

BERKS COUNTY ESTATE PLANNING COUNCIL The U.S. Economic Outlook^{*}

September 17th, 2015

FEDERAL RESERVE BANK OF PHILADELPHIA

* The views expressed today are my own and not necessarily those of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

Painting an Economic Picture



Economic Growth Conditions

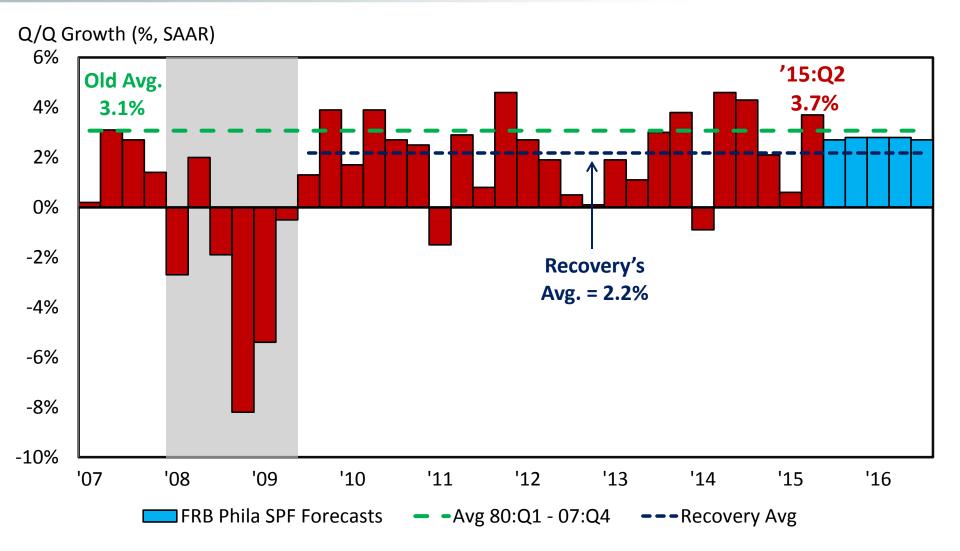
- Nationally
- Regionally
- Labor Market Conditions
 - Nationally
 - Regionally
- Inflationary/Price Conditions
- The Federal Reserve & Current Policy

Painting an Economic Picture

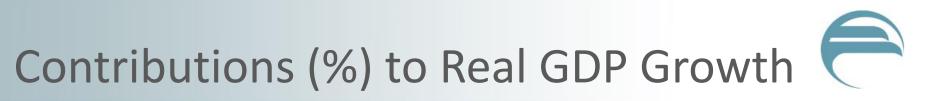
• Economic Growth Conditions

- Nationally \rightarrow Real GDP = C + I + G + (X M)
- Regionally
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- The Federal Reserve & Current Policy



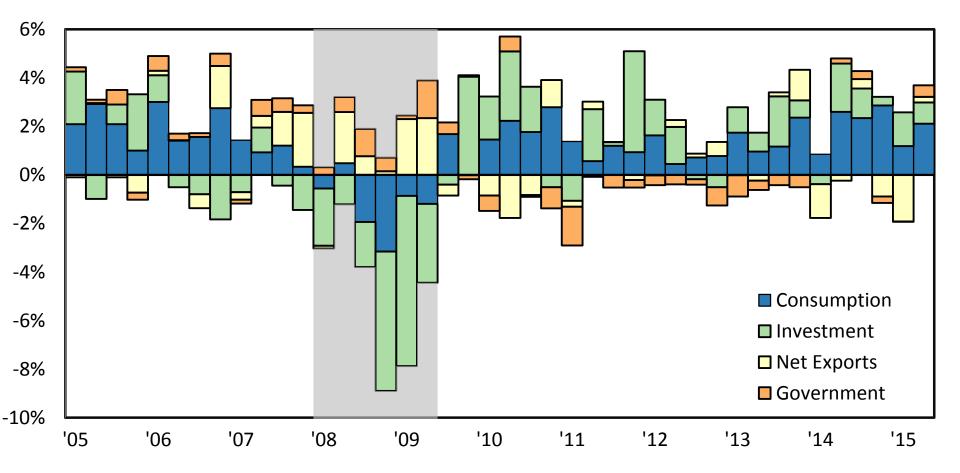


Source: Bureau of Economic Analysis; FRB Phila SPF, via Haver Analytics Last Point Plotted: 2015:Q2 (GDP growth is for second estimate)

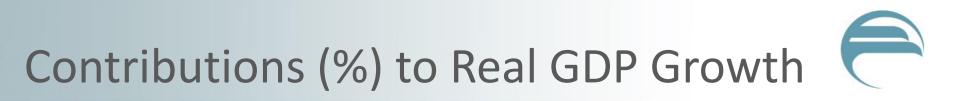


2015-Q2's Real GDP Growth = 3.7%

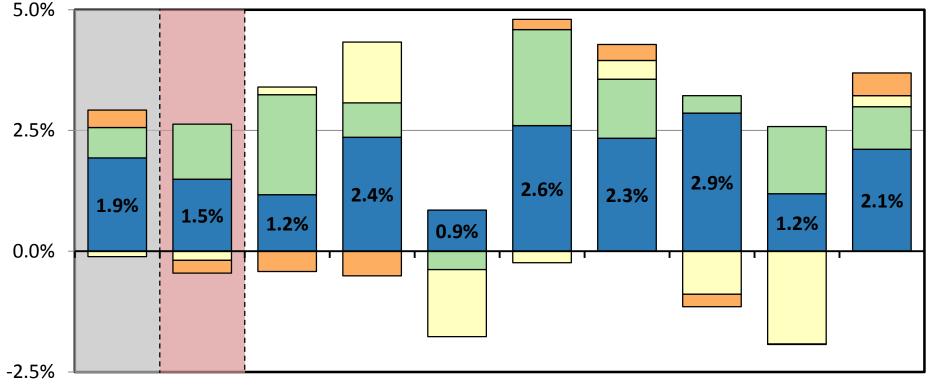
Contributions to Q/Q GDP Growth (%, SAAR)



Source: Bureau of Economic Analysis via Haver Analytics Last Point Plotted: 2015:Q2 (second estimate)

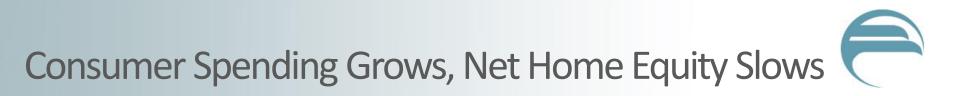


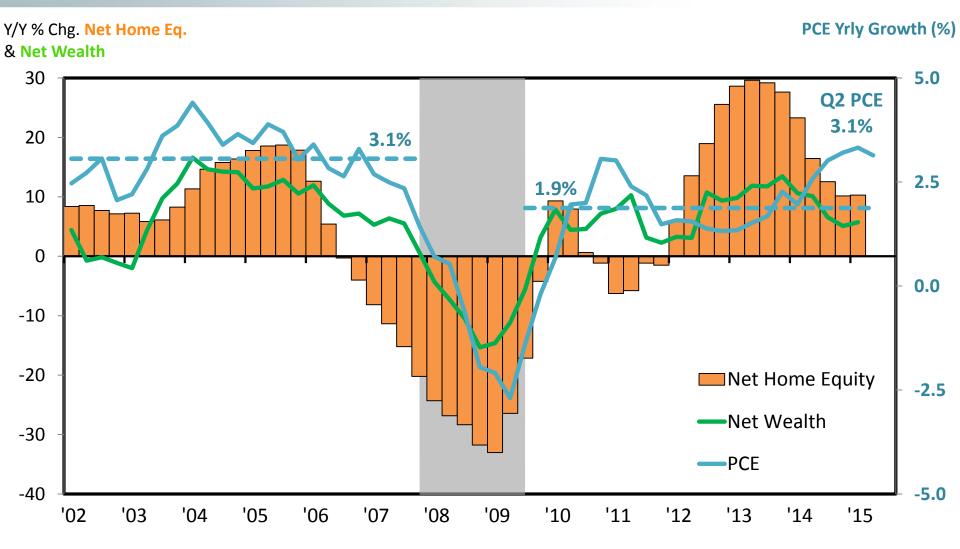
Contributions to Q/Q Real GDP Growth (%, SAAR)



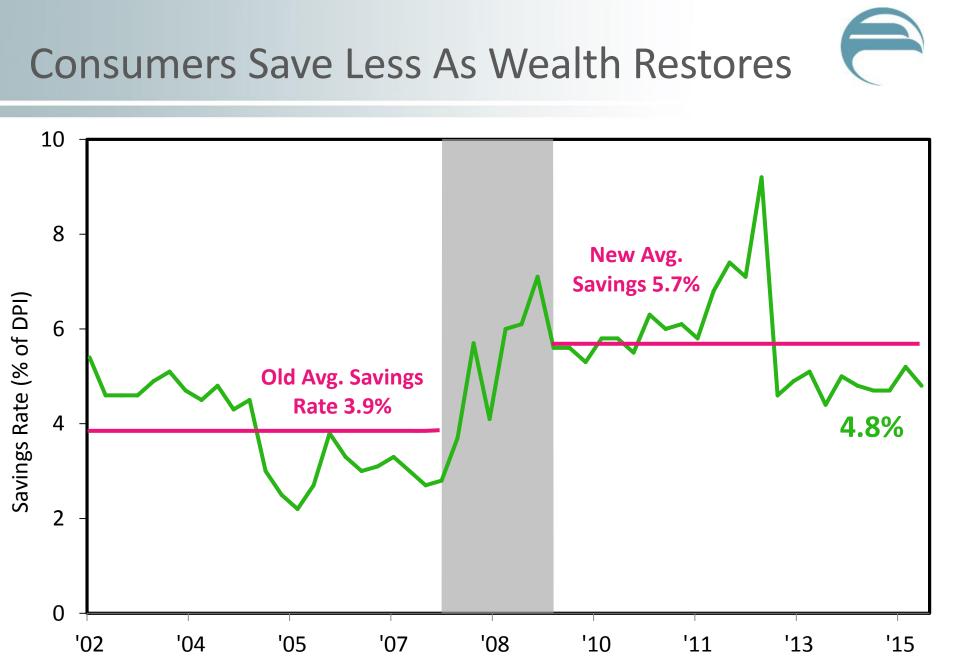
2002-07 Recovery 2013:Q3 2013:Q4 2014:Q1 2014:Q2 2014:Q3 2014:Q4 2015:Q1 2015:Q2 Average Average

■ Consumption ■ Investment ■ Net Exports ■ Government



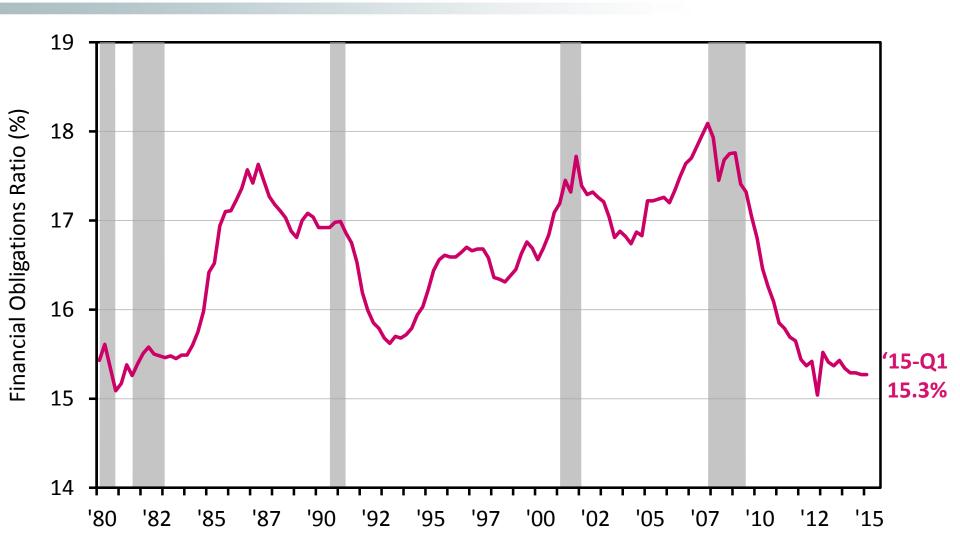


Source: FRB Flow of Funds Report & Bureau of Economic Analysis via Haver Analytics Last Point Plotted: Net Wealth & Net Home Equity – 2015:Q1; PCE data – 2015:Q2



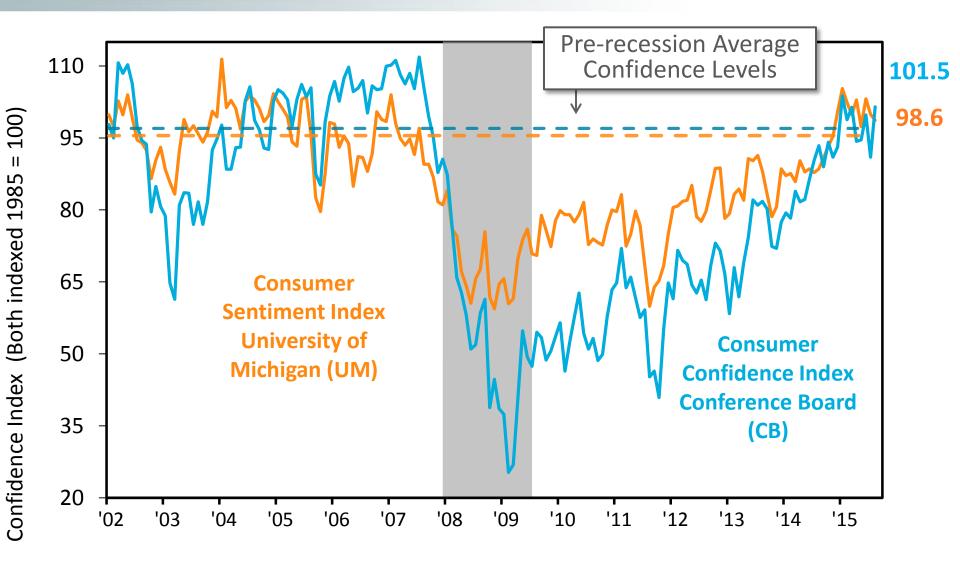
Source: Bureau of Economic Analysis via Haver Analytics Last Point Plotted: 2015:Q2

Households' Financial Obligations Ratio Low



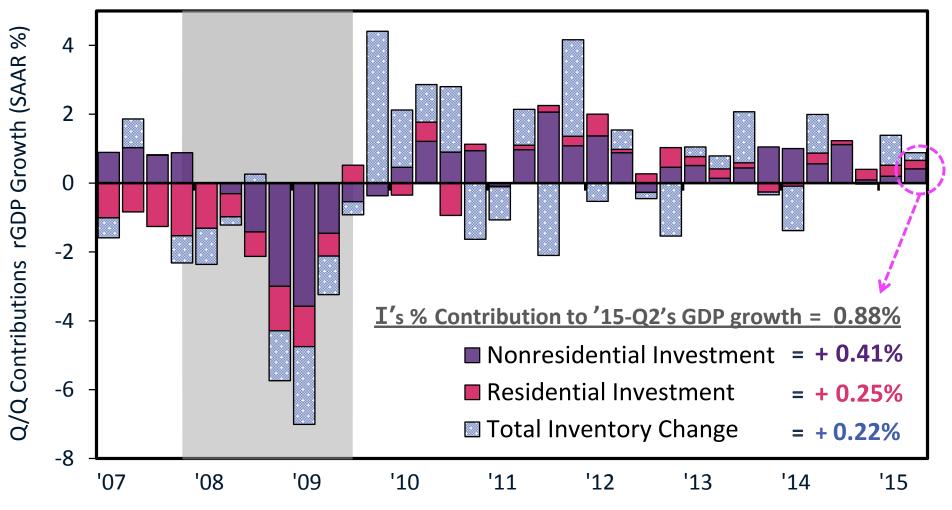
Source: Bureau of Economic Analysis via Haver Analytics Last Point Plotted: 2015:Q1

Consumer Confidence Returning...



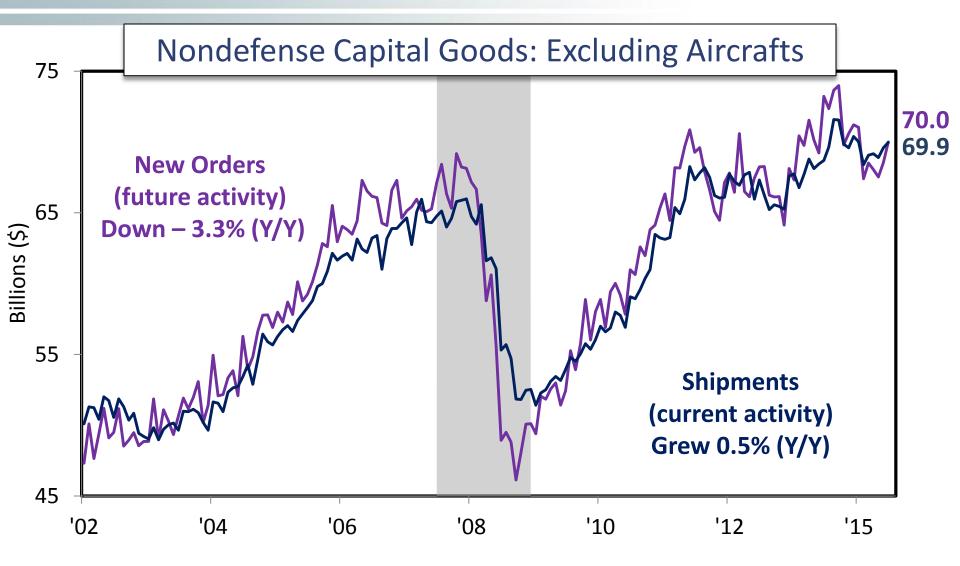
Source: Conference Board, University of Michigan, Haver Analytics & author's own index calculations Last point plotted: August 2015 www.philadelphiafed.org

Investment's Contribution to Growth



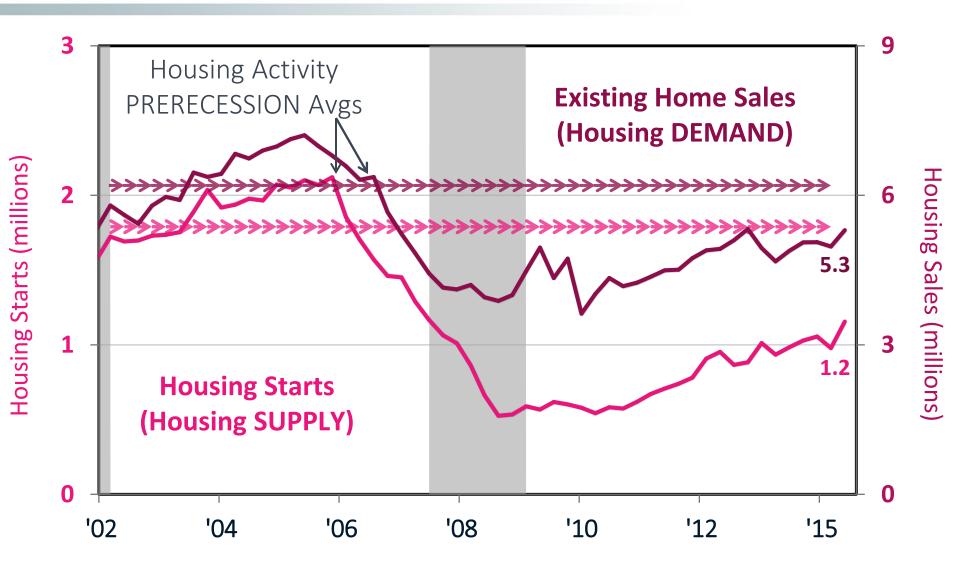
Source: Bureau of Economic Analysis via Haver Analytics Last Point Plotted: 2015:Q2 (second estimate)

U.S. Manufacturing Activity Rebounds

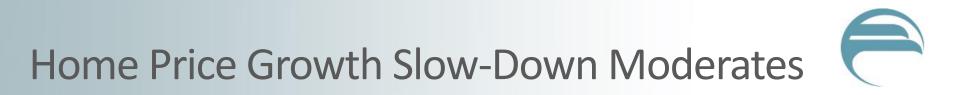


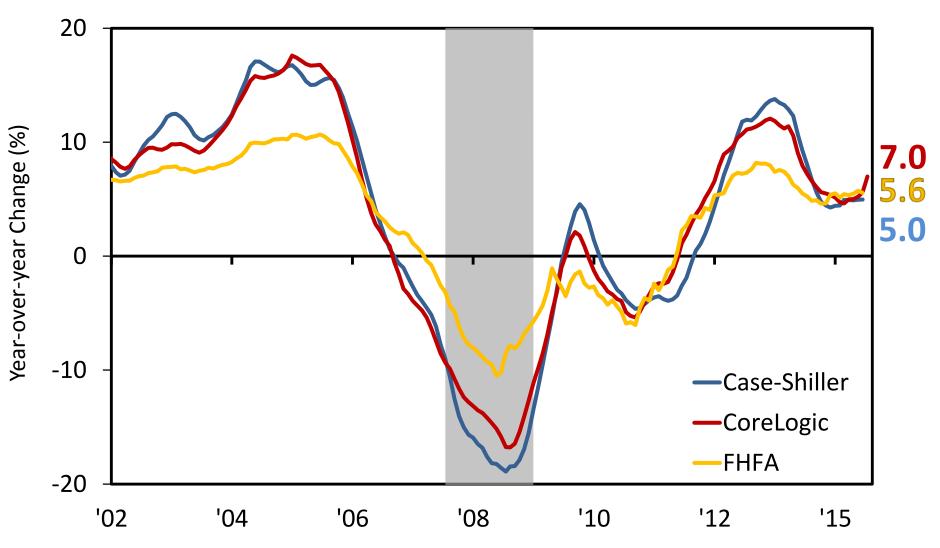
Source: Census Bureau via Haver Analytics Last Point Plotted: July 2015

U.S. Housing Activity Remains Sluggish 🧲



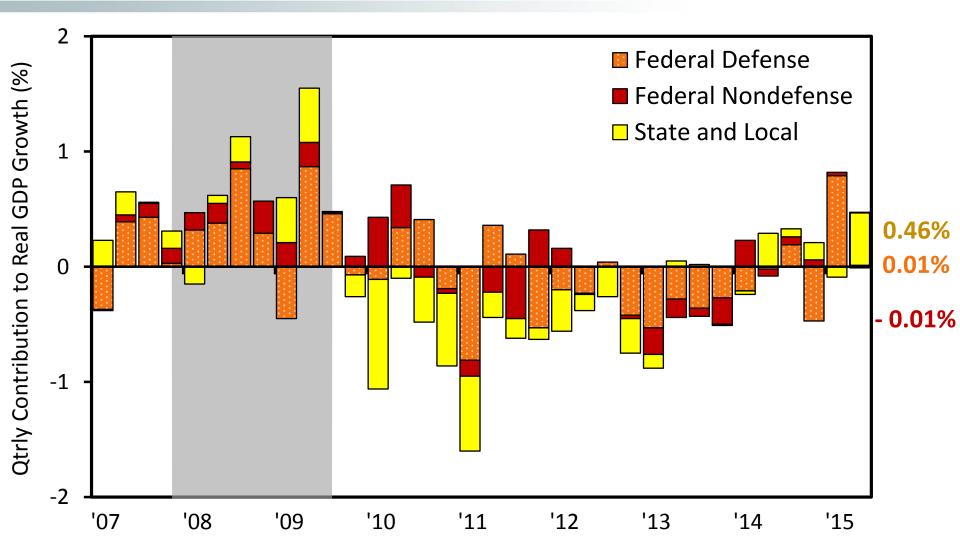
Source: National Association of REALTORS, Census Bureau via Haver Analytics Last Point Plotted: 2015:Q2





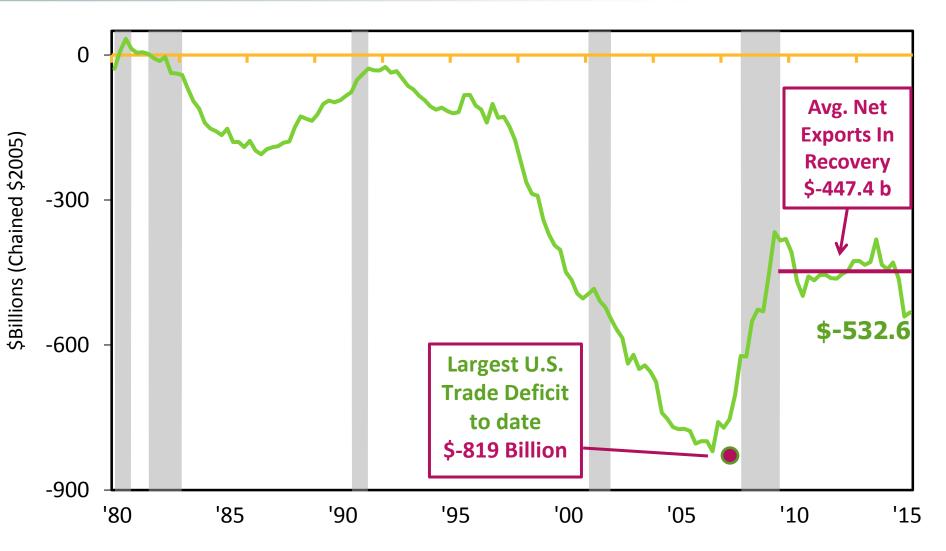
Source: Standard & Poors, CoreLogic, FHFA via Haver Analytics Last Point Plotted: CoreLogic – July 2015; FHFA & Case-Shiller – June 2015

Government Spending's Contribution



Source: Bureau of Economic Analysis via Haver Analytics Last Point Plotted: 2015:Q2 (second estimate)

Net Exports (\$ in U.S. Trade Deficit)



Source: Bureau of Economic Analysis via Haver Analytics Last Point Plotted: 2015:Q2

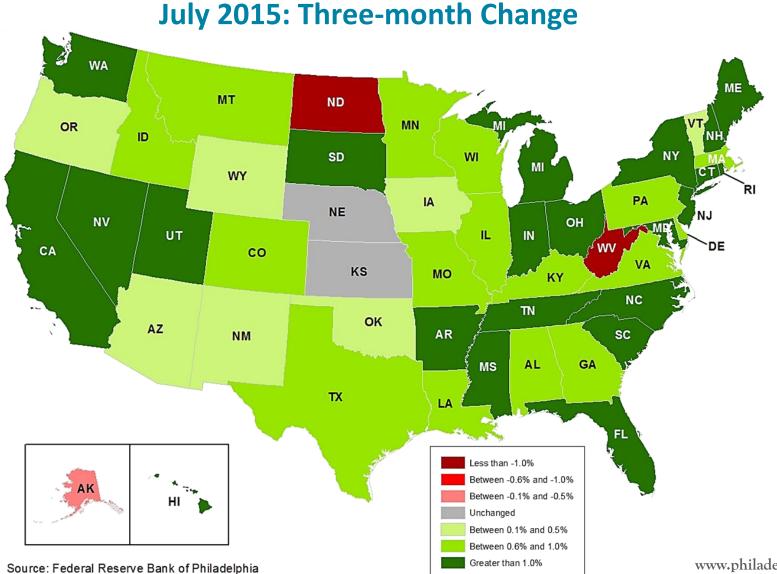
Painting an Economic Picture



Economic Growth Conditions

- Nationally
- − Regionally → Phila Fed: Eastern PA, South NJ, DE
- Labor Market Conditions
 - Nationally
 - Regionally
- Inflationary/Price Conditions
- The Federal Reserve & Current Policy

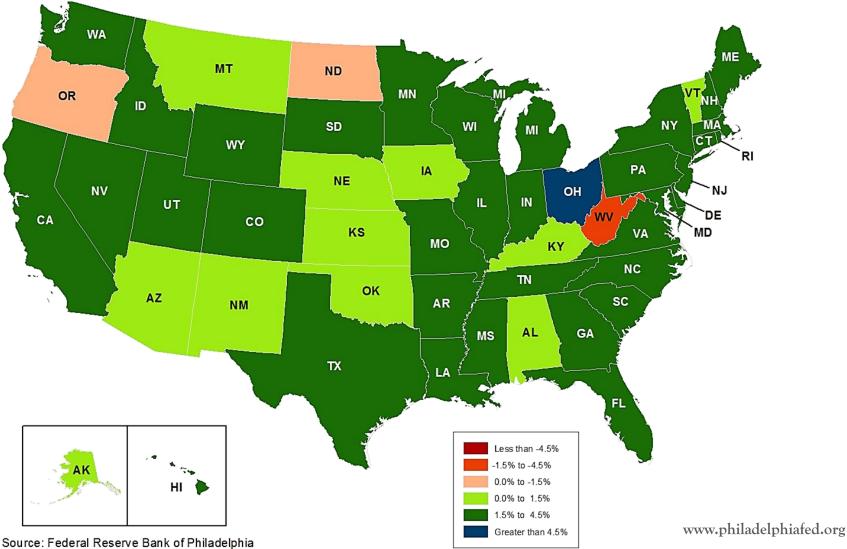




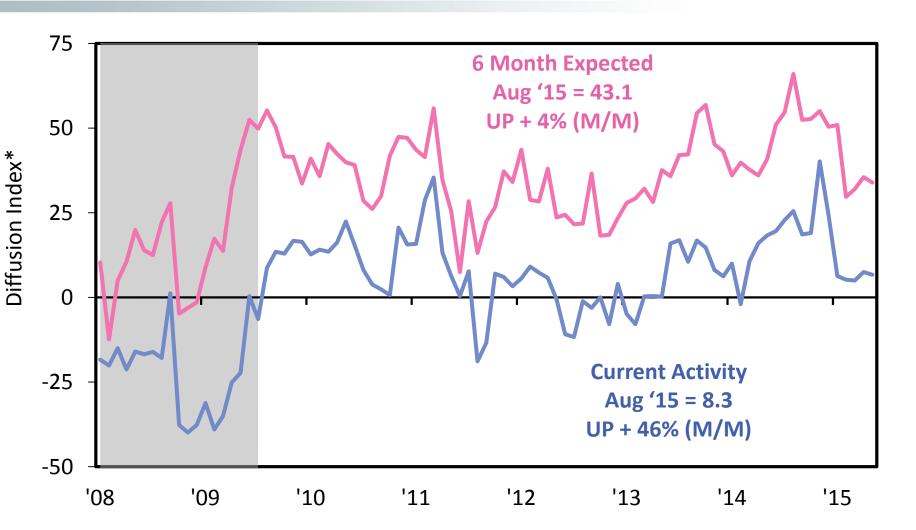


Philadelphia Fed's State Leading Index



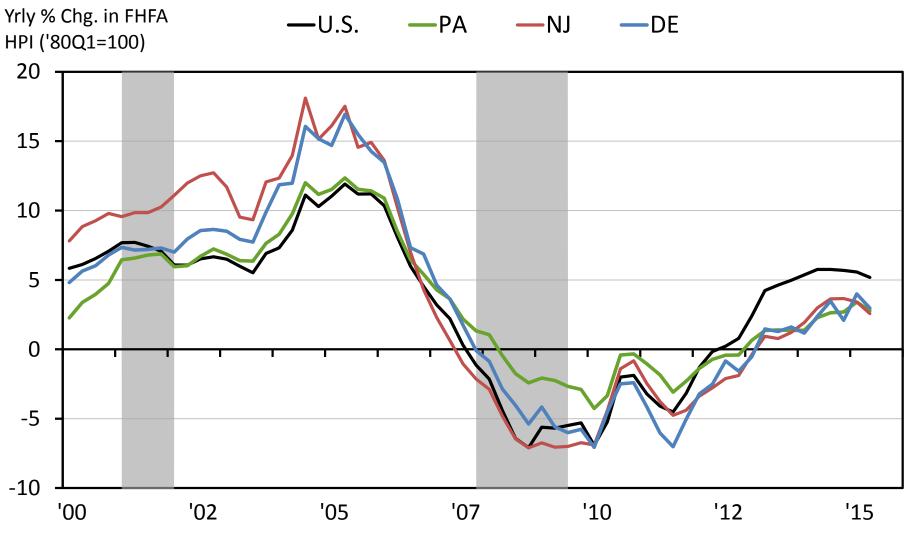


Regional Manufacturing Activity (BOS)



*<u>DIFFUSION INDEX</u> – *percentage of respondents indicating an increase less those indicating a decrease.* Source: Business Outlook Survey – Federal Reserve Bank of Philadelphia via Haver Analytics Last Point Plotted: August 2015

Regional Home Price Growth (%)



Source: Federal Home Financing Agency (FHFA) via Haver Analytics Last Point Plotted: 2015Q2

Painting an Economic Picture

Economic Growth Conditions

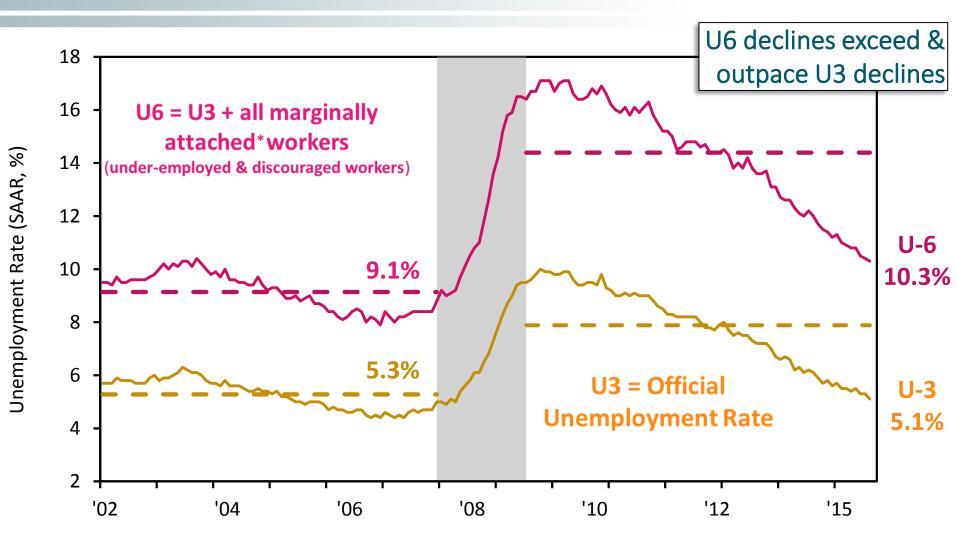
- Nationally
- Regionally

Labor Market Conditions

- Nationally
- Regionally

- Unemployment
- Job Growth
 - Over Great Recession
- Inflationary/Price Conditions
- The Federal Reserve's Role & Current Policy

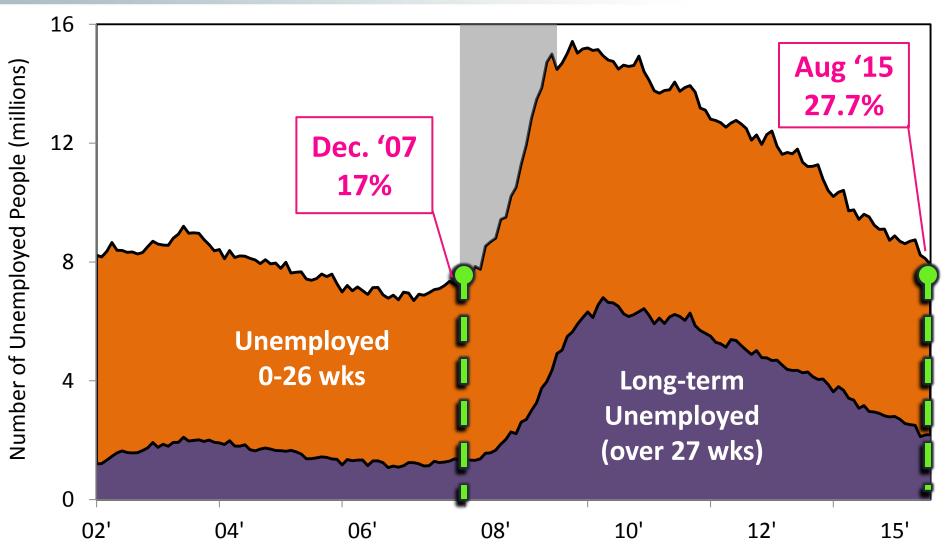
U.S. Unemployment Rates Decline...



Source: Bureau of Labor Statistics via Haver Analytics; Last Point Plotted: August 2015

*<u>MARGINALLY ATTACHED</u> - persons currently are not working nor looking for work but indicate that they want and are available for a job and have looked in the past 12 months. (i) <u>DISCOURAGED WORKERS</u> – A subset of *marginally attached*, are given a job-market related reason for not currently looking for work. (ii) <u>PERSONS EMPLOYED PART TIME FOR ECONOMIC REASONS</u> are those who want and are available for full-time work but have had to settle for a part-time schedule.

Long-Term Unemployment Remains High



Source: Bureau of Labor Statistics via Haver Analytics Last Point Plotted: August 2015



Nonfarm Payroll Jobs (000s, SA)

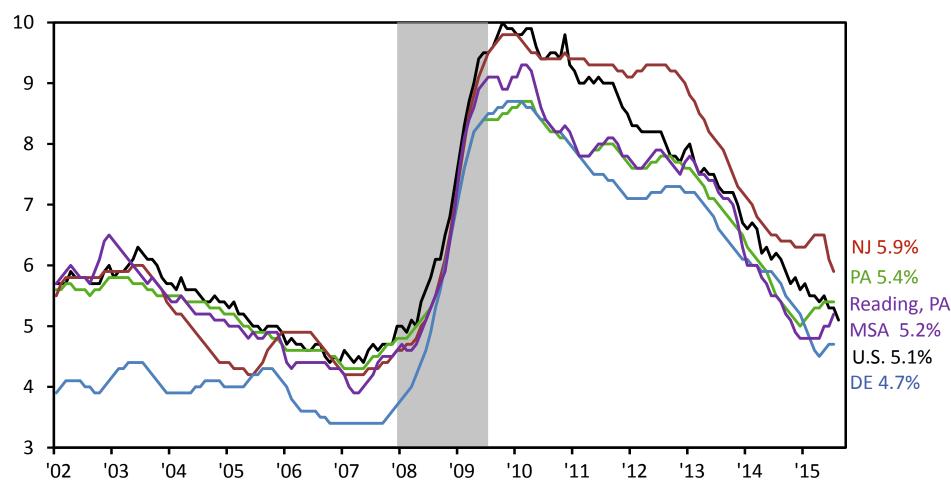
500 400 300 200 100 0 -100 -200 2011 2011 2012 2013 2014 2015 Avg = 173.3 Avg = 173.3 Avg = 259.7 Avg = 212.0 Avg = 188.1 Avg = 199.0

Source: Bureau of Labor Statistics via Haver Analytics Black lines denote each year's average monthly change Last month plotted: Aug 2015 Aug 2015: 173



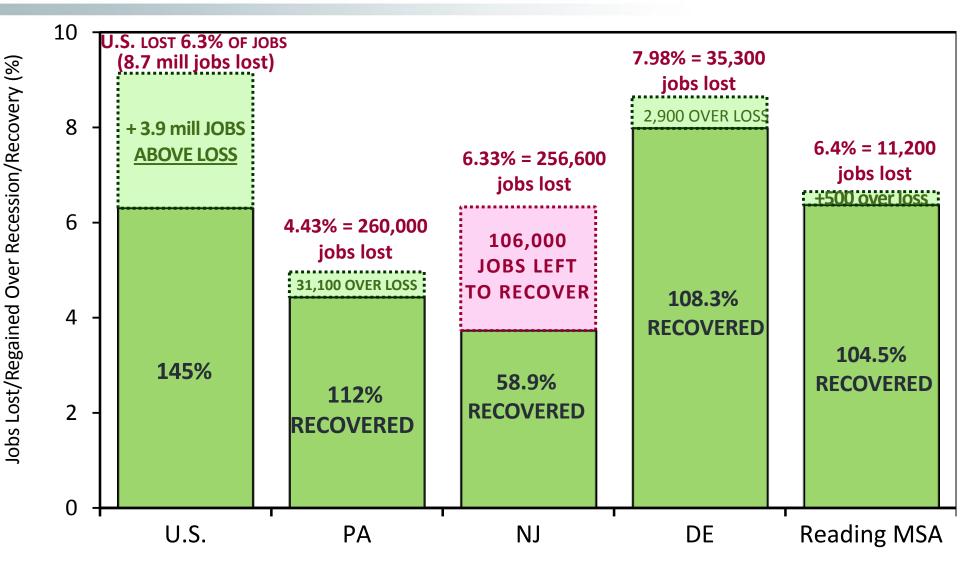
National & Regional Unemployment

Unemployment Rate (%)



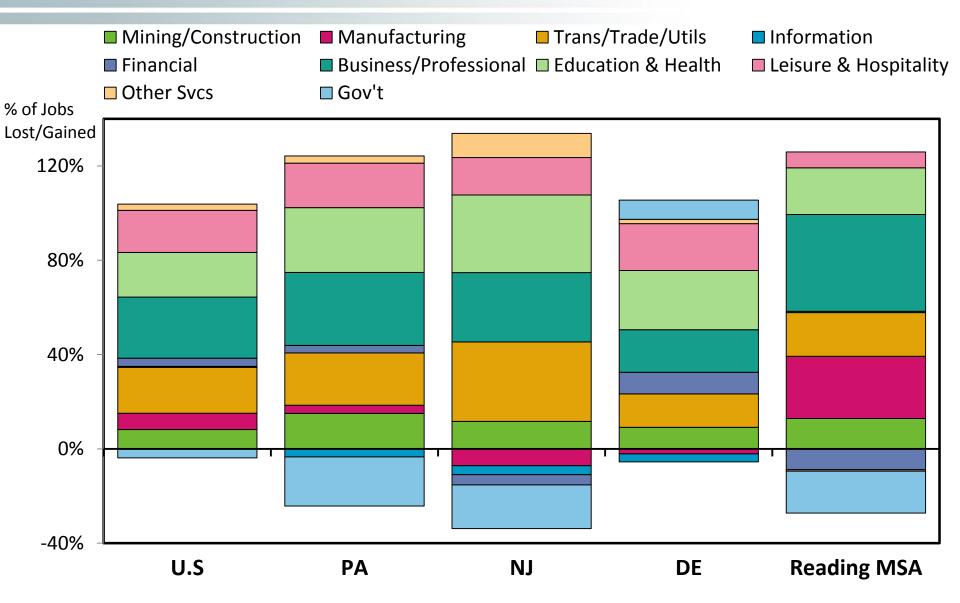
Source: Bureau of Labor Statistics via Haver Analytics Last Point Plotted: U.S. – August 2015; 3-states & Reading MSA – July 2015

Jobs Lost/Regained Over Recession



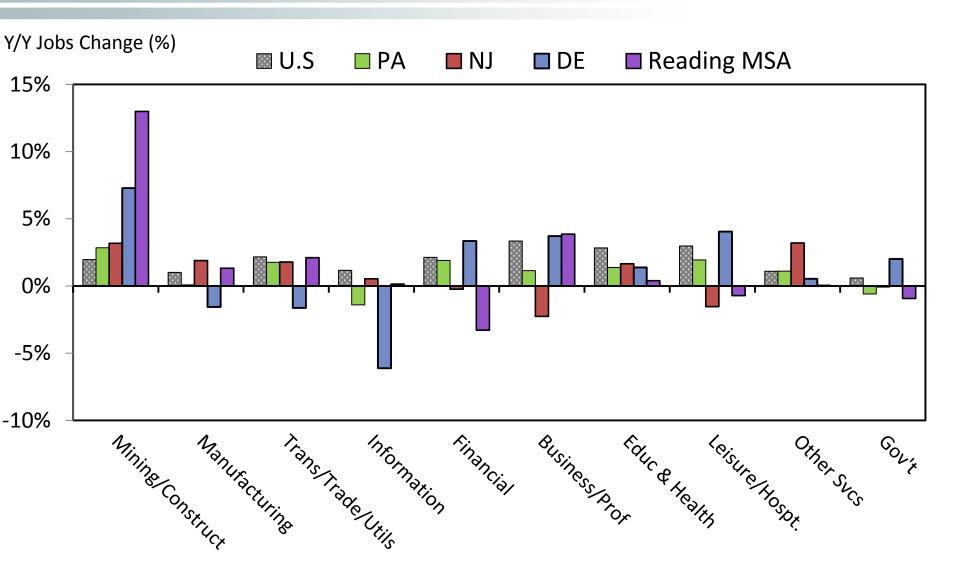
Source: Bureau of Labor Statistics & FRB Philadelphia via Haver Analytics Last Point Plotted: Calculated % changes from 2/10 to 8/15 (U.S.) & July 2015 (3 States/MSA)

Of Jobs Recovered, What Industry Were They In?



<u>Source</u>: BLS & Haver Analytics. <u>DATA</u>: % Changes from 2/2010 to 8/2015 (U.S.) & 7/2015 (Others)

Yearly Job Sector Growth Comparisons



Source: BLS & Haver Analytics Last Point Plotted: U.S. – Aug 2015; PA, NJ, & DE & Regional MSA July 2015

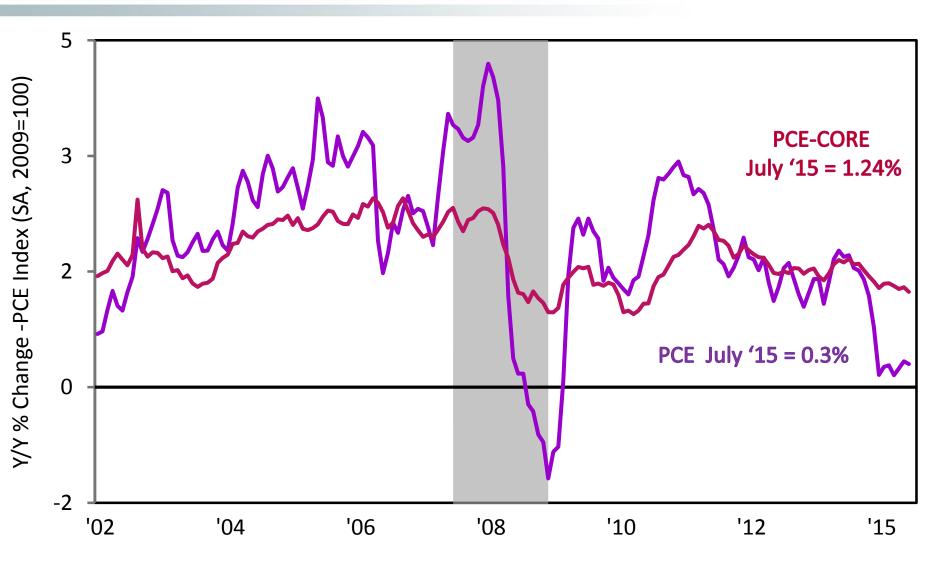
Painting an Economic Picture

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- Economic Growth Conditions
 - Nationally
 - Regionally
- Labor Market Conditions
 - Nationally
 - Regionally

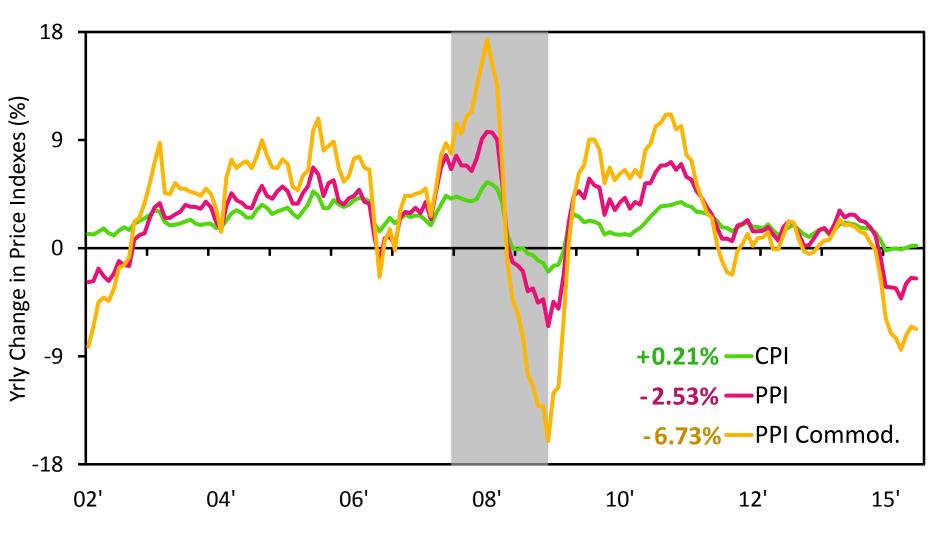
- PCE, CPI, PPI Inflation
- Inflationary/Price Conditions
 - Expected Inflation
 - Wage Inflation
- The Federal Reserve & Current Policy

PCE & PCE-Core Estimated Inflation



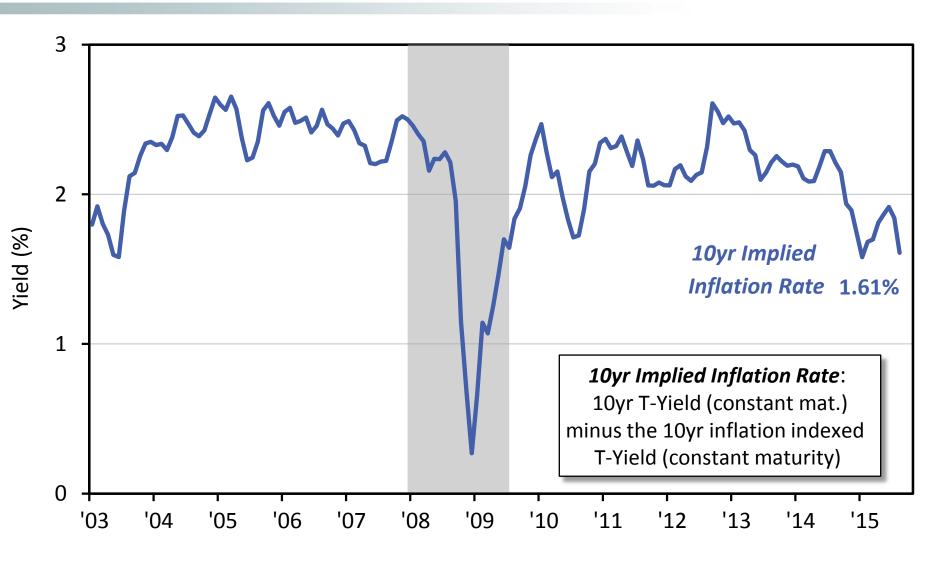
Source: Bureau of Economic Analysis via Haver Analytics Last Point Plotted: July 2015





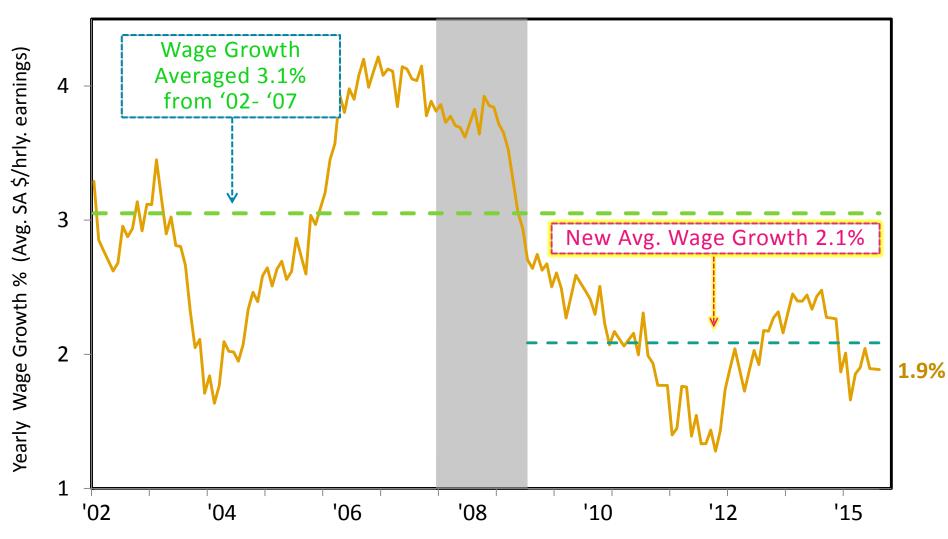
Source: Bureau of Labor Statistics via Haver Analytics Last Point Plotted: July 2015





Source: Haver Analytics Using Treasury Constant Maturity Yields Last Point Plotted: August 2015





Source: Bureau of Labor Statistics (BLS) via Haver Analytics Last Point Plotted: August 2015 (Avg Hrly Wages of Production/Nonsupervisory Employees)

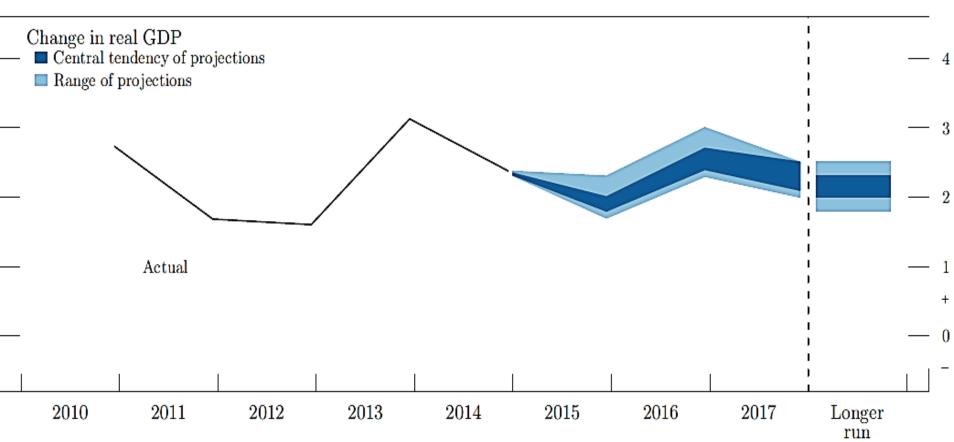
Painting an Economic Picture



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 → FOMC Forecasts

Real GDP Growth Projections

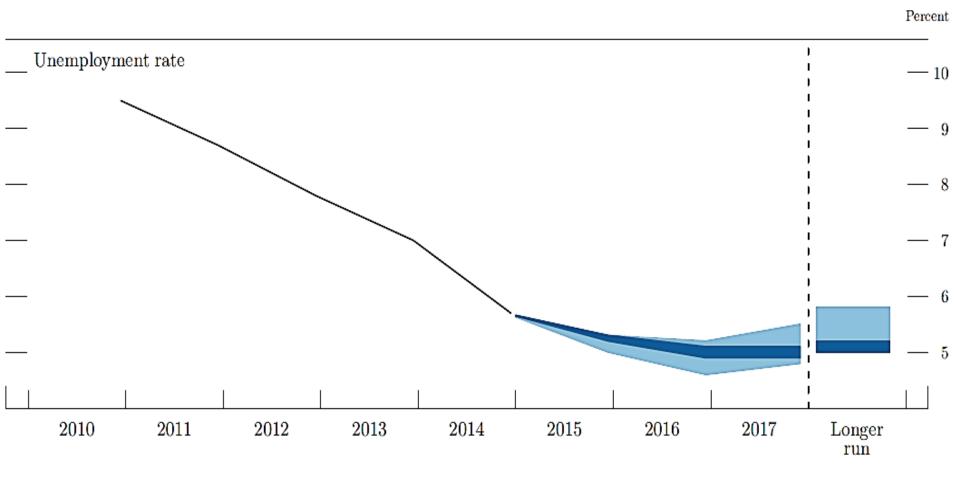


Source: Federal Open Market Committee (FOMC), Economic Projections from June 17, 2015 Figure 1. Central Tendencies & Ranges of Economics Projections

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Percent

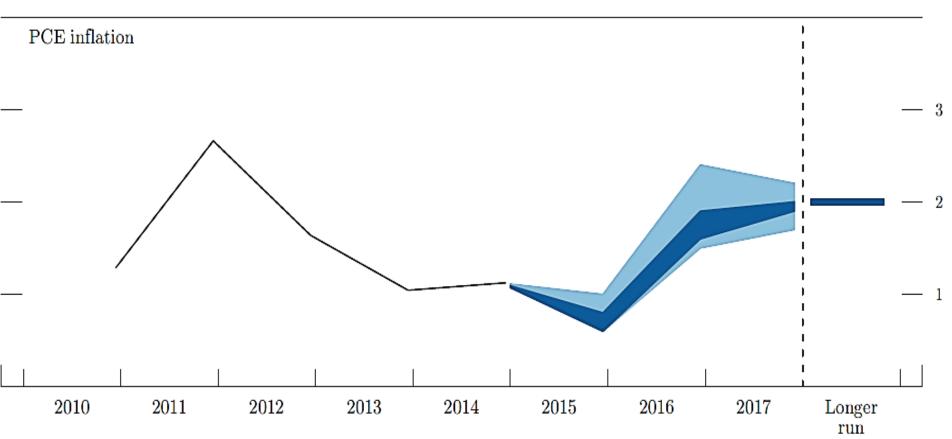




Source: Federal Open Market Committee (FOMC), Economic Projections from June 17, 2015 Figure 1. Central Tendencies & Ranges of Economics Projections

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PCE Inflation Rate Projections

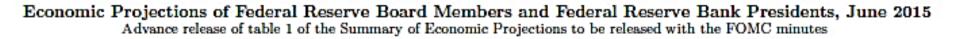


Source: Federal Open Market Committee (FOMC), Economic Projections from June 17, 2015 Figure 1. Central Tendencies & Ranges of Economics Projections

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Percent

Summary of FOMC's 6/2015 Forecasts



Percent

Variable	Central tendency ¹				Range ²			
	2015	2016	2017	Longer run	2015	2016	2017	Longer run
Change in real GDP	1.8 to 2.0	2.4 to 2.7	2.1 to 2.5	2.0 to 2.3	1.7 to 2.3	2.3 to 3.0	2.0 to 2.5	1.8 to 2.5
March projection	2.3 to 2.7	2.3 to 2.7	2.0 to 2.4	2.0 to 2.3	2.1 to 3.1	2.2 to 3.0	1.8 to 2.5	1.8 to 2.5
Unemployment rate					5.0 to 5.3		4.8 to 5.5	
March projection	5.0 to 5.2	4.9 to 5.1	4.8 to 5.1	5.0 to 5.2	4.8 to 5.3	4.5 to 5.2	4.8 to 5.5	4.9 to 5.8
PCE inflation	0.6 to 0.8	1.6 to 1.9	1.9 to 2.0	2.0	0.6 to 1.0	1.5 to 2.4	1.7 to 2.2	2.0
March projection	0.6 to 0.8	1.7 to 1.9	1.9 to 2.0	2.0	0.6 to 1.5	1.6 to 2.4	1.7 to 2.2	2.0
Core PCE inflation ³	1.3 to 1.4	1.6 to 1.9	1.9 to 2.0		1.2 to 1.6	1.5 to 2.4	1.7 to 2.2	
March projection	1.3 to 1.4	1.5 to 1.9	1.8 to 2.0		1.2 to 1.6	1.5 to 2.4	1.7 to 2.2	

NOTE: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are percent changes from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The March projections were made in conjunction with the meeting of the Federal Open Market Committee on March 17–18, 2015.

The central tendency excludes the three highest and three lowest projections for each variable in each year.

2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.

3. Longer-run projections for core PCE inflation are not collected.

Painting an Economic Picture

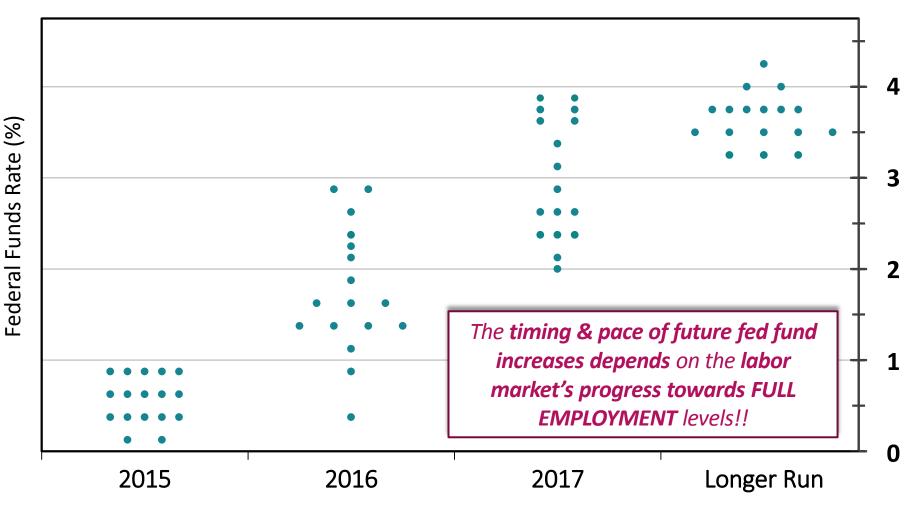


Economic Growth Conditions

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 → Fed Funds Rate & Normalization

FOMC Projections of Appropriate Policy

FIG. 2 - Midpoint of target range or target level for the federal funds rate



<u>Source</u>: Overview of FOMC Participants' Assessments of Appropriate Monetary Policy <u>As of</u>: FOMC's 6/17/2015 Meeting's *Economic Projections*, <u>FIGURE 2</u>: *Appropriate pace of policy firming*

Yellen's Labor Market "Dashboard"

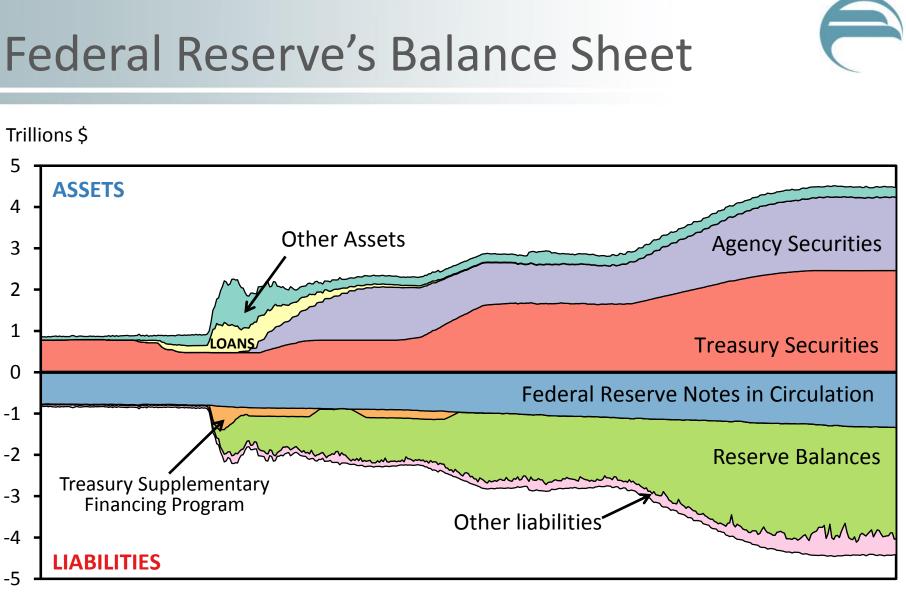


The timing & pace of future federal funds rate increases depend on the labor market's progress towards a full recovery from recessionary impacts (*presence of labor slack means the mkt. has NOT recovered yet*).

Chair Yellen identified numerous factors that are *complicating analysis of labor market slack*; estimate slack by analyzing 6 indicators:

- **1. Labor Force Participation Rate**
- 2. Part-time employment "for economic reasons" (U_{LONG-TERM})
- 3. Labor market flows (i.e. pace of hires & quits)
- 4. Aging of the workforce & other demographic trends
- 5. "Polarization" of jobs at high & low ends of pay & skill spectrums
- 6. Changes in labor compensation (nominal/real wage changes)

<u>Source</u>: "Labor Market Dynamics and Monetary Policy." Janet L. Yellen. Remarks at the Federal Reserve Bank of Kansas City Economic Symposium. Jackson Hole, WY. August 22, 2014.



1/07 7/07 1/08 7/08 1/09 7/09 1/10 7/10 1/11 7/11 1/12 7/12 1/13 7/13 1/14 7/14 1/15 7/15

Source: Federal Reserve Board Table H.41 Last Point Plotted: Week of September 2nd, 2015

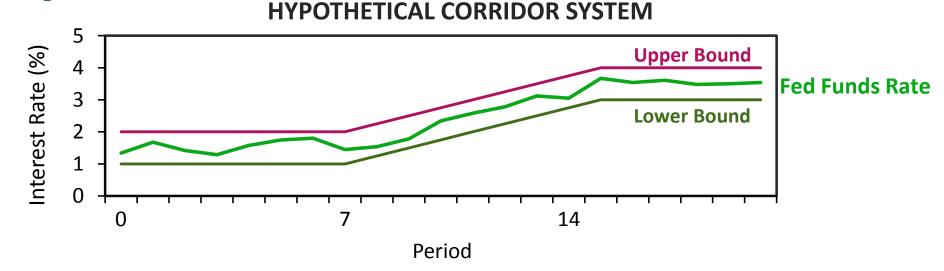
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NEW [Potential] Monetary Policy Tools?

Suggested tools involve using a "corridor system," where the federal funds rate is targeted between upper-& lower-bound - set by other rates - such as:

- 1. The RATE OF INTEREST ON EXCESS RESERVES (IOER)
- 2. The FIXED-RATE OVERNIGHT REVERSE REPURCHASE FACILITY (ON RRP)

At the July 2014 FOMC meeting "[m]ost participants anticipated that, at least initially, the IOER rate would be set at the top of the target range for the federal funds rate and the ON RRP rate would be set at the bottom of the federal funds rate range."



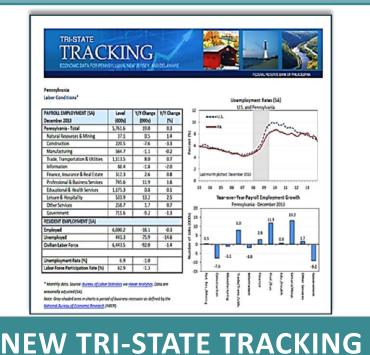
Source: FOMC Minutes from July 30th, 2014 Meeting, Produced by: Luke A. Tilley

Questions?



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Request a Fed Speaker: http://philadelphiafed.org/sbform





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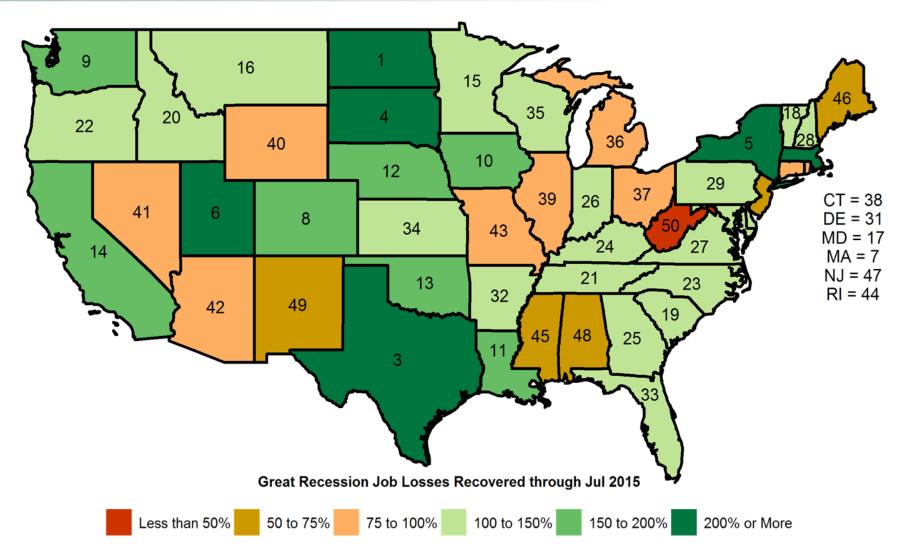
APPENDIX



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EMPLOYMENT RECOVERY IN THE STATES

State Labels Are Rankings Out of 50 (1 = most jobs recovered)

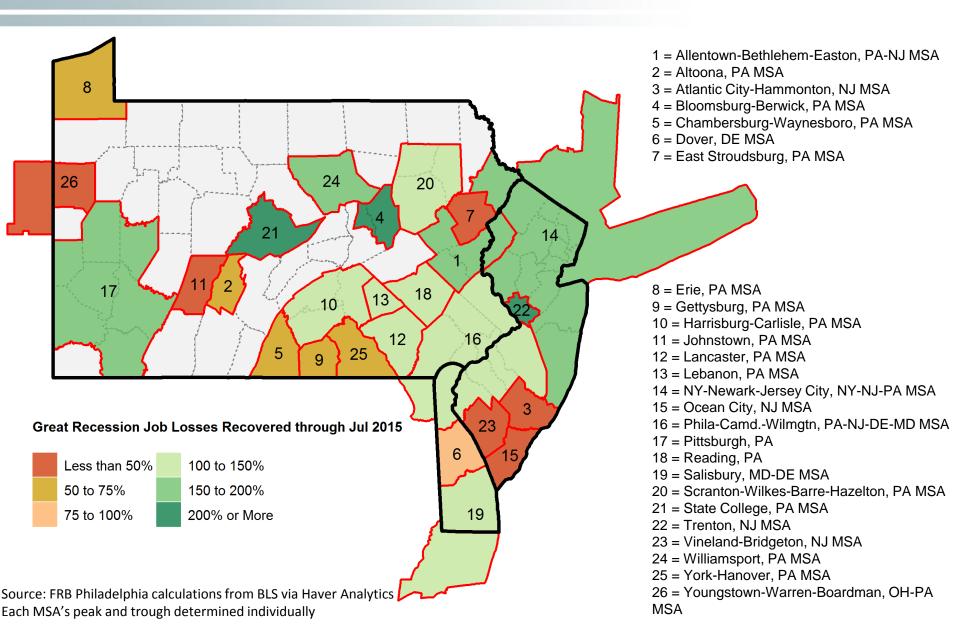


Source: FRB Philadelphia calculations from BLS via Haver Analytics. Note: Each state's peak and trough determined individually.

TRI-STATE MSA EMPLOYMENT RECOVERY

Metropolitan Statistical Area boundaries are denoted in red





SERIOUSLY DELINQUENT MORTGAGES



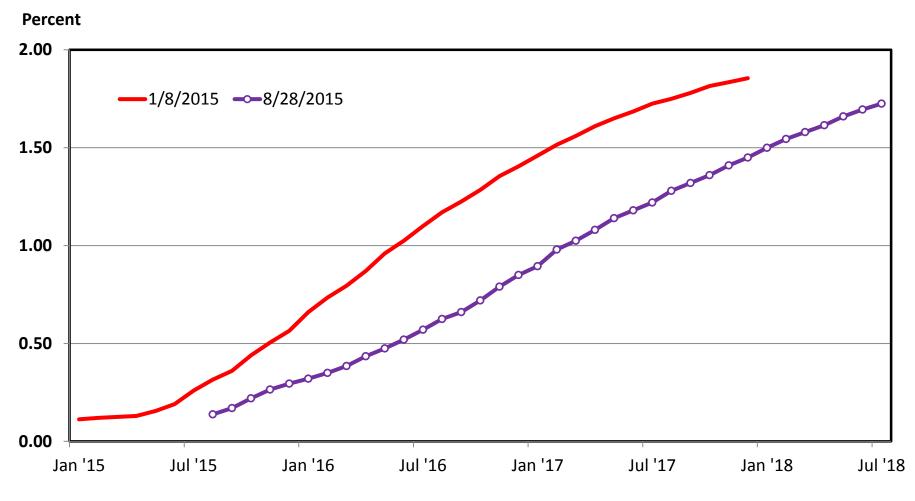
15% 10.2% 10% US PA NJ DE 2.2% 3.2% 2.0% 2.1% Avg. '02-07 5.1% 5% 4.9% 4.0% —U.S. —PA —NJ —DE 0% '00 '02 '04 '06 '08 '10 '12 '14

Seriously Delinquent Mortgages (Seasonally adjusted)

Source: Mortgage Bankers Association (MBA) via Haver Analy Last quarter plotted: 2015:Q2

MARKET-IMPLIED FEDERAL FUNDS RATE PATH

Using Federal Funds Rate futures contracts

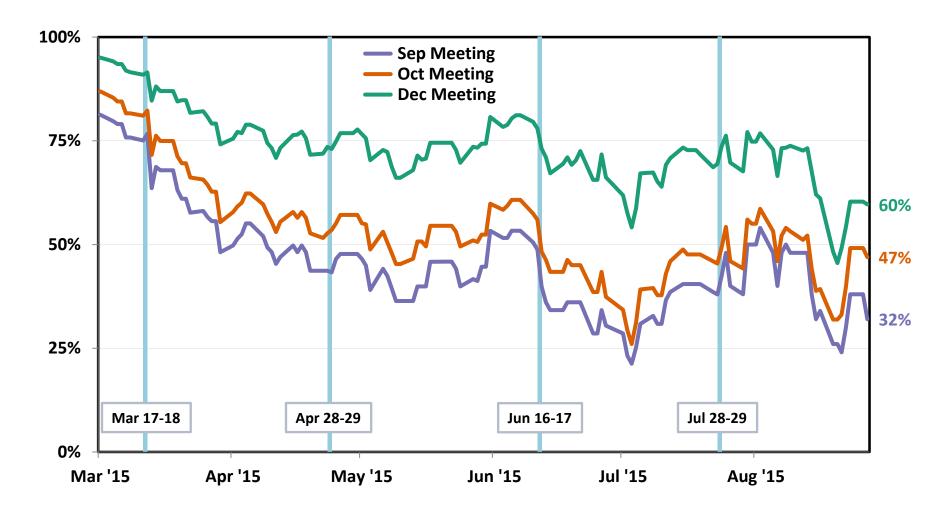


Source: Bloomberg

MARKET-IMPLIED PROBABILITY OF A RATE HIKE



Using Federal Funds Rate futures contracts



Source: Bloomberg Last day plotted: 09/01/2015

Vertical shading represents scheduled FOMC meeting dates