

# The Virginia Tech – U.S. Forest Service

## October 2016

### Housing Commentary: Section II



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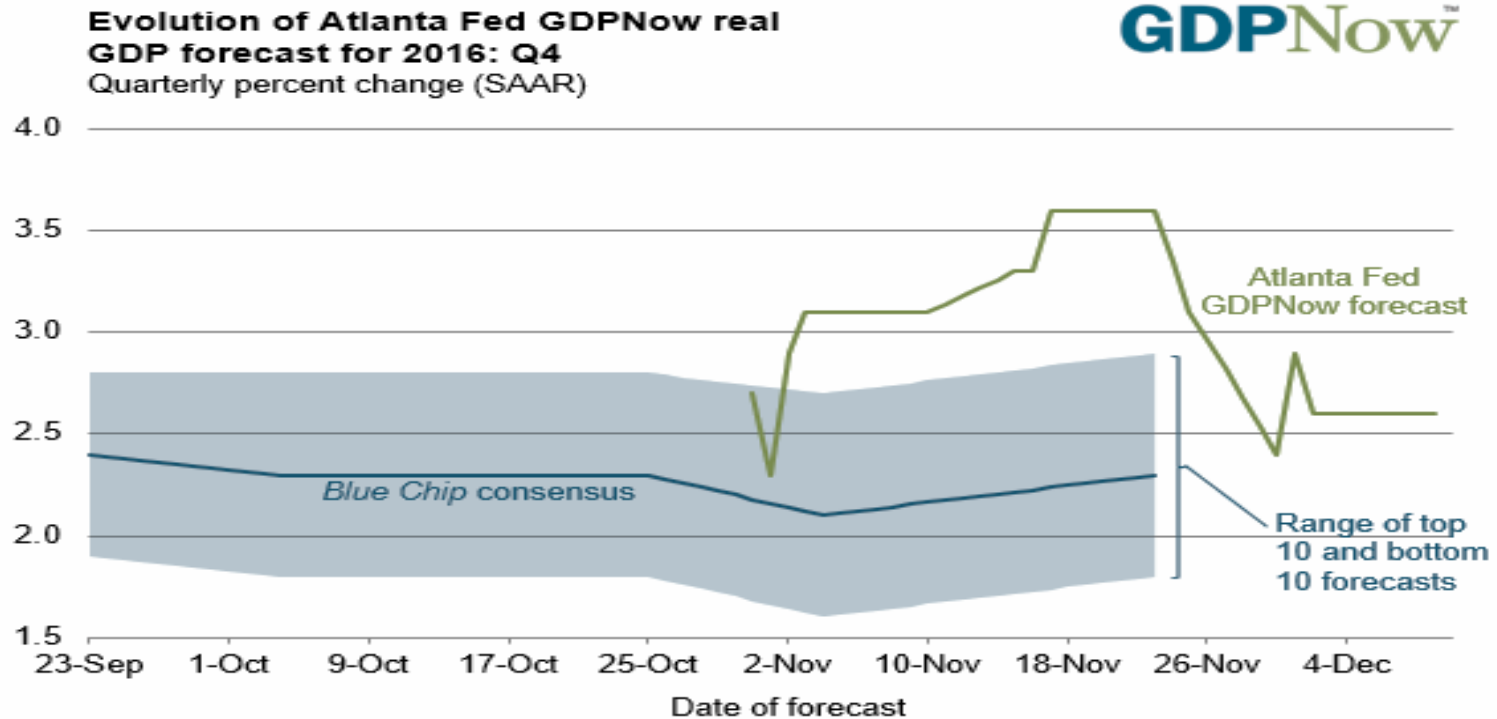
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# **Federal Reserve System and Private Indicators**

# U.S. Economic Indicators



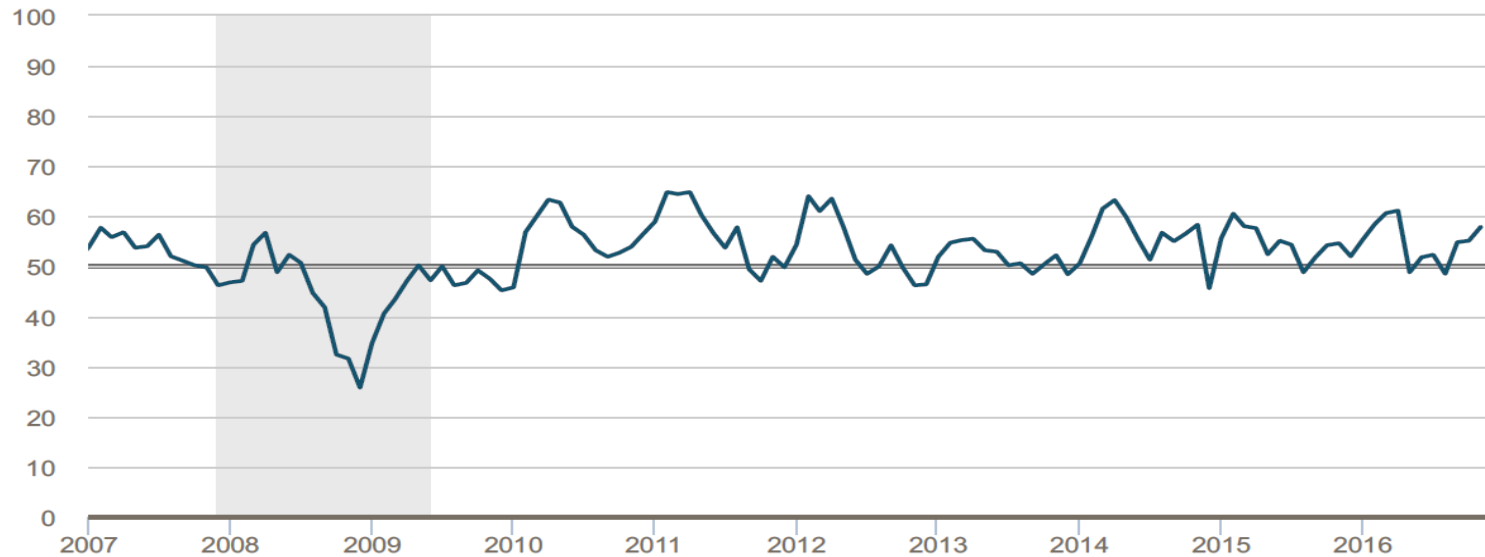
## Atlanta Fed GDPNow™

**Latest forecast: 2.6 percent — December 9, 2016**

“The GDPNow model forecast for real GDP growth (seasonally adjusted annual rate) in the fourth quarter of 2016 is **2.6 percent** on December 9, unchanged from December 6. The forecast of the contribution of inventory in investment to fourth-quarter growth decreased from 0.46 percentage points to 0.42 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



Note: 50+ = Expansion

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



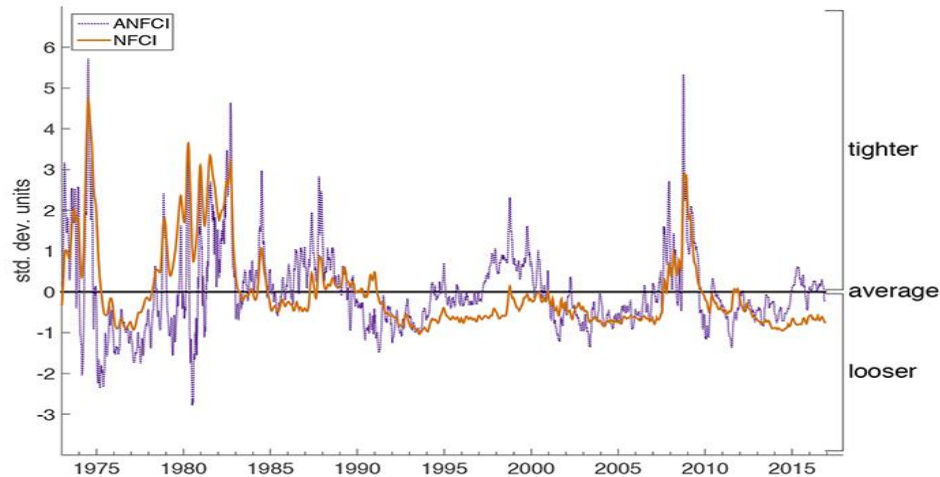
FEDERAL RESERVE BANK of ATLANTA

## The Federal Reserve Bank of Atlanta

### Southeast Manufacturing

“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 2.8 percentage points to 57.9 in November. The rise was driven by increases in the following underlying variables: production, employment, and finished inventories.” – 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>	12/2/2016	11/25/2016	11/4/2016	9/2/2016	6/3/2016	12/4/2015
NFCI	-0.75	-0.74	-0.69	-0.65	-0.68	-0.69
ANFCI	-0.22	-0.24	0.07	0.18	0.19	-0.41

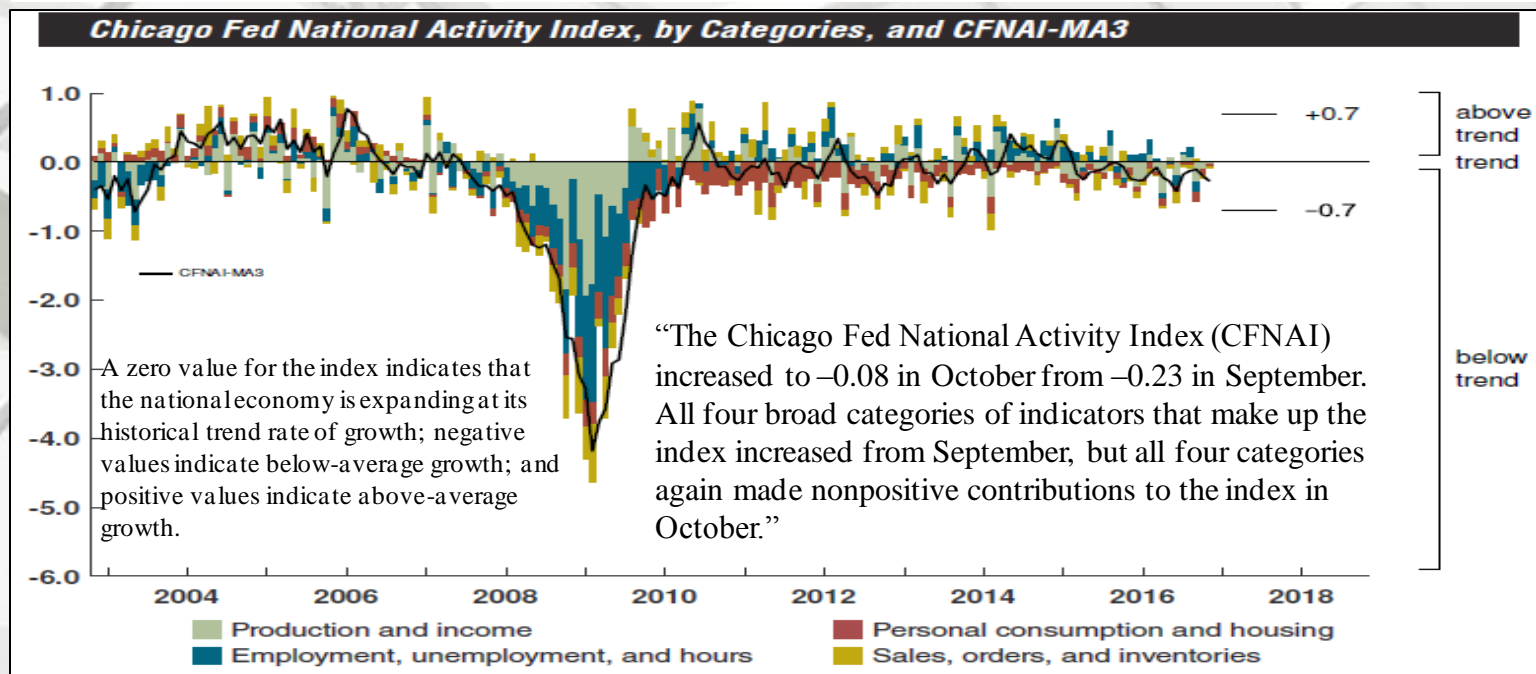
## The Federal Reserve Bank of Chicago

### Financial Conditions Hold Steady in Week Ending December 2

“The NFCI ticked down to  $-0.75$  in the week ending December 2. The credit and leverage subindexes both ticked down from the previous week, while the risk and nonfinancial leverage subindexes were unchanged.

The ANFCI edged up slightly from the previous week, to  $-0.22$ . The current level of the ANFCI indicates that financial conditions in the latest week were somewhat looser 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

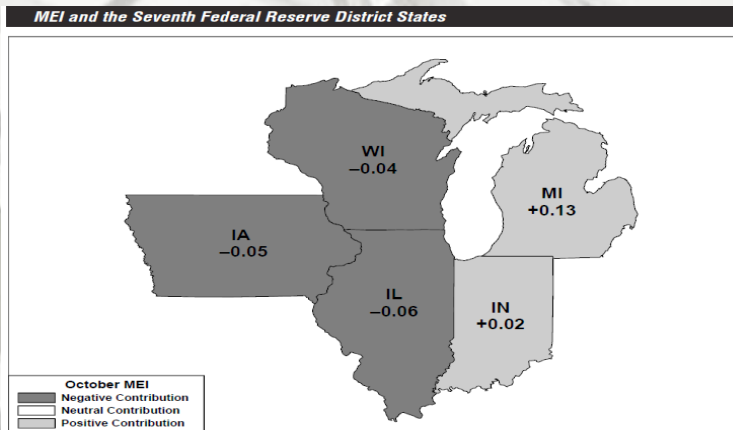


## Index shows economic growth increased slightly in October

“The index’s three-month moving average, CFNAI-MA3, edged down to  $-0.27$  in October from  $-0.20$  in September. October’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, decreased to  $-0.35$  in October from  $-0.16$  in September. Thirty-four of the 85 individual indicators made positive contributions to the CFNAI in October, while 51 made negative contributions. Fifty indicators improved from September to October, while thirty-four indicators deteriorated and one was unchanged. Of the indicators that improved, 21 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 Economy Index

“The Midwest Economy Index (MEI) rose to –0.01 in October from –0.11 in September. The relative MEI increased to +0.25 in October from +0.16 in September. October’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.” – Laura LaBarbera, Media Relations, The Federal Reserve Bank of Chicago

“The manufacturing sector’s contribution to the MEI increased to +0.01 in October from –0.05 in September. The pace of manufacturing activity increased in Iowa and Michigan, but decreased in Illinois and was unchanged in Indiana and Wisconsin. Manufacturing’s contribution to the relative MEI increased to +0.21 in October from +0.16 in September.

The construction and mining sector’s contribution to the MEI moved up to –0.05 in October from –0.08 in September. The pace of construction and mining activity was higher in Michigan and Wisconsin, but unchanged in Illinois, Indiana, and Iowa. Construction and mining’s contribution to the relative MEI edged up to –0.02 in October from –0.04 in September.

The service sector’s contribution to the MEI ticked down to +0.01 in October from +0.02 in September. The pace of service sector activity was down in Illinois and Wisconsin, but up in Indiana and Michigan and unchanged in Iowa. The service sector’s contribution to the relative MEI ticked up to +0.06 in October from +0.05 in September.

The contribution from consumer spending indicators to the MEI moved up to +0.02 in October from a neutral reading in September. Consumer spending indicators were, on balance, up in Iowa, Michigan, and Wisconsin, but down in Illinois and Indiana. Consumer spending’s contribution to the relative MEI remained at a neutral reading in October.” – Laura LaBarbera, Media Relations, The Federal Reserve Bank of Chicago

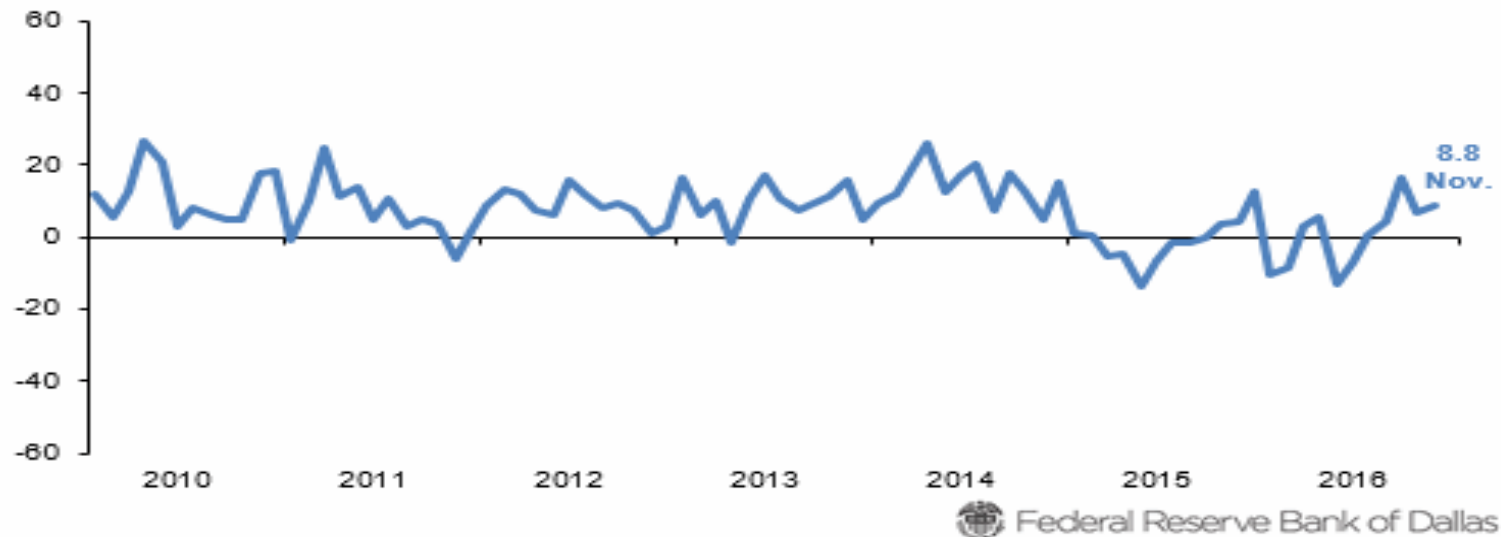
Source: <https://www.chicagofed.org/publications/mei/index>; 11/30/16



# U.S. Economic Indicators

## Texas Manufacturing Outlook Survey Production Index

Index, seasonally adjusted



## The Federal Reserve Bank of Dallas

### Texas Manufacturing Activity Continues to Expand

“Texas factory activity increased again in November, according to business executives responding to the *Texas Manufacturing Outlook Survey*. The production index, a key measure of state manufacturing conditions, posted a fifth consecutive positive reading and edged up to 8.8.

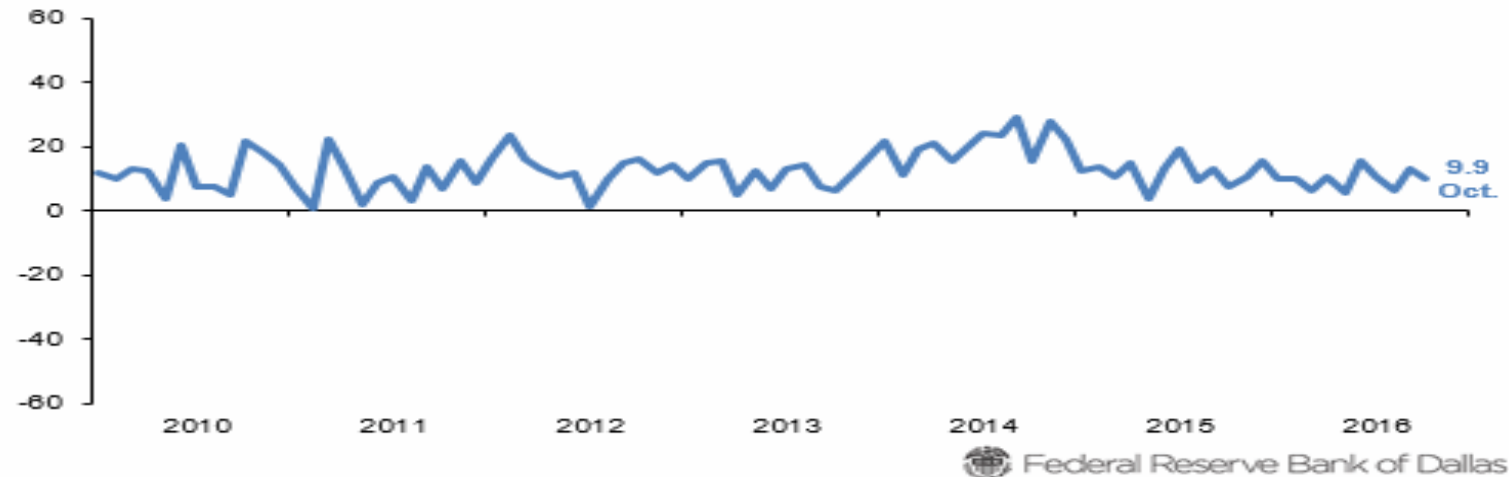
Other measures of current manufacturing activity showed mixed movements. The new orders and growth rate of orders indexes posted their third consecutive negative readings in November but moved up, coming in at -1.4 and -0.8, respectively. The capacity utilization index rose three points to 3.6, while the shipments index dipped slightly negative to -1.9.

Perceptions of broader business conditions improved markedly this month. The general business activity index shot up to 10.2 after nearly two years of negative readings. The company outlook index also posted a large gain, increasing nine points to a reading of 11.0.” – Emily Kerr, Business Economist, Federal Reserve Bank of Dallas

# U.S. Economic Indicators

## Texas Service Sector Outlook Survey Revenue Index

Index, seasonally adjusted



## 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.

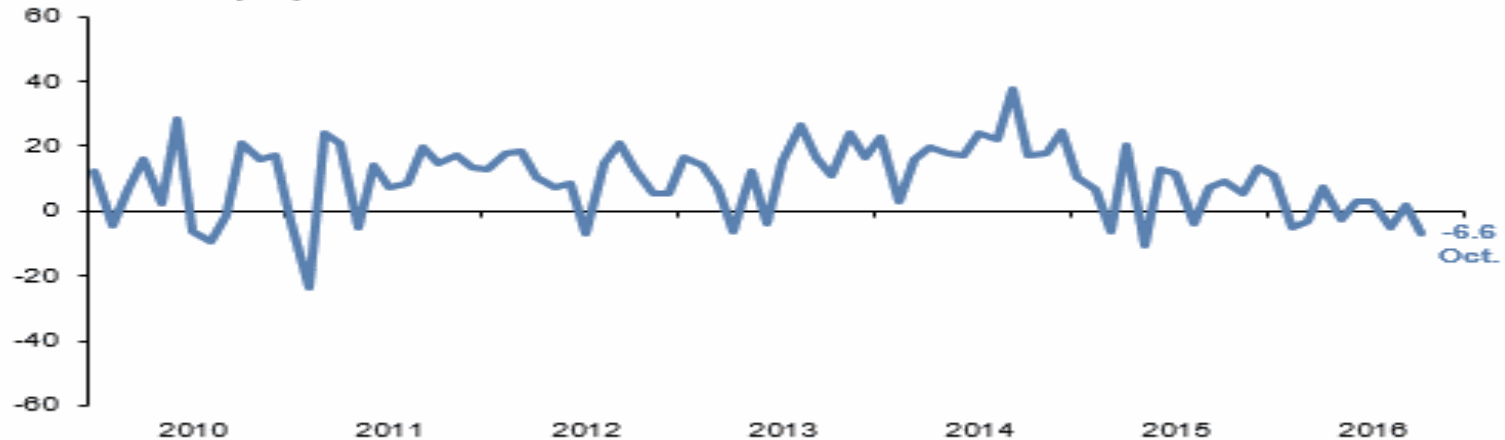
Labor market indicators reflected slower employment growth and shorter workweeks this month. The employment index edged down from 4.4 to 2.7. The hours worked index moved back into negative territory this month, falling from 3.1 to -1.4.

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.” – Amy Jordan, Assistant Economist, Federal Reserve Bank of Dallas

# U.S. Economic Indicators

## Texas Retail Outlook Survey Sales Index

Index, seasonally adjusted



Federal Reserve Bank of Dallas

## The Federal Reserve Bank of Dallas Texas Service Sector Activity

“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.

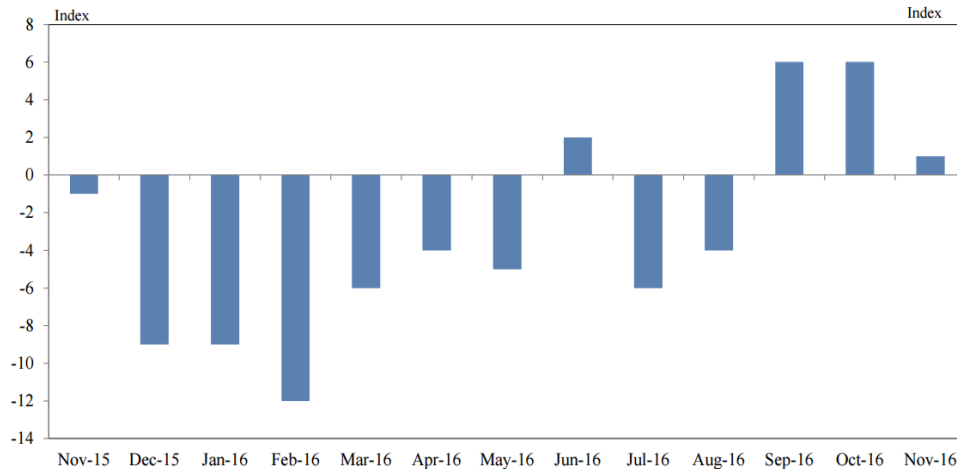
Labor market indicators were mixed again this month. The employment index fell slightly to a reading near zero, indicating retail employment was relatively unchanged from September. The hours worked index remained in negative territory for a third consecutive month and fell further to -12.1, suggesting workweeks shortened.

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.”

– Amy Jordan, Assistant Economist, Federal Reserve Bank of Dallas

# U.S. Economic Indicators

Composite Index vs. a Month Ago



## Tenth District Manufacturing Summary

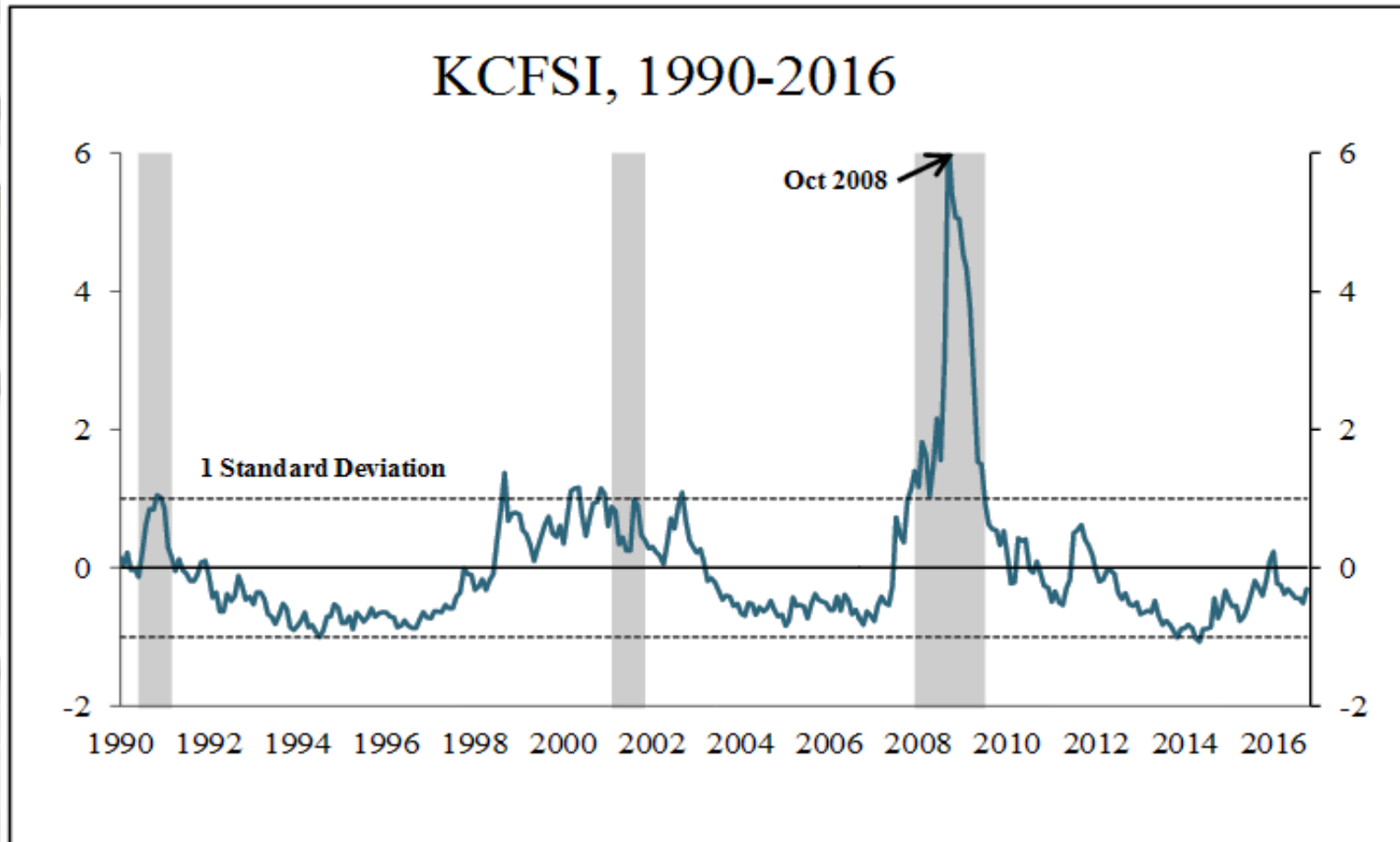
“Tenth District manufacturing activity expanded slightly, and producers’ expectations for future activity remained solid. Price indexes increased moderately in November.” – Pam Campbell, The Federal Reserve Bank of Kansas City

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

“Factory activity in our region rose for the third straight month in November, following a year and a half of near constant declines. Firms also remained optimistic about future activity.” – Chad Wilkerson, Vice President and Economist, The Federal Reserve Bank of Kansas City

“The month-over-month composite index was 1 in November, down from 6 in October and September (Tables 1 ). The composite index is an average of the production, new orders, employment, supplier delivery time, and raw materials inventory indexes. Durable goods production continued to grow modestly, while nondurable goods activity fell moderately, particularly for food and plastics products. Most month-over-month indexes slowed somewhat in November. The production index decreased from 18 to 9, and the shipments, new orders, and order backlog indexes also dropped. The employment index eased from 7 to 1, still the second highest reading in over a year. The finished goods inventory index fell from -9 to -13, while the raw materials inventory index was unchanged” – Pam Campbell, The Federal Reserve Bank of Kansas City

# U.S. Economic Indicators

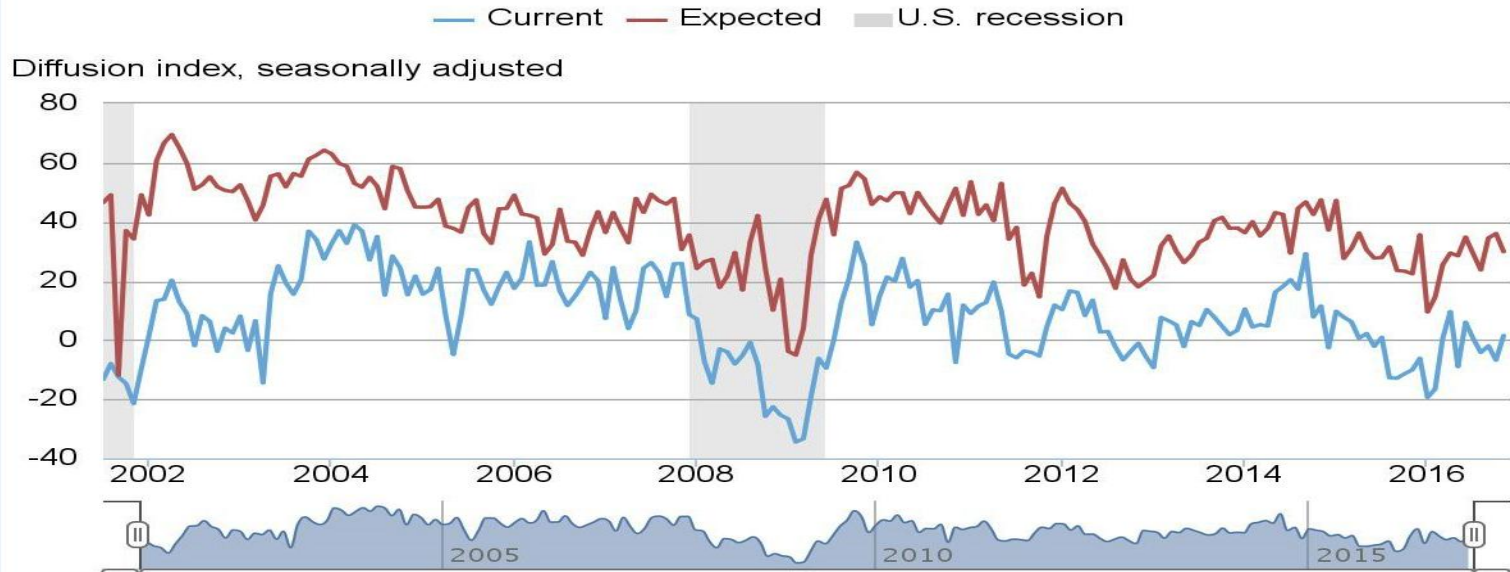


## **The Federal Reserve Bank of Kansas City The KCFSI suggests financial stress remains muted**

“The Kansas City Financial Stress Index (KCFSI) increased from -0.51 in October to -0.31 in November.” – Bill Medley, Media Relations, The Federal Reserve Bank of Kansas City

# U.S. Economic Indicators

## General Business Conditions



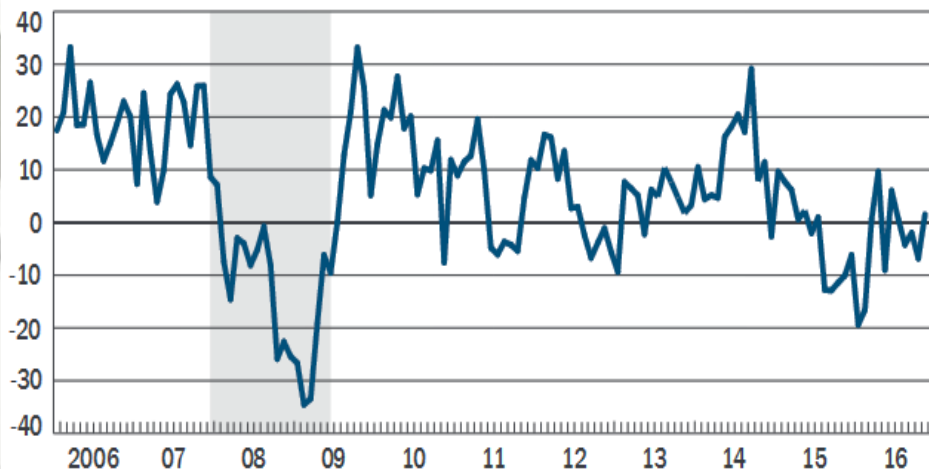
## Empire State Manufacturing Survey Business Activity Steadies

“Business activity stabilized in New York State, according to firms responding to the November 2016 *Empire State Manufacturing Survey*. The headline general business conditions index climbed out of negative territory for the first time in four months, rising eight points to 1.5. The new orders and shipments indexes also turned positive, rising to 3.1 and 8.5, respectively. Labor market conditions remained weak, with the number of employees and average workweek indexes both at -10.9. The inventories index fell eleven points to -23.6, pointing to a marked decline in inventory levels. Although price indexes were lower, they remained positive, suggesting a slower pace of growth in both input prices and selling prices. Indexes for the six-month outlook conveyed somewhat less optimism about future conditions than in October.” – 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

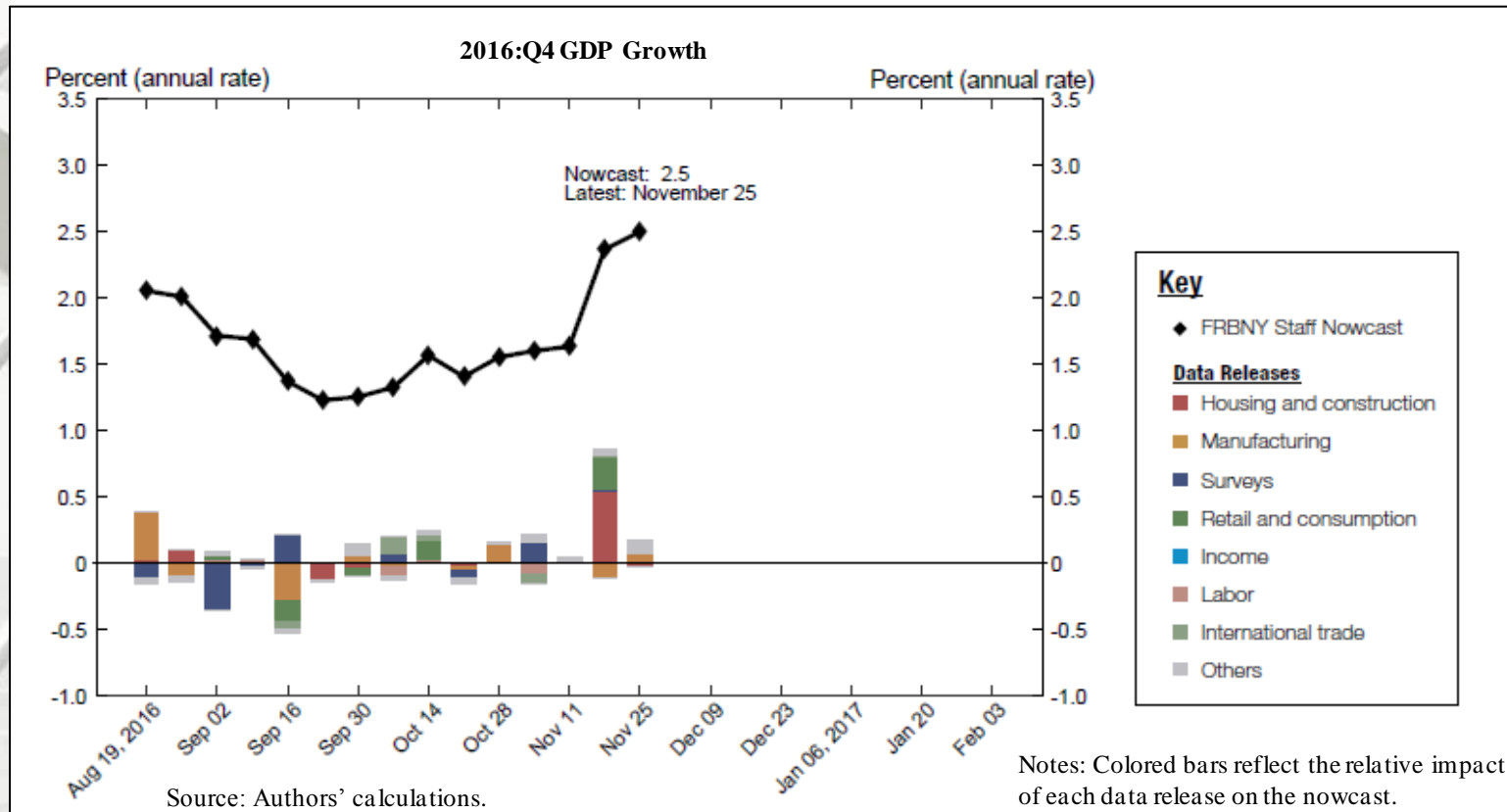
“Manufacturing firms in New York State reported that business activity was essentially flat in November. On the heels of three consecutive negative readings, the general business conditions index rose eight points to 1.5. Twenty-seven percent of respondents reported that conditions had improved over the month, while 25 percent reported that conditions had worsened.” – The Federal Reserve Bank of New York

## Outlook Slightly Lower

“Indexes for the six-month outlook suggested that respondents were somewhat less optimistic about future conditions than they were last month. The index for future business conditions retreated six points to 29.9. The index for future new orders and the index for future shipments fell to similar levels. Indexes for future employment and the future average workweek, at 10.9 and 10.0, respectively, indicated that firms expected to expand employee rolls and hours worked in the months ahead. Indexes for future prices suggested that firms anticipated an increase in both input prices and selling prices over the next six months. The capital expenditures and technology spending indexes were little changed, and pointed to modest increases in spending for both categories.” – The Federal Reserve Bank of New York

# U.S. Economic Indicators

## The Federal Reserve Bank of New York



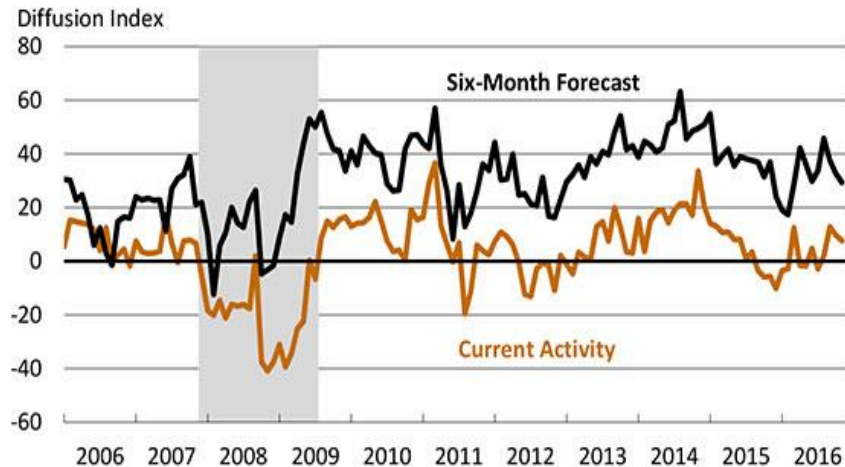
- “The FRBNY Staff Nowcast stands at 2.5% for 2016:Q4.
- News from this week’s data releases provided mixed signals, but on balance had a slightly positive impact on the nowcast.
- Positive contributions came from new orders of durable goods and wholesale inventories, but other items in the advance durable goods report had negative contributions.”

The NY Fed does not mention the large contribution from new housing construction (orange bar).



# U.S. Economic Indicators

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

“Firms reported continued weakness in manufacturing employment. The percentage of firms reporting a decrease in employment in November (20 percent) exceeded the percentage reporting an increase (18 percent). The current employment index, which has now remained negative for 11 consecutive months, edged 1 point higher to -2.6. One sign of improvement was the average workweek index, which was positive for the first time in eight months.”

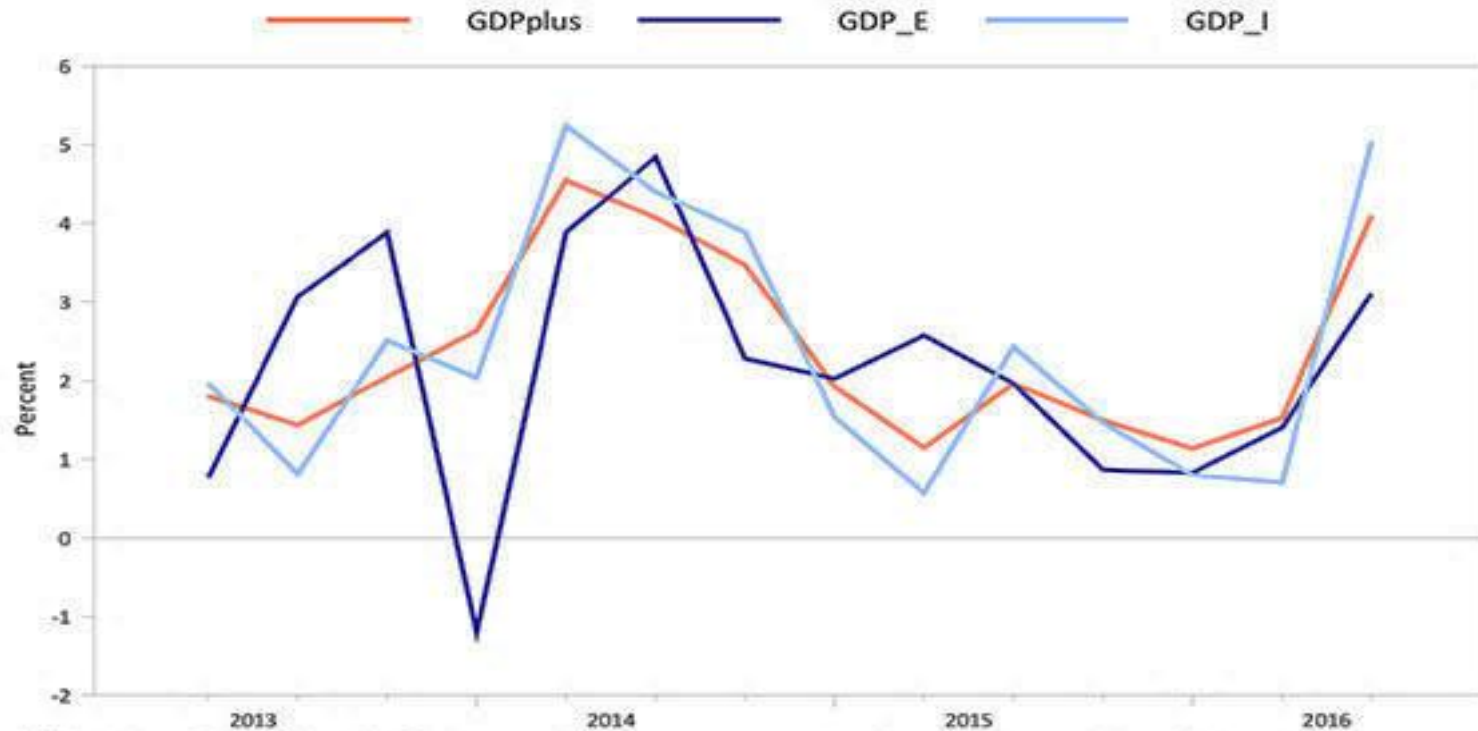
## October 2016 Manufacturing Business Outlook Survey New Orders and Shipments Pick Up

“The index for current manufacturing activity in the region edged down, from a reading of 9.7 in October to 7.6 this month. The index has been positive now for four consecutive months (Chart 1). Other broad indicators showed improvement. The current new orders and shipments indexes increased from their readings in October, by 2 points and 4 points, respectively. Both the delivery times and unfilled orders indexes were positive this month, suggesting longer delivery times and an increase in unfilled orders. The current inventories index moved into positive territory for the first time in 17 months.” – 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 November 29, 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.

# Philadelphia Fed

Median Forecasts for Selected Variables in the Current and Previous Surveys

	Real GDP (%)		Unemployment Rate (%)		Payrolls (000s/month)	
	Previous	New	Previous	New	Previous	New
<i>Quarterly data:</i>						
2016:Q4	2.3	2.2	4.7	4.8	169.8	176.9
2017:Q1	2.3	2.2	4.7	4.8	159.9	161.0
2017:Q2	2.3	2.2	4.6	4.7	164.9	179.2
2017:Q3	2.1	2.2	4.6	4.7	159.4	166.2
2017:Q4	N.A.	2.2	N.A.	4.7	N.A.	166.0
<i>Annual data (projections are based on annual-average levels):</i>						
2016	1.5	1.5	4.8	4.9	204.6	206.0
2017	2.3	2.2	4.6	4.7	161.1	173.6
2018	2.2	2.1	4.6	4.6	N.A.	N.A.
2019	2.2	2.1	4.7	4.7	N.A.	N.A.

## Federal Reserve Bank of Philadelphia

### Downward Revisions Characterize the Risk of a Negative Quarter

“The forecasters see much less than a one-in-five chance of a contraction in real GDP in any of the next five quarters. For the current quarter, they predict a 9.9 percent chance of negative growth, down from 15.6 percent in the survey of three months ago. The forecasters also see a lower probability of a negative quarter in the first three quarters in 2017 than they estimated three months ago.”

## Fourth Quarter 2016 Survey of Professional Forecasters

### Forecasters Predict Slightly Lower Growth over the Next Three Years

“Growth in the U.S. economy looks slightly weaker now than it did three months ago, according to 42 forecasters surveyed by the Federal Reserve Bank of Philadelphia before the election on November 8. The forecasters expect real GDP to grow at an annual rate of 2.2 percent this quarter and in each of the next four quarters in 2017. On an annual-average over annual-average basis, the forecasters see real GDP growing 1.5 percent in 2016, no change from the estimate in the survey of three months ago. The forecasters predict real GDP will grow 2.2 percent in 2017, 2.1 percent in 2018, and 2.1 percent in 2019. The forecasts for 2017, 2018, and 2019 are slightly weaker than the previous estimates.” – Tom Stark, Assistant Director and Manager, Real-Time Data Research Center, Federal Reserve Bank of Philadelphia

# U.S. Economic Indicators

## The Federal Reserve Bank of Richmond

### Manufacturing Activity Expanded; New Orders Picked Up, Average Wage Increases Broadened

“Fifth District manufacturing activity expanded in November, after a three-month contraction period. New orders increased in the most recent survey period, while shipments remained flat. Hiring activity continued to strengthen mildly across firms and wage increases were more widespread. Prices of raw materials and finished goods rose at a somewhat slower pace in November.

Manufacturers anticipated positive business conditions during the next six months. Producers expected faster growth in shipments and in the volume of new orders. Survey participants looked for backlogs to grow in the months ahead and anticipated increased capacity utilization. Firms looked for slightly longer vendor lead times during the next six months.

Looking ahead, survey participants planned more hiring. In November, more respondents reported future wage increases, while they anticipated somewhat longer average workweeks. Manufacturers looked for faster growth in prices paid and prices received.” – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond

# U.S. Economic Indicators



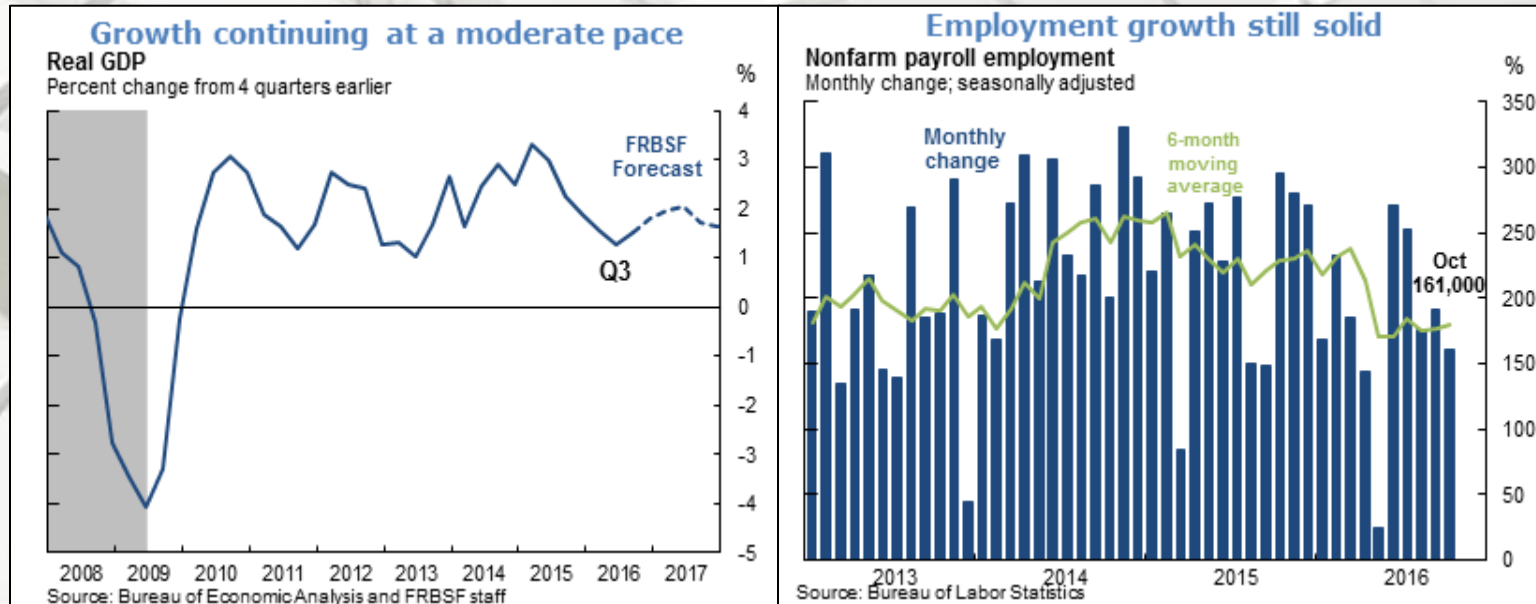
## Current Activity

“Overall manufacturing conditions expanded this month. The composite index for manufacturing gained eight points, moving into positive territory to end at a reading of 4. The new orders indicator increased this month, ending at a reading of 7, while the shipments index remained at a flat reading of 1. The manufacturing employment index changed little this month. The index added two points to end at 5.” – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond

# U.S. Economic Indicators



# U.S. Economic Indicators

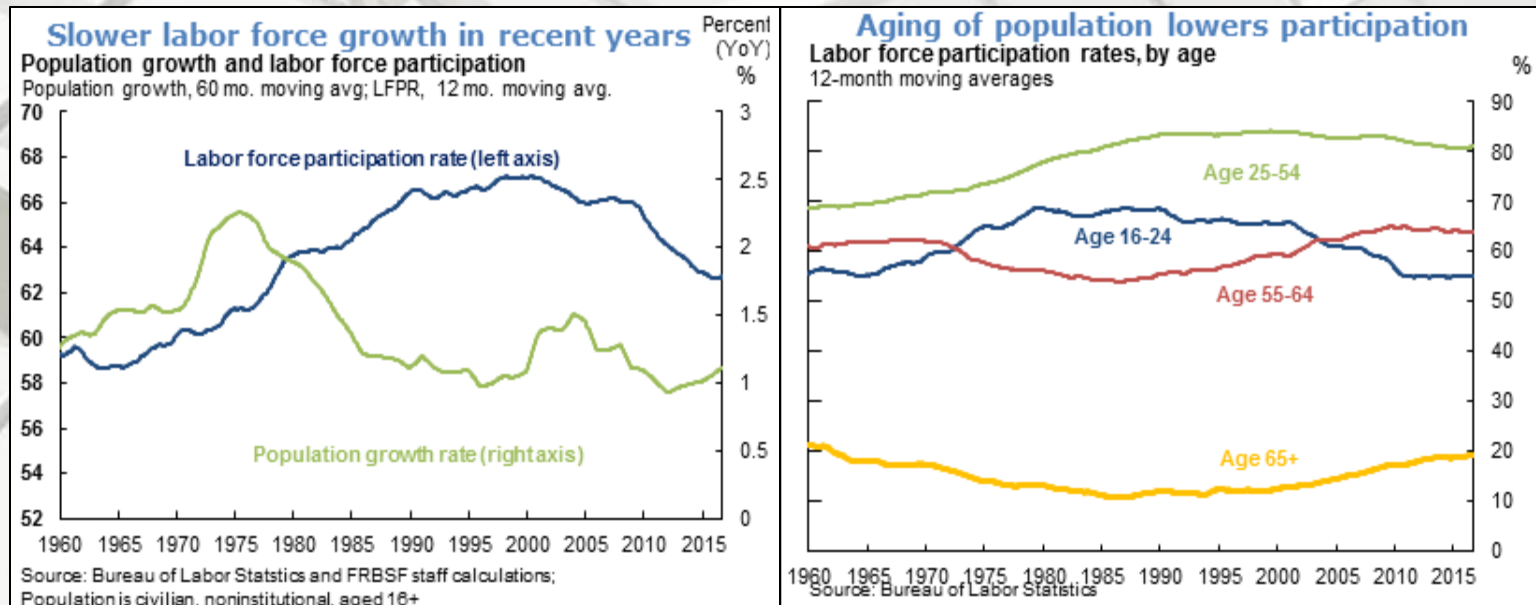


## The Federal Reserve Bank of San Francisco

“Real GDP grew at an annualized rate of 2.9% in the third quarter, a significant improvement over the average growth of 1.1 % during the first half of the year. Even though consumption growth has eased from its earlier rapid pace, strong net exports and a turnaround in inventory accumulation have boosted real GDP growth.

As some of the recent strength in net exports is likely to be transitory and investment and manufacturing performance continues to be sluggish, we expect real GDP growth to soften somewhat in the fourth quarter. However, annualized growth in the second half of the year should exceed 2% based on solid consumption growth in the near-to-medium term underpinned by strong fundamentals, such as continued strength in the labor market. Going into 2017 and beyond, we expect the pace of growth to slow somewhat to its long-run trend of a little over 1-½%.” – Rhys Bidder, Economist, The Federal Reserve Bank of San Francisco

# U.S. Economic Indicators



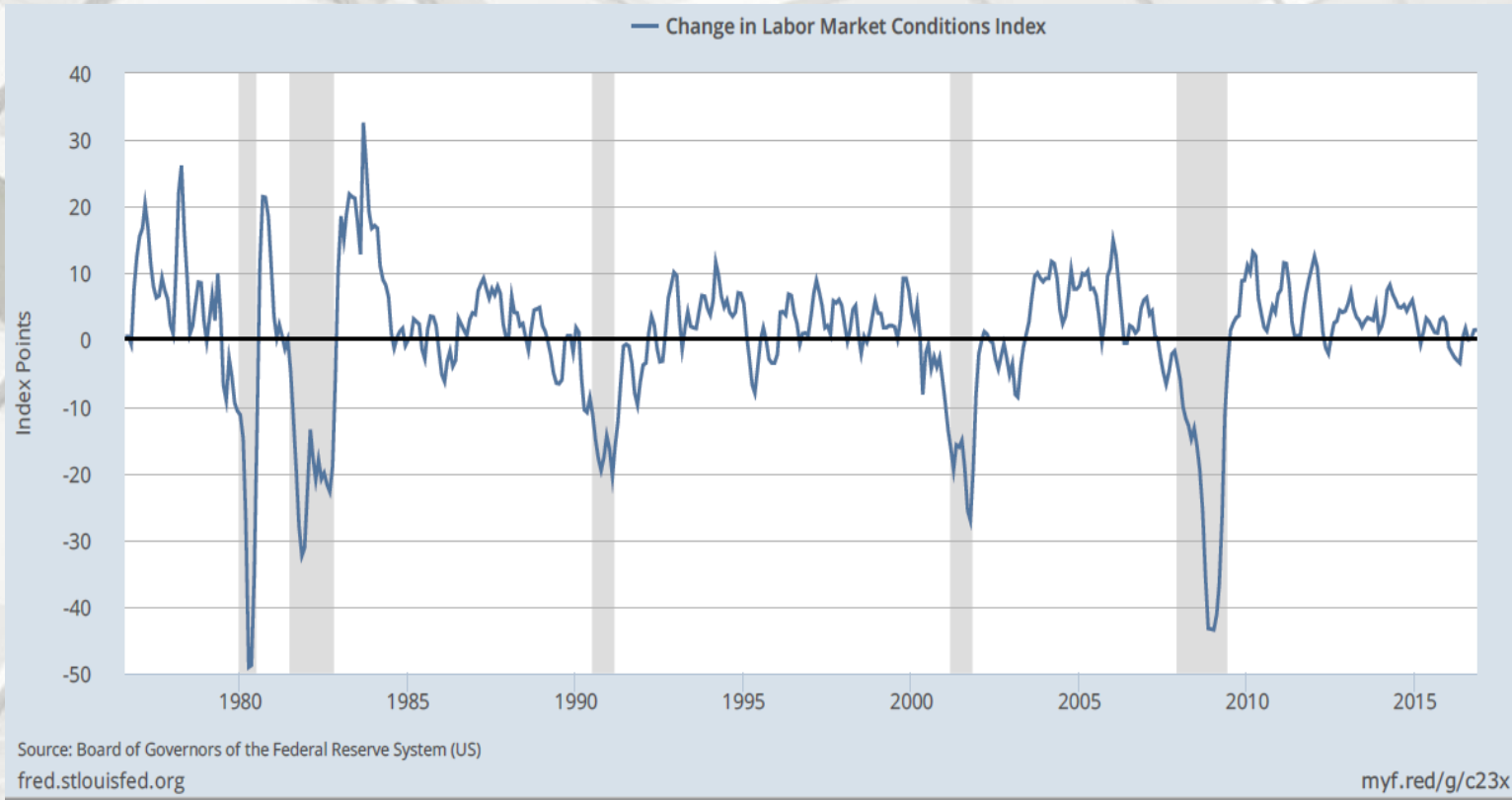
## The Federal Reserve Bank of San Francisco

“The growth of the labor force determines how many jobs need to be created to maintain full employment. Intuitively, the more people there are who want to work, the more jobs are needed to absorb them into the ranks of the employed. Calculations of trend labor force growth allow an estimate of the pace of employment growth consistent with a healthy labor market at full employment. In the 1990s, this number appears to have been of the order of 150,000 job gains per month. However, due to the aforementioned demographic changes, the “new normal” or “trend” employment growth is now estimated to be approximately 80,000. Alternative assumptions about future participation rates imply estimates varying between 50,000 and 100,000 jobs per month.

These estimates suggest that even if employment growth declines substantially from its current pace of 161,000 jobs to less than 100,000 per month, such a decline is still consistent with a healthy labor market where unemployment is close to its natural rate.” – Rhys Bidder, 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 November 1, the LMCI was 1.5, an increase from October 1's 1.4 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.” – The Federal Reserve Bank of St. Louis

# 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 November 1, the LNS12032194 level was 5,669 (thousands of persons), a decrease from October's 5,889 reading.

# U.S. Economic Indicators



Source: US. Bureau of Labor Statistics  
fred.stlouisfed.org

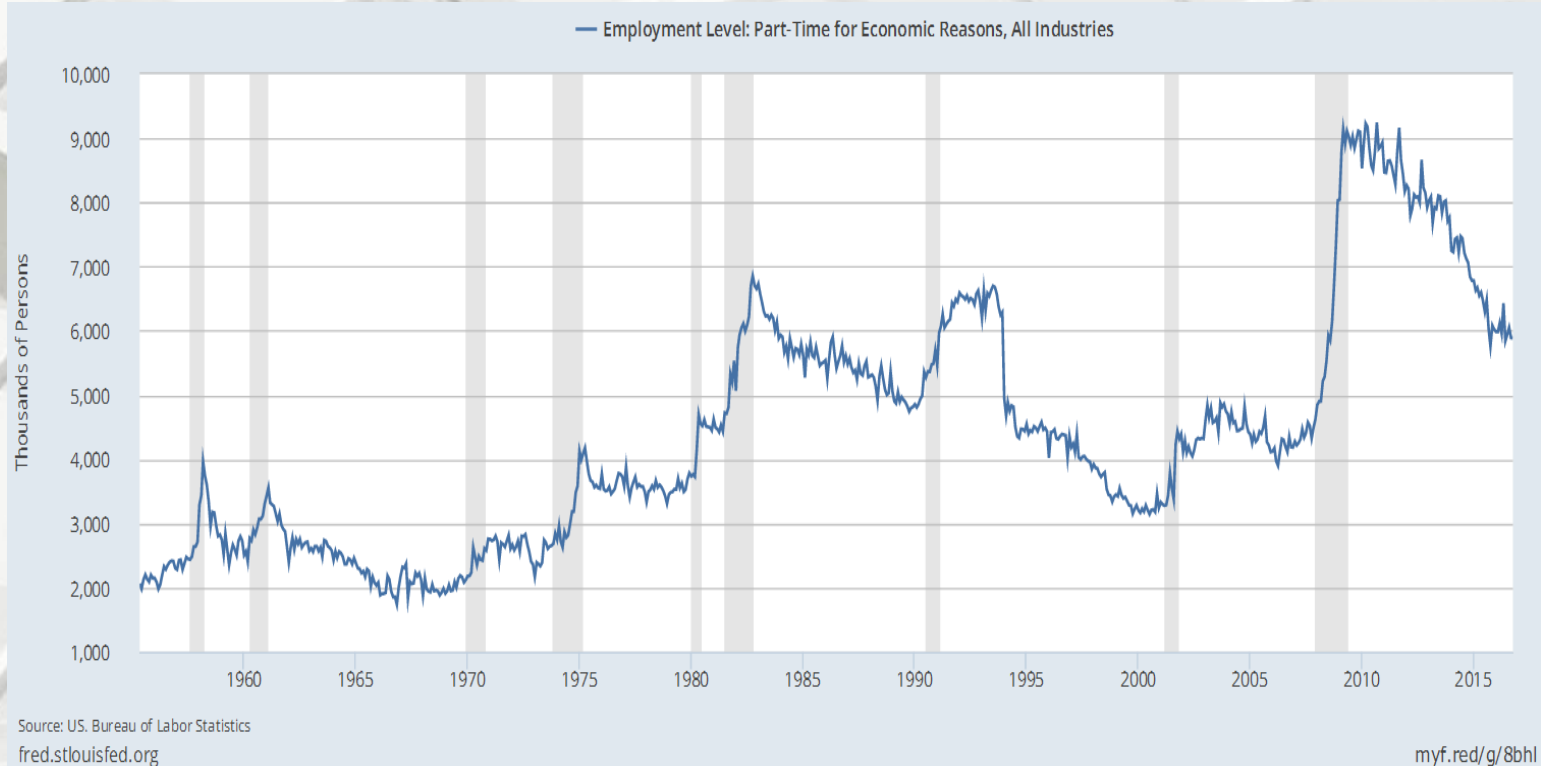
myf.red/g/c2aP

## Federal Reserve Board of Governors:

### Not in Labor Force: Searched for Work and Available

The Not in Labor Force: Searched for Work and Available level (LNU05026642) was 1,932 (thousands of persons) on November 1, an increase from October's 1,700 reading.

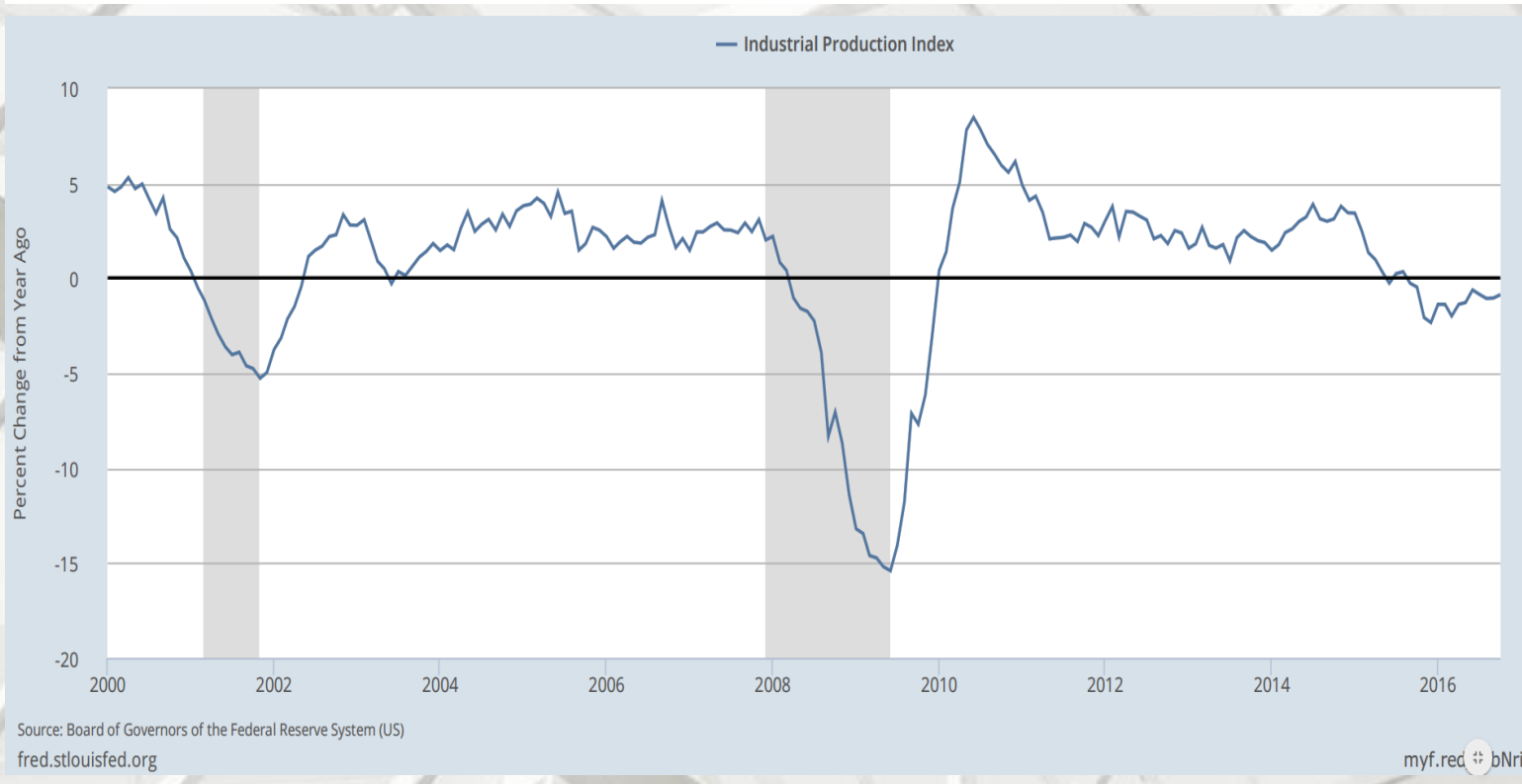
# U.S. Economic Indicators



## 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 26.3 weeks, a decrease from October's 27.2 reading.

# U.S. Economic Indicators

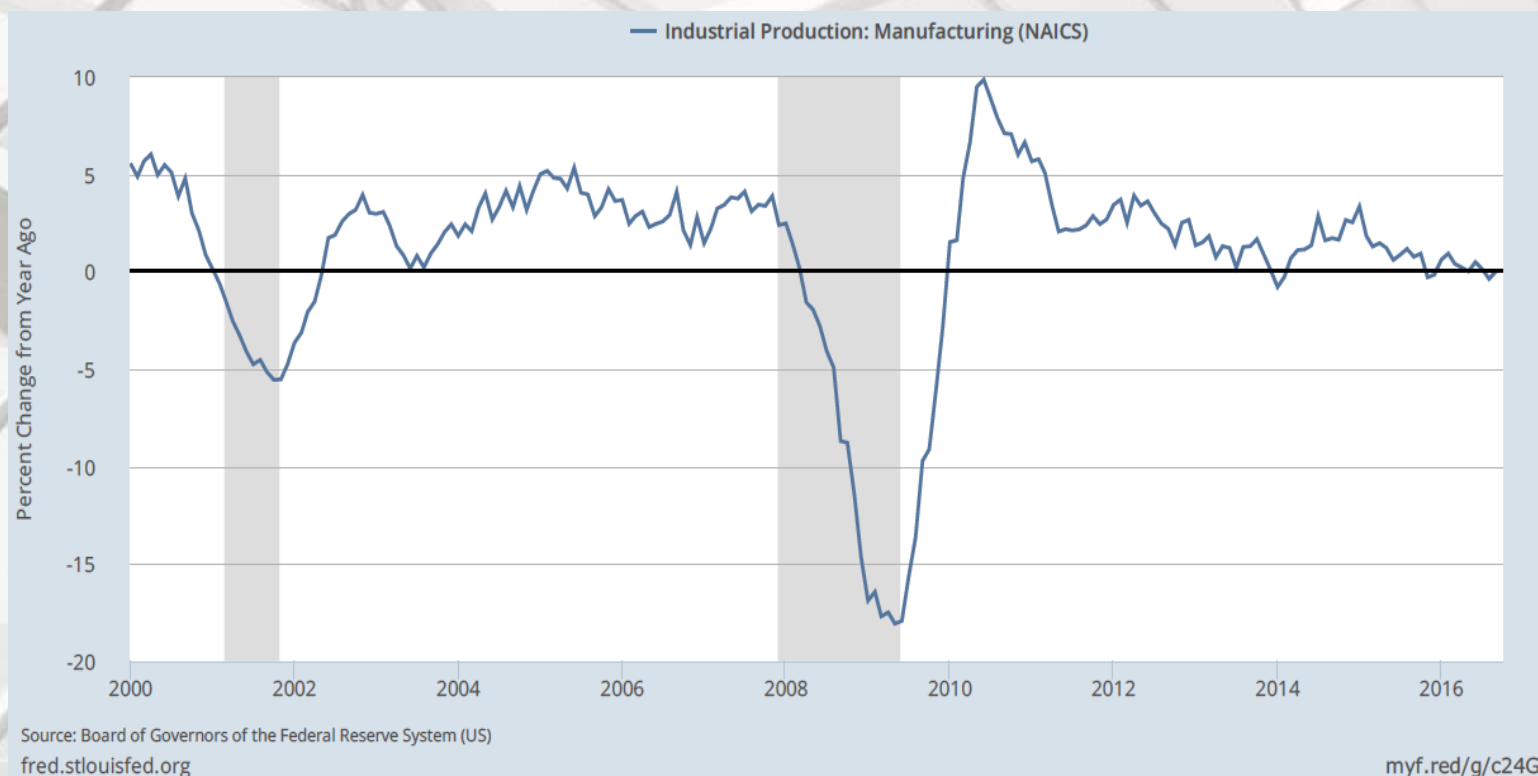


## Federal Reserve Board of Governors: Industrial Production Index

The Industrial Production Index (INDPRO) level was 104.3 in October, an increase from September (104.2) and a decrease from October 2015 reading of 105.2. In the graph above, the year-over-year percentage change is presented.

“The Industrial Production Index is an economic indicator that measures real output for all facilities located in the United States manufacturing, mining, and electric, and gas utilities (excluding those in U.S. territories).” – The Federal Reserve Bank of St. Louis

# U.S. Economic Indicators

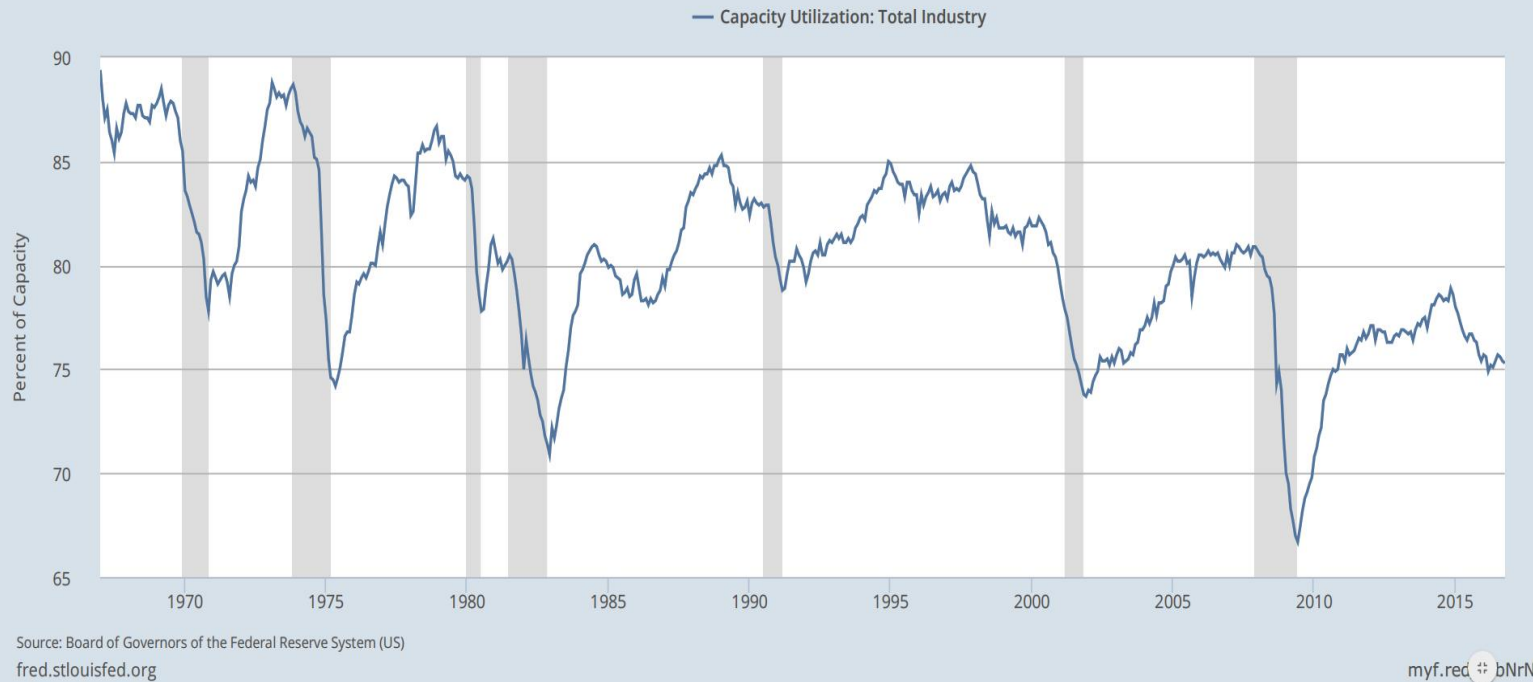


## Federal Reserve Board of Governors: Industrial Production Manufacturing Index

The Industrial Production Manufacturing Index (NACIS) level was 103.9 in October, an increase from September (103.7) and no change from the October 2015 reading of 103.9. In the graph above, the year-over-year percentage change is presented.

“The Industrial Production Manufacturing Index is an economic indicator that measures real output of United States manufacturing, mining, and electric, and gas utilities (excluding those in U.S. territories).” – The Federal Reserve Bank of St. Louis

# U.S. Economic Indicators

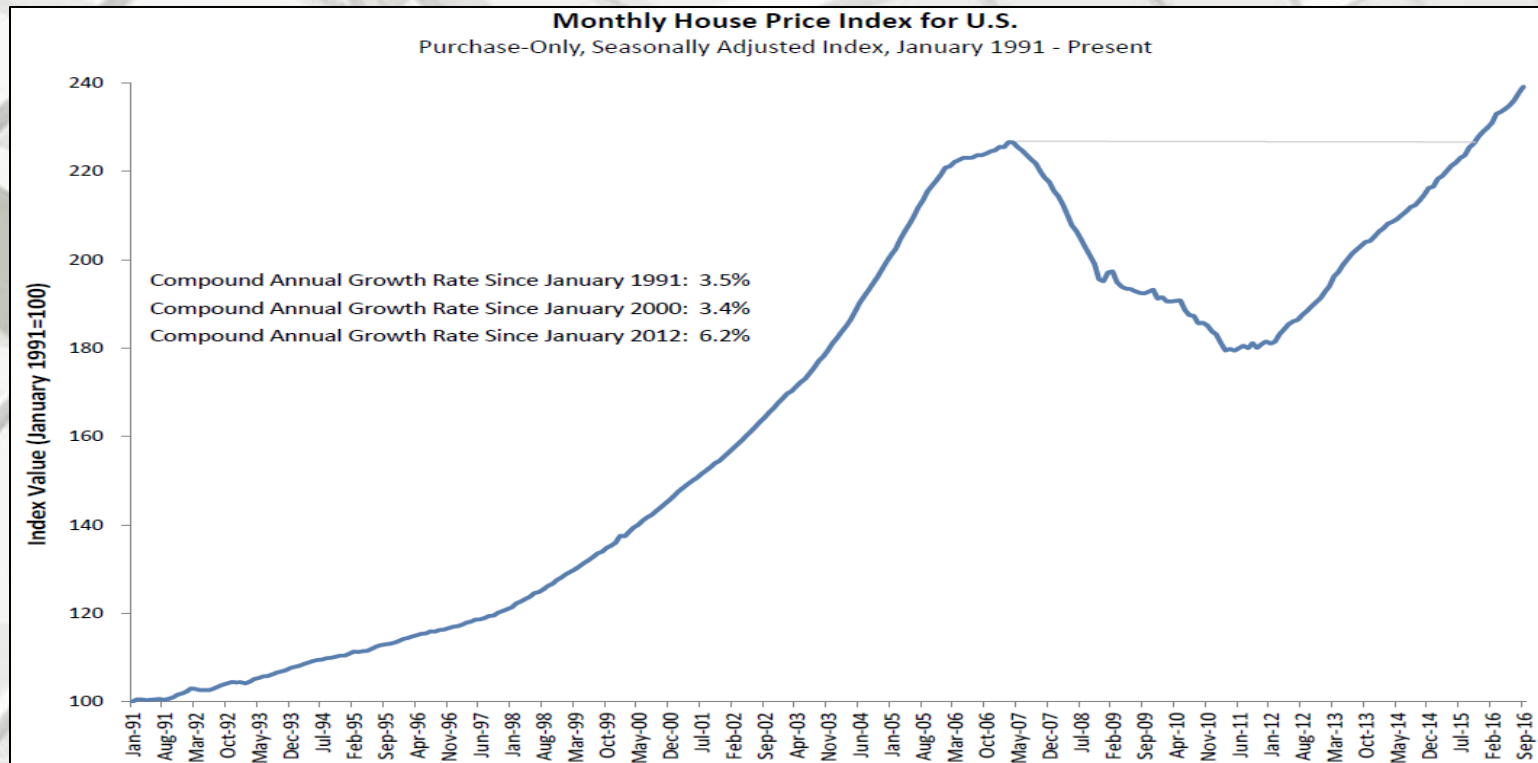


## Federal Reserve Board of Governors: Capacity Utilization Index

The Capacity Utilization-Total Industry (TCU) level was 75.3 in October, a decrease from the September reading of 75.4 (-0.13 %) and also a decrease from the October 2015 level of 76.3 (-1.31 %). In the graph above, the “percent of capacity” is presented.

“Capacity Utilization: Total Industry (TCU) is the percentage of resources used by corporations and factories to produce goods in manufacturing, mining, and electric and gas utilities for all facilities located in the United States (excluding those in U.S. territories). We can also think of capacity utilization as how much capacity is being used from the total available capacity to produce demanded finished products.” – The Federal Reserve Bank of St. Louis

# U.S. Economic Indicators



## FHFA House Price Index

### U.S. House Prices Rise 1.5 Percent in Third Quarter

“U.S. house prices rose 1.5 percent in the third quarter of 2016 according to the Federal Housing Finance Agency (FHFA) House Price Index (HPI). House prices rose 6.1 percent from the third quarter of 2015 to the third quarter of 2016. FHFA’s seasonally adjusted monthly index for September was up 0.6 percent from August. While the HPI rose 6.1 percent from the third quarter of 2015 to the third quarter of 2016, prices of other goods and services were nearly unchanged. The inflation-adjusted price of homes rose approximately 6.0 percent over the last year.” – Stefanie Johnson and Corinne Russell, FHFA

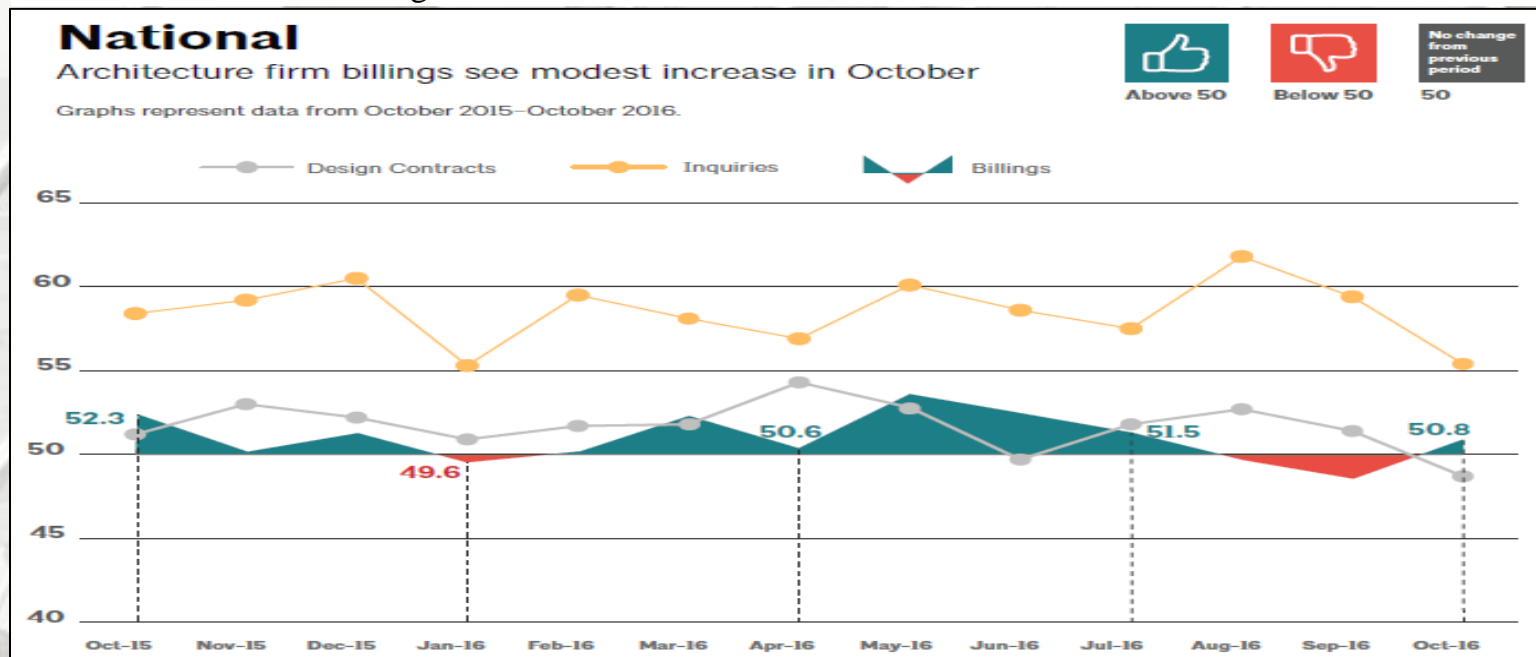


# Private Indicators

## American Institute of Architects (AIA)

### October Architecture Billings Index Business conditions improve modestly

“After two consecutive months of softening business conditions, architecture firms saw a modest rebound in their firm billings in October. The Architecture Billings Index (ABI) score for the month was 50.8, indicating that a modestly larger share of firms reported an increase in their firm billings for the month than reported a decrease. However, fewer firms reported an increase in inquiries into new projects this month, and firms also reported a decline in the value of new design contracts that were signed in October. This marks the second month of the year with a decline in the design contracts index, which has been relatively strong and steady for the last three years. While none of these indicators signals immediate alarm, it will be important to continue to keep a close eye on business conditions over the coming months.” – Kermit Baker, Hon. AIA, Chief Economist, AIA



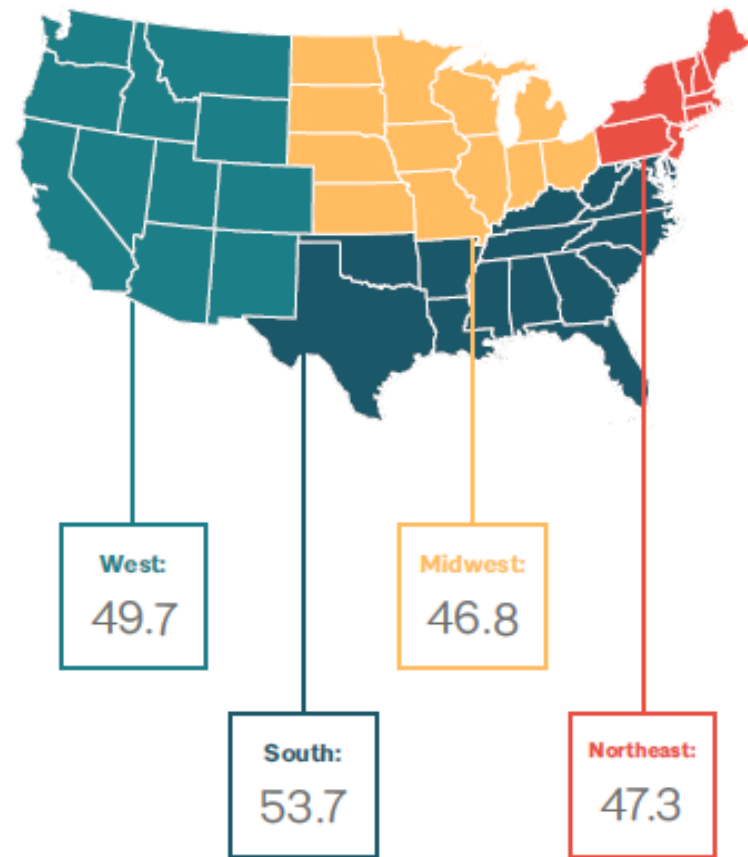
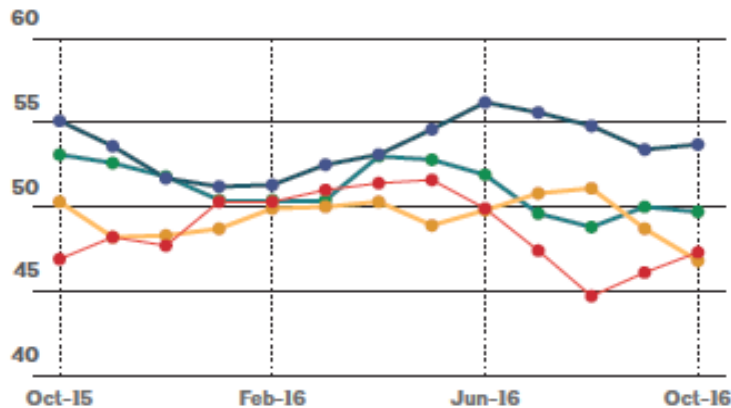
# Private Indicators: AIA

“While business conditions at firms located in the South region of the country remained strong in October, firms located in all other regions saw a decline in their firm billings for the month. Firms located in the West reported a very modest decline, but firms located in the Northeast and Midwest saw a more significant softening of their billings.” – Kermit Baker, Hon. AIA, Chief Economist, AIA

## Regional

Business conditions soften at firms in all regions except the South

\*Graphs represent data from October 2015–October 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

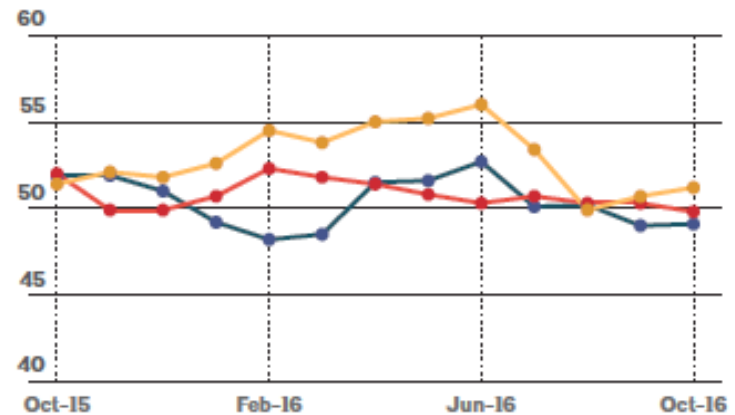
“Firms with commercial/industrial and institutional specializations also saw modest slowdowns in October, with only firms with a residential specialization reporting improving business conditions.”

– Kermit Baker, Hon. AIA, Chief Economist, AIA

## Sector

Billings soften at firms with a commercial/industrial specialization

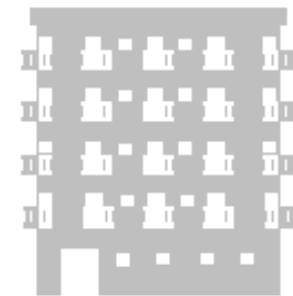
\*Graphs represent data from October 2015–October 2016 across the three sectors. 50 represents the diffusion center. Above 50 shows increase; Below 50 shows decrease. 3-month moving average.



**Commercial/Industrial: 49.8**

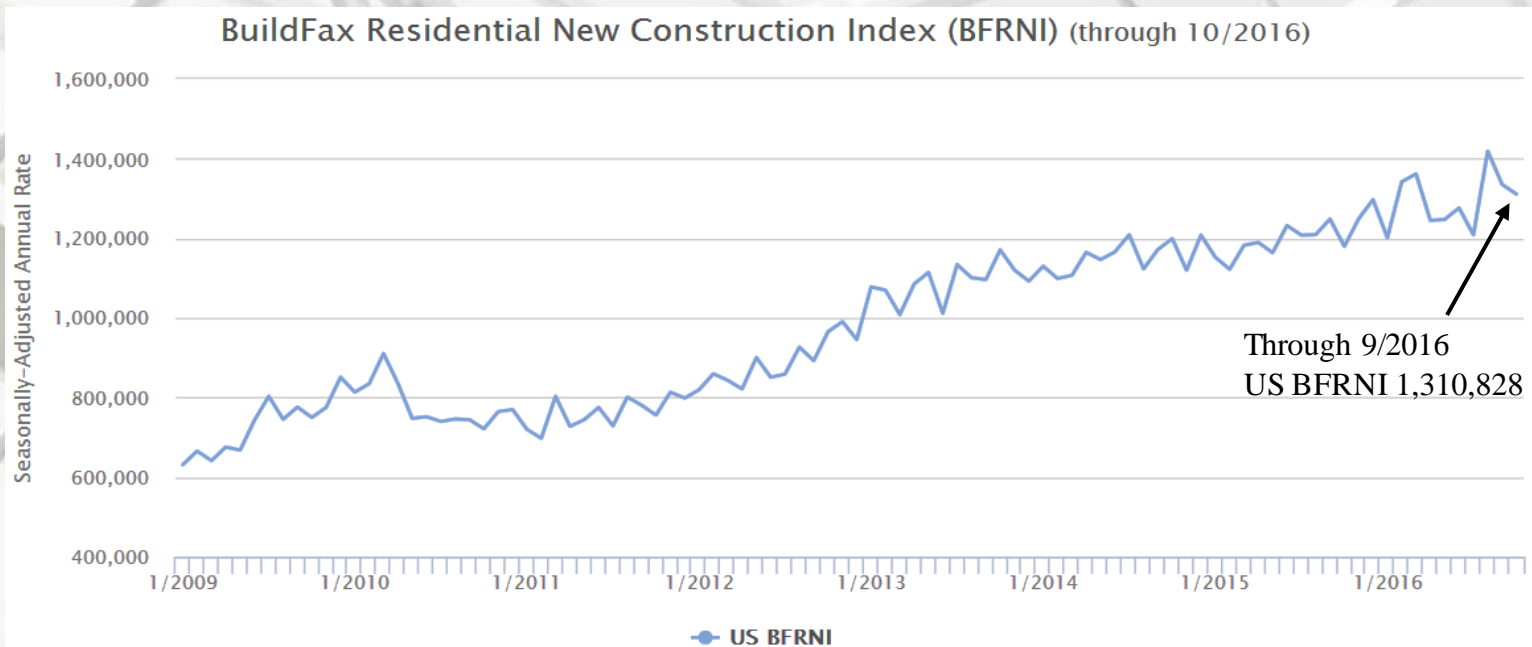


**Institutional: 49.1**



**Residential: 51.2**

# Private Indicators



## BuildFax Residential New Construction Index

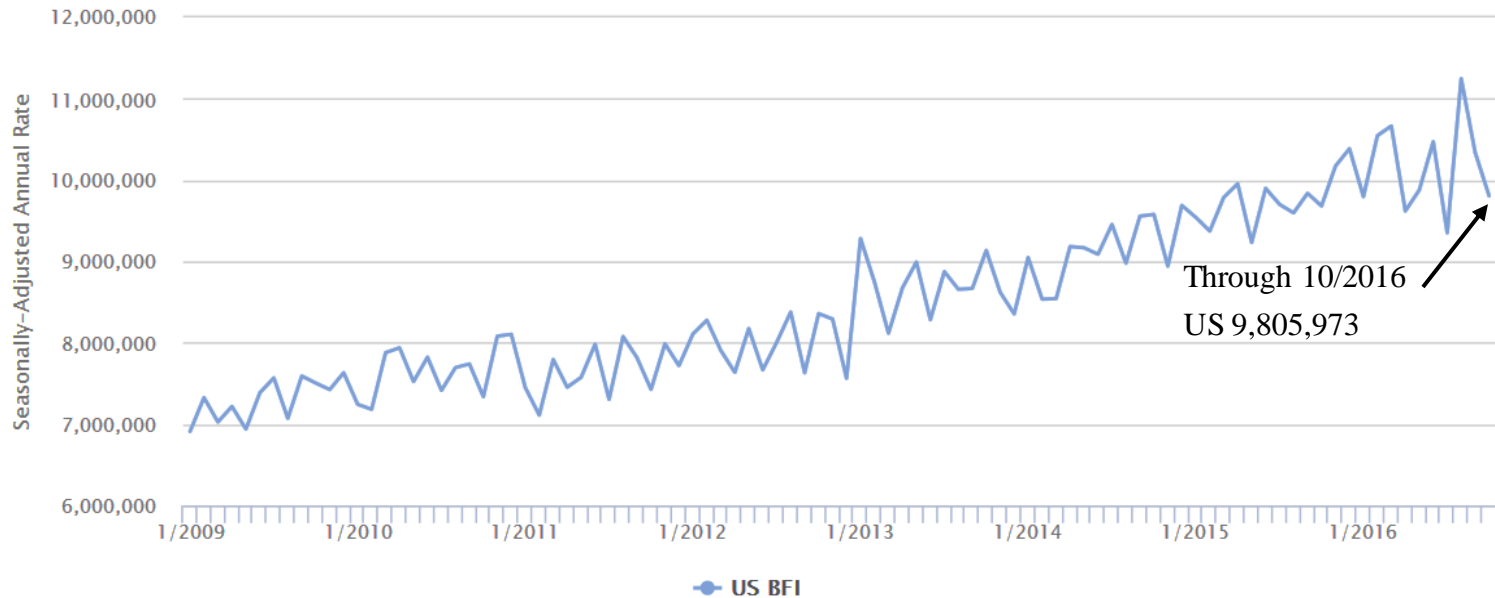
“Residential new construction authorized by building permits in the United States in October were at a seasonally-adjusted annual rate of 1,310,828. This is 2% below the revised September rate of 1,335,376 and is 11% above the revised October 2015 estimate of 1,179,763. BuildFax reports on total new 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 October 2016 are estimated as follows: Northeast, 67,500 (down 3% from September and up 92% from October 2015); South, 761,019 (down 1% from September and up 13% from October 2015); Midwest, 219,003 (up 3% from September and down 3% from October 2015); West, 279,573 (down 3% from September and up 9% from October 2015).”

# Private Indicators

BuildFax Residential Remodeling Index (BFI) (through 10/2016)



## BuildFax Residential Remodeling Index

“Residential remodels authorized by building permits in the United States in October were at a seasonally-adjusted annual rate of 9,805,973. This is 5% below the revised September rate of 10,339,033 and is 1% above the revised October 2015 estimate of 9,681,899.”

## Regional Residential Remodeling

“Seasonally-adjusted annual rates of residential remodeling across the country in October 2016 are estimated as follows: Northeast, 834,755 (down 4% from September and up 19% from October 2015); South, 4,837,950 (down 6% from September and up 3% from October 2015); Midwest, 1,828,804 (down 4% from September and down 7% from October 2015); West, 2,360,298 (down 6% from September and up 0% from October 2015).”

# Private Indicators

## October Construction Starts Recede 4 Percent

“New construction starts in October decreased 4% to a seasonally adjusted annual rate of \$678.9 billion, settling back from the elevated amount that was reported in September, according to Dodge Data & Analytics. Nonresidential building retreated from its brisk September pace, which was this sector’s strongest volume so far in 2016. October’s level for nonresidential building was still healthy compared to what’s been reported for much of 2016 – while down 12% from its average for August and September, it remained 15% above its lackluster average for this year’s first seven months. Residential building in October showed moderate growth, with contributions from both single family and multifamily housing. Nonbuilding construction in October edged up slightly, as an increase for public works offset diminished activity for electric utilities/gas plants.

After a sluggish second quarter, the pace of construction starts picked up during the third quarter, and on this basis October is at least maintaining recent improvement. While there was concern earlier in 2016 that the often hesitant expansion for construction could be stalling, the generally stronger activity in August, September, and now October eases those concerns. Furthermore, the year-to-date comparisons have strengthened as 2016 has proceeded, with total construction starts now down just 1% through the first ten months of this year. This compares with the 3% decline at the nine-month mark, the 7% decline at the eight-month mark, and the 11% decline at the seven-month mark. Aside from stronger activity during the most recent three months, the year-to-date comparisons are benefitting from last year’s pattern for total construction starts, which showed weaker activity in the second half. The first half of 2015 had been lifted by 13 very large projects valued each at \$1 billion or more, while last year’s second half saw only three such projects reach the construction start stage.” – Robert Murray, Chief Economist, McGraw Hill Construction

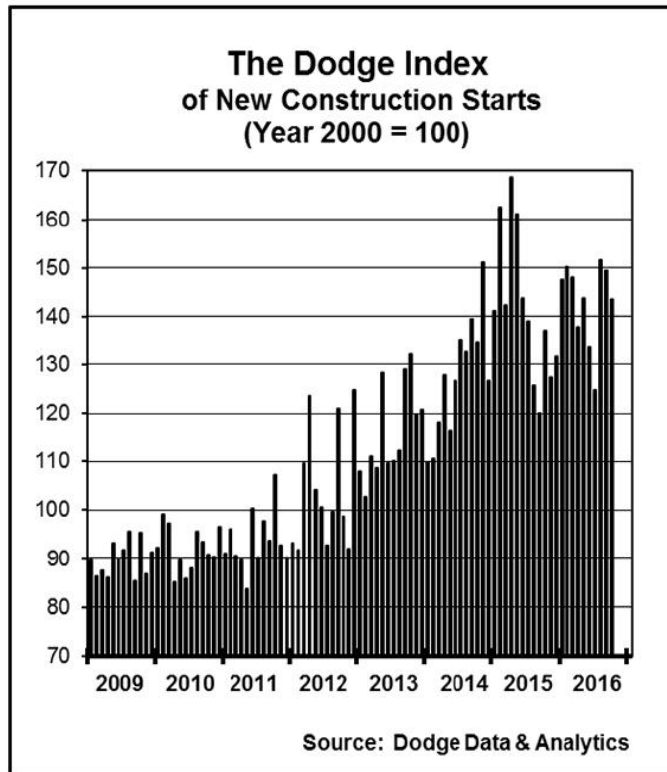
# Private Indicators

“**Residential building**, at \$289.6 billion (annual rate), grew 6% in October. Single family housing advanced 6%, strengthening after a 3% decline in September. By geography, single family housing in October showed increases in all five major regions – the South Central, up 10%; the Midwest, up 9%; the Northeast, up 6%; the West, up 4%; and the South Atlantic, up 3%. Multifamily housing in October climbed 5%, strengthening moderately after an 18% slide in September. There were 11 multifamily projects valued at \$100 million or more that reached groundbreaking in October (compared to five in September)... .

On balance, the current year is turning out to be one where the overall level of construction starts is at least holding steady. Supportive elements are moderate job growth, generally healthy market fundamentals for commercial real estate, and the funding coming from the state and local bond measures passed in recent years. Going forward, the continued expansion for construction should be helped by the November 2016 passage of such bond measures as the \$9 billion Proposition 51 in California for school construction, and the emphasis of the incoming Trump Administration on increased spending for infrastructure.” – Robert Murray, Chief Economist, McGraw Hill Construction

# Private Indicators

## October 2016 Construction Starts



## October 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>October 2016</u>	<u>September 2016</u>	<u>% Change</u>
Nonresidential Building	\$236,854	\$282,567	-16
Residential Building	289,555	273,709	+6
Nonbuilding Construction	<u>152,441</u>	<u>150,341</u>	<u>+1</u>
Total Construction	\$678,850	\$706,617	-4

#### The Dodge Index

Year 2000=100, Seasonally Adjusted

October 2016.....144

September 2016...149

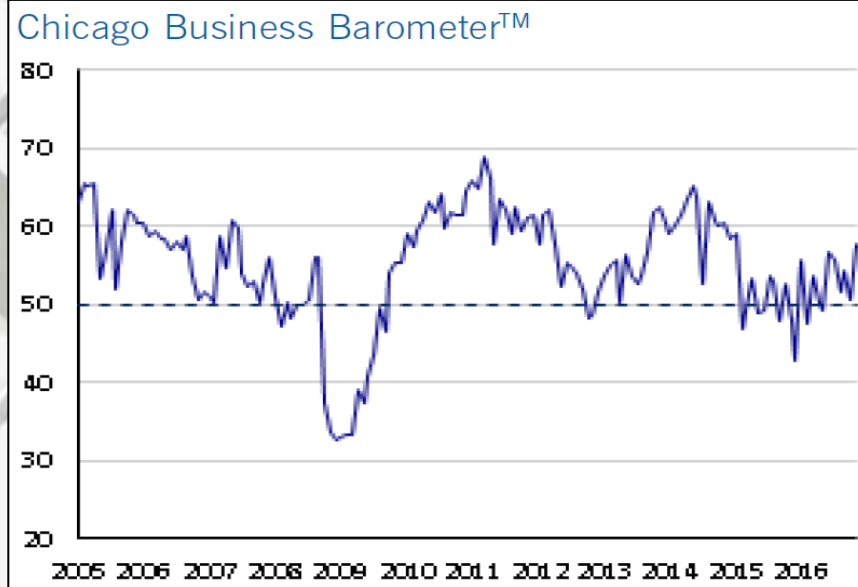
#### Year-to-Date Construction Starts

Unadjusted Totals, in Millions of Dollars

	<u>10 Mos. 2016</u>	<u>10 Mos. 2015</u>	<u>% Change</u>
Nonresidential Building	\$188,172	\$189,023	-0-
Residential Building	241,537	229,550	+5
Nonbuilding Construction	<u>142,261</u>	<u>160,477</u>	<u>-11</u>
Total Construction	\$571,970	\$579,050	-1
Total Construction, excluding manufacturing buildings and electric utilities/gas plants	\$519,487	\$503,306	+3



# Private Indicators



## October Chicago Business Barometer Up 7.0 Points to 57.6

“The MNI Chicago Business Barometer rose 7.0 points to 57.6 in November from 50.6 in October, the highest since January 2015.

The increase added momentum to the fourth quarter, with the three-month trend ascending to 54.1 this month, up from 52.1 in the three months to October.” – Shaily Mittal, Senior Economist, MNI Indicators

## New Orders Increase to the Highest Since June

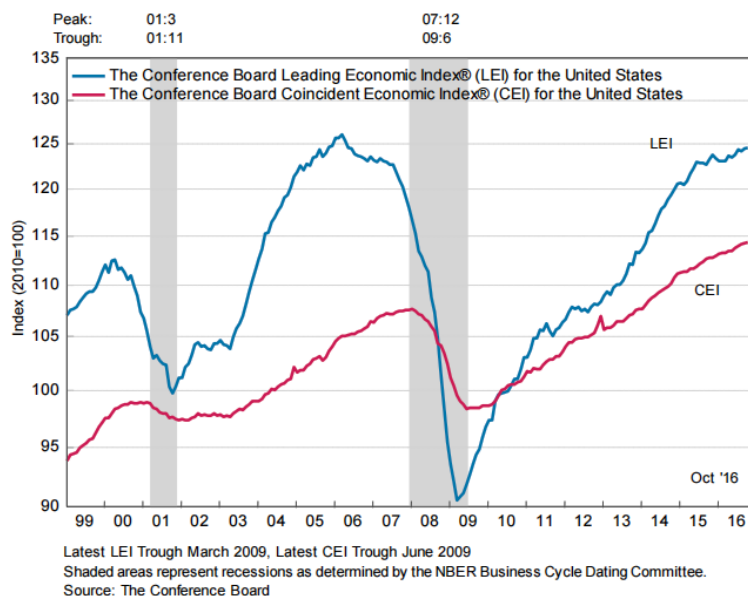
“The rise in New Orders contributed the most to the increase in the Barometer, increasing 10.7 points to 63.2 in November. Production also rose, regaining virtually all of October’s fall. Order Backlogs jumped out of contractionary territory, where it had been over the past three months, while Supplier Deliveries saw a smaller rise. Despite higher orders and output, demand for labor fell. Employment slipped back into contraction, making last month’s recovery short-lived.

The November reading for the Business Barometer marked the sixth month of expansionary business activity in the US. Strength in orders, a recovery in oil prices and the stronger dollar have all impacted businesses with varying degrees. Respondents to our survey also remain optimistic about business activity in 2017 although the new government’s policies and the Fed’s approach towards monetary tightening would impact the course of business activity over the next year.” – Shaily Mittal, Senior Economist, MNI Indicators

# Private Indicators

**The Conference Board Leading Economic Index® for the U.S.** increased 0.1 percent in October to 124.5 (2010 = 100), following a 0.2 percent increase in September, and a 0.2 percent decline in August.

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



“The U.S. LEI increased in October for a second consecutive month. Although its six-month growth rate has moderated, the index still suggests that the economy will continue expanding into early 2017. The interest rate spread and average weekly hours were the main drivers of October’s improvement, helping to offset some of the weaknesses in claims for unemployment insurance and new orders.” – 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 0.1 percent in October to 124.5 (2010 = 100), following a 0.2 percent increase in September, and a 0.2 percent decline in August.

The Conference Board Coincident Economic Index® (CEI) for the U.S. increased 0.1 percent in October to 114.3 (2010 = 100), following a 0.1 percent increase in September, and a 0.2 percent increase in August.

The Conference Board Lagging Economic Index® (LAG) for the U.S. increased 0.2 percent in October to 122.9 (2010 = 100), following a 0.2 percent increase in September, and a 0.3 percent increase in August.

# Private Indicators

## The Conference Board Economic Forecast for the U.S. Economy

### The U.S. Economic Forecast

THE CONFERENCE BOARD ECONOMIC OUTLOOK, 2016-2017  
Percentage Change, Seasonally Adjusted Annual Rates  
(except where noted)

	2017					2015 ANNUAL	2016 ANNUAL	2017 ANNUAL
	III Q*	IV Q	I Q	II Q	III Q			
Real GDP	2.9	1.7	2.1	1.8	1.8	2.6	1.5	2.0
Real Consumer Spending	2.1	2.3	2.2	2.1	2.0	3.2	2.6	2.3
Residential Investment	-6.2	5.8	5.0	5.0	4.2	11.7	4.3	2.7
Real Capital Spending	1.1	1.4	1.8	2.2	2.5	2.1	-0.5	1.8
Exports	10.0	-2.0	2.7	2.4	2.3	0.1	0.5	2.5

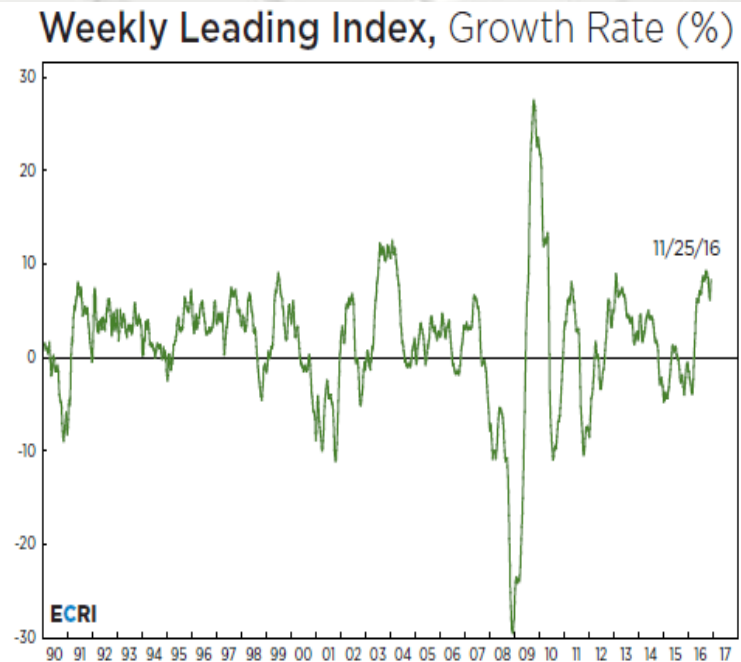
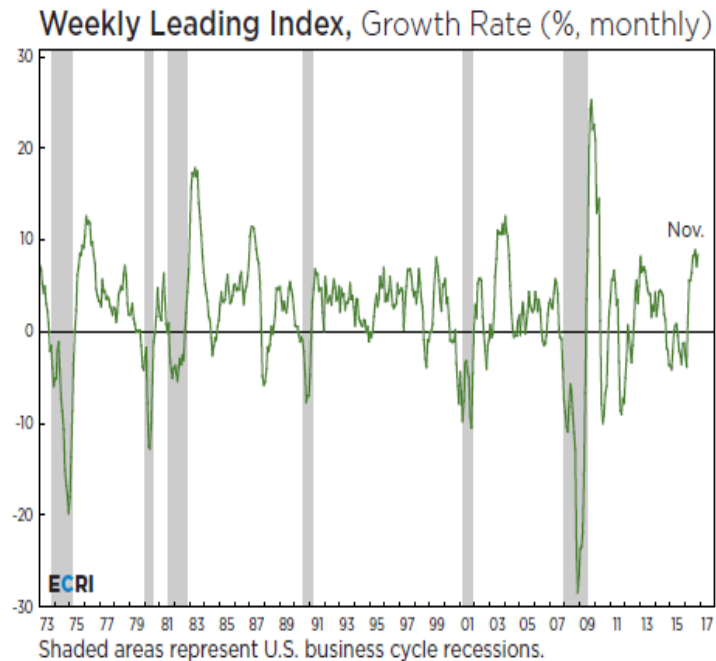
\* Actual data

### Modest economic growth increasingly kept in check by supply constraints rather than slow demand

“The US economy expanded at 2.9 percent in the third quarter, following a disappointing 1.1 percent annualized growth rate in the first half of 2016. The 2.9 percent pace, which is above trend growth, resulted from likely one-time gains in trade (driven by a short-term surge in soybeans) and an inventory build after the run off of the past five quarters. The underlying trend of consumption and investment remained modest, growing at only 1.4 percent annualized rate.

The fourth quarter will mostly depend on consumer’s willingness to spend this holiday season. Business investment will likely remain weak given the downside risks from subdued domestic demand, global trade and geopolitical events even as the tension of US presidential elections resides. Net trade will likely hold back growth as soybean exports reverse. The Fed is widely expected to raise rates in December, given where employment and inflation are. And it might even be willing to run the economy hot for some time with very gradual continued ‘normalizing’ of rates next year. Oil prices and import prices are likely to temporarily push the top line above the Fed’s 2 percent target for a brief period. Supply-constrained job growth and continued low productivity gains will tamp down economic growth and corporate profits in 2017.” – Bart van Ark, Executive Vice President, Chief Economist & Chief Strategy Officer, The Conference Board

# Private Indicators



## U.S. WLI Monthly Rose

The level of the monthly WLI rose to 138.9 from 137.2.

The growth rate of the monthly WLI increased to 8.5% from 7.2%.

“The U.S. Weekly Leading Index (WLI) edged up to 142.1 from 141.8. The [weekly] growth rate increased to 8.3% from 7.2%.” – Lakshamn Achuthan, Chief Operations Officer, ECRI

# Private Indicators

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

January 2010–November 2016

■ % of population employed full time for an employer



Rates shown are for November of each year

GALLUP DAILY

### GALLUP DAILY

REAL UNEMPLOYMENT  
Department of Labor (U-6)

9.3% -0.2

GALLUP GOOD JOBS  
Percent of Adult Population

45.4% -0.1

ENGAGED AT WORK

34.4% +0.1

ECONOMIC CONFIDENCE

11 -1

## U.S. Gallup Good Jobs Dips to 45.7% in November

- “Gallup Good Jobs rate is the highest recorded for any November
- Unemployment is the lowest in Gallup's trend, at 4.9%
- Workforce participation falls to 67.5%

The Gallup Good Jobs (GGJ) rate in the U.S. was 45.7% in November, down from 46.4% in October. However, the November estimate is nearly a full percentage point higher than the 44.9% recorded in November 2015 and is higher than any GGJ rate recorded for the month of November since Gallup began tracking this measure in 2010.” – Ben Ryan, Consultant Specialist, Gallup

# Private Indicators

## November 2016 Manufacturing ISM® Report On Business®

November PMI® at 53.2%

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

“Economic activity in the **manufacturing sector** expanded in November, and the **overall economy** grew for the 90th consecutive month, say the nation’s supply executives in the latest **Manufacturing ISM® Report On Business®**.

The November PMI® registered 53.2 percent, an increase of 1.3 percentage points from the October reading of 51.9 percent.

The New Orders Index registered 53 percent, an increase of 0.9 percentage point from the October reading of 52.1 percent.

The Production Index registered 56 percent, 1.4 percentage points higher than the October reading of 54.6 percent.

The Employment Index registered 52.3 percent, a decrease of 0.6 percentage point from the October reading of 52.9 percent.

Inventories of raw materials registered 49 percent, an increase of 1.5 percentage points from the October reading of 47.5 percent.

The Prices Index registered 54.5 percent in November, the same reading as in October, indicating higher raw materials prices for the ninth consecutive month.

Comments from the panel cite increasing demand, some tightness in the labor market and plans to reduce inventory by the end of the year.” – Bradley Holcomb, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee

# Private Indicators

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

**November NMI® at 54.8%**

**Business Activity Index at 61.7%; New Orders Index at 57.0%;**

**Employment Index at 58.2%**

“Economic activity in the **non-manufacturing sector** grew in November for the 82nd consecutive month, say the nation's purchasing and supply executives in the latest **Non-Manufacturing ISM® Report On Business®**.

The NMI® registered 57.2 percent in November, 2.4 percentage points higher than the October reading of 54.8 percent. This represents continued growth in the non-manufacturing sector at a faster rate. This is the 12-month high, and the highest reading since the 58.3 registered in October of 2015.

The Non-Manufacturing Business Activity Index increased to 61.7 percent, 4 percentage points higher than the October reading of 57.7 percent, reflecting growth for the 88th consecutive month, at a faster rate in November.

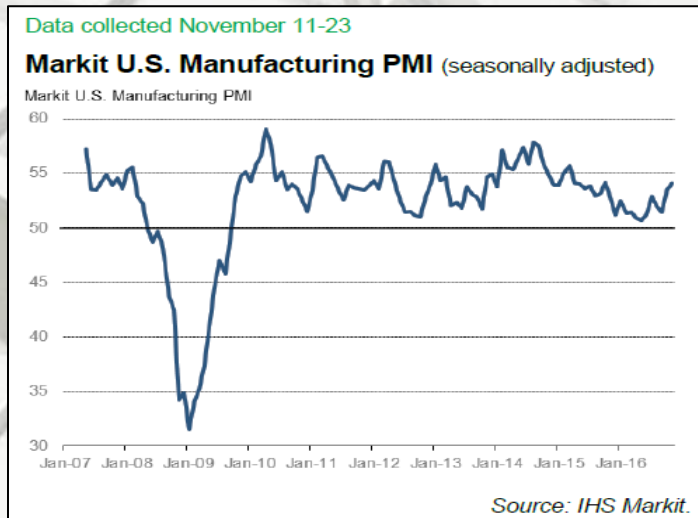
The New Orders Index registered 57 percent, 0.7 percentage point lower than the reading of 57.7 percent in October.

The Employment Index increased 5.1 percentage points in November to 58.2 percent from the October reading of 53.1 percent.

The Prices Index decreased 0.3 percentage point from the October reading of 56.6 percent to 56.3 percent, indicating prices increased in November for the eighth consecutive month at a slightly slower rate.

According to the NMI®, 14 non-manufacturing industries reported growth in November. The Non-Manufacturing sector rebounded after a slight cooling-off in October. The majority of respondents' comments are positive about business conditions and the direction of the overall economy.” – 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™ Strongest rate of new order growth since March 2014

“At 54.1 in November, the final Markit U.S. Manufacturing Purchasing Managers’ Index™ (PMI™) picked up from 53.4 in October and signalled the strongest improvement in business conditions for just over one year. The latest reading was up from the earlier ‘flash’ reading (53.9) and the joint-highest seen since March 2015, thereby signalling a robust improvement in manufacturing performance.”

“November data pointed to a sustained acceleration in U.S. manufacturing growth, with production volumes and incoming new work both rising at the fastest pace since March 2015. Stronger demand patterns, especially from domestic clients, resulted in greater input buying and increased payroll numbers across the manufacturing sector. Meanwhile, factory gate charges increased only slightly in November amid a slowdown in cost inflation from October’s two-year high.

A sharp and accelerated rise in new business volumes was reported by manufacturing companies during November. This was mainly driven by domestic sales, as new orders from abroad increased only marginally since the previous month, with survey respondents citing competitive pressures and the strong dollar. Anecdotal evidence suggested that improving U.S. economic conditions and greater confidence among clients had led to rising levels of new work.

The final PMI numbers have come in even stronger than the preliminary flash reading, adding to signs of buoyant business conditions in the US manufacturing sector. Both production and order books are growing at impressive rates, fuelled predominantly by rising domestic demand for goods from both consumers and businesses. Companies are also rebuilding stock levels, suggesting the recent inventory drag is easing. “– Chris Williamson, Chief Economist, Markit®



# Private Indicators

## Service sector business activity (seasonally adjusted)



## Markit U.S. Services PMI™

### New business growth accelerates to 12-month high in November

- “Robust and accelerated rise in new work
- Business activity growth holds close to October’s 11-month peak
- Job creation edges up again in November” – Markit®

“The seasonally adjusted final **Markit U.S. Services Business Activity Index** registered 54.6 in November, to remain above the 50.0 no-change value for the ninth consecutive month. Although the latest reading was fractionally lower than in October (54.8), the rate of growth remained stronger than at any time in the first half of 2016. Survey respondents noted that improved client confidence and a favourable domestic economic backdrop had helped to boost business activity in November.

The US economy is seeing robust growth, with the business surveys pointing to encouragingly solid rates of expansion in both manufacturing and services. Looked at together, the two PMI surveys point to the pace of economic growth holding steady on October’s 11-month high, indicating that GDP is set to rise by 0.6% (2.5% annualized) in the fourth quarter. Both sectors are benefitting primarily from stronger domestic demand.

The solid business survey readings not only add to the widely held view that the Fed is near certain to raise interest rates at its December meeting, but also raise the prospect of more aggressive than previously anticipated interest rate hikes in 2017.” – Chris Williamson, Chief Economist, Markit®

# Private Indicators

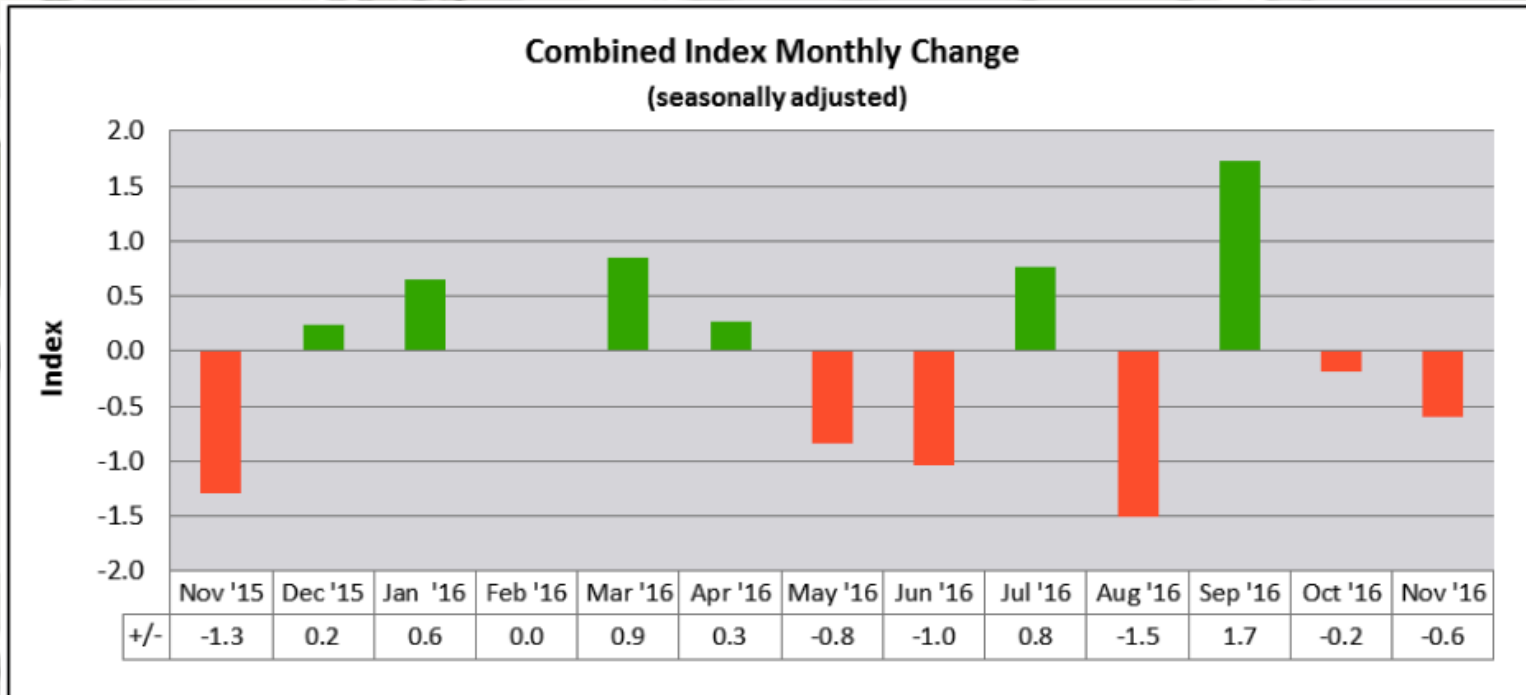
## **National Association of Credit Management – Credit Managers’ Index NACM’s Credit Managers’ Index Expands, but Data Shows Mixed Signals**

“The latest NACM Credit Managers’ Index (CMI) for November is mostly on track with prior months' readings, with post-election jitters sending some mixed signals of enthusiasm in some sectors and trepidation in others. The interesting dynamic is found in comparing the favorable factors with the unfavorable ones, however. Overall favorable factors improved to 60.3, back to the level seen in September when it hit 59.5. The score for the unfavorable factors caused the most concern as it has fallen to 48 from 50.3. Overall, the CMI score is slightly down at 52.9 from October’s reading of 53.5, but still remains in expansion territory (readings over 50).

The approaching holidays have affected the retail sector as consumers have been active but targeting discounted items that bring in lower profits. The manufacturing sector has been cautious as companies girded for major changes to the industry in the run-up to the election, no matter who won. The service sector stayed mostly consistent with previous months’ readings as sales increased, new credit applications fell and dollar collections improved. The sense is that credit requests tend to flag a little this time of year as retailers have already done most of their ordering. Now, they will be more likely to spend to catch up with the credit they already have.

Post-election, there is still trepidation in some sectors and enthusiasm in others. The data from the CMI this month reflects this shifting attitude, but there is an additional caveat to be aware of. The response to the survey was less robust than it has been in past months. This creates some concern that readings might be skewed as compared with where they have been and might be in future months.” – Chris Kuehl, Ph.D., Economist, NACM

# Private Indicators



<b>Combined Manufacturing and Service Sectors (seasonally adjusted)</b>	Nov '15	Dec '15	Jan '16	Feb '16	Mar '16	Apr '16	May '16	Jun '16	Jul '16	Aug '16	Sep '16	Oct '16	Nov '16
Sales	56.0	55.0	55.8	56.8	59.2	59.8	56.7	56.9	60.0	53.7	57.9	56.9	61.8
<b>Index of unfavorable factors</b>	<b>49.2</b>	<b>50.3</b>	<b>50.3</b>	<b>50.1</b>	<b>50.6</b>	<b>51.6</b>	<b>51.0</b>	<b>49.9</b>	<b>49.2</b>	<b>49.1</b>	<b>49.9</b>	<b>50.3</b>	<b>48.0</b>
<b>NACM Combined CMI</b>	<b>52.6</b>	<b>52.8</b>	<b>53.5</b>	<b>53.5</b>	<b>54.3</b>	<b>54.6</b>	<b>53.8</b>	<b>52.7</b>	<b>53.5</b>	<b>52.0</b>	<b>53.7</b>	<b>53.5</b>	<b>52.9</b>

# Private Indicators

## Small Business Optimism Index Increases 3.5 to 98.4

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



**NFIB**.com/sboi

## November 2016 Report: Small Business Economic Trends

“Small business optimism remained flat leading up to Election Day and then rocketed higher as business owners expected much better conditions under new leadership in Washington, according to a special edition of the monthly NFIB Index of Small Business Optimism...”

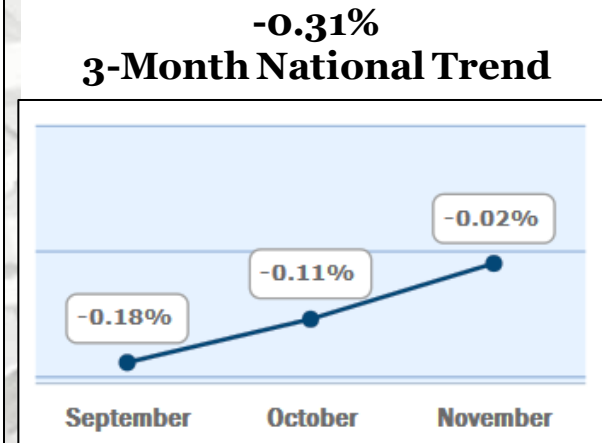
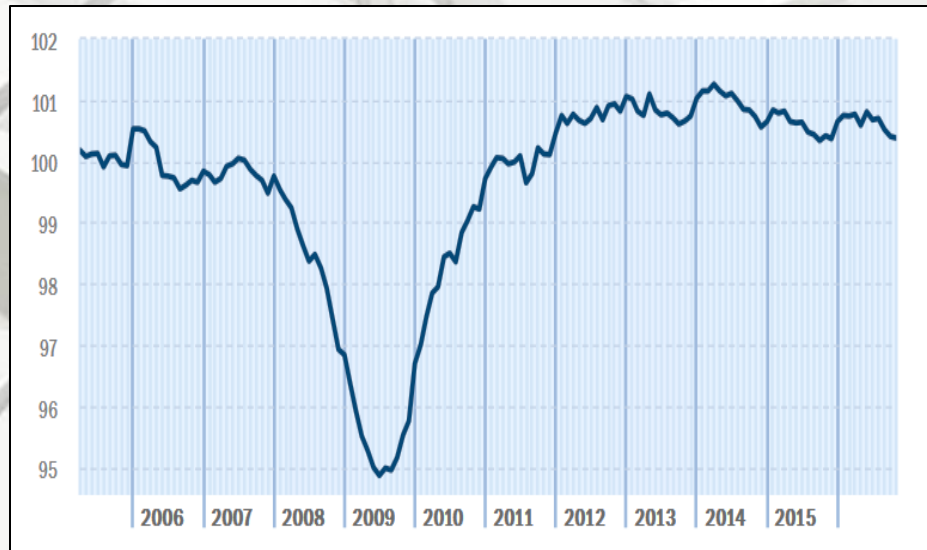
### **Small Business Optimism Index finds dramatically different attitudes among small business owners before and after election**

“The full November index, calculated as it is every month, improved 3.5 points to 98.4, which is just above the 42-year average and only the third time since 2007 that it has broken into above average territory.”

“This month we bifurcated the data to measure the results before and after the election. The November index was basically unchanged from October’s reading up to the point of the election and then rose dramatically after the results of the election were known. Even without separating the data, the November results paint a starkly different picture than what we’ve seen in the last 94 month. If higher optimism can be sustained, I expect that in the coming months we’ll see an increase in business activity, such as hiring and expanding,” – William Dunkelberg, Chief Economist, National Federation of Independent Business

“What a difference a day makes. Before Election Day small business owners’ optimism was flat, and after Election Day it soared.” – Juanita Duggan, President and CEO, National Federation of Independent Business

# Private Indicators



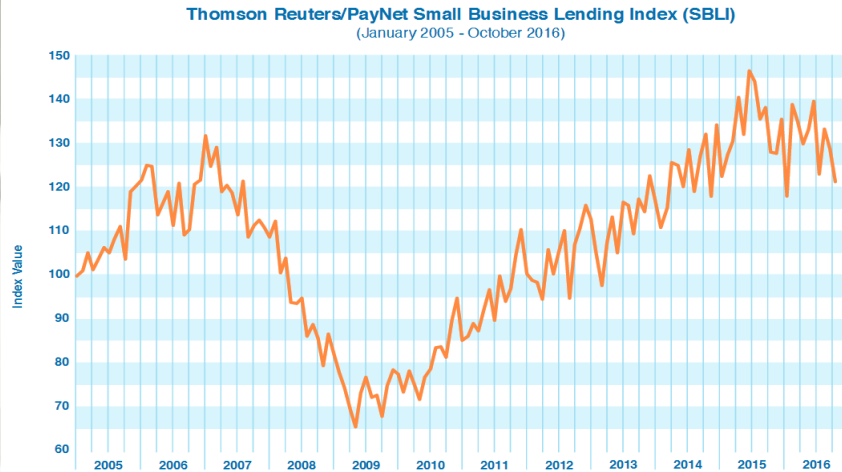
## **The Paychex | IHS Small Business Jobs Index The national index has declined for three straight months, from 100.70 to 100.38 in November**

“At 100.38, the Paychex | IHS Small Business Jobs Index settled at a level consistent with this time a year ago, after three consecutive months of decline. The recent slowdown in job growth flattened from October to November, with the index decreasing just 0.02 percent. Despite the index’s recent declines, small businesses have experienced positive job gains for more than 60 consecutive months, dating back to 2011. With one month remaining in 2016, the national index has averaged 100.64, just above 2015’s average of 100.59.”

“At 100.38, the Paychex | IHS Small Business Jobs Index was essentially unchanged from the previous month and from November 2015, representing consistent small business job growth rates from this time a year ago.” – James Diffley, Chief Regional Economist, HIS Markit

# Private Indicators

## Thomson Reuters/PayNet Small Business Lending Index U.S. small business borrowing falls, delinquencies tick up: PayNet



### Small Business Lending Index: **121.3**

“The Thomson Reuters/PayNet Small Business Lending Index fell to 121.3 from a downwardly revised 128.8 in September. Measured from a year earlier, it was the fifth straight monthly decline, with the index at its lowest point since January.”

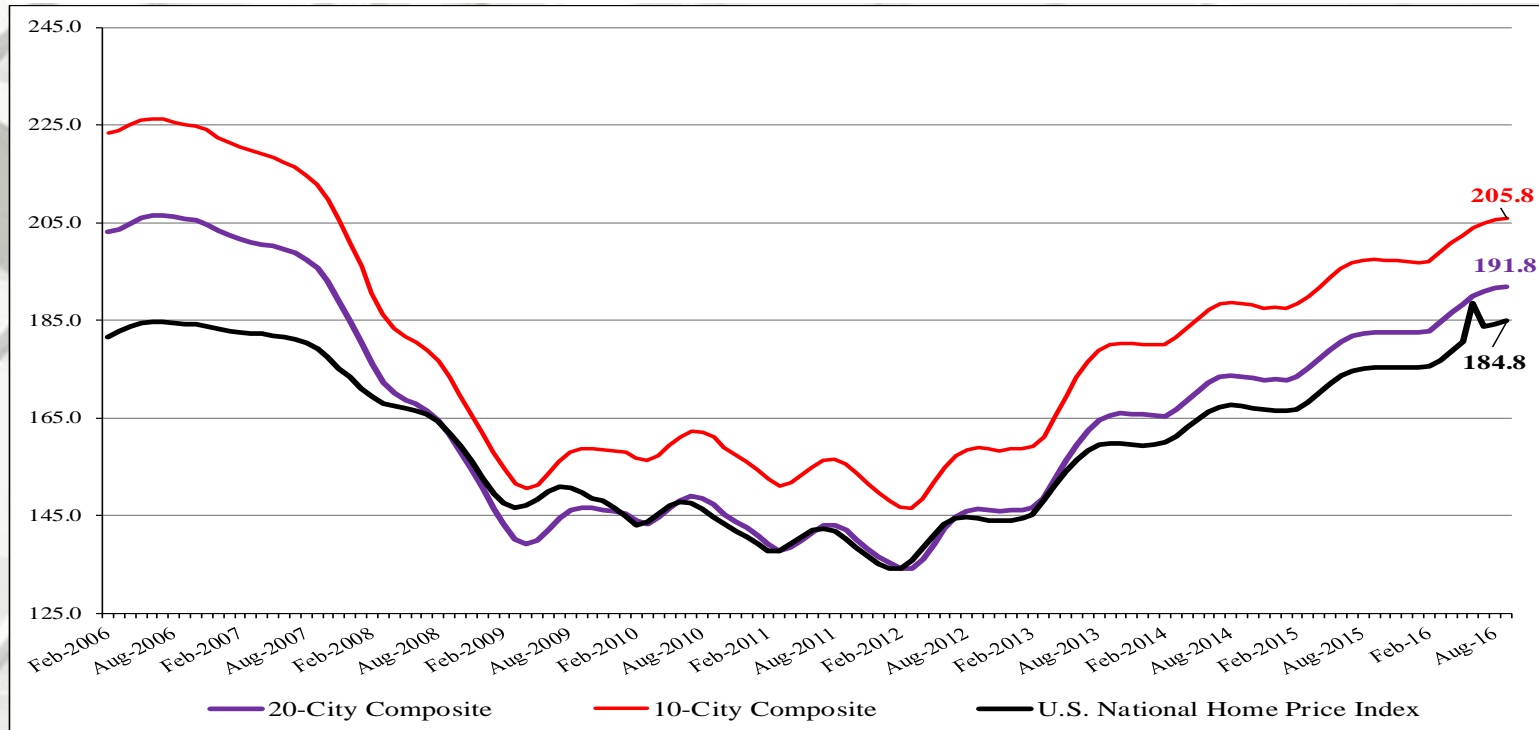
“Borrowing by small U.S. firms slipped in October to the lowest since January, and the percentage of firms late on repaying existing loans rose to its highest in nearly four years, data released on Thursday showed.

Companies also struggled to pay back existing debts, PayNet data showed. Loans more than 30 days past due rose in October to 1.68 percent, the seventh straight monthly increase and the highest delinquency rate since November 2012.

We are getting more clarity on the direction of policy, a positive point for small business. A reduction in uncertainty will remove some of the funk.” – Bill Phelan, President, PayNet

# Private Indicators

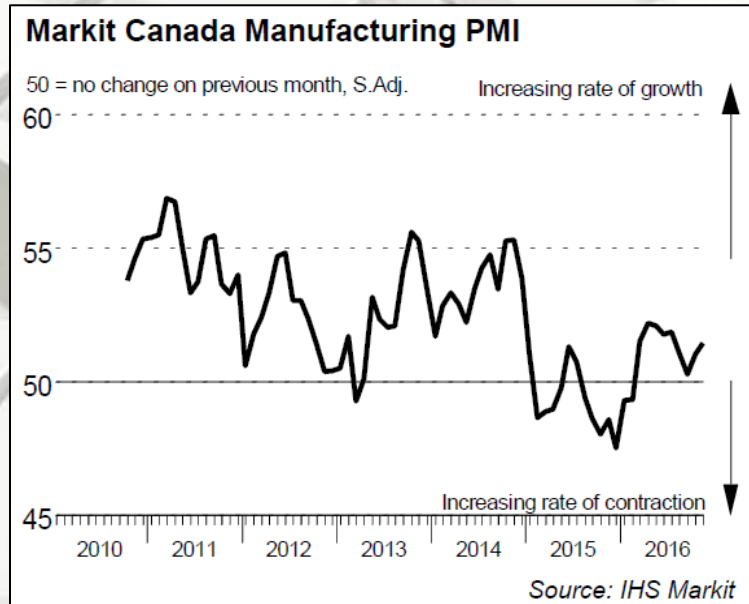
## S&P/Case-Shiller Home Price Indices



### National Index Reaches New High As Home Price Gains Continue

“The new peak set by the S&P Case-Shiller CoreLogic National Index will be seen as marking a shift from the housing recovery to the hoped-for start of a new advance. While seven of the 20 cities previously reached new post-recession peaks, those that experienced the biggest booms -- Miami, Tampa, Phoenix and Las Vegas -- remain well below their all-time highs. Other housing indicators are also giving positive signals: sales of existing and new homes are rising and housing starts at an annual rate of 1.3 million units are at a post-recession peak.” – David Blitzer, Managing Director and Chairman of the Index Committee, S&P Dow Jones

# Private Indicators: Global



## Markit Canada Manufacturing PMI™

### Manufacturing growth picks up to four-month high in November

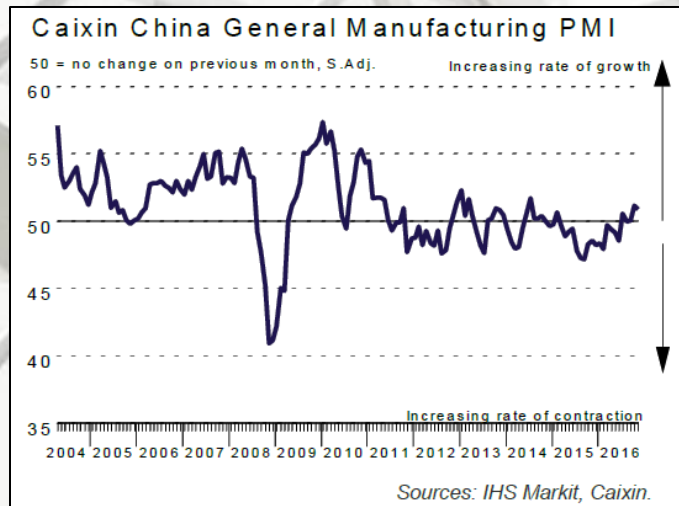
“Canadian manufacturers reported a modest improvement in business conditions during November, driven by a rebound in production volumes and the fastest rise in new work since April. The latest survey also highlighted an upturn in staffing numbers and greater levels of input buying. At the same time, input cost inflation accelerated to its strongest since July 2014, which contributed to the fastest rise in manufacturers’ output charges in two-and-a-half years.”

“The seasonally adjusted **Markit Canada Manufacturing Purchasing Managers’ Index™ (PMI™)** edged up to 51.5 in November, from 51.1 in October, to remain above the neutral 50.0 threshold for the ninth consecutive month. Moreover, the latest improvement in overall business conditions was the strongest recorded since July.

November’s survey reveals a return to growth for manufacturing production and one of the fastest rises in new orders seen since the end of 2015. Improving business conditions reflected greater sales to both domestic and export clients, which contributed to stronger staff hiring among manufacturing firms. Meanwhile, cost pressures intensified in November, with input prices rising at the sharpest pace since July 2014. In contrast to recent months, manufacturers sought to pass through some of the rise in raw material costs, meaning that factory gate prices also increased at the strongest rate since mid-2014.” – Tim Moore, Senior Economist, IHS Markit



# Private Indicators: Global



## Caixin China General Manufacturing PMI™

### Production expands at slightly softer rate in November

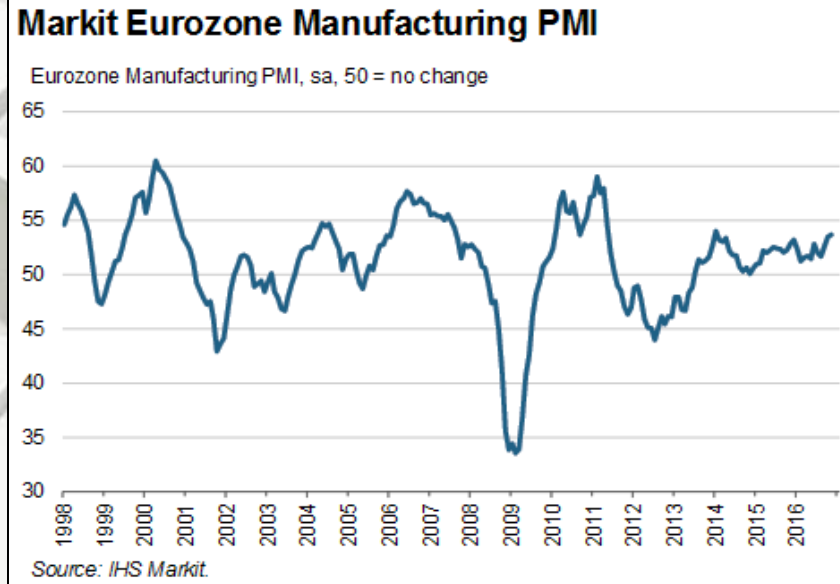
“Chinese manufacturing production continued to expand at a robust pace in November, despite the rate of growth easing since October’s five-and-a-half year peak. At the same time, companies reported a softer expansion of total new orders, while new export work was broadly stable after a slight fall in October. Meanwhile, cost-cutting initiatives underpinned a further fall in staff numbers, though the rate of job shedding was the slowest seen in a year-and-a-half. November also saw a sharp pick up in inflationary pressures, with both input costs and prices charged rising at the fastest rates since early-2011.”

“At 50.9 in November, the seasonally adjusted Purchasing Managers’ Index™ (PMI™) – a composite indicator designed to provide a single figure snapshot of operating conditions in the manufacturing economy – fell from a 27-month high of 51.2 in October, to signal a marginal improvement in overall operating conditions. Nonetheless, the health of the sector has now strengthened in each of the past three months, which marks the longest period of improvement since late-2014.

Index readings for both output and new orders declined, but those tracking input and output prices rose at a faster pace to hit their highest levels in five years, pointing to further intensification of inflationary pressure.

The Chinese economy continued to improve in November, although it lost some momentum compared to the previous month. Inventory and employment data also showed the foundation of growth is not solid yet and investors have to remain vigilant about the risk of a downturn in coming months.” – Dr. Zhengsheng Zhong, Director of Macroeconomic Analysis , CEBM Group

# Private Indicators: Global



## Markit Eurozone Manufacturing PMI® Eurozone Manufacturing PMI at highest level since January 2014

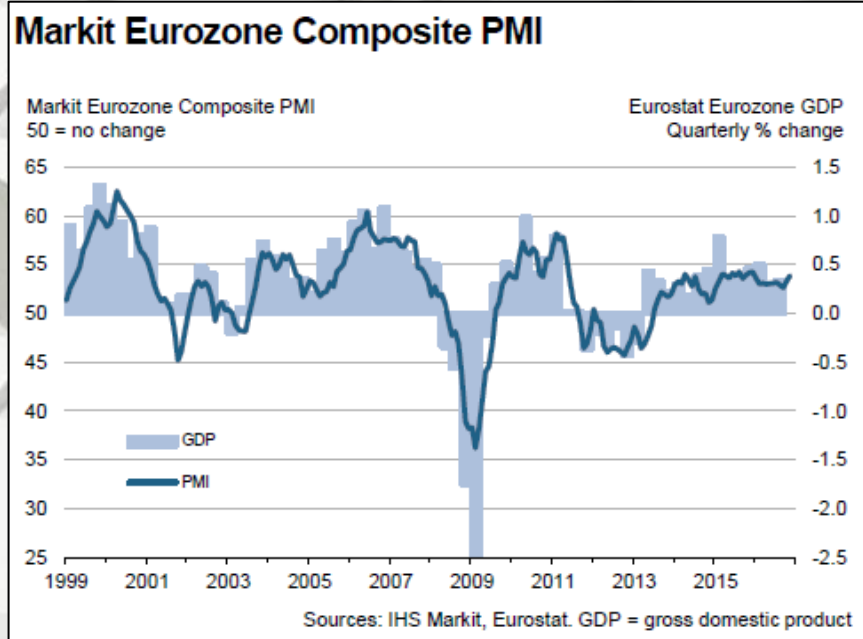
“The final Markit Eurozone Manufacturing PMI® rose to a 34-month high of 53.7 in November, up from 53.5 in October and unchanged from the earlier flash estimate. The PMI signalled expansion for the forty-first successive month, extending its current record sequence above the stagnation mark of 50.0.”

“The upturn in the eurozone manufacturing sector continued to gather pace in November. Operating conditions improved to the greatest degree since the start of 2014, underpinned by further growth in production volumes, rising staffing levels and stronger inflows of new work.

For a region suffering double-digit unemployment, there was also good news on the jobs front. The rate of factory job creation held close to October’s five-and-a-half-year high as firms boosted operating capacity in line with stronger demand.

Eurozone manufacturers are enjoying the best improvement in business conditions for almost three years, as the benefits of a weaker currency and strengthening demand helped firms brush off political worries. The November survey provided firm evidence that the weaker euro is providing a meaningful stimulus to manufacturing, leading to greater import substitution and higher exports. New export orders\* for manufactured goods rose at the fastest rate since February 2014.” – Chris Williamson, Chief Business Economist, Markit®

# Private Indicators: Global



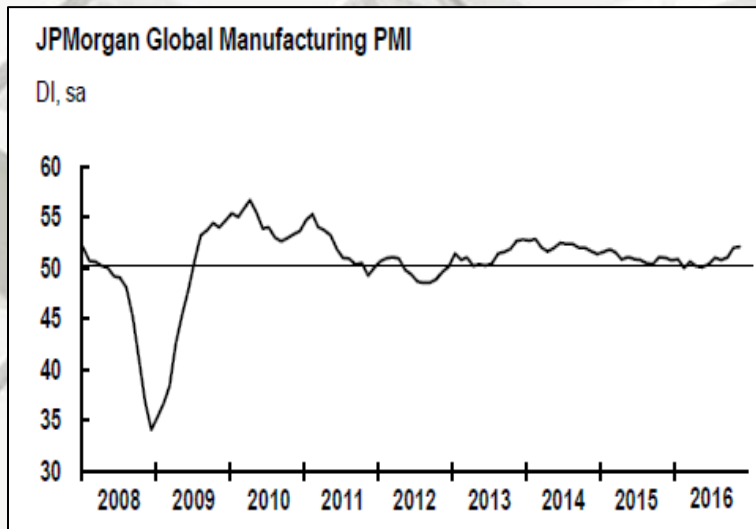
## Markit Eurozone Composite PMI® Eurozone growth accelerates to 11-month high in November

“The rate of eurozone economic expansion accelerated to its highest in the year to date during November. This was highlighted by the final Markit Eurozone PMI® Composite Output Index posting 53.9, slightly below the earlier flash estimate of 54.1 but still the best reading since December 2015.”

“Growth of eurozone services output accelerated to an 11-month high in November, underpinned by the steepest increase in new orders since January. Business optimism dipped slightly from October’s high, however, to a level below the long run survey average.

The Eurozone PMI indicated faster economic growth in November. The improvement is enough to signal an acceleration of GDP growth to 0.4% in the fourth quarter. The near-term outlook also looks promising. Rather than fretting about political risk, companies appear to be gearing up for further expansion. Employment is rising at one of the fastest rates seen over the past five years. Employers’ appetite to hire is being whetted by a further accumulation of unfinished work. Backlogs of uncompleted orders showed the largest rise for five-and-a-half years.” – Chris Williamson, Chief Business Economist, Markit®

# Private Indicators: Global



## JP Morgan Global Manufacturing PMI™ Manufacturing PMI edges higher despite rising cost pressures

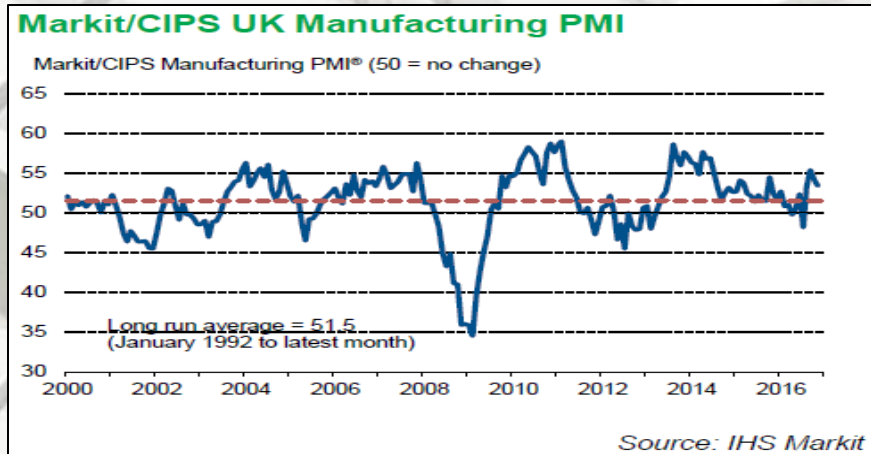
“Operating conditions in the global manufacturing sector continued to improve during November. The J.P. Morgan Global Manufacturing PMI™ – a composite index produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – rose to a 27-month high of 52.1, up slightly from October’s 52.0.”

“Headline PMI readings signalled expansion in 22 out of the 30 nations for which November data were available. Growth accelerated to a 13-month high in the US and 34-month record in the euro area. Expansions continued in China, Japan, India and the UK, but rates of increase all slowed. Growth was also registered in Russia and Taiwan, whereas contractions were seen in South Korea Indonesia, Thailand, Turkey, Malaysia, Brazil and Greece.

Global manufacturing production increased for the sixth successive month in November, under-pinned by rising levels of incoming new business. New orders expanded for the forty-seventh month in a row, with the pace of growth accelerating to the strongest since August 2014.

The Global Manufacturing PMI edged up again in November, reaching its highest level since August 2014. Output growth may have eased slightly, but the stronger trends in new order inflows and backlogs of work suggest that production will continued to rise at a solid pace in the near-term. Prices pressures are rising, however, as input cost inflation hit a five-year high to drive up average factory gate selling prices for a third month running.” – Rob Dobson, Senior Economist, IHS Markit

# Private Indicators: Global



## Markit/CIPS UK Manufacturing PMI™

“The seasonally adjusted Markit/CIPS Purchasing Managers’ Index® (PMI®) posted 53.4 in November, down further from September’s 27-month high, but above its long-run average of 51.5. The PMI has remained above the neutral 50.0 mark for four successive months.”

### Weak exchange rate continues to drive up price pressures at UK manufacturers

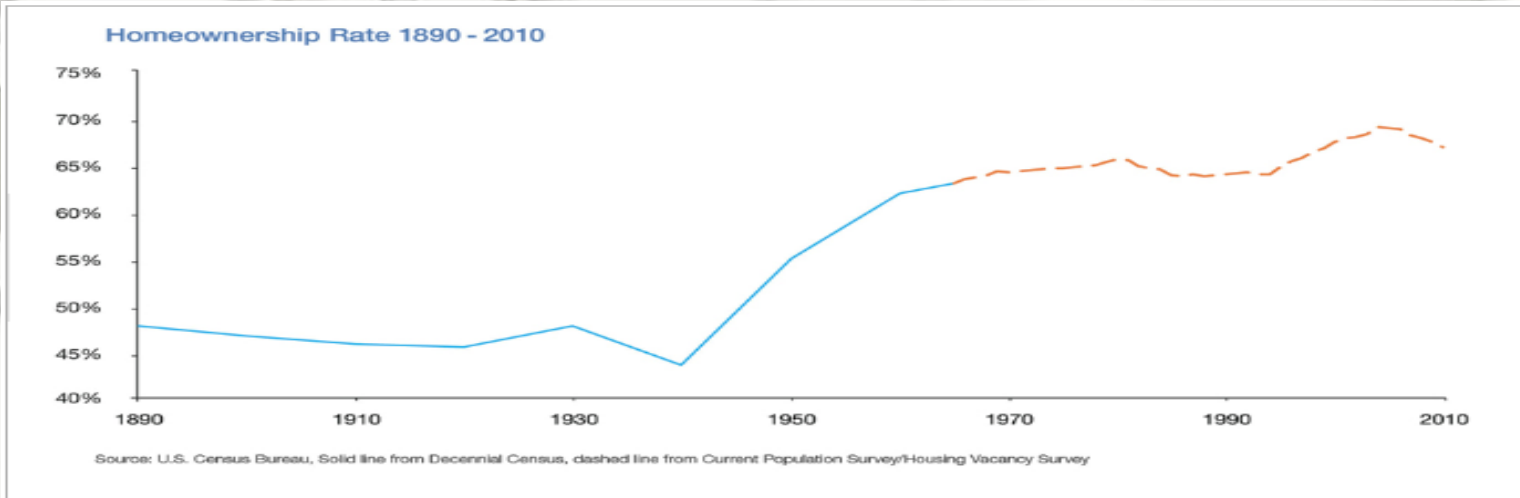
“The upturn in the UK manufacturing sector extended into its fourth month running during November. Rates of expansion for output and new orders both remained solid, despite growth easing further from the highs reached in September. There were also signs that the weak exchange rate was having a continued sharp cost inflationary impact, leading to higher selling prices at the factory gate.

The latest PMI indicates that the UK manufacturing sector remained in good health during November. Although the recent growth spurt showed further signs of slowing, the pace of expansion is still solid and above its long-term trend. This should be sufficient to ensure manufacturing is a positive contributor to fourth quarter GDP.

Scratching beneath the surface of the data shows that rising consumer demand and business-to-business spending is helping manufacturing to grow at a robust clip. However, the trend in new orders for investment goods such as plant and machinery has eased sharply so far in the fourth quarter, and will need to improve if investment is to continue to contribute positively to economic growth” – Rob Dobson, Director & Senior Economist, IHS Markit

# Demographics

## Homeownership: Where We Are Now, Where We Are Headed



### Where we are now

“The second half of the 20th century brought with it remarkable growth in homeownership. For the first four decades of the century, homeownership rates were relatively stable and remained below 50 percent, dropping as low as 44 percent in 1940. Following World War II, the rate of homeownership surged, propelled by the GI Bill, the institutionalization of the 30-year fixed-rate mortgage, and the creation of FHA, VA, and the GSEs. By 1965, the rate reached 63 percent, and by 1980 homeownership stood at just over 65 percent. Starting in 1995, the homeownership rate took off on another ten-year tear until it peaked at 69 percent in 2004.

Then came the housing crisis of the mid-2000s. Millions of households lost their homes to foreclosure or short sale and became renters. The homeownership rate dropped 0.4 percentage points during the Great Recession and another 3.9 percentage points since then. Today it stands at just under 63 percent, the lowest rate in half a century.” – Sean Beckett, VP and Chief Economist, Freddie Mac

# Demographics

## Where we are headed

“Experts at the Joint Center for Housing Studies at Harvard and at the Urban Institute project further declines in the homeownership rate in the next few decades. According to these projections, homeownership rates below 60 percent are possible within 20 years.

Why do these experts expect the homeownership rate to collapse to levels not seen since the 1950s? And how reliable are these projections?

While the Joint Center and the Urban Institute use slightly different approaches, both base their forecasts on two things: first, the typical homeownership rate of different age groups and different demographic groups; and, second, Census projections of changes in the population in each of these groups.

For instance, there is a strong relationship between homeownership and age. The homeownership rate is very low for people younger than 25. The rate rises rapidly through the mid-30s, then continues to rise more gradually, peaking in the early 70s. This relationship suggests that the national homeownership rate will start to decline as the Baby Boomers begin to leave the stage and the population of the U.S. becomes younger on average.

The increasing diversity of the U.S. population has an even greater impact on the homeownership projections of the experts. And the nation will certainly become more diverse. For instance, non-Hispanic whites comprise 73 percent of the Baby Boomer generation. In contrast, Millennials are much more diverse – only 59 percent of Millennials are non-Hispanic whites. Thus, as there are fewer Baby Boomers, the population of the U.S. will come to resemble the more-diverse Millennials.

Non-Hispanic whites historically have had homeownership rates 18 to 28 percent higher than African-Americans, Asians, and Hispanics. Relying on this historical pattern, the experts expect the homeownership rate to decline as the share of non-Hispanic whites in the population falls.” – Sean Beckett, VP and Chief Economist, Freddie Mac

# Demographics

## Is this future inevitable?

“Things may turn out very differently than the experts predict. As an example, prior projections did not anticipate the recent decline in homeownership. Of course, most of this decline can be attributed to the unprecedented housing and financial crisis of the mid-2000s, an event that very few predicted. But that’s the point. The experts project future homeownership rates by applying their arithmetic to current conditions and Census population projections. This approach does not – nor does it claim to – incorporate future macroeconomic disruptions, significant policy changes, or shifts in social attitudes in their calculations. And these types of influences ultimately will determine how accurate or off-target the expert projections are.

Most important, the factors accounting for the lower homeownership rates of non-white demographic groups may be overcome. In a relatively short time, the U.S. will become a “majority minority” nation. In this environment, persistent differences in income, education, and access to credit may finally be reduced or even eliminated. If so, we can expect a continuation of the robust homeownership experience of the late 20th century.” – Sean Beckett, VP and Chief Economist, Freddie Mac



# Demographics

## Record High Median Age at First Marriage

“Young adults are waiting longer than ever to marry. The median age at first marriage climbed to yet another record high in 2016, according to the Census Bureau. Men and women are marrying at an older age than ever before based on data going back to 1890. Here is how the median age at first marriage has grown since 2000:” – Cheryl Russell, Editorial Director, New Strategist Press

Women: median age at first marriage

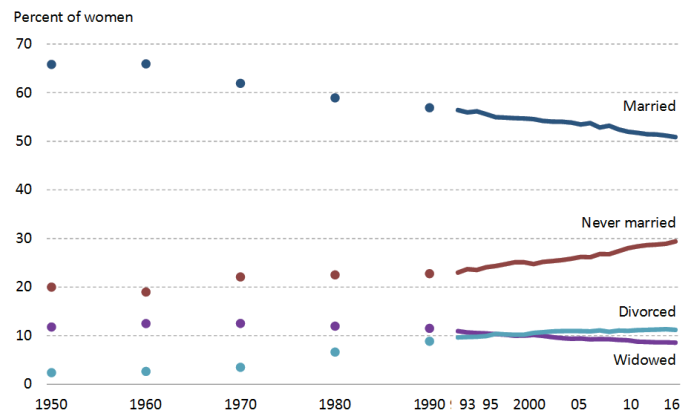
2016: 27.4  
2015: 27.1  
2010: 26.1  
2005: 25.3  
2000: 25.1

Men: median age at first marriage

2016: 29.5  
2015: 29.2  
2010: 28.2  
2005: 27.1  
2000: 26.8

# Demographics

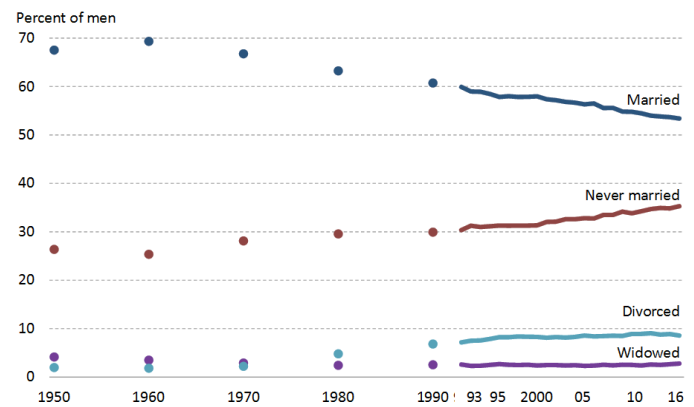
**Figure MS-1b**  
Women's marital status



United States Census Bureau  
U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU  
census.gov

Source: U.S. Census Bureau, Decennial Censuses, 1950 to 1990, and Current Population Survey, Annual Social and Economic Supplements, 1993 to 2016.  
Note: Married includes separated and married spouse absent.

**Figure MS-1a**  
Men's marital status



United States Census Bureau  
U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU  
census.gov

Source: U.S. Census Bureau, Decennial Censuses, 1950 to 1990, and Current Population Survey, Annual Social and Economic Supplements, 1993 to 2016.  
Note: Married includes separated and married spouse absent.

# Demographics

## Fewer Births Expected

“One of these days the baby bust will end, but it might not be anytime soon. Women aged 15 to 44 in 2013-15 expect to have an average of 2.2 children in their lifetime -- down from 2.4 children expected by their counterparts in 2006-10 -- according to the National Survey of Family Growth. Among childless women aged 15 to 24, fully 86 percent expect to have children someday. Among childless women aged 25 to 34, the figure is 77 percent.

But when will they have children? Will it be in the next year or two, causing a baby boom? Or will their childbearing stretch out over years, lengthening the baby bust. It looks like it will be a stretch. When childless women are asked when they expect to have their first child, only 12 percent say it will be within two years, 29 percent say in two to five years, and the largest share -- 36 percent -- say more than five years from now.” – Cheryl Russell, Editorial Director, New Strategist Press

# Demographics

## Our Latest Research Shows More Renters Worried About Paying Bills

“More than four in ten renters say they are satisfied with the rental experience. Adding in those who are moderately satisfied increases the overall percentage of satisfied renters to 66 percent in the latest research. At the same time, the number of respondents who say renting is more affordable than owning a home fell from 69 percent in January to 65 percent in September.

The desire to own a home is strongest among the Gen X population renters and they are most likely to save for a down payment. Yet, Gen Xers are more satisfied with their rental experience than any other generation.

### Concern Over Household Finances is Rising

Over the past year, a greater number of multifamily and single-family property renters — 20 percent compared to 11 percent last year — feel they sometimes don’t have enough money for basics until the next payday. The Gen X renters are feeling the tightest squeeze with over one-quarter feeling this way.

Renters are struggling with managing their debt and over one-third are either extremely or very concerned about potential rent increases in the next 12 months. Fear of eviction because of rising rents is now a reality for at least one in five Americans.

Despite increased financial stress, a majority of renters are saying they put more importance on saving for emergencies, children’s education or retirement than on down payments for a home. Four out of seven say they will move in the future and many are thinking about their finances, not lifestyle, when choosing where to live or go next. The majority expect their future residence to be the same or less expensive than what they’re currently paying.” – Market Insights, Corporate Communications & Marketing, Freddie Mac

# Demographics

## More Renters are Feeling Strained with Their Finances and Debt



Q: Which of the following statements best describes your household's general financial situation?  
 Q: Which of the following statements best describes your general feelings about your current debt?

### Managing Finances



### Managing Debt



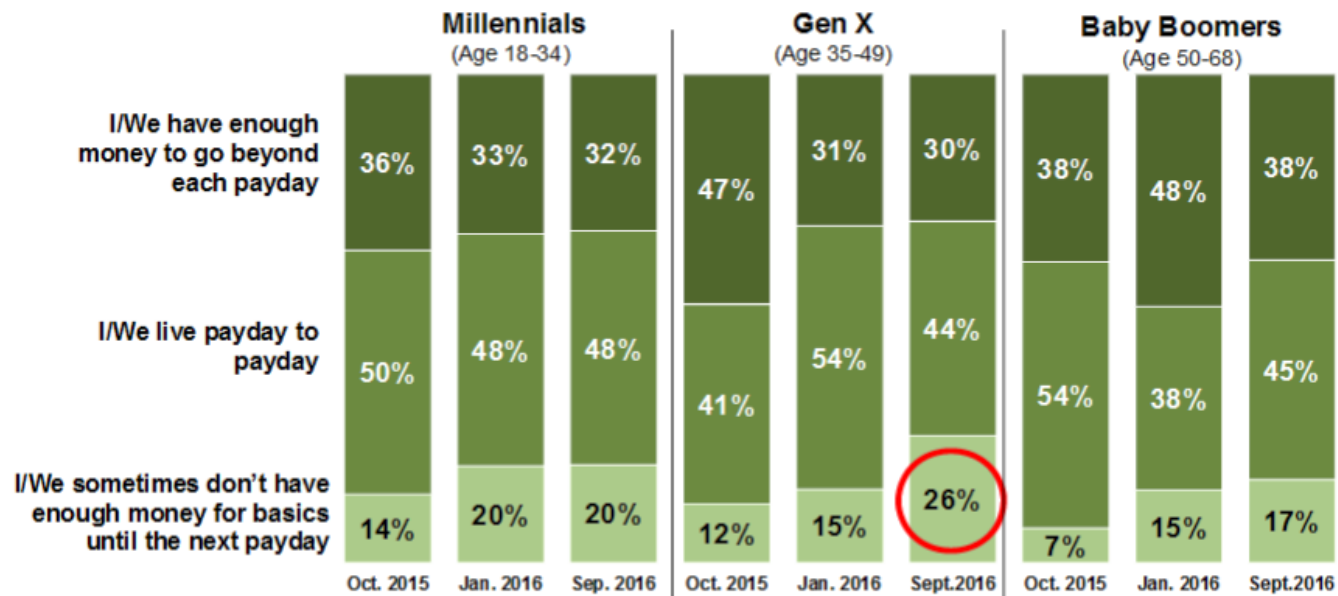
(September 2016 Base = 1,362 total renters)

# Demographics

## Renters Across All Generations Show Increases with Struggles with Finances



Q: Which of the following statements best describes your household's general financial situation?



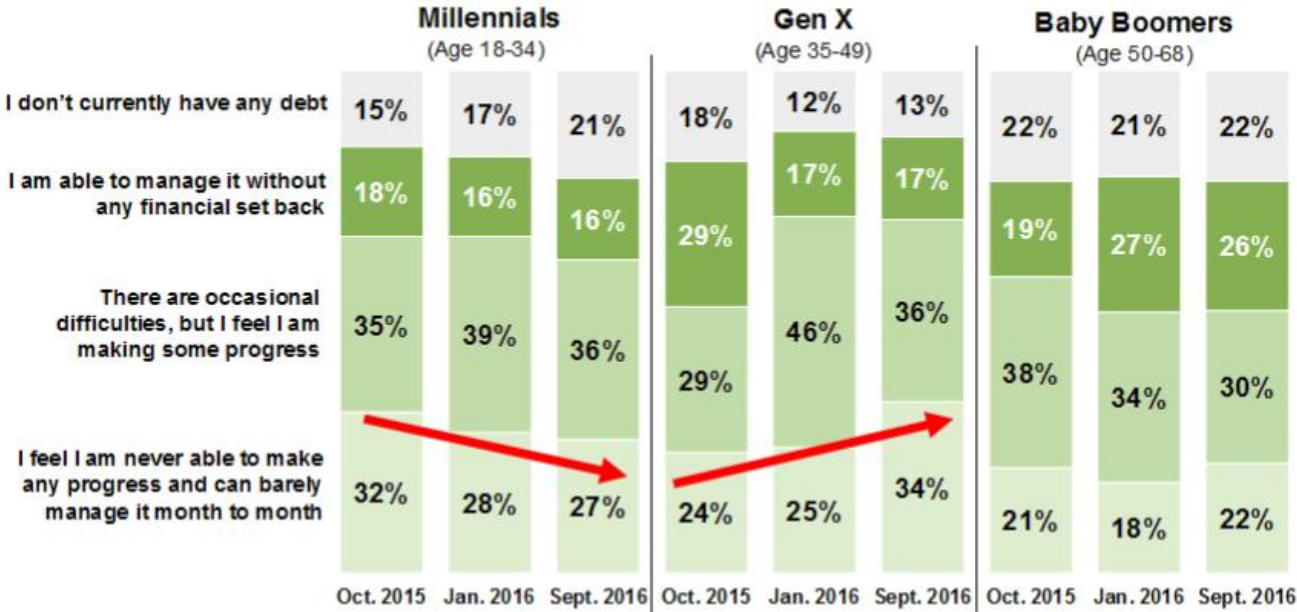
(September 2016 Base = 497 Millennials, 405 Gen X and 371 Baby Boomers  
Excludes "Mature" generational renters (Age 69+) given extremely small sample size.

# Demographics

## Gen Xers Continue to Struggle with Debt, While Millennials Show Improvement



Q: Which of the following statements best describes your general feelings about your current debt?



(September 2016 Base = 497 Millennials, 405 Gen X and 371 Baby Boomers)  
Excludes "Mature" generational renters (Age 69+) given extremely small sample size.

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