

# The Virginia Tech – U.S. Forest Service

## September 2016

### Housing Commentary: Section II



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# **Federal Reserve System and Private Indicators**

# Board of Governors of the Federal Reserve System

## Gross Domestic Product Projections

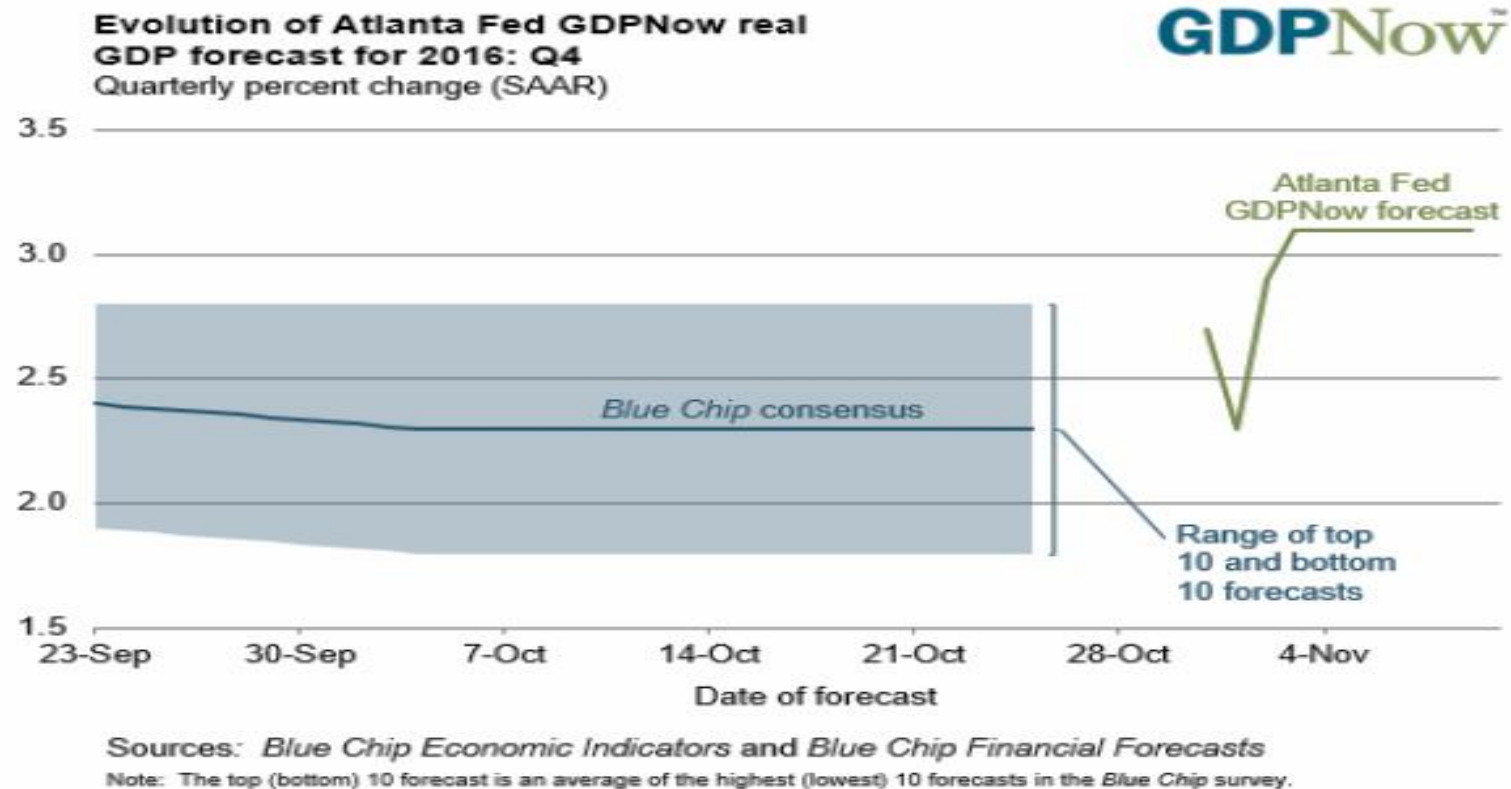
Latest forecasts — September 23, 2016

“Medians, central tendencies, and ranges of economic projections for years 2016 through 2019 and over the longer run. Actual values for years 2011 through 2015.” – Federal Open Market Committee

	2011	2012	2013	2014	2015	2016	2017	2018	2019	Longer run
<b>Actual</b>	1.7	1.3	2.7	2.5	1.9	-	-	-	-	-
<b>Upper End of Range</b>	-	-	-	-	-	2.0	2.5	2.3	2.2	2.2
<b>Upper End of Central Tendency</b>	-	-	-	-	-	1.9	2.2	2.1	2.0	2.0
<b>Median</b>	-	-	-	-	-	1.8	2.0	2.0	1.8	1.8
<b>Lower End of Central Tendency</b>	-	-	-	-	-	1.7	1.9	1.8	1.7	1.7
<b>Lower End of Range</b>	-	-	-	-	-	1.7	1.6	1.5	1.6	1.6



# U.S. Economic Indicators



## Atlanta Fed GDPNow™

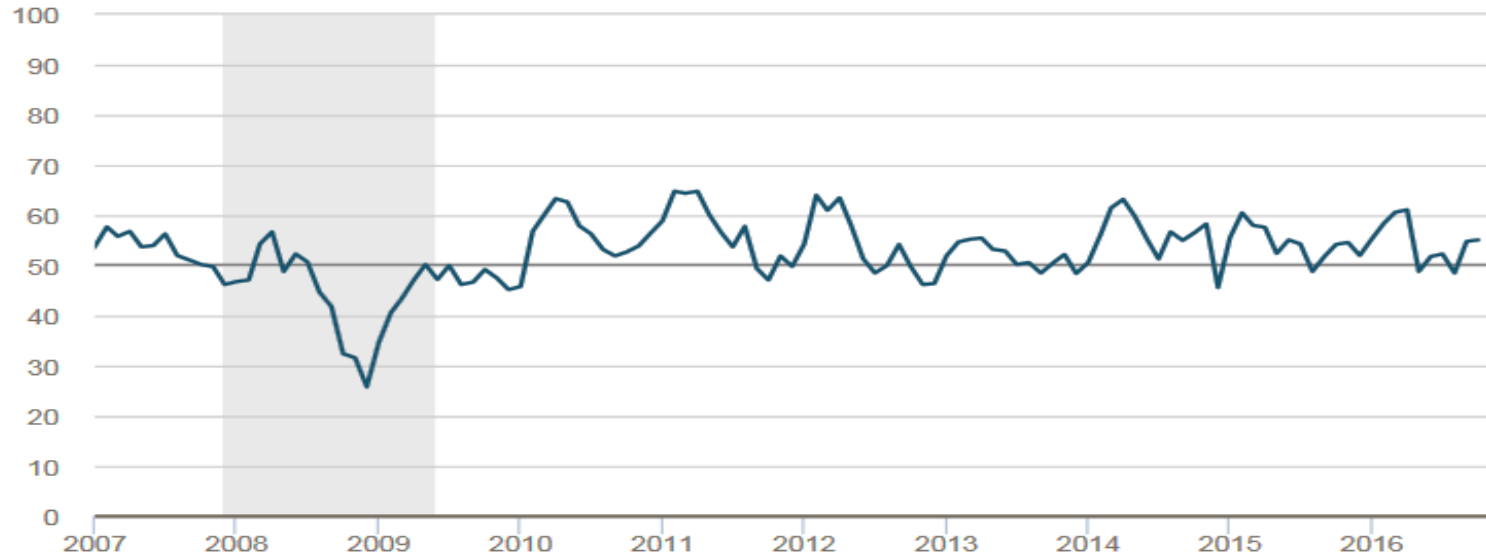
**Latest forecast: 3.1 percent — November 9, 2016**

“The GDPNow model forecast for real GDP growth (seasonally adjusted annual rate) in the fourth quarter of 2016 is **3.1 percent** on November 9, unchanged from November 4. The forecast of the contribution of inventory investment to fourth-quarter real GDP growth inched up from 0.46 percentage points to 0.50 percentage points after this morning's wholesale trade report from the U.S. Census Bureau.” – Pat Higgins, Economist, The Federal Reserve Bank of Atlanta

# U.S. Economic Indicators

**Southeast Purchasing Managers Index**

☰ Export



Note: 50+ = Expansion

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

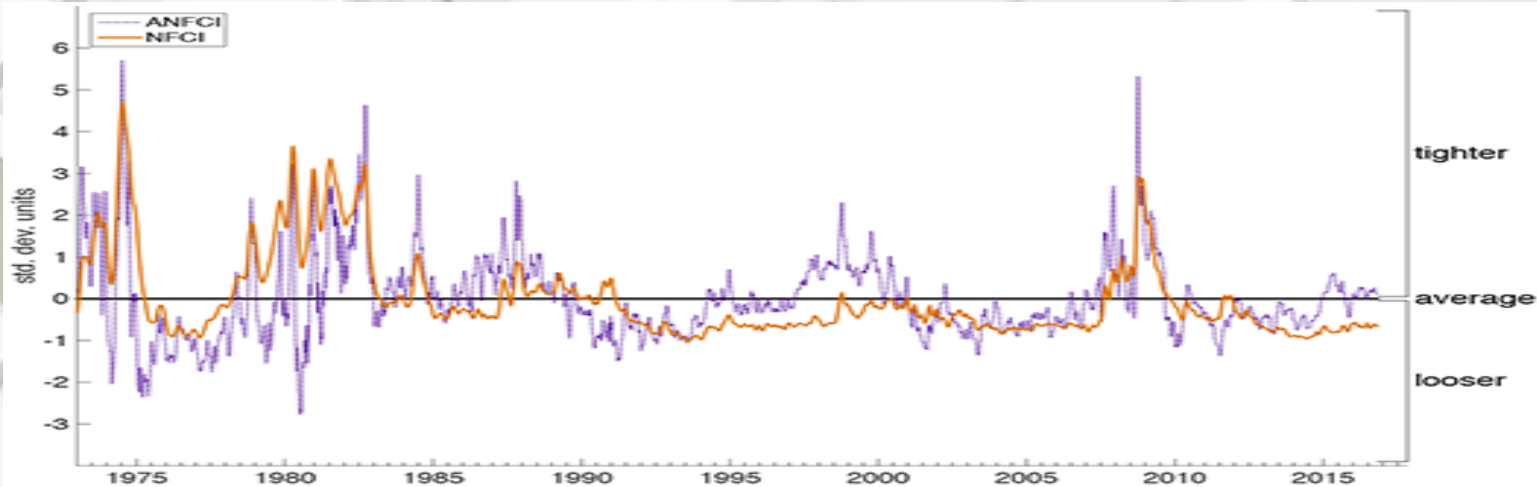


FEDERAL RESERVE BANK of ATLANTA

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

“Kennesaw State University's Southeast Purchasing Managers Index (PMI), a composite index that measures the region's manufacturing sector based on key sector indicators, rose three-tenths of a percentage point to 55.1 in October. The rise was driven by increases in the following underlying variables: finished inventories, commodity prices, and 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>11/4/2016</b>	<b>10/28/2016</b>	<b>10/7/2016</b>	<b>8/5/2016</b>	<b>5/6/2016</b>	<b>11/6/2015</b>
NFCI	-0.66	-0.66	-0.63	-0.70	-0.68	-0.78
ANFCI	0.11	0.12	0.17	0.21	0.27	-0.27

## The Federal Reserve Bank of Chicago

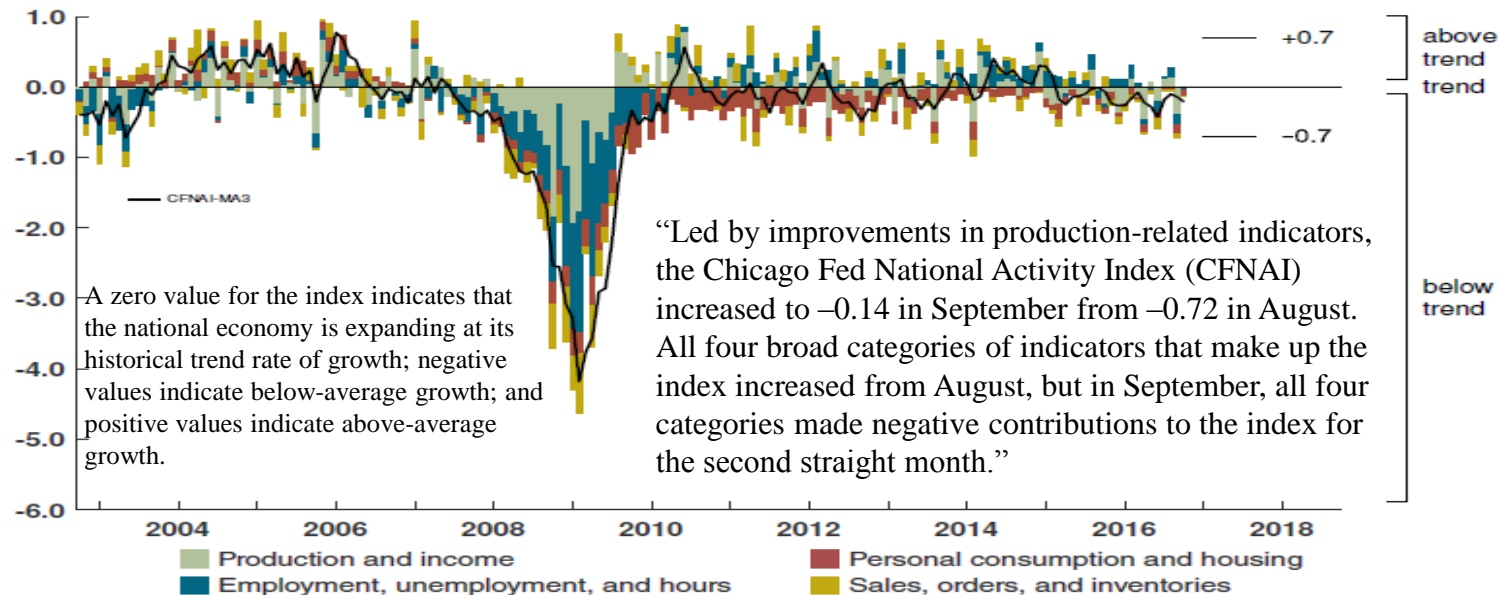
### Financial Conditions Hold Steady in Week Ending November 4

“The NFCI remained at  $-0.66$  in the week ending November 4. The risk subindex ticked up from the previous week, while the credit subindex edged down, and the leverage and nonfinancial leverage subindexes were unchanged.

The ANFCI ticked down to  $0.11$  from the previous week. 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 picked up in September

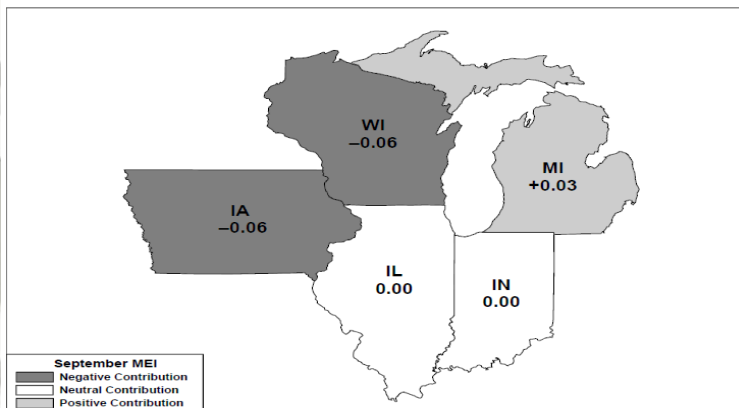
“The index’s three-month moving average, CFNAI-MA3, edged down to -0.21 in September from -0.14 in August. September’s CFNAI-MA3 suggests that growth in national economic activity was somewhat below its historical trend. The economic growth reflected in this level of the CFNAI-MA3 suggests subdued inflationary pressure from economic activity over the coming year.

The CFNAI Diffusion Index, which is also a three-month moving average, moved down to -0.12 in September from -0.03 in August. Forty-one of the 85 individual indicators made positive contributions to the CFNAI in September, while 44 made negative contributions. Sixty-seven indicators improved from August to September, while 17 indicators deteriorated and one was unchanged. Of the indicators that improved, 29 made negative contributions.” – Laura LaBarbera, Media Relations, The Federal Reserve Bank of Chicago



# Chicago Fed: Midwest Economy Index

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).

## Index shows Midwest economic growth steady in September

“The Midwest Economy Index (MEI) edged down to  $-0.10$  in September from  $-0.08$  in August. However, the relative MEI moved up to  $+0.17$  in September from  $+0.13$  in August. September’s value for the relative MEI indicates that Midwest economic growth was somewhat higher than what would typically be suggested by the growth rate of the national economy.”

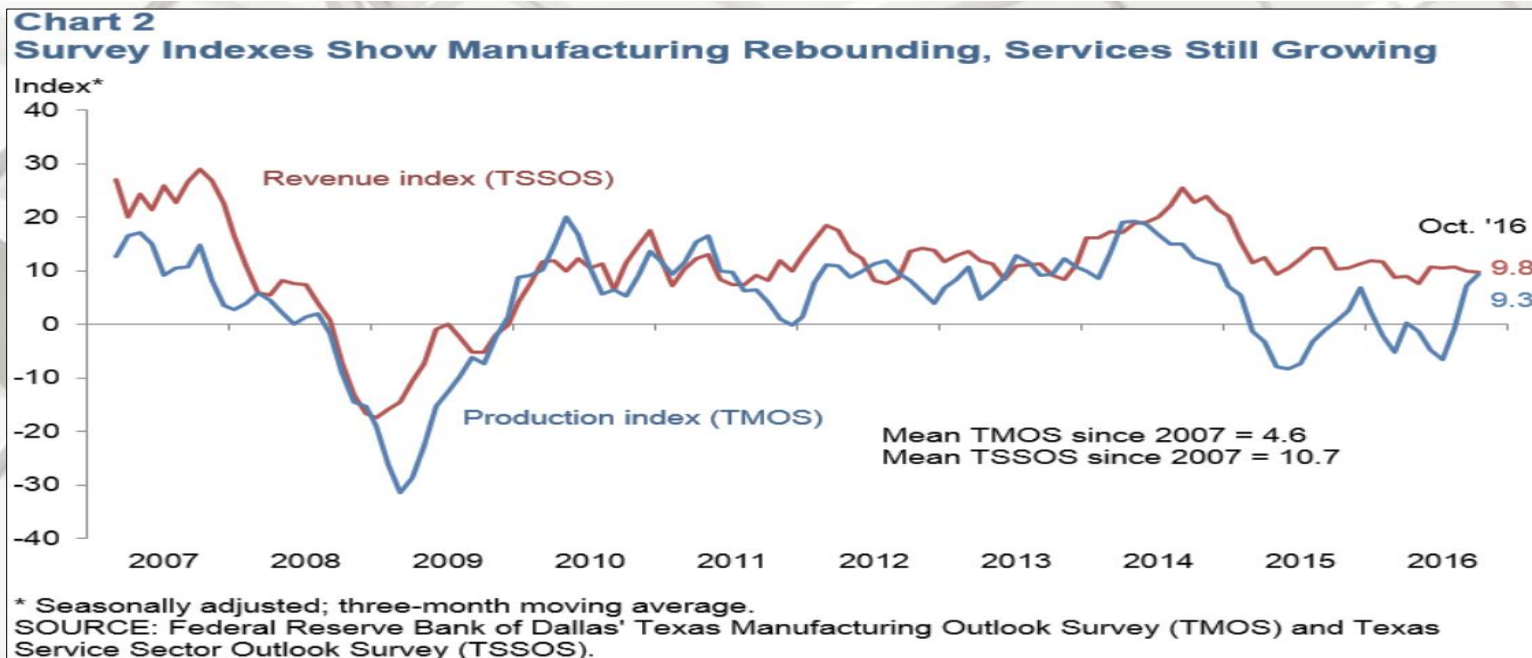
“The manufacturing sector’s contribution to the MEI was unchanged at  $-0.03$  in September. The pace of manufacturing activity increased in Iowa and Michigan, but decreased in Illinois and Wisconsin and was unchanged in Indiana. Manufacturing’s contribution to the relative MEI remained at  $+0.15$  in September.

The construction and mining sector’s contribution to the MEI was unchanged at  $-0.08$  in September. The pace of construction and mining activity was higher in Michigan, but lower in Indiana and unchanged in Illinois, Iowa, and Wisconsin. Construction and mining’s contribution to the relative MEI ticked down to  $-0.04$  in September from  $-0.03$  in August.

The service sector’s contribution to the MEI ticked down to  $+0.01$  in September from  $+0.02$  in August. The pace of service sector activity was down in Illinois, Michigan, and Wisconsin, but up in Indiana and unchanged in Iowa. The service sector’s contribution to the relative MEI increased to  $+0.06$  in September from  $+0.01$  in August.

The contribution from consumer spending indicators to the MEI ticked down to a neutral reading in September from  $+0.01$  in August. Consumer spending indicators were, on balance, steady in all five Seventh District states. Consumer spending’s contribution to the relative MEI ticked up to a neutral reading in September from  $-0.01$  in August.” – Laura LaBarbera, Media Relations, The Federal Reserve Bank of Chicago

# U.S. Economic Indicators



## The Federal Reserve Bank of Dallas Could This Be the End of the Texas Slump?

“Regional economic activity appears to be improving, and the oil-driven slump may be nearing an end. Texas job growth continues to accelerate, rising an annualized 2.1 percent in September and lifting year-to-date growth to an annualized 1.4 percent. After incorporating the second-quarter early benchmark, the Dallas Fed revised its forecast for 2016 employment growth up to 1.5 percent (December/December), which, if it comes to fruition, would surpass last year’s 1.3 percent increase. If there are additional downward revisions to state employment data, like those in the first half of the year, third-quarter growth could come in weaker than the current 2.6 percent increase.

The unemployment rate moved up again, to 4.8 percent in September, 0.5 percentage points above its low of 4.3 percent in March but still below the U.S. rate. The most recent increase reflects people entering the workforce, perhaps because hiring conditions have recently improved.” – Sarah Greer, Amy Jordan and Pia Orrenius, Research Department, Federal Reserve Bank of Dallas

# U.S. Economic Indicators



## Texas Manufacturing Activity Increases Again, but at a Slower Pace

“Texas factory activity increased again in October, according to business executives responding to the *Texas Manufacturing Outlook Survey*. The [production](#) index, a key measure of state manufacturing conditions, posted a fourth consecutive positive reading but moved down to 6.7. This suggests output grew but at a slower pace this month.

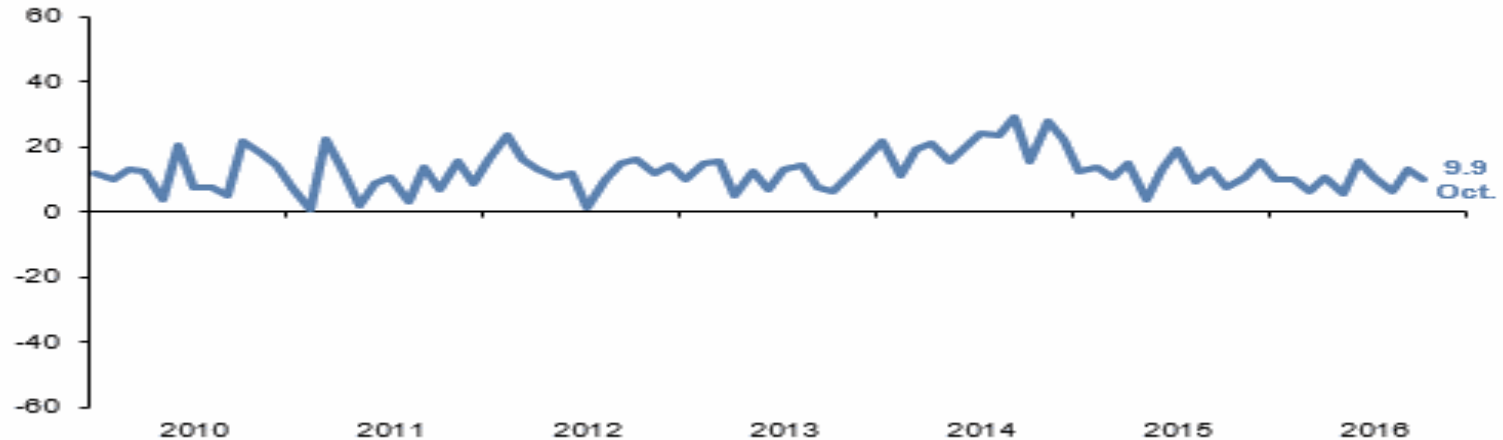
Other measures of current manufacturing activity showed mixed movements. The [new orders](#) and [growth rate of orders](#) indexes posted second consecutive negative readings in October, holding fairly steady at -3.5 and -5.1, respectively. The [capacity utilization](#) and [shipments](#) indexes have been positive throughout the second half of the year so far but fell notably after spiking last month, coming in at 0.8 and 1.9. The [capital expenditures](#) index moved up to 8.7, reaching its highest reading in nearly two years.

Perceptions of broader business conditions remained mixed. The [general business activity](#) index has been negative for nearly two years, although it continued to push closer to positive territory in October, coming in at -1.5. The [company outlook](#) index posted a second positive reading in a row, but moved down 5 points to 1.8.” – Emily Kerr, Business Economist, Federal Reserve Bank of Dallas

# U.S. Economic Indicators

## Texas Service Sector Outlook Survey Revenue Index

Index, seasonally adjusted



Federal Reserve Bank of Dallas

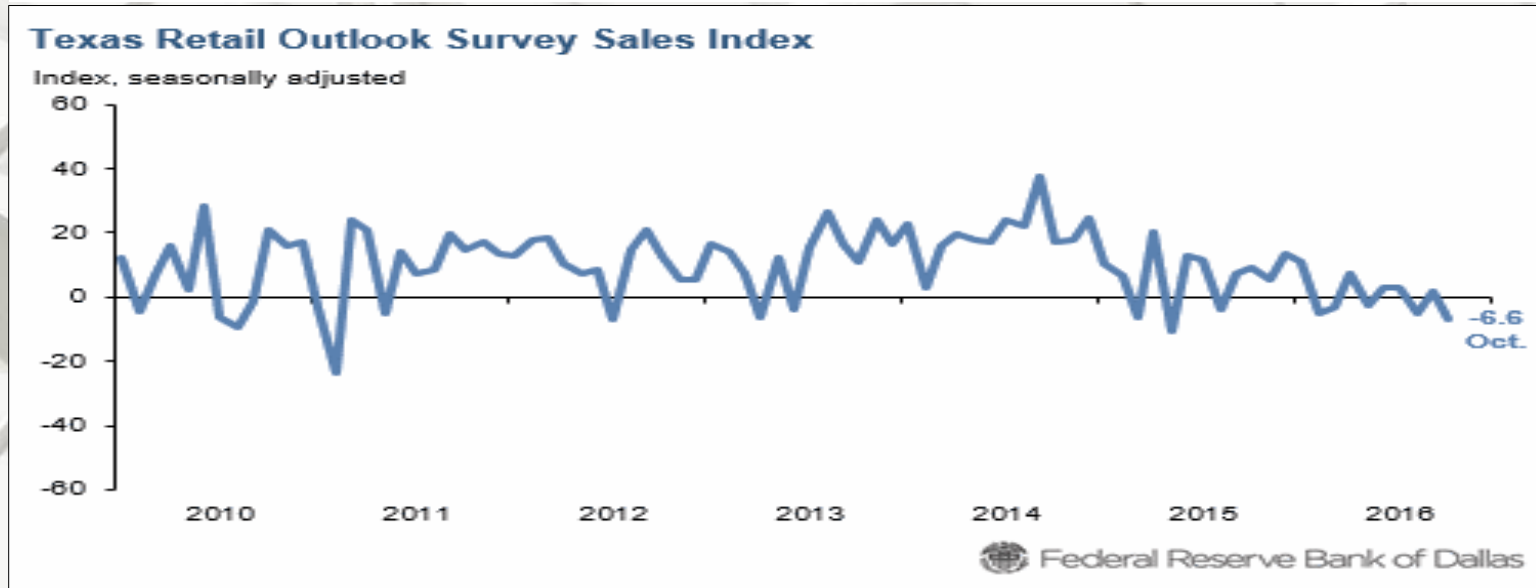
## The Federal Reserve Bank of Dallas

### Texas Service Sector Activity Increases at a Slower Pace

“Texas service sector activity increased in October albeit at a slightly slower pace than 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, dipped from 13.0 in September to 9.9 in October. Perceptions of broader economic conditions reflected less optimism in October. The general business activity index remained positive but fell slightly from 4.7 to 3.0. The company outlook index edged down to a reading near zero, with the share of respondents reporting that their outlook improved from last month equal to the share noting it worsened.

Respondents’ expectations regarding future business conditions continued to reflect optimism in October. The index of future general business activity ticked down from 10.4 to 9.1. The index of future company outlook came in at a reading of 12.2, similar to September. Indexes of future service sector activity, such as future revenue and employment, reflected more optimism this month.” – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

# U.S. Economic Indicators



## The Federal Reserve Bank of Dallas Retail Sales Decline

“Retail sales fell in October, according to business executives responding to the *Texas Retail Outlook Survey*. The [sales](#) index moved back into contractionary territory, retreating from 2.0 in September to -6.6 in October. [Inventories](#) increased this month after declining last month.

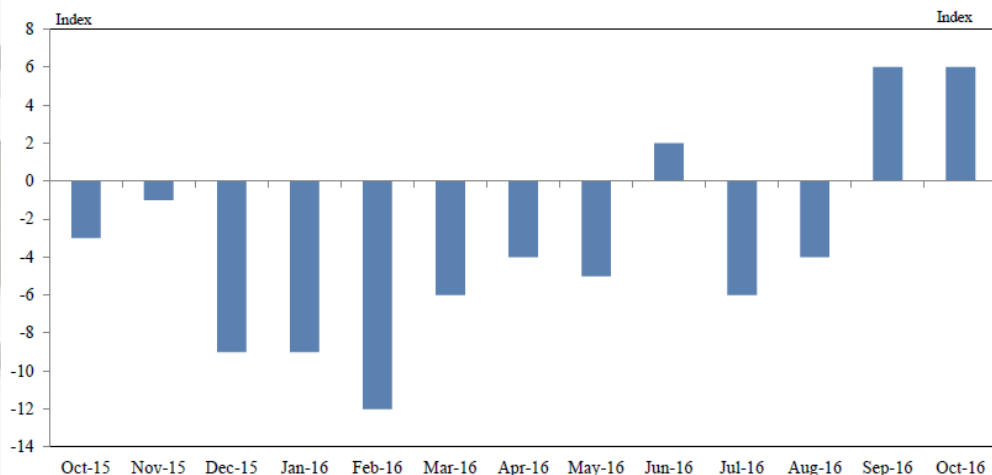
Retailers’ perceptions of broader economic conditions worsened in October. The [general business activity](#) index plunged from 7.9 to -5.1. The [company outlook](#) index retreated from 2.9 to -5.6, with 11 percent of respondents reporting that their outlook improved from last month and 16 percent noting that it worsened.

Retailers’ perceptions of future broader economic conditions were mixed in October. The index of future [general business activity](#) remained positive but fell from 9.9 to 4.2. The index of future [company outlook](#) fell sharply from 9.7 to -1.3. 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

Composite Index vs. a Month Ago



## Tenth District Manufacturing Summary

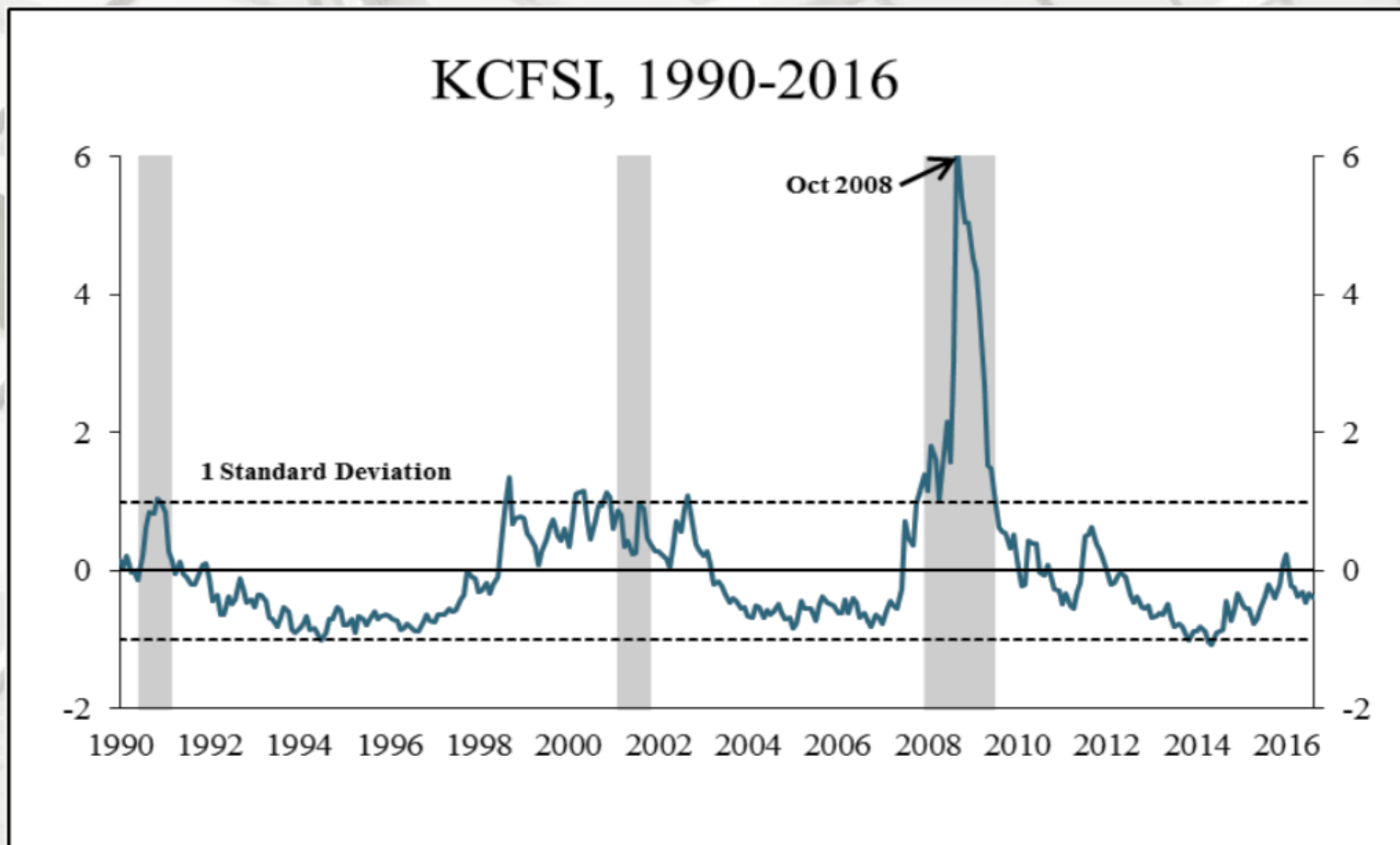
“Tenth District manufacturing activity expanded again at a moderate pace, and producers’ expectations for future activity increased further. The price indexes were mixed, but mostly little changed.” – Pam Campbell, Federal Reserve Bank of Kansas City

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

“This was the second consecutive month of rising factory activity in the Tenth District, the first time that has happened in nearly two years. Much of the improvement recently has been in machinery and fabricated metals manufacturing.” – Chad Wilkerson, Vice President and Economist, Federal Reserve Bank of Kansas City

“The month-over-month composite index was 6 in October, equal to 6 in September and up from -4 in August. The composite index is an average of the production, new orders, employment, supplier delivery time, and raw materials inventory indexes. The increase was mostly attributable to continued strength in metals, machinery, and chemical production. Most month-over-month indexes improved further in October. The production index edged higher from 15 to 18, and the shipments, new orders, and order backlog also rose moderately. The employment index climbed from -3 to 7, its highest level in almost two years. The raw materials inventory index dropped from 8 to -11, and the finished goods inventory index also fell substantially.” – 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**

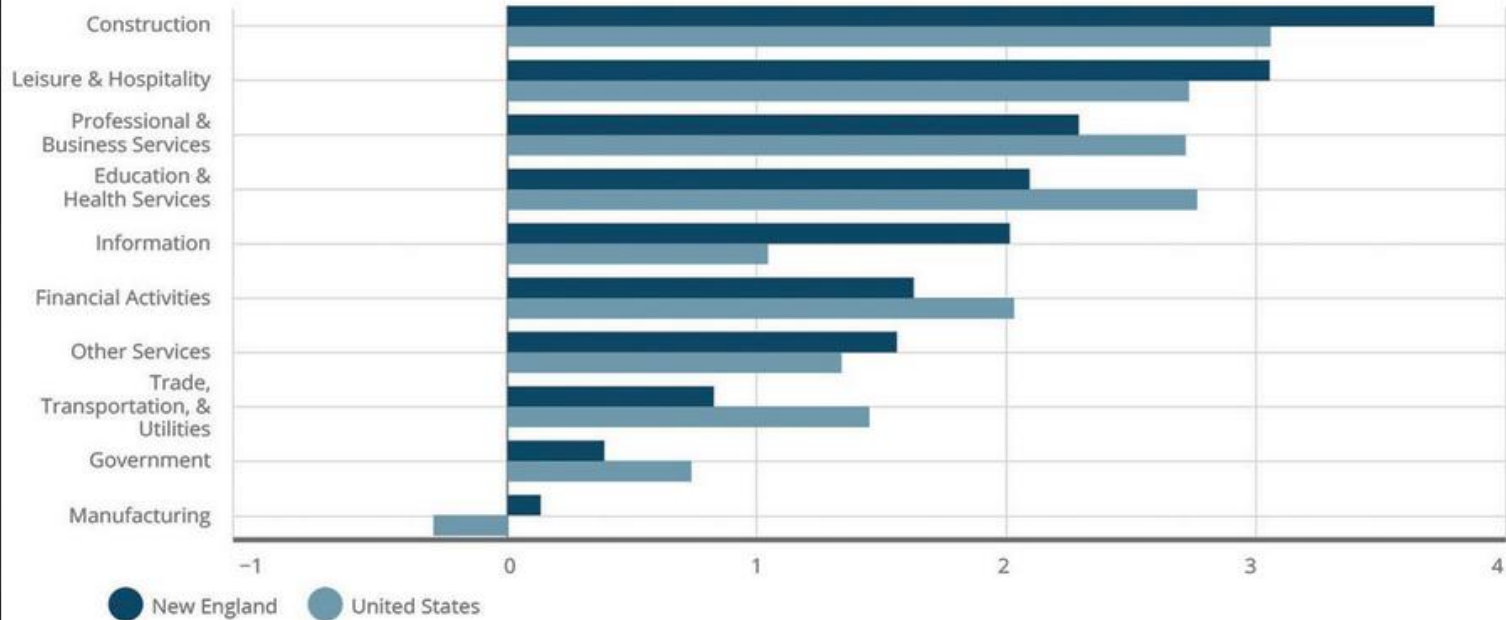
“The Kansas City Financial Stress Index (KCFSI) decreased slightly from -0.34 in September to -0.39 in September.” – Bill Medley, Media Relations, The Federal Reserve Bank of Kansas City

# U.S. Economic Indicators

EXHIBIT 2

## Employment Growth by Supersector

Percent Change, August 2015 to August 2016



Source: U.S. Bureau of Labor Statistics.

Note: Data are seasonally adjusted. New England's Information supersector is based on data from NH, MA, and CT only.

## New England Economic Update

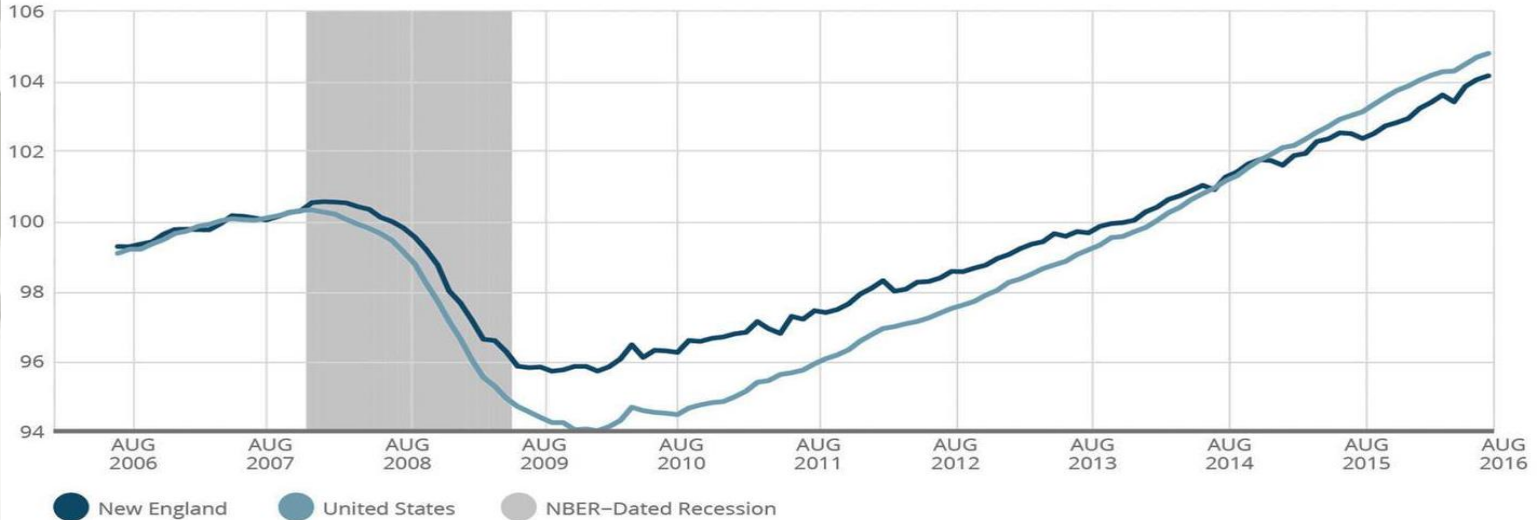
“All ten supersectors recorded year-over-year job gains in the region in August 2016 (Exhibit 2). The Construction sector led the region in job growth over this period, growing at a pace (3.9 percent) that exceeded that in the same sector for the nation (3 percent). Employment in the Manufacturing sector declined nationally, but it increased modestly year-over-year in New England. The region’s Information supersector has grown at nearly double the national rate since August 2015.” – Riley Sullivan, Policy Analyst, The Federal Reserve Bank of New England

# U.S. Economic Indicators

EXHIBIT 1

## Nonagricultural Employment

August 2006 – August 2016  
Index 2007=100



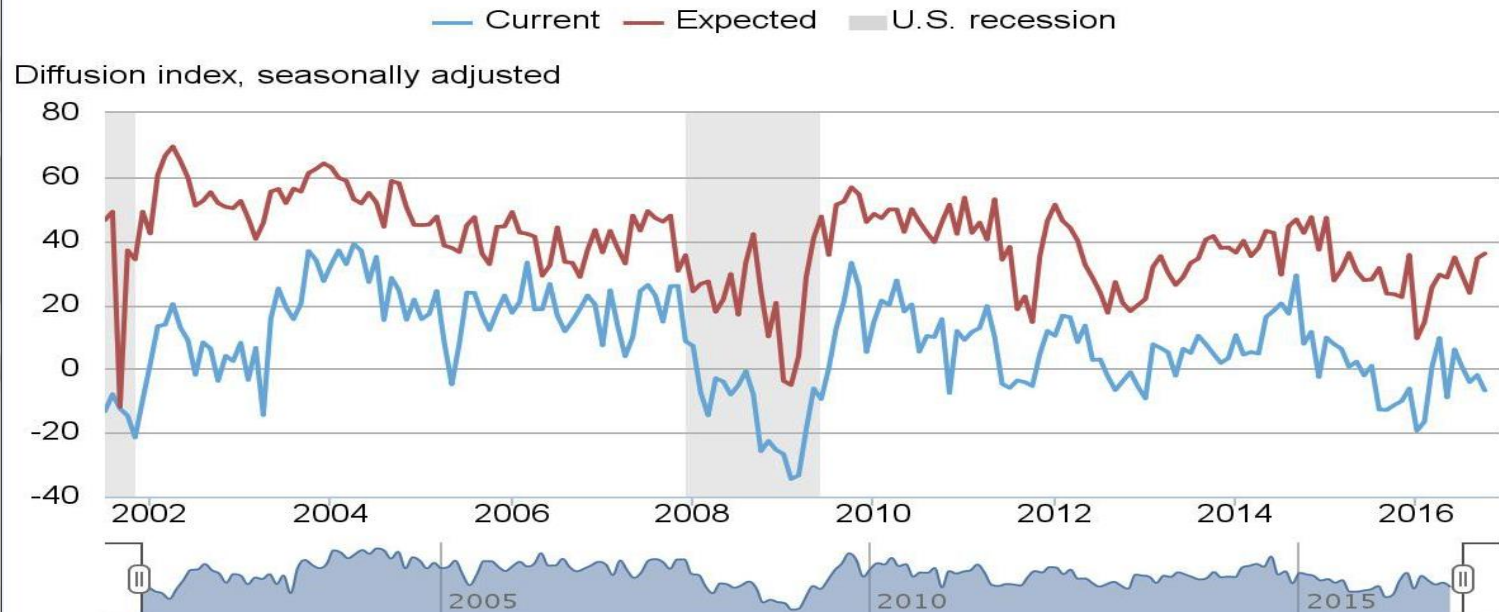
Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted.

## New England Economic Update

“The United States and New England both experienced moderate payroll employment growth between August 2015 and August 2016. During that period, job growth in the New England states ranged from a high of 2.1 percent in Vermont to a low of 0.8 percent in Connecticut. Massachusetts, New Hampshire, and Vermont all enjoyed job growth rates that exceeded the national average of 1.7 percent. The latest regional average employment growth rate, 1.6 percent, is close to its highest rate in the past twelve months. Payroll employment in the region is well above its peak pre-recession level, but New England still lags behind the nation on this measure (Exhibit 1). The region’s overall employment recovery is held back by Rhode Island, Connecticut, and Maine, which all continue to face employment shortfalls relative to their respective pre-recession peaks.” – Riley Sullivan, Policy Analyst, The Federal Reserve Bank of New England

# U.S. Economic Indicators

## General Business Conditions



## Empire State Manufacturing Survey Business Activity Continues to Decline

“Business activity continued to decline in New York State, according to firms responding to the October 2016 *Empire State Manufacturing Survey*. The headline general business conditions index slipped five points to -6.8. The new orders index edged up but remained negative at -5.6, indicating an ongoing drop in orders, and the shipments index increased to -0.6, suggesting that shipments were essentially flat. Labor market conditions remained weak, with both employment levels and the average workweek reported as lower. Price indexes increased somewhat, and continued to signal moderate input price increases and a slight increase in selling prices. Indexes for the six-month outlook suggested that manufacturing firms expect conditions to improve in the months ahead.” – The Federal Reserve Bank of New York

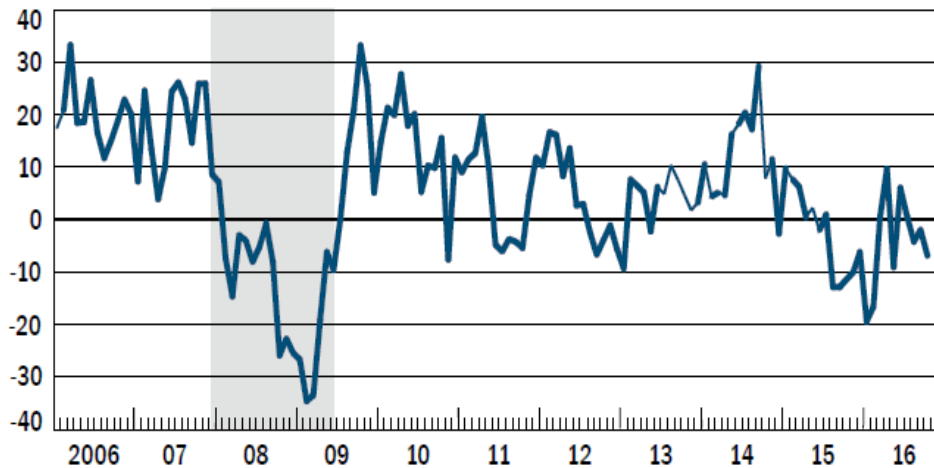


# U.S. Economic Indicators

## 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

“For the third consecutive month, manufacturing firms in New York State reported a modest decline in business activity. The general business conditions index retreated five points to -6.8 in October. Twenty-seven percent of respondents reported that conditions had improved over the month, while 33 percent reported that conditions had worsened.” – The Federal Reserve Bank of New York

## Outlook Remains Optimistic

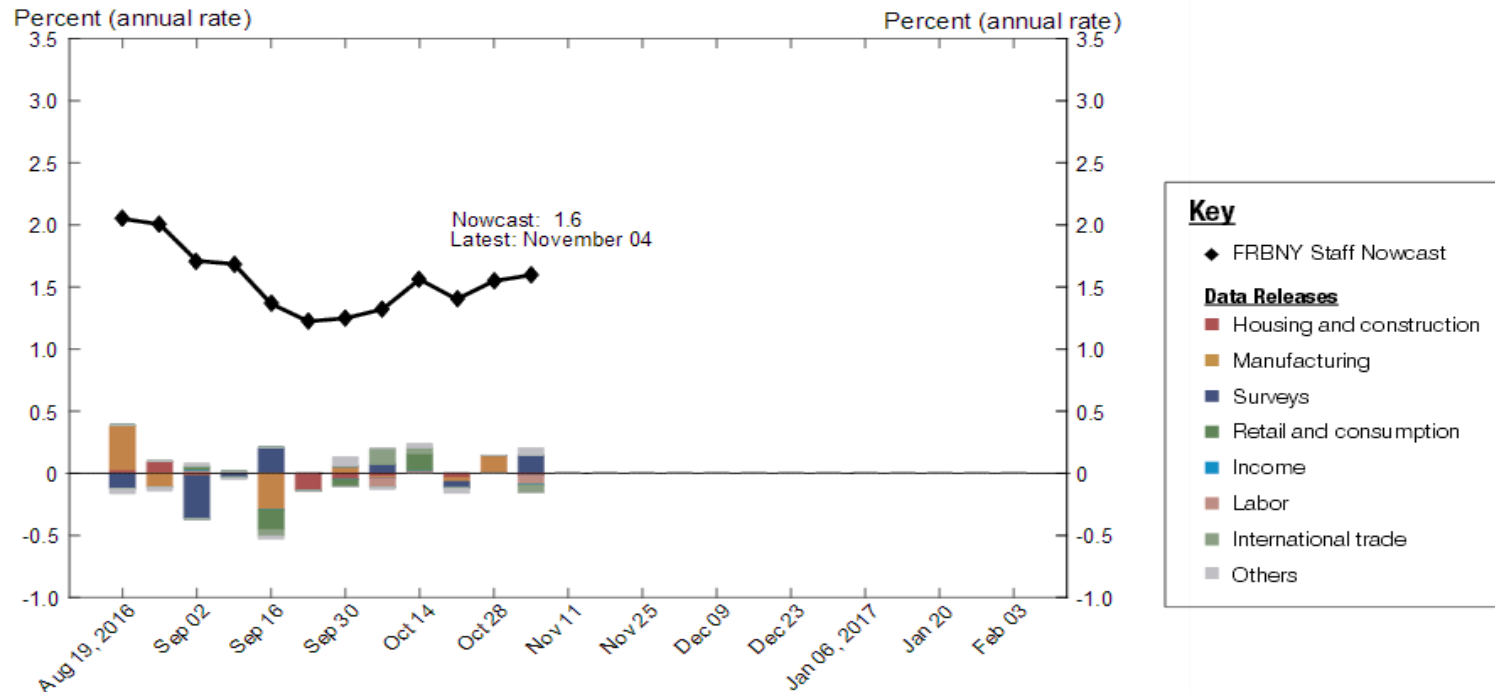
“Indexes for the six-month outlook suggested that respondents were more optimistic about future conditions than in September. The index for future business conditions increased two points to 36.0. In addition, the index for future new orders rose seven points to 39.0 and the index for future shipments jumped fifteen points to 36.5, indicating that manufacturing firms anticipated a significant increase in activity. In a sign that firms looked to expand employment in the months ahead, the index for future employment moved further into positive territory. Indexes for future prices suggested that firms expected both input prices and selling prices to increase over the next six months. The capital expenditures index rose modestly to 13.2, while the technology spending index edged back to 8.5.” – The Federal Reserve Bank of New York

# U.S. Economic Indicators

## The Federal Reserve Bank of New York

### 1 | 2016:Q4 GDP Growth

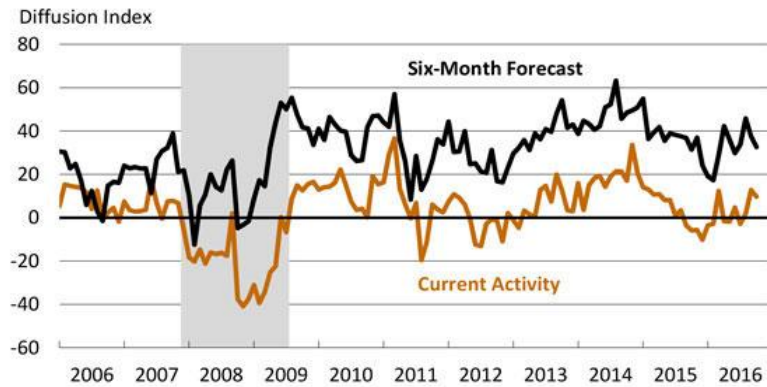
Source: Authors' calculations. Notes: Colored bars reflect the relative impact of each data release on the nowcast.



- “The FRBNY Staff Nowcast stands at 1.6% for 2016:Q4.
- Overall positive news during the last two weeks pushed the nowcast for Q4 up 0.2 percentage point.
- Manufacturers’ shipments and ISM manufacturing survey data had the largest positive contributions in the last two weeks.”

# U.S. Economic Indicators

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

## Introduction

“Results from the October *Manufacturing Business Outlook Survey* suggest that regional manufacturing conditions continued to improve. Indexes for general activity, new orders, and shipments were all positive this month. But firms reported continued weakness in overall labor market conditions. Firms expect continued growth for manufacturing over the next six months and are becoming more optimistic about employment expansion.”

## October 2016 Manufacturing Business Outlook Survey New Orders Pick Up, but Employment Still Not Growing

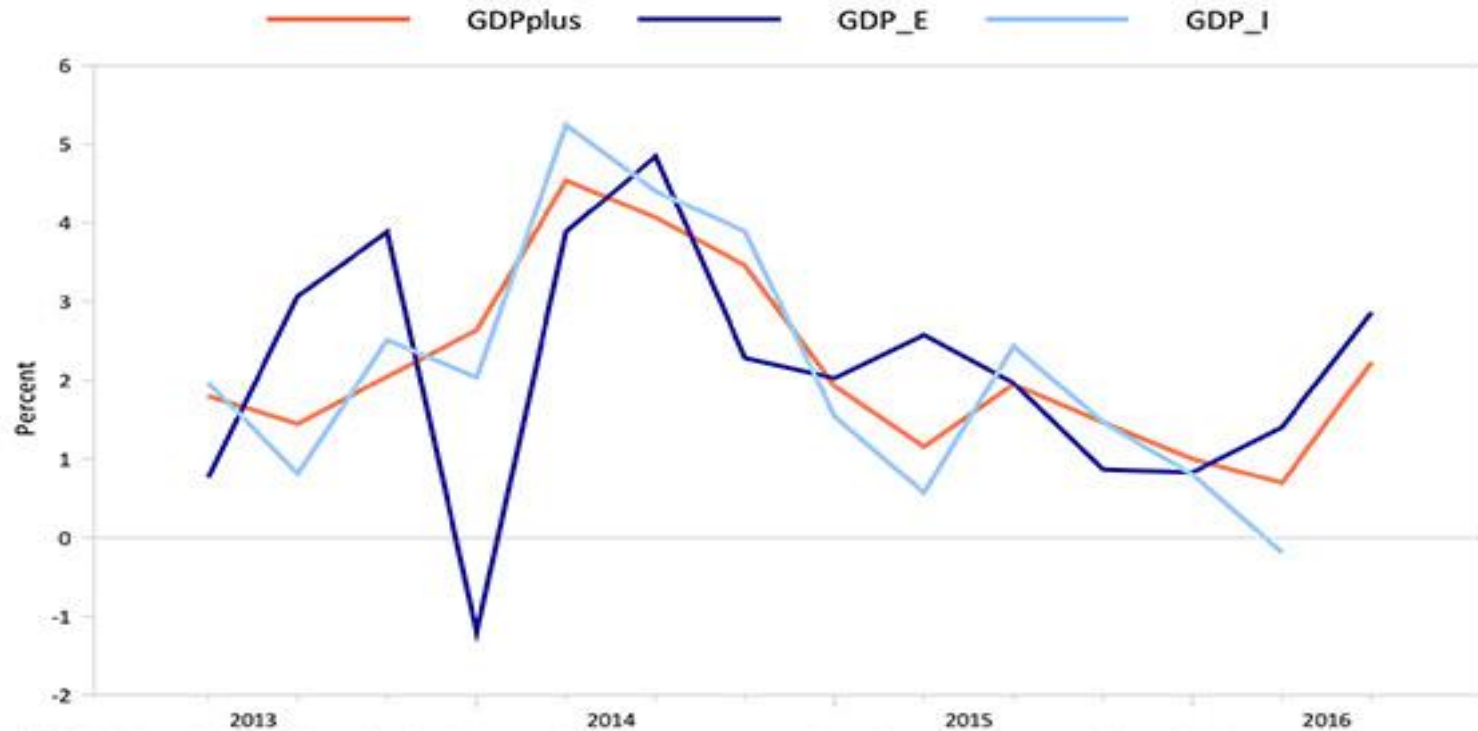
“The index for current manufacturing activity in the region edged down, from a reading of 12.8 in September to 9.7 this month. The index has now been positive for three consecutive months (see Chart 1). Other broad indicators showed notable improvement. The new orders index improved markedly this month, increasing from 1.4 in September to 16.3 in October. The percentage of firms reporting increases in new orders this month rose to 40 percent from 30 percent last month. The current shipments index also improved, rising 24 points to 15.3. The delivery times, unfilled orders, and inventories indexes remained weak, however, with all registering negative readings, although they were less negative than in September.

Firms reported continued weakness in manufacturing employment. The percentage of firms reporting a decrease in employees in October (17 percent) exceeded the percentage reporting an increase (13 percent). The current employment index edged up slightly to -4.0.” – 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 October 28, 2016.



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.

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.

# U.S. Economic Indicators

## The Federal Reserve Bank of Richmond

### **Manufacturing Activity Slowed in October; New Orders Decreased, Hiring Strengthened Mildly**

“Fifth District manufacturing activity remained sluggish in October, according to the most recent survey by the Federal Reserve Bank of Richmond. New orders and backlogs decreased this month, while shipments flattened. Hiring activity strengthened mildly across firms and wage increases were more widespread. Prices of raw materials and finished goods rose more quickly in October, compared to last month.

Firms looked for better business conditions during the next six months. Manufacturers expected positive growth in shipments and in the volume of new orders. In addition, manufacturers looked for rising backlogs of new orders. Producers anticipated increased capacity utilization and looked for slightly longer vendor lead times.

Survey participants' outlook for the months ahead included moderate growth in hiring, while future wage increases outweighed declines in the October expectations index. Producers anticipated somewhat longer average workweeks. Firms expected faster growth in prices paid and prices received.” – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond



# U.S. Economic Indicators



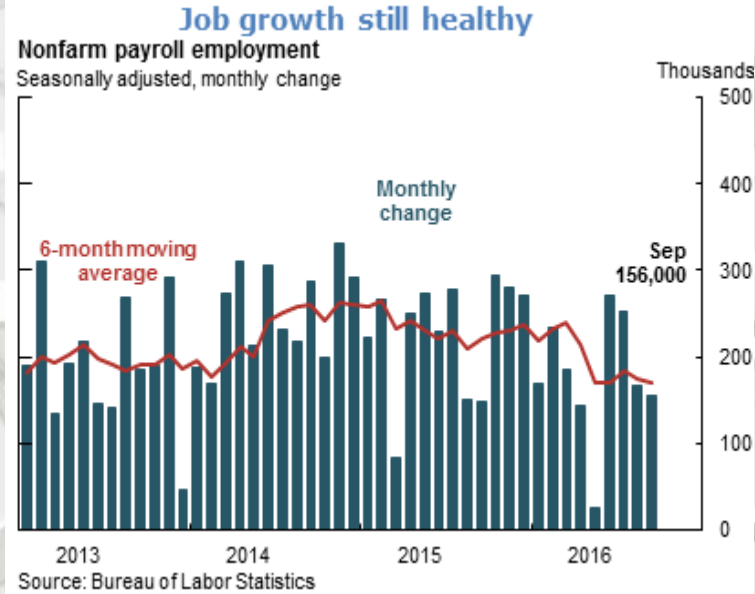
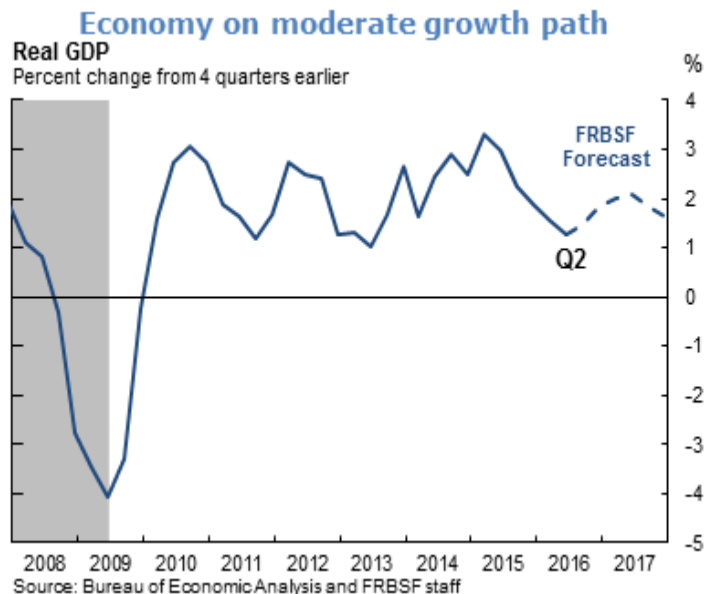
## Current Activity

“Overall manufacturing conditions remained sluggish this month. The composite index for manufacturing remained negative; however, the index added four points to end at a reading of  $-4$ . The new orders indicator also remained negative this month, ending at a reading of  $-12$ , while the shipments index flattened to a reading of  $2$ . The manufacturing employment index moved up to a positive reading, adding  $16$  points to end at  $3$ .” – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond

# U.S. Economic Indicators



# U.S. Economic Indicators

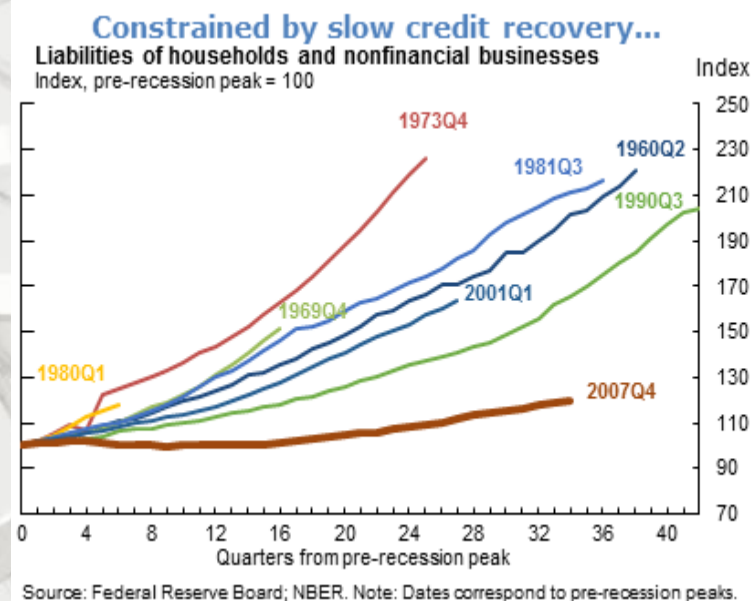
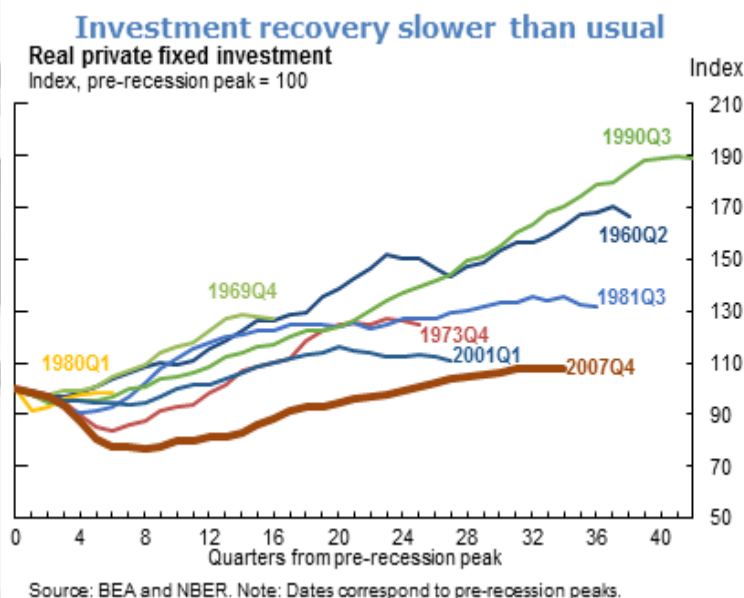


## The Federal Reserve Bank of San Francisco

“The Bureau of Economic Analysis revised its estimate for second quarter real GDP growth to an annualized rate of 1.4%, up from the prior estimate of 1.1%, and following 0.8% growth in the first quarter. Real GDP growth has been supported by solid consumer spending but dampened by weak business investment spending and slower inventory accumulation.

Recent data show that growth, while somewhat weaker than expected, has picked up its pace relative to the first half of the year. We expect real GDP growth to accelerate to over 2% in the second half of 2016, as households, supported by solid personal income growth, continue to spend. Although the headwinds from weak foreign growth and elevated uncertainty is likely to remain in the near term, we expect real GDP growth to be closer to trend in the 1½% to 2% range in 2017.” – Zheng Liu, Senior Research Advisor, The Federal Reserve Bank of San Francisco

# U.S. Economic Indicators

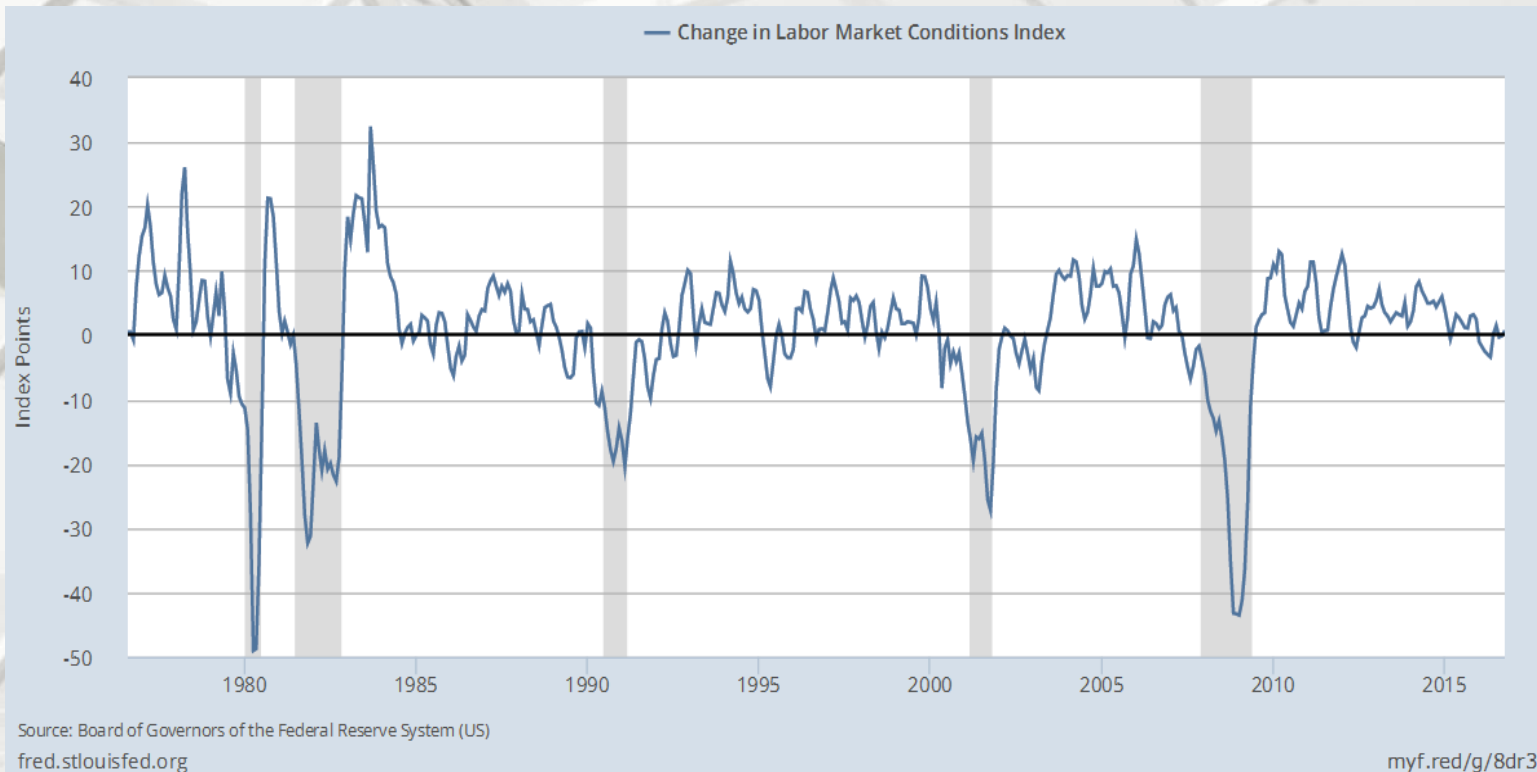


## The Federal Reserve Bank of San Francisco

“One such factor is the slowdown in potential GDP growth that has dampened credit demand and investment. Another factor is credit supply, which has recovered more slowly than usual since the Great Recession due to tightened financial regulations such as the Dodd-Frank Act.

A third factor that may have contributed to slow investment growth is elevated economic policy uncertainty. Recent events such as Britain’s intended exit from the European Union (Brexit) and the upcoming U.S. elections have led to spikes in measures of policy uncertainty. When uncertainty rises, firms become less willing to undertake capital spending projects, causing investment growth to slow.” – Zheng Liu, Senior Research Advisor, The Federal Reserve Bank of San Francisco

# U.S. Economic Indicators



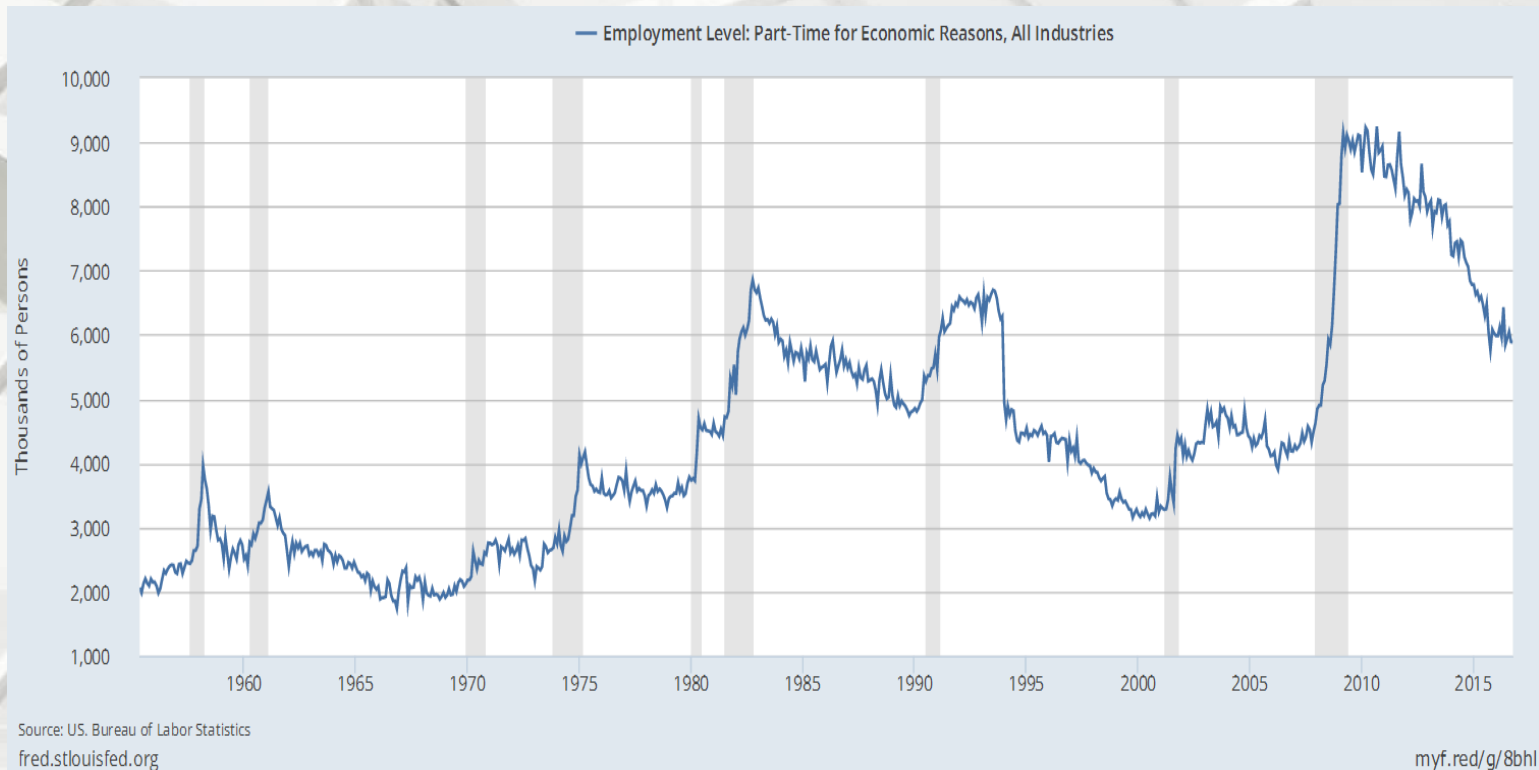
## Federal Reserve Board of Governors: Labor Market Conditions Index

The Labor Market Conditions Index (LMCI) assesses changes in the U.S. labor market. As of October 1, the LMCI change was 0.7, an increase from September 1's -0.1 delta.

“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.”



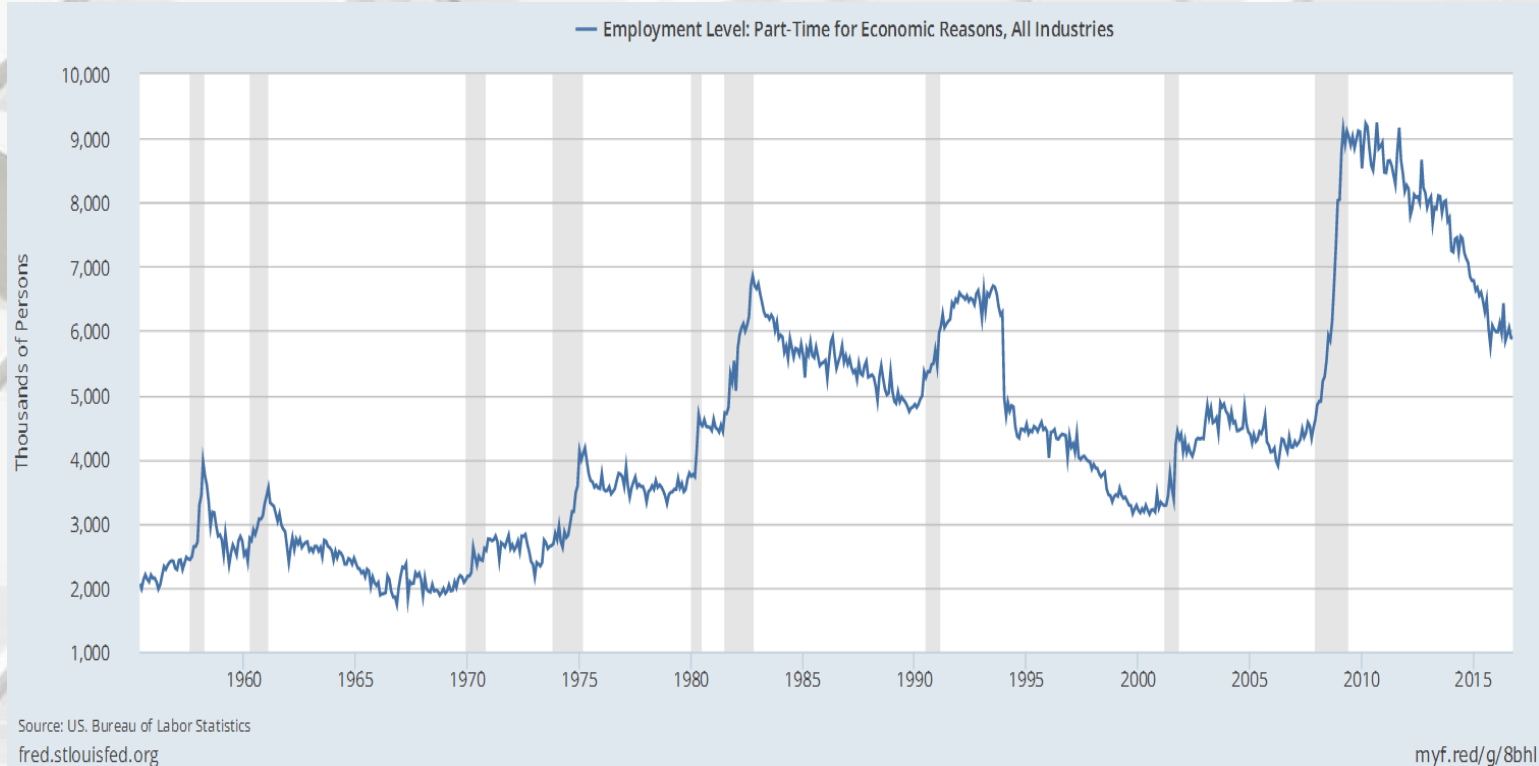
# U.S. Economic Indicators



## **Federal Reserve Board of Governors: Part-Time Employment for Economic Reasons**

The employment level for part-time for economic reasons (LNS12032194) also assesses under-employment in the U.S. labor market. As of October 1, the LNS12032194 level was 5,889 (thousands of persons), a decrease from September's 5,894 reading.

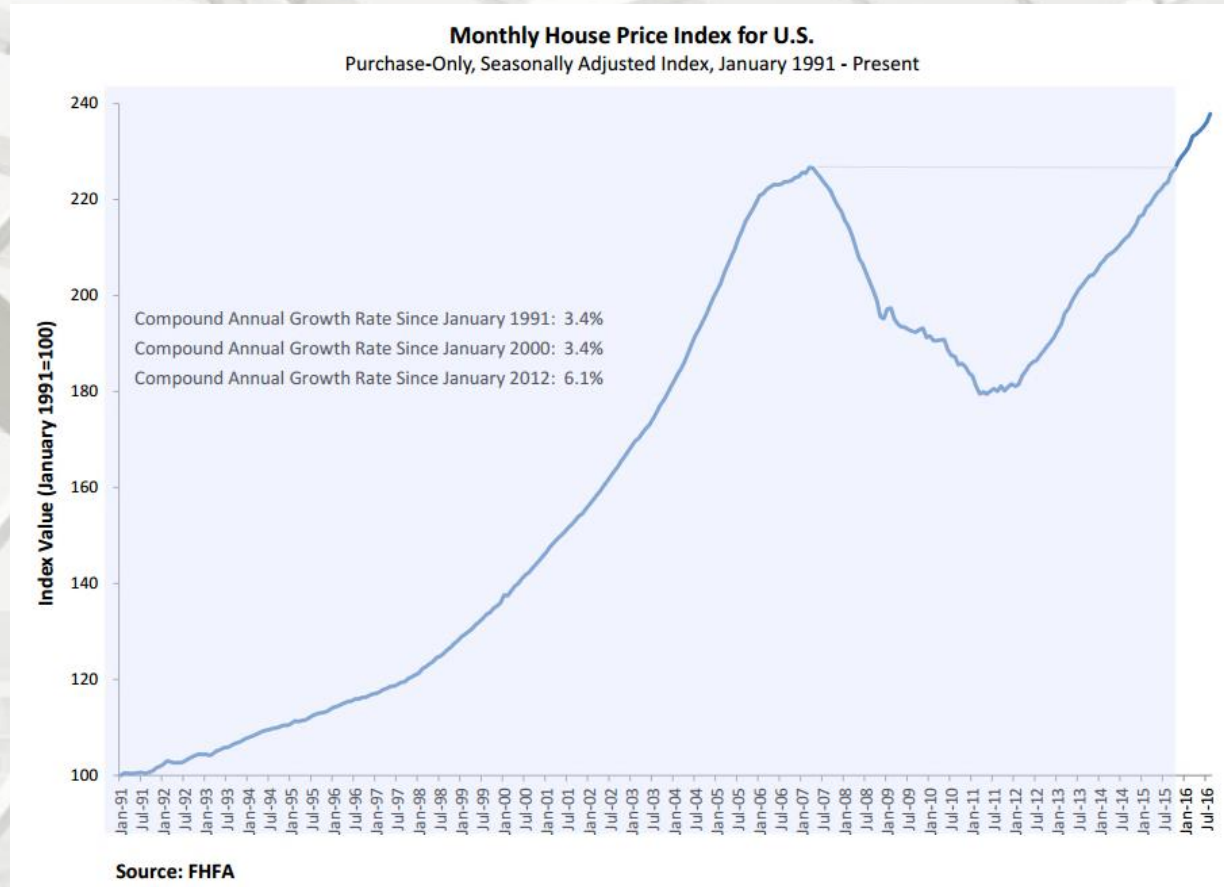
# U.S. Economic Indicators



## Federal Reserve Board of Governors: Average (Mean) Duration of Unemployment

The average (mean) duration of unemployment (UEMPMEAN) assesses unemployment in the U.S. labor market. As of November 1, the UEMPMEAN level was 27.2 (thousands of persons), an decrease from September's 27.5 reading.

# U.S. Economic Indicators



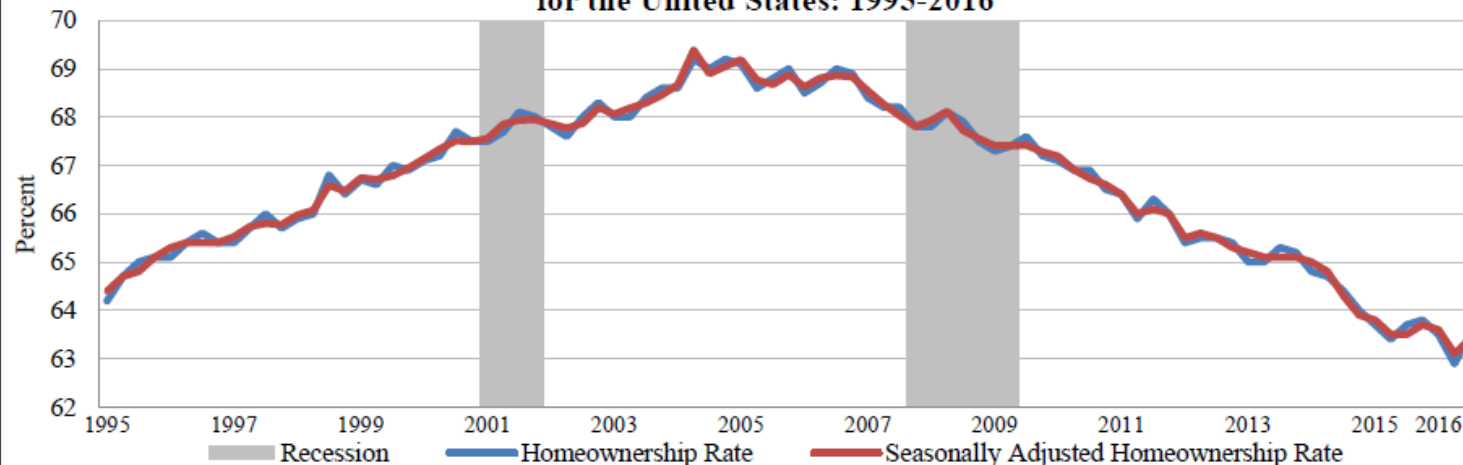
## FHFA House Price Index Up 0.7 Percent in August

U.S. house prices rose in August, up 0.7 percent on a seasonally adjusted basis from the previous month, according to the Federal Housing Finance Agency monthly House Price Index (HPI). The previously reported 0.5 percent increase in July remained unchanged. From August 2015 to August 2016, house prices were up 6.4 percent.” – Stefanie Johnson and Corinne Russell, FHFA

# U.S. Economic Indicators

Figure 4

Quarterly Homeownership Rates and Seasonally Adjusted Homeownership Rates for the United States: 1995-2016



Source: U.S. Census Bureau, Current Population Survey/Housing Vacancy Survey, Recession data: National Bureau of Economic Research, <[www.nber.org](http://www.nber.org)>

## Quarterly Residential Vacancies and Homeownership, 3<sup>rd</sup> Quarter 2016

“The homeownership rate of 63.5 percent was not statistically different from the rate in the third quarter 2015 (63.7 %) and 0.6 percentage points higher than the rate in the second quarter 2016.”<sup>1</sup> – Robert Callis and Melissa Kresin, Social, Economic & Housing Statistics Division, U.S. Census

## Homeownership Rate Claws Back Up, But Wait . . .

“On the optimist’s side, household formation – whether it’s from new renter or new owner households – is good for both the housing market and the general economy, as some renters eventually become owners and new households drive demand for home-related goods and services. On the pessimist’s side, there are headwinds for those that want to own a home but can’t: prices and rents have outpaced incomes, credit standards are higher, and a high share of young households are still living with their parents. On the neutral side, the homeownership rate is not different from last year or last quarter when seasonally adjusted.”<sup>2</sup> – Ralph McLaughlin, Chief Economist, Trulia

Sources: <sup>1</sup><http://www.census.gov/housing/hvs/files/currenthvspress.pdf>; 10/27/16

<sup>2</sup><http://www.themreport.com/daily-dose/10-27-2016/homeownership-rate-claws-back-wait>; 10/27/16

# Private Indicators

## American Institute of Architects (AIA)

### September Architecture Billings Index

#### Firm billings decline but design contracts grow

“Architecture firm billings softened for the second consecutive month in September, with an ABI score of 48.4 (a score above 50 indicates increasing firm billings, while a score below 50 indicates declining billings). This is the first time since 2012 that there have been two consecutive months of declining billings; while it is too early to be indicative of a trend, it is worth monitoring. Firms continue to report client caution around the upcoming presidential election, which may be one element contributing to the decline. However, on a more encouraging note, firms reported that value of new design contracts continued to increase in September. While the pace of growth slowed modestly from August, firms signing contracts for new work indicates future billings down the road.” – Kermit Baker, Hon. AIA, Chief Economist, AIA

### National

#### Architecture firm billings soften in September

Graphs represent data from September 2015–September 2016.



Above 50

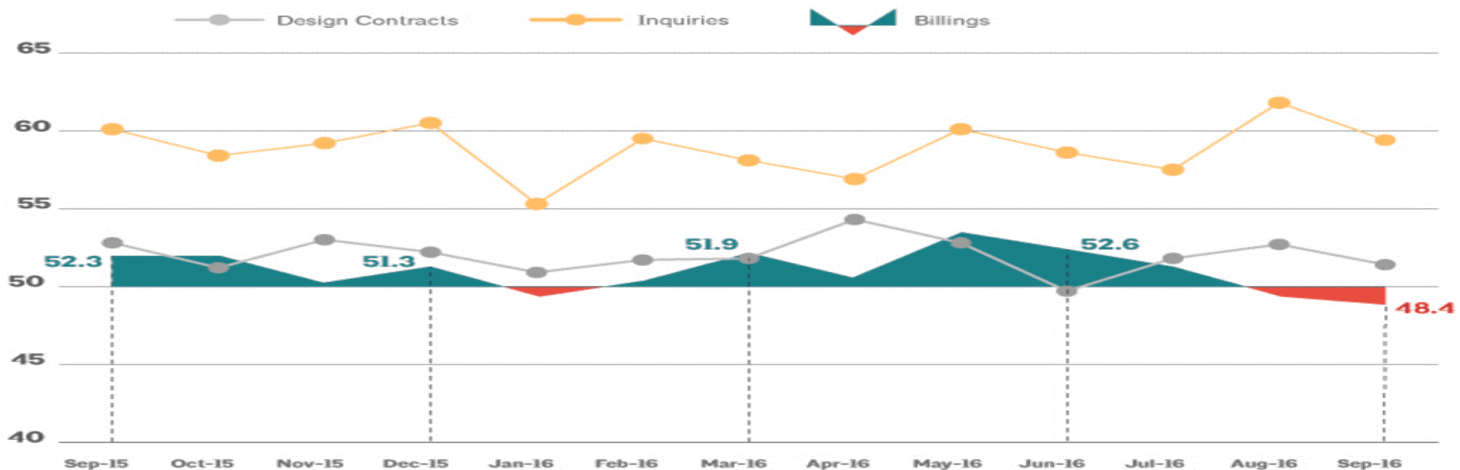


Below 50



No change from previous period

50





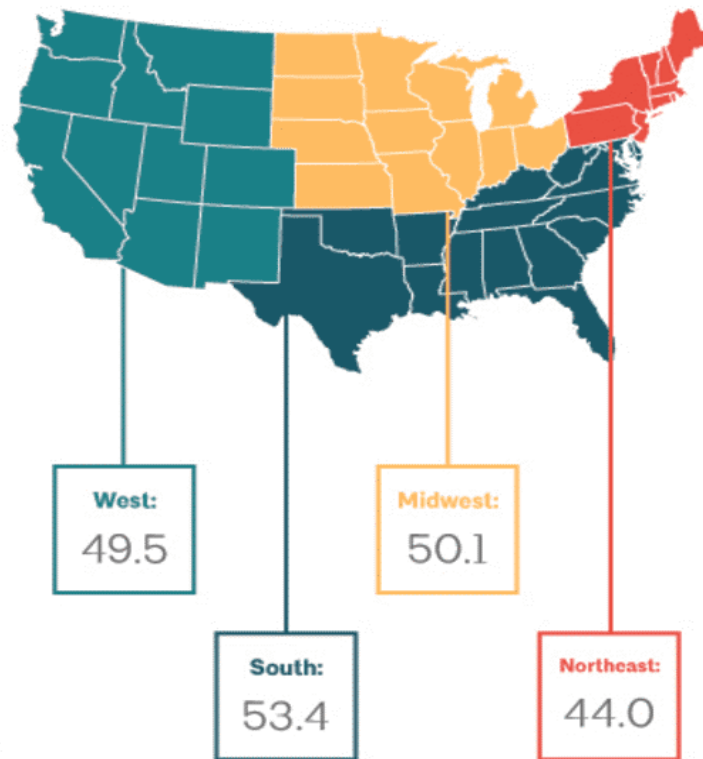
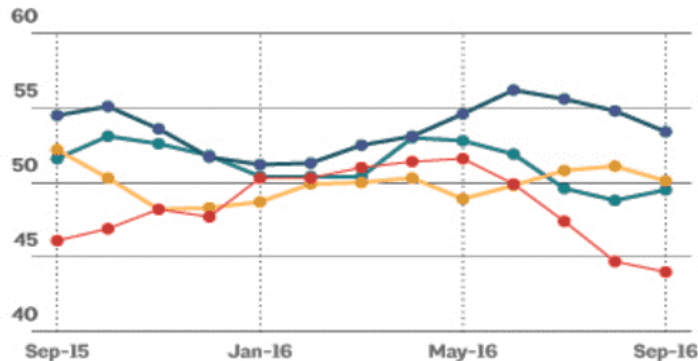
# Private Indicators: AIA

“Business conditions have softened most notably at firms located in the Northeast region of the country in recent months, although firms located in the West have also seen some softness. Firms located in the Northeast saw declining billings in the second half of 2014 and nearly the entirety of 2015, before recovering for the first half of 2016, but they have now declined again for the last four months. Firm billings at firms located in the South, on the other hand, have been relatively strong for the last several years, and continue to see growth.”  
– Kermit Baker, Hon. AIA, Chief Economist, AIA

## Regional

Business conditions stronger at firms in the South, weaker at firms in the Northeast

\*Graphs represent data from September 2015–September 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.



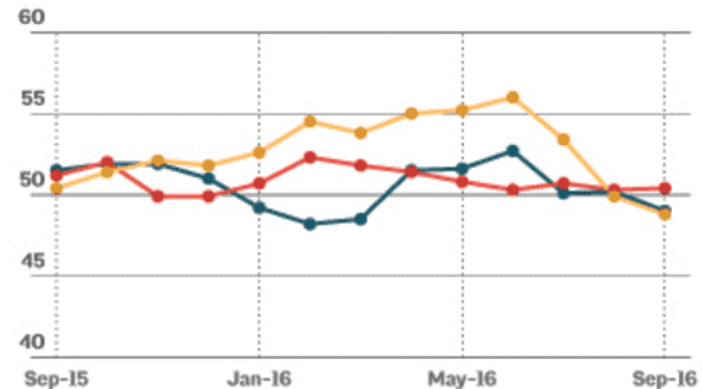
# Private Indicators: AIA

“By firm type, both firms with a residential and institutional specialization saw firm billings decline in September, albeit at a relatively moderate rate, while billings were essentially flat at firms with a commercial/industrial specialization for the fifth consecutive month.” – Kermit Baker, Hon. AIA, Chief Economist, AIA

## Sector

Billings essentially flat at firms of all specializations

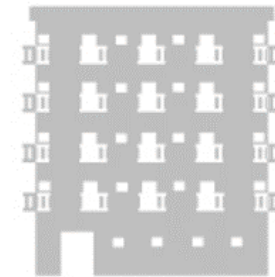
\*Graphs represent data from September 2015–September 2016 across the three sectors. 50 represents the diffusion center. A score of 50 equals no change from the previous month. Above 50 shows increase; Below 50 shows decrease. 3-month moving average.



**Commercial/Industrial: 50.4**

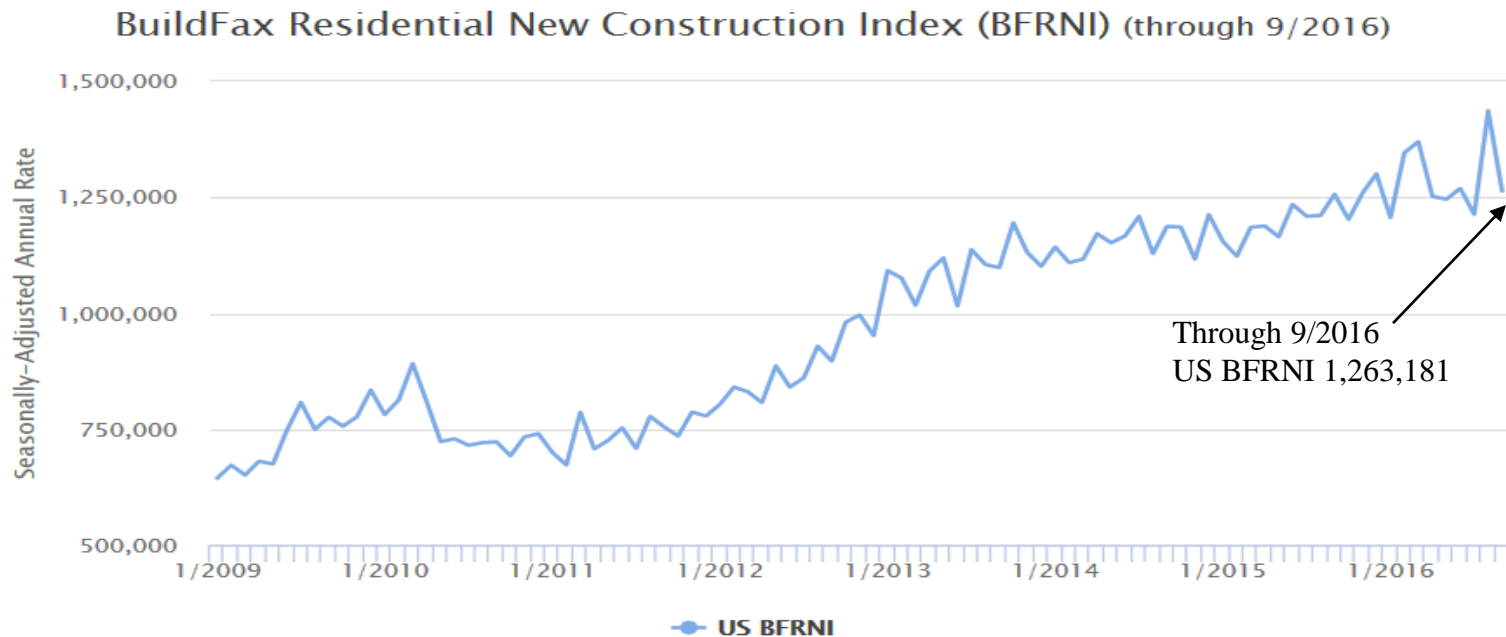


**Institutional: 49.0**



**Residential: 48.8**

# Private Indicators



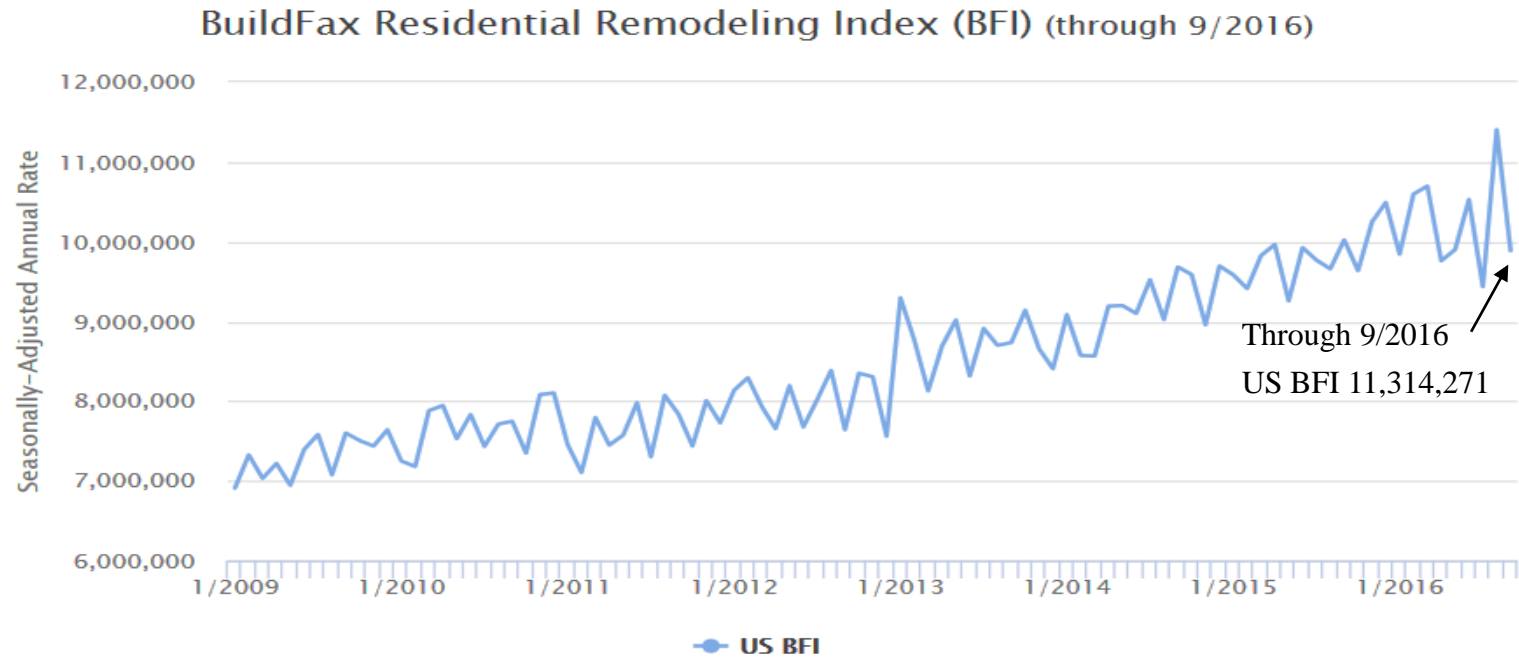
## BuildFax Residential New Construction Index

“Residential new construction authorized by building permits in the United States in September were at a seasonally-adjusted annual rate of 1,263,181. This is 12% below the revised August rate of 1,436,896 and is 1% above the revised September 2015 estimate of 1,256,652. 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 September 2016 are estimated as follows: Northeast, 71,723 (down 1% from August and up 159% from September 2015); South, 749,514 (down 7% from August and up 1% from September 2015); Midwest, 191,881 (down 17% from August and down 15% from September 2015); West, 253,066 (down 16% from August and down 4% from September 2015).”

# Private Indicators



## BuildFax Residential Remodeling Index

“Residential remodels authorized by building permits in the United States in September were at a seasonally-adjusted annual rate of 9,887,488. This is 13% below the revised August rate of 11,404,127 and is 1% below the revised September 2015 estimate of 10,021,951.”

## Regional Residential Remodeling

“Seasonally-adjusted annual rates of residential remodeling across the country in September 2016 are estimated as follows: Northeast, 880,620 (down 6% from August and up 27% from September 2015); South, 4,982,702 (down 7% from August and up 1% from September 2015); Midwest, 1,779,047 (down 19% from August and down 9% from September 2015); West, 2,313,556 (down 15% from August and down 7% from September 2015).”

# Private Indicators

## **Construction Starts Ease Back 2 Percent in September Nonresidential Building Tops Strong August Amount, But Housing and Public Works Retreat**

“The value of new construction starts in September decreased a slight 2% to a seasonally adjusted annual rate of \$703.7 billion, according to Dodge Data & Analytics. This follows the 22% jump for total construction starts in August, which witnessed the highest monthly pace for construction starts so far in 2016. Nonresidential building showed further strength in September, exceeding its elevated August pace. However, the housing sector lost momentum in September, pulling back from August which included groundbreaking for a number of very large multifamily projects. Nonbuilding construction also slipped in September, following its improved August volume that included the start of a \$3.0 billion pipeline upgrade in the southeastern part of the nation. Through the first nine months of 2016, total construction starts on an unadjusted basis were \$506.7 billion, trailing the same period a year ago by 3%. The September data produced a reading of 149 for the Dodge Index (2000=100), down from an upwardly revised 152 for August. September was still fairly high by recent standards, coming in 6% above the average of the previous eight months.”

“Whether looking at construction starts month-to-month or quarter-to-quarter, the past two years have shown considerable volatility, reflecting in part when very large projects were entered as construction starts. ... When combined with the more broad-based strengthening for construction that’s taken place in this year’s August and September, and with the comparison to the subdued activity for the same two months a year ago, the year-to-date shortfall for total construction starts has become considerably smaller than what was reported earlier in the year.” – Robert Murray, Chief Economist, McGraw Hill Construction



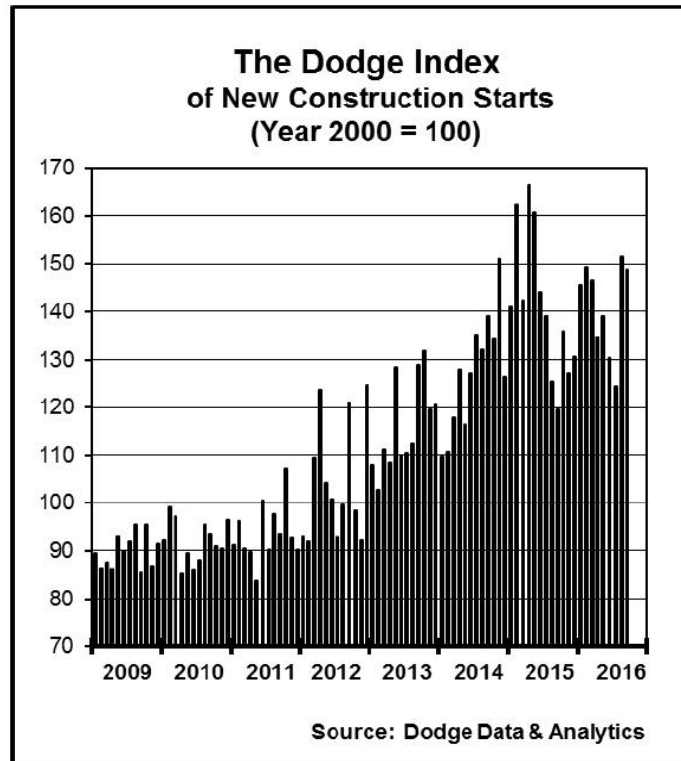
# Private Indicators

“**Residential building**, at \$271.1 billion (annual rate), fell 8% in September. Multifamily housing retreated after a strong performance in August, falling 17%. While August included 13 multifamily projects valued each at \$100 million or more, there were only five such projects that reached groundbreaking in September, . . . . Through the first nine months of 2016, the top five metropolitan areas ranked by the dollar amount of multifamily starts were New York NY, Los Angeles CA, Chicago IL, Miami FL, and Boston MA. Metropolitan areas ranked 6 through 10 were Washington DC, San Francisco CA, Dallas-Ft. Worth TX, Atlanta GA, and Denver CO. While the New York NY metropolitan area continues to be the leading market for multifamily construction by dollar volume, its year-to-date amount for 2016 is down 27%, and its share of the national total has fallen from 26% for all of 2015 to 19% so far in 2016.

**Single family housing** in September dropped 4%, slipping back slightly from the plateau that’s been present for much of 2016. By geography, single family housing in September showed weaker activity in the South Atlantic, down 9%; the South Central and West, each down 2%; the Midwest, down 1%; while the Northeast was unchanged from August.” – Robert Murray, Chief Economist, McGraw Hill Construction

# Private Indicators

## September 2016 Construction Starts



## September 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>September 2016</u>	<u>August 2016</u>	<u>% Change</u>
Nonresidential Building	\$282,270	\$268,470	+5
Residential Building	271,120	295,185	-8
Nonbuilding Construction	<u>150,339</u>	<u>152,668</u>	<u>-2</u>
Total Construction	\$703,729	\$716,323	-2

#### The Dodge Index

Year 2000=100, Seasonally Adjusted

September 2016....149

August 2016.....152

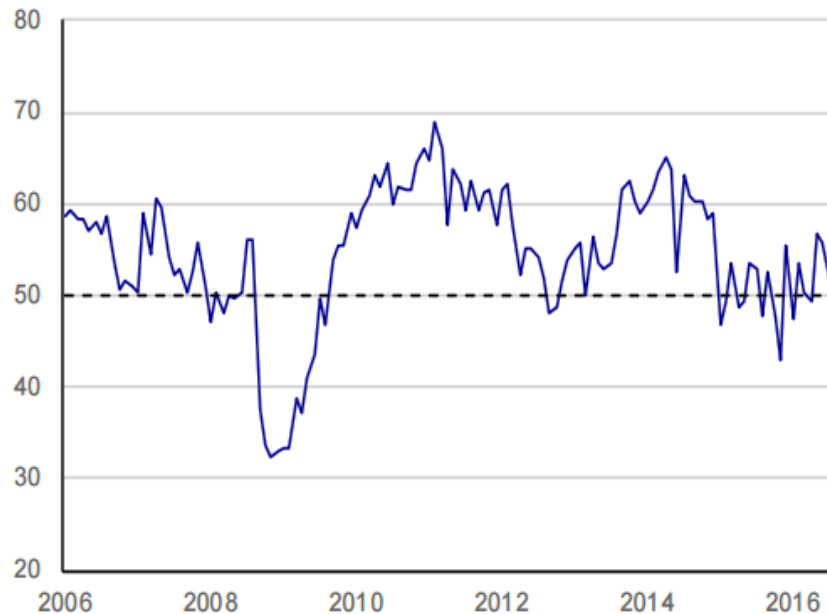
#### Year-to-Date Construction Starts

Unadjusted Totals, in Millions of Dollars

	<u>9 Mos. 2016</u>	<u>9 Mos. 2015</u>	<u>% Change</u>
Nonresidential Building	\$164,530	\$168,068	-2
Residential Building	215,319	205,729	+5
Nonbuilding Construction	<u>126,858</u>	<u>147,088</u>	<u>-14</u>
Total Construction	\$506,707	\$520,885	-3
Total Construction, excluding electric utilities/gas plants	\$470,846	\$470,138	-0-

# Private Indicators

Chicago Business Barometer™



## September 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 September, 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 September.”

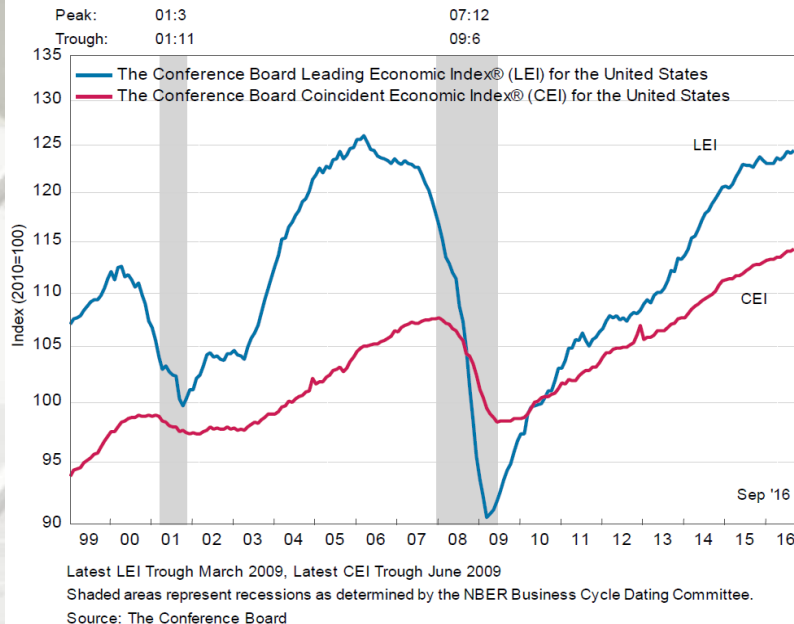
Meanwhile, Supplier Deliveries lengthened to the highest level since May 2016. Some companies reported difficulties in getting MRO supplies, with lead times at the longest since September 2015. An equal number of firms reported increasing inventories as decreasing them, with the Inventories indicator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

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



### **The Index increased 0.2 percent in September to 124.4**

“The U.S. LEI increased in September, reversing its August decline, which together with the pickup in the six-month growth rate suggests that the economy should continue expanding at a moderate pace through early 2017. Housing permits, unemployment insurance claims, and the interest rate spread were the main components lifting the index in September. Overall, the strengths among the leading indicators are outweighing modest weaknesses in stock prices and the average workweek.” – Ataman Ozyildirim, Director of Business Cycles and Growth Research, The Conference Board

### **Economy to Continue Expanding at Moderate Pace through Early 2017**

“The Conference Board Leading Economic Index® (LEI) for the U.S. increased 0.2 percent in September to 124.4 (2010 = 100), following a 0.2 percent decline in August, and a 0.5 percent increase in July.

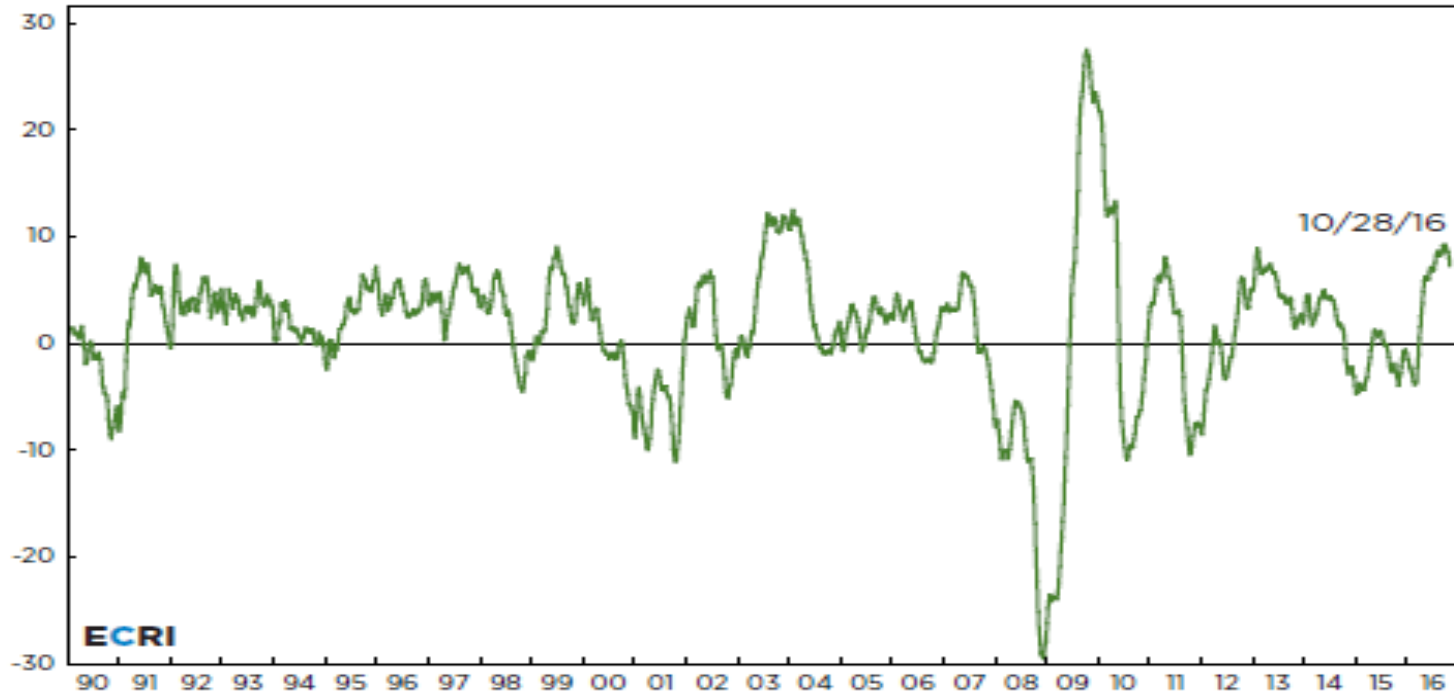
The Conference Board Coincident Economic Index® (CEI) for the U.S. increased 0.2 percent in September to 114.2 (2010 = 100), following no change in August, and a 0.3 percent increase in July.

The Conference Board Lagging Economic Index® (LAG) for the U.S. increased 0.2% in September to 122.3 (2010 = 100), following a 0.2% percent increase in August, and no change in July.



# Private Indicators

## Weekly Leading Index, Growth Rate (%)



## U.S. Weekly Leading Index Ticked Down

“The U.S. Weekly Leading Index (WLI) ticked down to 138.4 from 138.6. The growth rate decreased to 7.3% from 8.0%” – Lakshamm Achuthan, Chief Operations Officer, ECRI



# Private Indicators

## U.S. Gallup Good Jobs Employment Rate, Monthly Trend

January 2010–October 2016

■ % of population employed full time for an employer



Rates shown are for October of each year

GALLUP DAILY TRACKING

### GALLUP DAILY

REAL UNEMPLOYMENT  
Department of Labor (U-6)

9.7% -

GALLUP GOOD JOBS  
Percent of Adult Population

46.4% -

ENGAGED AT WORK

35.9% +0.5

ECONOMIC CONFIDENCE

-9 +2

CONSUMER SPENDING

\$102 +17

## U.S. Gallup Good Jobs Rate Edges Up to 46.4% in October

- “GGJ rate highest recorded for any October
- Unemployment tied for lowest in Gallup's trend, at 5.1%
- Workforce participation rose to 68.4%’

“The Gallup Good Jobs (GGJ) rate in the U.S. was 46.4% in October. This is up from 45.6% in September and higher than any GGJ rate recorded for the month of October since Gallup began tracking this measure in 2010.” – Ben Ryan, Consultant Specialist, Gallup

# Private Indicators

## October 2016 Manufacturing ISM® Report On Business®

October PMI® at 51.9%

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

“Economic activity in the **manufacturing sector** expanded in October, and the **overall economy** grew for the 89th consecutive month, say the nation’s supply executives in the latest **Manufacturing ISM® Report On Business®**.”

October PMI® = registered 51.9 percent, an increase of 0.4 percentage point from the September reading of 51.5 percent.

New Orders Index = 52.1 percent, a decrease of 3 percentage points from the September reading of 55.1 percent.

Production Index = 54.6 percent, 1.8 percentage points higher than the September reading of 52.8 percent.

Employment Index = 52.9 percent, an increase of 3.2 percentage points from the September reading of 49.7 percent.

Inventories of raw materials = 47.5 percent, a decrease of 2 percentage points from the September reading of 49.5 percent.

Prices Index = 54.5 percent in October, an increase of 1.5 percentage points from the September reading of 53 percent, indicating higher raw materials prices for the eighth consecutive month.

Comments from the panel are largely positive citing a favorable economy and steady sales, with some exceptions. Of the 18 manufacturing industries, 10 are reporting growth in October. ...” – Bradley Holcomb, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee

# Private Indicators

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

**October NMI® at 54.8%**

**Business Activity Index at 57.7%, New Orders Index at 57.7%,  
Employment Index at 53.1%**

“Economic activity in the **non-manufacturing sector** grew in October for the 81st consecutive month, say the nation's purchasing and supply executives in the latest **Non-Manufacturing ISM® Report On Business®**.

The NMI® registered 54.8 percent in October, 2.3 percentage points lower than the September reading of 57.1 percent. This represents continued growth in the non-manufacturing sector at a slower rate.

The Non-Manufacturing Business Activity Index decreased to 57.7 percent, 2.6 percentage points lower than the September reading of 60.3 percent, reflecting growth for the 87th consecutive month, at a slower rate in October.

The New Orders Index registered 57.7 percent, 2.3 percentage points lower than the reading of 60 percent in September.

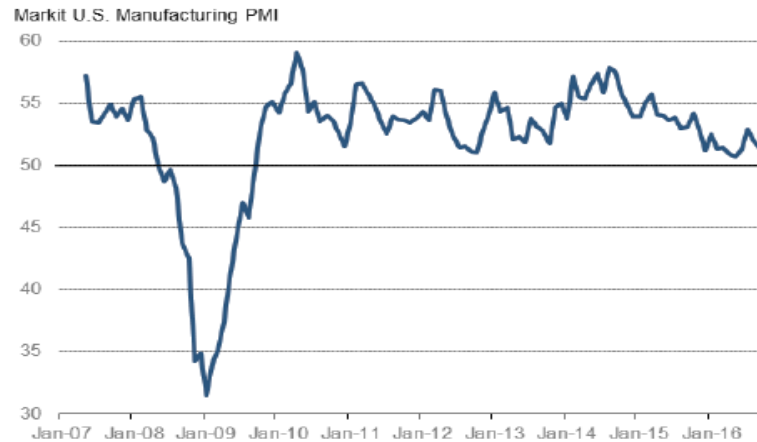
The Employment Index decreased 4.1 percentage points in October to 53.1 percent from the September reading of 57.2 percent.

The Prices Index increased 2.6 percentage points from the September reading of 54 percent to 56.6 percent, indicating prices increased in October for the seventh consecutive month.

According to the NMI®, 13 non-manufacturing industries reported growth in October. There has been a slight cooling-off in the non-manufacturing sector month-over-month, indicating that last month's increases weren't sustainable. Respondent's comments remain mostly positive about business conditions and the overall economy. Several comments were made about the uncertainty on the impact of 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™ PMI reaches highest level for a year in October

“October’s headline Markit Final U.S. Manufacturing Purchasing Managers’ Index™ (PMI™) was slightly better than the earlier flash reading of 53.2, coming in at 53.4.

Operating conditions in the U.S. manufacturing sector strengthened to the greatest degree for a year during October, underpinned by faster expansions in both production and new orders. With pressure on capacity, as highlighted by a sharper increase in backlogs of work, further jobs were created.”

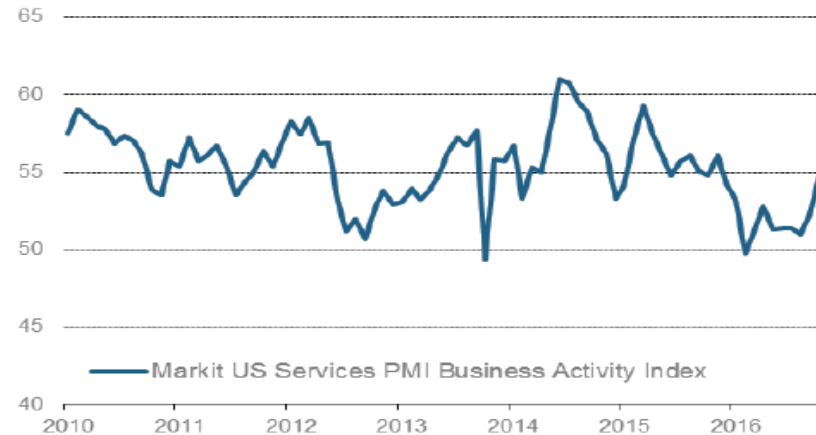
“October’s headline Markit Final **U.S. Manufacturing Purchasing Managers’ Index™ (PMI™)** was slightly better than the earlier flash reading of 53.2, coming in at 53.4. That was a marked improvement on September’s 51.5 and the best reading recorded for a year. Operating conditions have continuously improved throughout the past seven years, with October’s PMI reading notable for being the highest recorded by the survey for 12 months.

“October saw manufacturing enjoy its best performance for a year. Factories benefitted from rising domestic and export sales, driving output higher to mark an encouragingly strong start to the fourth quarter. However, a widespread reticence to take on extra staff highlights lingering caution with respect to investing in capacity, at least until after the presidential election.” – 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™ Sharp improvement in service sector growth during October

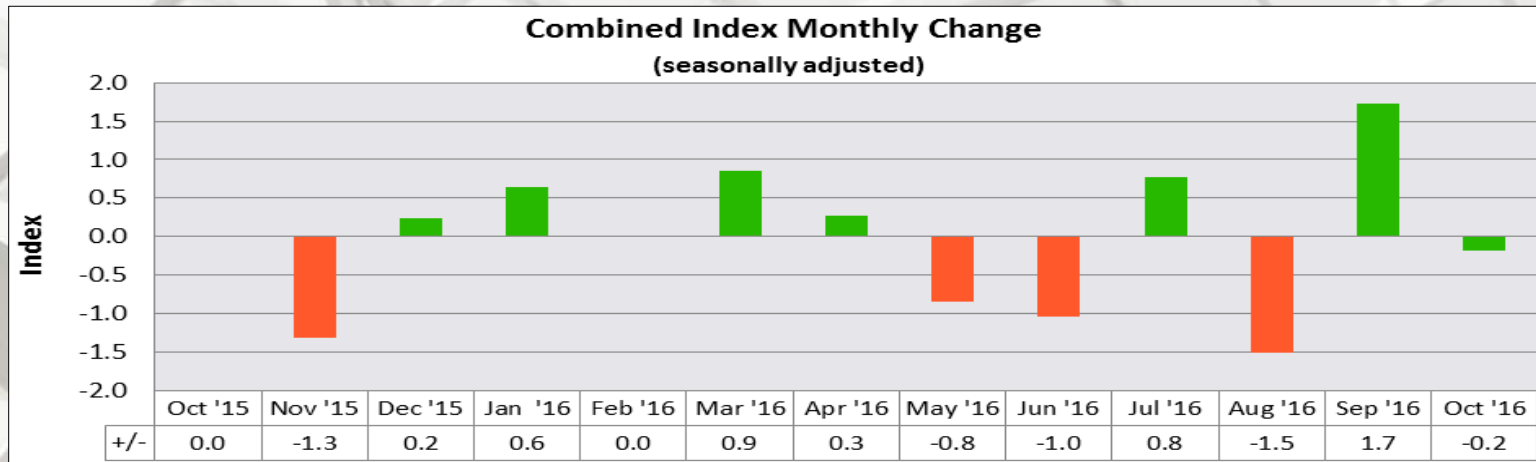
- “Services business activity expands at fastest pace since November 2015
- Robust increase in new work, but job creation remains subdued
- Input price inflation accelerates to 15-month high” – Markit®

“October data pointed to a relatively strong month for the US service sector, with business activity and incoming new work rising at the fastest rates since November 2015. Adjusted for seasonal influences, the final Markit U.S. Services Business Activity Index registered 54.8 in October, up markedly from 52.3 in September and above the crucial 50.0 no-change value for the eighth consecutive month. The latest reading signalled a robust upturn in service sector output, with the rate of expansion the steepest for almost one year.

“Indications of stronger economic growth, solid job creation, rising prices and improved business confidence all pave the way for the Fed to hike interest rates again by the end of the year. The upturn in new work helped drive renewed optimism about prospects for the year ahead. However, it’s evident that many businesses remain cautious as the presidential election nears. As a result, employment growth across the services and manufacturing sectors remained one of the weakest seen for over three years, though still signals a respectable 130,000 rise in non-farm payrolls in October.” – Chris Williamson, Chief Economist, Markit®



# Private Indicators



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

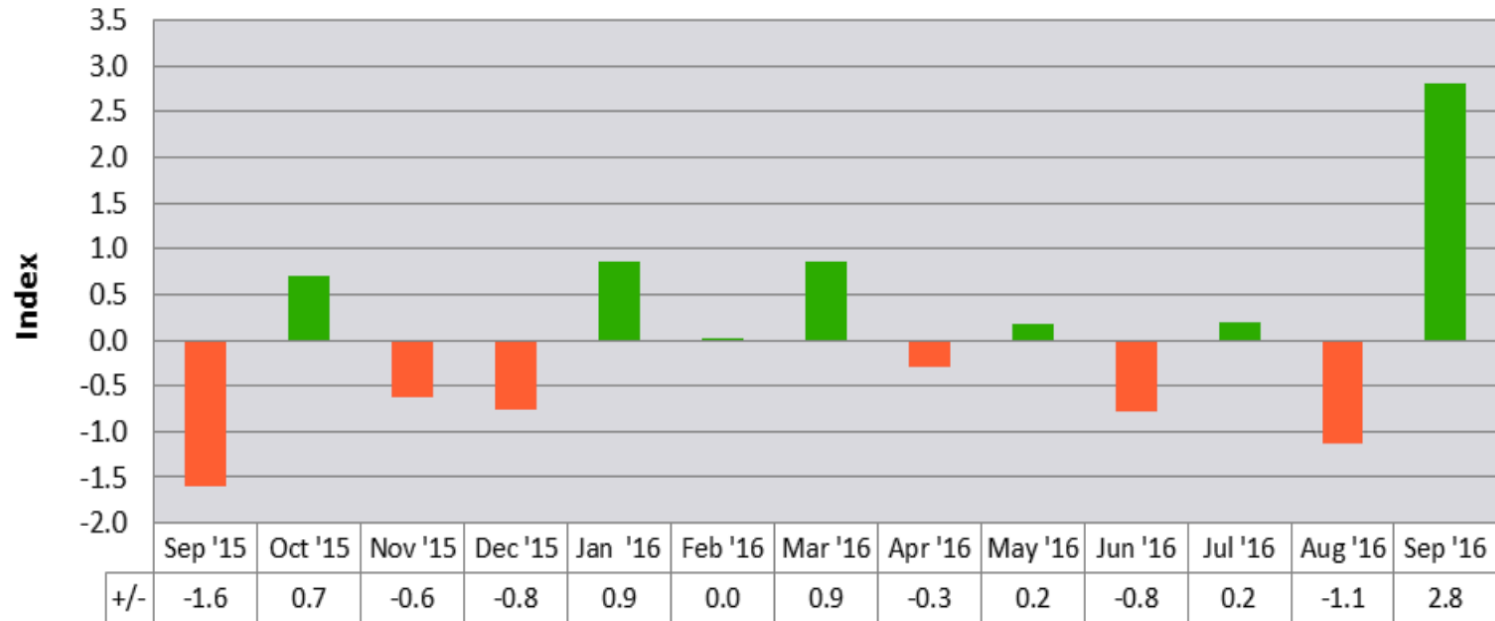
“The news this month is not quite as uplifting as it was last month, but the numbers are still an improvement over what they had been for the last several months. The overall sense of the economy right now is mixed. Most of the indicators are telling the same jumbled story. We see improvements in parts of the Purchasing Managers’ Index and declines in other parts.

Readings for the combined index were impressive last month, and there has been a bit of return to less exalted readings this month. The combined CMI was at 53.7 in September and is now at 53.5 – close to what it has been for the year with the high point coming in April when the reading hit 54.6. The index of favorable factors was at yearlong highs in September and has fallen back a little. It was 59.5 and is now 58.4. That is about where the numbers have been all year with two months (March and July) hitting 60.0. The index of unfavorable factors actually improved a little from what it was in September as it went from 49.9 to 50.3. This is certainly not a big change, but it is always significant to move out of the contraction.”

“Retailers seem to be gearing up for a better season – at least they have been more aggressive as far as hiring. At the same time, consumers have continued to be somewhat reticent. It is a waiting game for many – a desire to see what happens once the dust settles from the election.” – Chris Kuehl, Ph.D., Economist, NACM

# Private Indicators

Manufacturing Index Monthly Change  
(seasonally adjusted)

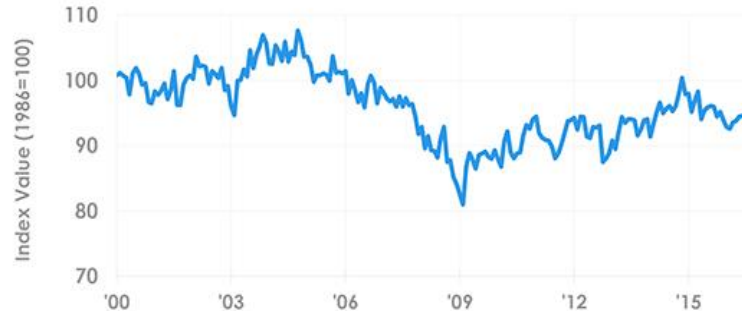


Combined Manufacturing and Service Sectors (seasonally adjusted)	Sep '15	Oct '15	Nov '15	Dec '15	Jan '16	Feb '16	Mar '16	Apr '16	May '16	Jun '16	Jul '16	Aug '16	Sep '16
NACM Combined CMI	52.9	53.9	52.6	52.8	53.5	53.5	54.3	54.6	53.8	52.7	53.5	52.0	53.7

# Private Indicators

## Small Business Optimism Index Increases 0.8 to 94.9

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



**NFIB**.COM/sbet

## October 2016 Report: Small Business Economic Trends

“Small business owners are rattled by uncertainty and unable to decide whether to expand, whether to hire, or whether to make other important decisions that might boost the economy, according to the **National Federation of Independent Business** (NFIB), but that gain was erased by significantly weaker inventories and hard-to-fill job openings.”

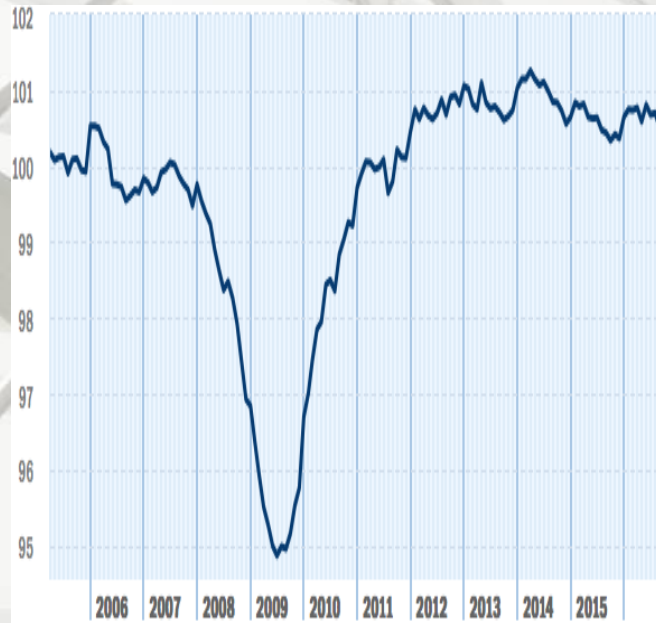
## Small Business Optimism Index Remains Low as Americans go to the Polls

“The NFIB Small Business Optimism Index ticked up a meager 0.8 points to 94.9. Five of the 10 components posted a gain, three declined, and two remained unchanged in October. Nearly half of the respondents cited taxes or regulations and red tape as their “Single Most Important Business Problem.”

“Small business owners need predictability. What we’re seeing in our data is that the political climate creates the opposite. Government actions affect basic business decisions, and owners are unwilling to take risks, make investments, or hire new employees as long as politicians and regulators keep them guessing about the future.” – William Dunkelberg, Chief Economist, National Federation of Independent Business

“The data contained in this report shows record levels of uncertainty among small business owners, and it is tied directly to the election. The result is economic inertia, with business owners unwilling to make the business decisions that would jumpstart the economy.” – Juanita Duggan, President and CEO, National Federation of Independent Business

# Private Indicators



## The Paychex | IHS Small Business Jobs Index

- “At 100.41, the national index is up 0.06 percent from last year, well above the baseline of 100 and representing continued small business employment growth
- The Southeast leads regional growth
- Washington remains top state by a wide margin; Texas down significantly
- Seattle continues to lead metros, followed by Atlanta
- Small business employment growth in Construction declines for fourth consecutive month”

## Moderates for Second Month in a Row; Remains 0.06 Percent Above a Year Ago

“The Paychex | IHS Small Business Jobs Index declined in October, down 0.11 percent from the previous month to 100.41. September and October marked the first consecutive declines in 2016, as the national index is down 0.27 percent for the quarter.”

“The Paychex | IHS Small Business Jobs Index remains 0.06 percent above the level of growth from a year ago, though the national index has declined to its lowest point of 2016.” – James Diffley, Chief Regional Economist, IHS Markit.

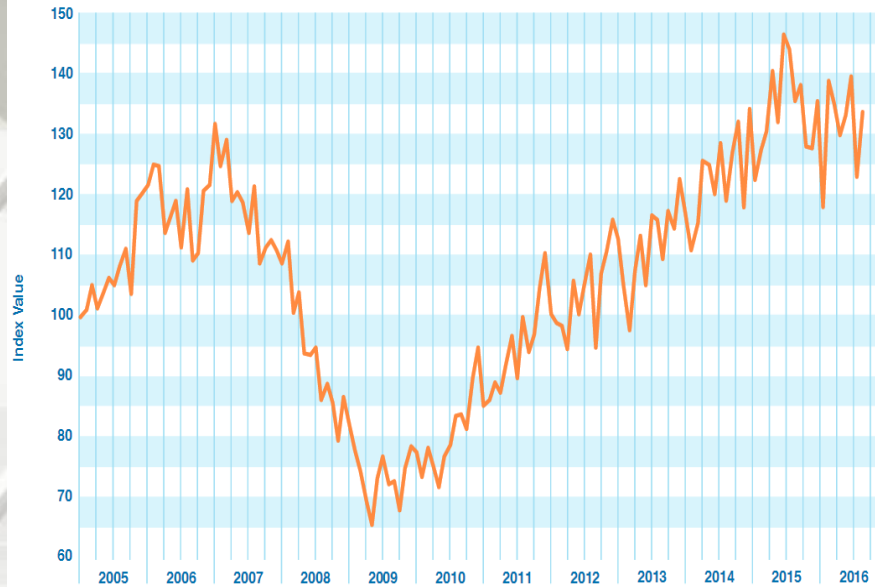
“Uncertainty about what the future may bring is always a factor during a presidential election, and the most recent two months indicate that the election is likely one factor contributing to a slowing of small business employment growth.” – Martin Mucci, President and CEO, Paychex

# Private Indicators

## Thomson Reuters/PayNet Small Business Lending Index

U.S. small businesses borrowing up, as are delinquencies: PayNet

Thomson Reuters/PayNet Small Business Lending Index (SBLI)  
(January 2005 - August 2016)



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

“The Thomson Reuters/PayNet Small Business Lending Index rose to 133.7 in September 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 September, 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.

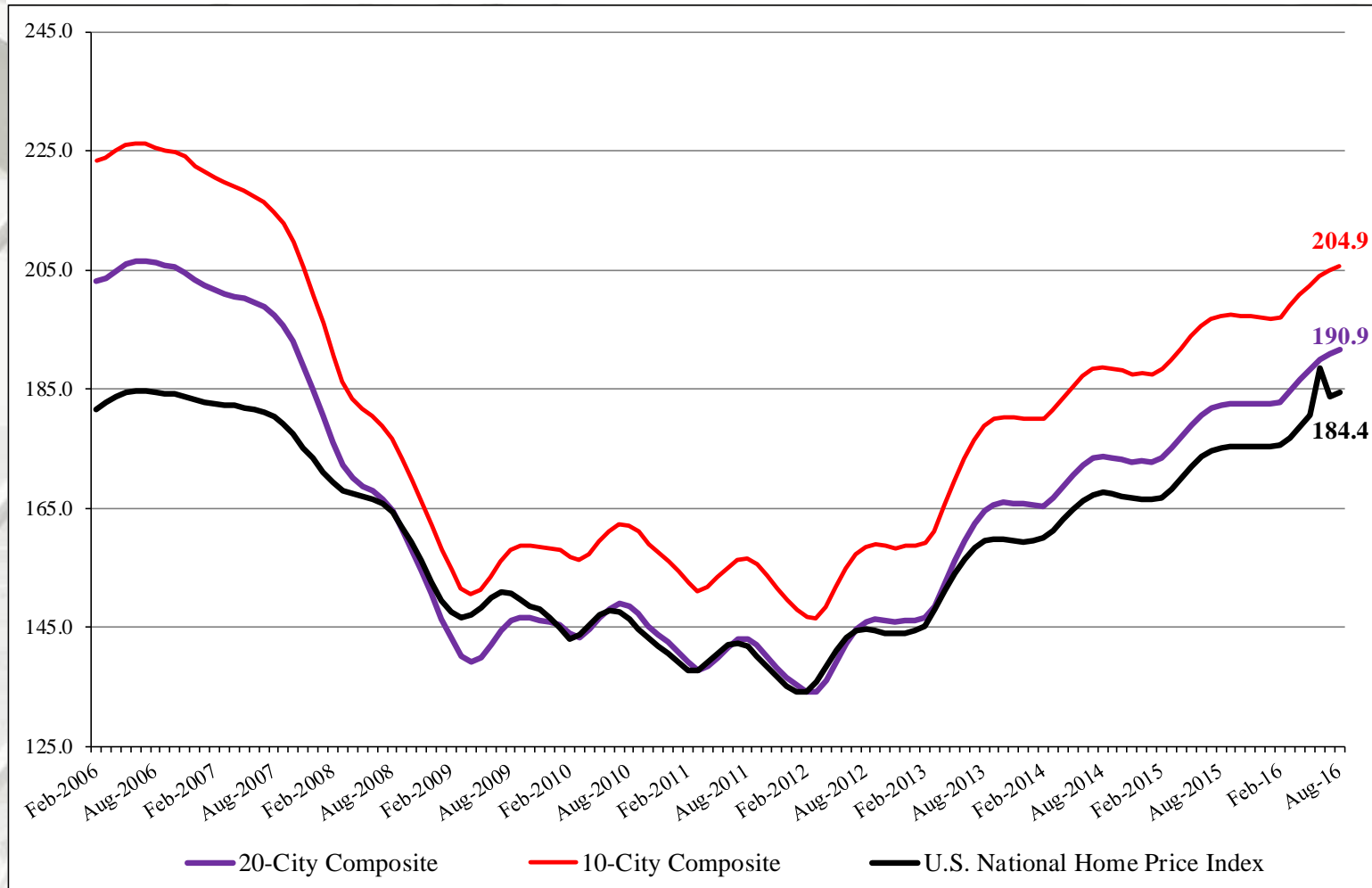
Companies also struggled to pay back existing debts, PayNet data showed. Loans more than 30 days past due rose in September to 1.63 percent, the fifth straight monthly increase and the highest delinquency rate since December 2012.

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 Continues In August

“Supported by continued moderate economic growth, home prices extended recent gains. All 20 cities saw prices higher than a year earlier with 10 enjoying larger annual gains than last month. The seasonally adjusted month-over-month data showed that home prices in 14 cities were higher in August than in July. Other housing data including sales of existing single family homes, measures of housing affordability, and permits for new construction also point to a reasonably healthy housing market.

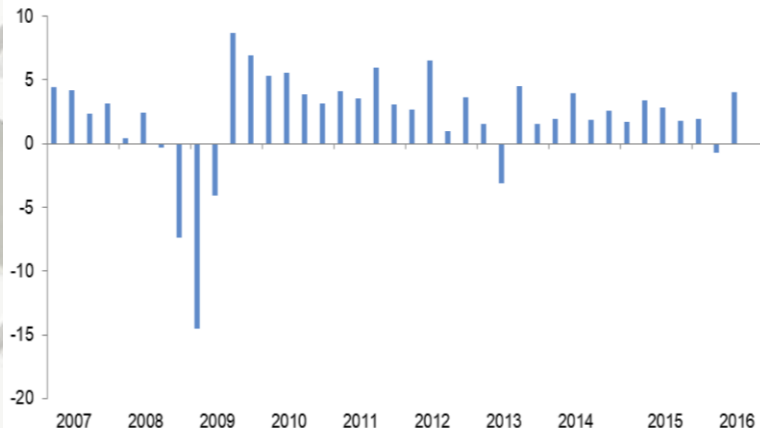
With the national home price index almost surpassing the peak set 10 years ago, one question is how the housing recovery compares with the stock market recovery. Since the last recession ended in June 2009, the stock market as measured by the S&P 500 rose 136% to the end of August while home prices are up 23%. However, home prices did not reach bottom until February 2012, almost three years later. Using the 2012 date as the starting point, home prices are up 38% compared to 59% for stocks. While the stock market recovery has been greater than the rebound in home prices, the value of Americans’ homes at about \$22.3 trillion is slightly larger than the value of stocks and mutual funds at \$21.2 trillion.” – David Blitzer, Managing Director and Chairman of the Index Committee, S&P Dow Jones

# Federal Reserve Indicators: Global

Chart 1

## Mexico Economic Growth Turns Up in Third Quarter

Quarterly percent change, annualized



NOTE: Gross domestic product (GDP) for third quarter 2016 is an advance estimate and is subject to revision. Final GDP figures for the third quarter will be available Nov. 23.

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

## Federal Reserve Bank of Dallas

### Mexico Economy Rebounds in Third Quarter

“Mexico’s gross domestic product (GDP) grew an annualized 4.0 percent in the third quarter after contracting 0.7 percent in the second quarter, according to the government’s advance estimate. More recent data on employment, retail sales and exports also improved, but industrial production fell. Inflation ticked up in September, and the peso held steady in October. The consensus 2016 GDP growth forecast was unchanged in October at 2.1 percent.” – Jesus Cañas, Business Economist, The Federal Reserve Bank of Dallas

## The Federal Reserve Bank of Dallas

### Output Picks Up – Exports Increase in September

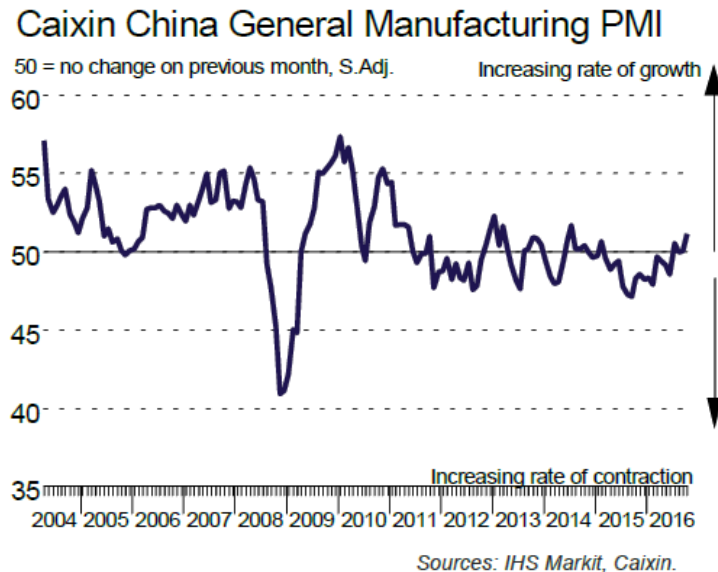
“Mexico economic growth was back in positive territory in the third quarter. Service-related activities (including trade, transportation and business services) rose 6 percent, while goods-producing industries (including manufacturing, construction, utilities and mining) fell 0.4 percent. Agricultural output expanded 4.8 percent in the quarter.

Exports rose 7 percent in September after falling 2.8 percent in August. The three-month moving averages of total exports and manufacturing exports finally turned up after declining throughout 2015 and into the first quarter of 2016. Oil exports turned around earlier this year after a long decline, but the reversal was driven by rising oil prices, not higher volume. Oil exports were down 30 percent in the first nine months of 2016 compared with the same period a year ago, and they remain at low levels. Manufacturing exports have fallen 3.8 percent this year through September relative to the same period in 2015.” – Jesus Cañas, Business Economist, The Federal Reserve Bank of Dallas

# Private Indicators: Global

## Caixin China General Manufacturing PMI™

### Output rises at fastest pace since March 2011



“Chinese manufacturers signalled an improvement in growth at the start of the fourth quarter, with output expanding at the quickest rate in over five-and-a-half years amid a rebound in new order growth. Stronger demand appeared to be led by improved domestic orders, however, as the level of new export sales fell slightly over the month. Meanwhile, companies cut their staff numbers at the slowest pace in 17 months, while backlogs of work continued to accumulate. Inflationary pressures picked up sharply in October, with input cost inflation accelerating to its fastest since September 2011 and output charges rising to the greatest extent since February 2011.”

- Production expands at quicker pace as total new order growth accelerates
- Staff numbers declined at slowest rate since May 2015
- Firms see inflationary pressures pick up sharply

“The Caixin China General Manufacturing PMI for October climbed to 51.2, up 1.1 compared to the previous month, marking the fastest growth seen in the sector in two years amid apparent signs of an improvement. The index readings for new orders and output for October were both much higher than in September, and those for input and output prices rose even more, indicating a return of inflationary pressure. The economy seems to be stabilizing for the moment, owing primarily to policies implemented to sustain growth. Supportive policies must be continued, or industrial output may be dragged down by a slowdown in investment.” – Dr. Zhengsheng Zhong, Director of Macroeconomic Analysis , CEBM Group

# Private Indicators: Global

## Markit Eurozone Composite PMI



## Markit Eurozone Composite PMI® – final data

### Eurozone economic growth accelerates on back of faster German expansion

- Final Eurozone Composite Output Index: 53.3 (Flash: 53.7, September Final: 52.6)
- Final Eurozone Services Business Activity Index: 52.8 (Flash: 53.5, September Final: 52.2)

“The final **Markit Eurozone PMI® Composite Output Index** rose to 53.3 in October, up from 52.6 in September, but below the earlier flash estimate of 53.7. Faster output growth was seen in both the manufacturing and service sectors, reaching a 30-month high in the former.

The weaker than previously indicated expansion in October raises doubts about whether the Eurozone is breaking out of the sluggish growth phase seen throughout much of this year. The October PMI signals a mere 0.3% GDP growth rate, suggesting the fourth quarter could see growth unchanged on that seen in the second and third quarters despite the ECB’s further efforts to stimulate the economy.

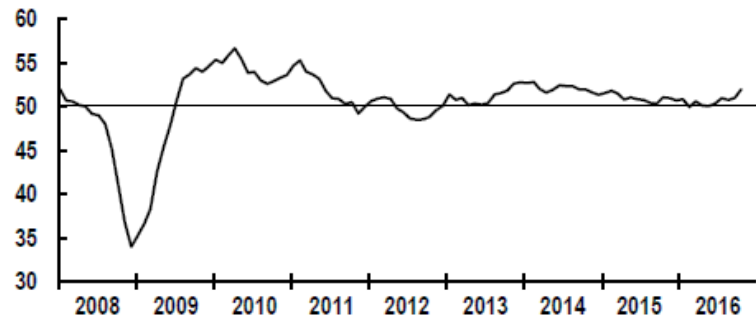
However, with backlogs of work rising at the fastest rate for over five years, hiring showing tentative signs of accelerating and business confidence improving, there’s a strong suggestion that growth will pick up as we move closer towards the end of the year.” – Chris Williamson, Chief Economist, Markit®



# Private Indicators: Global

JPMorgan Global Manufacturing PMI

DI, sa



## JP Morgan Global Manufacturing PMI™

### Global manufacturing growth at two-year high in October

“The start of the final quarter saw improved growth of the global manufacturing sector. This was highlighted by the J.P. Morgan Global Manufacturing PMI™ – a composite index<sup>1</sup> produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – rising to 52.0 in October, its highest level since October 2014.”

“Underpinning the rise in the headline PMI were solid accelerations in the rates of expansion of output and new orders. Production rose at the quickest pace since July 2014, while growth of new business hit a 25-month peak. Rates of output expansion accelerated across the consumer, intermediate and investment goods sectors.

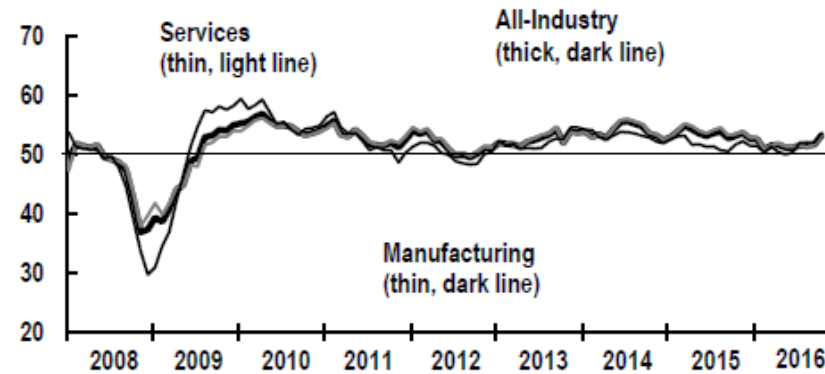
National PMI readings signalled a broad-based expansion, with 22 out of the 31 nations for which October data were available registering improved operating conditions.

Growth accelerated to a one-year high in the US and a 33-month record in the eurozone. China, Japan and India saw rates of expansion accelerate, to 27-, nine- and 22-month highs respectively. Improved growth was also registered in Russia, Taiwan and Canada. The UK PMI remained at a solid, albeit lower, level.” – Rob Dobson, Director & Senior Economist, IHS Markit

# Private Indicators: Global

JPMorgan global PMI output

DI, sa



## JP Morgan Global PMI™

### Global economic growth moves up a gear in October

“The start of the fourth quarter saw a solid improvement in the rate of global economic expansion. Output rose at the quickest pace in almost a year, driven by the sharpest growth in new orders over the same period.

The J.P. Morgan Global All-Industry Output Index – produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – rose to an 11-month high of 53.3 in October, from 51.7 in September. The 1.6 point increase in the index was also the best recorded for almost three years.”

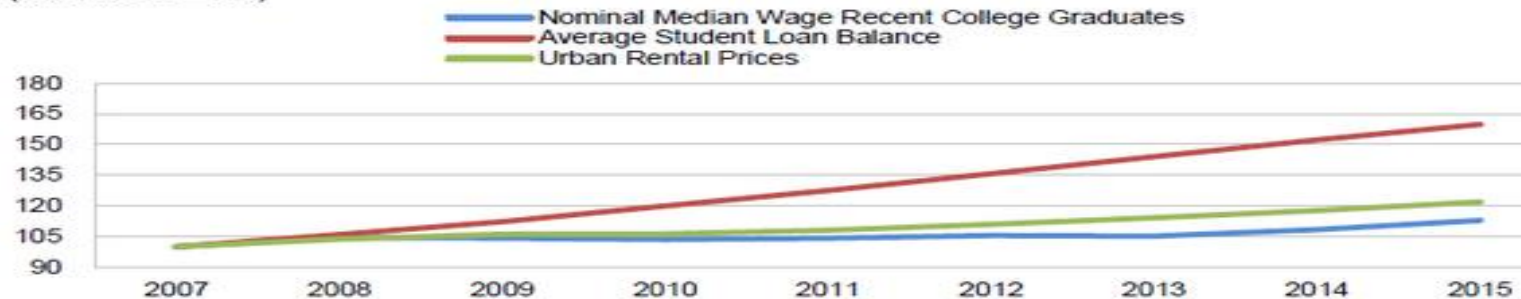
“October saw manufacturing production and service sector business activity expand at the quickest rates since July 2014 and November 2015 respectively. Manufacturers reported the faster pace of growth.

National all-industry output PMI data were also broadly positive in October. Growth accelerated to an 11-month high in the US, a nine-month peak in the euro area and fastest since March 2013 in China. The UK, India and Russia also saw quicker expansions, while Japan returned to growth territory following back-to-back contractions in August and September.” – Rob Dobson, Director & Senior Economist, IHS Markit

# Demographics

## Fitch: Student Loans, Stagnant Wages Push Millennials off Housing's Wealth Ladder

**Millennials Facing Wage Stagnation and Rising Costs**  
(Index 2007=100)



Notes: Recent college graduates include those aged 25-34; Urban rental prices are of primary residence only.  
Sources: U.S. Department of Education, U.S. Census Bureau, U.S. Bureau of Labor Statistics retrieved from FRED, Federal Reserve Bank of St. Louis.

“Rising student loan balances, stagnant real wages, appreciation in home prices and more conservative underwriting standards are combining to keep millennials from participating fully in housing-driven wealth creation. Most older Americans have relied heavily on home equity growth as an important source of wealth creation throughout their lives. Millennials are facing some bigger obstacles, such as higher student loan debt and slowly-rising incomes, making it harder to jump on to the housing wealth ladder.

Fitch's comparison of cash flows for two hypothetical recent college graduates shows that a monthly student loan payment of \$203/month, the 2016 median according to the Federal Reserve Bank of Cleveland, would result in \$45,000 less in mortgage loan capacity. Over 40 million people now hold student loans.

Longer-term, delays in purchases or decreasing homeownership rates raise a number of questions about the economic consequences of generational spending shifts, including consumers' spending mix, savings rates, and related demographic variables like marriage and birth rates.” – Bill Warlick, Senior Analyst, Macro Credit Research, Fitch Ratings

# Demographics

## Is My Uber Driver Holding Back the Housing Market?

“Why are so many young adults today willing to make perhaps the biggest commitment of all — having a child together — before getting married? Does this recent societal shift tell us anything about young adults’ willingness to commit to a 30-year mortgage? I recently had a conversation with an Uber driver who shed light on the younger generation’s choices.

My Uber driver told me that he and his girlfriend were about to have their third child together. (Uber drivers have become a great source for researching social shifts, as they are right in the middle of the new Sharing Economy.) He said it made no financial sense for them to marry. Her modest income qualified her for all sorts of benefits, including free medical care for the kids. As long as she was not associated with his income, they could live a good life together while getting the government to cover many of their expenses. I didn’t ask if this was legal.

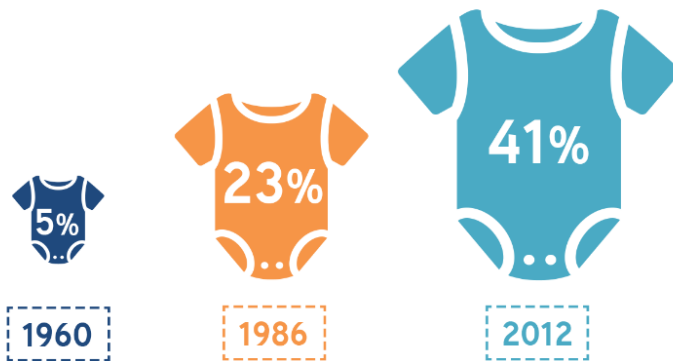
Our research has shown that today’s young adults born in the 1980s and 1990s are quite thrifty, taking advantage of technology to save money and very willing to share expenses with each other. The Uber driver and his girlfriend will clearly not become homeowners any time soon because to do so they would have to declare that they live together. I assume doing so would cause them to lose free health insurance for their kids as well as other benefits. How many 1980s Sharers have figured out how to have a family and still receive maximum government assistance? We already know that the number of children born to unwed mothers has exploded to 41%.” – John Burns, CEO, and Mikaela Sharp, Research Analyst, John Burns RE Consulting LLC



# Demographics

## Is My Uber Driver Holding Back the Housing Market?

 **SINGLE MOMS HAVE EXPLODED IN NUMBERS**  
FIGURE 4.11 Percent of Births to Unmarried Women



Source: Centers for Disease Control and Prevention, National Vital Statistics Report\*

### Median Welfare Benefits for a Single Parent with Two Young Children by Type, 2013<sup>1</sup>

Temporary Cash Assistance for Needy Families (TANF)	\$5,112
Supplemental Nutrition Assistance Program (SNAP)	\$6,312
Housing Assistance	\$8,295
Medicaid	\$7,452
Women, Infants, and Children Program	\$1,030
Low Income Home Energy Assistance Program (LIHEAP)	\$400
The Emergency Food Assistance Program (TEFAP)	\$300

“We call the higher taxes or fewer benefits that a married couple encounters in comparison to two single people with an equal combined income a “marriage penalty.” This new marriage penalty could easily be enough of an incentive for an unmarried parent to keep their relationship “off the books.” The table above shows the median benefit amount for a nonworking single parent with two young children. Don’t add these up because it is highly unlikely that a recipient would receive all of these benefits simultaneously.” – John Burns, CEO, and Mikaela Sharp, Research Analyst, John Burns RE Consulting LLC



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