

# The Virginia Tech – U.S. Forest Service

## August 2016

### Housing Commentary: Section II



**Urs Buehlmann**

Department of Sustainable Biomaterials  
College of Natural Resources & Environment

Virginia Tech  
Blacksburg, VA

540.231.9759

[buehlmann@gmail.com](mailto:buehlmann@gmail.com)

**Delton Alderman**

Forest Products Marketing Unit  
Forest Products Laboratory

U.S. Forest Service  
Madison, WI

304.431.2734

[dalderman@fs.fed.us](mailto:dalderman@fs.fed.us)



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# Table of Contents

Slide 3: [Federal Reserve System Indicators](#)

Slide 30: [Private Indicators](#)

Slide 64: [Demographics](#)

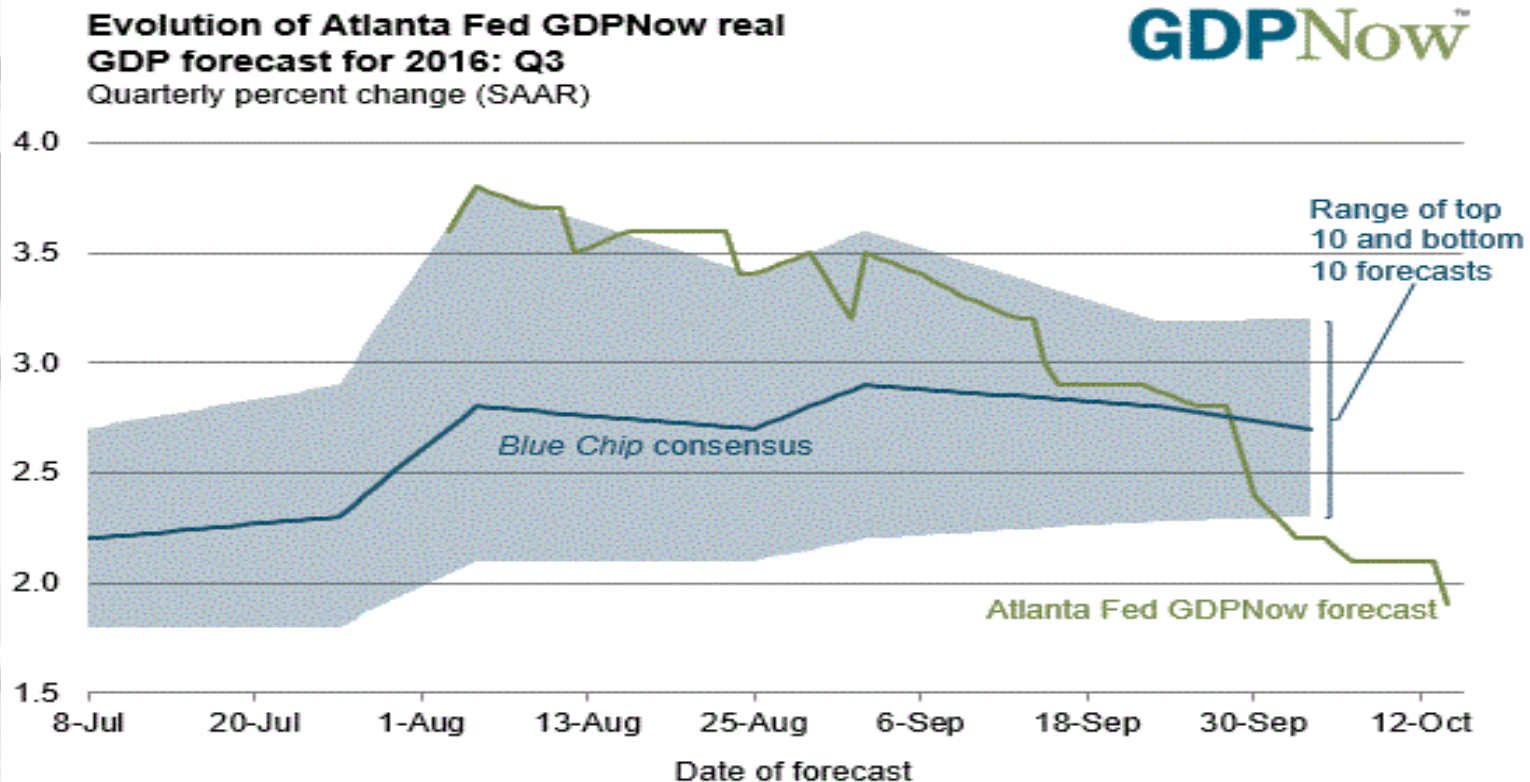
Slide 69: [Virginia Tech Disclaimer](#)

Slide 70: [USDA Disclaimer](#)



# **Federal Reserve System and Private Indicators**

# Atlanta Fed: GDPNow™



Sources: Blue Chip Economic Indicators and Blue Chip Financial Forecasts

## Latest forecast: 1.9 percent – October 14, 2016

“The GDPNow model forecast for real GDP growth (seasonally adjusted annual rate) in the third quarter of 2016 is **1.9 percent** on October 14, down from 2.1 percent on October 7. The forecast of third-quarter real personal consumption expenditures growth fell from 2.9 percent to 2.6 percent after this morning's retail sales report from the U.S. Census Bureau.” – Pat Higgins, Economist, The Federal Reserve Bank of Atlanta

# U.S. Economic Indicators

## Southeast Purchasing Managers Index



Note: 50+ = Expansion

Source: Kennesaw State University, Coles College of Business Econometric Center



FEDERAL RESERVE BANK of ATLANTA

## The Federal Reserve Bank of Atlanta Southeast Manufacturing Slows in August

“Kennesaw State University's Southeast Purchasing Managers Index (PMI), a composite index that measures the region's manufacturing sector based on key sector indicators, **fell 3.8 points to 48.5 in August**. The index is now in contractionary territory (a reading below 50 indicates manufacturing is contracting, while over 50 means the industry is expanding). August's decline was driven by decreases in nearly all underlying variables except new orders.” – Troy Balthrop, Senior Analyst, The Federal Reserve Bank of Atlanta

# U.S. Economic Indicators



	Current	Previous	1 Month Ago	3 Months Ago	6 Months Ago	12 Months Ago
<b>Index</b>	<b>10/7/2016</b>	<b>9/30/2016</b>	<b>9/9/2016</b>	<b>7/8/2016</b>	<b>4/8/2016</b>	<b>10/9/2015</b>
NFCI	-0.65	-0.63	-0.64	-0.62	-0.66	-0.71
ANFCI	0.08	0.29	0.23	0.12	0.25	-0.06

## The Federal Reserve Bank of Chicago

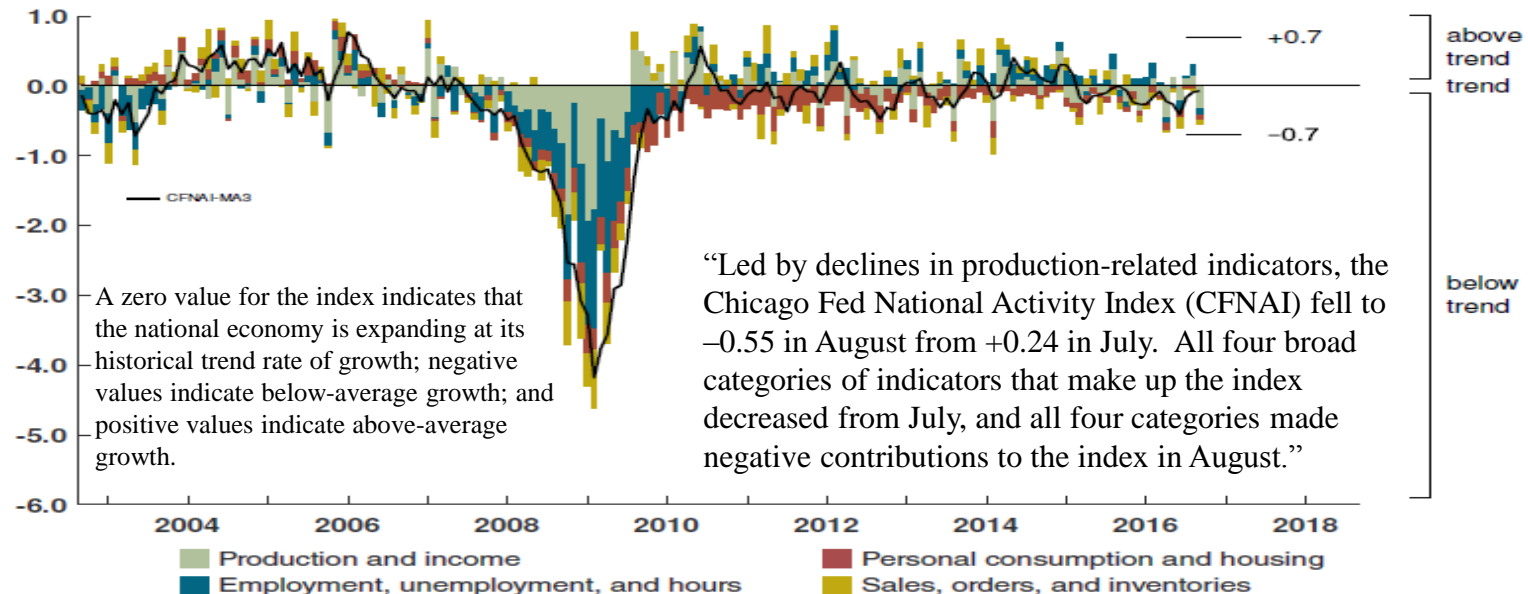
### Financial Conditions Loosen Slightly in Week Ending October 7

“The NFCI edged down to  $-0.65$  in the week ending October 7. The risk subindex ticked down, while the leverage subindex ticked up and the credit and nonfinancial leverage subindexes were unchanged.

The ANFCI also decreased, to  $0.08$ . The current level of the ANFCI indicates that financial conditions in the latest week were marginally 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 Price Index for Personal Consumption Expenditures (PCE).” – Scott Brave, Economic Research, The Federal Reserve Bank of Chicago

# Chicago Fed: National Activity Index

Chicago Fed National Activity Index, by Categories, and CFNAI-MA3

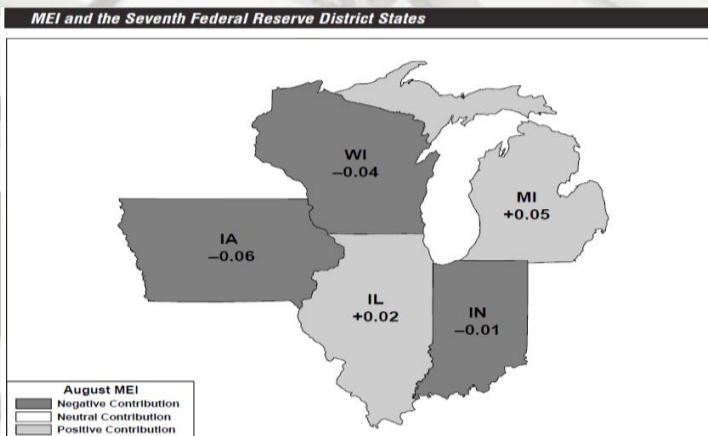


## Index shows economic growth slowed in August

“The index’s three-month moving average, CFNAI-MA3, ticked up to -0.07 in August from -0.09 in July. August’s CFNAI-MA3 suggests that growth in national economic activity was slightly below its historical trend. The economic growth reflected in this level of the CFNAI-MA3 suggests subdued inflationary pressure from economic activity over the coming year.

The CFNAI Diffusion Index, which is also a three-month moving average, ticked down to -0.02 in August from -0.01 in July. Nineteen of the 85 individual indicators made positive contributions to the CFNAI in August, while 66 made negative contributions. Twenty-one indicators improved from July to August, while 63 indicators deteriorated and one was unchanged. Of the indicators that improved, 13 made negative contributions.” – Laura LaBarbera, Media Relations, The Federal Reserve Bank of Chicago

# Chicago Fed: Midwest Economy Index



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 economic growth picked up slightly in August

“The Midwest Economy Index (MEI) increased to  $-0.04$  in August from  $-0.16$  in July. The relative MEI moved up to  $+0.11$  in August from  $+0.01$  in July. August’s value for the relative MEI indicates that Midwest economic growth was slightly higher than what would typically be suggested by the growth rate of the national economy.”

“The manufacturing sector’s contribution to the MEI increased to  $-0.01$  in August from  $-0.05$  in July. The pace of manufacturing activity increased in Illinois, but was unchanged in Indiana, Iowa, Michigan, and Wisconsin. Manufacturing’s contribution to the relative MEI remained at  $+0.12$  in August.

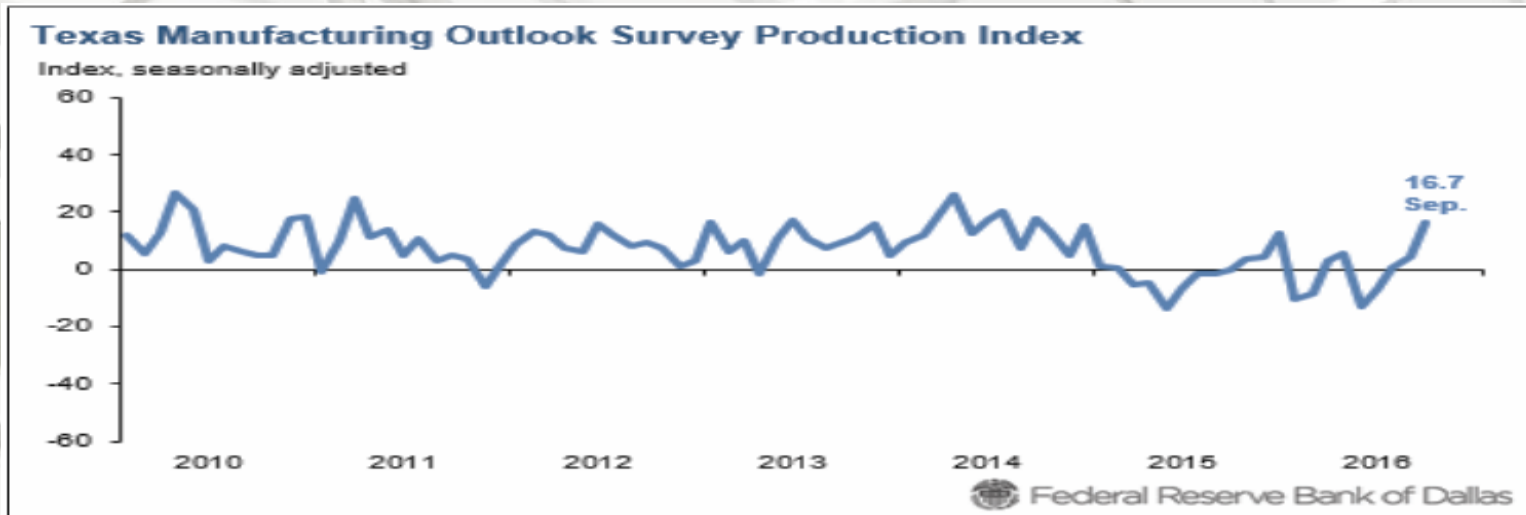
The construction and mining sector’s contribution to the MEI increased slightly to  $-0.07$  in August from  $-0.09$  in July. The pace of construction and mining activity was higher in Michigan, but lower in Illinois and unchanged in Indiana, Iowa, and Wisconsin. Construction and mining’s contribution to the relative MEI was unchanged at  $-0.03$  in August.

The service sector’s contribution to the MEI increased to  $+0.04$  in August from  $-0.05$  in July. The pace of service sector activity was up in Indiana, Iowa, and Michigan, but down in Illinois and Wisconsin. The service sector’s contribution to the relative MEI rose to  $+0.04$  in August from  $-0.11$  in July.

The contribution from consumer spending indicators to the MEI moved down to  $+0.01$  in August from  $+0.03$  in July. Consumer spending indicators were, on balance, down in Michigan and Wisconsin, but up in Indiana and Iowa and steady in Illinois. Consumer spending’s contribution to the relative MEI decreased to  $-0.01$  in August from  $+0.02$  in July.” – Laura LaBarbera, Media Relations, Federal Reserve Bank of Chicago



# U.S. Economic Indicators



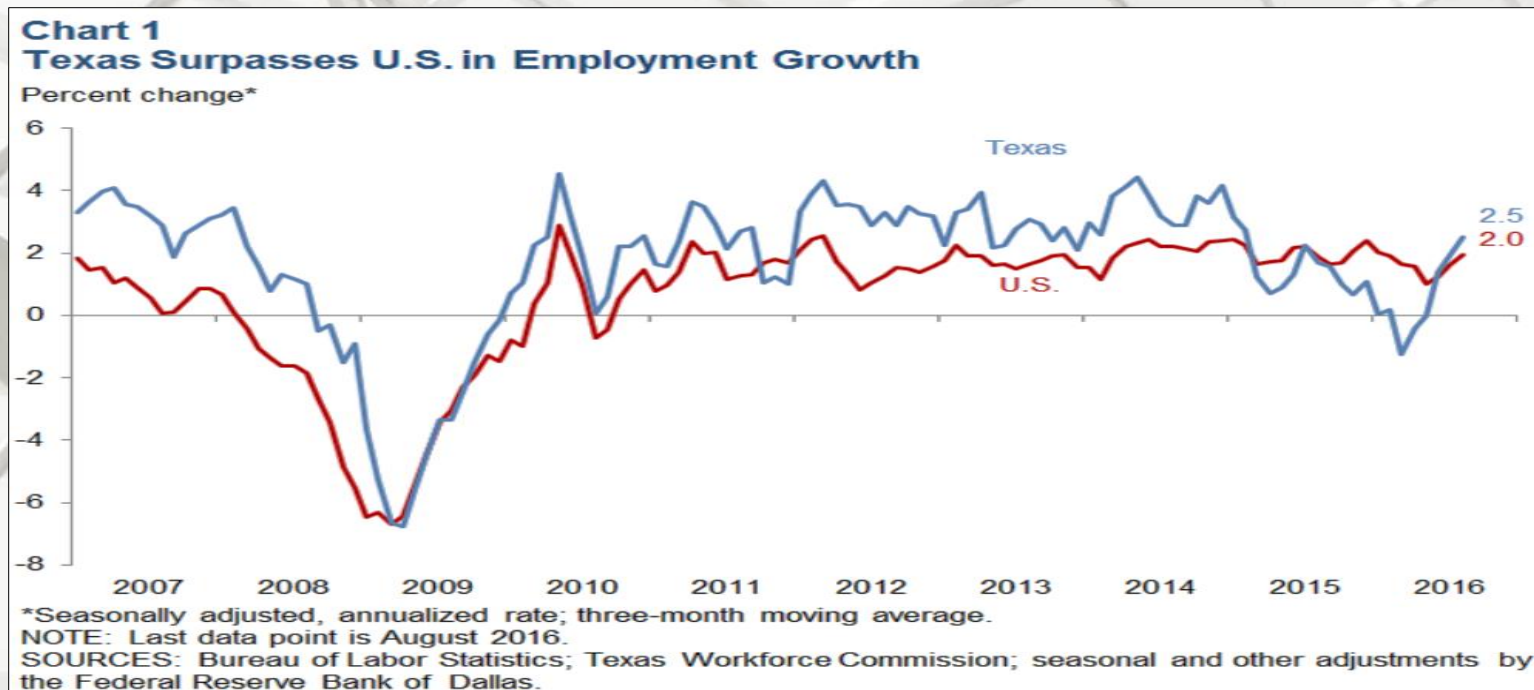
## Texas Manufacturing Strengthens Further

“Texas factory activity increased markedly in September, according to business executives responding to the *Texas Manufacturing Outlook Survey*. The [production](#) index, a key measure of state manufacturing conditions, rose 12 points to 16.7, suggesting output picked up at a notably faster pace this month.

Some other measures of current manufacturing activity also reflected faster expansion, while the survey's demand indicators dipped back into negative territory. The [capacity utilization](#) and shipments indexes posted double-digit gain to reach 13.5 and 20.1, respectively. These reading represent the highest readings for these indexes in roughly two years. The [new orders](#) fell from 5.3 to -2.9 in September, and the [growth rate of orders](#) index fell to -5.8 after pushing into positive territory last month.

Perceptions of broader business conditions were mixed. The [general business activity](#) index remained negative for a 21st consecutive month, although it edged up to -3.7. The [company outlook](#) index reflected optimism as it pushed into positive territory for the first time since November 2015, coming in at 6.7.” – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas

# U.S. Economic Indicators



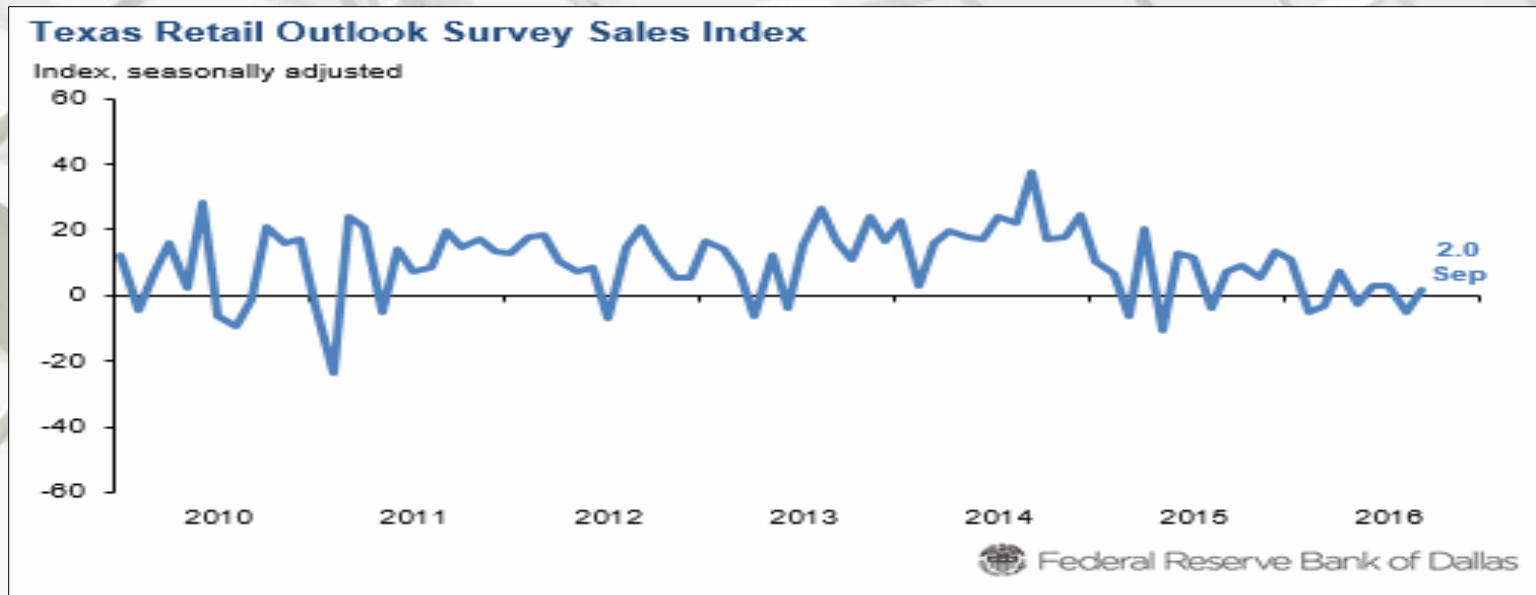
## The Federal Reserve Bank of Dallas

### Regional Economy Improves Further, but Risks to Outlook Remain

“The Texas economy has been in expansion after contracting in first quarter 2016, suggesting the worst of the energy bust may be over. Employment is up, and the Dallas Fed’s most recent forecast suggests job growth in the second half of the year will be much stronger than in the first. The Texas Business Outlook Surveys have also improved, and there are signs of life in the energy sector. However, weakness persists in construction spending and exports, and significant risks to the outlook remain.

The Dallas Fed’s [Texas Employment Forecast](#) suggests 1.2 percent growth in 2016, implying job gains in the second half of the year will be around 2.3 percent. While this would represent a significant turnaround in growth, this positive assessment is tempered by risks of sharply lower oil prices, a stronger dollar and decelerating global or U.S. growth.” – Stephanie Gullo, Amy Jordan and Pia Orrenius, Research Department, Federal Reserve Bank of Dallas

# U.S. Economic Indicators



## The Federal Reserve Bank of Dallas

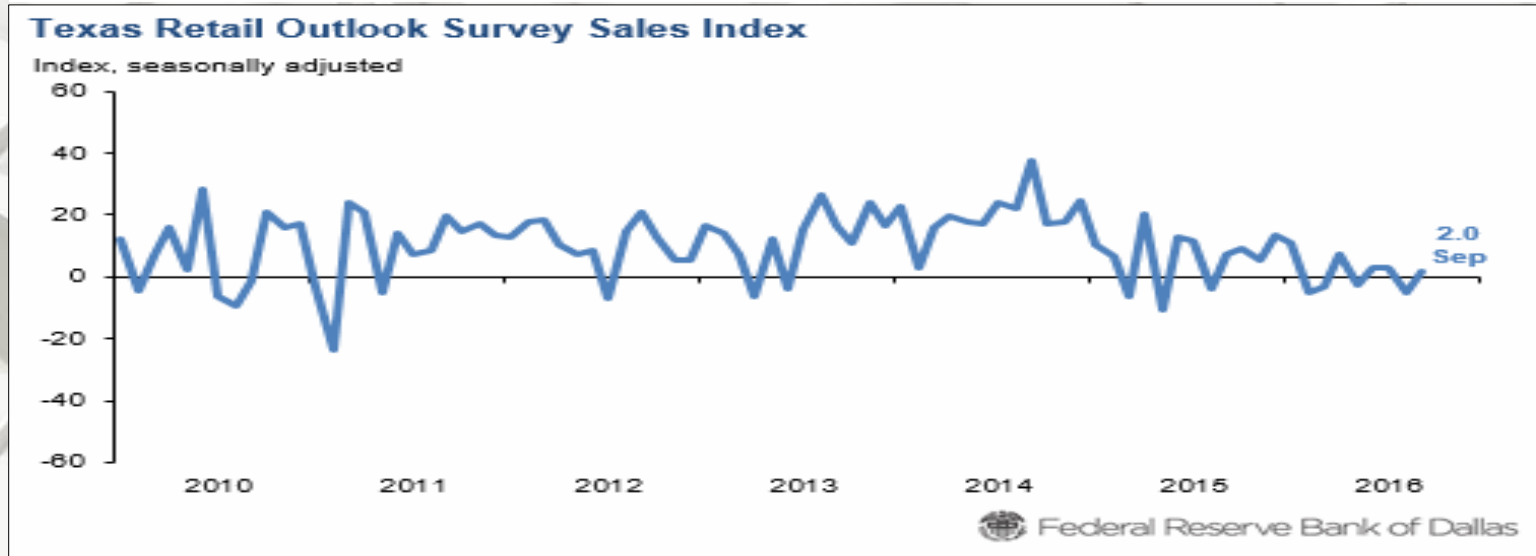
### Texas Service Sector Activity Strengthens

“Texas service sector activity increased in September, according to business executives responding to the Texas Service Sector Outlook Survey. The [revenue](#) index, a key measure of state service sector conditions, advanced from 6.5 in August to 13.0 in September.

Labor market indicators reflected slower employment growth and longer workweeks this month. The [employment](#) index edged down from 5.8 to 4.4. The [hours worked](#) index rose slightly from a reading near zero to 3.1.

Perceptions of broader economic conditions reflected optimism in September. The [general business activity](#) index rebounded from -5.0 to 4.7, its first positive reading this year. The [company outlook](#) index held steady at 2.8, with 16 percent of respondents reporting that their outlook improved from last month and 14 percent noting it worsened.” – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

# U.S. Economic Indicators



## The Federal Reserve Bank of Dallas

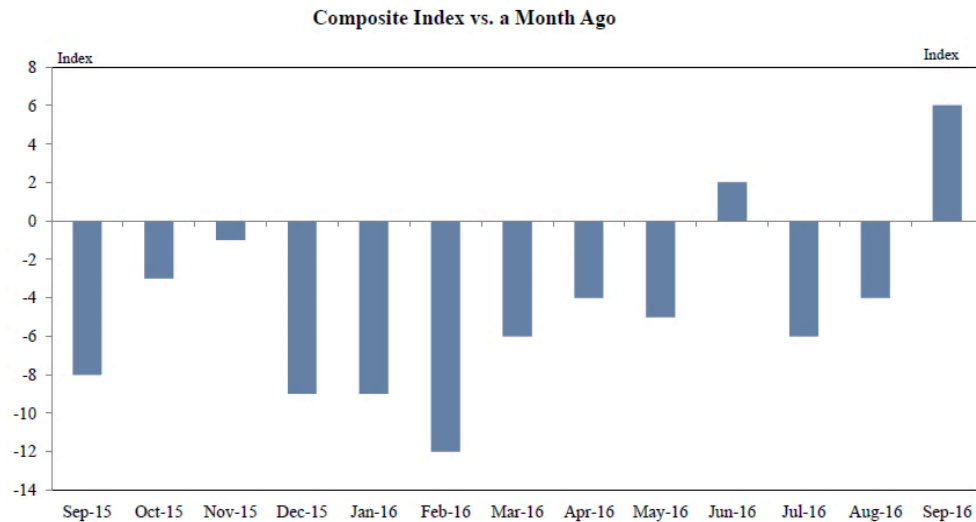
### Retail Sales Rebound and Outlooks Improve

“Retail sales grew in September, according to business executives responding to the *Texas Retail Outlook Survey*. The [sales](#) index advanced from -5.3 to 2.0. [Inventories](#) declined this month after holding steady last month. Labor market indicators were mixed again this month. The [employment](#) index was largely unchanged at 3.3, indicating retail hiring increased at the same pace as last month. The [hours worked](#) index remained in negative territory for a second consecutive month at -1.7, suggesting workweeks shortened.

Retailers’ perceptions of broader economic conditions improved in September. The [general business activity](#) index surged from -11.8 to 7.9, its first positive reading in 11 months. The [company outlook](#) index rebounded from -13.4 to 2.9, with 19 percent of respondents reporting that their outlook improved from last month and 16 percent noting that it worsened.

Retailers’ perceptions of future broader economic conditions improved in September. The index of future [general business activity](#) shot up from -3.5 to 9.9. The index of future [company outlook](#) rose slightly from 7.4 to 9.7. Indexes of future retail sector activity continued to reflect optimism this month.” – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

# U.S. Economic Indicators



## Tenth District Manufacturing Summary

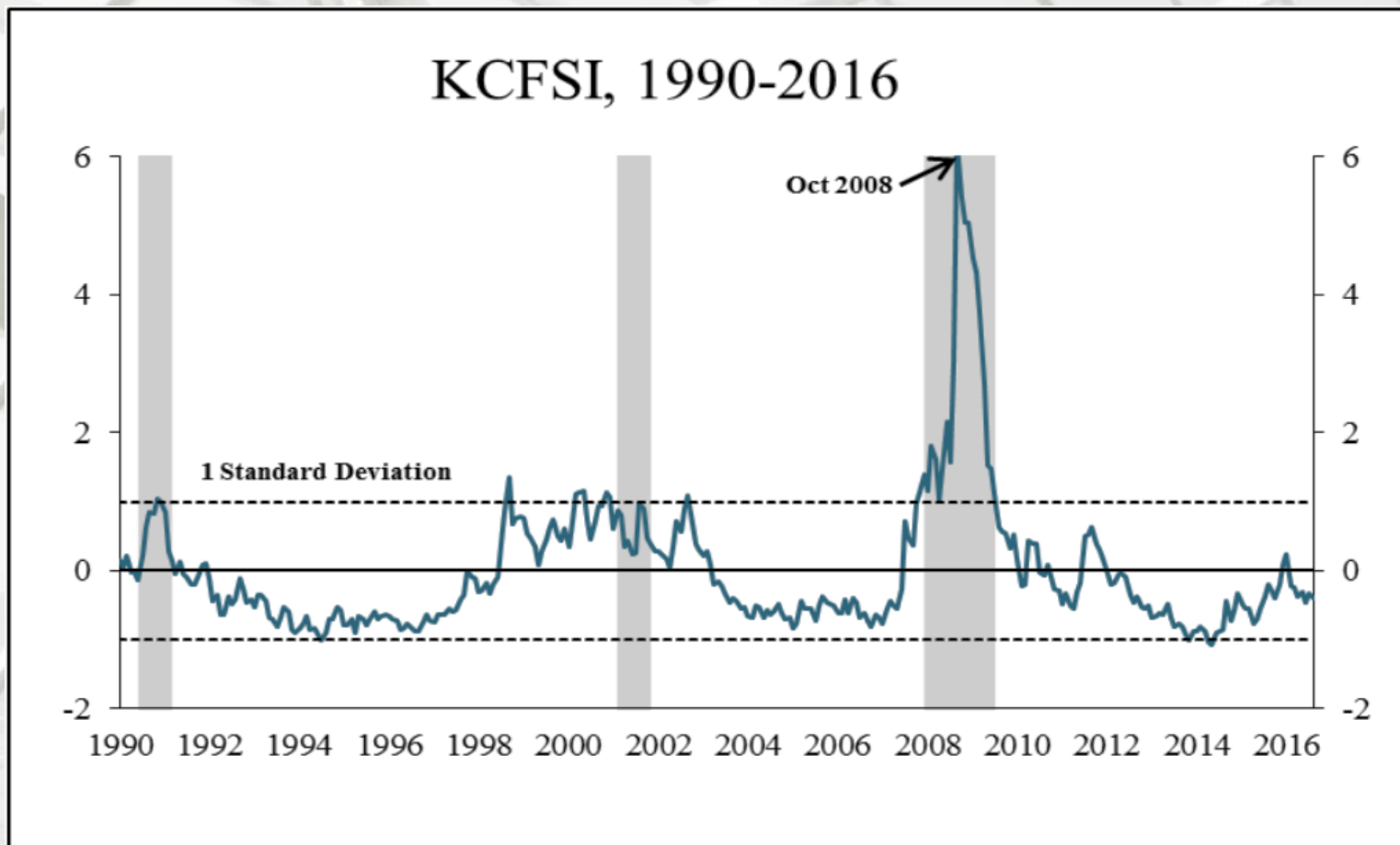
“Tenth District manufacturing activity rebounded moderately in September, and producers’ expectations for future activity remained positive. The price indexes were mixed.” – Pam Campbell, Federal Reserve Bank of Kansas City

## The Federal Reserve Bank of Kansas City Tenth District Manufacturing Activity Rebounded Moderately

“For the second time in four months we had a positive reading on our composite index. This followed 15 straight months of contraction and suggests regional factory activity may be stabilizing.” – Chad Wilkerson, Vice President and Economist, Federal Reserve Bank of Kansas City

“The month-over-month composite index was 6 in September, up from -4 in August and -6 in July. The composite index is an average of the production, new orders, employment, supplier delivery time, and raw materials inventory indexes. Non-durable goods activity grew modestly, while durable goods production grew strongly, particularly for machinery and metals production. Most month-over-month indexes improved markedly in September. The production index climbed from -7 to 15, and the shipments and new orders indexes also rose considerably. The employment, new export orders, order backlog indexes were modestly higher, while the supplier delivery time index fell into negative territory. The raw materials inventory index rose from -1 to 8, and the finished goods inventory index inched higher.” – Pam Campbell, Federal Reserve Bank of Kansas City

# U.S. Economic Indicators



## **The Federal Reserve Bank of Kansas City The KCFSI suggests financial stress remains low**

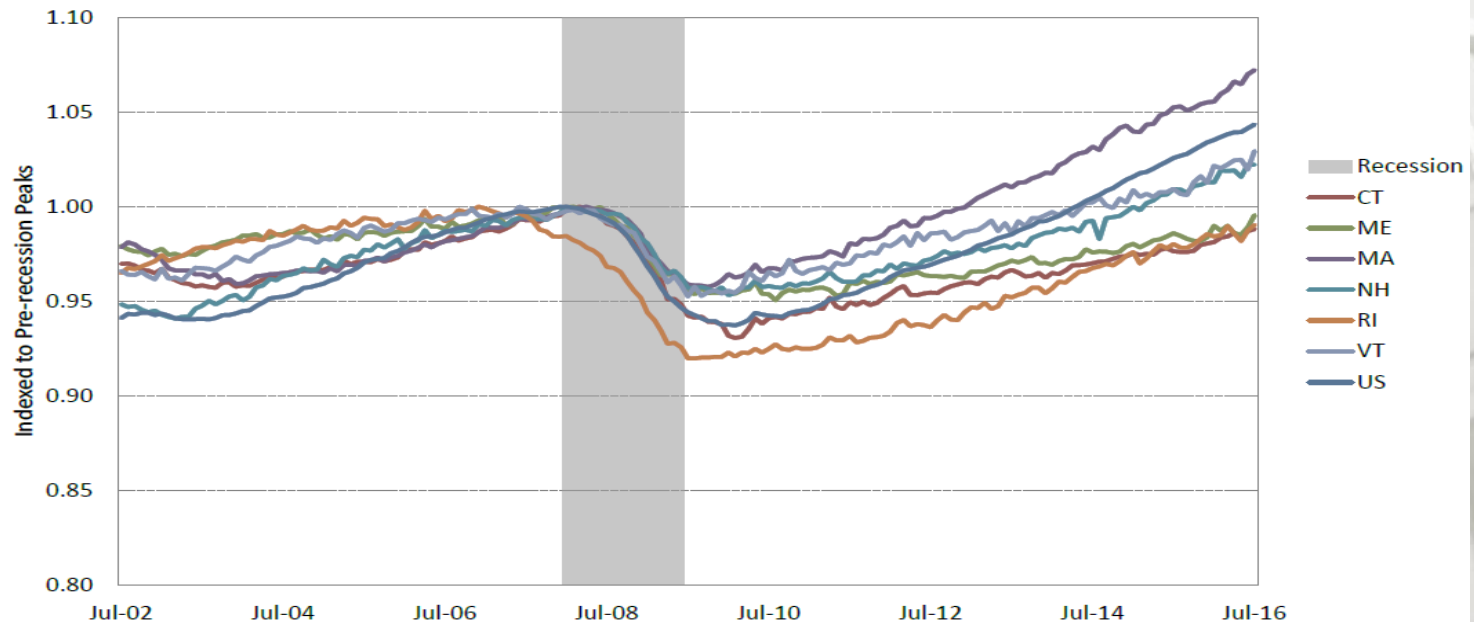
“The Kansas City Financial Stress Index (KCFSI) decreased slightly from -0.34 in August to -0.39 in September.” – Bill Medley, Media Relations, The Federal Reserve Bank of Kansas City

# U.S. Economic Indicators

## New England Economic Update

- “Region as a whole growing more slowly than U.S.
- Massachusetts growing faster than the U.S.
- Unemployment very low in region
- Consumer confidence strengthened in region
- Forecast predicts slower growth in some states” – Mary Burke, Senior Economist, The Federal Reserve Bank of New England

## Non-Agricultural Employment



Source: Bureau of Labor Statistics, NBER, Haver Analytics

Source: <https://www.bostonfed.org/publications/new-england-economic-updates/2016/burke-091216.aspx>; 9/1/16

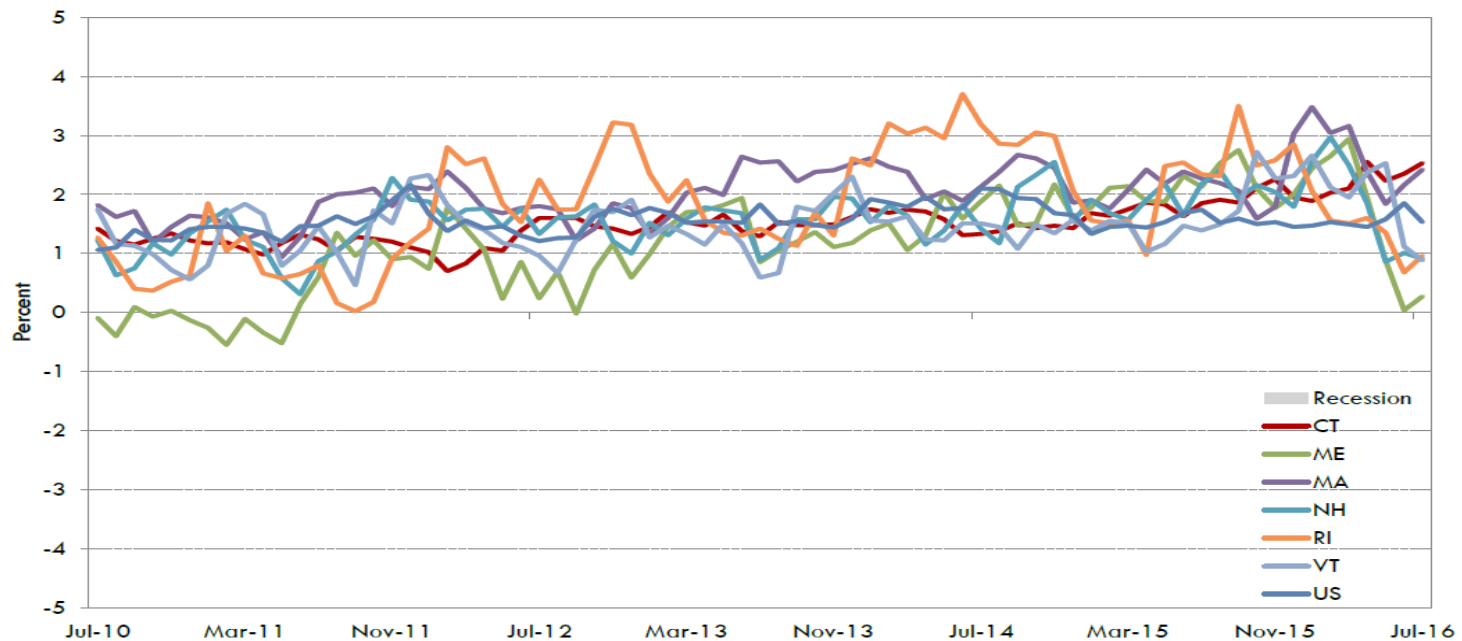
[Return to TOC](#)

# U.S. Economic Indicators

## New England Economic Update

- “Economic performance remains mixed in the region
- Leisure/hospitality employment up in all states
- Unemployment at very low levels in some states
- Region’s consumers have improved outlook
- But Philly Fed sees slower growth ahead” – Mary Burke, Senior Economist, The Federal Reserve Bank of New England

## State Leading Economic Activity Indexes

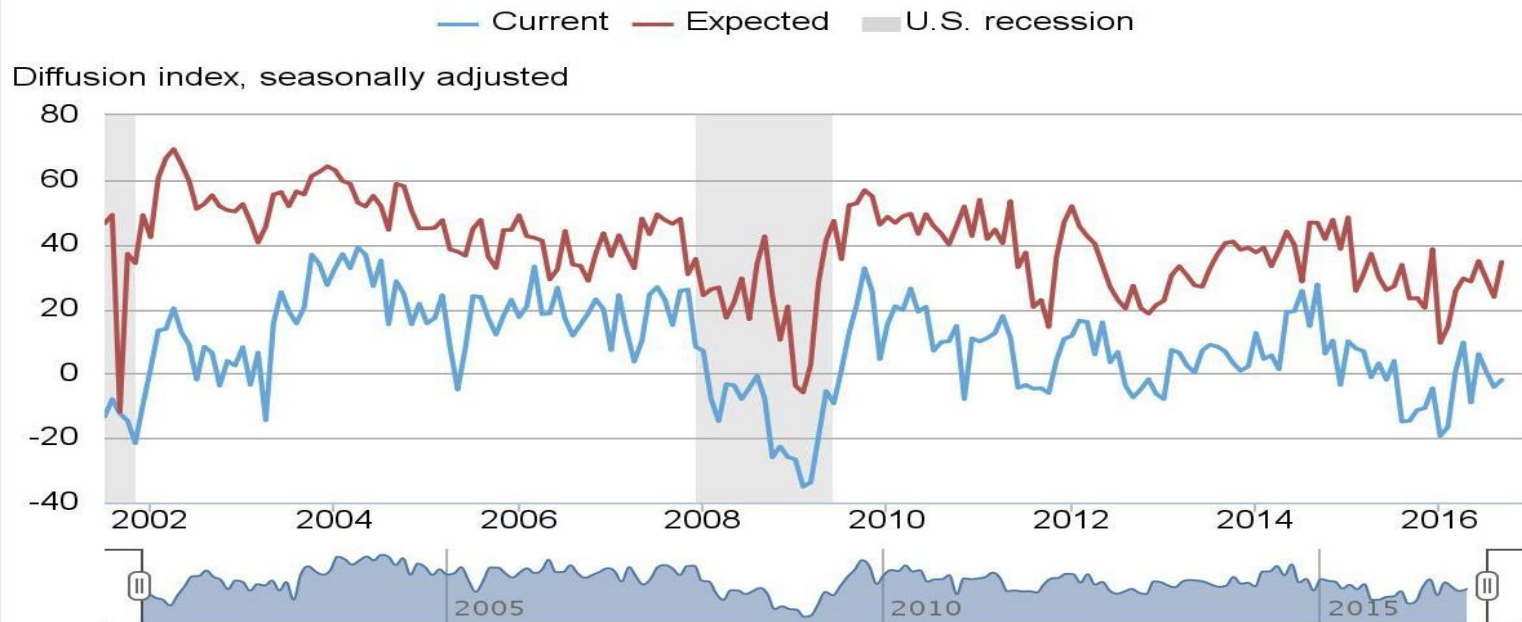


Source: Federal Reserve Bank of Philadelphia, NBER, Haver Analytics



# U.S. Economic Indicators

## General Business Conditions



## Empire State Manufacturing Survey

### Business Activity Remains Weak

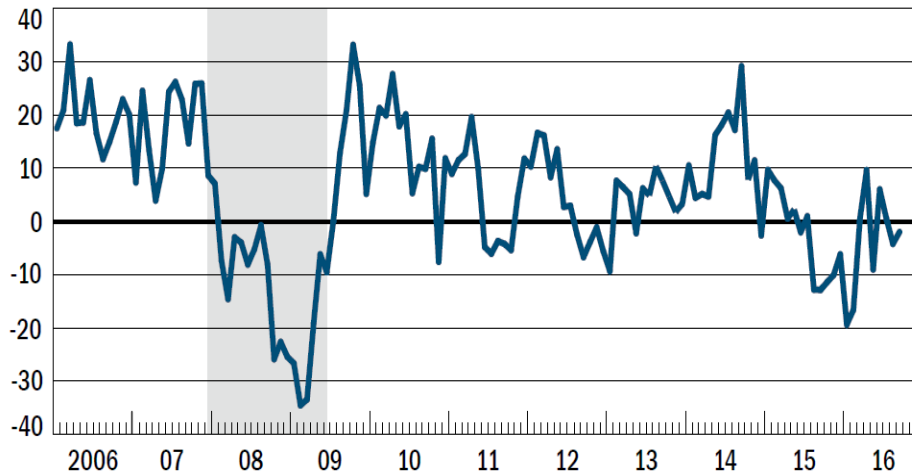
“Business activity edged lower in New York State, according to firms responding to the September 2016 *Empire State Manufacturing Survey*. The headline general business conditions index held below zero, and was little changed at -2.0. The new orders index fell eight points to -7.5 and the shipments index fell eighteen points to -9.4 — developments that pointed to a marked decline in both orders and shipments. Labor market conditions weakened, with both employment levels and the average workweek reported as lower. Price indexes remained close to last month’s levels, and indicated ongoing moderate input price increases coupled with a continued slight increase in selling prices. Indexes for the six-month outlook suggested that firms generally expect conditions to improve in the months ahead.” – The Federal Reserve Bank of New York

# 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.

## Empire State Manufacturing Survey

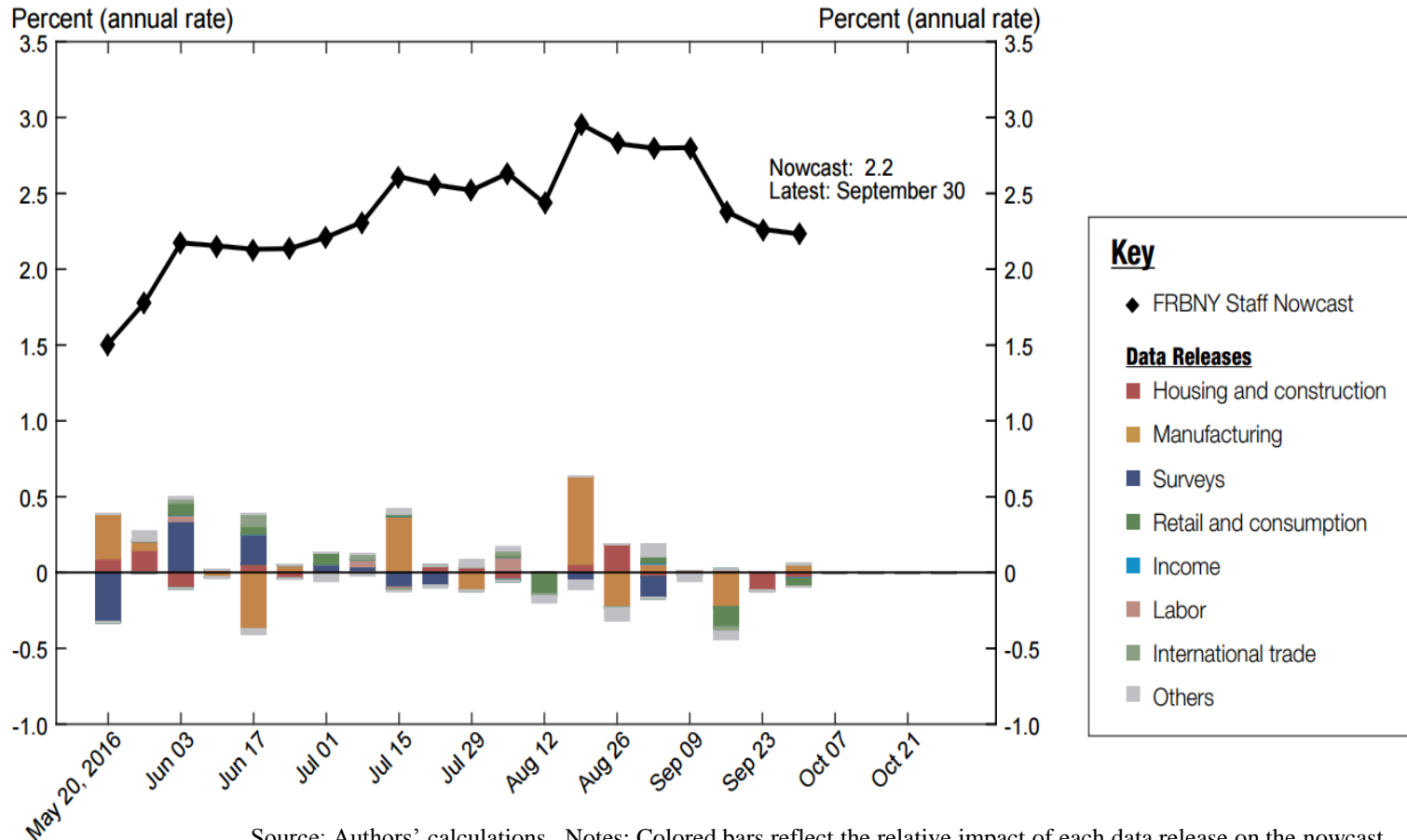
“Echoing their August assessment, manufacturing firms in New York State reported a slight decline in business activity in September. The general business conditions index inched up two points, but remained negative at -2.0. 22 percent of respondents reported that conditions had improved over the month, while 24 percent reported that conditions had worsened.” – The Federal Reserve Bank of New York

## Outlook Remains Optimistic

“Indexes for the six-month outlook suggested that respondents were more optimistic about future conditions than they were last month. The index for future business conditions climbed eleven points to 34.5. The index for future new orders advanced to a similar level, while the index for future shipments, though positive, declined. The index for future employment moved up into positive territory, suggesting that firms expected to expand employment in the months ahead. Indexes for future prices rose considerably, suggesting that firms expected both input prices and selling prices to increase more significantly over the next six months. The capital expenditures and technology spending indexes both climbed to 10.7.” – The Federal Reserve Bank of New York

# U.S. Economic Indicators

## The Federal Reserve Bank of New York

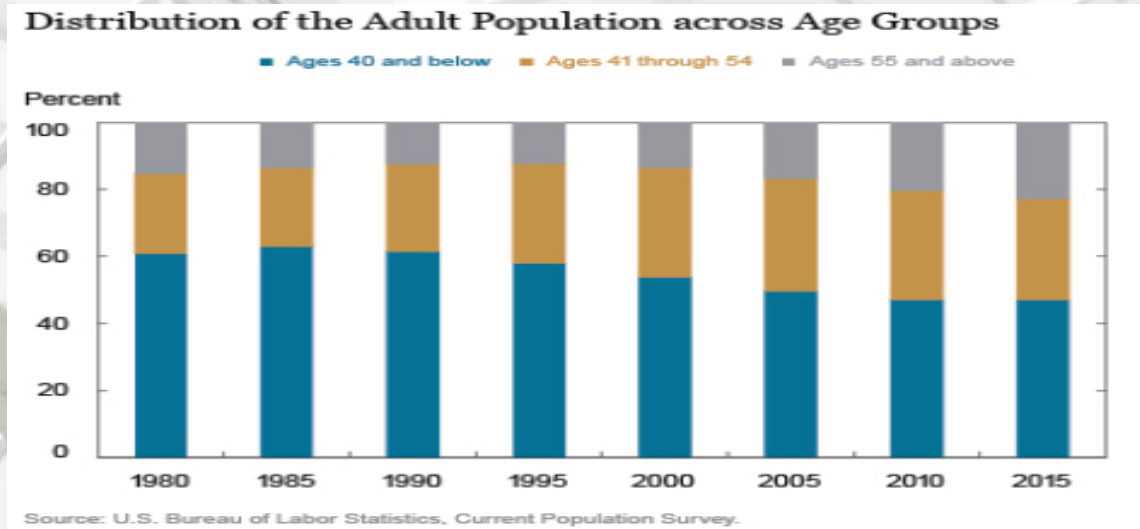


Source: Authors' calculations. Notes: Colored bars reflect the relative impact of each data release on the nowcast.

“The FRBNY Staff Nowcast stands at 2.2% and 1.2% for 2016:Q3 and 2016:Q4, respectively. The net impact of the releases was small and left the nowcast virtually unchanged from last week. Negative contributions from real personal consumption expenditures and single family houses sold were offset by positive contributions from orders of durable goods and wholesale inventories data.”

# U.S. Economic Indicators

## U.S. Real Wage Growth: Fast Out of the Starting Blocks



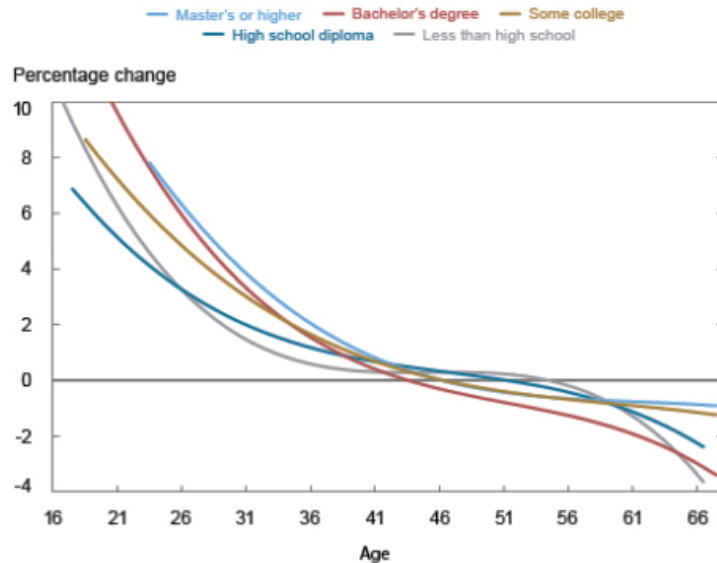
“As a labor force ages, more workers will transition from the fast to the slow or negative real wage growth phases of their careers. Drawing on the patterns we observed in the cohort real wage growth profiles, we divide careers into three life-cycle phases: (1) fast growth, up to age 40, (2) flat growth, ages 41-54, and (3) negative growth, age 55 and older. The next chart shows the distribution over time of the U.S. adult population across these three career phases. The fraction of the U.S. population in the fast real wage growth phase has declined from close to 60 percent in the 1980s to the mid-40 percent range recently. Correspondingly, a greater fraction of the U.S. population is now in the flat and declining life-cycle phases of real wage growth.

So, what does all of this suggest in terms of the behavior of real wage growth since 1980? In Wednesday's post, we combine the information on the demographic pattern of real wage growth rates with the information on the changing demographics of the U.S. population to construct an economy-wide average real wage growth rate over the last 35- years. We show that there has been a meaningful slowdown in this average real wage growth rate as the U.S. population has aged.” – Robert Rich, Joseph Tracy, and Ellen Fu, The Federal Reserve Bank of New York

# U.S. Economic Indicators

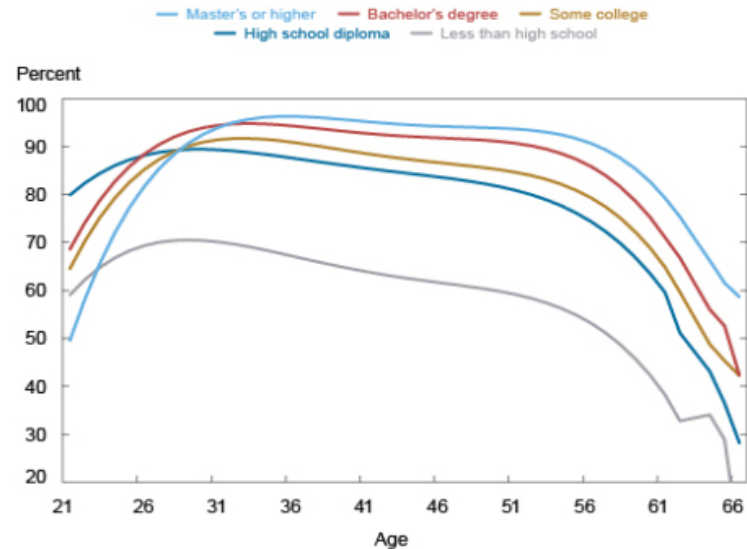
## U.S. Real Wage Growth: Slowing Down With Age

Real Wage Growth for White Males Born in the 1950s



Source: U.S. Bureau of Labor Statistics, Current Population Survey.

Cyclically Neutral Employment Rates for White Males Born in the 1950s



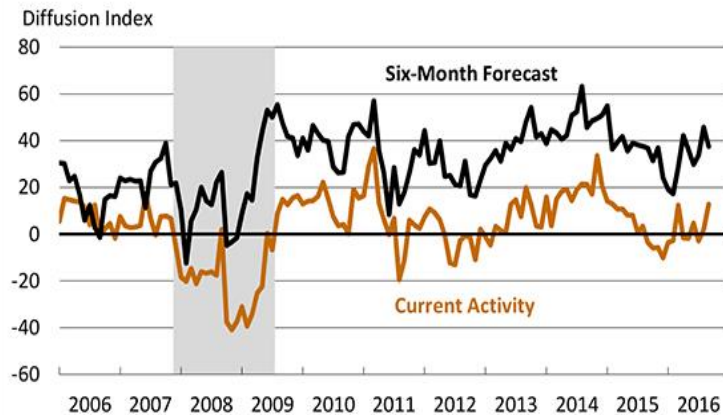
Source: U.S. Bureau of Labor Statistics, Current Population Survey.

“...real wages, holding constant any cyclical effects, show positive growth that is concentrated early in a worker’s career. By age 40, real wage growth has typically declined to around zero. The chart above, reproduced from Monday’s post, depicts this pattern for the five cohorts of white males born in the 1950s by different education levels.

So, what does all of this suggest in terms of the behavior of real wage growth since 1980? In Wednesday’s post, we combine the information on the demographic pattern of real wage growth rates with the information on the changing demographics of the U.S. population to construct an economy-wide average real wage growth rate over the last 35- years. We show that there has been a meaningful slowdown in this average real wage growth rate as the U.S. population has aged.” – Robert Rich, Joseph Tracy, and Ellen Fu, The Federal Reserve Bank of New York

# U.S. Economic Indicators

**Chart 1. Current and Future General Activity Indexes**  
January 2006 to September 2016



Note: The diffusion index is computed as the percentage of respondents indicating an increase minus the percentage indicating a decrease; the data are seasonally adjusted.

## Summary

The *August Manufacturing Business Outlook Survey* suggests continued growth of the region's manufacturing sector in September. Indexes for both general activity and new orders indicated expansion. However, firms reported an overall reduction in shipments this month, and employment indicators suggested continued weakness. Firms remained optimistic about increases in overall business activity over the next six months and were more upbeat with regard to their employment forecasts.”

## August 2016 Manufacturing Business Outlook Survey

### Current Indicators Remain Weak

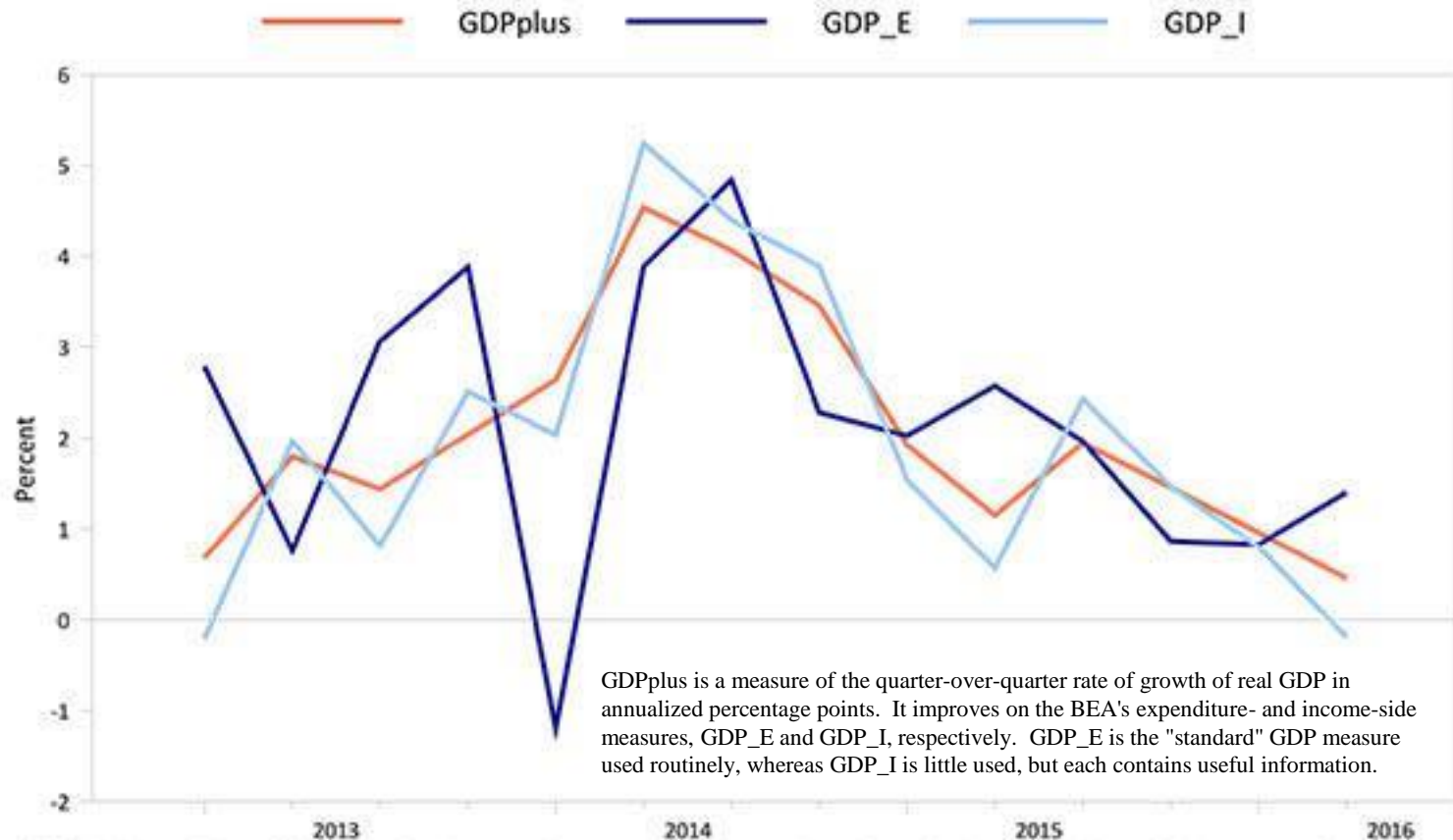
“The index for current manufacturing activity in the region increased 11 points to 12.8. The index for current manufacturing activity in the region rose 5 points to only 2.0 in August, as the share of firms reporting an increase in activity (35%) barely exceeded the share reporting a decrease (33%). This is only the third positive reading of the index in the current year.

Results from the *Manufacturing Business Outlook Survey* suggest that regional manufacturing conditions continued to improve in September. Indicators for general activity and new orders were positive and increased from their readings last month. Indicators for shipments and employment, however, were negative, suggesting weaker performance for the sector. Firms remain optimistic about growth over the next six months and were more positive about increasing employment.” – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

# Philadelphia Fed: GDPplus

## GDPplus Components: Alternative Measures of Real Output Growth

Last Updated on September 29, 2016.



GDPplus is a measure of the quarter-over-quarter rate of growth of real GDP in annualized percentage points. It improves on the BEA's expenditure- and income-side measures, GDP\_E and GDP\_I, respectively. GDP\_E is the "standard" GDP measure used routinely, whereas GDP\_I is little used, but each contains useful information.

NOTES: Shaded areas indicate NBER recessions. The data measure the quarter-over-quarter growth rate in continuously compounded annualized percentage points.

Sources: Bureau of Economic Analysis (BEA) and NBER via Haver Analytics; Federal Reserve Bank of Philadelphia.

# U.S. Economic Indicators

## The Federal Reserve Bank of Richmond

### Manufacturing Sector Activity Still Soft in September; Employment Index at 36-Month Low

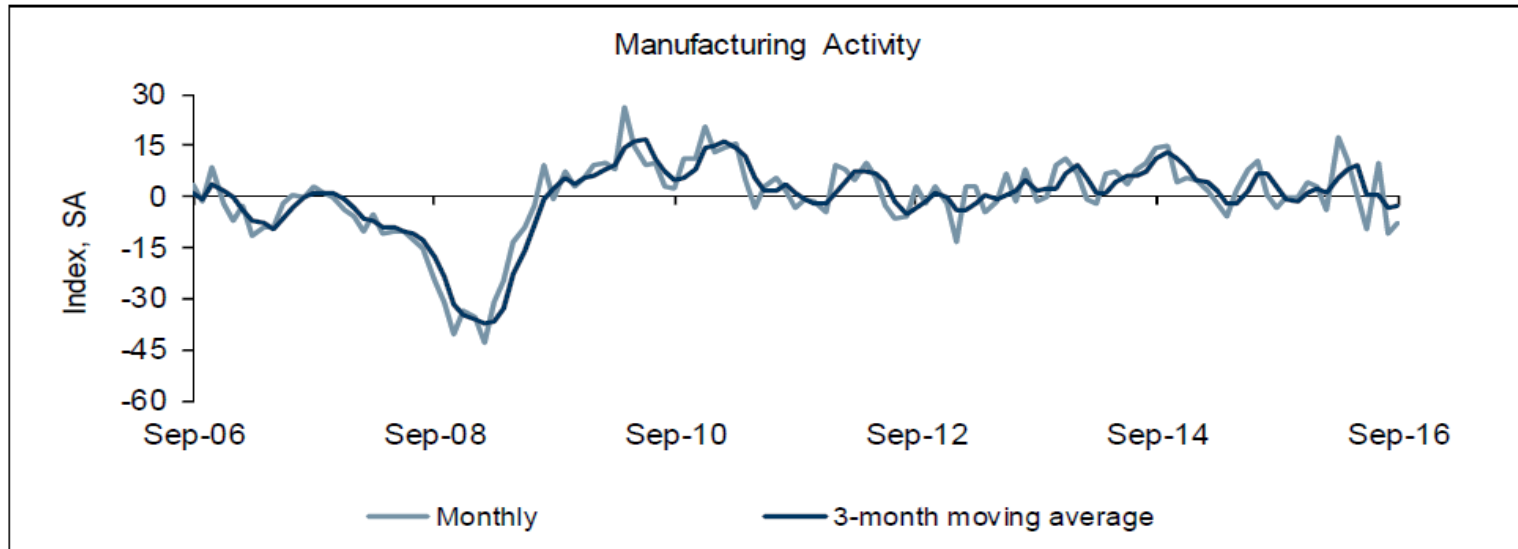
“Manufacturing activity in the Fifth District continued to soften in September, but somewhat less so than in August, according to the Richmond Fed's latest survey. New orders and shipments decreased this month at a slower pace, while backlogs decreased at about the same pace as last month. Hiring activity weakened across firms and wage increases were less widespread. Although raw materials prices rose at a somewhat faster pace in September, prices of finished goods barely increased in the month.

Looking ahead six months, producers' expectations about future business conditions have softened compared to last month's readings. Manufacturers expected softer growth in shipments and in the volume of new orders as well as backlogs of orders. Fewer survey participants expected vendor lead times to lengthen. Expectations for increased capacity utilization softened somewhat.

Manufacturing firms anticipate more modest hiring and continued wage increases in the months ahead. Firms expected faster growth in prices received and prices paid in the next six months.” – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond



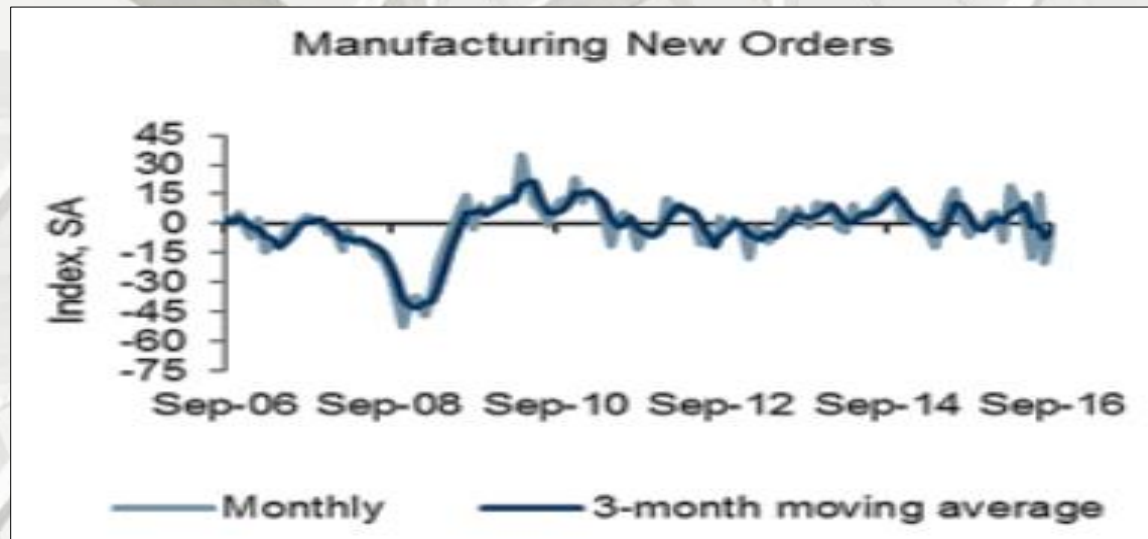
# U.S. Economic Indicators



## Current Activity

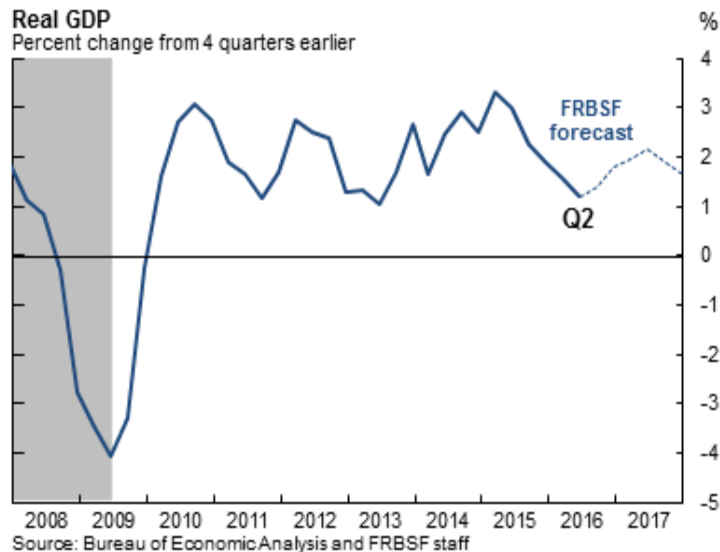
“Overall manufacturing activity, as measured by the composite index, gained three points but continued to indicate some contraction, with a reading of  $-8$  following last month’s reading of  $-11$ . The indicators for shipments and new orders increased this month but remained negative. The index for shipments gained 10 points, ending at a reading of  $-4$ , while the index for new orders rose 13 points to  $-7$ . In contrast, the manufacturing employment index fell into negative territory for the first time in three years, with a reading of  $-13$ .” – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond

# U.S. Economic Indicators

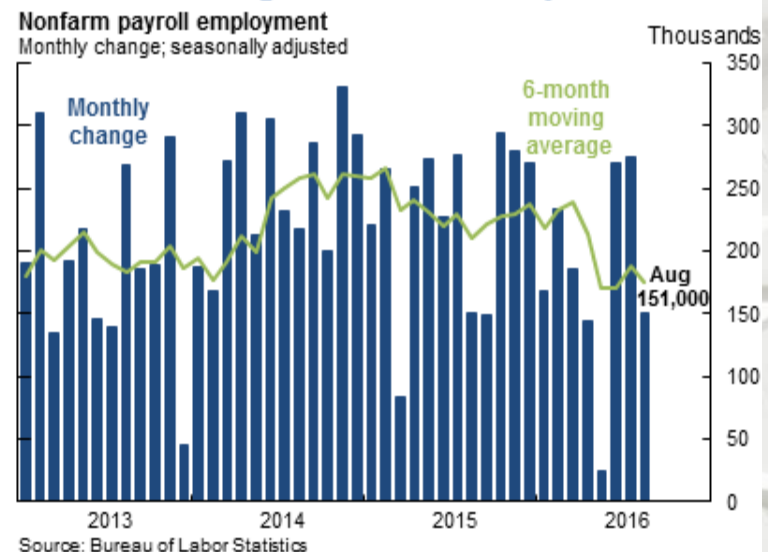


# U.S. Economic Indicators

## Economy on moderate growth path



## Job growth still healthy

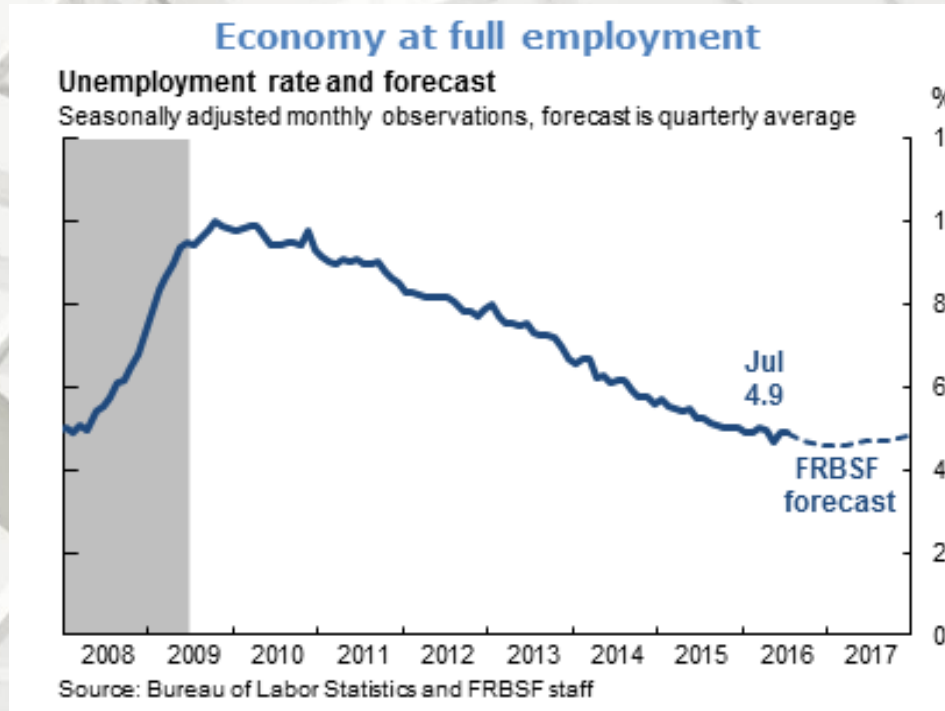


## The Federal Reserve Bank of San Francisco

“GDP growth for the first half of this year has been weak. Real GDP growth was revised down to an annualized rate of 1.1% in the second quarter from an initial estimate of 1.2%, following 0.8% growth in the first quarter. Growth has been supported by healthy consumer spending, but dampened by weak business investment spending and by firms’ inventory drawdowns; the latter alone subtracted 1.3 percentage points from overall growth in the second quarter.

Over the long term, slower trend productivity and output growth in the United States and other advanced economies have reduced demand for investment. Aging populations and shrinking labor forces have also put downward pressure on output and depressed investment demand. In addition, the so-called “global saving glut” in many emerging market economies has added to the supply of funds in financial markets. More saving and less investment have pushed down equilibrium interest rates.” – Reuven Glick, Group Vice President, The Federal Reserve Bank of San Francisco

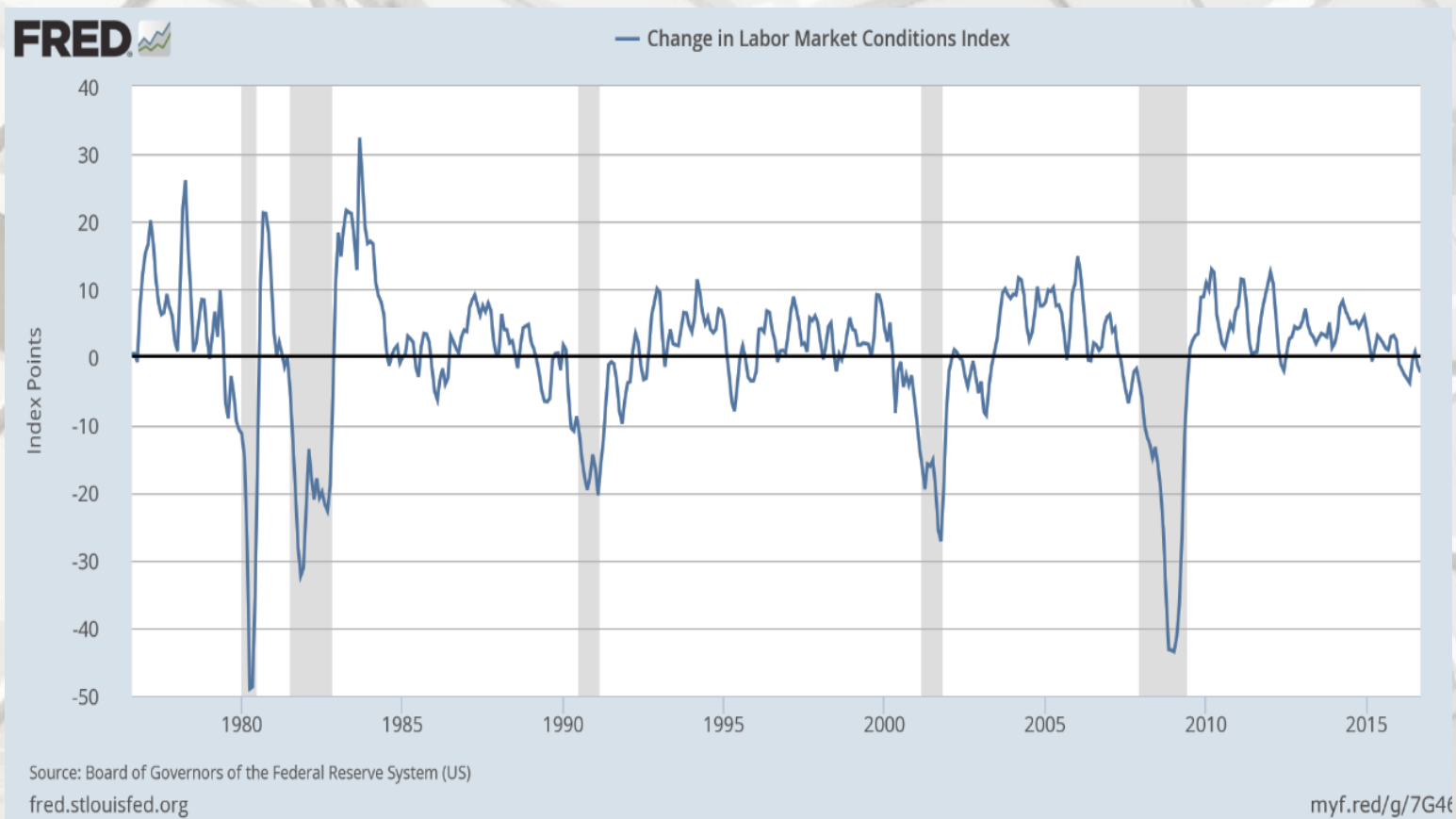
# U.S. Economic Indicators



## The Federal Reserve Bank of San Francisco

“We forecast moderate output growth for the second half of this year and 2017 at a rate slightly below 2%. Inventory investment is expected to increase as companies rebuild their stocks. While the outlook for investment remains weak, particularly for the energy sector, we anticipate that it will gradually improve as business profitability increases. Foreign growth remains anemic, but the passage of the United Kingdom’s “Brexit” vote to leave the European Union has not led to a noticeable downgrade in our forecast for the U.S. economy.” – Michael Bauer, Senior Economist, The Federal Reserve Bank of San Francisco

# U.S. Economic Indicators



## **Federal Reserve Board of Governors: Labor Market Conditions Index**

The Labor Market Conditions Index (LMCI) assesses changes in the U.S. labor market. As of September 1, the LMCI was -2.2, a decrease from August 1's -1.3 reading.

“A positive value indicates that labor market conditions are above their long-run average, while a negative value signifies that labor market conditions are below their long-run average.”

# Private Indicators

## American Institute of Architects (AIA)

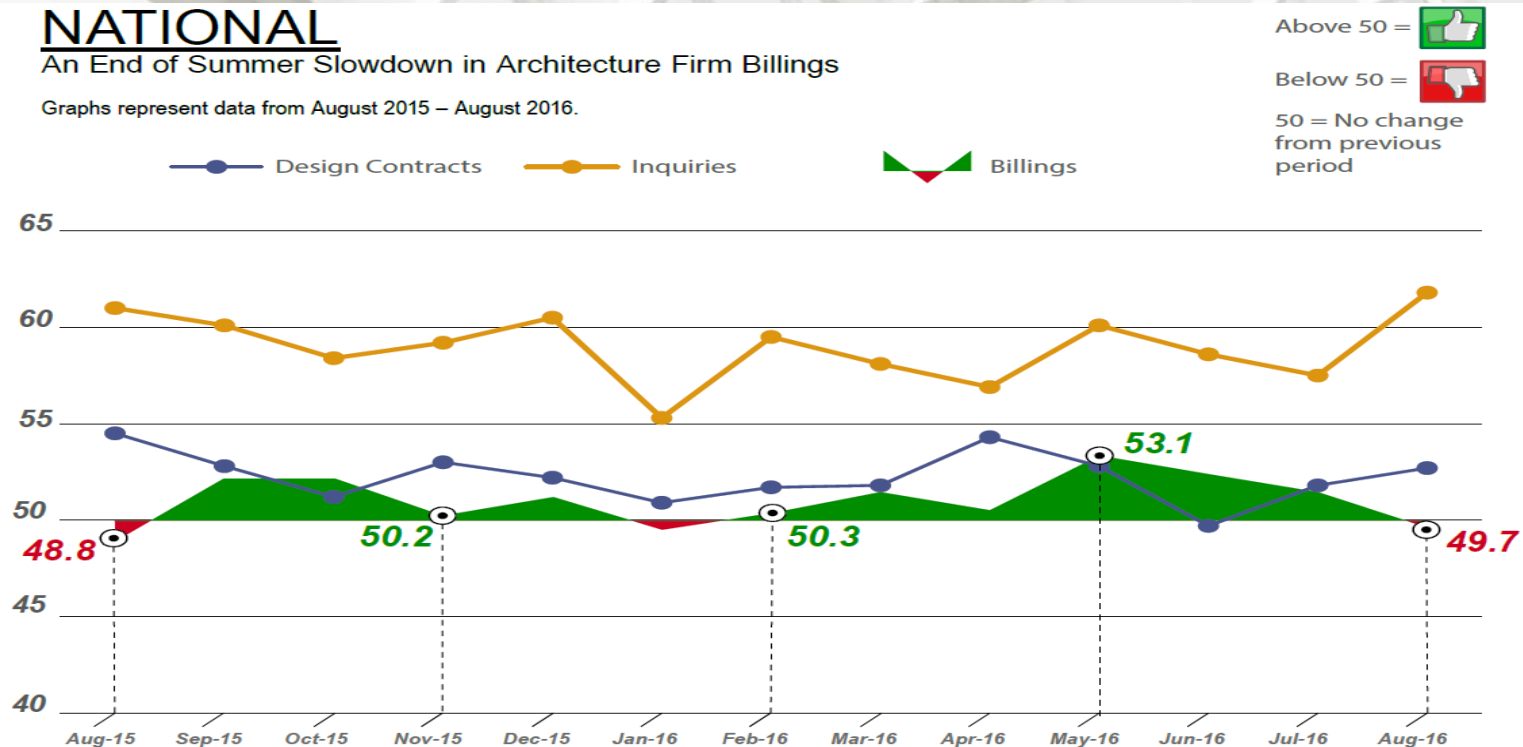
### August Architecture Billings Index Slight dip in billings heading into fall

“Billings at U.S. architecture firms continue to demonstrate their volatility. After six straight months of growth, the AIA’s Architecture Billings Index (ABI) dipped below the 50 threshold in August, with a national reading of 49.7. However, a strong score of 61.8 for project inquiries – the strongest reading for this indicator in over a year – coupled with a solid performance for new design contracts (52.7) suggests that there still is plenty of momentum in the design and construction sector.” – Kermit Baker, Hon. AIA, Chief Economist, AIA

#### NATIONAL

##### An End of Summer Slowdown in Architecture Firm Billings

Graphs represent data from August 2015 – August 2016.



# Private Indicators: AIA

“Regionally, firms in the South continued to report very strong business conditions while firms in the Midwest reported some acceleration in design activity in their region. However, these positive trends were offset by a modest decline in billings at firms in the West, and a reasonably sharp downturn for firms in the Northeast.” – Kermit Baker, Hon. AIA, Chief Economist, AIA

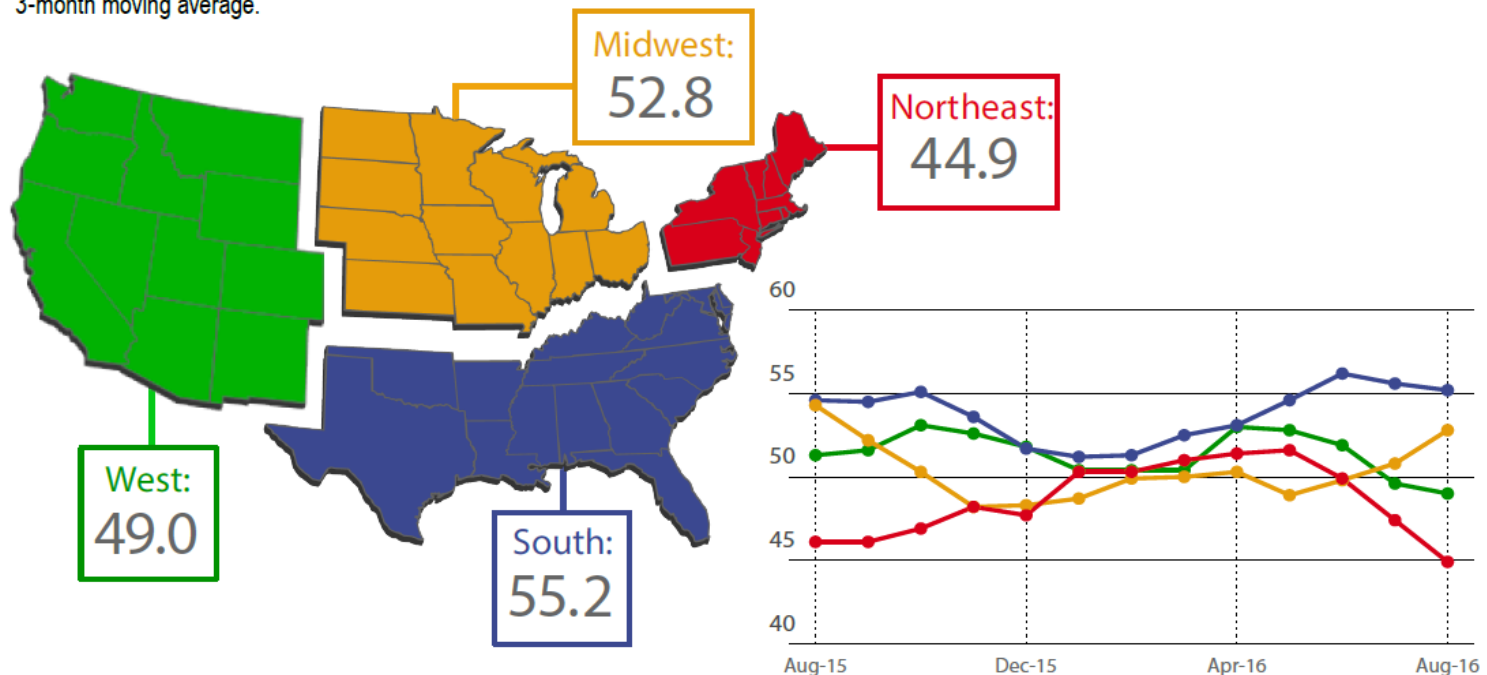
## REGIONAL

### Slowdown Concentrated at Firms in Northeast

Graphs represent data from August 2015 – August 2016 across the four regions.

50 represents the diffusion center. A score of 50 equals no change from the previous month. Above 50 shows increase; Below 50 shows decrease.

3-month moving average.



# Private Indicators: AIA

“By sector, residential firms continued to report strong growth in billings as commercial/industrial and institutional firms saw only modest growth during the month.” – Kermit Baker, Hon. AIA, Chief Economist, AIA

## SECTOR

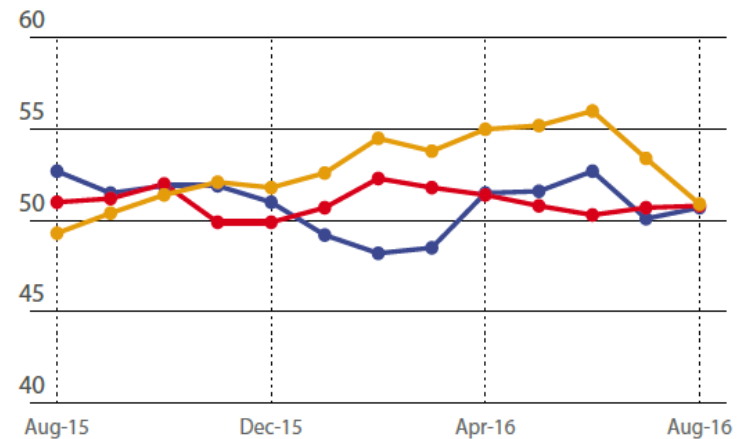
Major Construction Sectors Seeing More Balanced Levels of Design Activity

Graph represents data from August 2015 – August 2016 across the three sectors.

50 represents the diffusion center.

A score of 50 equals no change from the previous month. Above 50 shows increase; Below 50 shows decrease.

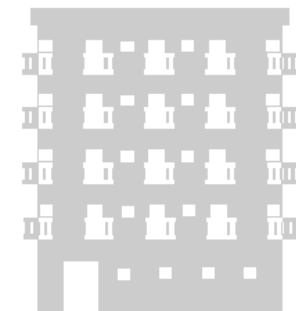
3-month moving average.



**Commercial/Industrial: 50.8**



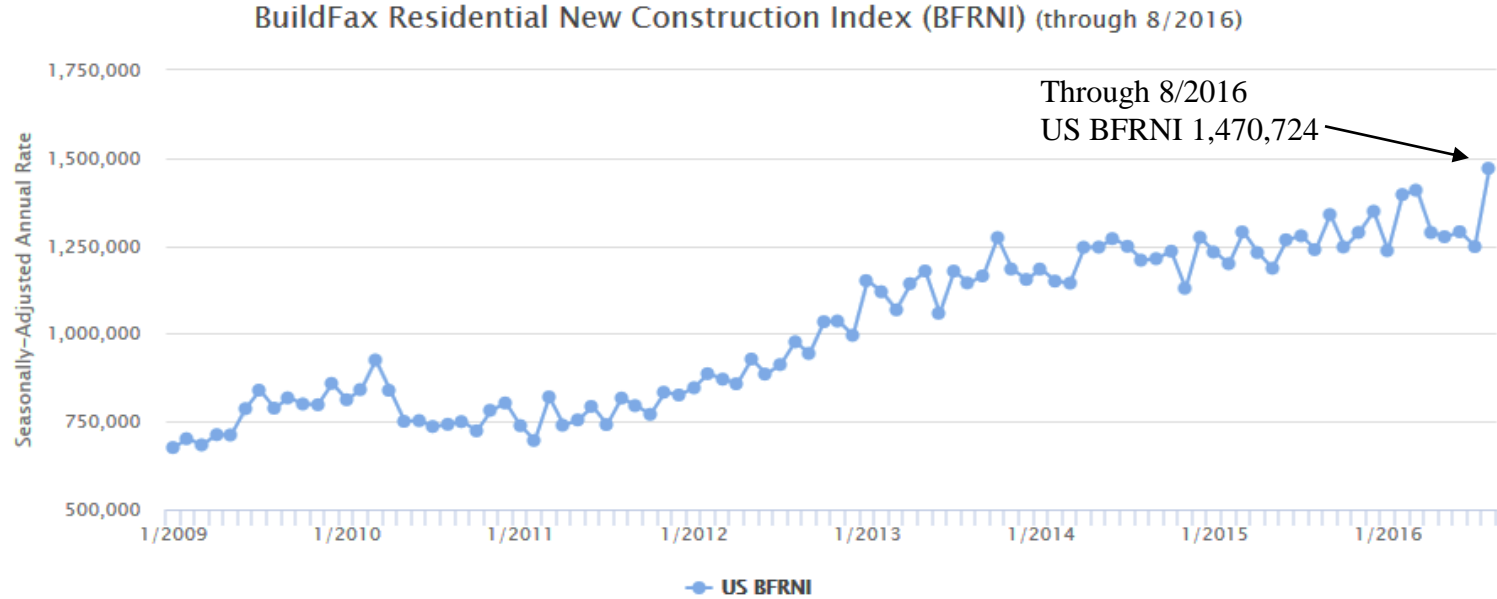
**Institutional: 50.7**



**Residential: 50.9**



# Private Indicators



## BuildFax Residential New Construction Index

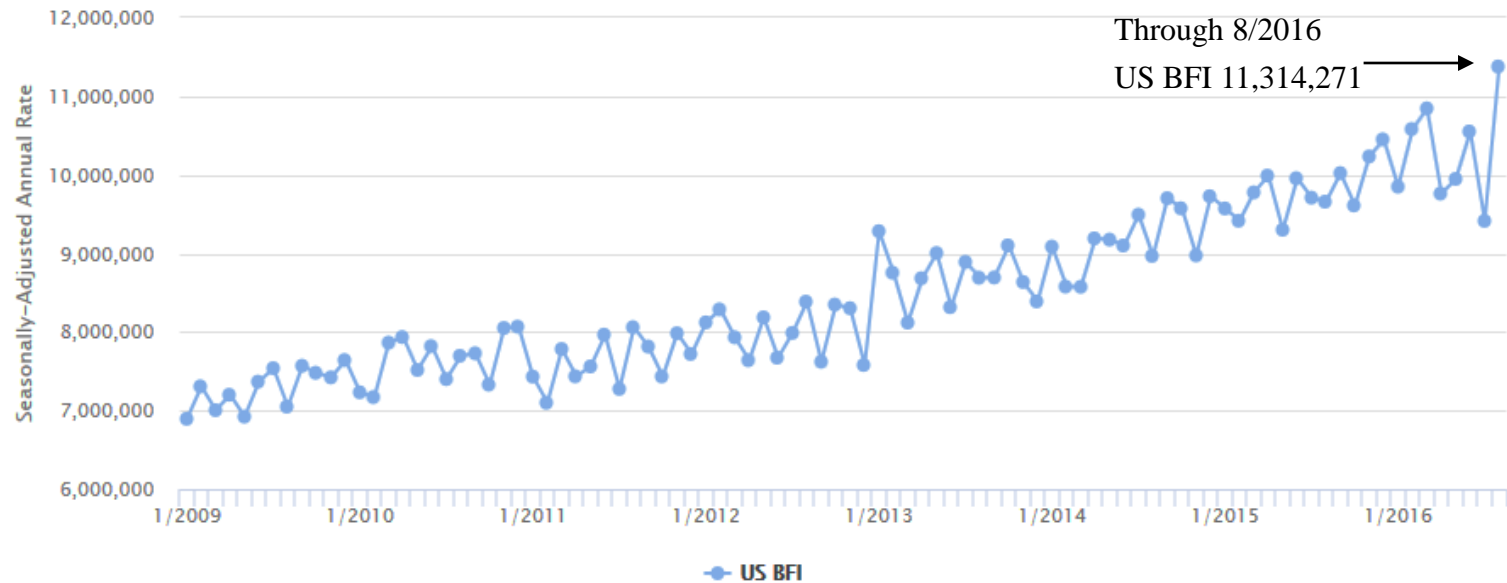
“Residential new construction authorized by building permits in the United States in August were at a seasonally-adjusted annual rate of 1,470,724. This is 18% above the revised July rate of 1,247,924 and is 19% above the revised August 2015 estimate of 1,239,594. BuildFax reports on total new residential projects, this is unlike the U.S. Census that reports total number of housing units.”

## Regional Residential New Construction

“Seasonally-adjusted annual rates of residential new construction across the country in August 2016 are estimated as follows: Northeast, 70,703 (up 24% from July and up 133% from August 2015); South, 812,725 (up 16% from July and up 13% from August 2015); Midwest, 266,593 (up 17% from July and up 16% from August 2015); West, 298,913 (up 12% from July and up 22% from August 2015).”

# Private Indicators

BuildFax Residential Remodeling Index (BFI) (through 8/2016)



## BuildFax Residential Remodeling Index

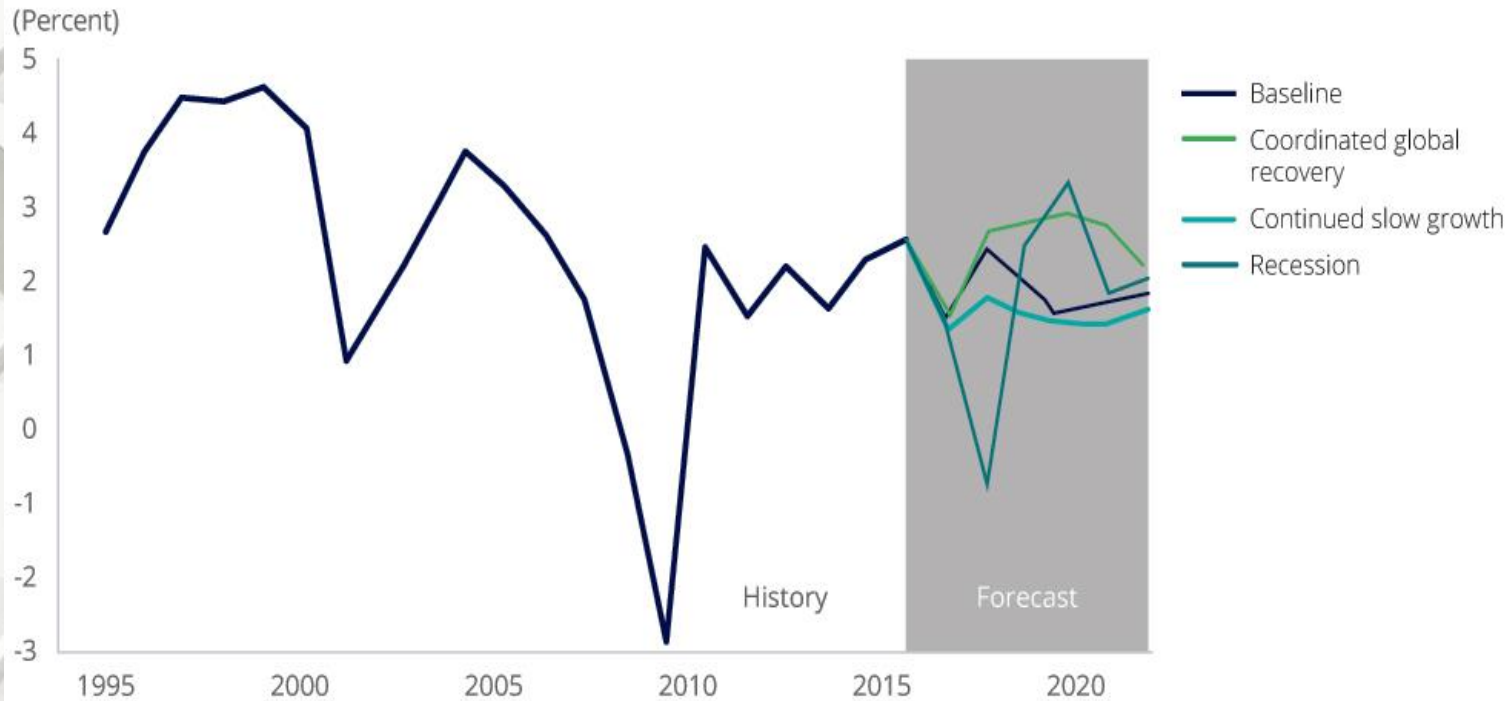
“Residential remodels authorized by building permits in the United States in August were at a seasonally-adjusted annual rate of 11,378,727. This is 21% above the revised July rate of 9,415,194 and is 18% above the revised August 2015 estimate of 9,659,035.”

## Regional Residential Remodeling

“Seasonally-adjusted annual rates of residential remodeling across the country in August 2016 are estimated as follows: Northeast, 926,070 (up 13% from July and up 56% from August 2015); South, 5,256,158 (up 11% from July and up 15% from August 2015); Midwest, 2,205,055 (up 23% from July and up 16% from August 2015); West, 2,697,766 (up 20% from July and up 15% from August 2015).”

# Private Indicators

Figure 1. Real GDP growth



Sources: Deloitte/Oxford Economics.

Graphic: Deloitte University Press | DUPress.com

## Deloitte: United States Economic Forecast 3rd Quarter 2016

“Notwithstanding high consumer confidence and employers’ willingness to hire, GDP growth has remained sluggish; goods have lagged even as services have stayed strong. But don’t blame election-year uncertainty for the weakness.” – Dr. Daniel Bachman, Senior Manager and Dr. Rumki Majumdar, Manager and Economist, Deloitte Services LP

# Private Indicators

## Deloitte: United States Economic Forecast 3rd Quarter 2016 Scenarios

**“The baseline (55 percent probability):** Weak foreign demand weighs on growth. US domestic demand is strong enough to provide employment for workers returning to the labor force for a couple of years, and the unemployment rate remains about 5 percent. GDP annual growth hits a maximum of 2.5 percent. In the medium term, low productivity growth puts a ceiling on the economy, and by 2019, US GDP growth is below 2 percent, despite the fact that the labor market is at full employment. Inflation remains subdued.

**Recession (5 percent):** China’s financial problems create a drag on its economy, and growth slows substantially. This triggers a financial panic in East Asia, as investors in countries connected by supply chains to China seek to reduce risk. Volatility in Europe increases, as does market valuation of the riskiness of euro assets, adding to the panic. Several US financial institutions find themselves long on euro- and China-related assets at the wrong time. The result: a global financial panic. Capital flows into the United States to avoid risk in Europe and Asia, and the US dollar climbs even higher. The financial panic throws the US economy into recession. Timely Fed action offsets the financial crisis after several months, leading to relatively fast growth during the recovery.” – Dr. Daniel Bachman, Senior Manager and Dr. Rumki Majumdar, Manager and Economist, Deloitte Services LP

# Private Indicators

## Deloitte: United States Economic Forecast 3rd Quarter 2016 Scenarios

**“Slower growth (25 percent):** Weak economic conditions abroad, financial turmoil, and flight from risky assets cuts demand below the level required for labor market equilibrium. Although the participation rate climbs slightly, hoped-for jobs disappear and the unemployment rate rises. Despite that increase, the Fed slowly raises interest rates, helping to keep a cap on inflation. GDP growth stays below 2 percent for the foreseeable future.

**Coordinated global boom (15 percent):** Terrorism, refugee issues, and Brexit prove to be only minor obstacles for European economies, and the continent finally begins to pull out of the doldrums. Emerging markets also pick up momentum as China resolves its financial problems, and India and Brazil start to adopt more reforms. Capital flows out of the United States and into Europe and the developing world, pushing the dollar lower, further enhancing US exports. Lower US energy prices make the United States even more competitive. At home, the resolution of budget issues at both the federal and state levels allows more money to flow into infrastructure investment, creating short-term demand and long-term productivity growth.” – Dr. Daniel Bachman, Senior Manager and Dr. Rumki Majumdar, Manager and Economist, Deloitte Services LP

# Private Indicators

## United States Economic Forecast 3rd Quarter 2016

### Housing

“Every year, thousands of young Americans abandon the nest, happy to leave home and start their own households. But more than usual stayed put during the recession: The number of households didn’t grow nearly enough to account for all the newly minted young adults. We expect those young adults would prefer to live on their own and create new households; as the economy continues to recover, they will likely do exactly that – as previous generations have.

This likely means some positive fundamentals for housing construction in the short run. Since 2008, the United States has been building fewer new housing units than the population would normally require; in fact, housing construction was hit so hard that the oversupply turned into an undersupply. But the hole isn’t as large as you might think. Several factors offset each other:

If household size returns to mid-2000s levels, we would need an additional 3.2 million units.

On the other hand, household vacancy rates are much higher than normal. Vacancy returning to normal would make available an additional 2.5 million units – which would fill 78 percent of the pent-up demand for housing units.

But are the existing vacant houses in the right place or condition, or are they the right type, for that pent-up demand? The future of housing may look very different than in the past. Growth in new housing construction has been concentrated in multifamily units. If that continues, we may find it is related to young buyers’ growing reluctance to settle in existing single-family units.” – Dr. Daniel Bachman, Senior Manager and Dr. Rumki Majumdar, Manager and Economist, Deloitte Services LP

# Private Indicators

**Table 2. Coordinated global recovery**

Percent change, year over year unless otherwise noted.

	History					Forecast					
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Housing</b>											
Housing starts (thousands)	612	784	928	1,001	1,108	1,222	1,475	1,495	1,348	1,221	1,160
Stock of owner-occupied homes (millions)	132	133	133	134	135	136	137	138	139	140	141
Interest rate on 30-year fixed rate mortgages (percent)	4.46	3.66	3.98	4.17	3.85	3.68	4.5	5.45	6.48	7.09	7.74

## Housing

“In developing our housing forecast, we assumed that the demand for housing (in the form of the average household’s size decreasing) picks up this year, vacancy rates gradually drop, and household depreciation begins falling after new renters and buyers remove about 2.5 million housing units from the nation’s housing surplus. Slowing population growth suggests that we will have a short-lived housing boom in which starts hit the 1.3–1.4 million level, followed by a period of contraction until starts reach the level of long-run demand. We estimate this to be about 1.0 million units in the medium term. Housing will likely contribute to GDP growth in 2016 and 2017 but subtract from GDP growth by 2018 as the pent-up demand goes away. In the long run, the slowing population suggests that housing will not be a growth sector (although specific segments, such as housing for elderly residents, might well be very strong).

Tight housing credit may be a key culprit in keeping individual purchases of single-family houses low, although there are some signs that credit is loosening. Young adults also seem to be showing a preference for living in urban rather than suburban communities. We may see some significant changes from the post–World War II model of single-family home-ownership.” – Dr. Daniel Bachman, Senior Manager & Dr. Rumki Majumdar, Manager and Economist, Deloitte Services LP

# Private Indicators

Figure 3. Housing



Sources: Deloitte/Oxford Economics.

Graphic: Deloitte University Press | DUPress.com

## Deloitte: United States Economic Forecast 3rd Quarter 2016 Housing News

“Housing permits rose from March through July by almost 100,000 units. By July total permits were above the year-ago level. Single-family permits, however, fell during the period (after rising in the early spring). Multifamily permits, which are more volatile, were higher in the summer than earlier in the spring.

Contract interest rates have fallen about 25 basis points in the past six months. House prices are rising, though not quickly. As of February, the Case-Shiller home price index was about 5 percent above the year-ago level.” – Dr. Daniel Bachman, Senior Manager and Dr. Rumki Majumdar, Manager and Economist, Deloitte Services LP



# Private Indicators

## August Construction Starts Jump 21 Percent

“New construction starts in August soared 21% to a seasonally adjusted annual rate of \$711.2 billion, according to Dodge Data & Analytics, following lackluster activity in July. The August rise for total construction starts featured an especially elevated amount for nonresidential building, ... As 2016 is proceeding, the year-to-date decline for total construction is becoming smaller, affected to a lesser extent by the comparison to the massive projects reported during the first half of 2015 and now benefitting from the start of several massive projects in this year’s second half. If projects valued at \$1 billion or more are excluded, total construction starts during the first eight months of 2016 would be down a slight 1%, or essentially even, with a year ago.

The August data raised the Dodge Index to 150 (2000=100), up from 124 in July. The quarterly averages for the Dodge Index show that construction activity increased 11% in this year’s first quarter to 146, followed by a 10% decline in the second quarter to 131. The July and August average for the Dodge Index comes to 137, a 4% gain relative to the second quarter.

“The sharp rise in August makes it likely when September data becomes available that construction starts for the third quarter will be able to register moderate growth, supporting the belief that the construction industry still has room for further expansion despite some recent deceleration. The presence or absence of very large projects, of course, has played a considerable role in the month-to-month pattern for construction starts. While July did not receive much of a boost from very large projects, such a boost was clearly present in the August statistics. Furthermore, the year-to-date readings for the first half of 2016 were skewed by the comparison to the heightened first half of 2015, which included 13 projects valued at \$1 billion or more, ... .” – Robert Murray, Chief Economist, McGraw Hill Construction

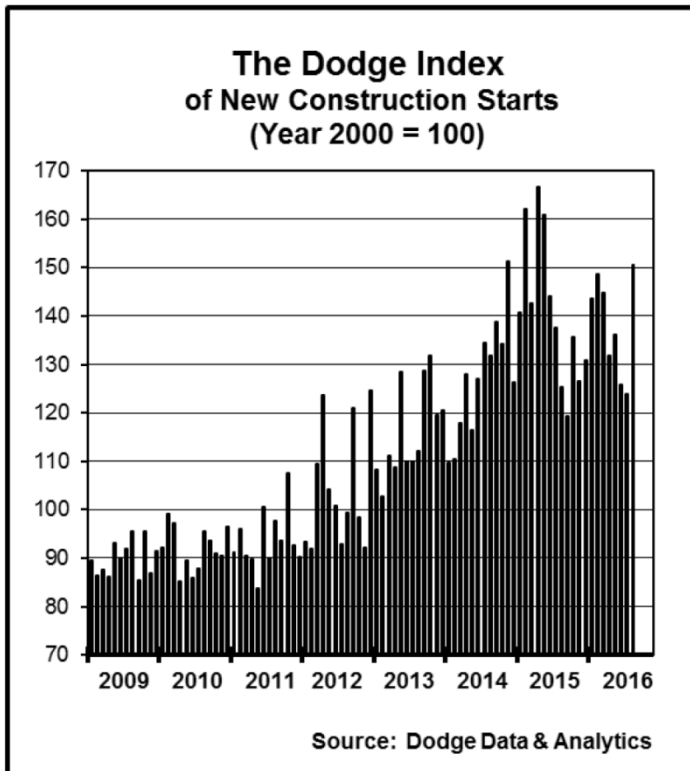
# Private Indicators

“**Residential building** in August advanced 5% to \$291.1 billion (annual rate). Multifamily housing strengthened for the second month in a row, rising 25% after its 10% gain in July. August featured 13 multifamily projects valued at \$100 million or more, . . . . Through the first eight months of 2016, the top five metropolitan areas ranked by the dollar amount of multifamily starts were – New York NY, Chicago IL, Los Angeles CA, Miami FL, and Boston MA. While New York City was able to hold onto to its number one ranking, its dollar amount of multifamily construction starts was down 30% in this year’s January-August period from a year ago. In contrast, large year-to-date gains for multifamily housing were reported for Chicago, up 153%; and Los Angeles, up 24%.

**Single family housing** in August eased back 2%, essentially maintaining the plateau that’s been present so far in 2016. The regional pattern for single family housing in August showed gains in the South Atlantic and the Northeast, each up 2%, while declines were reported in the Midwest, down 1%; the South Central, down 5%; and the West, down 7%. Residential building continued to be the one major sector reporting a year-to-date gain, increasing 3% with single family housing up 7% while multifamily housing receded 4%. By major region, total construction starts during the first eight months of 2016 showed this performance compared to a year ago – the Midwest, up 5%; the South Atlantic, up 4%; the West, unchanged; the Northeast, down 12%; and the South Central, down 25%.” – Robert Murray, Chief Economist, McGraw Hill Construction

# Private Indicators

## August 2016 Construction Starts



## August 2016 Construction Starts

### Monthly Summary of Construction Starts

Prepared by Dodge Data & Analytics

#### Monthly Construction Starts

Seasonally Adjusted Annual Rates, in Millions of Dollars

	<u>August 2016</u>	<u>July 2016</u>	<u>% Change</u>
Nonresidential Building	\$267,419	\$187,693	+42
Residential Building	291,090	276,184	+5
Nonbuilding Construction	<u>152,705</u>	<u>121,713</u>	<u>+25</u>
<b>Total Construction</b>	<b>\$711,214</b>	<b>\$585,590</b>	<b>+21</b>

#### The Dodge Index

Year 2000=100, Seasonally Adjusted

August 2016 .....150

July 2016.....124

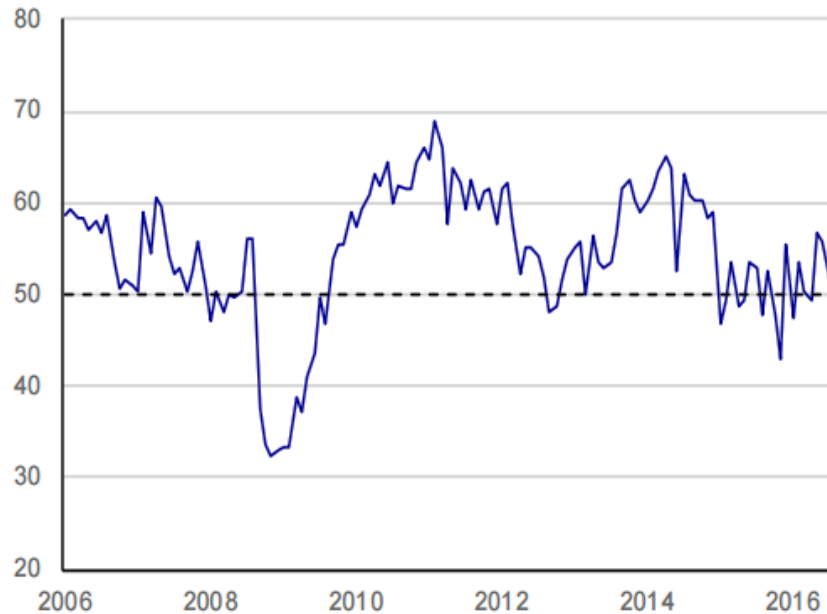
#### Year-to-Date Construction Starts

Unadjusted Totals, in Millions of Dollars

	<u>8 Mos. 2016</u>	<u>8 Mos. 2015</u>	<u>% Change</u>
Nonresidential Building	\$137,422	\$152,439	-10
Residential Building	190,750	184,336	+3
Nonbuilding Construction	<u>111,103</u>	<u>134,405</u>	<u>-17</u>
<b>Total Construction</b>	<b>\$439,275</b>	<b>\$471,180</b>	<b>-7</b>
<b>Total Construction, excluding projects valued at \$1 billion or greater</b>	<b>\$420,475</b>	<b>\$424,586</b>	<b>-1</b>

# Private Indicators

Chicago Business Barometer™



## August Chicago Business Barometer Up 2.7 Points to 54.2

“The MNI Chicago Business Barometer increased 2.7 points to 54.2 in September from 51.5 in August, recovering most of lost ground experienced in the previous month.

On a trend basis, the MNI Chicago Report paints a slightly better picture than earlier in the year with the Barometer averaging 53.8 in Q3, up from 52.2 in Q2 and the highest quarterly level since Q4 2014.”

“The latest increase was driven by a sharp gain in Production, which rose 7.3 points to 59.8, the highest since January 2016. New Orders and Order Backlogs, which led the Barometer’s decline last month, were little changed in September, with the latter failing to bounce back above the 50 breakeven level. Employment was the only Barometer component that fell, having rallied to a 16-month high in August.”

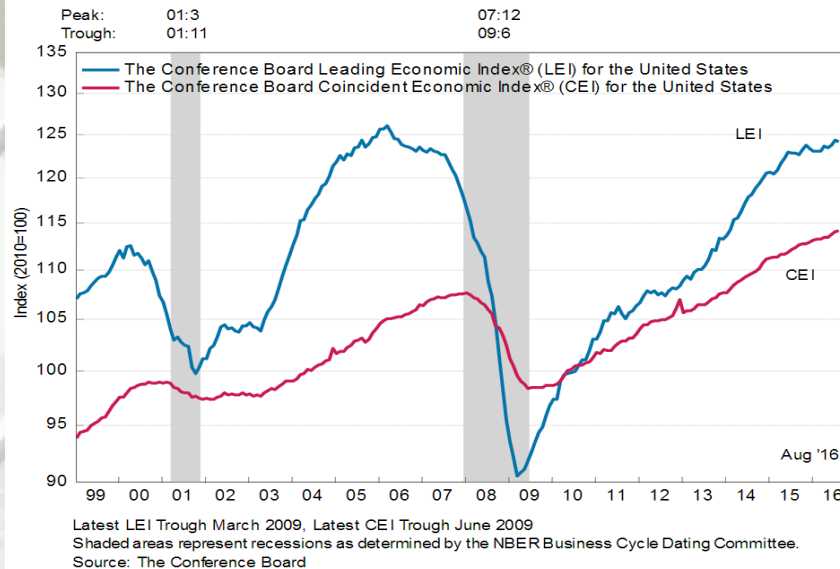
Meanwhile, Supplier Deliveries lengthened to the highest level since May 2016. Some companies reported difficulties in getting MRO supplies, with lead times at the longest since September 2015. An equal number of firms reported increasing inventories as decreasing them, with the Inventories indicator rising just above 50 in September, having edged into contraction territory in August.” – Lorena Castellanos, Senior Economist, MNI Indicators

# Private Indicators

## The Conference Board Leading Economic Index®

The Conference Board Leading Economic Index® (LEI) for the U.S. Decreased

*The Conference Board Leading Economic Index® (LEI) for the U.S. declined in August*



**The Index decreased 0.2 percent in August to 124.1**

“While the U.S. LEI declined in August, its trend still points to moderate economic growth in the months ahead. Although strengths and weaknesses among the leading indicators are roughly balanced, positive contributions from the financial indicators were more than offset by weakening of nonfinancial indicators, such as leading indicators of labor markets, suggesting some risks to growth persist.” – Ataman Ozyildirim, Director of Business Cycles and Growth Research, The Conference Board

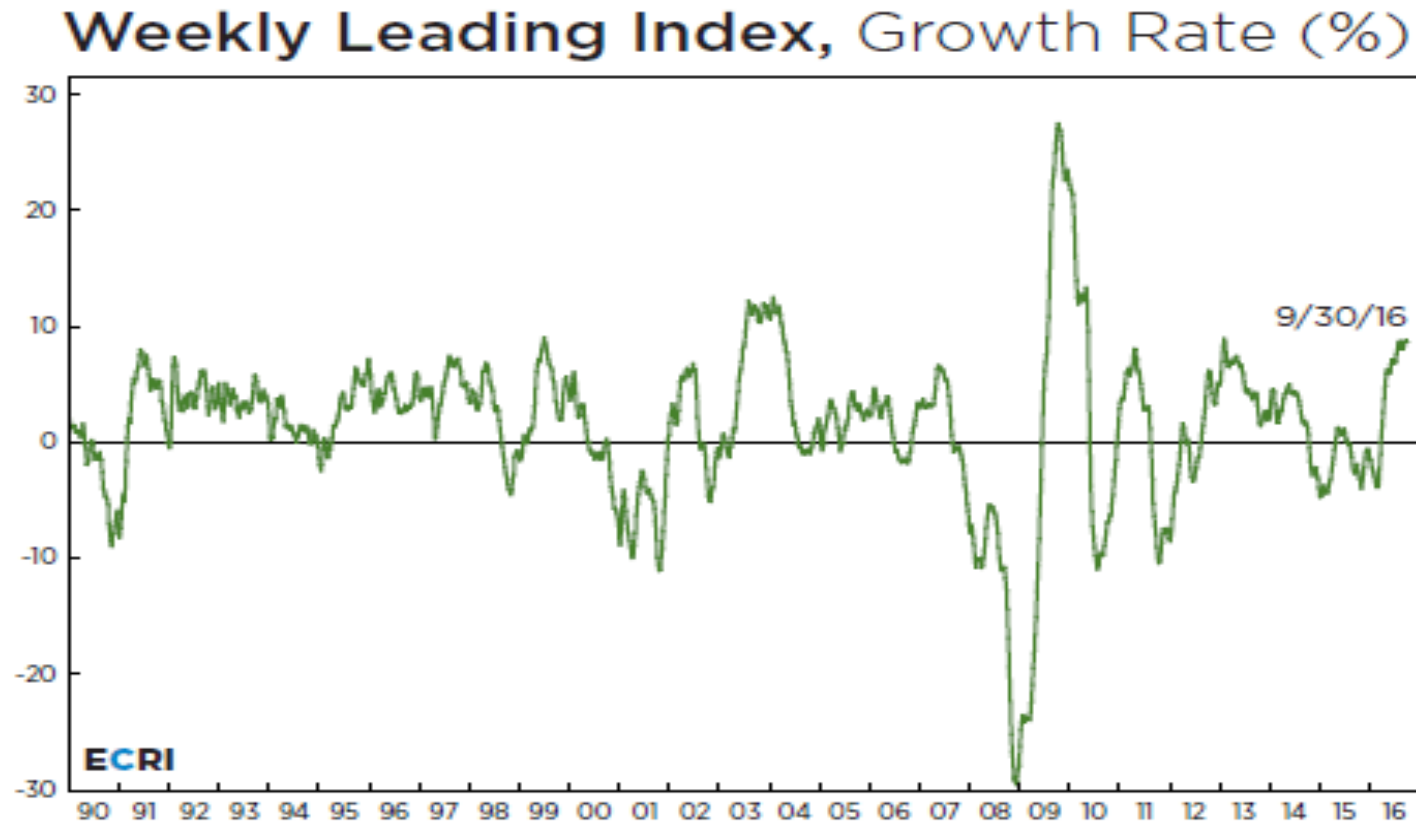
### **But Trend Still Points to Moderate Economic Growth Ahead**

“The Conference Board Leading Economic Index® (LEI) for the U.S. declined 0.2 percent in August to 124.1 (2010 = 100), following a 0.5 percent increase in July, and a 0.2 percent increase in June.

The Conference Board Coincident Economic Index® (CEI) for the U.S. increased 0.1 percent in August to 114.1 (2010 = 100), following a 0.3 percent increase in July, and a 0.3 percent increase in June.

The Conference Board Lagging Economic Index® (LAG) for the U.S. increased 0.2 percent in August to 122.1 (2010 = 100), following a 0.2 percent increase in July, and a 0.2 percent decline in June.

# Private Indicators



## U.S. Weekly Leading Index Increased

“The U.S. Weekly Leading Index (WLI) increased to 139.2 from 139.0. The growth rate ticked down to 8.7% from 8.8%.” – Lakshamn Achuthan, Chief Operations Officer, ECRI

# Private Indicators

## U.S. Gallup Good Jobs Employment Rates

Monthly trend, January 2010-September 2016

■ % of adult population employed full time for an employer



Gallup Daily tracking

GALLUP®

GALLUP DAILY

REAL UNEMPLOYMENT

Department of Labor (U-6)

9.7% -

GALLUP GOOD JOBS

Percent of Adult Population

45.5% -

ENGAGED AT WORK

34.3% -0.4

ECONOMIC CONFIDENCE

-7 +3

## U.S. Gallup Good Jobs Rate Edges Down to 45.6% in September

- “GGJ rate fall consistent with historical seasonal trends
- Unemployment steady at 5.4% in September
- Workforce participation statistically even at 67.5%

The Gallup Good Jobs (GGJ) rate in the U.S. was 45.6% in September. This is down from the 46.5% measured in August but still higher than any other September rate Gallup has recorded since it began tracking this measurement in 2010. GGJ typically peaks in June and July with summer employment and falls through autumn, so the decline from the record 47.1% in July is in line with typical seasonal patterns.” – Ben Ryan, Consultant Specialist, Gallup

# Private Indicators

## September 2016 Manufacturing ISM® Report On Business®

September PMI® at 51.5%

### New Orders and Production Growing, Employment and Inventories Contracting, Supplier Deliveries Slowing

“Economic activity in the manufacturing sector expanded in September following one month of contraction in August, and the overall economy grew for the 88th consecutive month, say the nation’s supply executives in the latest **Manufacturing ISM® Report On Business®**.

September PMI® = registered 51.5 percent, an increase of 2.1 percentage points from the August reading of 49.4 percent.

New Orders Index = 55.1 percent, an increase of 6 percentage points from the August reading of 49.1 percent.

Production Index = 52.8 percent, 3.2 percentage points higher than the August reading of 49.6 percent.

Employment Index = 49.7 percent, an increase of 1.4 percentage points from the August reading of 48.3 percent.

Inventories of raw materials = 49.5 percent, an increase of 0.5 percentage point from the August reading of 49 percent..

Prices Index = 53 percent in September, the same reading as in August, indicating higher raw materials prices for the seventh consecutive month.

Manufacturing expanded in September following one month of contraction in August, with nine of the 18 industries reporting an increase in new orders in September (up from six in August), and 10 of the 18 industries reporting an increase in production in September (up from eight in August).” – Bradley Holcomb, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee



# Private Indicators

## September 2016 Non-Manufacturing ISM® Report On Business®

**September NMI® at 57.1%**

**Business Activity Index at 60.3%, New Orders Index at 60.0%,  
Employment Index at 57.2%**

“Economic activity in the non-manufacturing sector grew in September for the 80th consecutive month, say the nation's purchasing and supply executives in the latest **Non-Manufacturing ISM® Report On Business®**.

The NMI® registered 57.1 percent in September, 5.7 percentage points higher than the August reading of 51.4 percent. This represents continued growth in the non-manufacturing sector at a faster rate.

The Non-Manufacturing Business Activity Index increased substantially to 60.3 percent, 8.5 percentage points higher than the August reading of 51.8 percent, reflecting growth for the 86th consecutive month, at a noticeably faster rate in September.

The New Orders Index registered 60 percent, 8.6 percentage points higher than the reading of 51.4 percent in August.

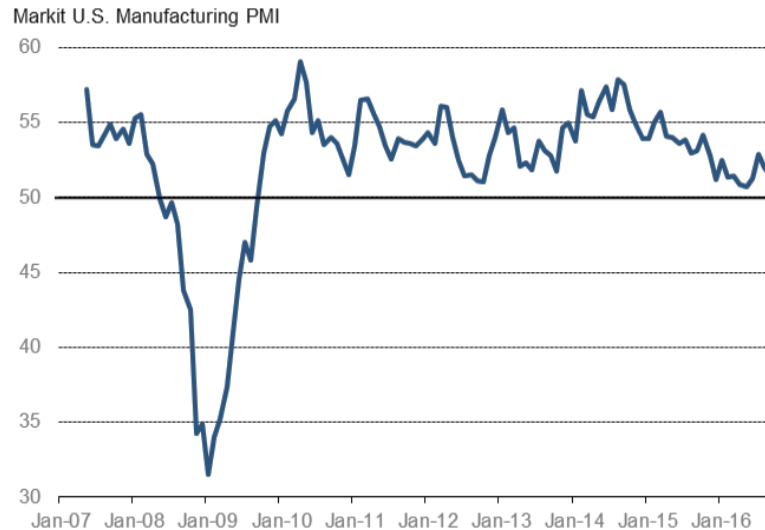
The Employment Index increased 6.5 percentage points in September to 57.2 percent from the August reading of 50.7 percent

The Prices Index increased 2.2 percentage points from the August reading of 51.8 percent to 54 percent, indicating prices increased in September for the sixth consecutive month.

According to the NMI®, 14 non-manufacturing industries reported growth in September. The comments from the respondents are mostly positive about business conditions and the overall economy. A degree of uncertainty does exist due to geopolitical conditions coupled with the upcoming U.S. presidential election.” – Anthony Nieves, CPSM, C.P.M., CFPM, Chair of the Institute for Supply Management® (ISM®) Non-Manufacturing Business Survey Committee

# Private Indicators

## Markit U.S. Manufacturing PMI (seasonally adjusted)



Source: IHS Markit.

## Markit U.S. Manufacturing PMI™

### Manufacturing growth slows amid weakest upturn in new orders for nine months

“The seasonally adjusted final Markit U.S. Manufacturing Purchasing Managers’ Index™ (PMI™) registered 51.5 in September (flash: 51.4), down slightly from 52.0 in August, to signal the weakest improvement in overall business conditions since June. Slower rates of output and new order growth were the main factors weighing on the headline index, which more than offset a stronger contribution from the staff hiring component.”

“U.S. manufacturers signalled another moderate upturn in both production volumes and incoming new work during September, but the latest survey indicated a further loss of growth momentum from July’s recent peak. Softer overall growth was attributed to generally subdued client demand, alongside a drop in new export sales for the first time in four months.

Manufacturing growth slowed to a crawl in September, suggesting the economy is stuck in a soft-patch amid widespread uncertainty in the lead up to the presidential election. The survey saw firms pulling back on expanding production and focusing instead on cost-cutting, as inflows of new business slowed to the weakest seen so far this year. Any growth is largely being driven by the consumer, in turn helped by tail-winds of low interest rates, low inflation and a solid labour market.

Business spending, in contrast, is being subdued by the headwinds of uncertainty about the economic outlook, cost-driven inventory reduction and the strong dollar, the latter linked to yet another drop in exports.” – Chris Williamson, Chief Economist, Markit®

# Private Indicators

## Service sector business activity (seasonally adjusted)

Markit US Services PMI Business Activity Index



Source: IHS Markit.

## Markit U.S. Services PMI™ Business activity growth picks up, but job creation eases to 3½ year low

- “Service sector activity rises at fastest pace since April...
- ...despite softer upturn in new work during September
- Employment growth eases to weakest since March 2013” – Markit®

“At 52.3 in September, the final Markit U.S. Composite PMI™ Output Index was up from 51.5 in August and signalled the fastest rise in private sector business activity since April. However, new business volumes and employment numbers expanded at slower rates during the latest survey period.

Coming hard on the heels of the IMF’s downgrade to the US economic outlook, the upturn in the PMI is a welcome development and suggests that the pace of economic growth gained some momentum in September. However, take a longer look and it’s clear that this is by no means a robust upturn. Even with the latest increase the surveys are indicating that the economy is growing at an annualized rate of only 1%.

Business optimism about the year ahead is at one of the lowest levels seen since the global financial crisis. The surveys therefore add ammunition to those arguing for the Fed to hold off with hiking interest rates again, at least until the dust settles after the election.” – Chris Williamson, Chief Economist, Markit®

# Private Indicators

## National Association of Credit Management – Credit Managers’ Index

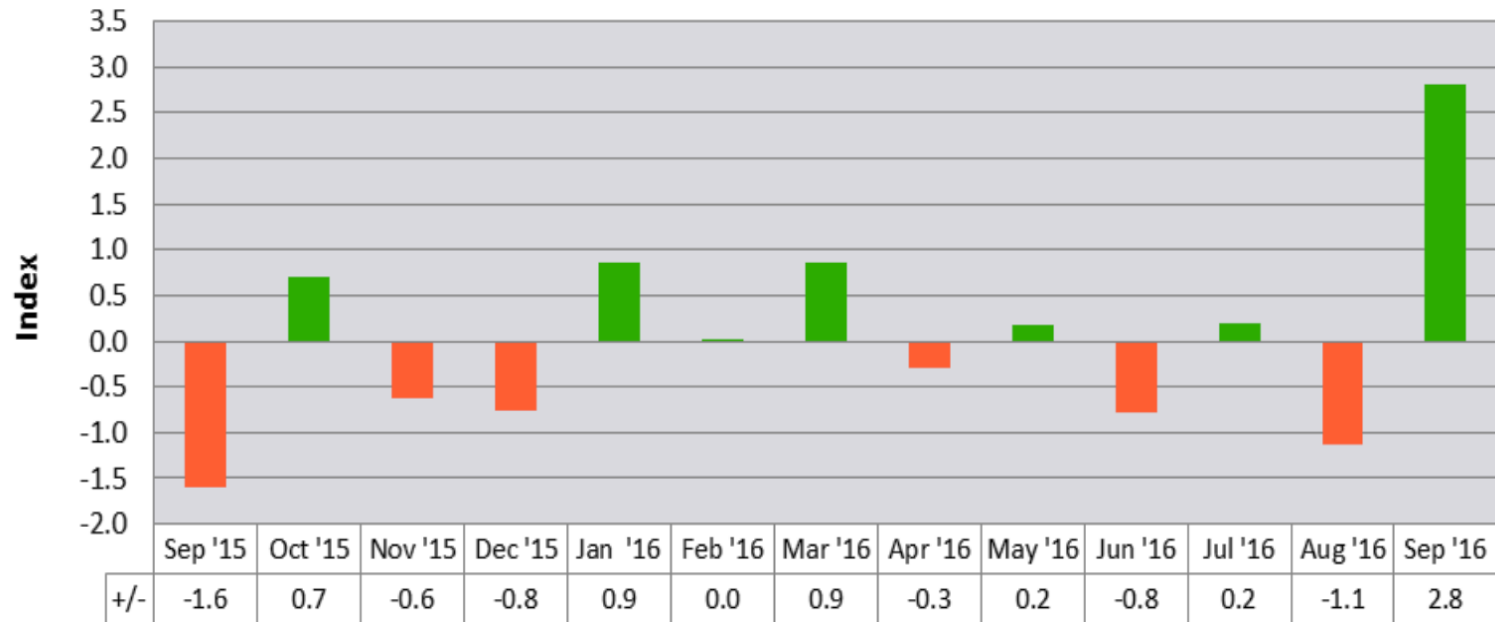
“This month may be an anomaly, but we certainly hope not. After a big dip in the Credit Managers’ Index (CMI) last month it recovered a bit this month, and the best news is that the gains were seen primarily in the favorable categories.

The readings last month were especially disturbing because for most of 2016, the numbers were pretty good – even hitting 60 in March and July. In August, the favorable numbers sagged to levels not seen since December. Now they appear to be back to those growth numbers with a reading in the combined favorable categories of 59.5. Together, the index of favorable factors and the index of unfavorable factors showed a lot of improvement as well – going from 52.0 to 53.7. As with the last several months, unfavorable factors continued to drag down the whole index. In August, the combined unfavorable number was 49.1, and this month it remains in contraction territory at 49.9.

There has been a great deal of confusion and trepidation in the business community as well as with consumers as the election year has progressed. There is uneasiness as many in the country are really not very happy with either the Democratic or Republican candidate. The surveys suggest that companies are delaying decisions about growth and expansion until they see what happens. There are some people that assert this trepidation will last into next year and others that believe that once the dust settles, there will be an opportunity for some real growth as all the pent-up demand is released.” – Chris Kuehl, Ph.D, Economist, NACM

# Private Indicators

Manufacturing Index Monthly Change  
(seasonally adjusted)

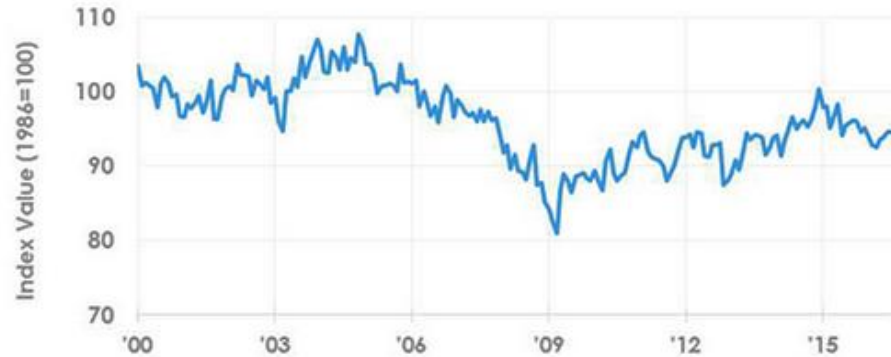


Combined Manufacturing and Service Sectors (seasonally adjusted)	Sep '15	Oct '15	Nov '15	Dec '15	Jan '16	Feb '16	Mar '16	Apr '16	May '16	Jun '16	Jul '16	Aug '16	Sep '16
NACM Combined CMI	52.9	53.9	52.6	52.8	53.5	53.5	54.3	54.6	53.8	52.7	53.5	52.0	53.7

# Private Indicators

## Small Business Optimism Index Decreases 0.3 to 94.1

Based on 10 survey indicators, seasonally adjusted, Jan. '00 – Sep. '16



**NFIB**.COM/sbet

## September 2016 Report: Small Business Economic Trends

“The net percent of small business owners who expect better business conditions in the next six months jumped 12 points last month, according to the **National Federation of Independent Business (NFIB)**, but that gain was erased by significantly weaker inventories and hard-to-fill job openings.”

## Small Business Optimism Dips Lower Before Election

“The NFIB Index of Small Business Optimism dipped 0.03 points in September for the second consecutive month. Expected business conditions over the next six months was the biggest mover in this month’s survey, climbing out of negative territory back to zero with a 12-point gain. Increased inventories fell seven points while hard-to-fill job openings plunged six points landing at 24 percent. Six of the 10 indices dropped, washing away the rise in expected business conditions.

It is quite clear that the top issues for small-business owners will not be addressed this year. The presidential election is so divisive that it offers little promise of a bipartisan effort to deal with any of these important issues... “small business owners won’t be hiring or building inventories – both of which signify confidence in the economy – until something changes in Washington.”” – William Dunkelberg, Chief Economist, National Federation of Independent Business

# Private Indicators



## The Paychex | IHS Small Business Jobs Index

- “South Atlantic reclaims the top spot among regions
- Washington remains top-ranked state, increasing its sizable lead
- Seattle continues to lead metro areas, followed by Atlanta and Phoenix
- Education and Health Services and Financial Activities increase modestly among industries”

## Small Business Jobs Index Indicates Continued Growth, Despite Short-Term Declines

“The Paychex | IHS Small Business Jobs Index declined from 100.70 in August to 100.52 in September, a decrease of 0.18 percent. While now at its lowest level in 2016, the national index remains 0.08 percent higher than a year ago.”

“The Paychex | IHS Small Business Jobs Index declined in September to its lowest point in 2016. Nevertheless, at 100.52, the national index continues to show solid small business employment gains.” – James Diffley, Chief Regional Economist, HIS

“While we continue to see mixed results from month-to-month, the year-over-year trends remains positive. Also, with one quarter remaining in 2016, the national index is up 0.15 percent year-to-date.” – Martin Mucci, President and CEO, Paychex

# Private Indicators

## Thomson Reuters/PayNet Small Business Lending Index U.S. small businesses borrowing up, as are delinquencies: PayNet



### Small Business Lending Index: **133.7**

“The Thomson Reuters/PayNet Small Business Lending Index rose to 133.7 in August from an upwardly revised 123.1 in July, which had three fewer working days. Borrowing by companies in most industries, except construction and recreation, fell.”

“Borrowing by small U.S. firms rose in August, in part because the month had more business days than July, and the percentage of firms late on repaying existing loans also increased, data released on Tuesday showed.

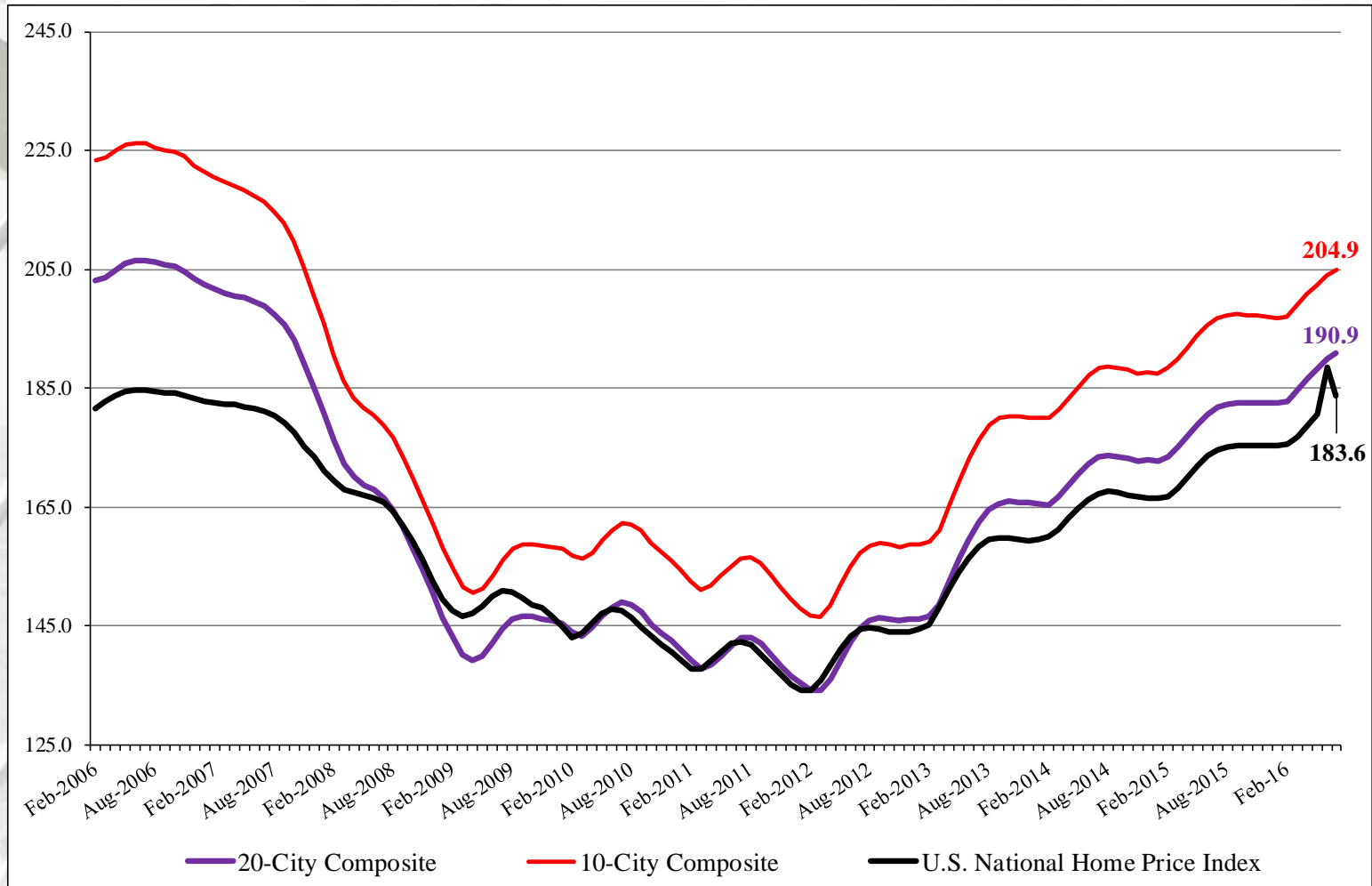
Companies also struggled to pay back existing debts, PayNet data showed. Loans more than 30 days past due rose in August to 1.63 percent, the fifth straight monthly increase and the highest delinquency rate since December 2012.

It's malaise, rather than freefall.” – Bill Phelan, President, PayNet



# Private Indicators

## S&P/Case-Shiller Home Price Indices



# Private Indicators

## S&P/Case-Shiller Home Price Indices

### Home Price Gains in June Concentrated in South and West

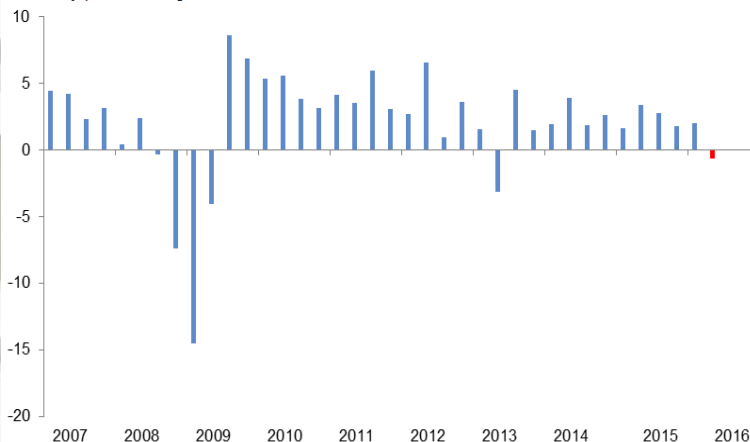
“Both the housing sector and the economy continue to expand with home prices continuing to rise at about a 5% annual rate. The statement issued last week by the Fed after its policy meeting confirms the central bank’s view that the economy will see further gains. Most analysts now expect the Fed to raise interest rates in December. After such Fed action, mortgage rates would still be at historically low levels and would not be a major negative for house prices,

The S&P CoreLogic Case-Shiller National Index is within 0.6% of the record high set in July 2006. Seven of the 20 cities have already set new record highs. The 10-year, 20-year, and National indices have been rising at about 5% per year over the last 24 months. Eight of the cities are seeing prices up 6% or more in the last year. Given that the overall inflation is a bit below 2%, the pace is probably not sustainable over the long term. The run-up to the financial crisis was marked with both rising home prices and rapid growth in mortgage debt. Currently, outstanding mortgage debt on one-to-four family homes is 12.6% below the peak seen in the first quarter of 2008 and up less than 2% in the last four quarters. There is no reason to fear that another massive collapse is around the corner.” – David Blitzer, Managing Director and Chairman of the Index Committee, S&P Dow Jones

# Federal Reserve Indicators: Global

**Chart 1**  
Mexico's Gross Domestic Product Falls in Second Quarter 2016

Quarterly percent change\*

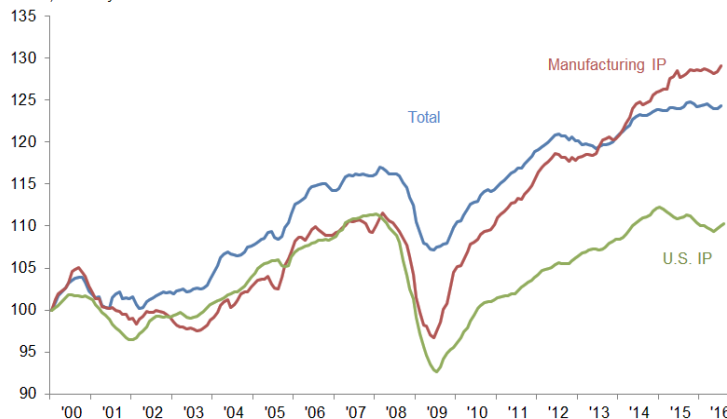


\* Seasonally adjusted, annualized rate.

SOURCE: Instituto Nacional de Estadística y Geografía (National Institute of Statistics and Geography).

**Chart 3**  
Industrial Production Moving Sideways in 2016

Index, January 2000 = 100\*



\*Seasonally adjusted, three-month moving average.

SOURCES: Instituto Nacional de Estadística y Geografía (National Institute of Statistics and Geography); Federal Reserve Board.

## The Federal Reserve Bank of Dallas

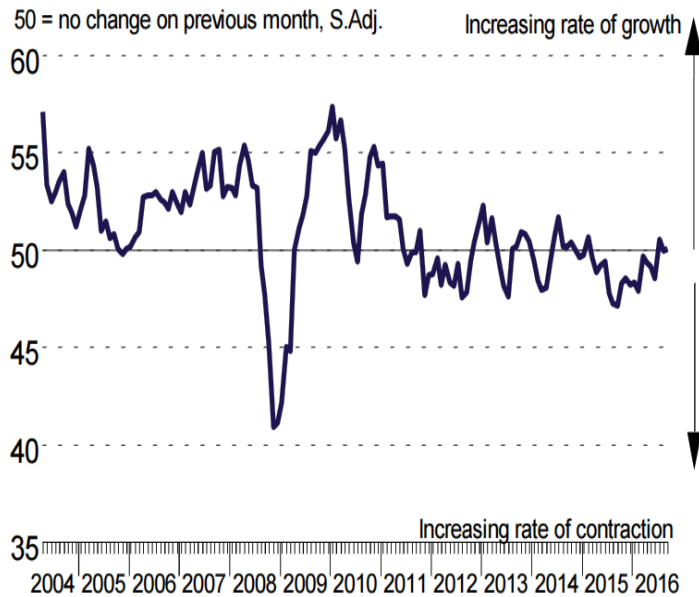
### Better Output Data Revises Mexico's Second-Quarter Dip Down

“Mexico’s economy contracted less than previously estimated in second quarter 2016. Gross domestic product (GDP) fell at an annual rate of 0.7 percent in the second quarter, according to the second estimate released by Instituto Nacional de Estadística y Geografía (National Institute of Statistics and Geography). In addition, more recent data on exports, employment, industrial production and retail sales also show improvement. Inflation held steady in August, but the peso fell against the dollar in September. The consensus 2016 GDP growth forecast edged down from 2.3 percent in July to 2.2 percent in August.

Mexico’s industrial production (IP) increased 0.3 percent in July after growing 0.1 percent in June. U.S. IP also increased in July (0.6 percent) but then fell 0.5 percent in August. The three-month moving average in Mexico’s IP shows signs of improvement after stagnating earlier in the year (Chart 3). Total IP, which includes manufacturing, construction, oil and gas extraction, and utilities, has been growing slower than manufacturing IP since early 2014.” – Jesus Cañas, Business Economist, The Federal Reserve Bank of Dallas

# Private Indicators: Global

## Caixin China General Manufacturing PMI



Sources: IHS Markit, Caixin.

## Caixin China General Manufacturing PMI™

### Manufacturing output expands only slightly in September

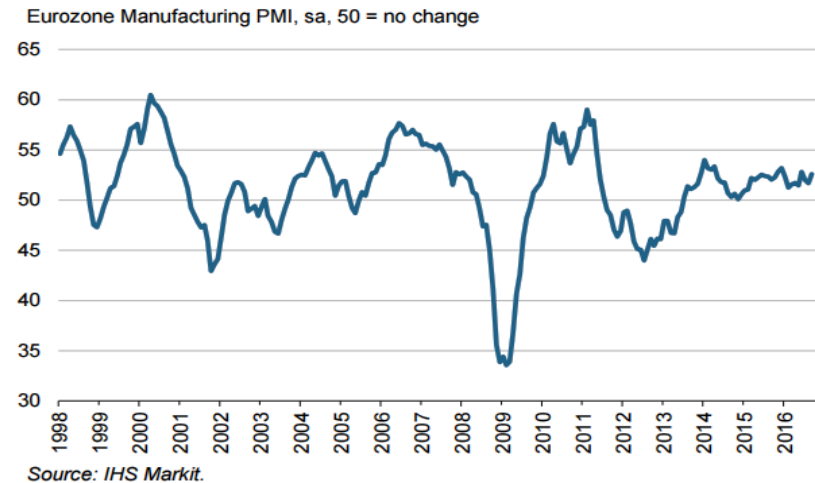
“Having stagnated in August, Chinese manufacturers signalled little-change to overall operating conditions during September. On a positive note, output and total new orders continued to expand, albeit marginally, while firms raised their purchasing activity for the third month in a row. However, cost-cutting initiatives contributed to a further marked reduction in employment. As a result, companies signalled a sustained squeeze on operating capacity as highlighted by a further increase in the amount of outstanding business. Inflationary pressures appeared to intensify during September, with both input costs and output charges rising at quicker rates than in August.”

- Total new business rises marginally, as new export work stabilises
- Job shedding eases but remains marked
- Inflationary pressures show signs of picking up

“The Caixin China General Manufacturing PMI for September edged up slightly from the August level to 50.1, above the neutral 50-point level separating expansion from contraction. The index readings for new orders and stocks of purchases improved from the previous month while the reading for output slipped, but remained in expansion territory. The readings for the manufacturing PMI over the past three months seem to indicate that the economy has begun to stabilize. But given that the growth rate of fiscal income has slowed recently while expenditures have swung, there is insufficient momentum to drive future economic growth, and there is a risk that industrial output may decline.” – Dr. Zhengsheng Zhong, Director of Macroeconomic Analysis , CEBM Group

# Private Indicators: Global

## Markit Eurozone Manufacturing PMI



## Markit Eurozone Composite PMI® – final data

### Manufacturing growth accelerates at end of third quarter

- Final Eurozone Manufacturing PMI at 52.6 in September (Flash: 52.6, August Final: 51.7)
- Germany and Austria record fastest growth
- Italy returns to expansion

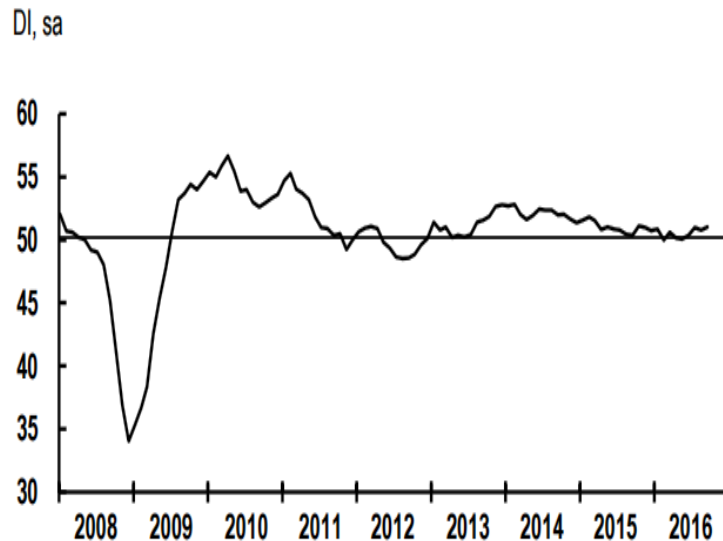
“The end of the third quarter saw a mild acceleration in the rate of expansion of the Eurozone manufacturing sector. Growth of output, new orders, new export business and employment all improved. At 52.6 in September, unchanged from the earlier flash estimate, the final Markit Eurozone Manufacturing PMI® rose to a three-month high. The average reading over the third quarter (52.1) was a tick higher than in quarter two (52.0).

The key message from the September survey is that the euro area’s manufacturing economy continues to expand at an encouragingly solid pace. The PMI points to production rising at a steady 2% annual pace in the third quarter, with momentum picking up in September. Production gains are being driven by welcome signs of improving demand from both within the region and from wider export markets.

The concern is that the upturn is worryingly uneven, reliant on a ‘core’ centred on Germany and its neighbours. German manufacturers reported their second-best month for two-and-a-half years, with strong performances also seen in the Netherlands and Austria.” – Chris Williamson, Chief Economist, Markit®

# Private Indicators: Global

JPMorgan Global Manufacturing PMI



## JP Morgan Global PMI

### Global manufacturing remains in low growth gear at end of third quarter

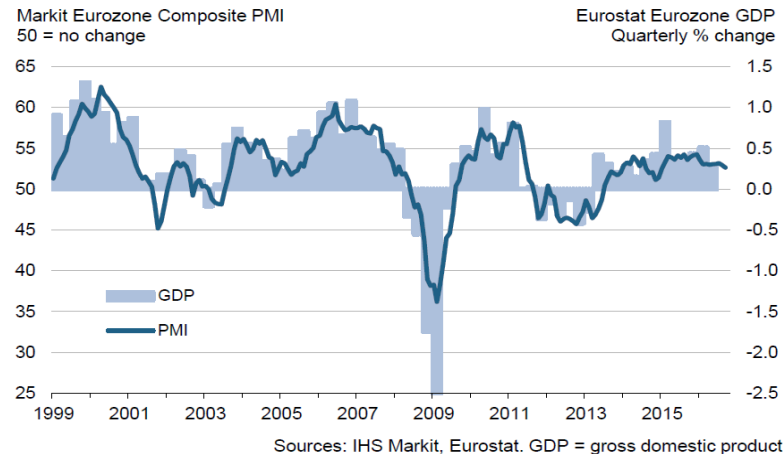
“The rate of expansion in the global manufacturing sector remained moderate during September. This was highlighted by the J.P. Morgan Global Manufacturing PMI™ – a composite index produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – posting 51.0, up slightly from 50.8 in August..”

“The average reading of the headline PMI over the third quarter as a whole (50.9) was the highest since the fourth quarter of 2015, but remained below its long-run survey average (51.3).”

“The September PMIs signal that the global manufacturing sector remained in a low growth gear at the end of the third quarter, though the survey has registered some improvement in recent months. Based on the global PMI, it appears that global output growth is firming modestly from a 1% pace to a 2% pace. The consumer goods PMI remains quite elevated, consistent with good gains in retail sales, whereas the investment goods PMI is sending a message that capex growth remains slow.” – David Hensley, Director of Global Economic Coordination, J.P. Morgan

# Private Indicators: Global

## Markit Eurozone Composite PMI



## JP Morgan Global Manufacturing PMI™

### Global economic growth remains in low growth gear at end of third quarter

- “Final Eurozone Composite Output Index: 52.6 (Flash: 52.6, August Final: 52.9)”
- Final Eurozone Services Business Activity Index: 52.2 (Flash: 52.1, August Final: 52.8)”

“The rate of expansion in the global manufacturing sector remained moderate during September. This was highlighted by the J.P. Morgan Global Manufacturing PMI™ – a composite index produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – posting 51.0, up slightly from 50.8 in August.

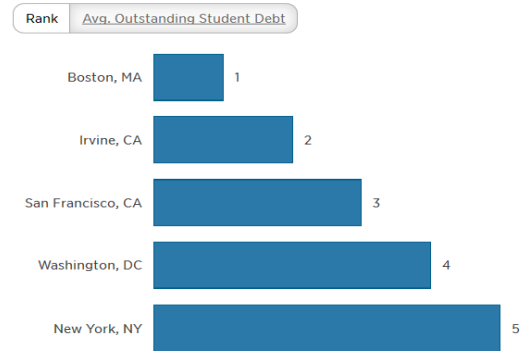
Global manufacturing production rose for the fourth successive month in September, underpinned by a further increase in new business. Output growth was a tick slower than in the prior month, whereas inflows of new work rose at a marginally quicker (yet still subdued) pace.

The September PMIs signal that the global manufacturing sector remained in a low growth gear at the end of the third quarter, though the survey has registered some improvement in recent months. Based on the global PMI, it appears that global output growth is firming modestly from a 1% pace to a 2% pace. The consumer goods PMI remains quite elevated, consistent with good gains in retail sales, whereas the investment goods PMI is sending a message that capex growth remains slow.” – David Hensley, Director of Global Economic Coordination, J.P. Morgan

# Demographics

## Saddled with debt, grads head to most expensive cities

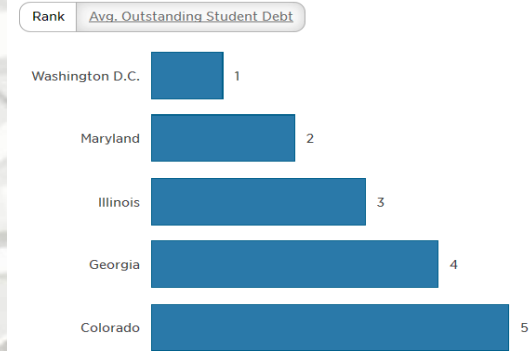
Top 5 cities with the highest outstanding student debt



Source: LendingTree

CNBC

Top 5 states with the highest outstanding student debt per borrower



Source: LendingTree

CNBC

“Nearly two-thirds of millennials graduated, or will graduate, with student debt, averaging \$27,162 per borrower, according to a new report by LendingTree. Despite that hefty student loan burden, newly minted grads are moving to some of the nation's most expensive cities, heavily concentrated in the Northeast, LendingTree found.

Particularly with regard to housing expenses, the cost of living in those locations far exceeds the national average. In Boston, for example, the average cost of renting a two-bedroom apartment is \$2,821, which means that you would need to earn \$120,900 a year just to afford it, according to a separate report by personal-finance site SmartAsset. (To calculate the gross income required, the site set the rent-to-income ratio at 28 percent.)

Millennials make \$48,146 a year, on average, and pay about \$317 a month toward their student loan repayment, according to LendingTree. Those monthly student loan payments amount to more than 11 percent of net income each month. [In this example, monthly take-home pay is \$2,808, on average, factoring in federal and state taxes, Social Security, Medicare, insurance costs and a 401(k).]

The majority of those polled said that monthly bill affects their spending ability “very much.” – Jessica Dickler, Personal Finance Writer, CNBC



# Demographics

## LendingTree Study: Crippling Effects of Student Debt Extend Beyond Millennials

**Survey suggests student debt may not only obstruct Millennial spending, but may be negatively influencing college and career choices and restricting economic growth**

- “Nearly two-thirds (63.3%) of millennials graduated, or will graduate, with student debt, and 46.5% currently owe money on their student loans. The burdens of student debt, however, extend far beyond just the borrowers, implicating education, occupations, spending and the economy.
- Respondents (63.3%) born between 1980 and 1995 said they either had student debt or expected to owe on student loans when they graduate, and more than 46% said they were currently carrying student debt.
- The average loan payment of \$317 per month, they said, had not only kept them from buying a house (45.31%) but had stopped them from traveling (53.27%), saving for retirement (38.07%) and buying a car (44.74%).
- Millennials who are currently employed report an average salary of \$48,146. When factoring in Federal and State Income Taxes, Social Security, 401k, Medicare and insurance costs, a typical millennial would net roughly 70% of their gross income, depending on exemptions, state and elections. In this example, monthly take-home pay would total \$2,808.
- If student debt obligations were to hypothetically be absolved, millennials said that the newly-freed funds would go towards saving for emergencies (53.98%), buying a home (41.76%), retirement savings (31.68%) or be spent on travel/vacations (31.25%).” – Megan Greuling, Media Contact, LendingTree

# Demographics

## LendingTree Study: Crippling Effects of Student Debt Extend Beyond Millennials

**Survey suggests student debt may not only obstruct Millennial spending, but may be negatively influencing college and career choices and restricting economic growth**

- “The survey found that millennials' student debt influenced education decisions. The cost of tuition and the amount of potential student debt affected either the choice of school (32.97%), major (3.55%) or both (14.12%).
- Said another way, student debt concerns helped determine where and what students study for slightly more than half (50.6%) of respondents. Even more troubling, 15.06 percent were accepted to a "better" school but found attendance to be unaffordable, and another one third (33.2%) didn't even apply to a "better" school due to the cost of attendance and increased student debt potential.
- More than half (55.9%) of those surveyed have feelings of financial regret related to their post-secondary education. The most common is that he or she wished they went to a more affordable school (29.05%), followed by wishing they chose a different major or area of study (20.81%), or feel they should have attended a different school for their money (14.05%).
- Unfortunately, 10.41 percent feel as though they shouldn't have attended college at all, and 10.14 percent feel overeducated, paying for education beyond what is necessary for their career.
- Not only were school choices and areas of study impacted by student debt fears, but 38.34 percent feel that having student debt affected his/her career or occupation choice.”– Megan Greuling, Media Contact, LendingTree

# Demographics

## Americans Would Rather Save for a Trip Than a House

“Owning a home is the American Dream, right? Hold that thought. Research commissioned by travel search engine [liligo.com](http://liligo.com) found that 22 percent of Americans surveyed actually save more money to travel than they do to buy a home. And that's not where the travel obsession ends.

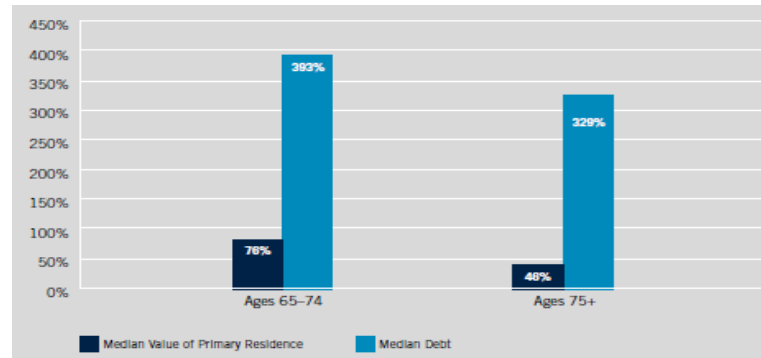
The study of 1,002 adults, which was conducted by research firm YouGov, revealed that one-third (33 percent) are spending more time researching their short getaways than which doctor to visit. ...” – Jordi Lippe-McGraw, Contributing Writer, *Condé Nast Traveler*

# Demographics

## Housing Debt Is Causing Problems for Retirees: Prudential

“Americans are carrying higher levels of debt as they head into retirement, raising the specter of financial headaches in their old age, according to a white paper from Prudential Financial. Much of that debt Americans are taking with them into retirement is housing debt, Prudential noted in a white paper based on data from the Center for Retirement Research at Boston College. Citing Federal Reserve data, Prudential reported that median-home values for those aged 65 to 74 rose 76%, while housing debt skyrocketed 393%.

Figure 1: Increase in Housing Values and Housing Debt 1989–2013



Source: 2013 Survey of Consumer Finance. Values are in 2013 dollars.

“It is easy to accumulate debt and Americans are pretty comfortable with borrowing money. The increased debt means the monthly payments will eat away at their Social Security checks and the situation for many could become especially difficult for couples when one of them passes away. Therefore, problems easily crop up for couples with high levels of housing debt, such as the forced sale of a home when a spouse dies. This whole scenario has fueled the life insurance industry, as retirees' higher debt burdens necessitate greater protections. These factors create a much greater need for older Americans to consider life insurance coverage to help ensure their family's financial security,” said Jill Perlin, Prudential Individual Life Insurance vice president of advanced marketing.” – Jacob Passy, National Mortgage News

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