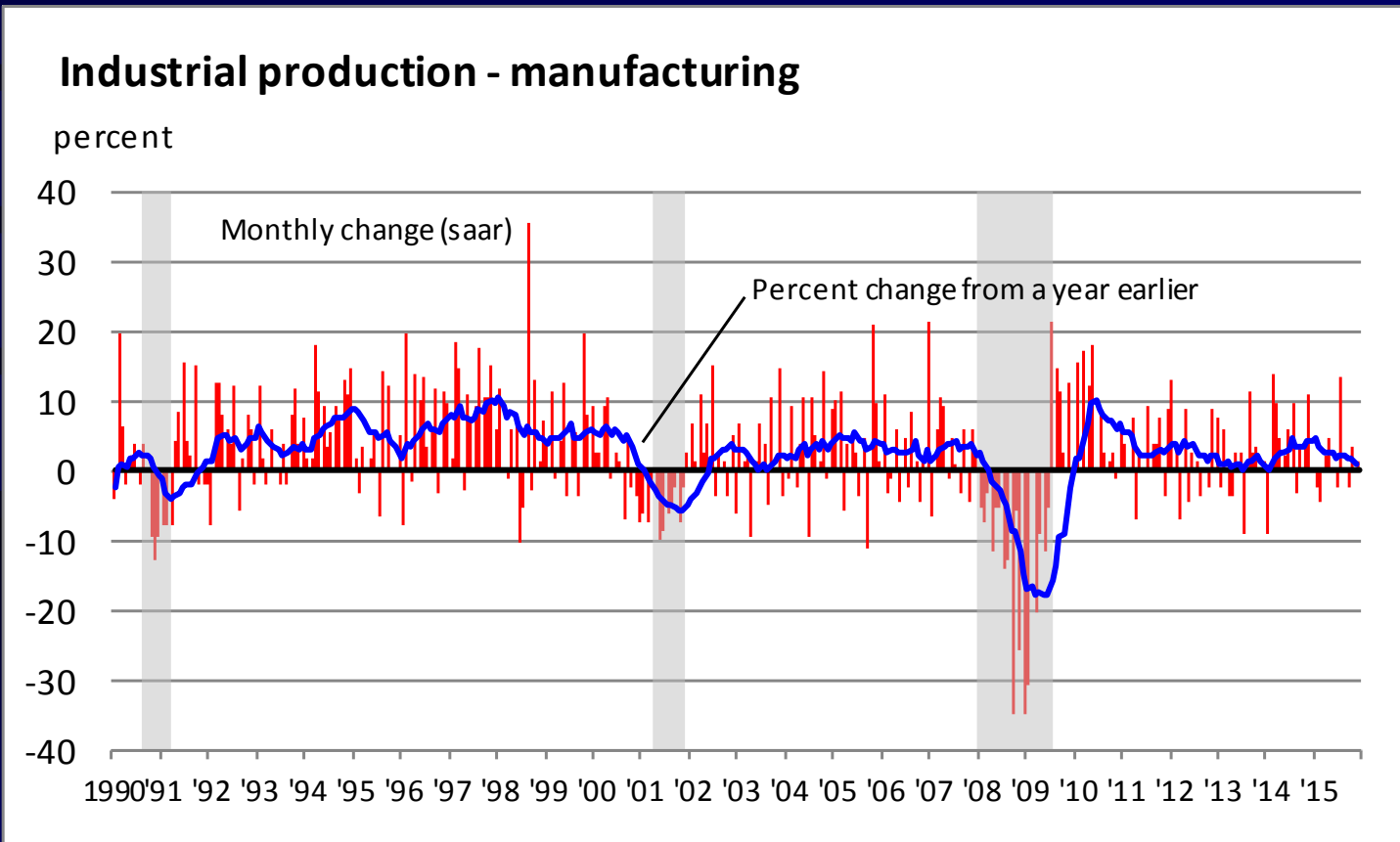
The real trade-weighted dollar has increased 17.2% over the past 16 months



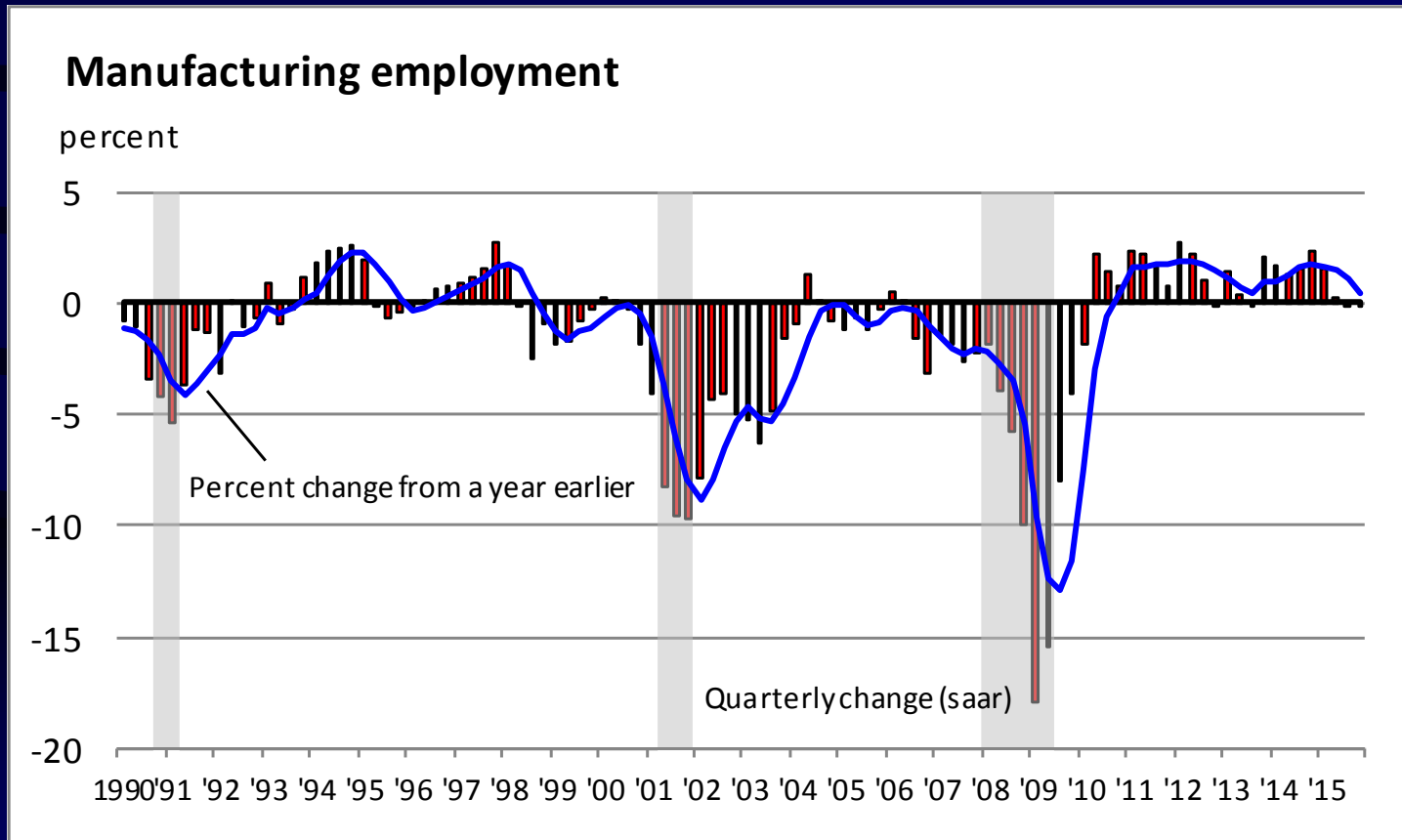
The forecast calls for a very gradual recovery in housing



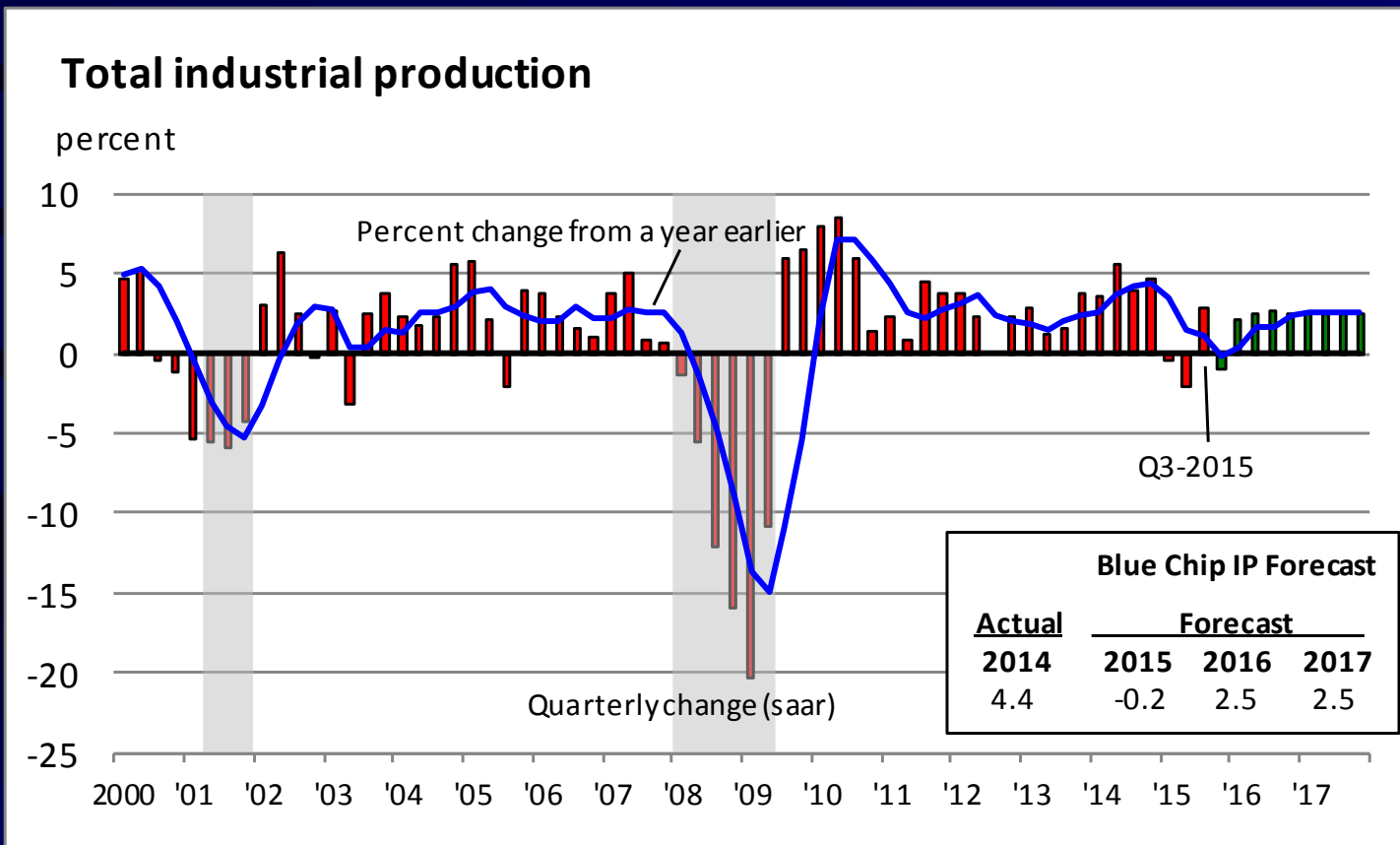
Since the beginning of the expansion manufacturing output has been increasing at a 3.5% annualized rate and has recovered 93.8% of the output during the recession



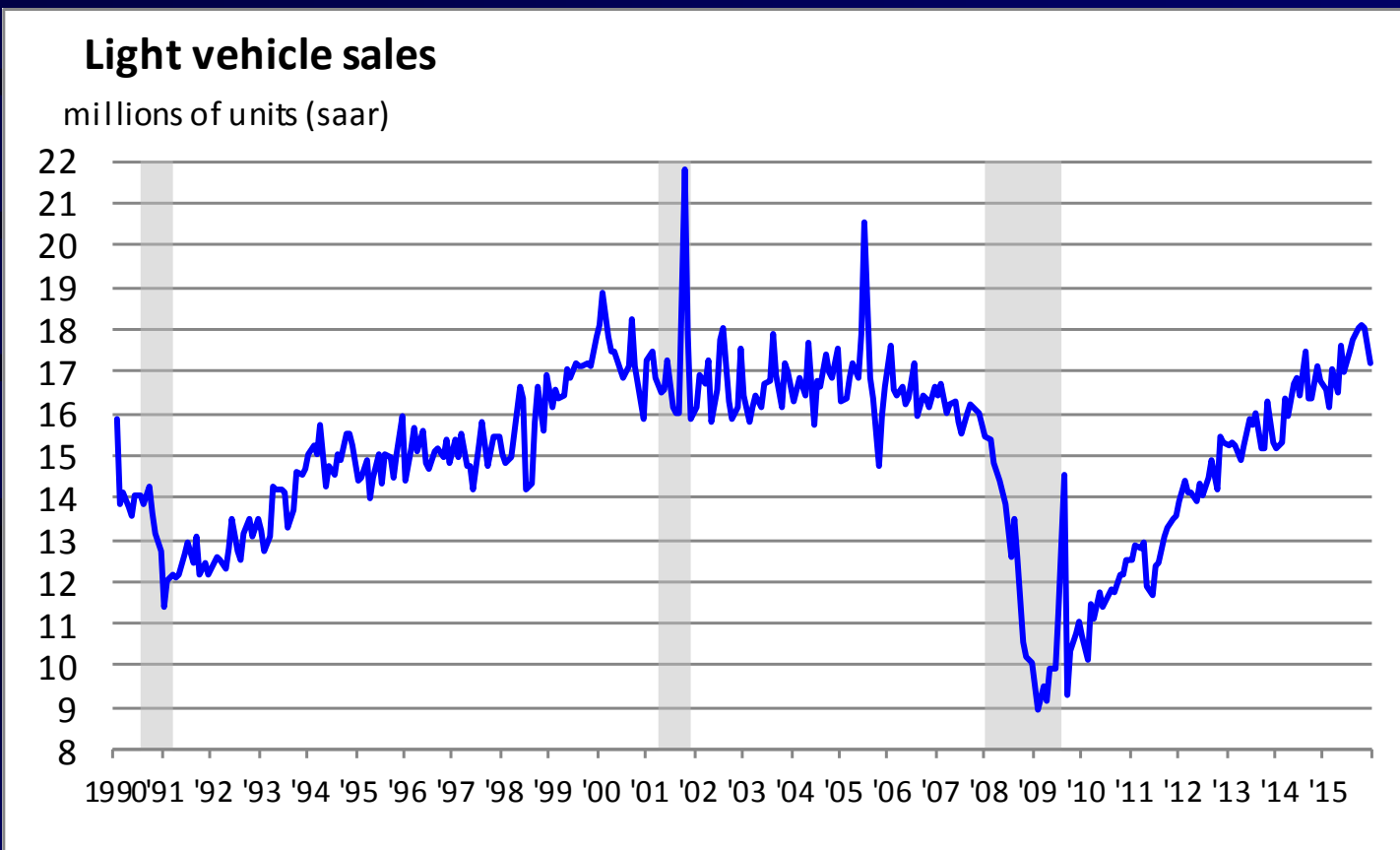
While manufacturing jobs have been rising, they have only recovered 38.3% of the jobs lost during the downturn



Industrial production is forecast to have edged lower last year but improve this year and grow just below its historical rate



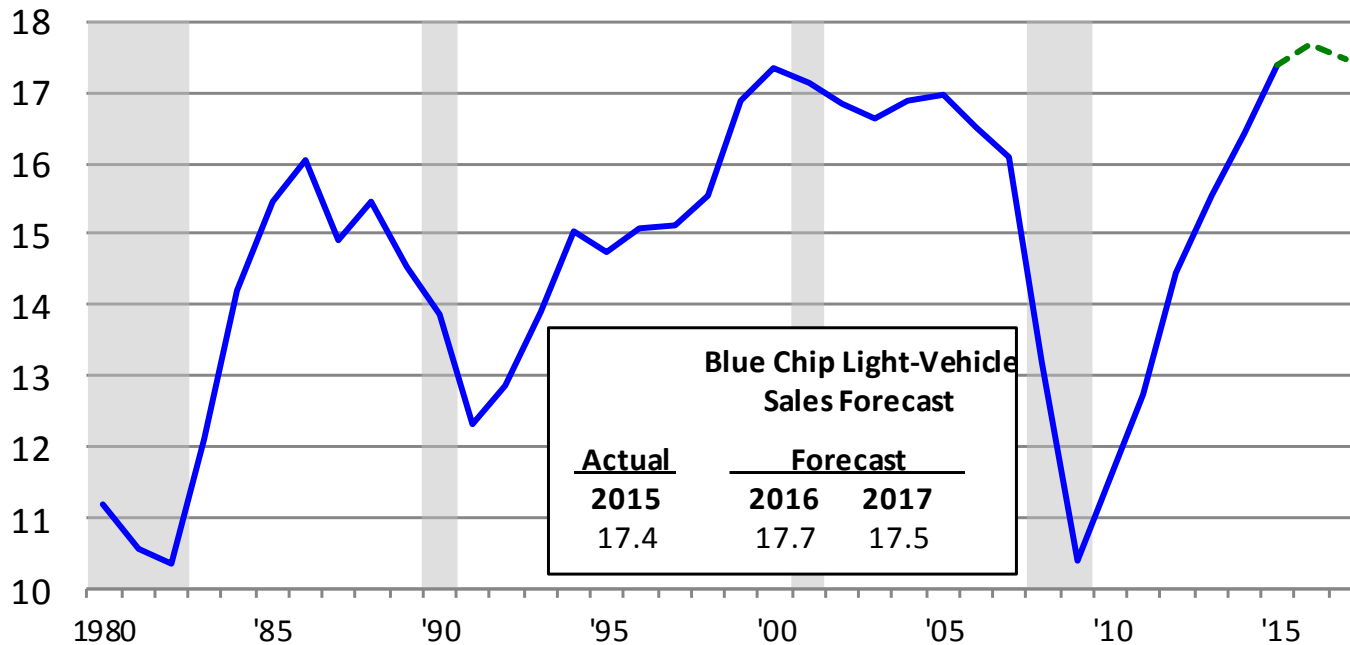
Light vehicles sales set a record last year



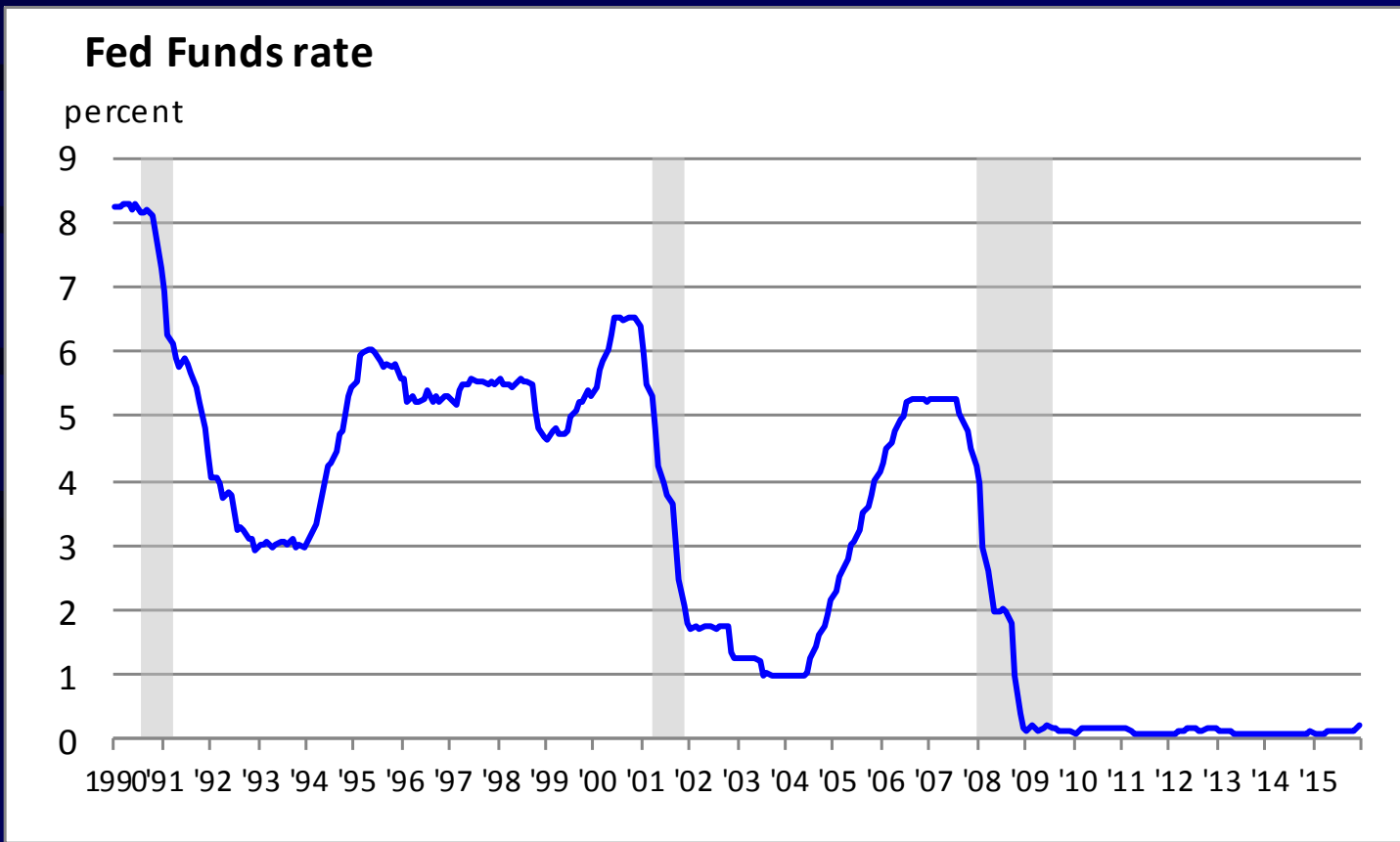
Vehicle sales rose 5.8% last year and are anticipated to rise 1.6% this year

Vehicle sales

millions of units

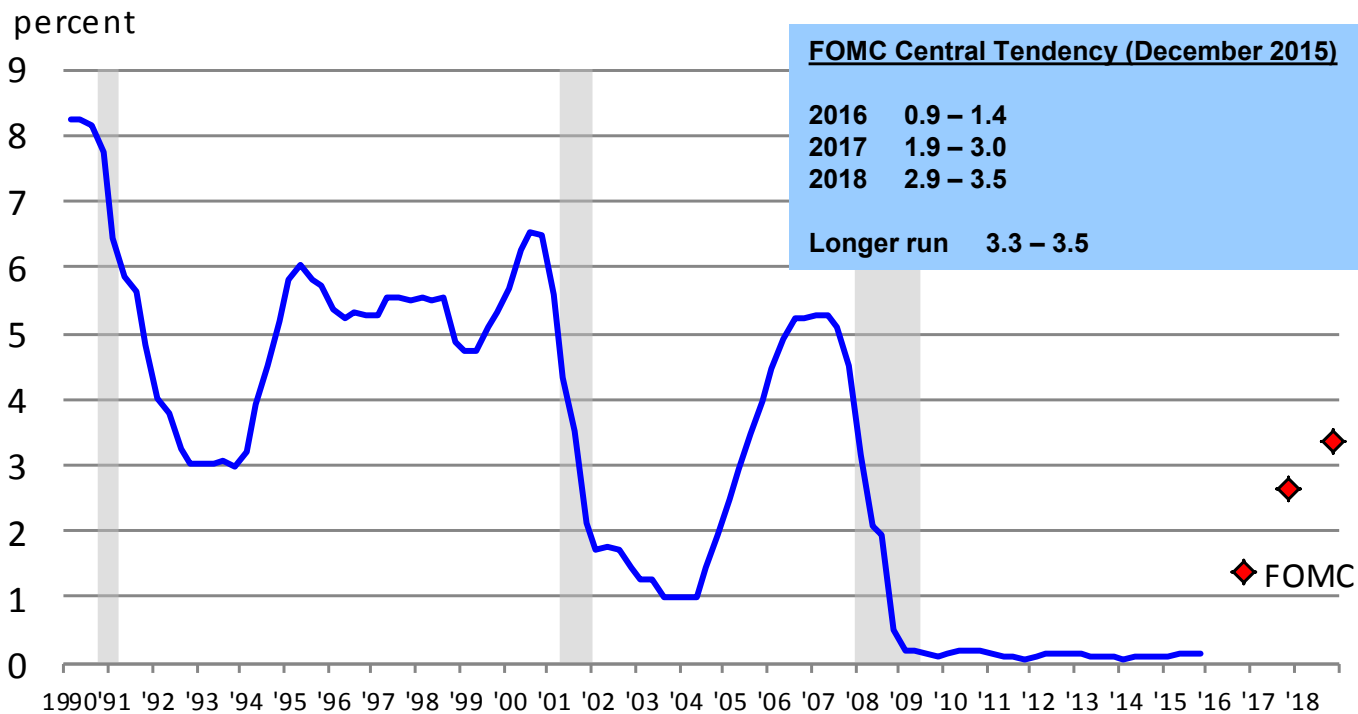


The Federal Reserve increased the Federal Funds rate by 0.25% in December 2015 after seven years of near zero interest rates

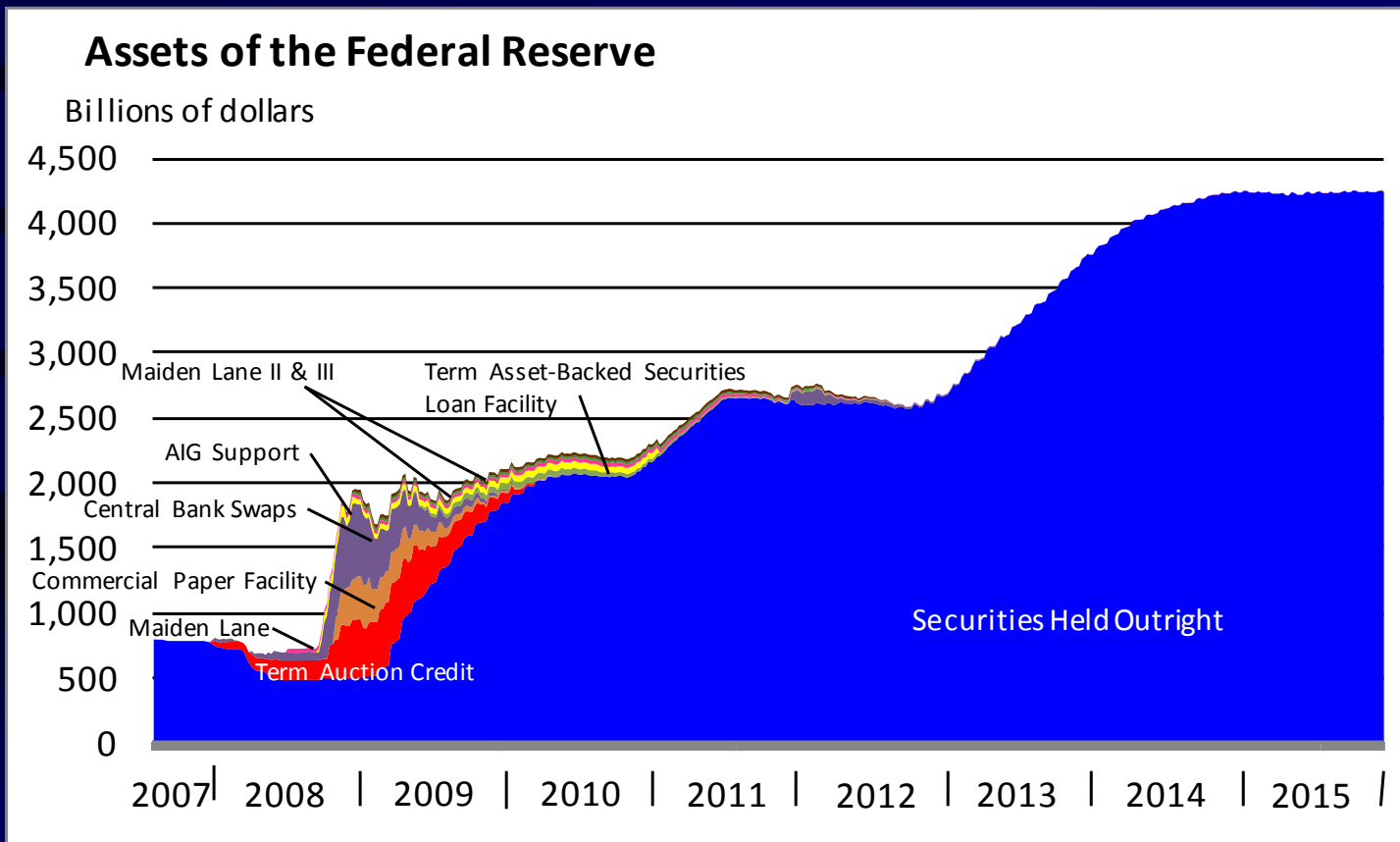


The Federal Funds rate is expected to remain below the neutral rate through 2018

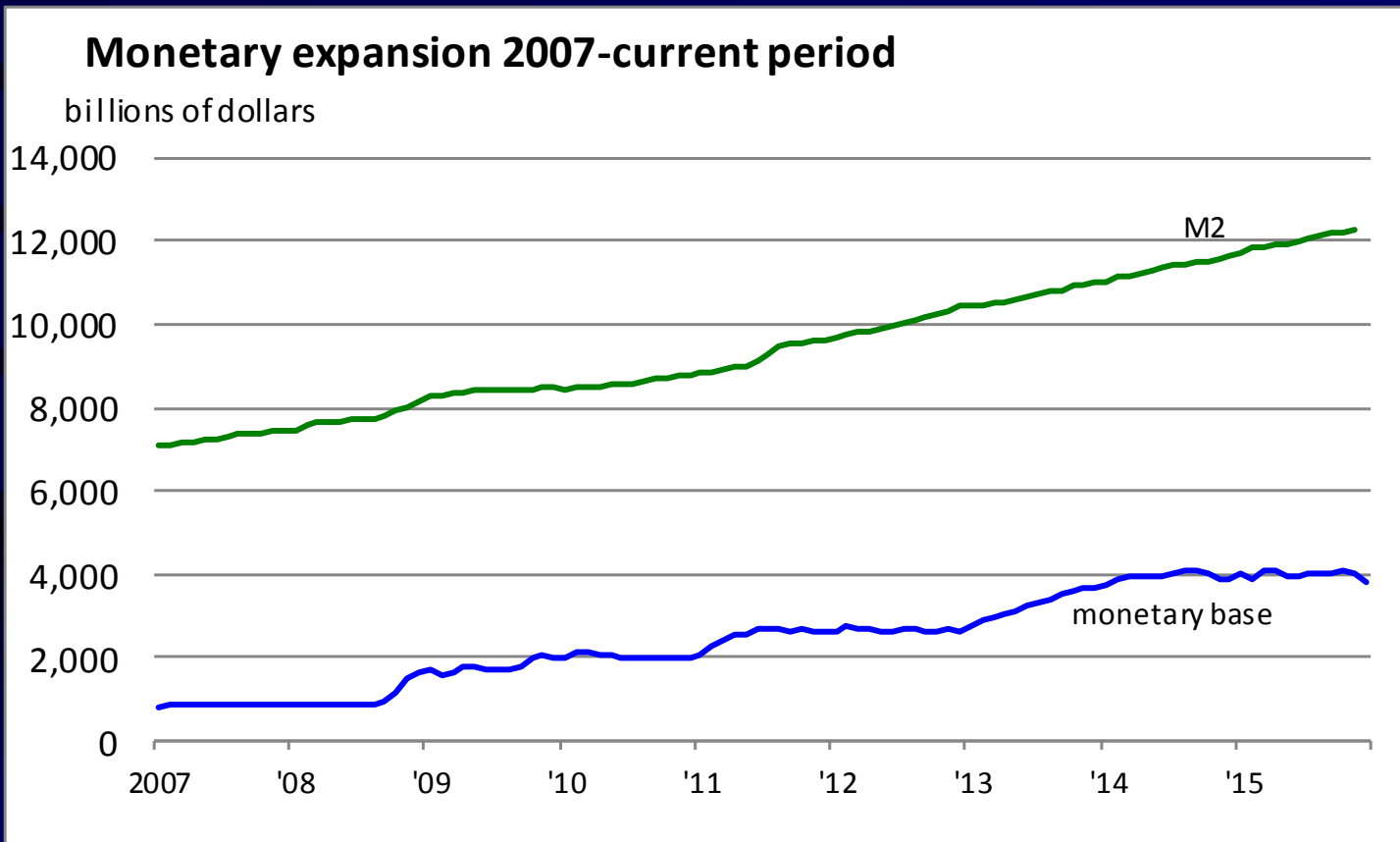
Target Federal Funds Rate



The asset side of the Fed's balance sheet has expanded in size and in composition



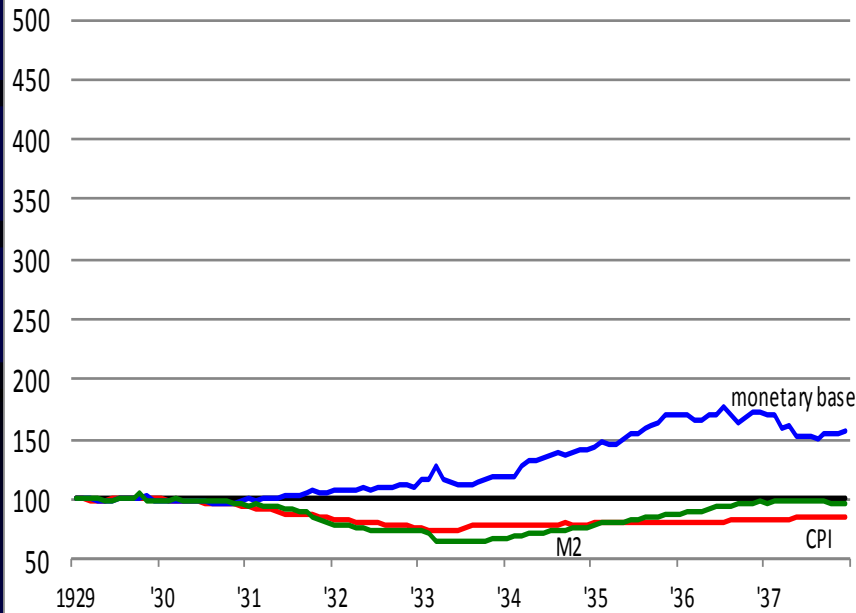
The money supply (M2) is 3 times bigger than the monetary base



The Fed's expansion of the monetary base has allowed the money supply to continue rising, compared with what took place during the 1930s

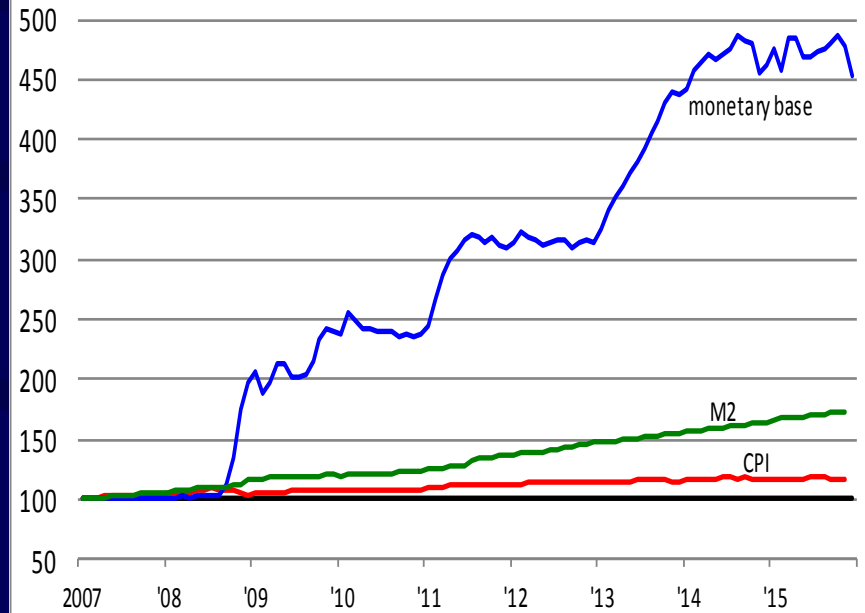
Monetary expansion 1929-1936

index: Jan 1929 = 100



Monetary expansion 2007-current period

index: Jan 2007 = 100



Summary

- The outlook is for the U.S. economy to expand at a pace slightly above trend in 2016
- Employment is expected to rise moderately with the unemployment rate edging lower
- Slackness in the economy will lead to a relatively contained inflation rate
- Vehicle sales are anticipated to rise to a record level this year
- Manufacturing output is expected to increase at a rate slightly below trend in 2016



www.chicagofed.org

www.federalreserve.gov

