

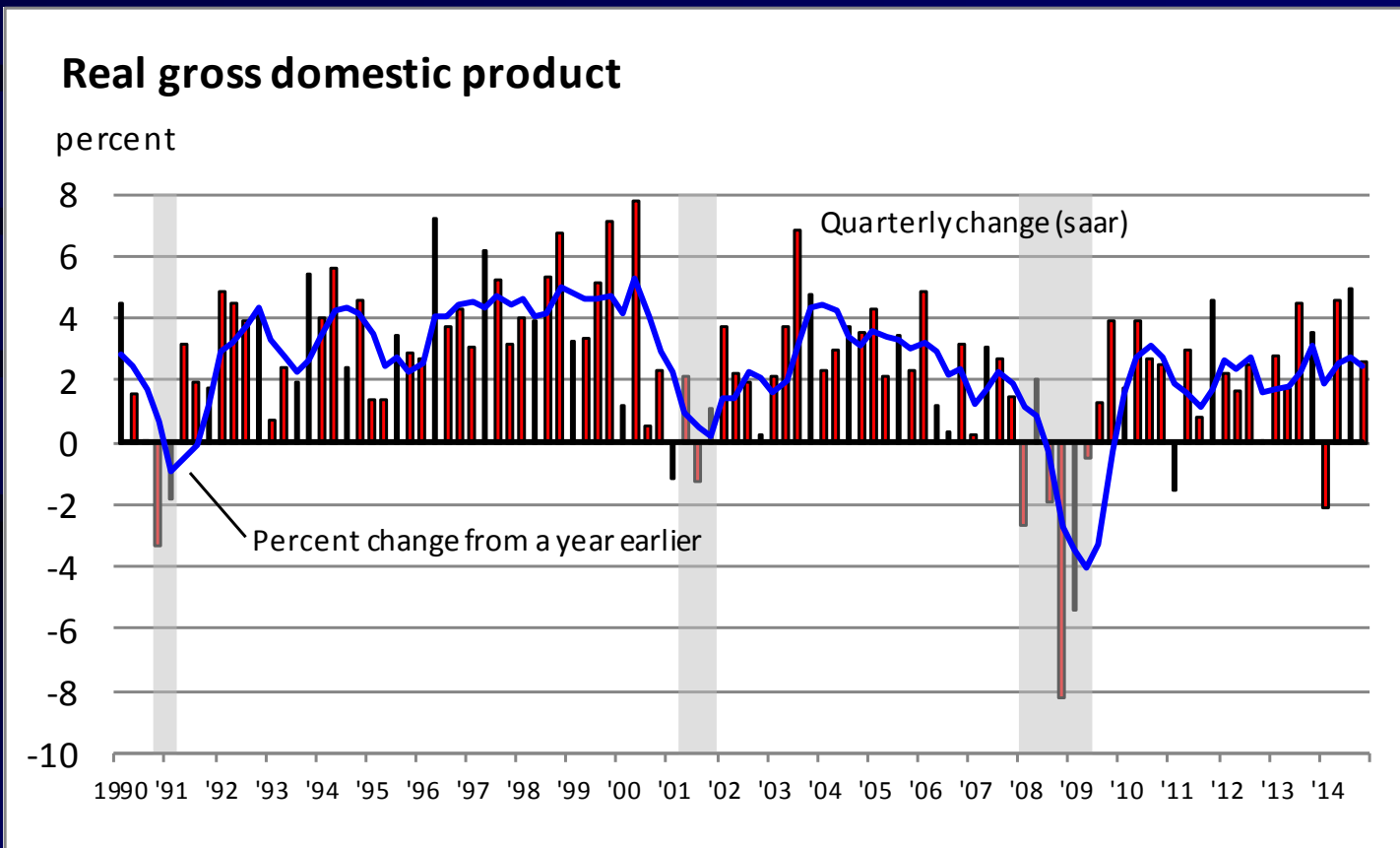
# Economic Outlook

**Detroit Association for Business Economics**  
Detroit, MI  
February 19, 2015

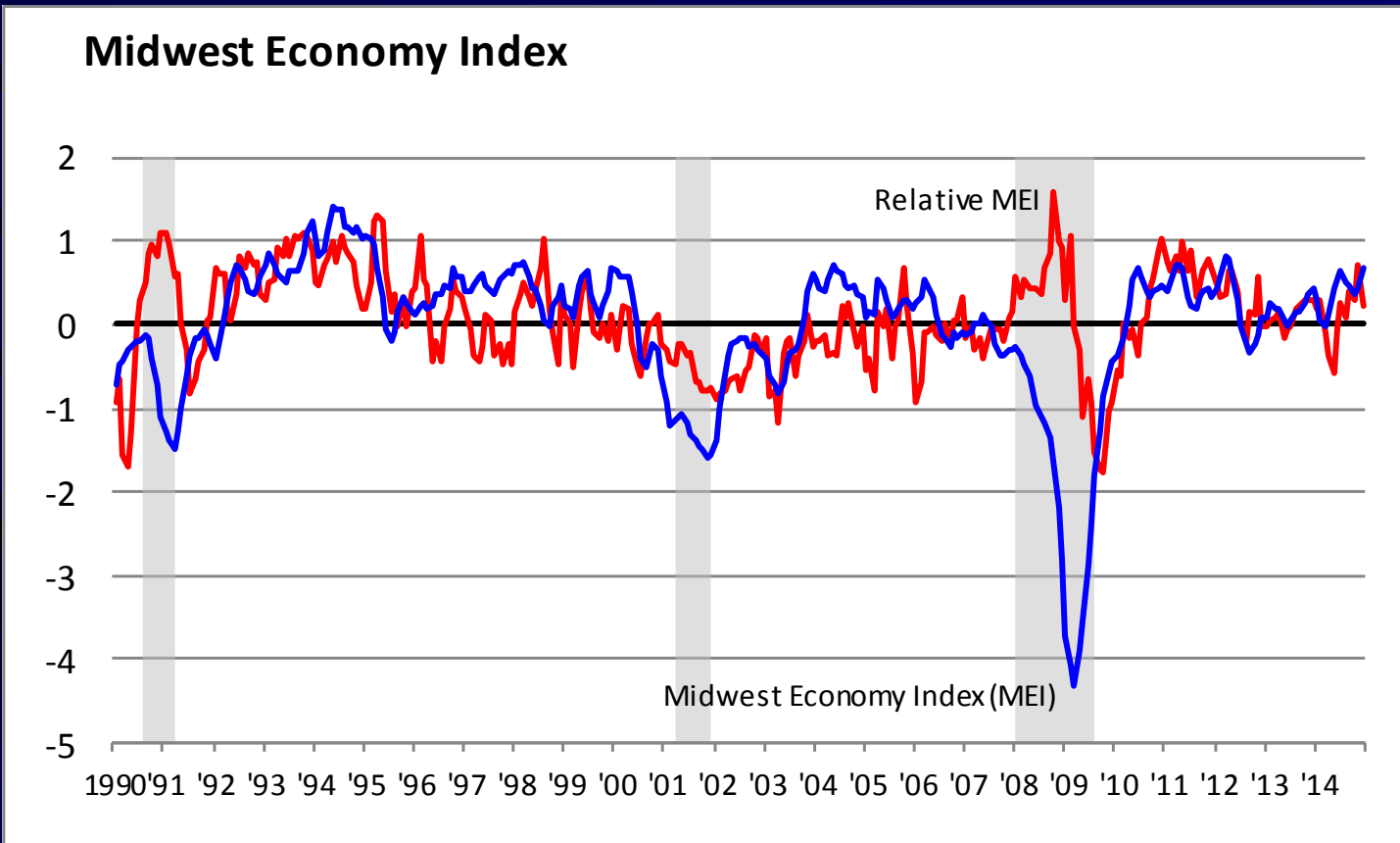
**William Strauss**  
Senior Economist  
and Economic Advisor  
Federal Reserve Bank of Chicago



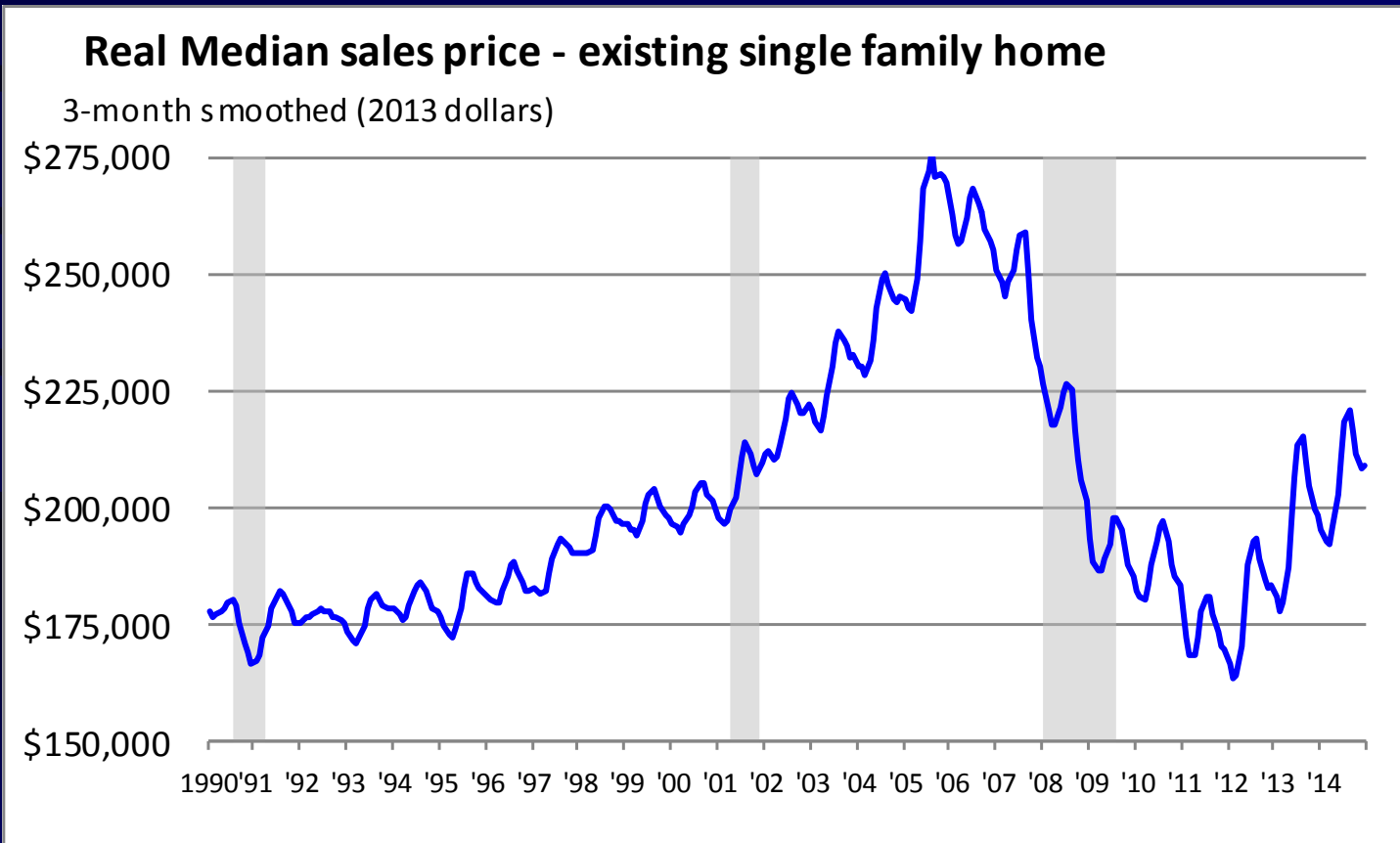
# The “Great Recession” ended in June 2009 and GDP expanded by 2.5% last year



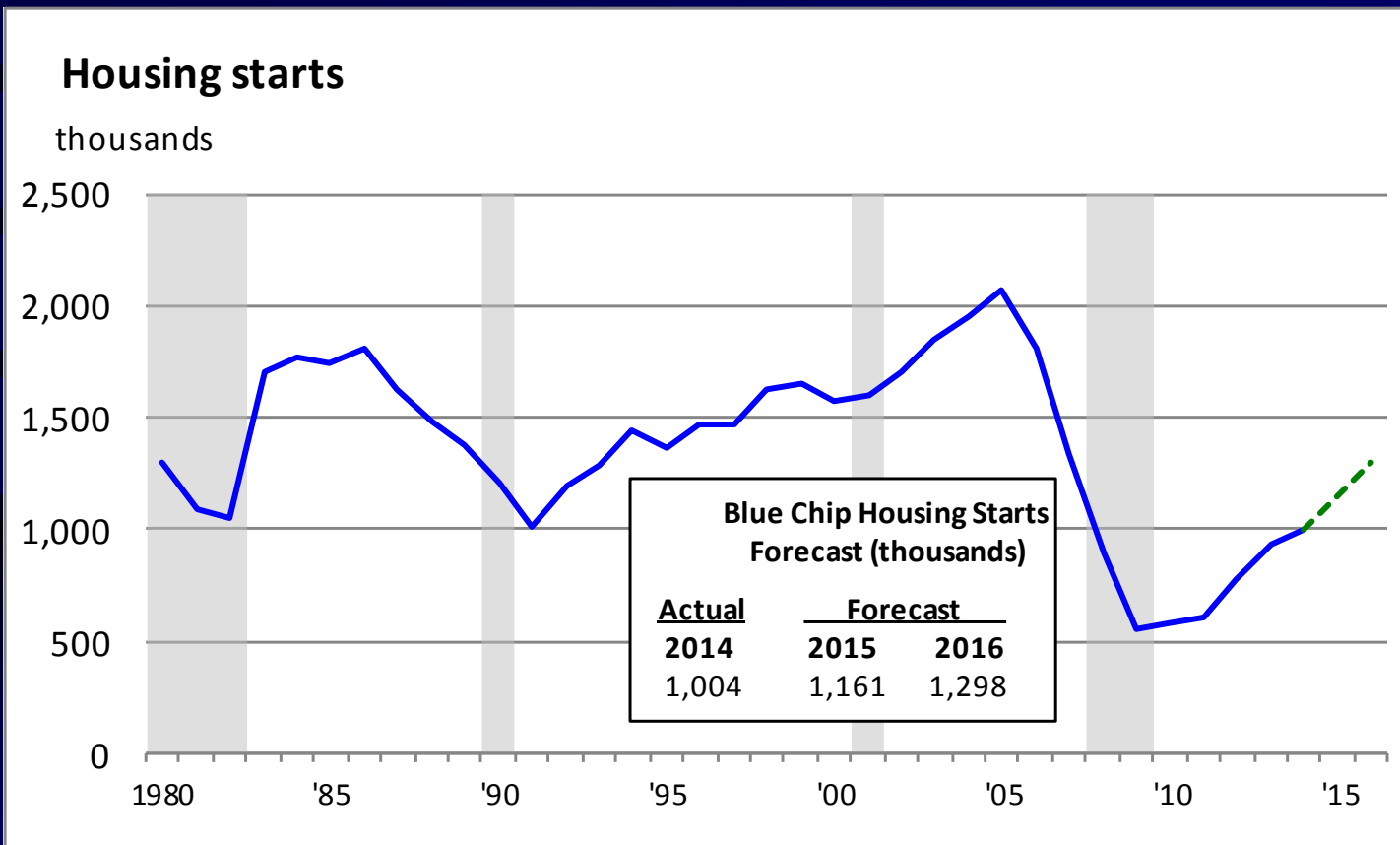
# The “Midwest” economy has performed well over the past year



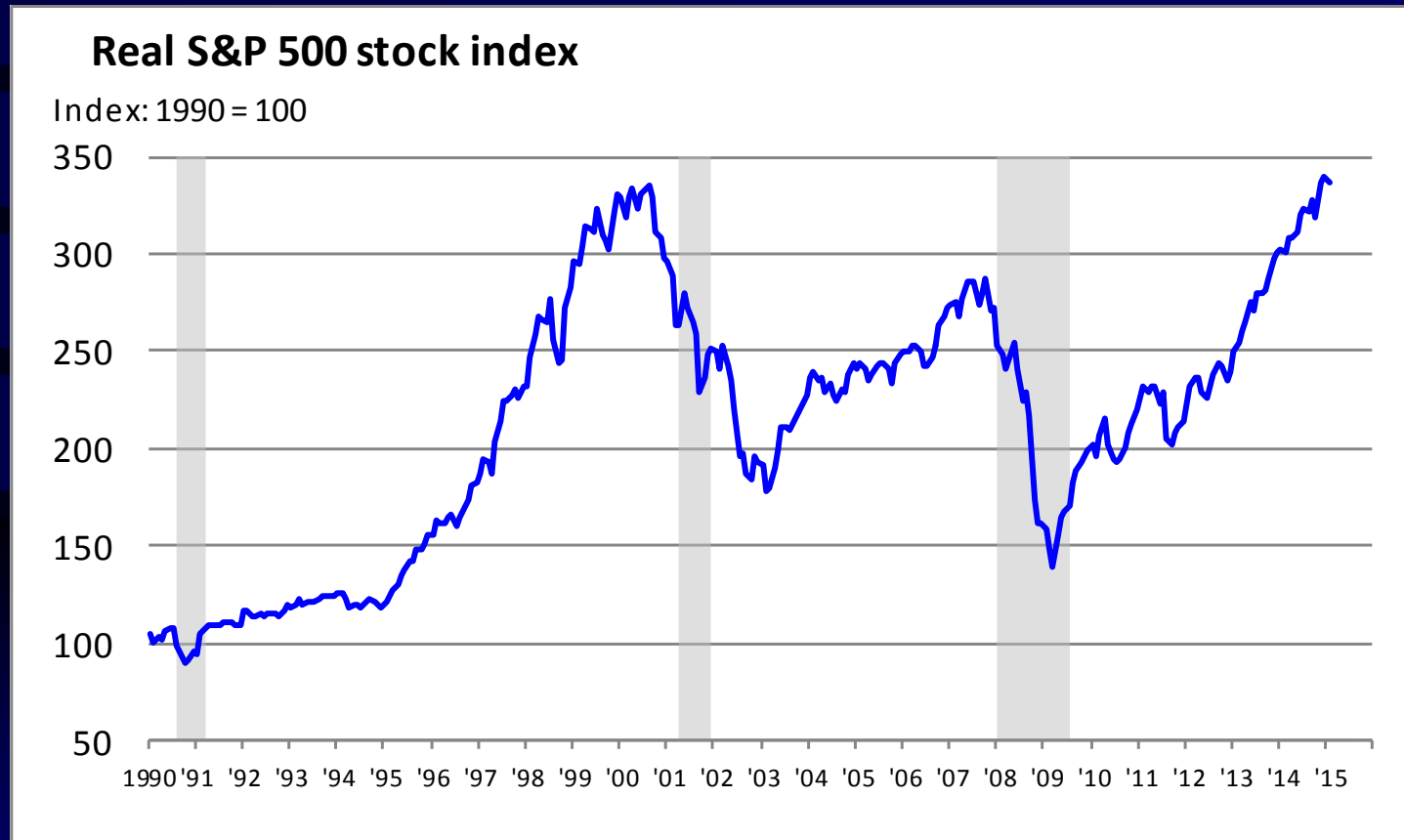
# Real existing home prices fell by 40%, but have begun to rise



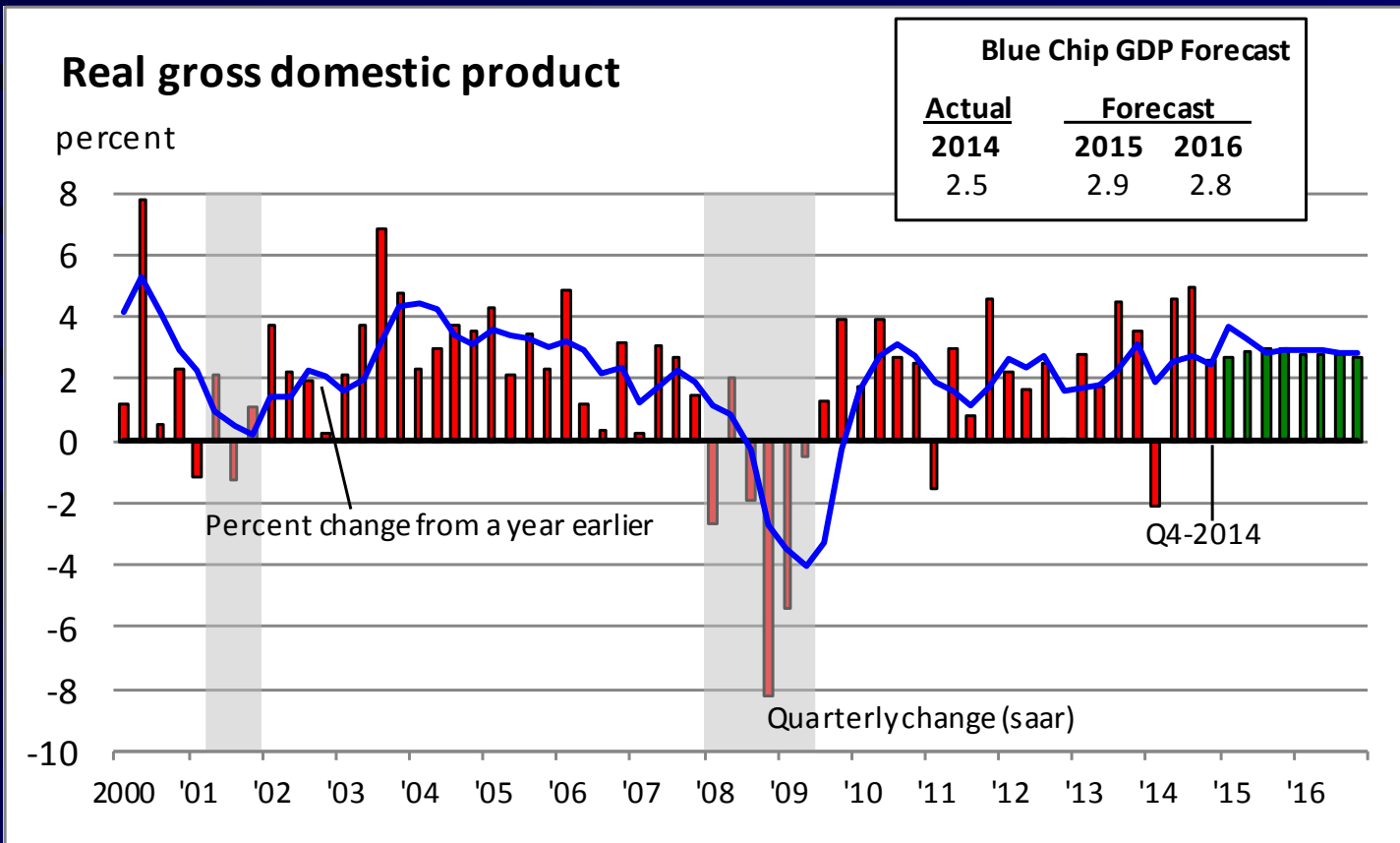
# The forecast calls for a very gradual recovery in housing



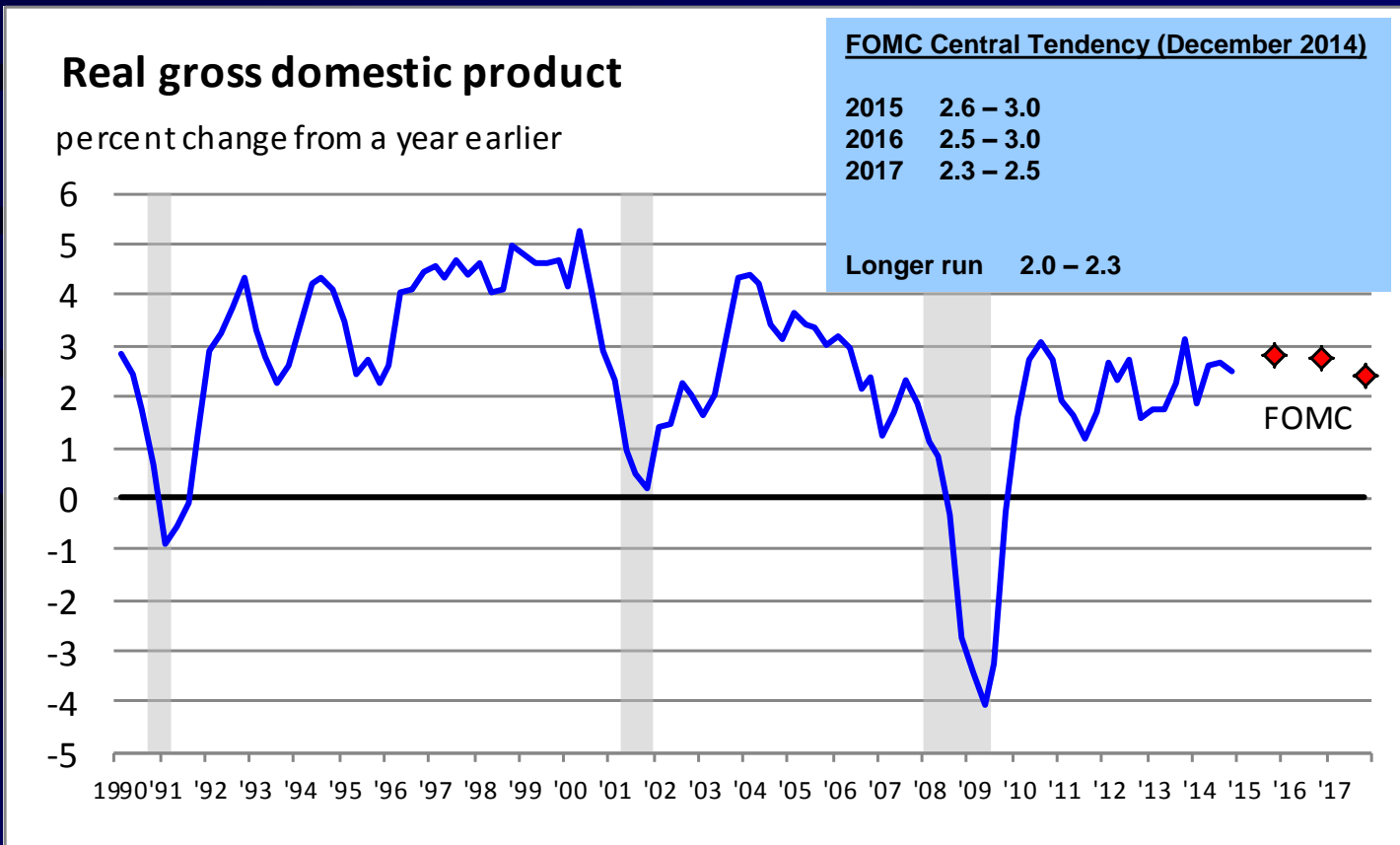
# The stock market has improved since March 2009, and has surpassed its previous peak



# Blue-Chip is expecting GDP to grow somewhat above trend over the next two years

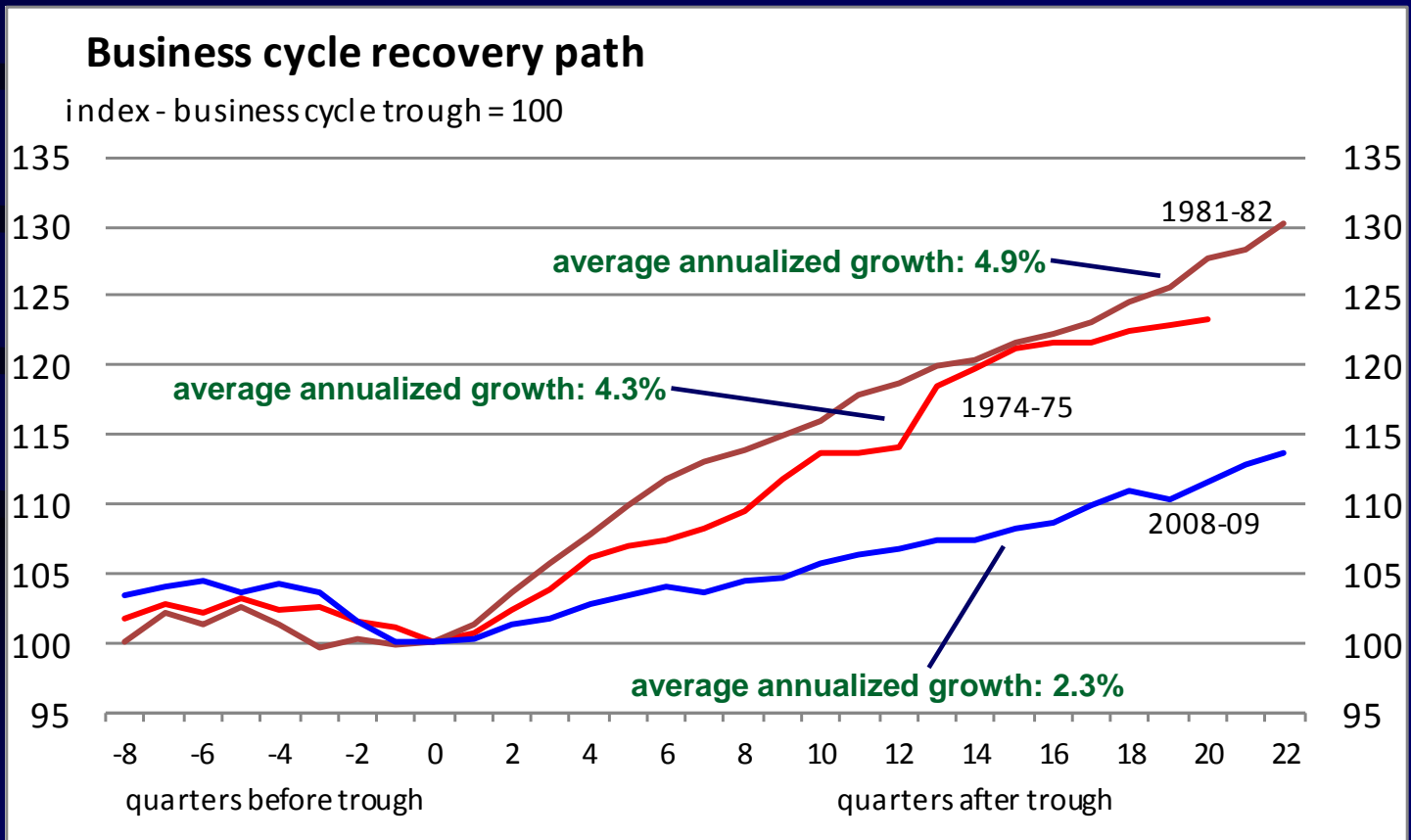


# The Federal Open Market Committee (FOMC) expects GDP to grow somewhat above trend over the next three years

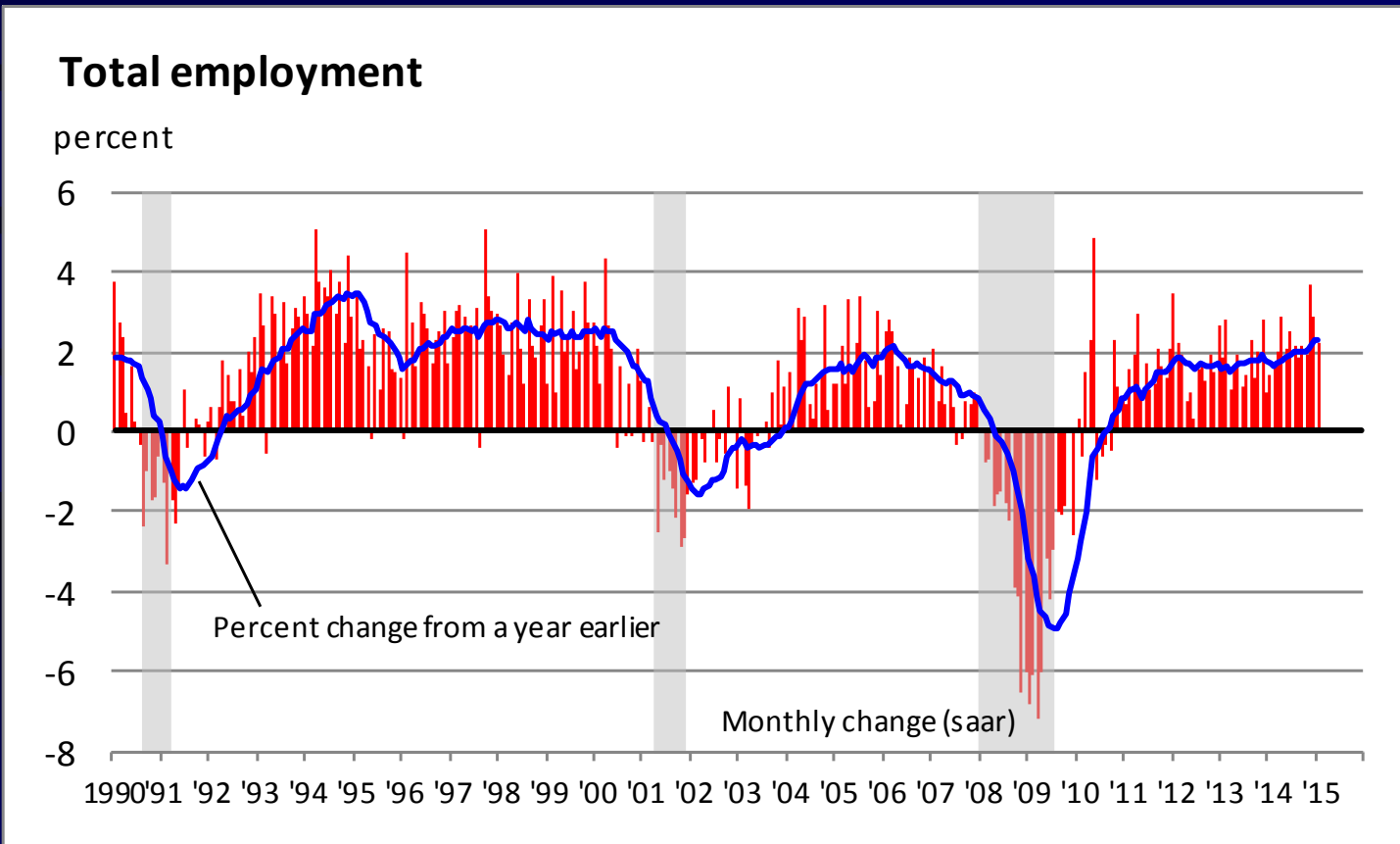




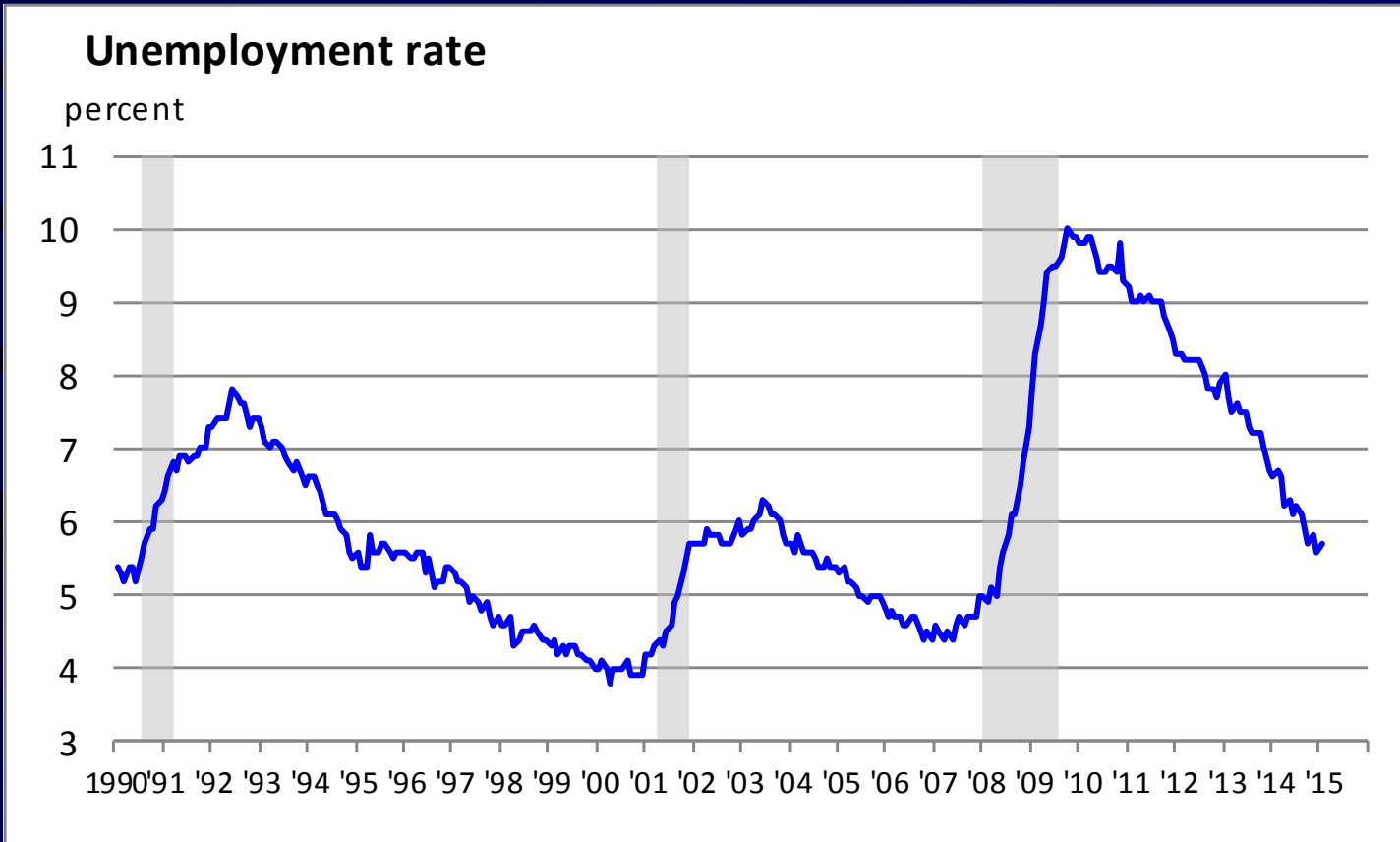
# The path of the current recovery is restrained compared with past deep recession recovery cycles



# Employment grew by over 3.2 million jobs over the past 12 months



**After peaking in October 2009,  
the unemployment rate has fallen by  
4.3 percentage points**



**However, the labor force participation rate fell to a level last seen in 1977**

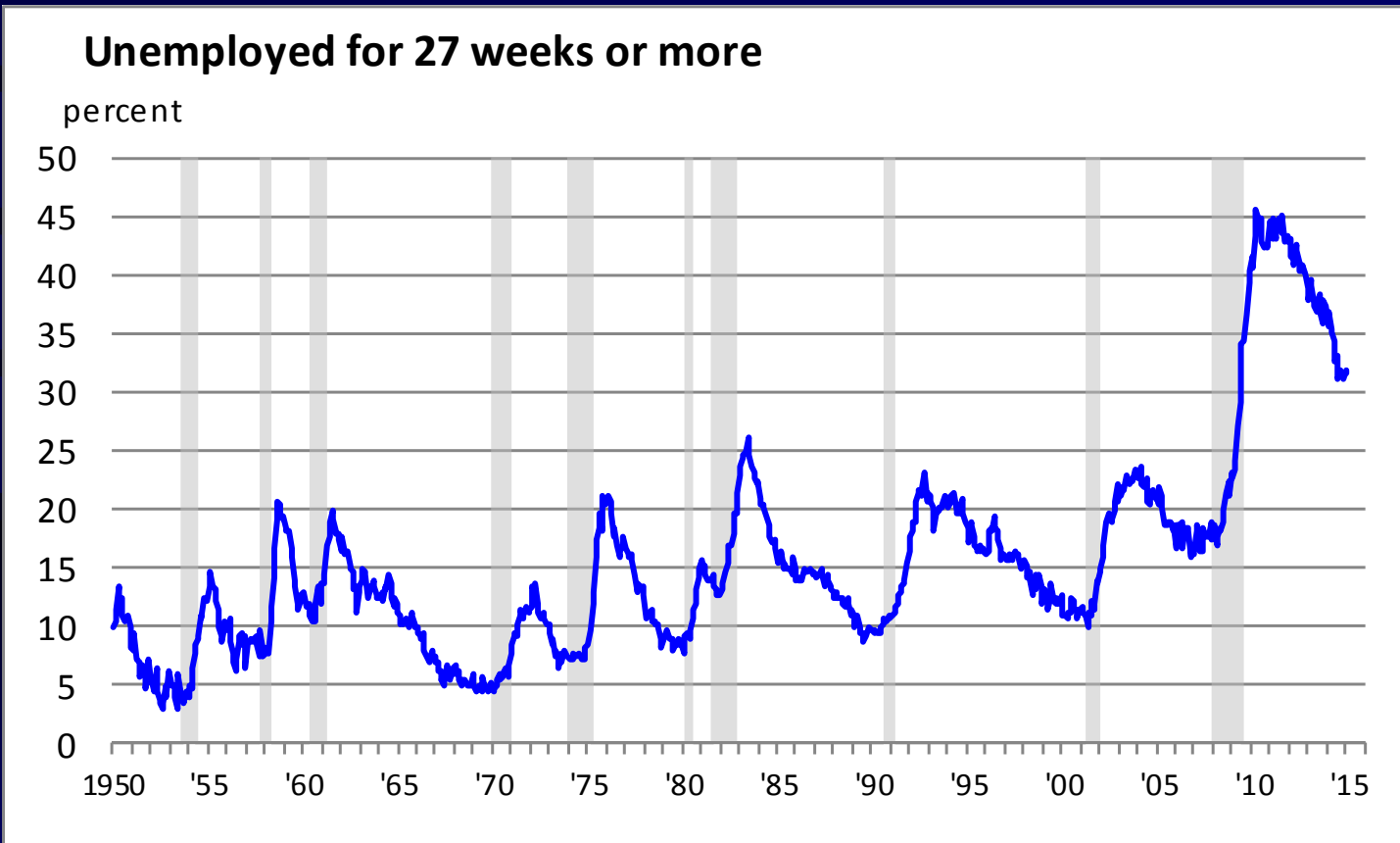


# Civilian Labor Force Participation Rate and Population Share 16 and Older by Age Category, United States, 2007 and 2014

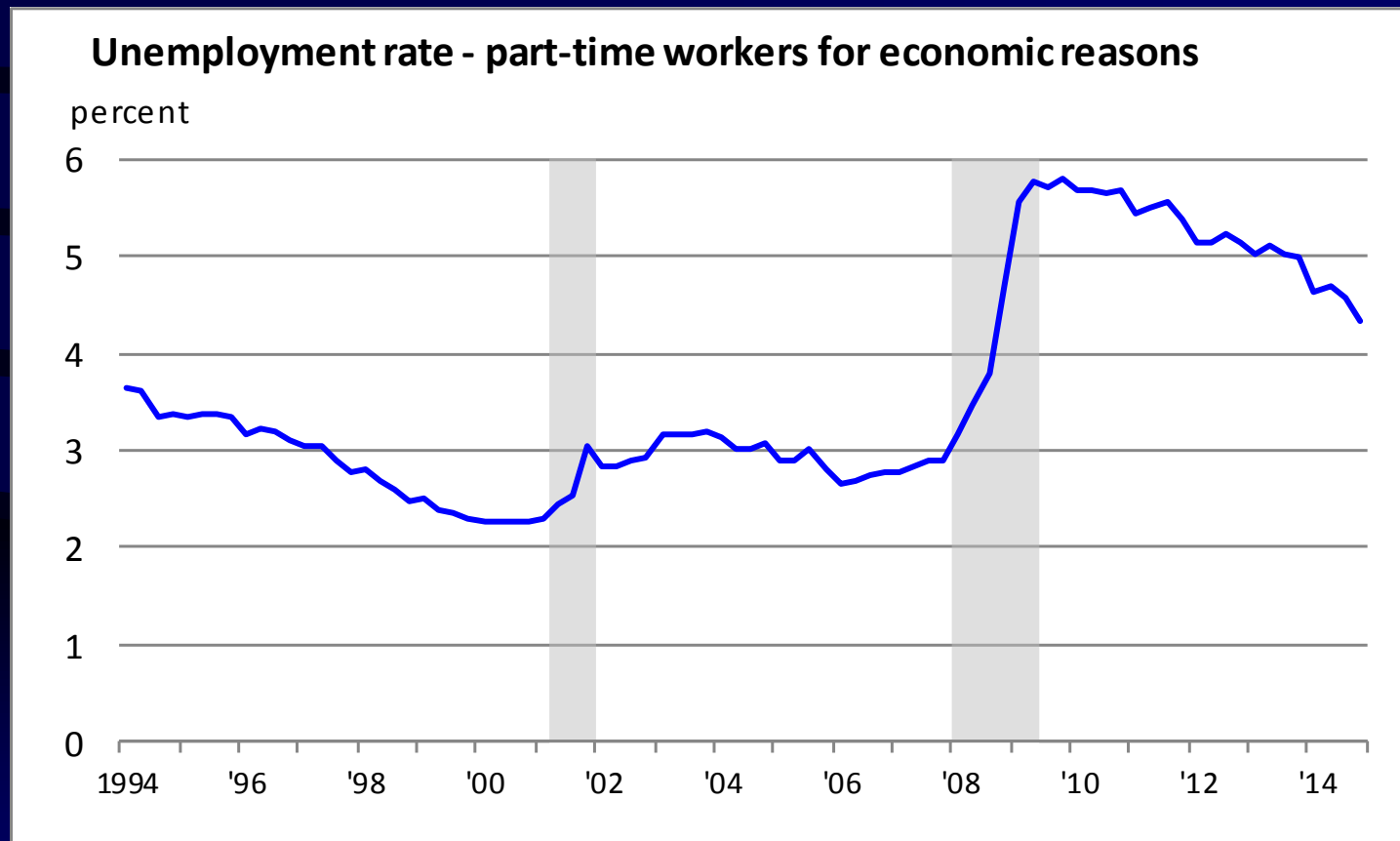
	Labor Force Participation Rate (%)			Population Share (%)		
	2014	2007	Change '07-'14	2014	2007	Change '07-'14
Population						
16 and older	62.9	66.1	-3.2	100.0	100.0	0.0
16 to 24	55.0	59.4	-4.4	15.6	16.1	-0.5
25 to 34	81.2	83.3	-2.1	17.0	17.1	-0.2
35 to 44	82.2	83.8	-1.6	16.0	18.3	-2.3
45 to 54	79.6	82.0	-2.4	17.3	18.8	-1.5
55 to 64	64.1	63.8	0.4	16.0	14.0	2.0
65 plus	18.6	16.0	2.6	18.1	15.6	2.5



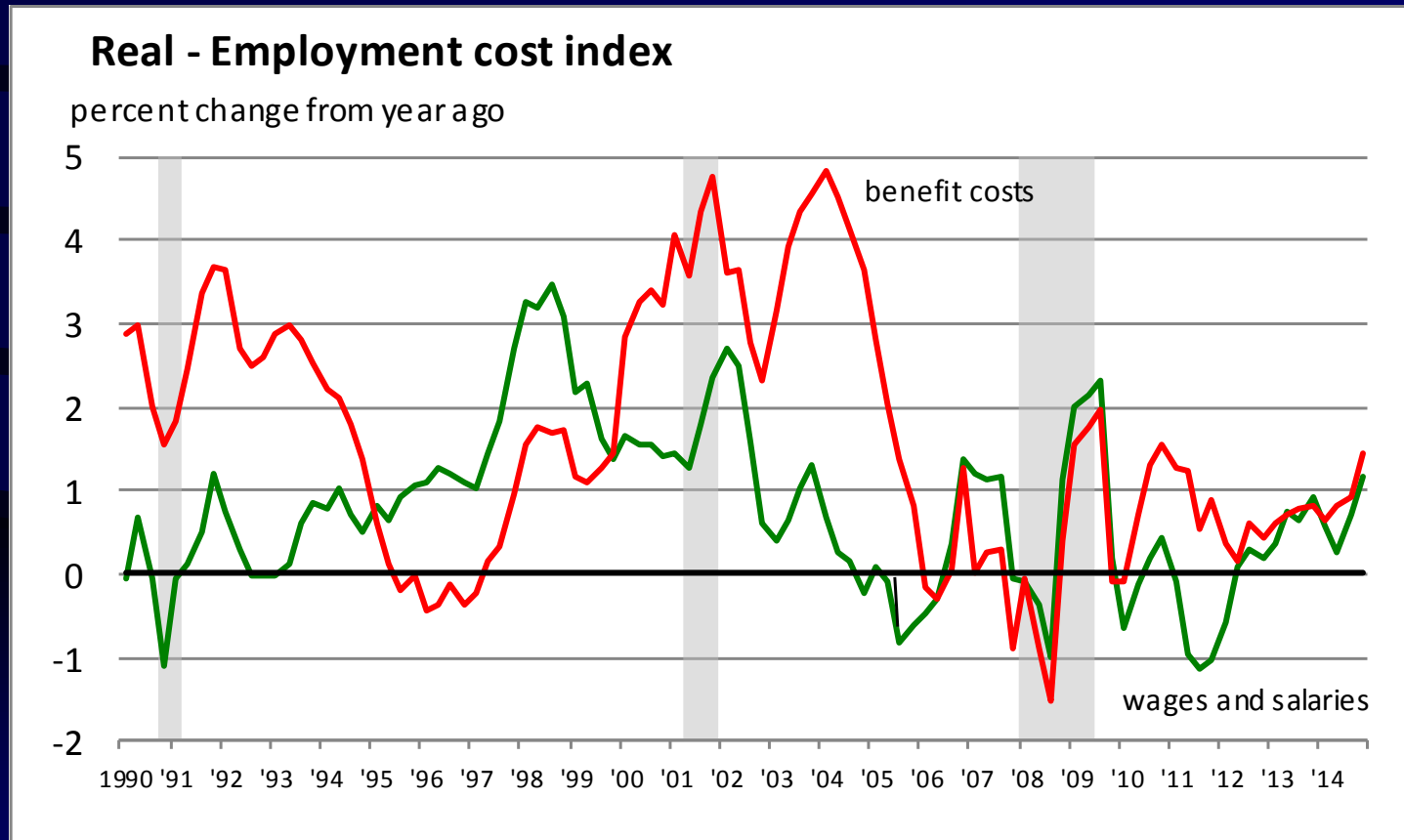
# The share of those unemployed more than 6 months remains significantly high



## Employees working part time for economic reasons remains elevated

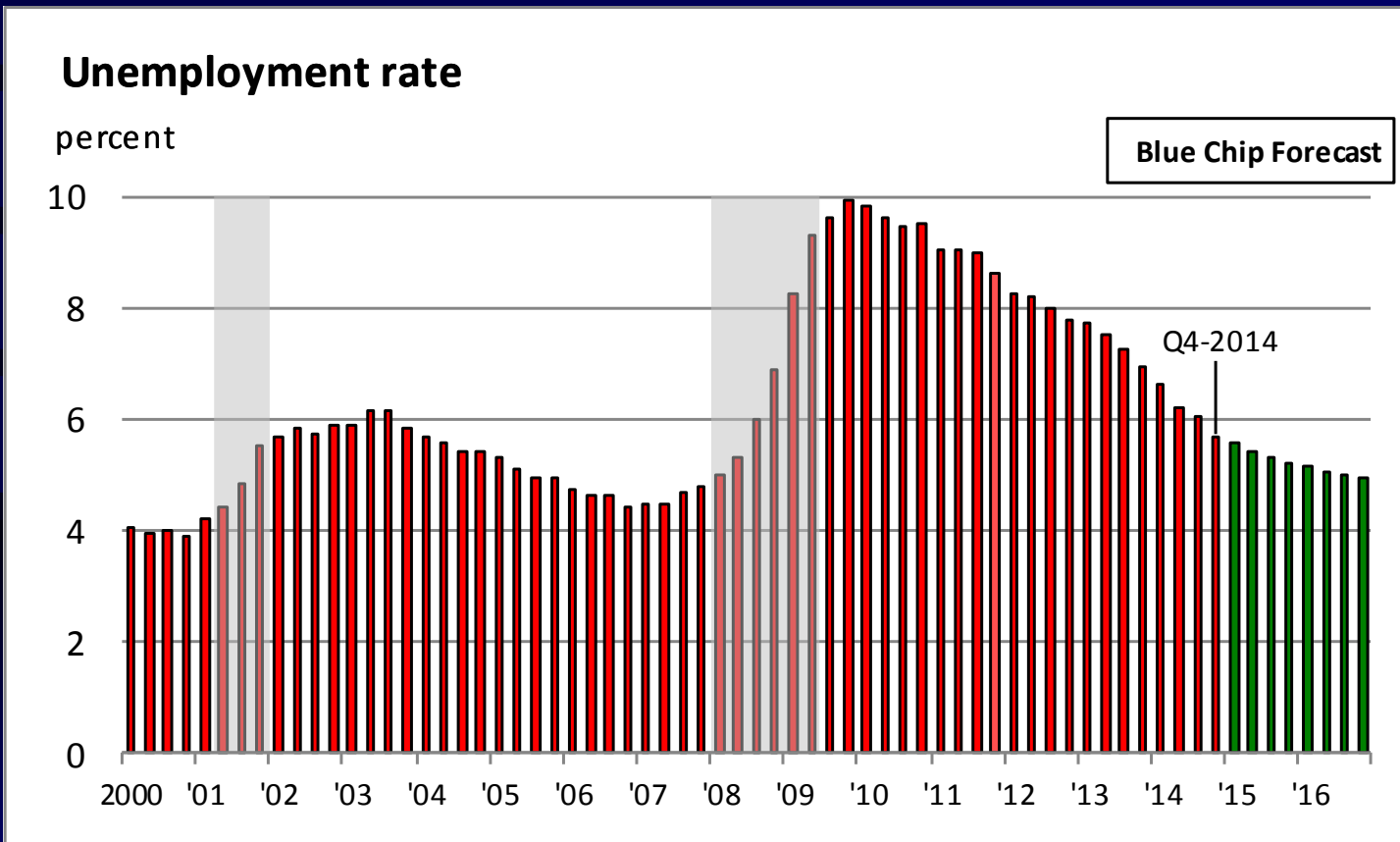


# Wages and benefit costs have increased over the past year, but still remains relatively low

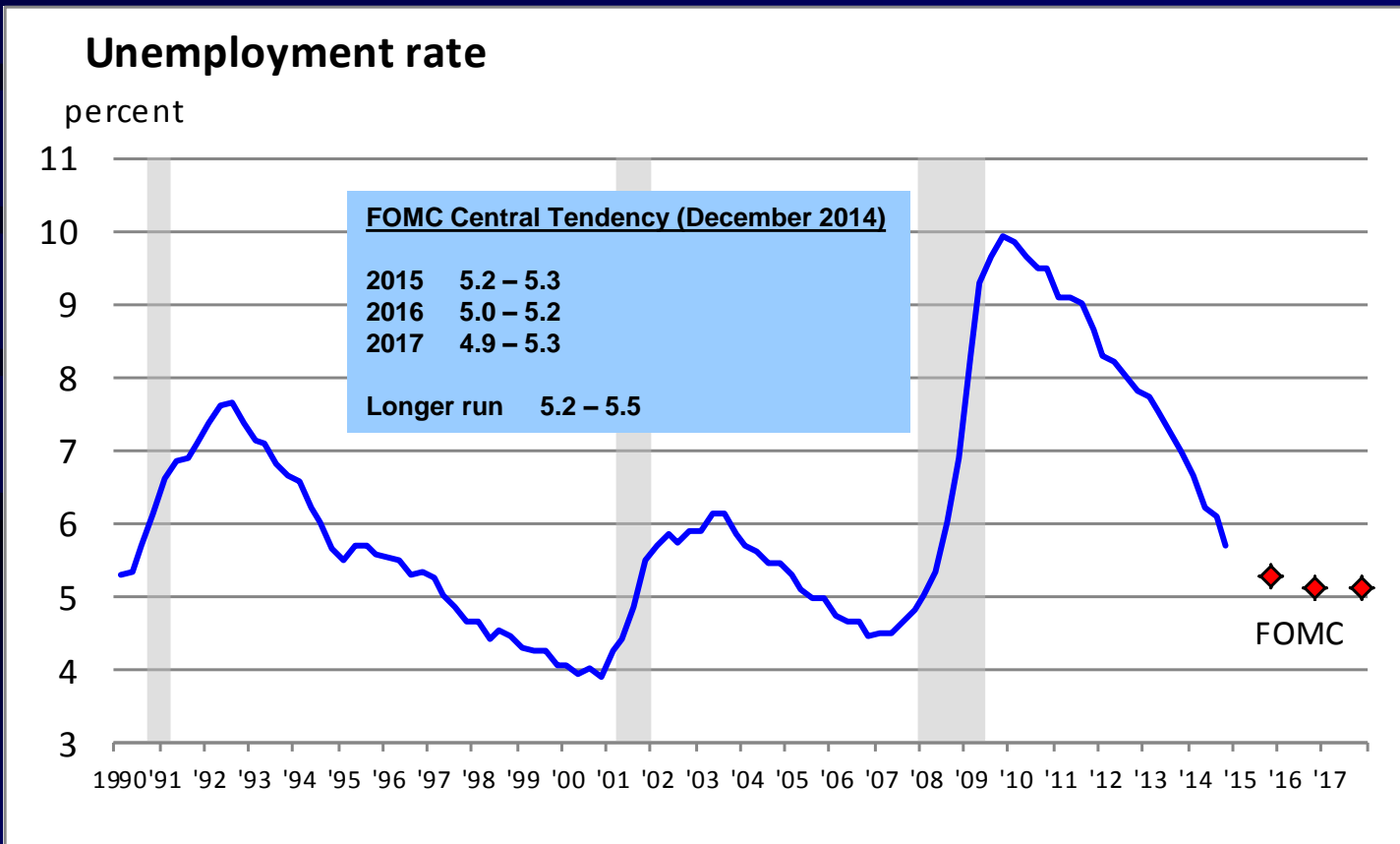




# The unemployment rate is forecast to edge lower with an additional 2.7 million jobs projected for 2015



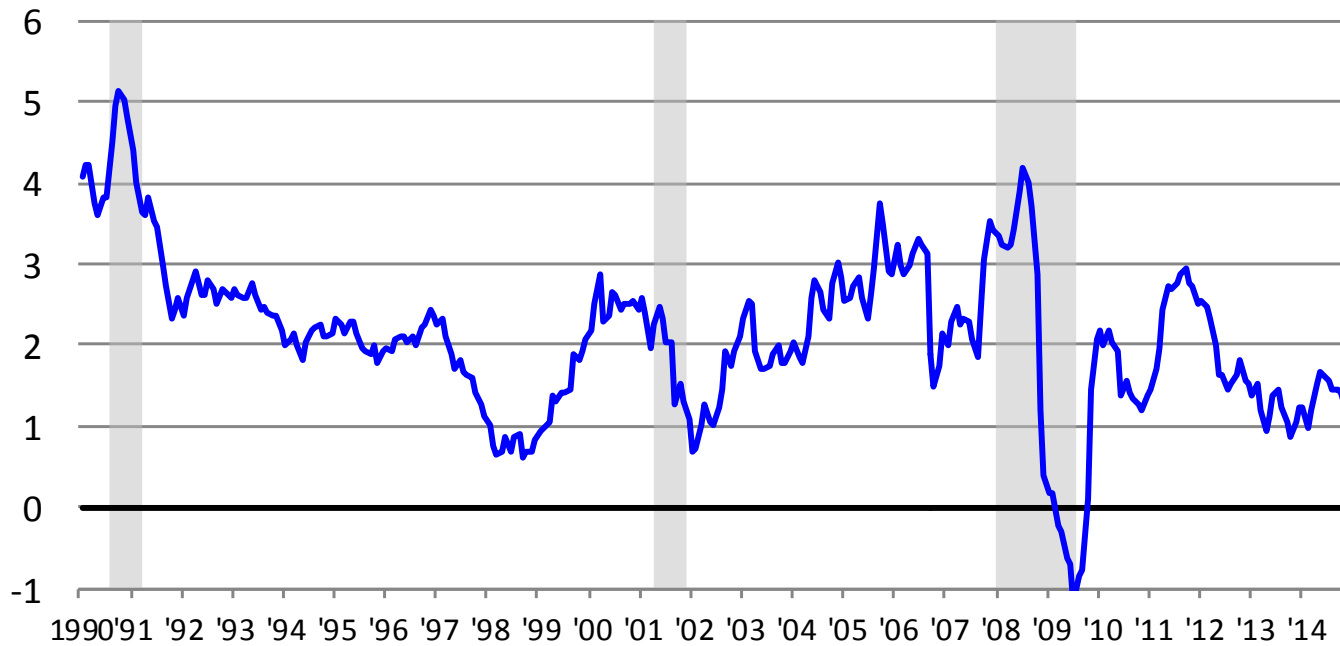
# The FOMC forecasts that the unemployment rate will be at the natural rate at the end of this year



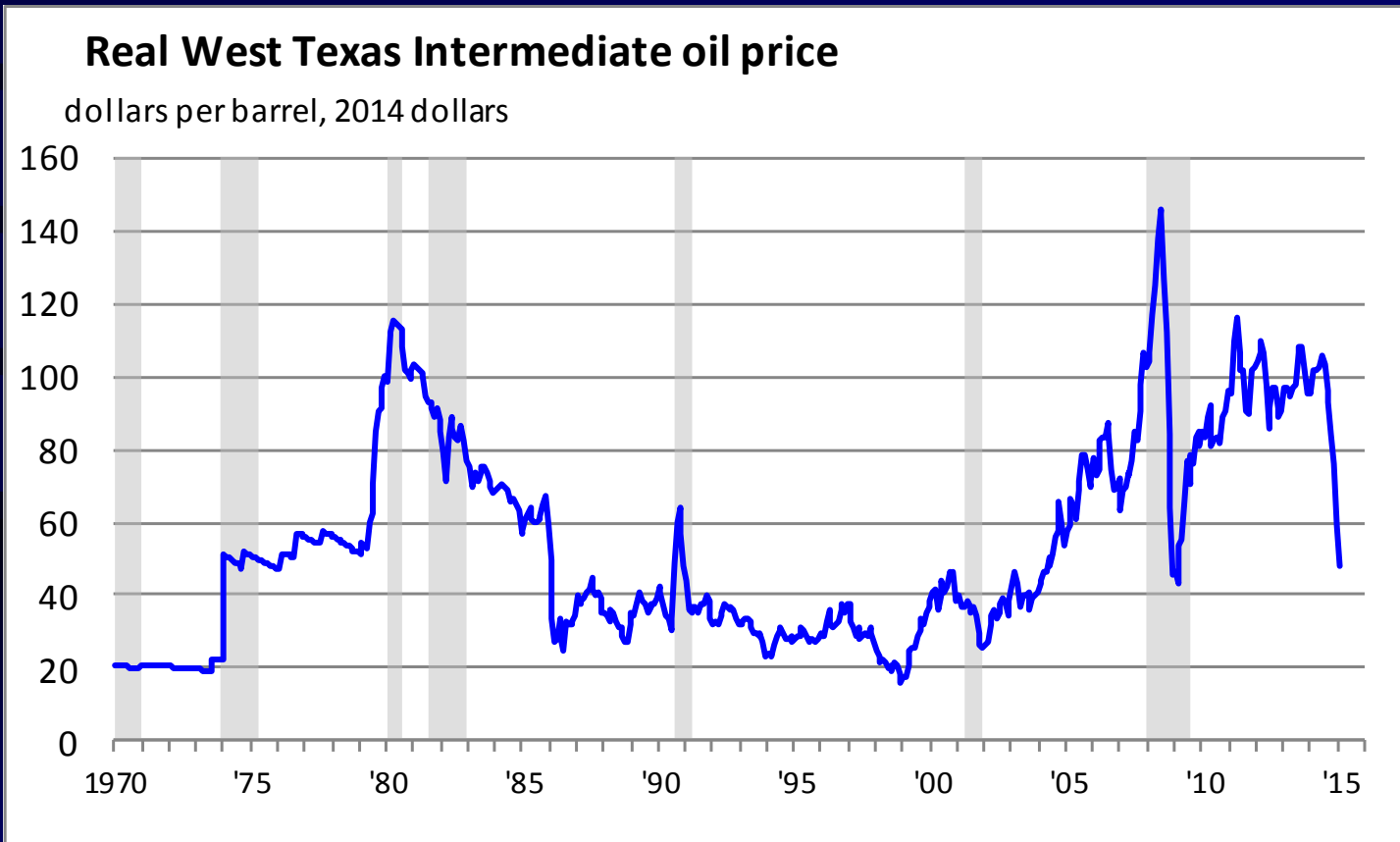
# Inflation is declining

## Personal consumption expenditure - chain price index

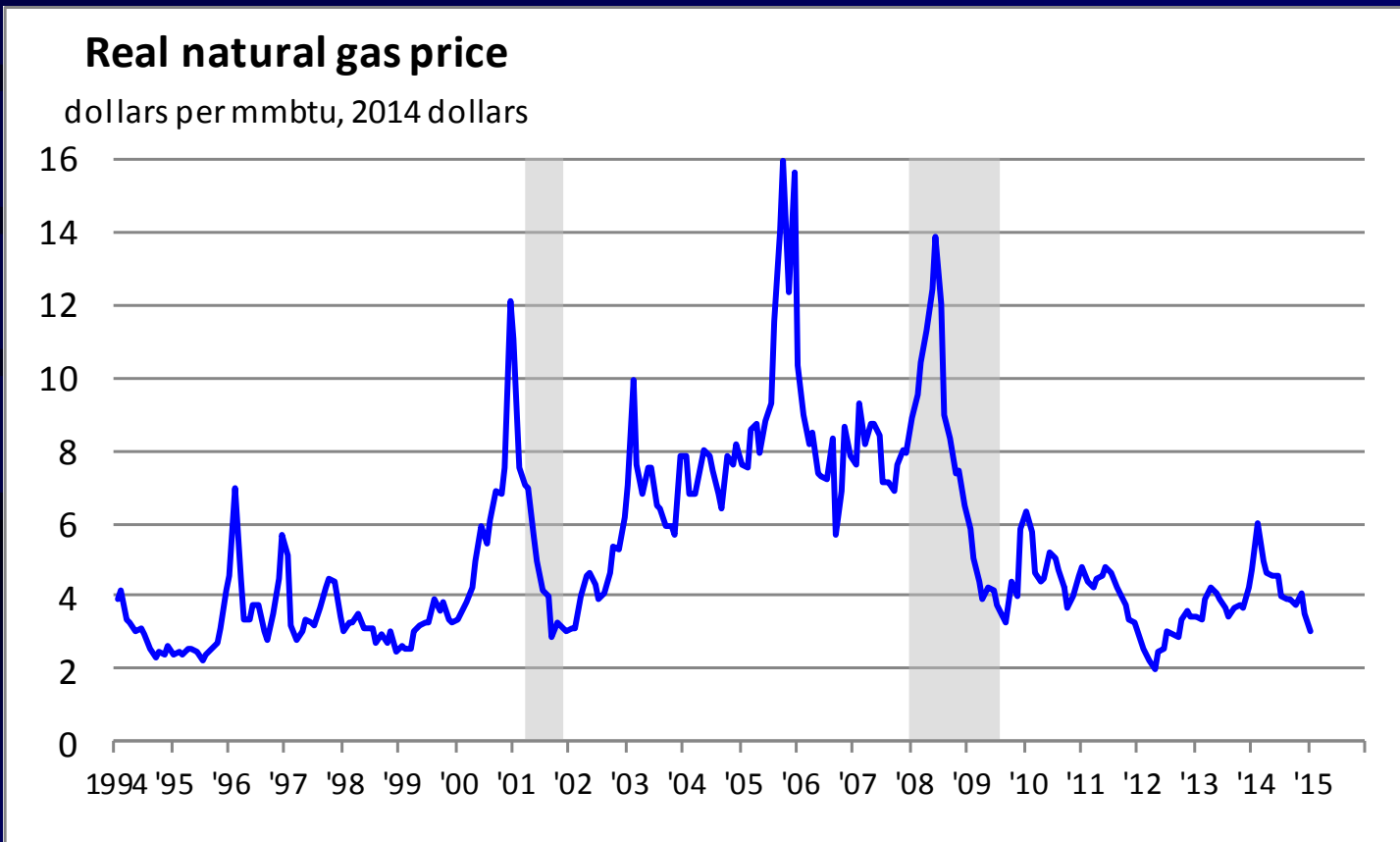
percent change from a year earlier



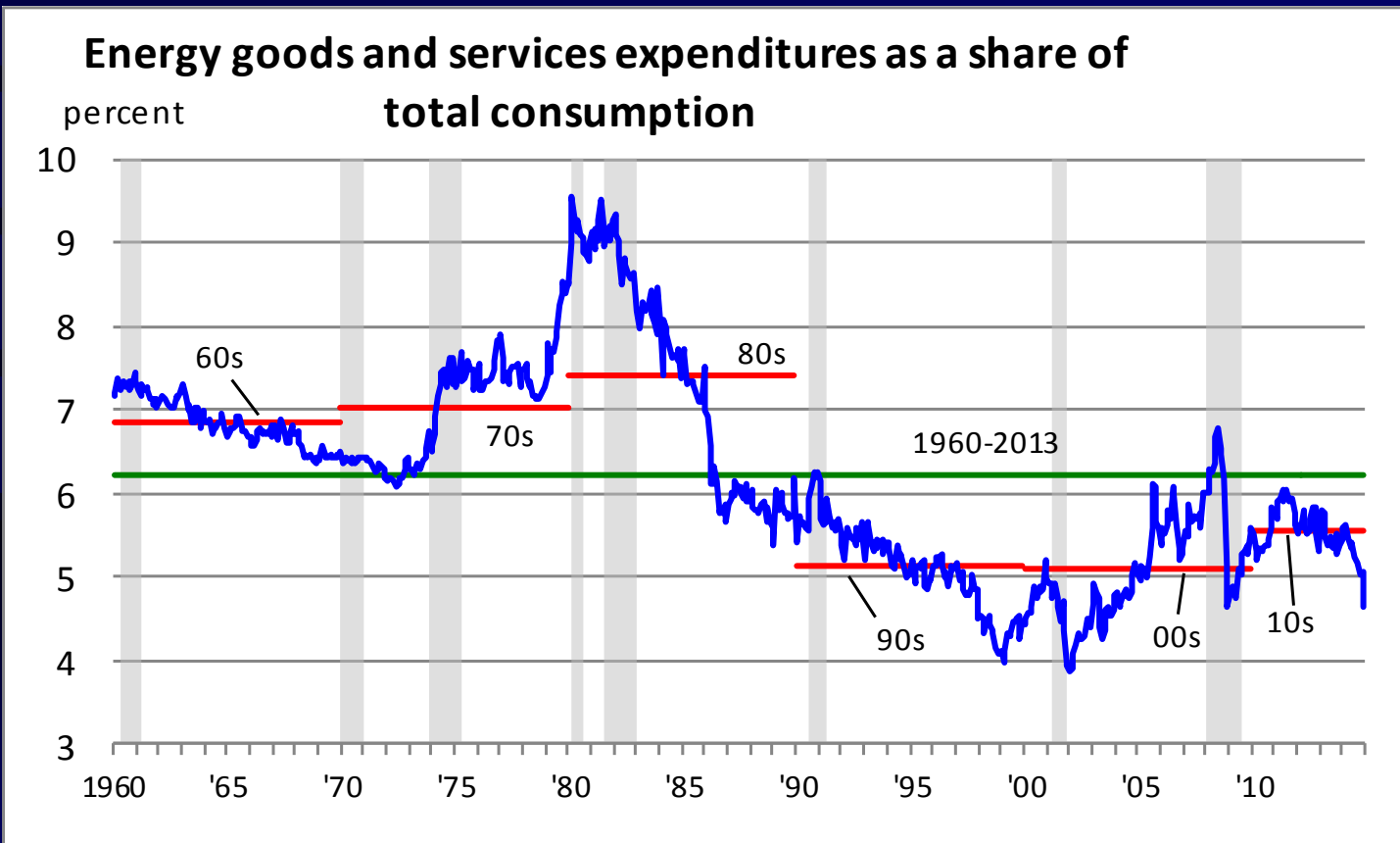
**In large part due to the collapse of energy prices**



# Natural gas prices have also declined and remains low

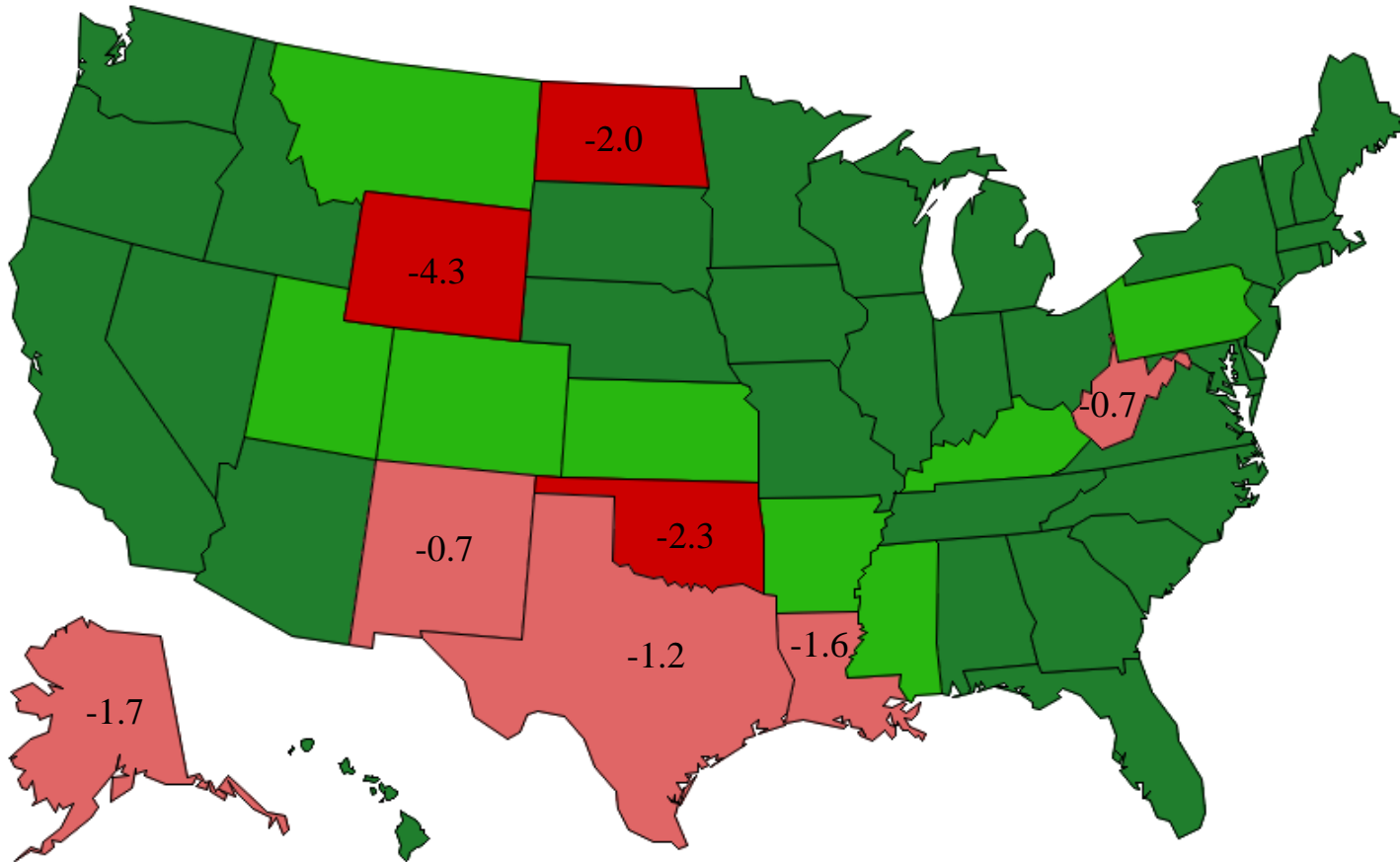


# Expenditures on energy are below the historical average



# Low oil prices benefit most states

(Effect of a 50% decline in oil prices on employment)



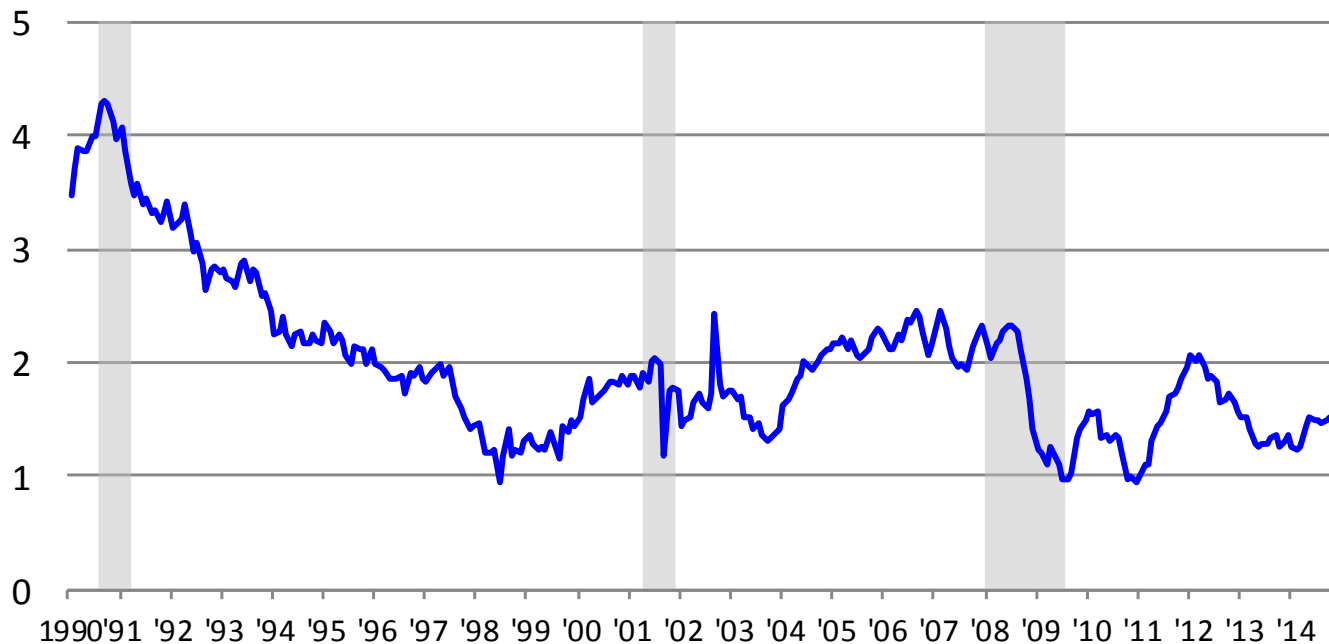
Percent change in total employment

Red	<-2	Light Red	-2 to 0	Light Green	0 to 1	Dark Green	>1
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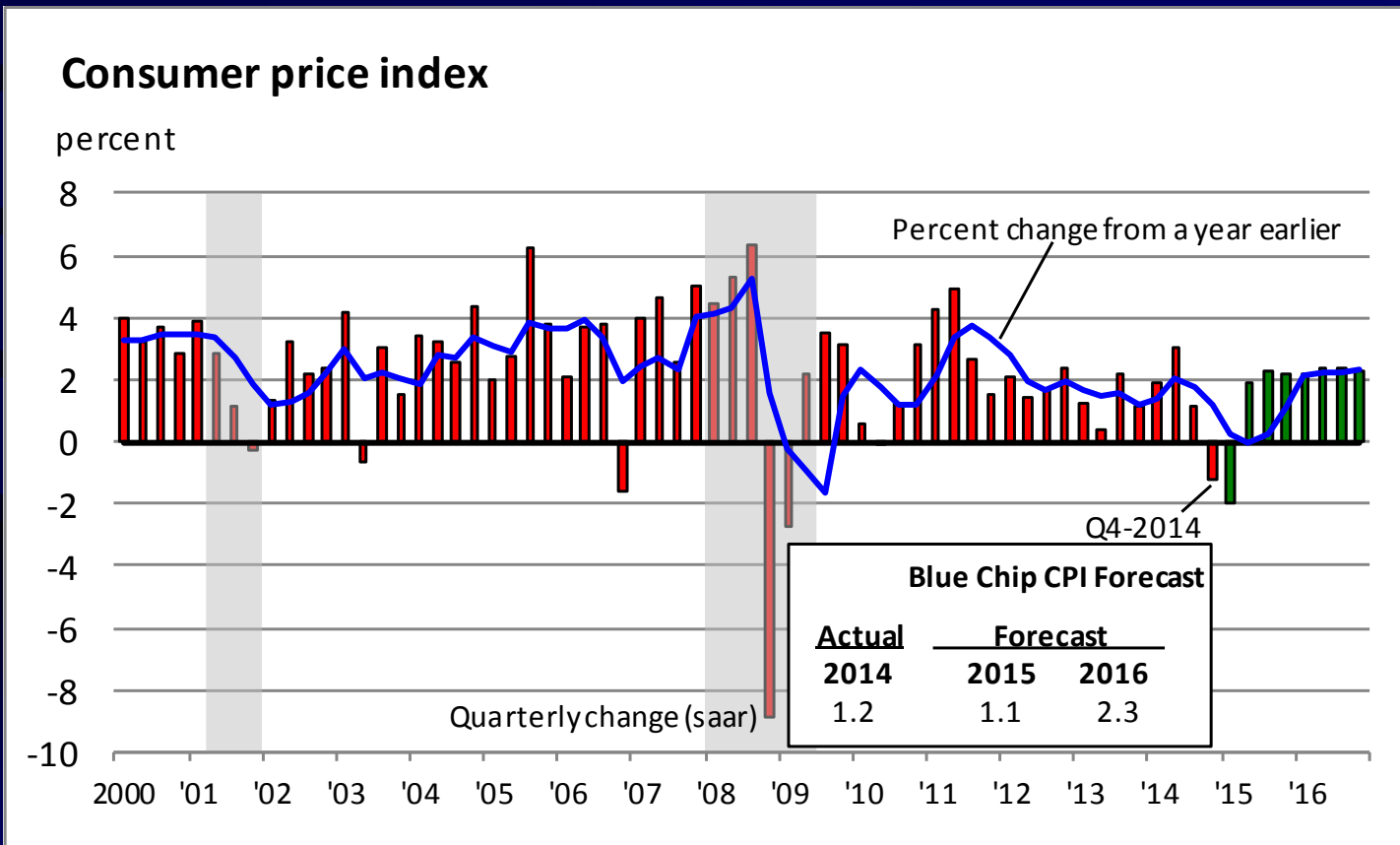
# Removing the volatile food and energy components from the PCE, “core” inflation remains low

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





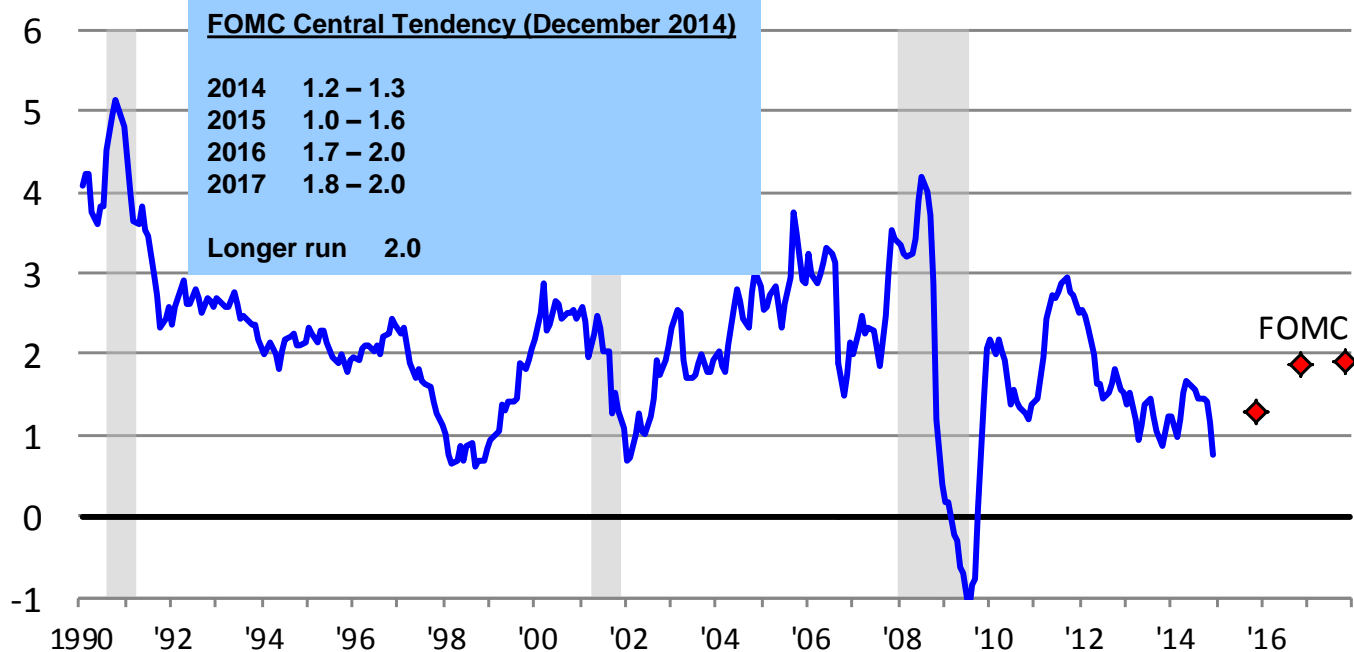
# Inflation is forecast to rise 1.1 percent in 2015 and 2.3 percent in 2016



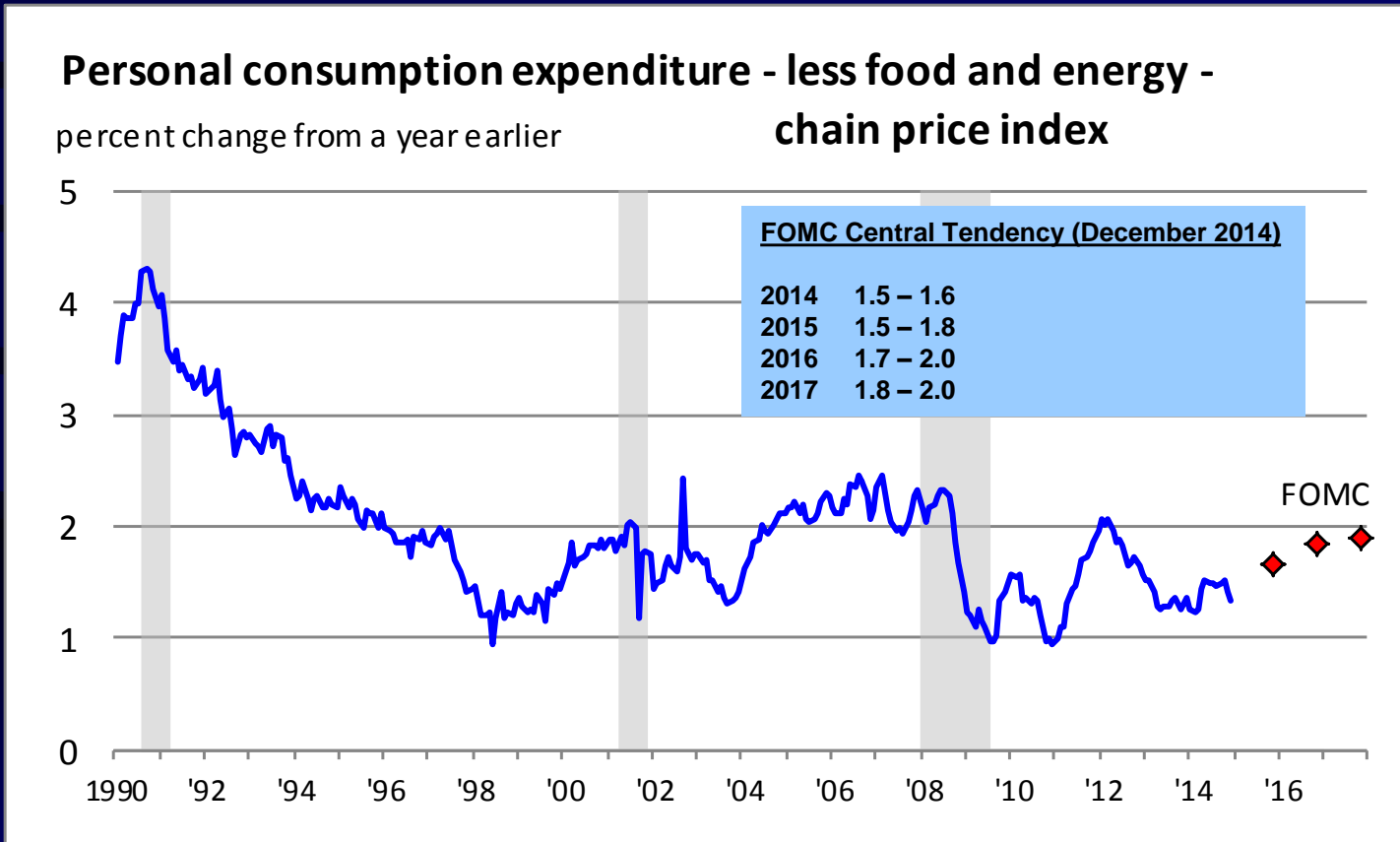
# The FOMC anticipates that PCE inflation will remain below two percent through 2017

## Personal consumption expenditure - chain price index

percent change from a year earlier



# The FOMC anticipates that “core” PCE inflation will also remain below two percent through 2017



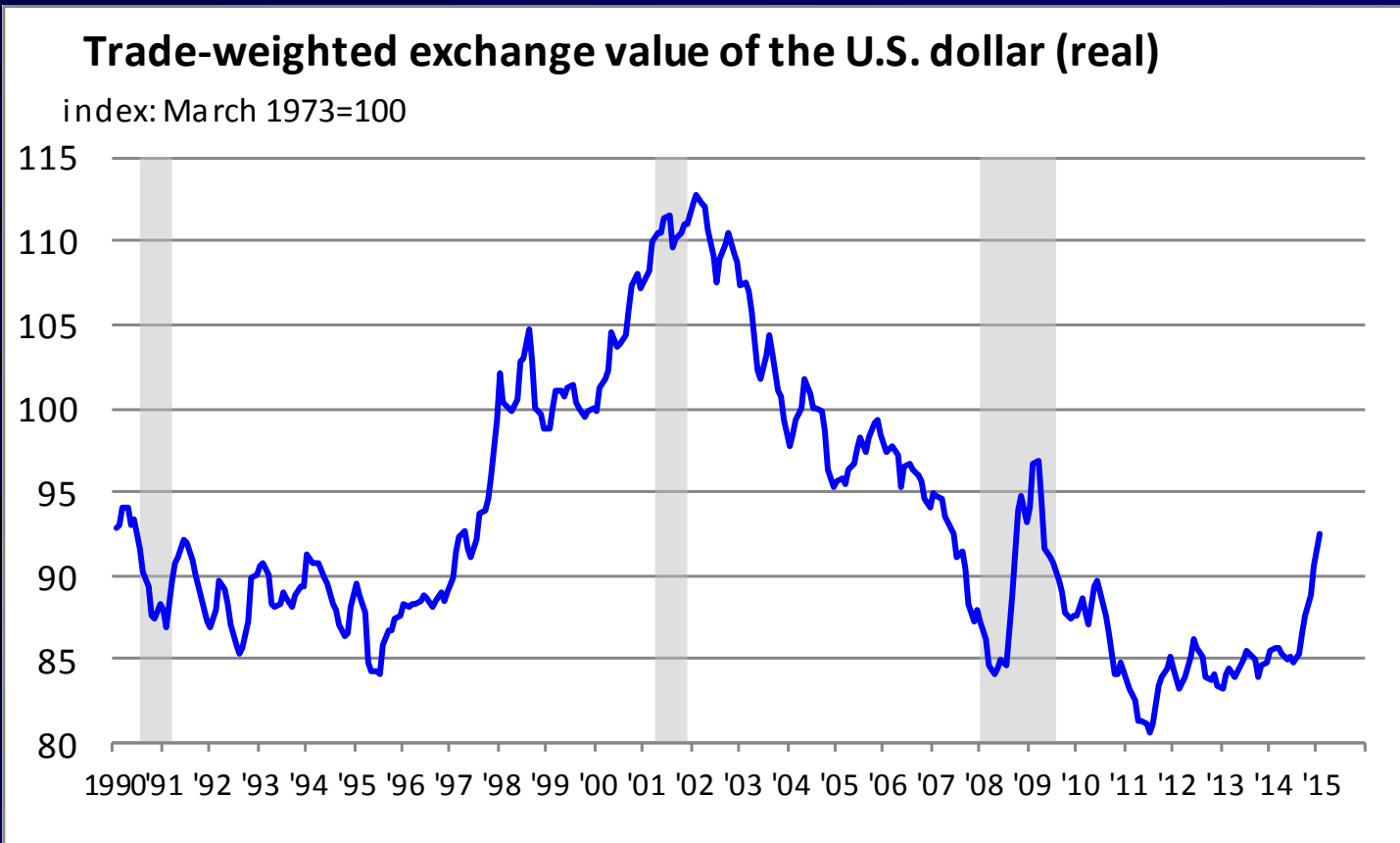
# Blue Chip International Consensus Forecasts

	Real GDP % change Annual			Inflation % change Annual Consumer Prices			Exchange Rate Against US Dollar End of Year	
	2014	2015	2016	2014	2015	2016	2015	2016
United States	2.4	3.2	2.9	1.7	0.4	2.3	-	-
Canada	2.4	2.3	2.3	2.0	1.2	2.1	1.21	1.19
Mexico	2.3	3.3	3.8	3.9	3.6	3.6	14.03	13.75
Japan	0.6	1.0	1.4	2.7	1.2	1.4	123.5	127.2
South Korea	3.4	3.5	3.6	1.4	1.4	2.1	1,097	1,091
United Kingdom	2.6	2.6	2.5	1.5	0.7	1.7	1.49	1.51
Germany	1.5	1.4	1.8	0.9	0.5	1.4	1.11	1.07
France	0.4	0.9	1.3	0.7	0.5	1.1	1.11	1.07
Euro Zone	0.8	1.2	1.6	0.5	0.0	1.1	1.11	1.07
Brazil	0.2	0.3	1.7	6.3	6.4	5.6	2.79	2.85
Russia	0.2	-3.4	0.3	7.6	12.4	7.0	62.4	60.5
China	7.3	6.9	6.7	2.1	1.7	2.2	6.21	6.16
India	5.8	6.1	6.6	7.0	5.5	5.7	63.2	63.1

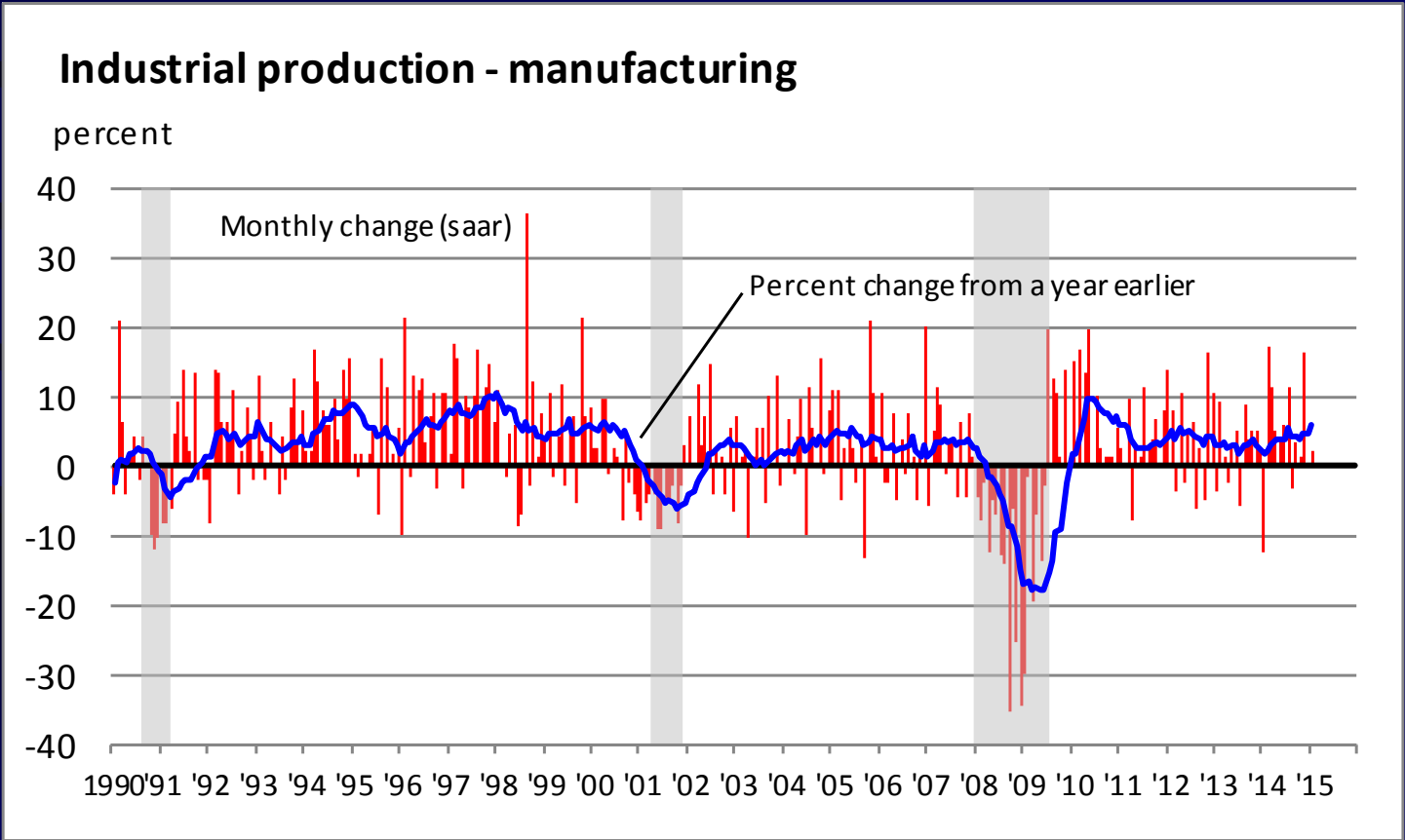
Blue Chip Economic Indicators Forecast February 10, 2015



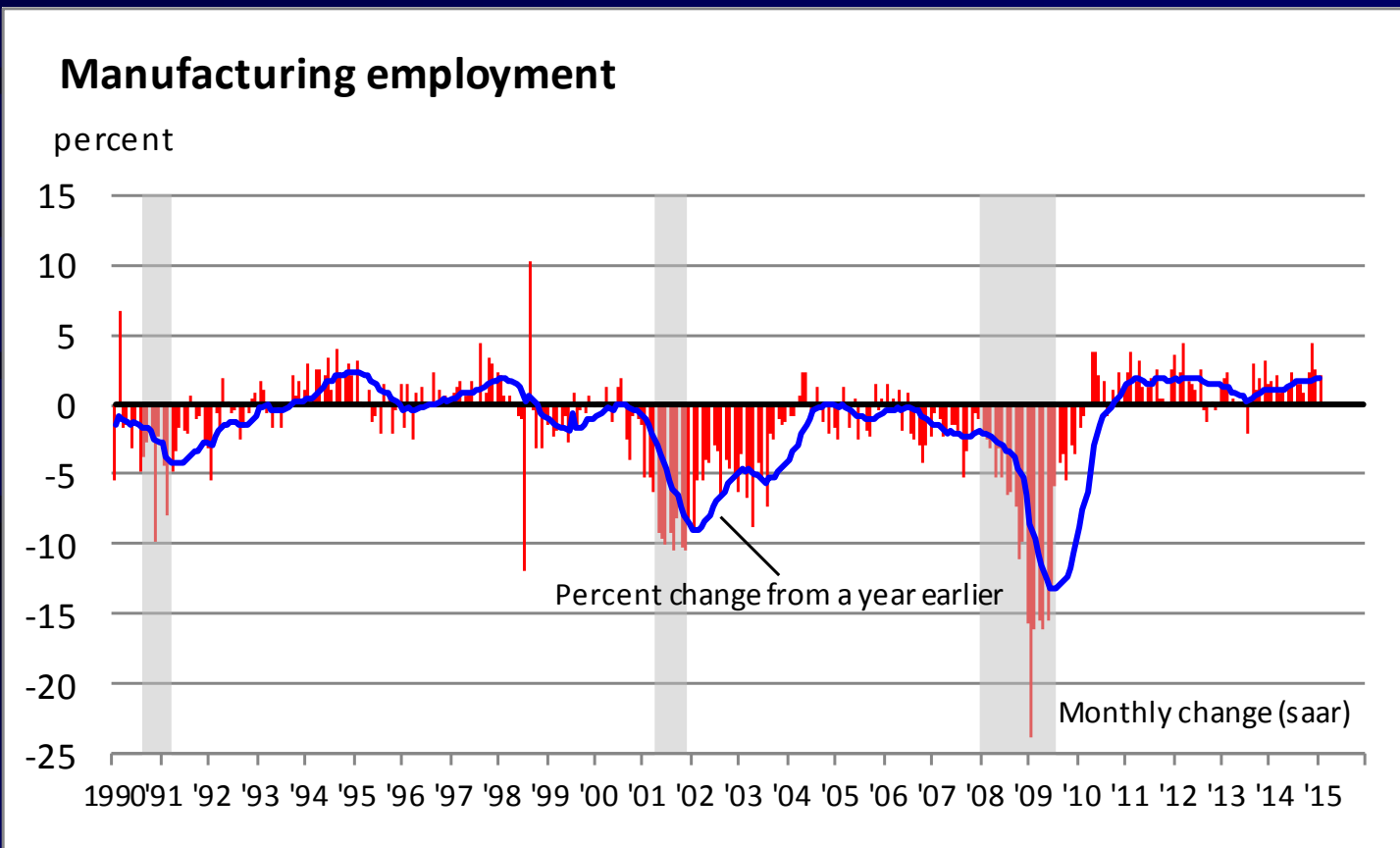
# The real trade-weighted dollar has increased 8.9% over the past six months



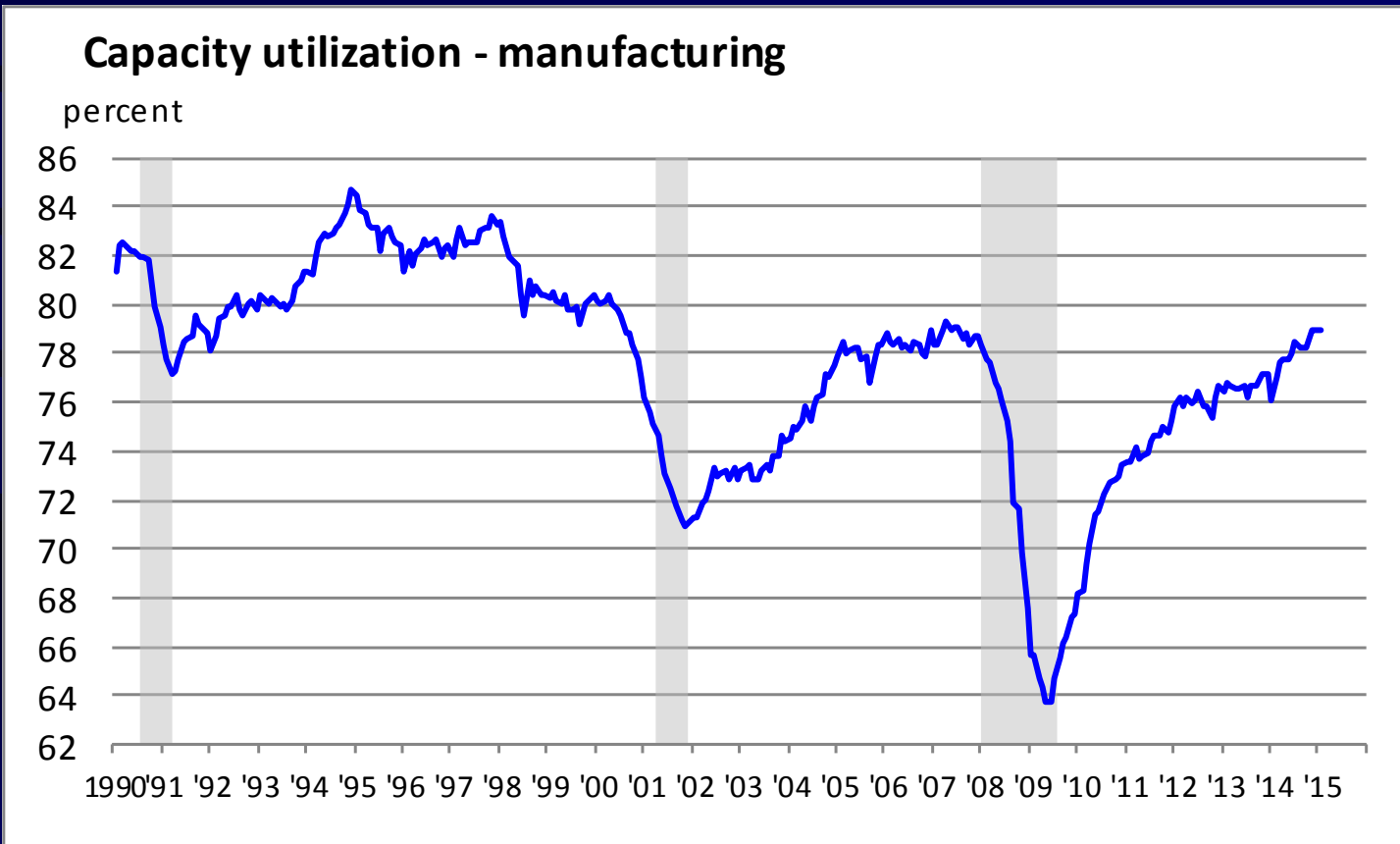
Since the beginning of the expansion manufacturing output has been increasing at a 4.8% annualized rate and has recovered 115% of the output during the recession



# While manufacturing jobs have been rising, they have only recovered 38.2% of the jobs lost during the downturn

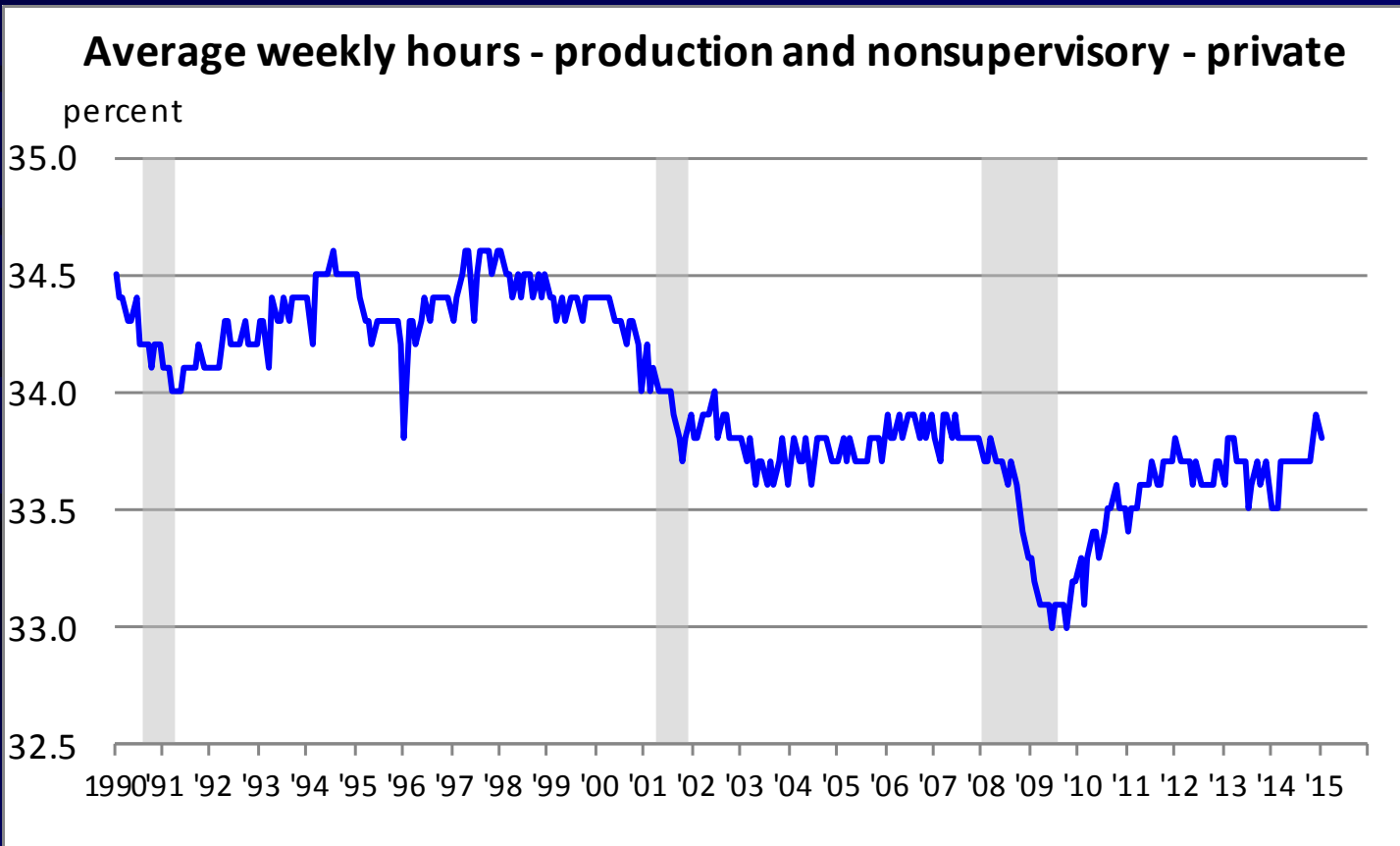


# Capacity utilization is getting very close to full utilization

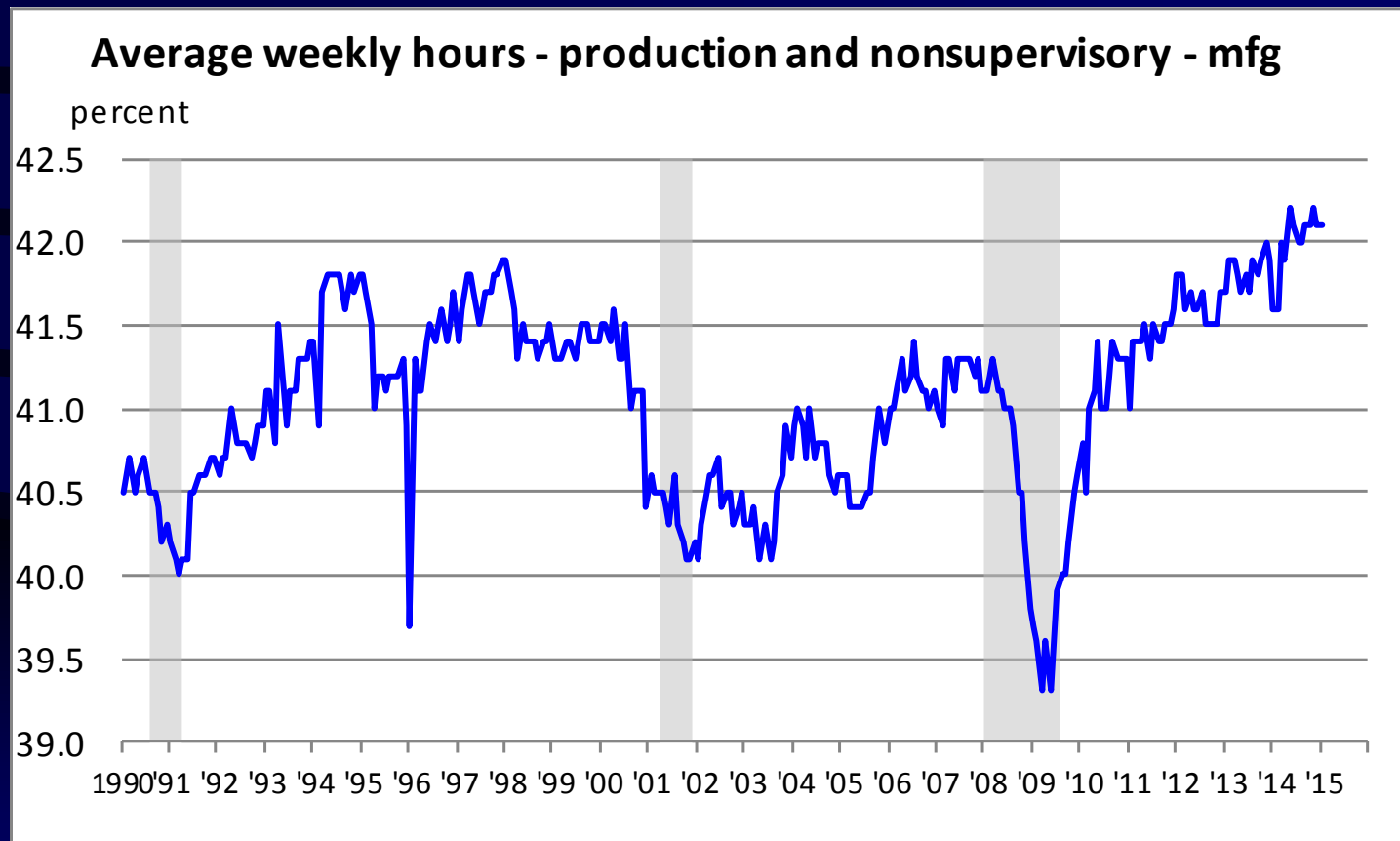




# Average weekly hours for private workers has recently moved higher

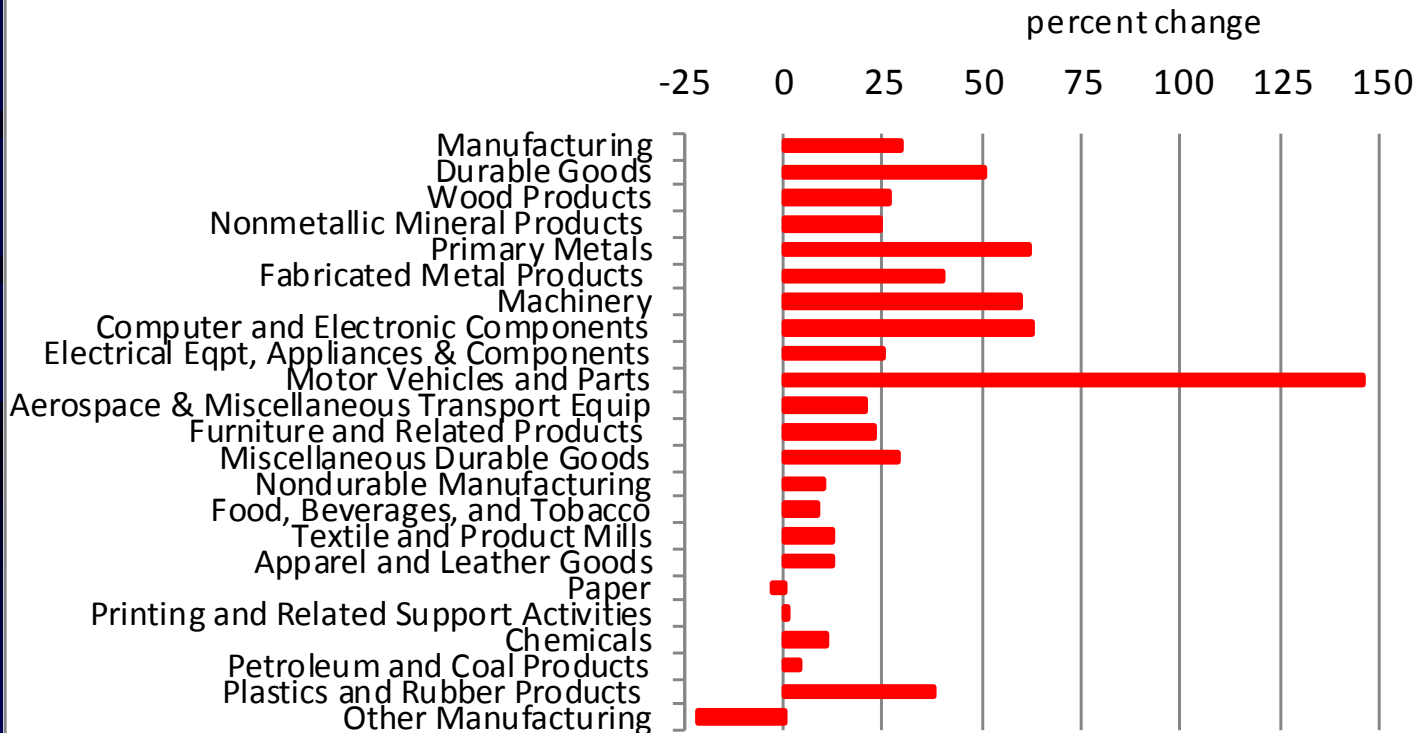


**However, average weekly hours for manufacturing are at extremely high levels:  
the highest working week since World War II**

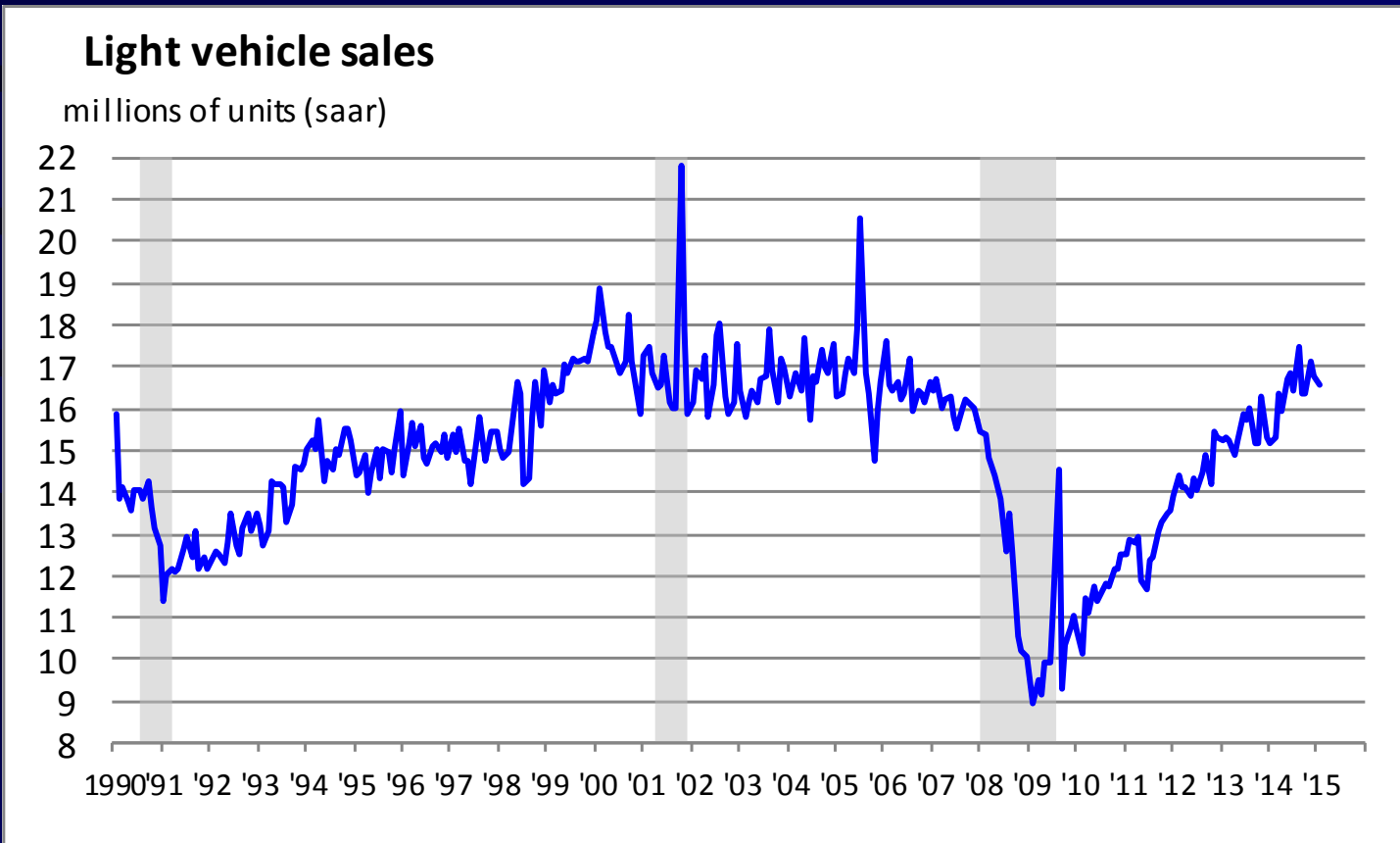


# The recovery has also been broad-based with vehicle and primary metals manufacturing leading the way

Industrial output: June 2009 - January 2015



# Light vehicles sales have reached pre-recession levels



## The New 2015 F-150



500 pounds lighter by using aluminum

EcoBoost 2.7 liter V-6

Fuel economy increases by 5-20%

Prices range from \$26K-\$60K+

Will this new design be accepted by the consumer?

“High-strength, military grade, aluminum-alloy body”



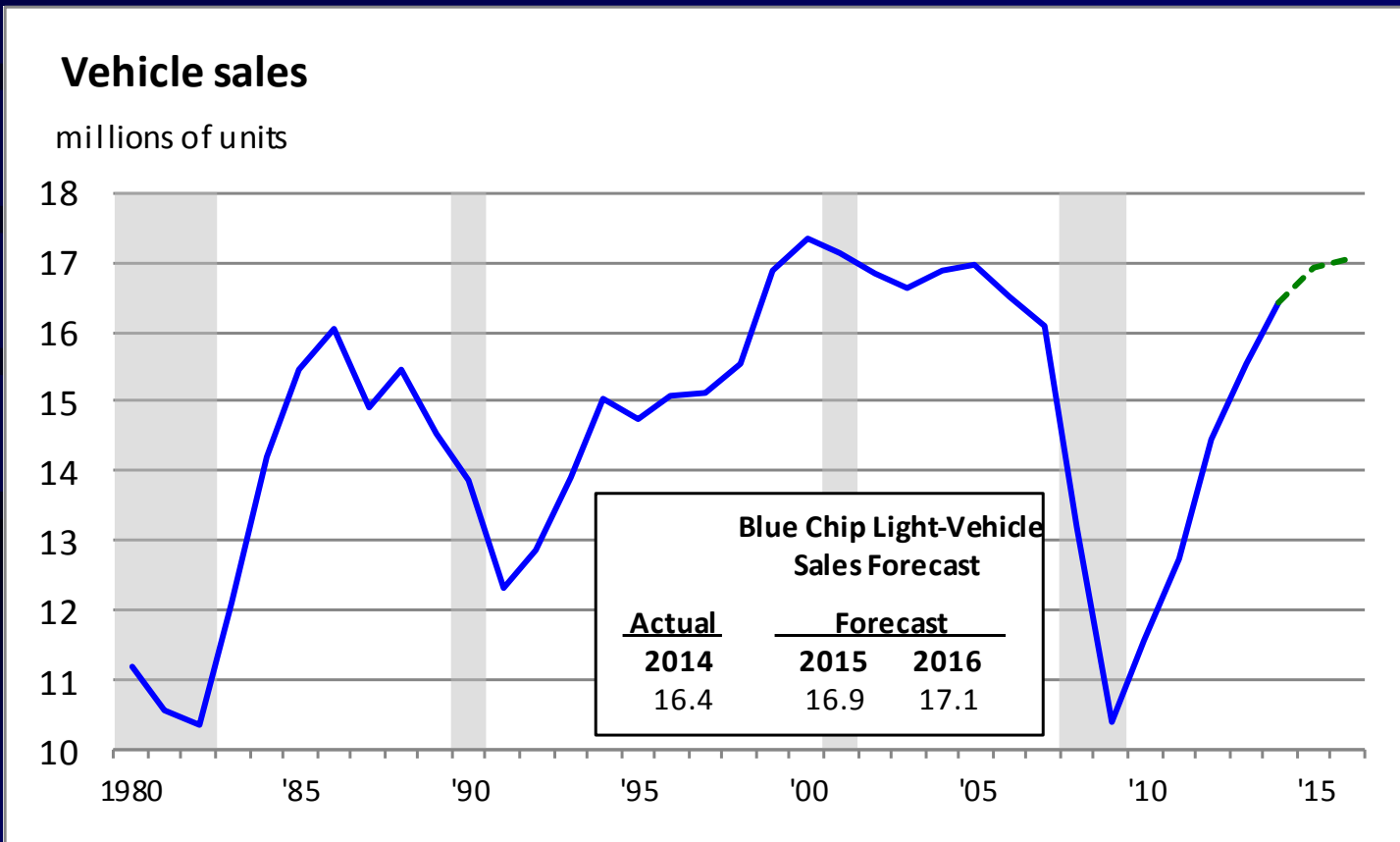
## The “Old” 2015 GMC Sierra



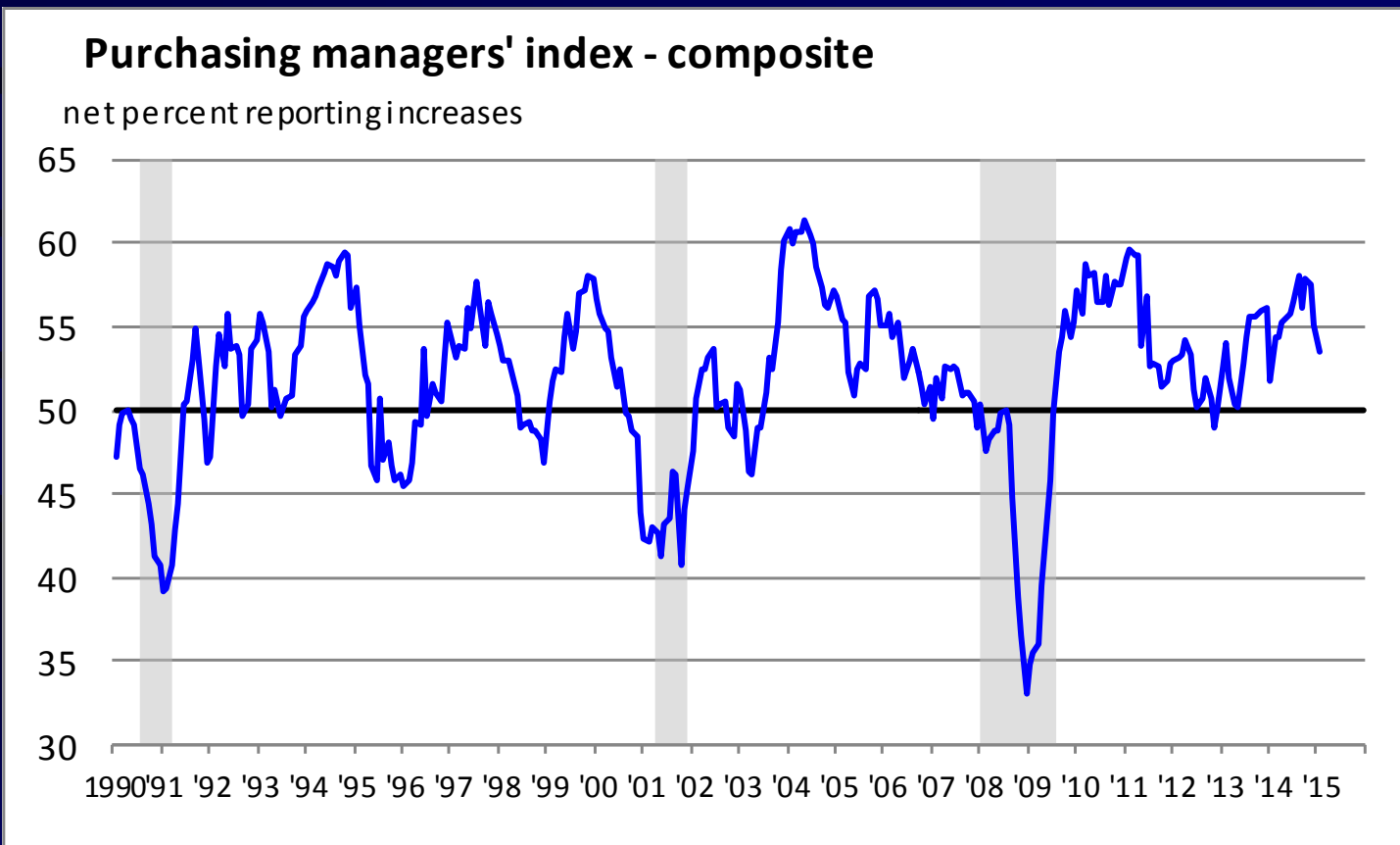
“When redesigning the GMC Sierra, engineers relied on roll-formed steel, the same material found in the hulls of submarines. Big ones.”



# Vehicle sales are forecast to rise around 3% this year and 1% next year



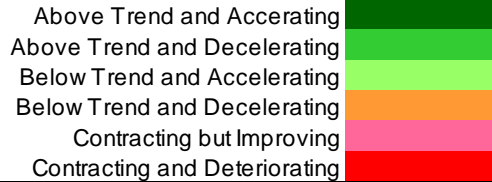
# The purchasing managers' index has moderated over the past few months



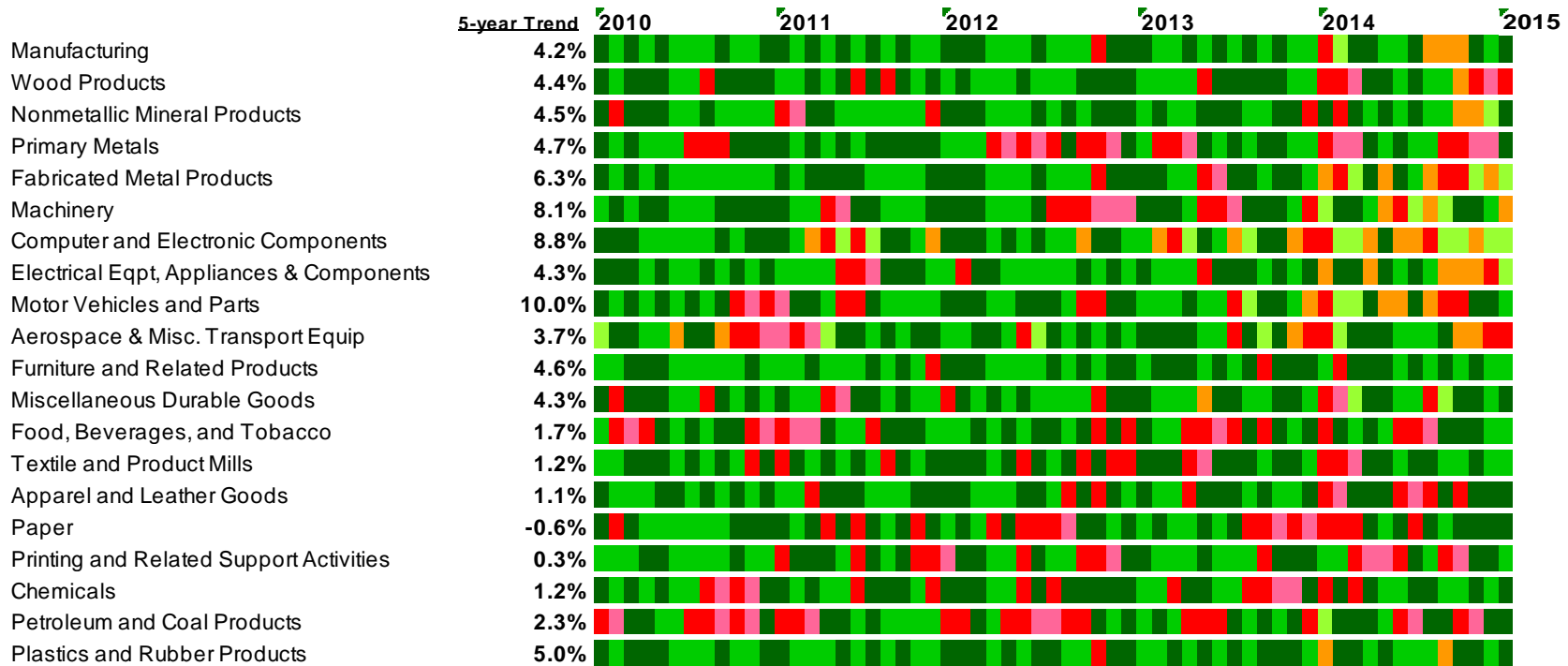


# The industrial sector has performed very well over the past 5 years

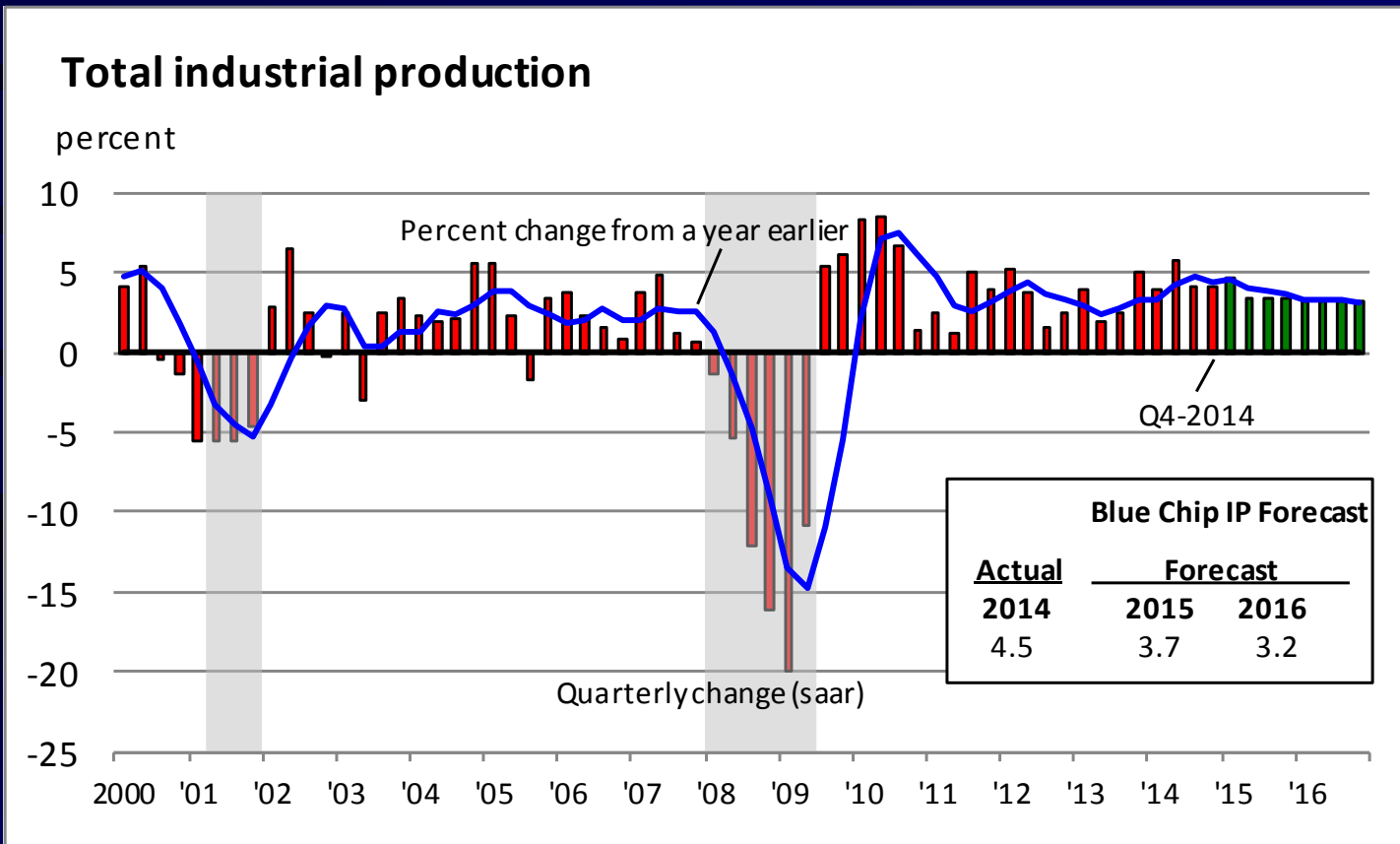
Current 3 Month Moving Average Growth is:



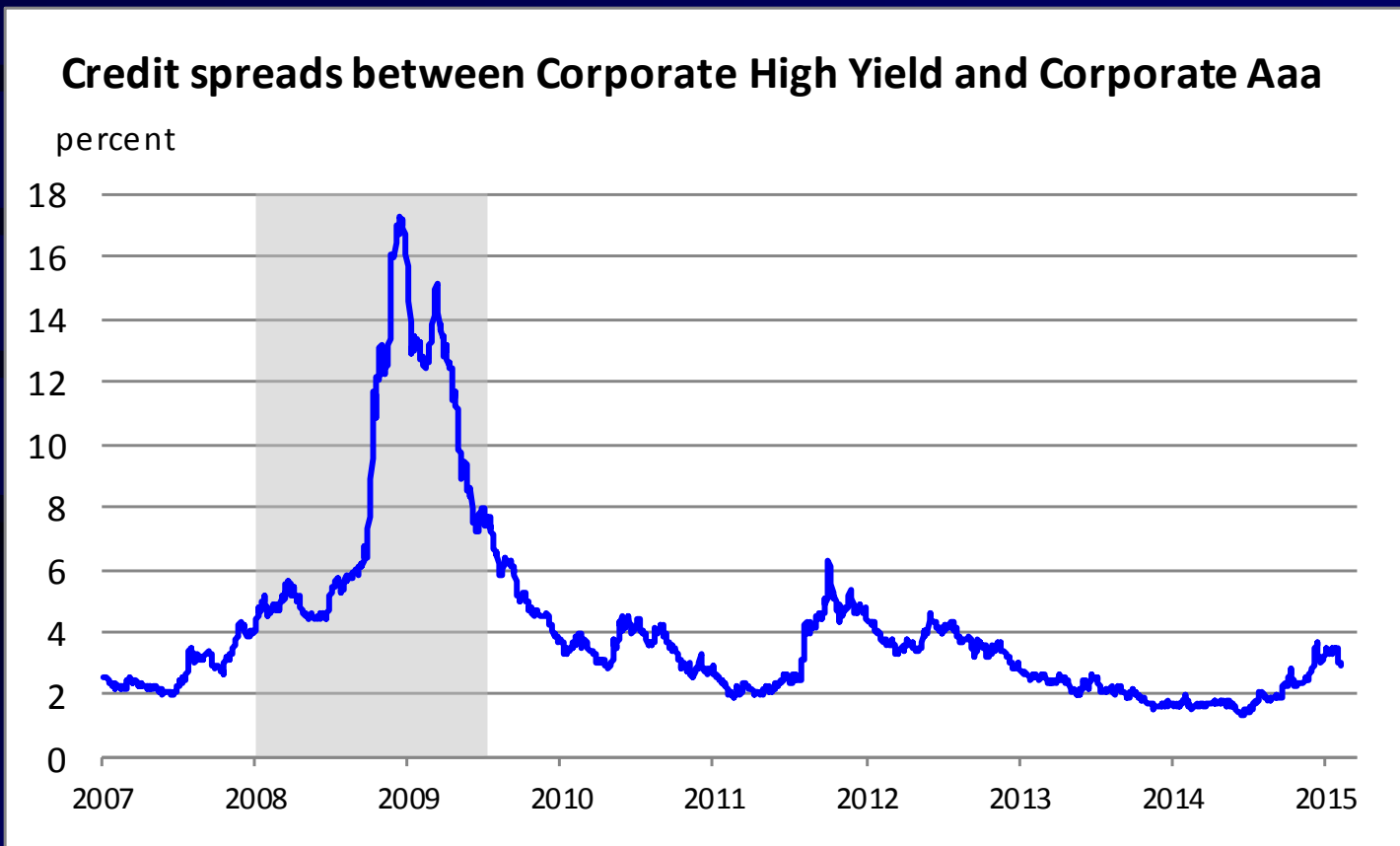
## Manufacturing Industries Activity Chart Growth (3-month moving average) compared with the most recent 5-year trend



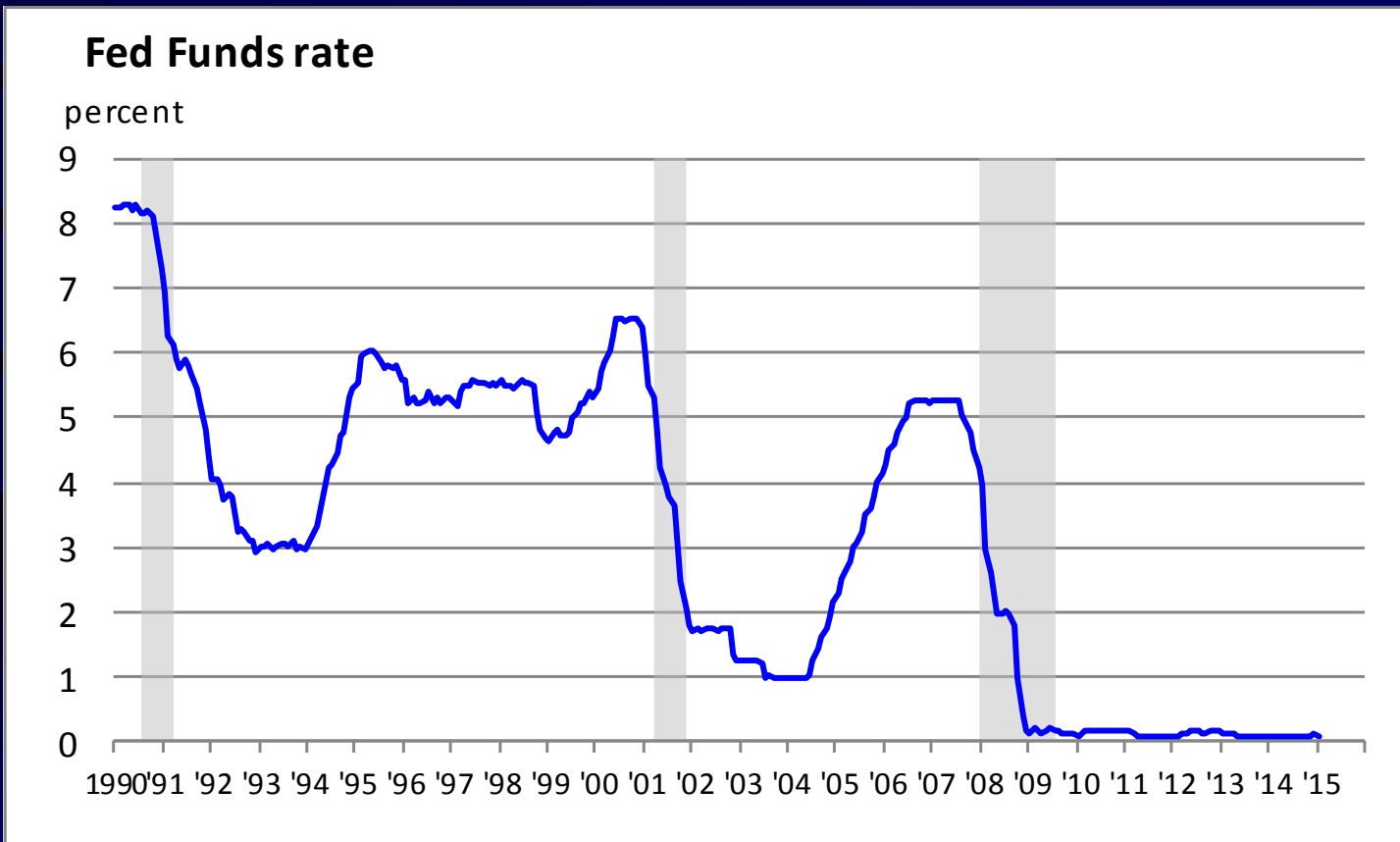
# Industrial production is forecast to rise at a pace above trend in 2015 and 2016



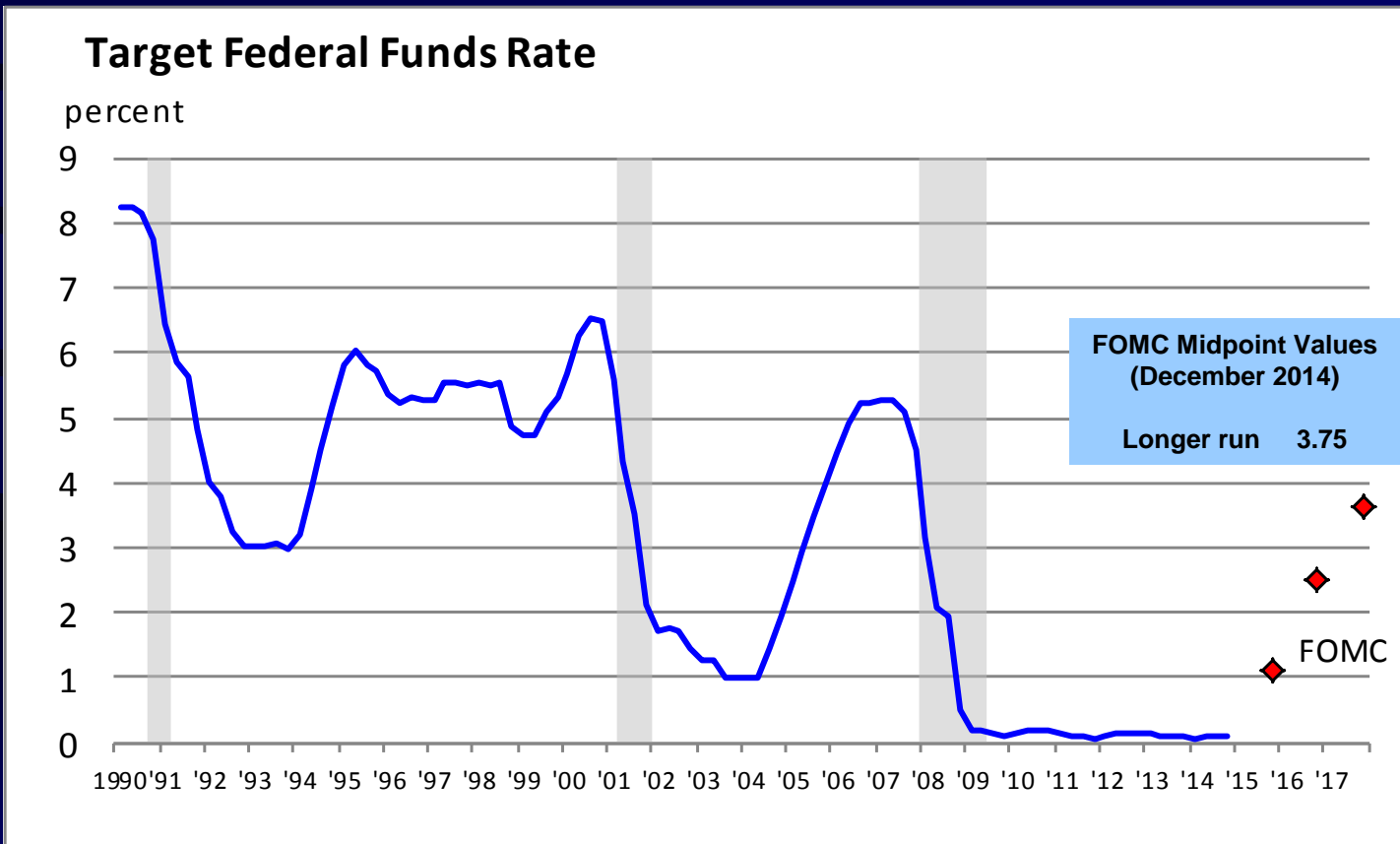
# Credit spreads between Corporate High Yield securities and Corporate Aaa securities have remained low, but has been inching higher since the middle of 2014



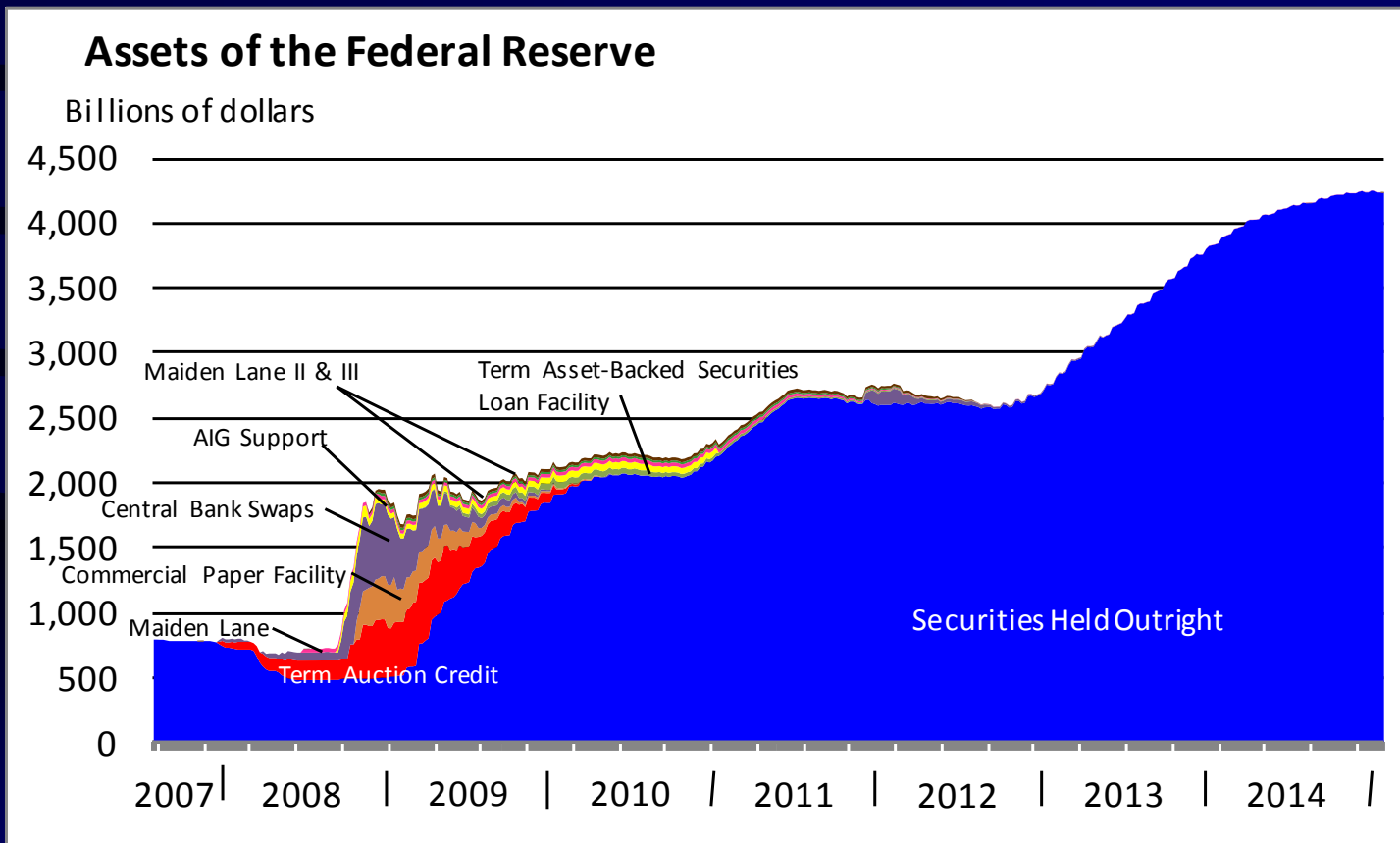
**Monetary policy has been very aggressive,  
keeping the Fed Funds near zero since December 2008**



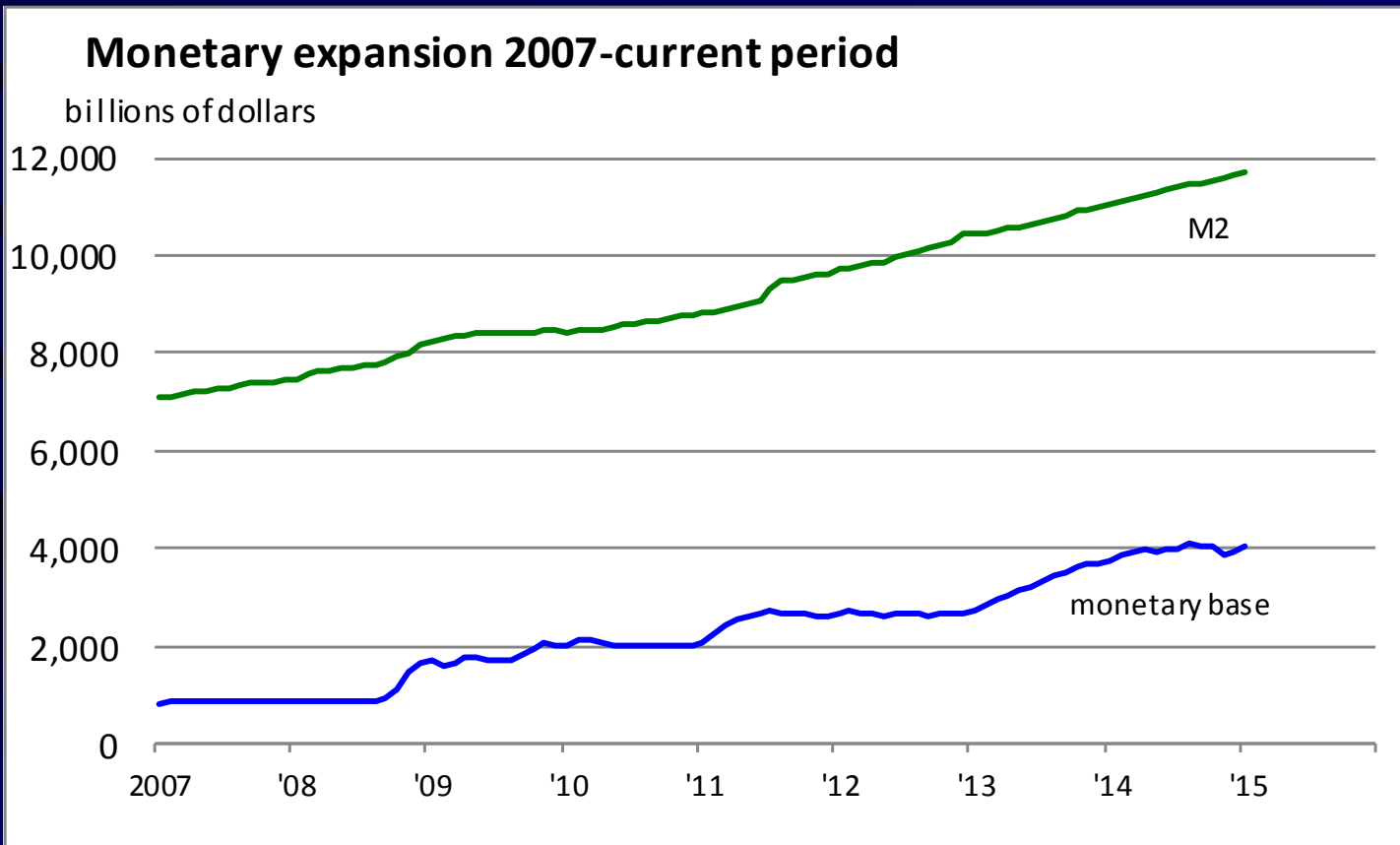
# The Federal Funds Rate is anticipated to return to the neutral rate by the end of 2017



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



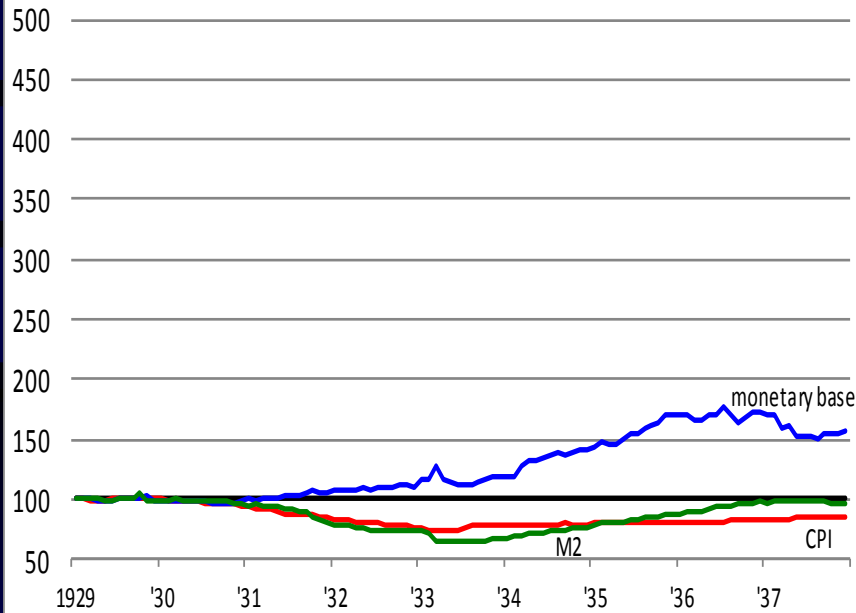
# The money supply (M2) is nearly 3 times bigger than the monetary base



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

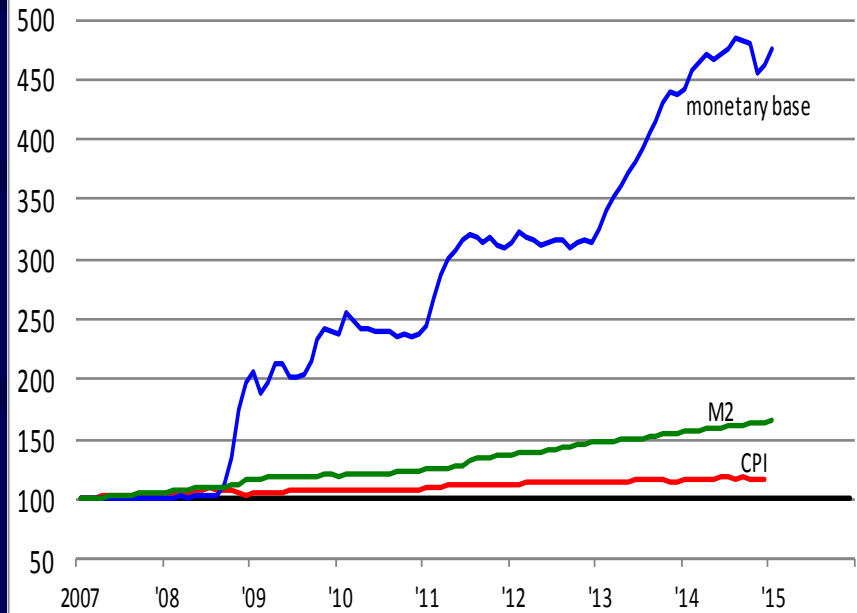
### Monetary expansion 1929-1936

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 somewhat above trend in 2015 and 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
- Growth in manufacturing output should be above trend over the next two years



[www.chicagofed.org](http://www.chicagofed.org)

[www.federalreserve.gov](http://www.federalreserve.gov)

