

# Virginia Tech – U.S. Forest Service

## August 2015 Housing Commentary

### Part B: Current Markets



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2015

Virginia Polytechnic Institute and State University

ANR-167NP

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# Opening Comments

The Current Market segment contains information on status of the housing market as of August 2105's end. Also included is a slide on lending; and private and government indicators.

The Current market August 2105 section includes analysis by Dr. Jed Kolko, formerly chief economist with Trulia and who is now a consultant. He also is Senior Fellow with the Turner Center for Housing Innovation at the University of California-Berkley. In these slides he provides information on the composition of house sales; single-family rentals; household formation, and vacancies.

The latter slides contain economic and housing indicators. One must remember that these data points are a “snapshot in time” and should be viewed in a long-term context.



# Current Housing Market



# Current Housing Market

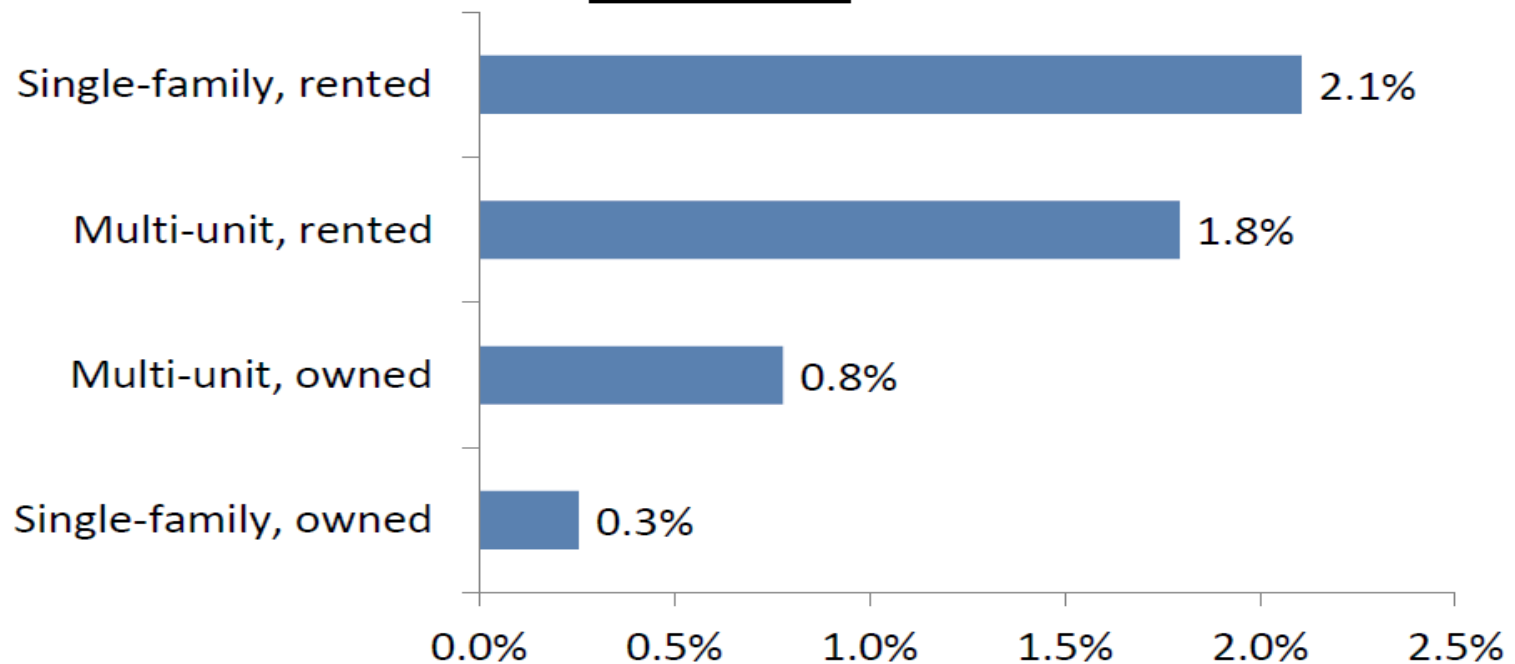
All growth in occupied housing units since 2006 has been in rentals

	2006 (millions)	2014 (millions)	Change, 2006-2014 (millions)	Change, 2006-2014 (%)
Single-family owner-occupied	65.5	65.2	-0.3	-0.4%
Single-family renter-occupied	11.3	15.2	+3.9	+34%
Multi-unit owner-occupied	4.2	4.0	-0.2	-6%
Multi-unit renter-occupied	23.4	26.1	+2.7	+12%
All occupied housing units (includes other housing types)	111.6	117.3	+5.6	+5%

# Current Housing Market

In past year, more of all housing types;  
but single-family rentals still lead

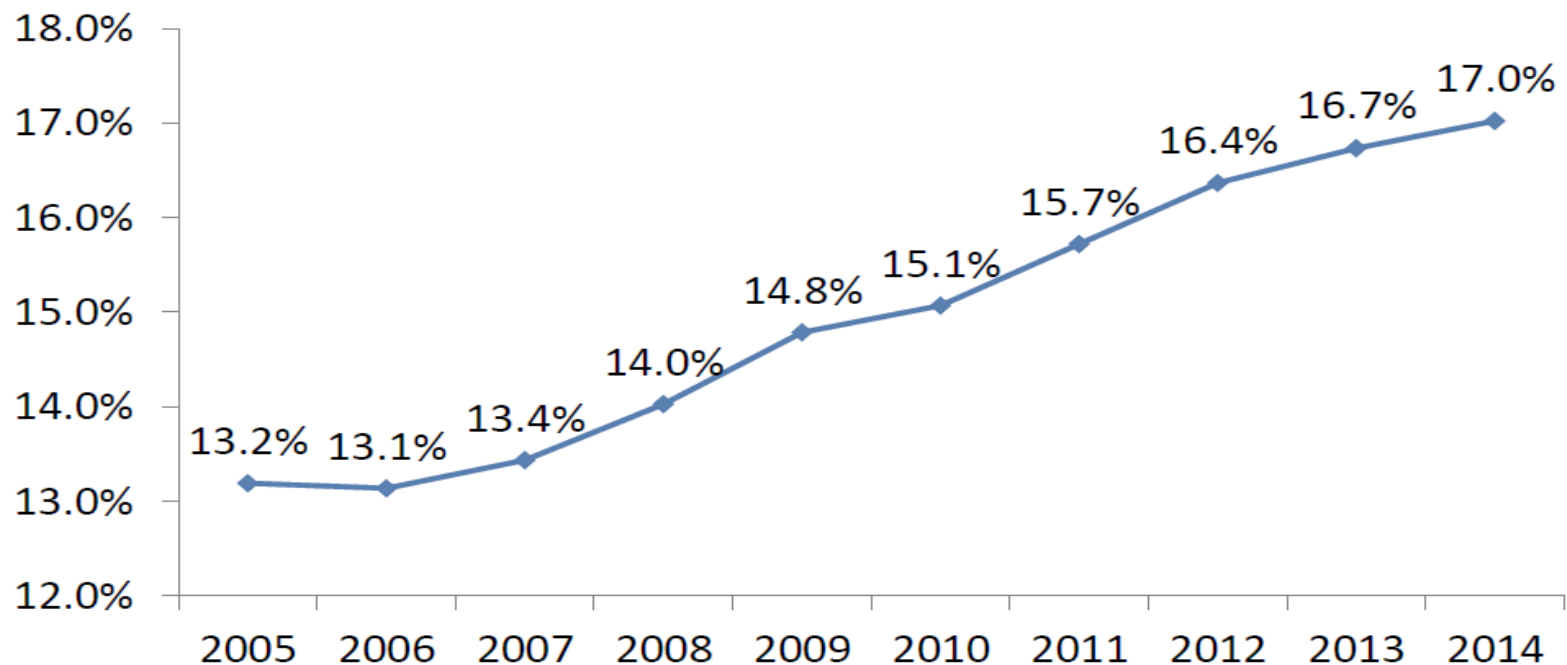
Change in occupied housing units, by type  
2013-2014



# Current Housing Market

## No slowdown in single-family rentals

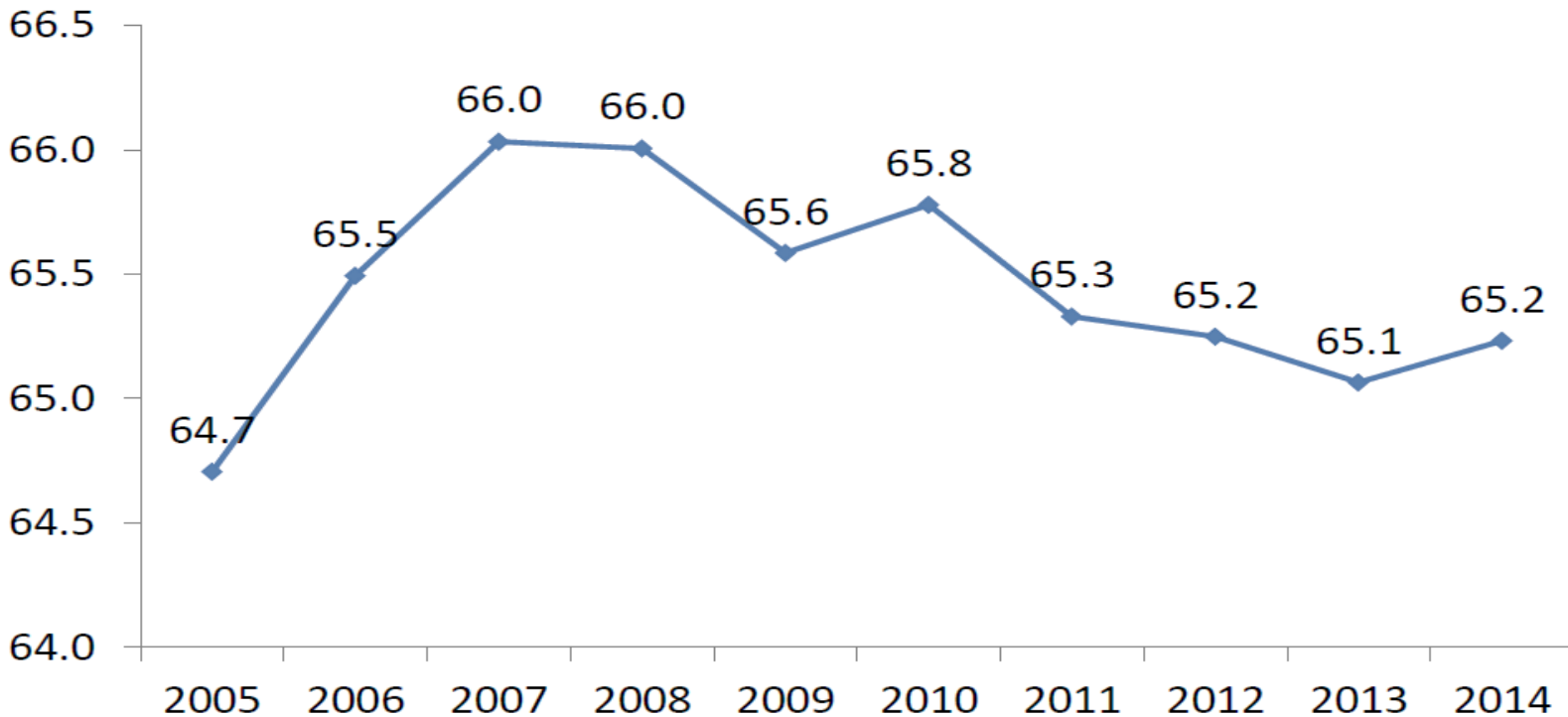
Rental share of occupied single-family detached homes



# Current Housing Market

Finally, after several years, an increase in owner-occupied single-family homes

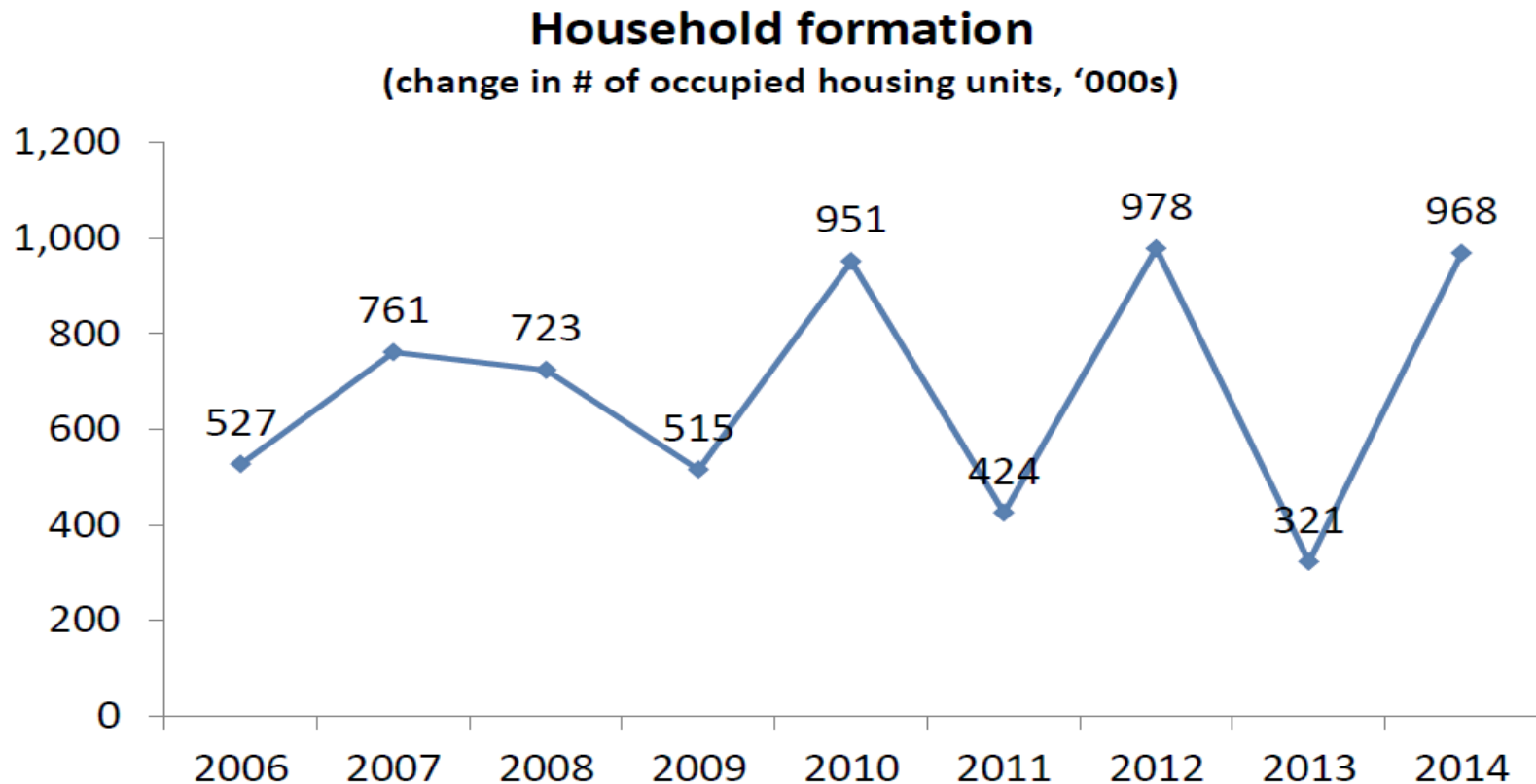
Owner-occupied single-family homes (millions)





# Current Housing Market

Household formation volatile but remains consistently below 1.2m “normal” level



# Current Housing Market

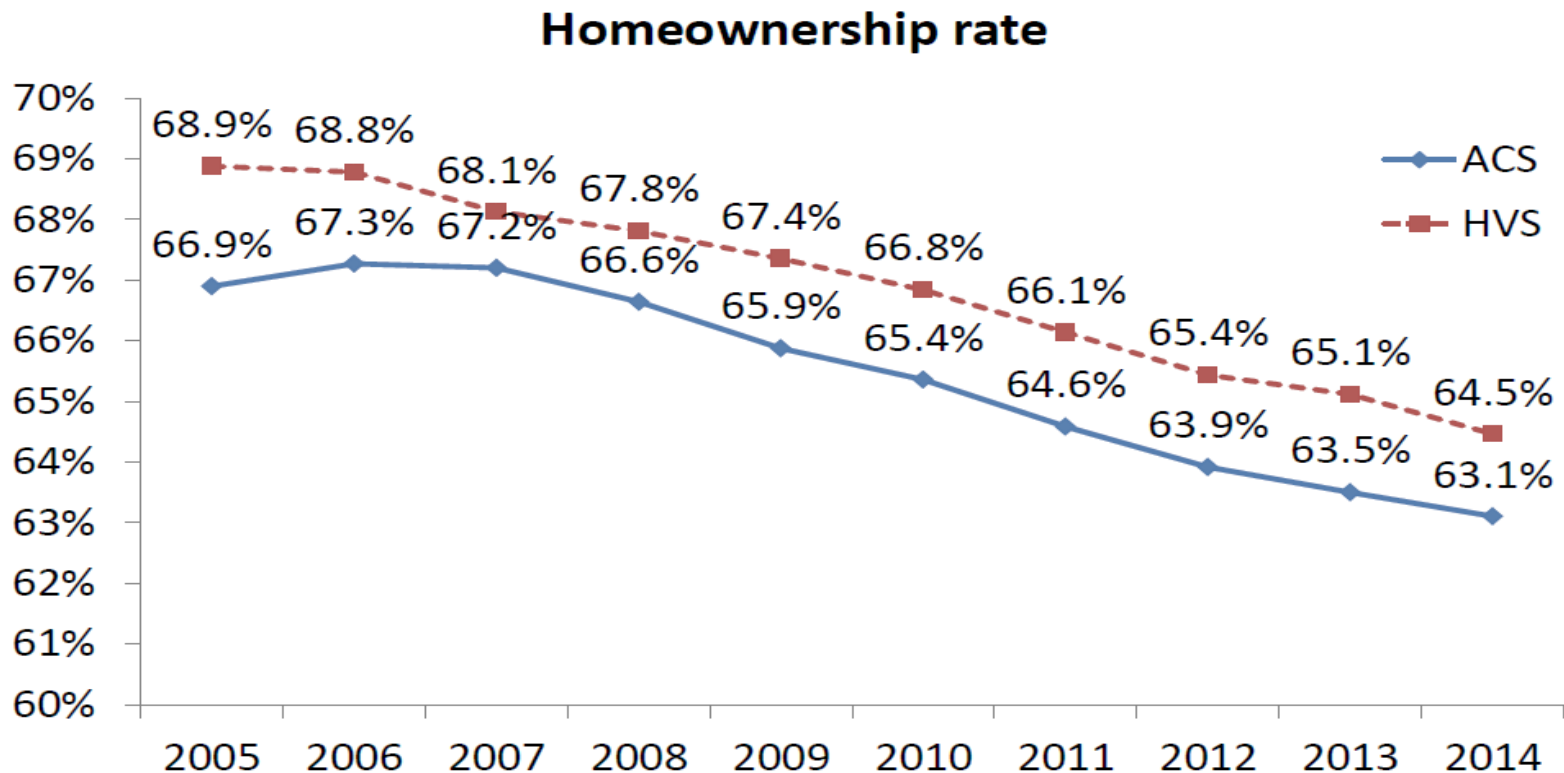
ACS and HVS both showed 2014 household formation of ~1m

**Household formation**  
(change in # of occupied housing units, '000s)



# Current Housing Market

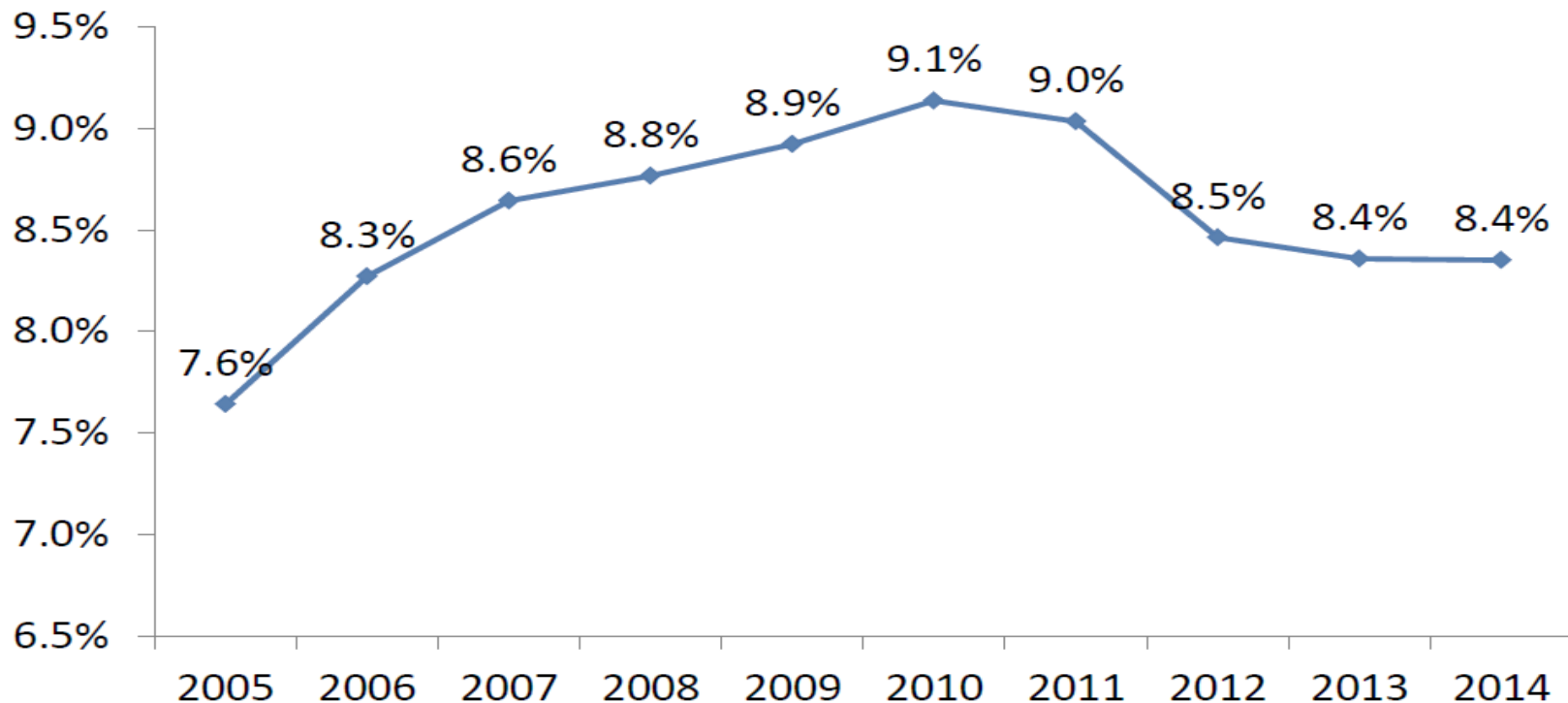
ACS reports lower homeownership than HVS, but similar trend



# Current Housing Market

**Despite below-normal construction activity, vacancy rate holds steady**

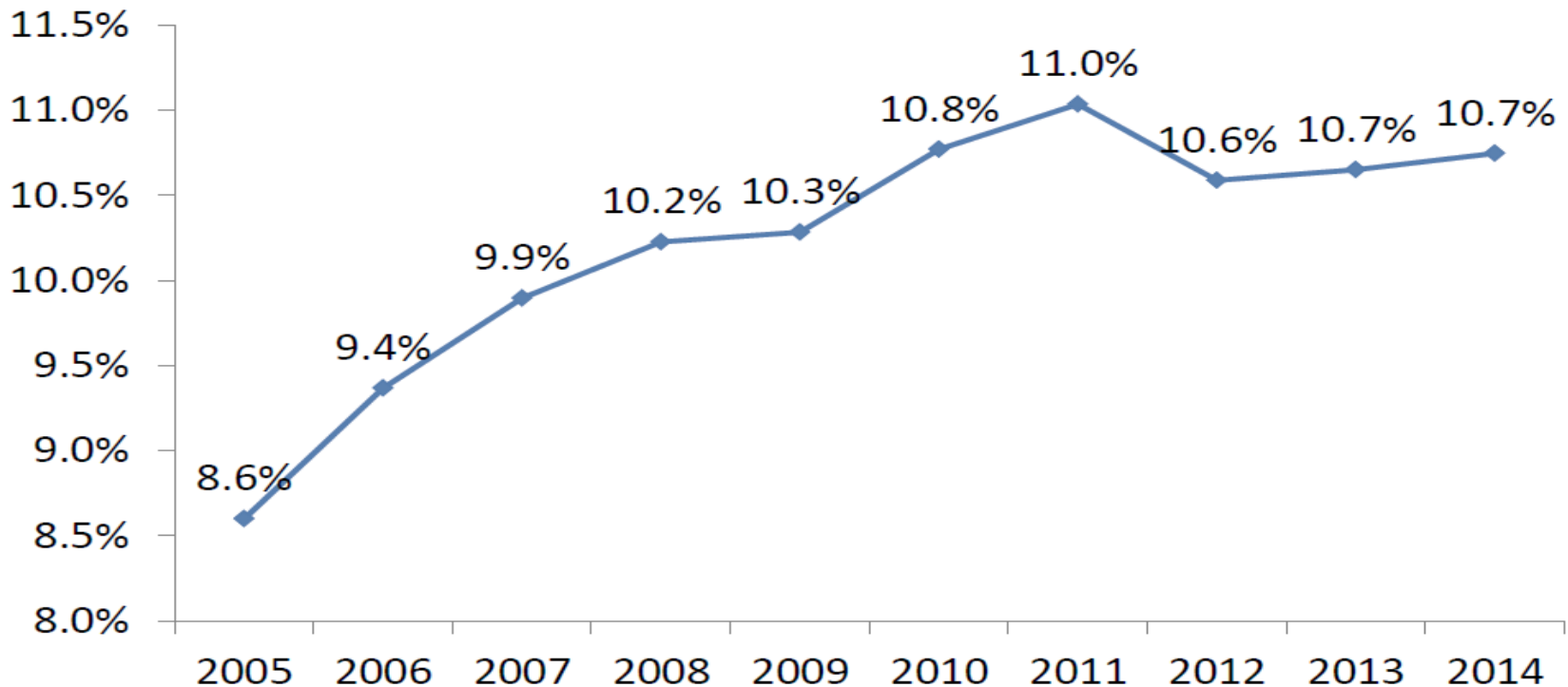
**Vacancy rate**  
(excl. seasonal; % of all housing units)



# Current Housing Market

Single-family vacancies are elevated and inching upward

Vacancy rate, single-family homes  
(all vacancy reasons, incl. seasonal)

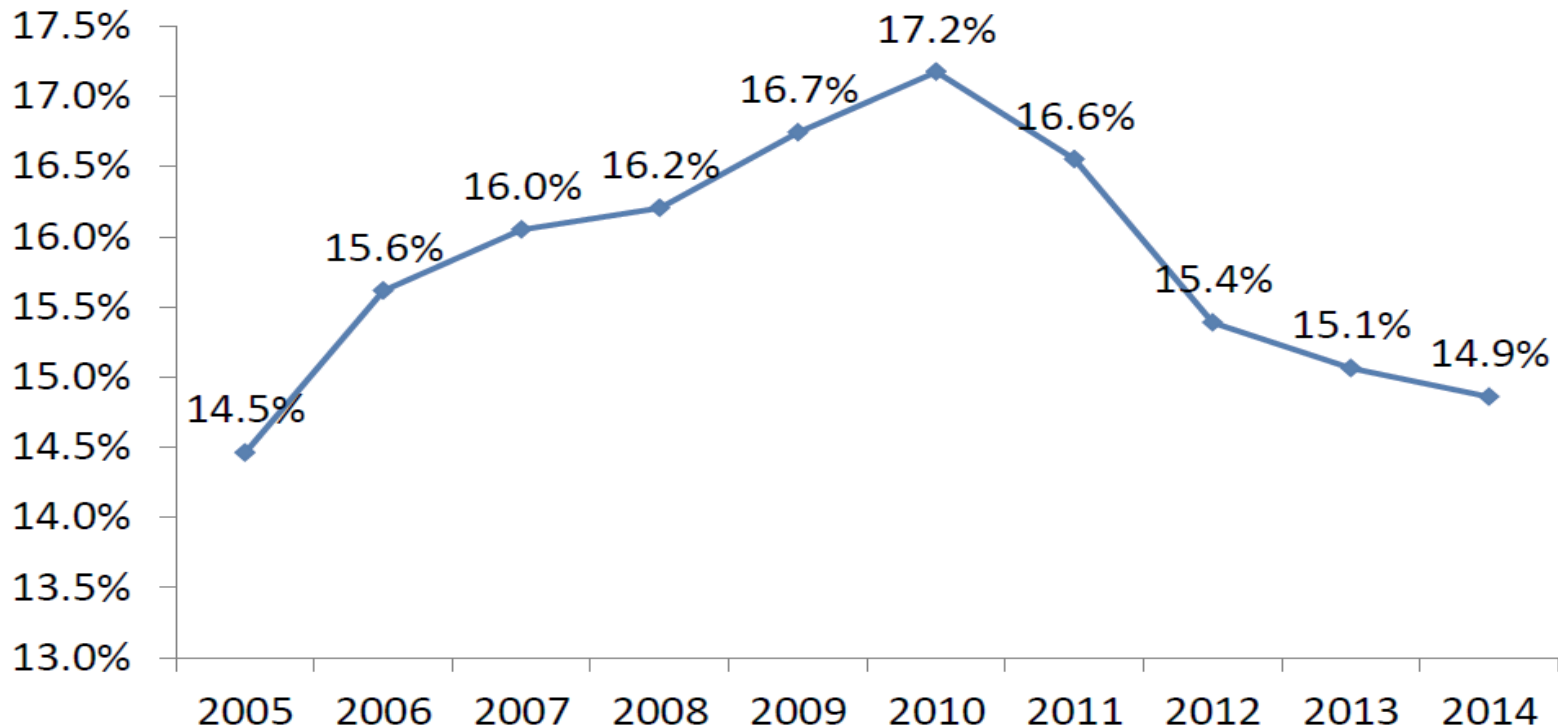




# Current Housing Market

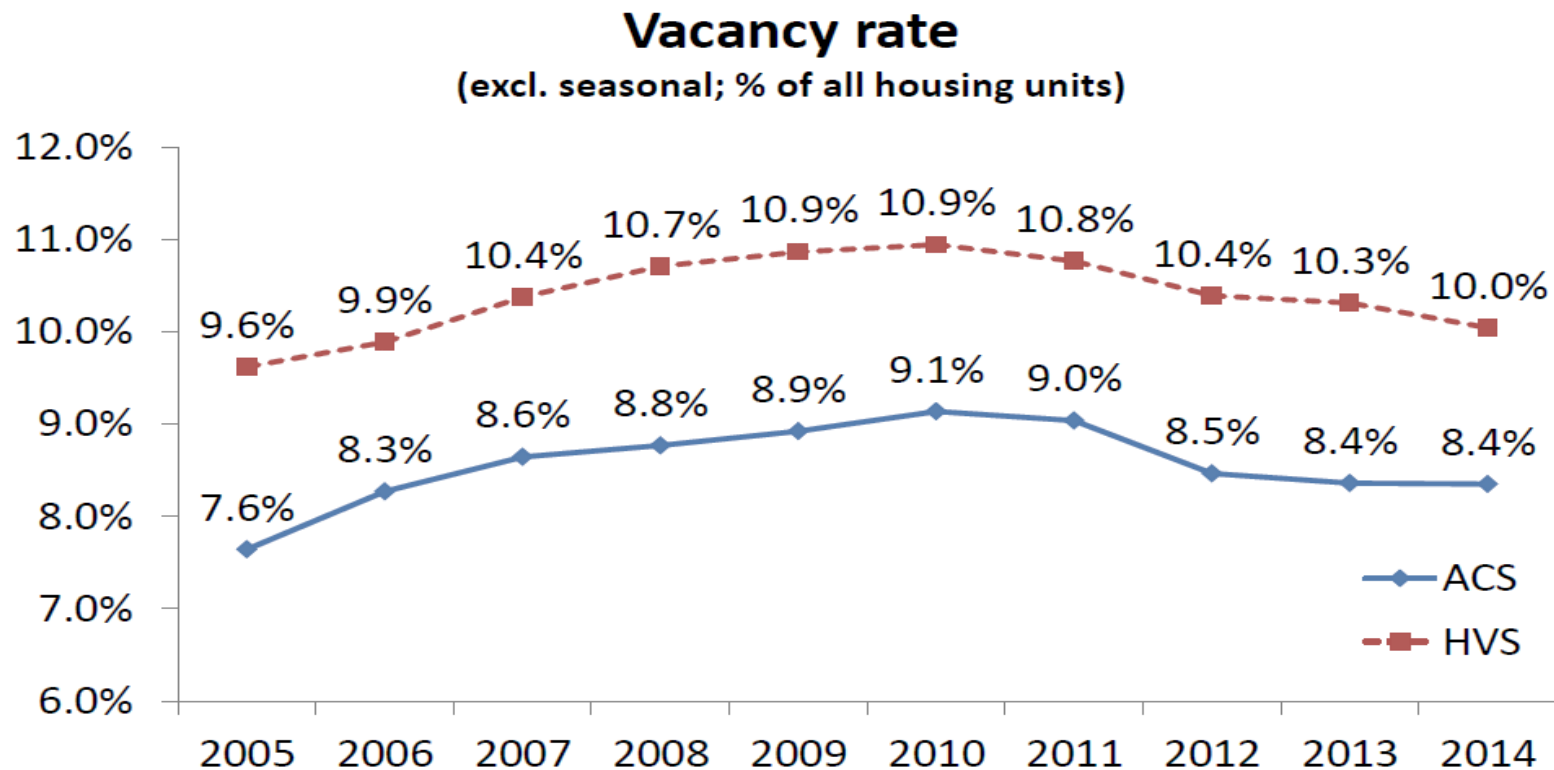
## Multi-unit vacancies down below 2006 level

Vacancy rate, multi-unit buildings  
(all vacancy reasons, incl. seasonal)

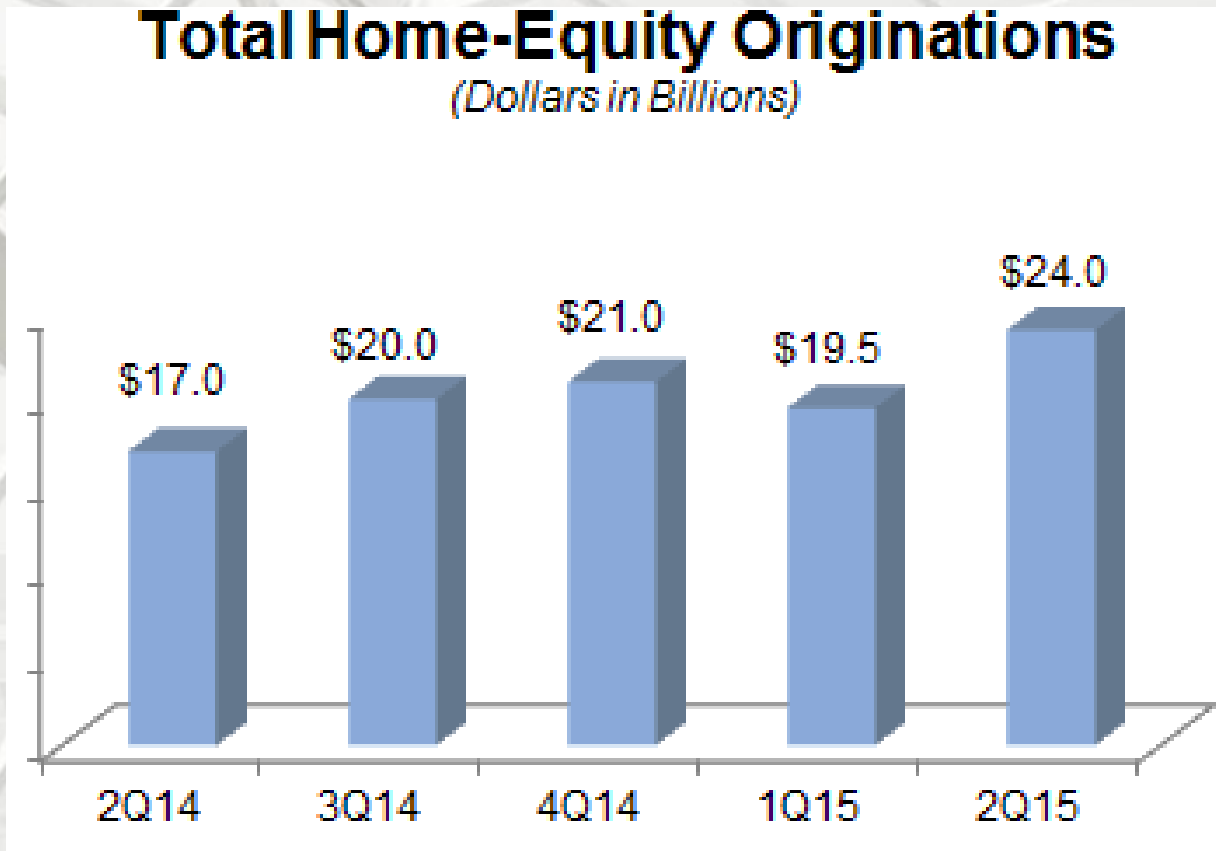


# Current Housing Market

ACS reports much lower vacancy than HVS, but similar trend



# Lending



“Total home-equity originations rose by 23.1 percentage points from the previous quarter according to estimates from *Inside Mortgage Finance*.

...\$24.0 billion of home-equity lines-of-credit and second mortgages were originated during the 2<sup>nd</sup> quarter, up 23.1% from Q1 2015. ...the highest production level since the Q2 2008.”

The background of the slide is a grayscale photograph of a wooden roof truss system. The beams are arranged in a complex, geometric pattern, creating a series of triangles and rectangles. The lighting is soft, highlighting the texture of the wood and the structural details.

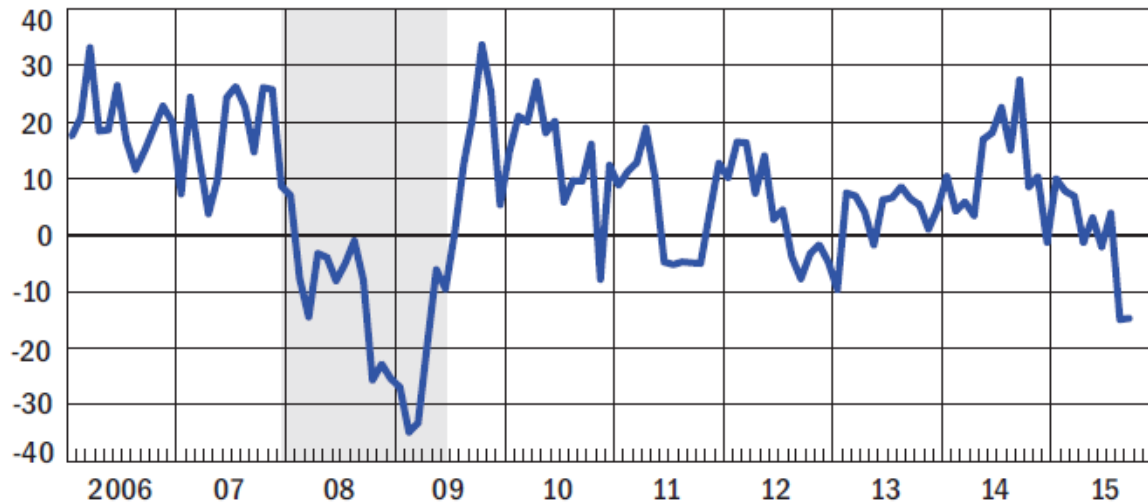
# Private and Government Indicators

# U.S. Economic Indicators

## General Business Conditions

Seasonally Adjusted

Diffusion index



Note: The shaded area indicates a period designated a recession by the National Bureau of Economic Research.

## The Federal Reserve Bank of New York

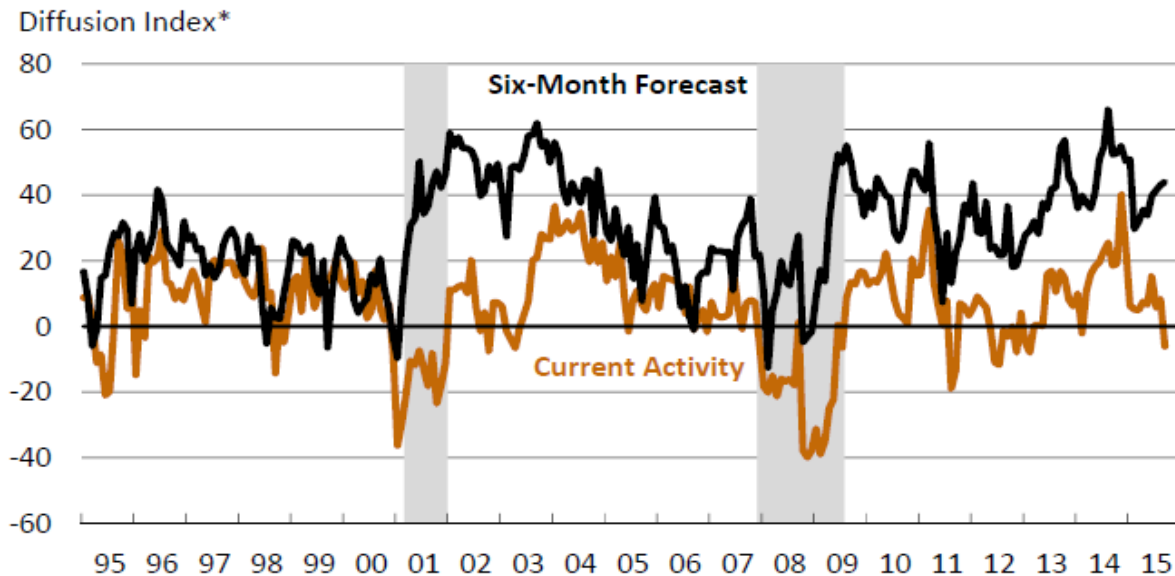
Business activity declined for a second consecutive month for New York manufacturers. The headline general business conditions index remained well below zero at -14.7. Orders and shipments: new orders index was -12.9 and the shipments index was -8.0. Inventories index slipped a point to -18.5, indicating a continuing drop in inventory levels. Six-month outlook displayed less optimism about future conditions than in August to 23.2.



# U.S. Economic Indicators

## Current and Future General Activity Indexes

(January 1995 to September 2015)



\* Percentage of respondents indicating an increase minus percentage indicating a decrease

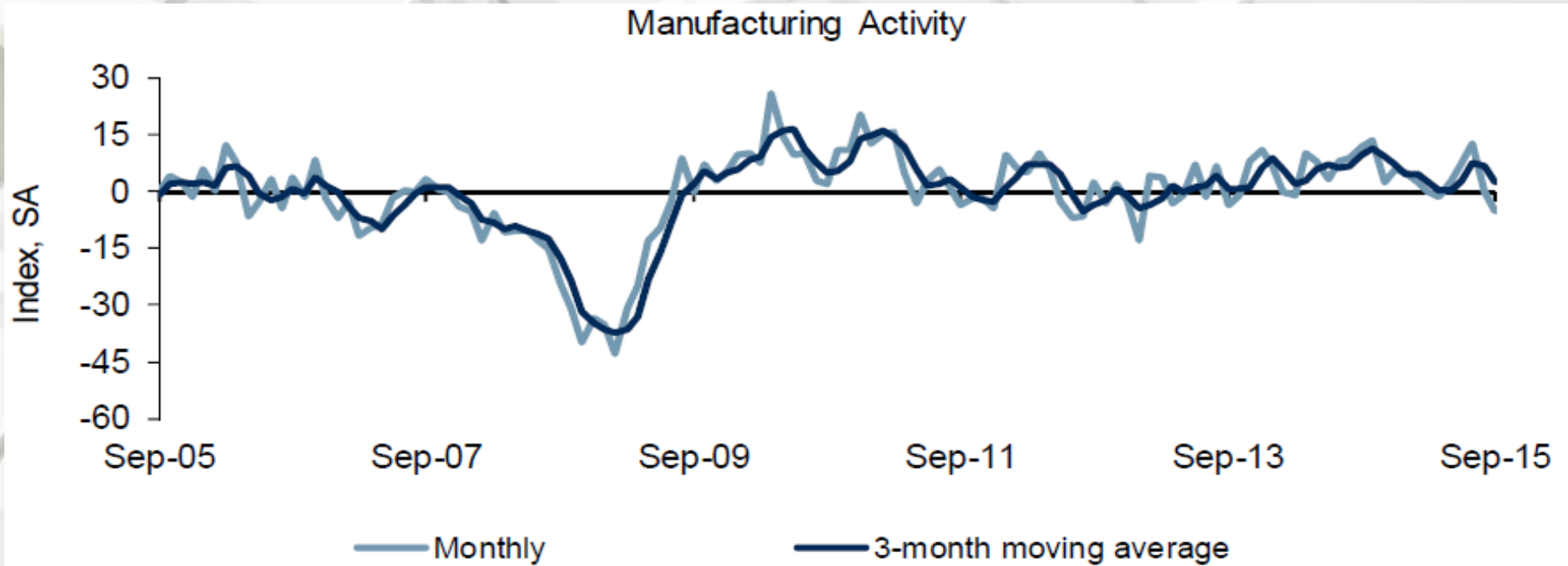
## The Federal Reserve Bank of Philadelphia

Manufacturing conditions in the region were mixed in September

The indicator for general activity current activity, decreased from 8.3 in August to -6.0 this month

New orders, shipments, and employment remained positive

# U.S. Economic Indicators



## The Federal Reserve Bank of Richmond

### Manufacturing conditions weakened in September

The manufacturing composite index decreased to -5, following last month's reading of 0.

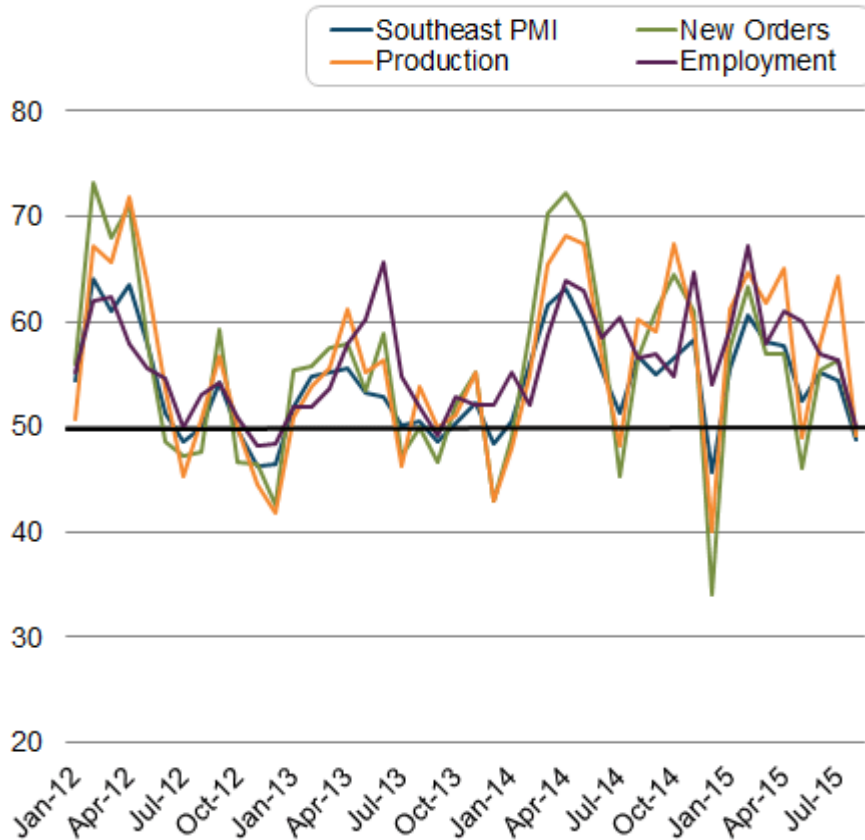
The shipments index remained negative, only gaining one point to end at -3.

...the volume of new orders decreased this month. At an index of -12, the September indicator lost 13 points from last month's reading of 1.

Manufacturing employment increased mildly this month. The indicator added two points, ending at a reading of 3.

# U.S. Economic Indicators

## Southeast Purchasing Managers Index



Source: Kennesaw State University Econometric Center through August 2015

## The Federal Reserve Bank of Atlanta

The new orders subindex fell 7.1 points from July to a reading of 49.1.

The production subindex dropped 15.2 points from the previous month to a reading of 49.1.

The employment subindex declined 6.3 points to a reading of 50.0, which indicates no change in employment levels at Southeast factories.

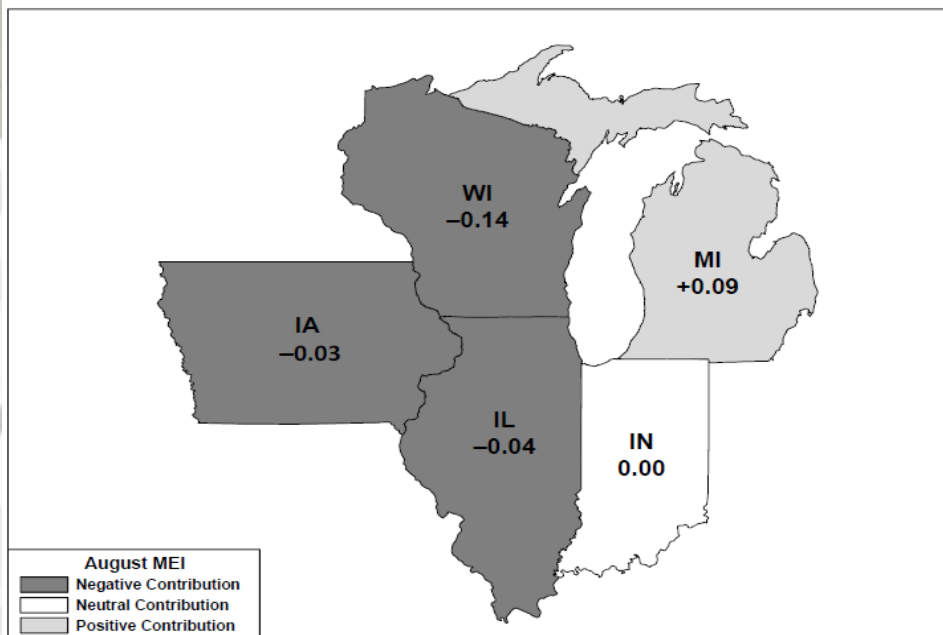
The supplier deliveries subindex increased 3.6 points to 50.9.

The finished inventory subindex decreased 2.7 points to 44.6.

The commodity prices subindex fell 10.7 points and now reads 34.8.

# U.S. Economic Indicators

MEI and the Seventh Federal Reserve District States



Note: The map's shading summarizes the most recent contribution to growth in Midwest economic activity from each of the five states in the Seventh Federal Reserve District (Illinois, Indiana, Iowa, Michigan, and Wisconsin).

## Midwest Economy Index Index shows Midwest growth still slightly below average in August

The Midwest Economy Index (MEI) ticked down to  $-0.12$  in August from  $-0.11$  in July. The relative MEI declined to  $-0.23$  in August from  $-0.06$  in July. August's value for the relative MEI indicates that Midwest economic growth was somewhat lower than what would typically be suggested by the growth rate of the national economy.

## The Federal Reserve Bank of Chicago

Manufacturing's contribution to the MEI was unchanged at  $+0.01$  in August.

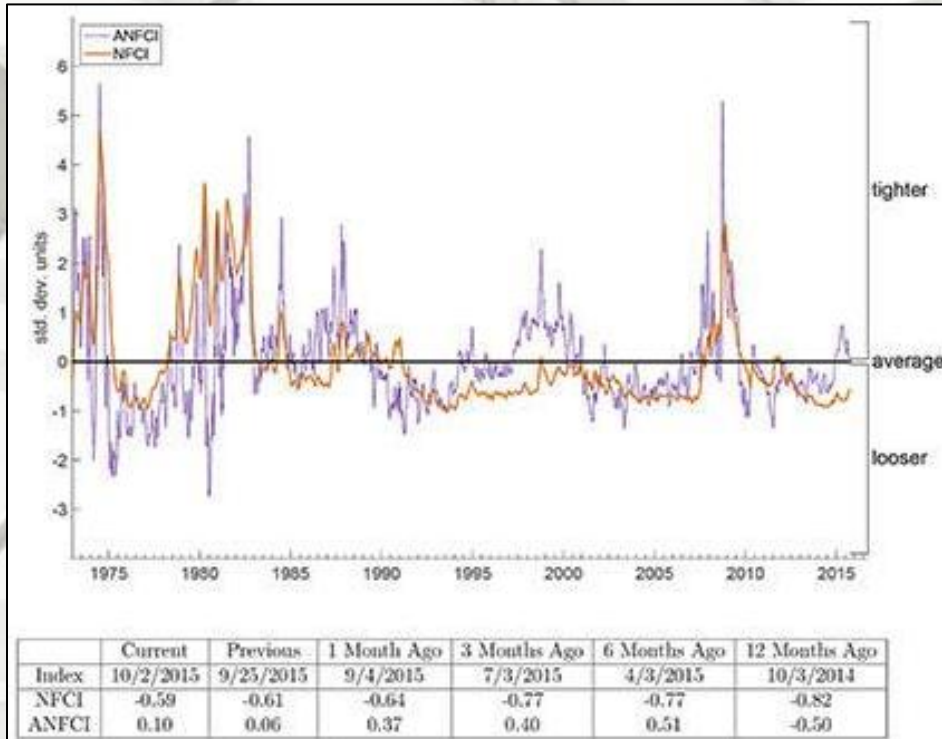
Manufacturing's contribution to the relative MEI edged down to  $+0.03$  in August from  $+0.07$  in July.

The construction and mining sector's contribution to the MEI was also unchanged, at  $-0.14$ , in August.

The contribution from consumer spending indicators to the MEI ticked down to  $+0.01$  in August from  $+0.02$  in July.



# U.S. Economic Indicators



## Financial Conditions Edge Tighter in Week Ending October 2

The NFCI ticked up to  $-0.59$  in the week ending October 2.

The credit and nonfinancial leverage subindexes edged up from the previous week, while the risk subindex was unchanged and the leverage subindex ticked down.

## The Federal Reserve Bank of Chicago

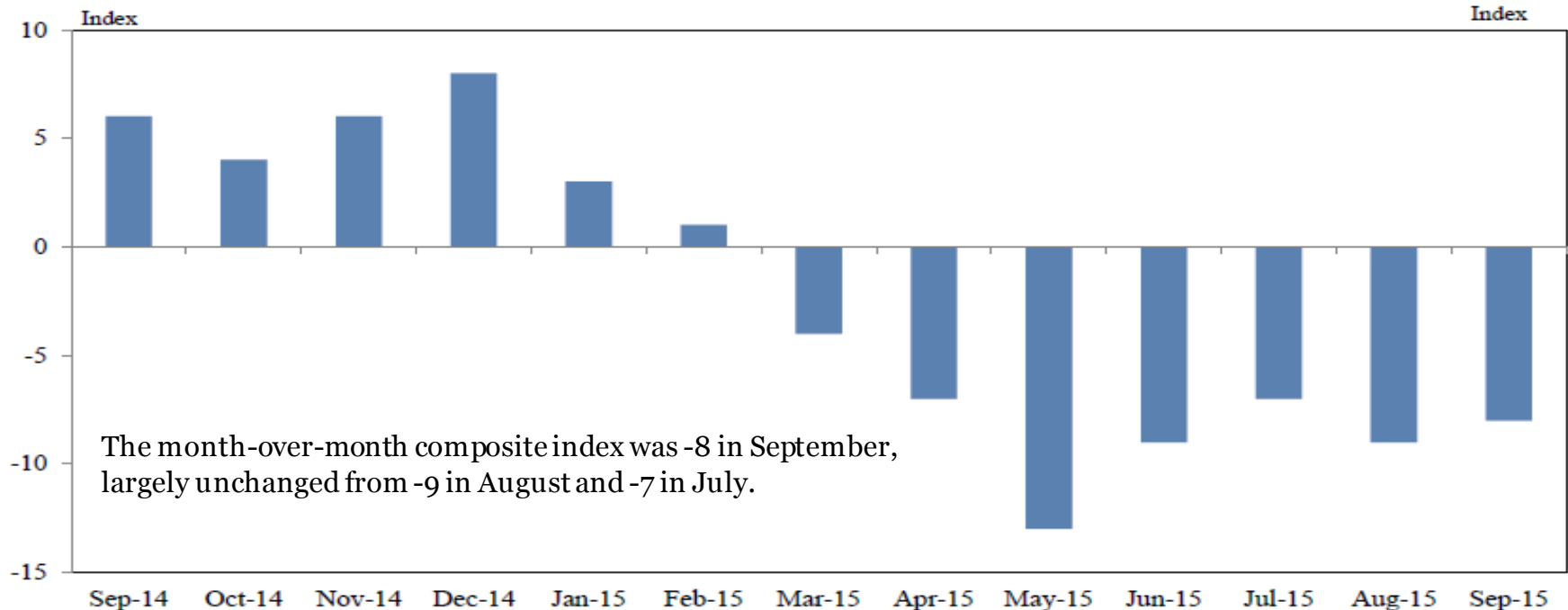
The ANFCI also increased slightly from the previous week, to 0.10. The release of August data for the Chicago Fed National Activity Index and the Price Index for Personal Consumption Expenditures (PCE) led to an average downward revision of 0.3 standard deviations to recent values of the ANFCI.

The current level of the ANFCI indicates that financial conditions in the latest week remained somewhat tighter than what would typically be suggested by current economic conditions as captured by the three-month moving average of the Chicago Fed National Activity Index (CFNAI-MA3) and three-month total inflation according to the PCE Price Index.



# U.S. Economic Indicators

Composite Index vs. a Month Ago



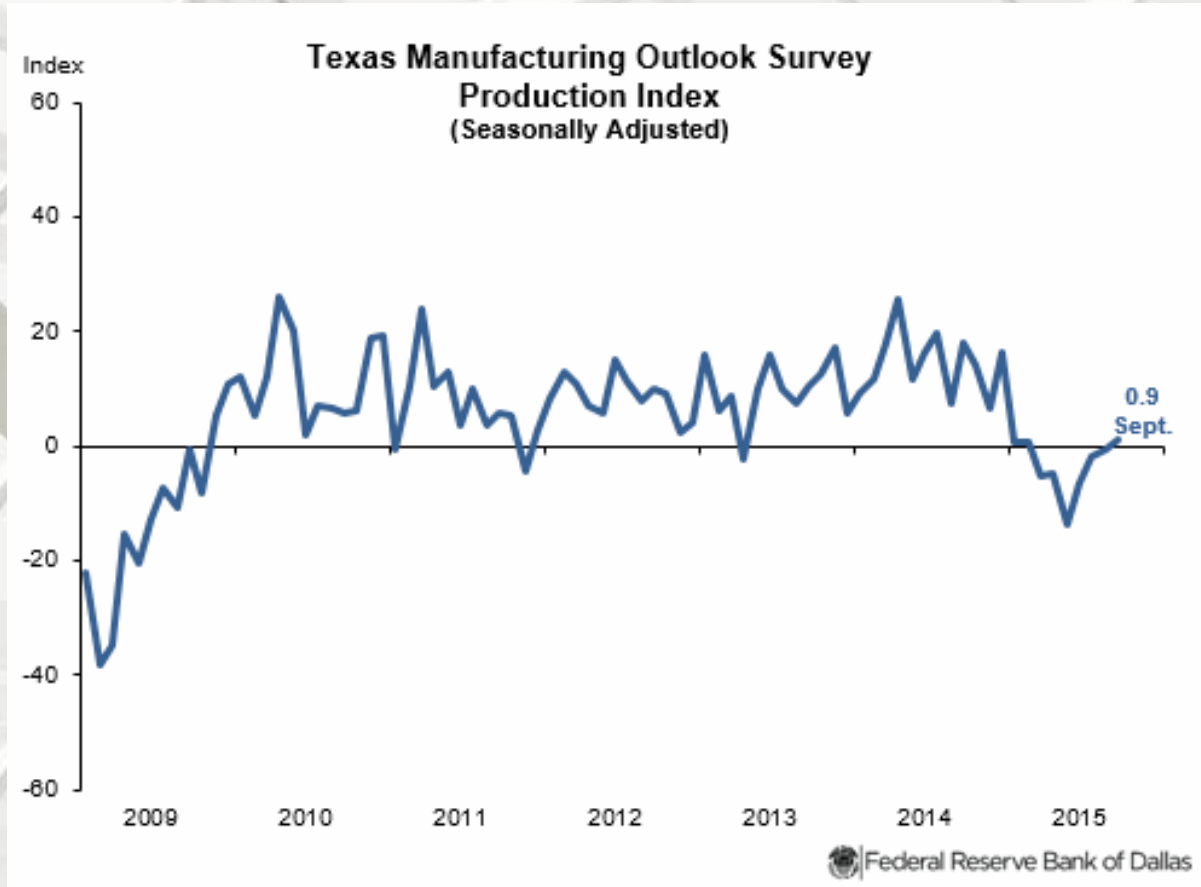
## The Federal Reserve Bank of Kansas City

...the survey revealed that Tenth District manufacturing activity declined at a similar pace as in previous months, while expectations for future activity dropped considerably.

Producers continued to cite weak oil and gas activity along with a strong dollar as key reasons for the sluggish activity. Most price indexes fell from the previous survey.

Both durable and nondurable goods production continued to decline... .

# U.S. Economic Indicators



## The Federal Reserve Bank of Dallas

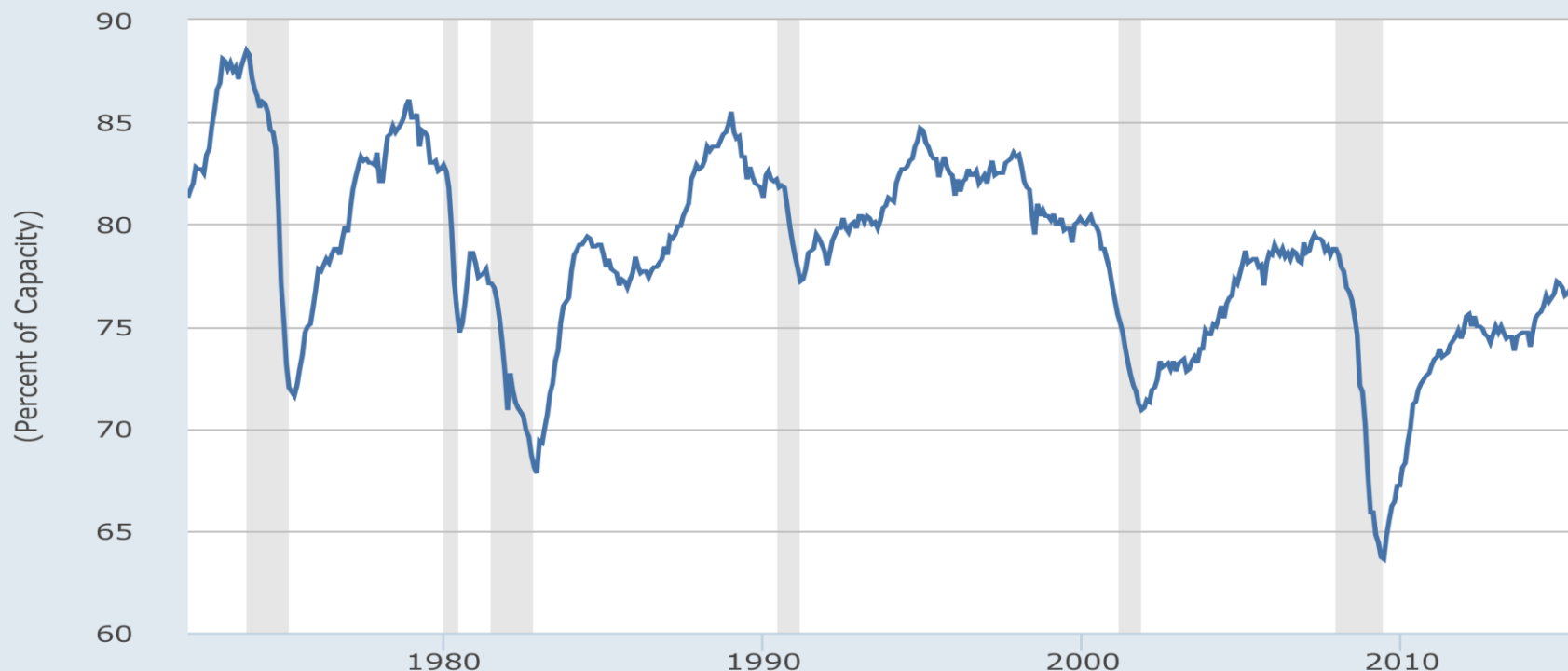
Texas factory activity was essentially flat in September, according to business executives responding to the Texas Manufacturing Outlook Survey.

The company outlook index plunged to -10.3 in August but recovered somewhat this month, climbing to -5.2..

# U.S. Economic Indicators

**FRED** 

— Capacity Utilization: Manufacturing (NAICS)



Source: Board of Governors of the Federal Reserve System (US)

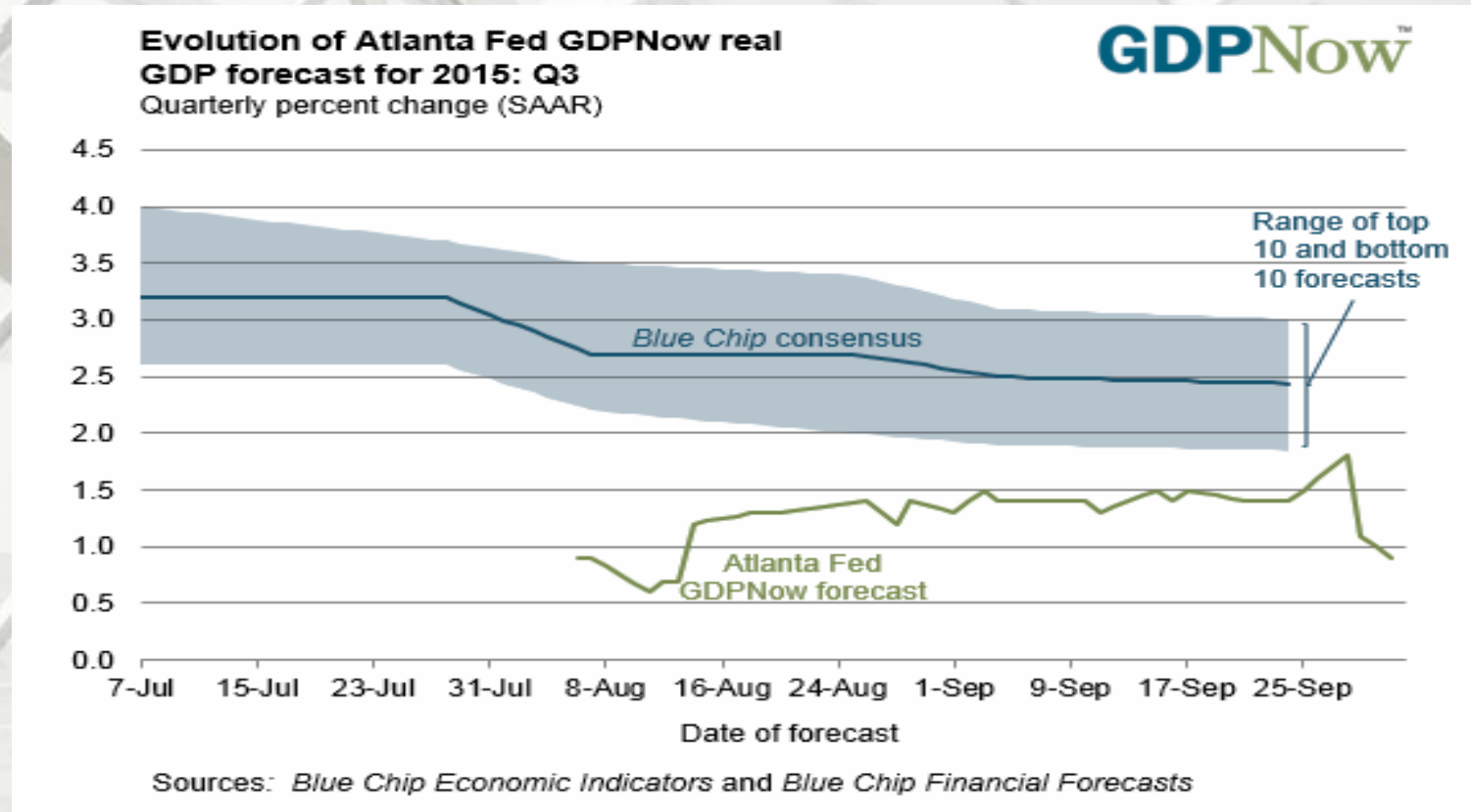
Shaded areas indicate US recessions - 2015 research.stlouisfed.org

## Capacity Utilization

The manufacturing capacity utilization rate is a rate that measures the utilization of a country's available manufacturing productive volume. It is a measure of potential output and actual output that can indicate slack in manufacturing. And it provides a metric for potential output.

Month-over-month and year-over-year capacity utilization decreased 0.5% and increased 0.5%, respectively.

# Atlanta Fed: GDPNow™



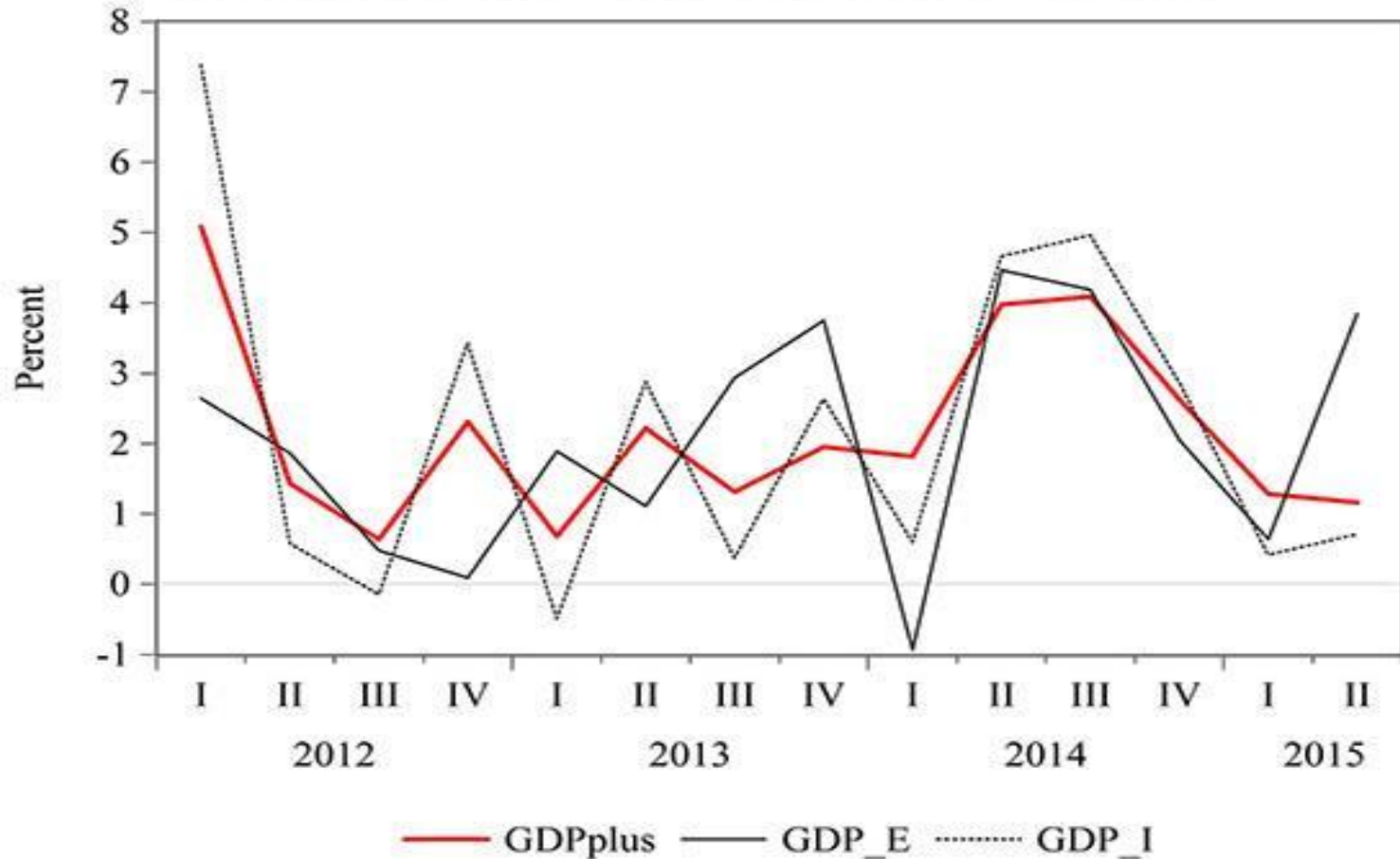
The GDPNow™ model forecast for real GDP growth (seasonally adjusted annual rate) in the third quarter of 2015 is 0.9 percent on October 1, down from 1.8 percent on September 28.

The model's nowcast for the contribution of net exports to third-quarter real GDP growth fell 0.7 percentage points to -0.9 percentage points on September 29 following the advance report on U.S. international trade in goods from the U.S. Census Bureau.

# Philadelphia Fed: GDPplus

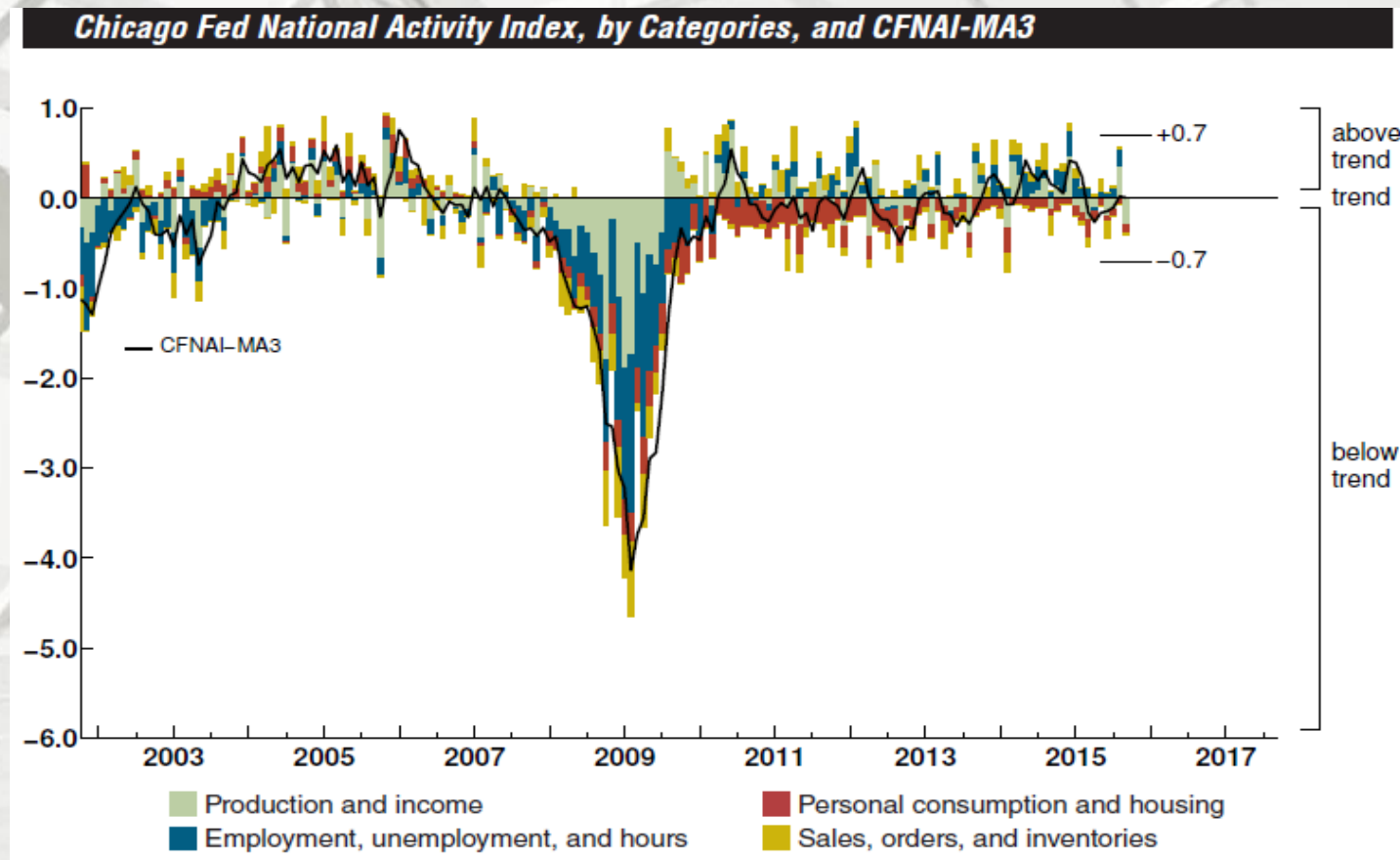
## GDP Growth

GDPplus is a measure of the quarter-over-quarter rate of growth of real GDP in annualized percentage points. GDP\_E and GDP\_I are quarter-over-quarter rates of growth of expenditure and income-side measures of real GDP in annualized percentage points, respectively.





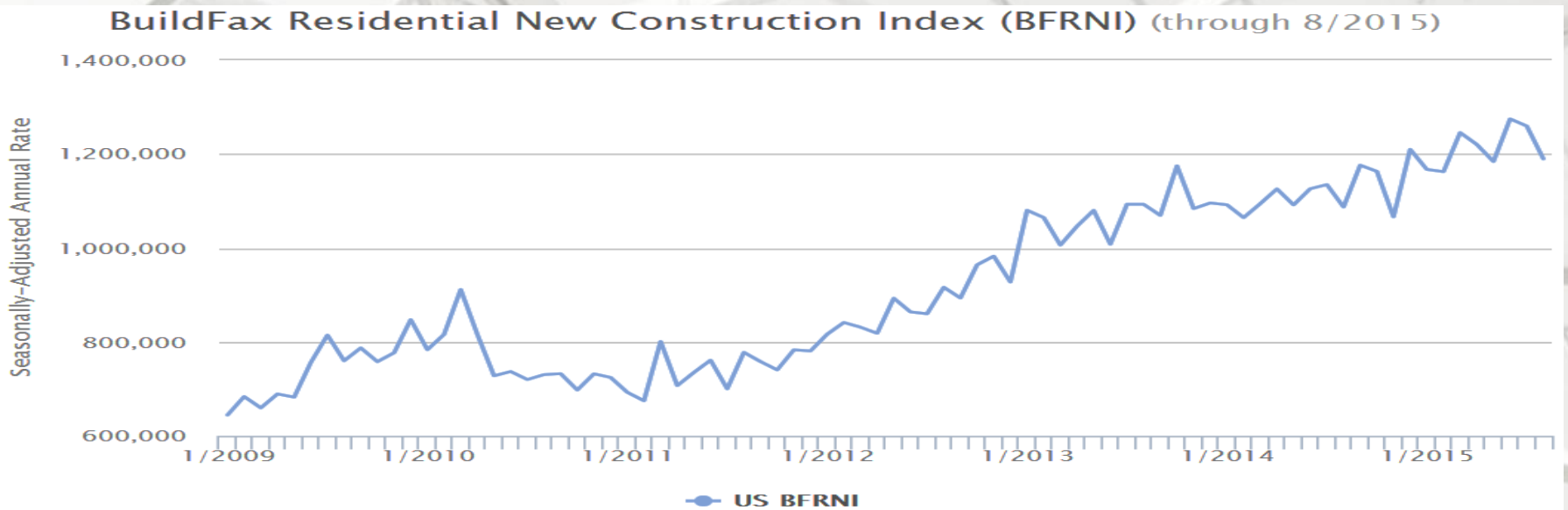
# Chicago Fed: National Activity Index



## Index Shows Economic Growth Slowed in August

Led by declines in production-related indicators, the Chicago Fed National Activity Index fell to  $-0.41$  in August from  $+0.51$  in July. All four broad categories of indicators that make up the index decreased from July, and all four categories made negative contributions to the index in August.

# Private Indicators



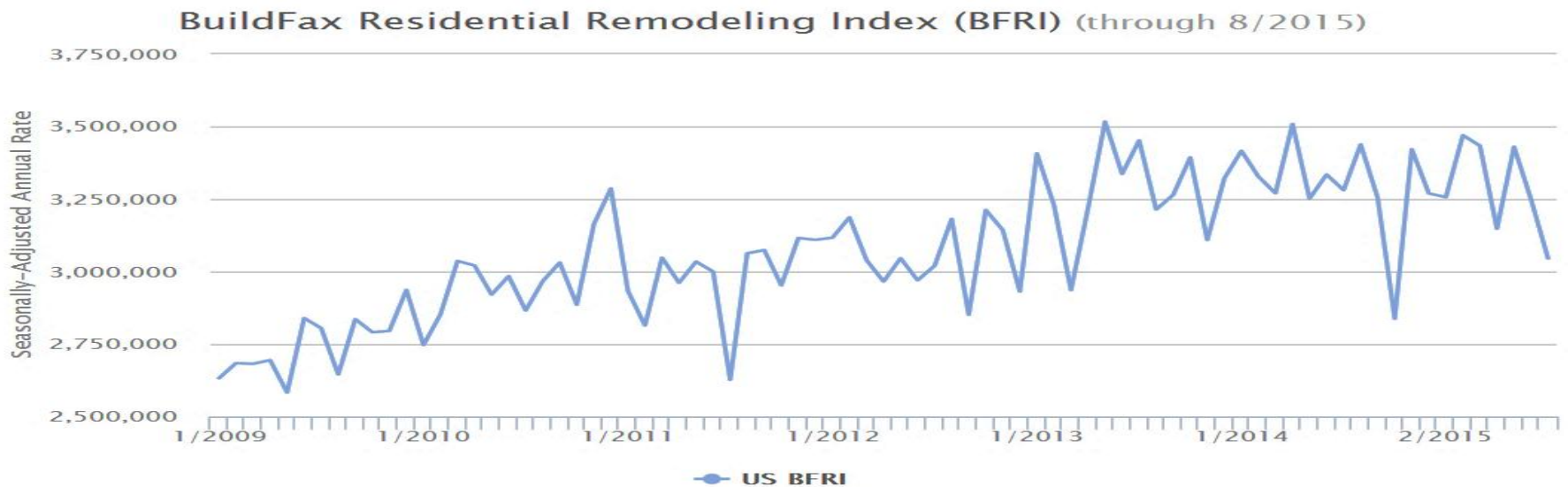
## BuildFax Residential New Construction Index

Residential new construction new construction authorized by building permits in the U.S. in August were at a seasonally adjusted annual rate (SAAR) of 1,189,282. This is 6% below the revised July rate of 1,259,329 and is 9% above the revised August 2014 estimate of 1,086,953. BuildFax reports on total new residential projects, unlike the U.S. Census that reports total number of housing units.

## Regional Residential New Construction

SAARs of residential new construction across the country in August 2015 are estimated as follows: Northeast, 82,268 (up 1% from July and up 73% from August 2014); South, 646,894 (down 5% from July and up 1% from August 2014); Midwest, 203,475 (less than 1% down from July and up 9% from August 2014); West, 253,401 (down 17% from July and up 22% from August 2014).

# Private Indicators



## BuildFax Residential Remodeling Index

Residential remodels authorized by building permits in the U.S. in August were at a seasonally adjusted annual rate (SAAR) of 3,045,365. This is 6% below the revised July rate of 3,248,517 and is 7% lower than the revised August 2014 estimate of 3,280,810.

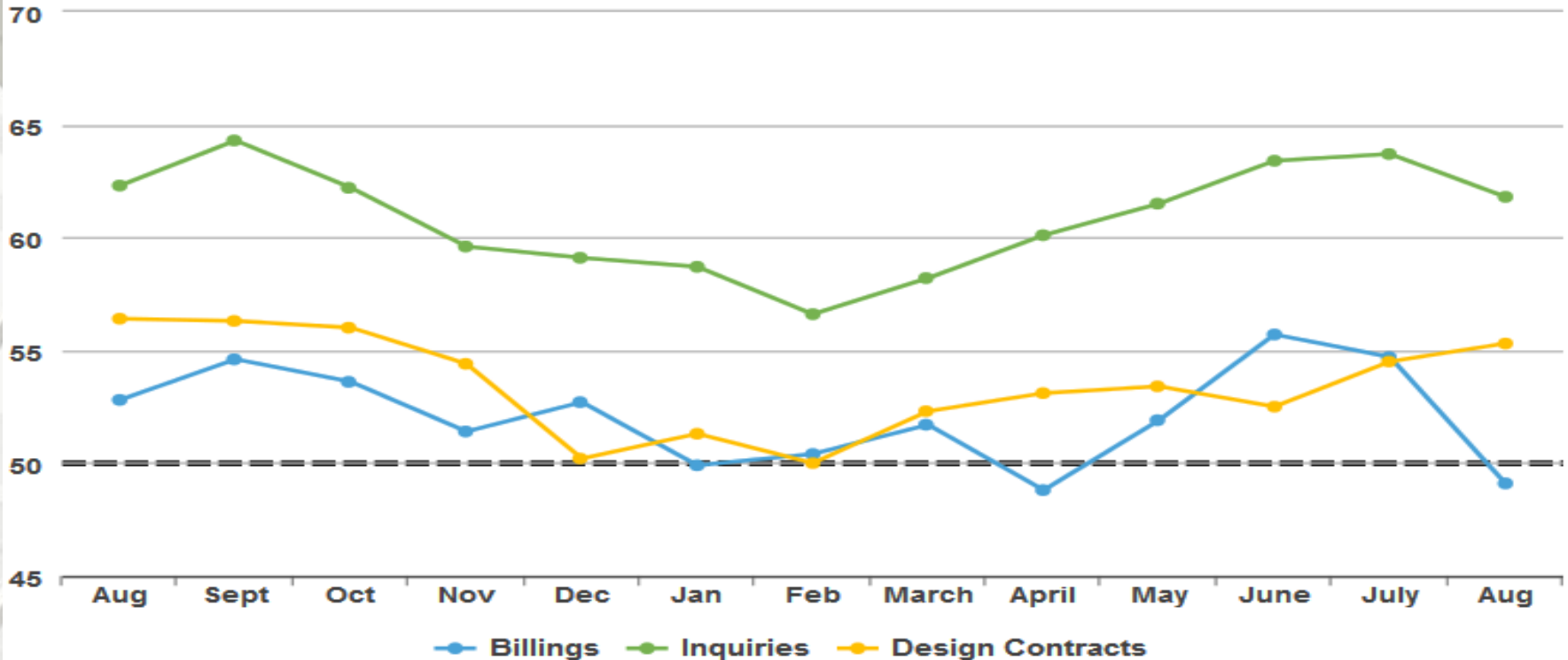
## Regional Residential Remodeling

SAARs of residential remodeling across the country in U.S. 2015 are estimated as follows:

Northeast, 1,148,536 (down 35% from July and down 20% from August 2014); South, 1,307,755 (down 2% from July and up 6% from August 2014); Midwest, 450,708 (down 1% from July and down 21% from August 2014); West, 724,393 (down 3% from July and down 8% from August 2014).

# Private Indicators

## ARCHITECTURE BILLINGS INDEX Past 12 Months



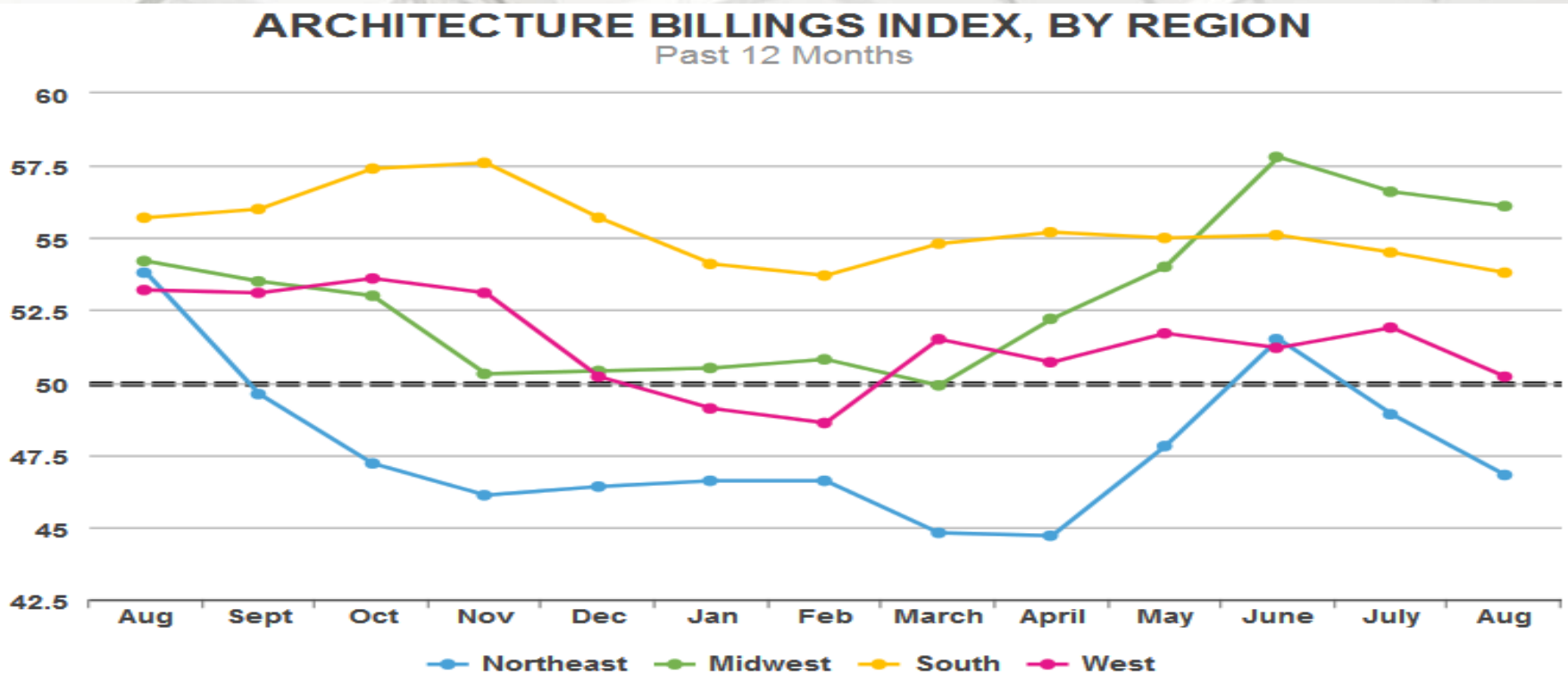
**National Billings:** Down from 54.7 in July to 49.1 in August, the index experienced its third contraction this year.

**Project Inquiries:** This index indicates a drop in demand by about two points from July (63.7) to August (61.8).

**Design Contracts:** The design contracts index was 55.3, up from a reading of 54.5 in July.



# Private Indicators



**Northeast:** The only region in this report to contract, the North's index fell from 48.9 in July to 46.8 in August.

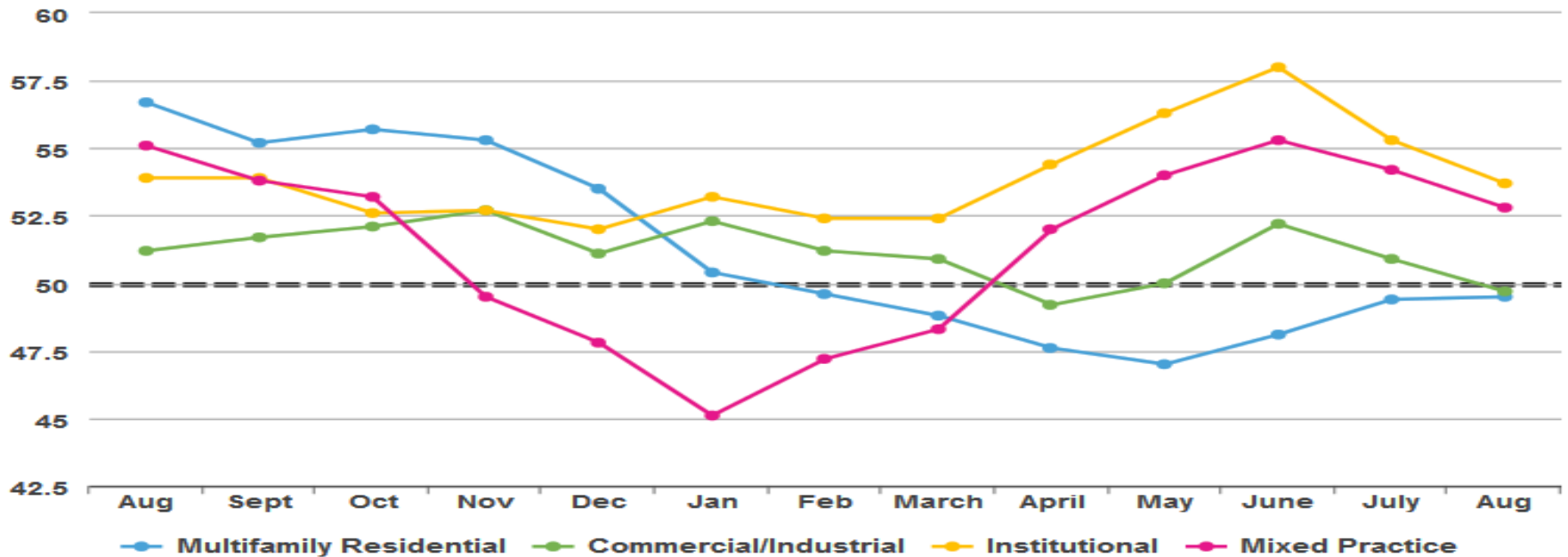
**Midwest:** The Midwest received the highest regional score for the third straight month. August's mark of 56.1 is only slightly below that of July (56.6).

**South:** The region that has stayed above the 50-mark line for more than three years continued that trend in August, coming in at 53.8, just below July's 54.5.

**West:** In positive territory since March, the West slid from 51.9 in July to 50.2 in August.

# Private Indicators

**ARCHITECTURE BILLINGS INDEX, BY SECTOR**  
Past 12 Months



**Multifamily Residential:** Coming in below the 50 mark since February, the sector stayed in negative territory with an August score of 49.5, marginally above July's 49.4.

**Commercial/Industrial:** The commercial sector also contracted, with an August mark of 49.7, slightly below July's 50.9.

**Institutional:** The institutional project category saw the greatest demand for design services in August, with an index score of 53.7, down from 55.3 in July.

**Mixed Practice:** In its fifth-consecutive month in positive territory, the sector received an August score of 52.8, a decline from July's mark of 54.2.



# Private Indicators

## New Construction Starts in August Fall 11 Percent

New construction starts in August dropped 11% to a SAAR of \$554.5 billion. Declines were reported for each of construction's three main sectors – nonresidential building and housing pulled back from their improved July pace, while nonbuilding construction continued to recede from the heightened performance witnessed earlier in 2015.

Residential building, at \$265.5 billion (SAAR), fell 8% in August. Multifamily housing retreated 23% after climbing 22% in July to its strongest level so far in 2015. The August pace for multifamily housing was still 21% above the average monthly amount reported during 2014. There were 8-multifamily projects valued each at \$100 million or more that reached groundbreaking in August...

“For residential building, the August decline was due to a slower pace for multifamily housing after a particularly strong July, and the upward trend for this sector remains intact.” -- Robert A. Murray, Chief Economist, Dodge Data & Analytics

### THE DODGE INDEX (Year 2000=100, Seasonally Adjusted)

August 2015.....117

July 2015.....133

### YEAR-TO-DATE CONSTRUCTION STARTS Unadjusted Totals, In Millions of Dollars

	<u>8 Mos. 2015</u>	<u>8 Mos. 2014</u>	<u>% Change</u>
Nonresidential Building	\$136,356	\$143,837	-5
Residential Building	179,201	151,904	+18
Nonbuilding Construction	<u>130,536</u>	<u>90,974</u>	<u>+43</u>
<b>TOTAL Construction</b>	<b>\$446,093</b>	<b>\$386,715</b>	<b>+15</b>

### MONTHLY SUMMARY OF CONSTRUCTION STARTS Prepared by Dodge Data & Analytics

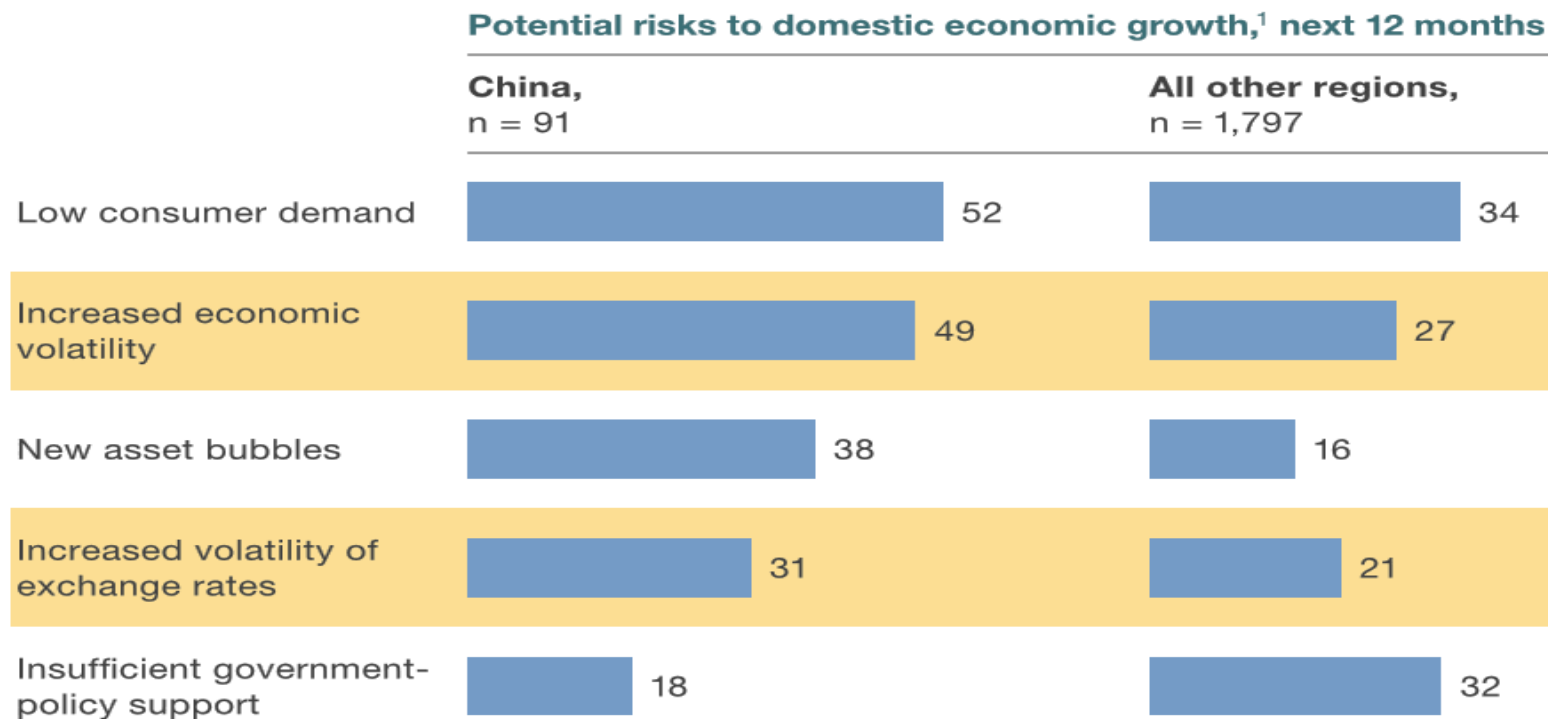
### MONTHLY CONSTRUCTION STARTS Seasonally Adjusted Annual Rates, In Millions of Dollars

	<u>August 2015</u>	<u>July 2015</u>	<u>% Change</u>
Nonresidential Building	\$160,704	\$192,180	-16
Residential Building	265,485	288,595	-8
Nonbuilding Construction	<u>128,281</u>	<u>145,700</u>	<u>-12</u>
<b>TOTAL Construction</b>	<b>\$554,470</b>	<b>\$626,475</b>	<b>-11</b>

# Private Indicators

Increasing volatility is a heightened concern among emerging-market executives — especially those in China.

% of respondents, by office location



## McKinsey Global Survey - September 2015

“Executives are more downbeat about the state of the global economy now than at any time this year. Recent turmoil in global markets has fueled concern over the strength of respondents’ home economies — and of the world economy, too.”

# Private Indicators

Compared with June, executives are roughly three times more likely now to say that global economic conditions have worsened.

% of respondents<sup>1</sup>

## Global economic conditions

■ Substantially better   
 ■ Moderately better   
 ■ The same   
 ■ Moderately worse   
 ■ Substantially worse

### Current conditions, compared with 6 months ago

### Expected conditions, in 6 months

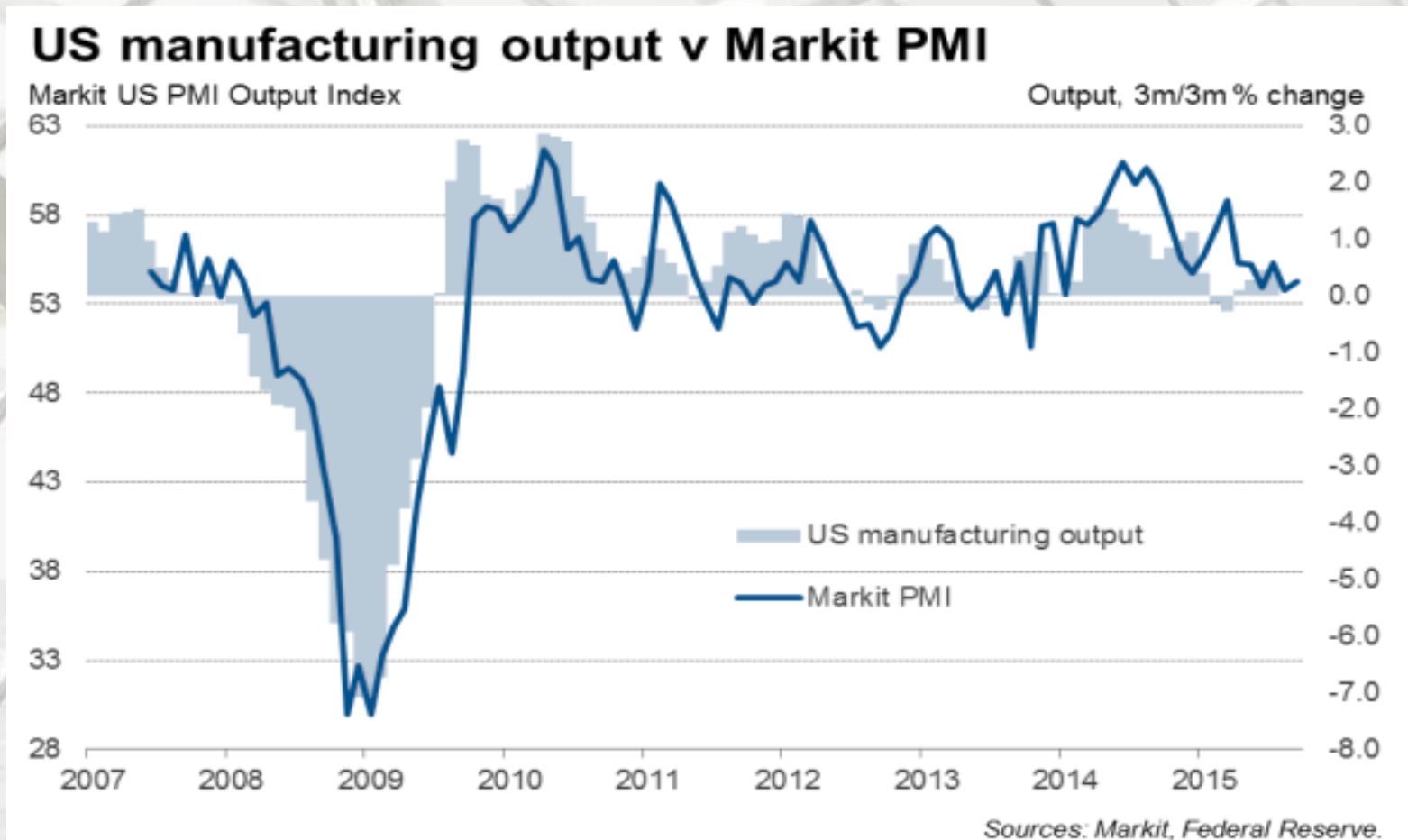


<sup>1</sup> Figures may not sum to 100%, because of rounding.

## McKinsey Global Survey - September 2015

“In the past four surveys, executives consistently reported modest views of the global economy; they were most likely to say that current conditions had held steady. But now, respondents in all regions are most likely to say that the global economy is worse than it was six months ago. Sixty-two percent say economic conditions have worsened - nearly three times the share that did so in June, making this the gloomiest.”

# Private Indicators



## Growth worries as manufacturing struggles

“At 53.0 and unchanged on August, the headline flash Markit Manufacturing PMI came in exactly in line with expectations. However, the survey is indicating the weakest manufacturing growth for almost two years, meaning the sector will have acted as a drag on the economy in the third quarter.”



# Private Indicators



## Global manufacturing PMI hits 26-month low amid deepening emerging market downturn

“Global manufacturing remained stuck firmly in the slow lane at the end of the third quarter, hindered by slumping demand in many key emerging markets.”

“The JPMorgan PMI™ fell to 50.6 in September compared to 50.7 in August. The latest reading was the weakest since July 2013 and finished off the weakest quarter of manufacturing expansion since the second quarter of 2013. The index is broadly consistent with global manufacturing output expanding at an annual rate of just 1.0% in the third quarter, with the loss of momentum in September suggesting the slowdown could intensify in the fourth quarter.”

# Private Indicators



## Exporters are fighting the strong dollar

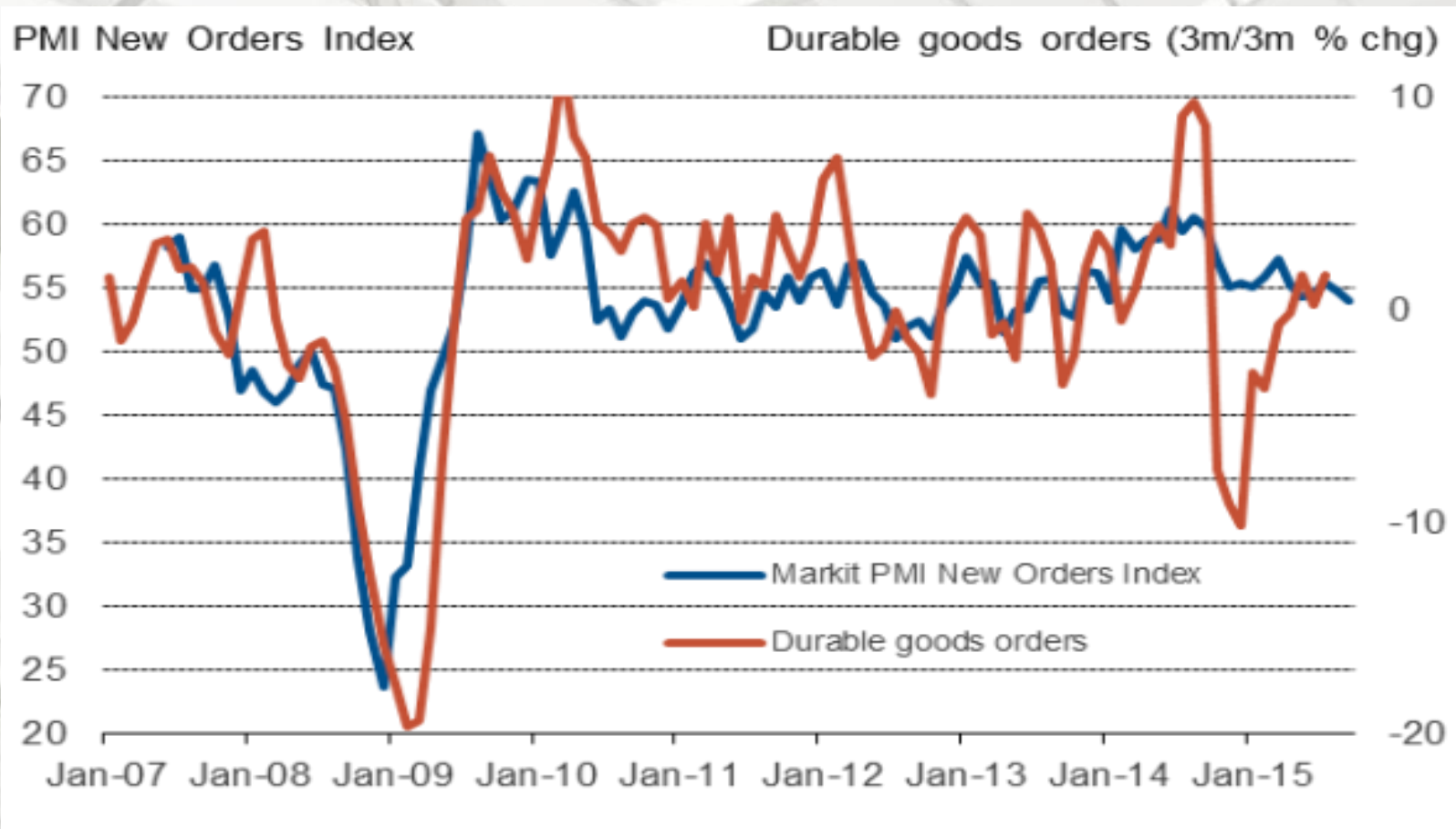
“Export orders barely grew in volume terms during the month, albeit rose at the fastest rate since February.

Producers struggled again the stronger dollar and weak growth in key export markets, especially previously-fast growing emerging markets such as China.

The dollar has appreciated by 18% over the past year on a trade weighted basis. The higher exchange rate makes US producer goods more expensive abroad, though producers are often countering the currency appreciation with price discounting, which will hit profits margins.”



# Private Indicators



## Smallest rise in orders since January 2014

“Inflows of work rose at the slowest pace since the start of 2014 as weak domestic demand added to the lacklustre export performance. The PMI new orders series cuts through the noise of the official durable goods orders data, and points to a near-stagnation of order book growth.”

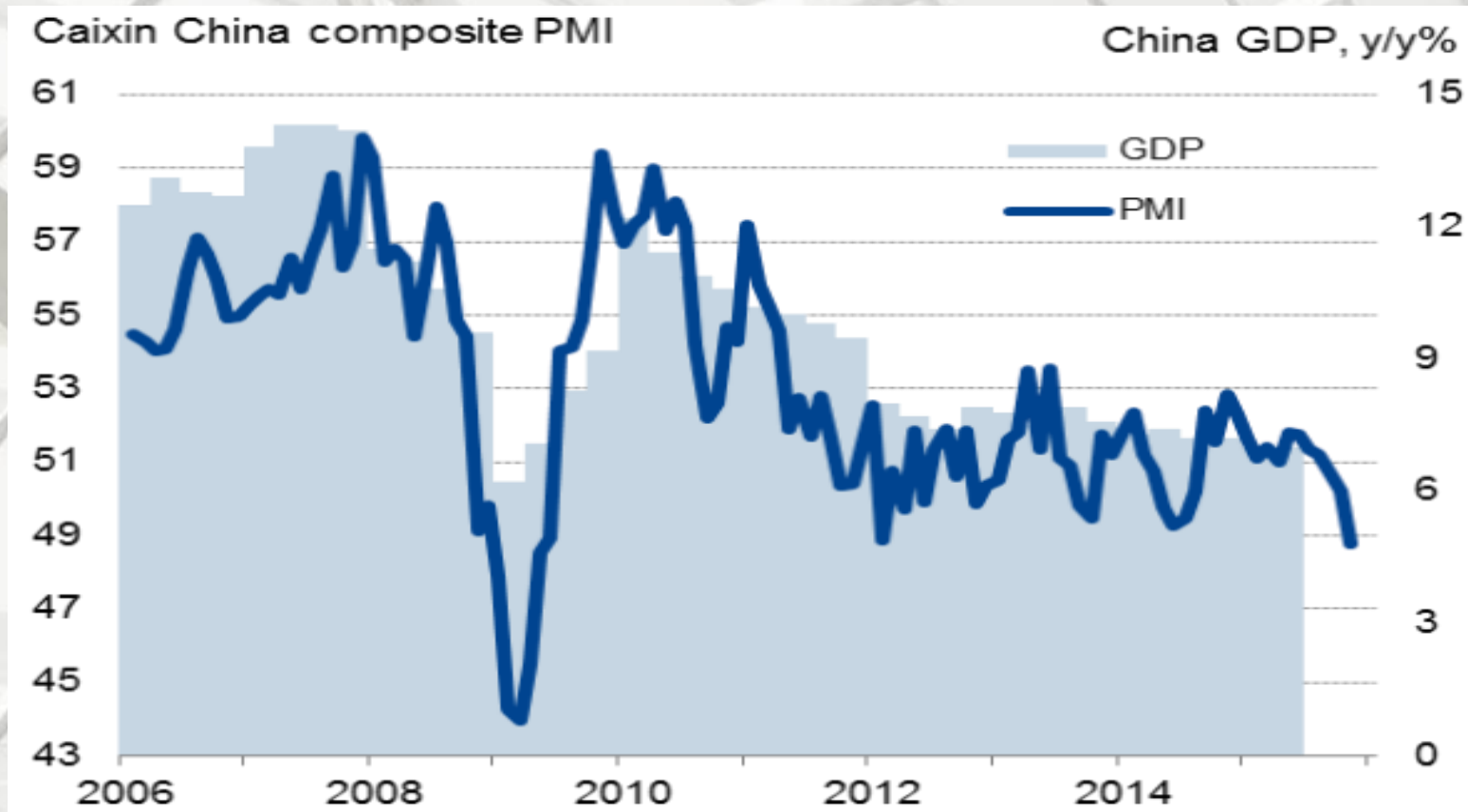
# Private Indicators



## Job creation has waned

“The survey also showed that job creation has slowed, with the PMI’s sub-index consistent with the official measure of factory non-farm payrolls dropping by around 10,000 in September. The latest reading was one of the lowest seen since the financial crisis and reflected an increasingly cautious approach to hiring as companies focus on protecting profit margins in the face of the strong dollar and weak sales.”

# Private Indicators



## Economic growth weakest since January 2009

“The headline Caixin China General Manufacturing PMI™ (manufacturing and services) fell from 48.8 in August to 48.0 in September. The latest reading indicated a second successive monthly deterioration in business activity and the largest monthly decline since January 2009, when the world was in the grips of the global financial crisis.

At 49.0, down from 51.1 in the second quarter, the third quarter PMI average points to GDP growth waning further from the 7.0% annual rate of increase seen in the second quarter. With inflows of new business falling at the fastest rate since March 2009, the survey highlights how business activity has fallen due to slumping demand.”

# Private Indicators

## China exports



### **Order books are slumping as demand weakens at home and abroad**

“New orders fell at the fastest rate since November 2011, finishing off the worst quarter for order books since the opening quarter of 2009. Export orders slumped to the greatest extent seen since June 2013, suffering one of the largest declines seen since the global financial crisis.”



# Private Indicators

## Eurozone economic growth and the PMI



### Solid(ish) third quarter

“The Markit Eurozone PMI slipped from 54.3 in August to 53.9 in September, according to the preliminary ‘flash’ reading. The latest index came in below consensus expectations of a dip to 54.1 but nevertheless remained broadly in line with recent readings seen over the past eight months.”



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