Housing Commentary: Section II
Table of Contents

Slide 3: Federal Reserve System Indicators
Slide 33: Private Indicators
Slide 78: Demographics
Slide 87: Economics
Slide 91: Virginia Tech Disclaimer
Slide 92: USDA Disclaimer
Federal Reserve System and Private Indicators
Atlanta Fed GDPNow™

Latest forecast: 3.2 percent — February 14, 2018

“The GDPNow model estimate for real GDP growth (seasonally adjusted annual rate) in the first quarter of 2018 is **3.2 percent** on February 14, down from 4.0 percent on February 9. The nowcast of first-quarter real consumer spending growth fell from 3.0 percent to 2.0 percent after this morning's retail sales report from the U.S. Census Bureau and this morning's Consumer Price Index release from the U.S. Bureau of Labor Statistics.” – Pat Higgins, Economist, Federal Reserve Bank of Atlanta

Source: https://www.frbatlanta.org/economy-matters/regional-economics/data-digests; 2/14/18
Southeast Purchasing Managers Index

December 2018: 55.8

The Federal Reserve Bank of Atlanta
Southeast Purchasing Managers Index

“The composite index measures the region's manufacturing sector based on key sector indicators; a reading below 50 indicates manufacturing is contracting, while over 50 means the industry is expanding.” – The Federal Reserve Bank of Atlanta

“Led by improvements in production-related indicators, the Chicago Fed National Activity Index (CFNAI) moved up to +0.27 in December from +0.11 in November. Two of the four broad categories of indicators that make up the index increased from November, and three of the four categories made positive contributions to the index in December. The index’s three-month moving average, CFNAI-MA3, ticked down to +0.42 in December from +0.43 in November.

Index Points to a pickup in economic growth in December

The contribution from production-related indicators to the CFNAI rose to +0.25 in December from −0.02 in November. Total industrial production increased 0.9 percent in December after moving down 0.1 percent in November. The sales, orders, and inventories category made a contribution of +0.08 to the CFNAI in December, up slightly from +0.04 in November. Employment-related indicators contributed +0.01 to the CFNAI in December, down from +0.12 in November. Nonfarm payrolls increased by 148,000 in December after increasing by 252,000 in November. The contribution of the personal consumption and housing category to the CFNAI edged down to −0.07 in December from −0.03 in November. Housing starts decreased to 1,192,000 annualized units in December from 1,299,000 in November.

… The November monthly index value was revised to +0.11 from an initial estimate of +0.15, and the October monthly index value was revised to +0.87 from last month’s estimate of +0.76. Revisions to the monthly index can be attributed to two main factors: revisions in previously published data and differences between the estimates of previously unavailable data and subsequently published data. The revisions to both the November and October monthly index values were primarily due to the former.” – Laura LaBarbera, Media Relations, Federal Reserve Bank of Chicago

Source: https://www.chicagofed.org/publications/cfnai/index; 1/21/18
The Midwest Economy Index (MEI) rose to +0.43 in December from +0.17 in November. Contributions to the December MEI from all four broad sectors of nonfarm business activity and all five Seventh Federal Reserve District states increased from November. The relative MEI moved up to +0.02 in December from –0.20 in November. Contributions to the December relative MEI from all four sectors and all five states increased from November.

**Index Points to a Pickup in Midwest Economic Growth in December**

The manufacturing sector’s contribution to the MEI increased to +0.39 in December from +0.30 in November. The pace of manufacturing activity increased in Illinois, Indiana, Michigan, and Wisconsin, but was unchanged in Iowa. Manufacturing’s contribution to the relative MEI increased to +0.36 in December from +0.27 in November.

The construction and mining sector’s contribution to the MEI ticked up to –0.02 in December from –0.06 in November. The pace of construction and mining activity was stronger in Illinois, Indiana, and Iowa, but unchanged in Michigan and Wisconsin. Construction and mining made a contribution of –0.07 to the relative MEI in December, up slightly from –0.11 in November.

The service sector contributed +0.05 to the MEI in December, up from a neutral contribution in November. The pace of service sector activity was up in Illinois and Wisconsin, but unchanged in Indiana, Iowa, and Michigan. The service sector’s contribution to the relative MEI edged up to –0.27 in December from –0.29 in November.

Consumer spending indicators made a contribution of +0.01 to the MEI in December, up from –0.07 in November. Consumer spending indicators were, on balance, up in all five Seventh District states. Consumer spending’s contribution to the relative MEI increased to –0.01 in December from –0.07 in November.” – Laura LaBarbera, Media Relations, Federal Reserve Bank of Chicago

Source: https://www.chicagofed.org/publications/mei/2017/december2017; 1/31/18
“Texas factory activity expanded strongly in December, according to business executives responding to the Texas Manufacturing Outlook Survey. The production index, a key measure of state manufacturing conditions, spiked 18 points to 32.8, reaching its highest level in more than 11 years.

Other measures of manufacturing activity also pointed to more rapid growth in December. The new orders index jumped 10 points to 30.1, another 11-year high, and the growth rate of orders index moved up to 21.4. The capacity utilization index increased nine points to 26.3, and the shipments index rose from 16.7 to 21.5 this month.

Perceptions of broader business conditions were markedly more positive in December. The general business activity index and the company outlook index posted double-digit increases, coming in at 29.7 and 31.5, respectively. Both represent highs last seen in 2006.” – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas

Source: https://www.dallasfed.org/research/surveys/tmos/2018/181.aspx; 1/26/18
“Texas service sector activity continued to increase in December, according to business executives responding to the Texas Service Sector Outlook Survey. The revenue index, a key measure of state service sector conditions, was unchanged at 24.4 in December.

Labor market indicators reflected faster employment growth and longer workweeks this month. The employment index rose from 9.8 to 15.3. The hours worked index edged up to 9.2.

Perceptions of broader economic conditions continued to reflect optimism in December. The general business activity index edged down two points to 18.1. The company outlook index moved up to 19.6, its highest reading this year, with 26 percent of respondents reporting that their outlook improved from last month and 7 percent noting it worsened.” – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas
"Retail sales increased in December, albeit at a slower pace than last month, according to business executives responding to the Texas Retail Outlook Survey. The sales index fell from 30.4 in December to 25.6 in December. Inventories increased at a similar pace as last month.

Labor market measures indicated faster retail employment growth and markedly longer workweeks this month. The employment index jumped 11 points to 13.1. The hours worked index rose sharply from 5.6 to 15.8, its highest reading in over 10 years.

Retailers’ perceptions of broader economic conditions continued to reflect optimism in December. The general business activity index fell from 25.4 to 20.9. The company outlook index was similar to last month at 24.7, with 29 percent of respondents reporting that their outlook improved from last month and 5 percent noting it worsened.” – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

The growth in Tenth District manufacturing activity strengthened further in January, and firms’ expectations for future activity increased. Most price indexes rose moderately from the previous month, with some indexes reaching five to ten year highs. The month-over-month composite index was 16 in January, higher than 13 in December and 15 in November (Chart 1). The composite index is an average of the production, new orders, employment, supplier delivery time, and raw materials inventory indexes. Growth in factory activity improved at both durable and non-durable goods plants, particularly for machinery, aircraft, chemicals, and plastics. Most month-over-month indexes also increased. The shipment, new orders, and order backlog indexes all rose moderately. The employment index inched higher from 16 to 18, while the production index was unchanged. The raw materials inventory index climbed from 7 to 15, and the finished goods inventory index moved into positive territory.” – Pam Campbell, The Federal Reserve Bank of Kansas City

“We saw faster growth this month despite some firms noting negative effects from extremely cold weather, and several price indexes rose considerably.

Most year-over-year factory indexes were slightly higher in January. The composite index rose from 30 to 35, and the production, order backlog, and new orders for exports indexes also increased. The shipments and new order indexes were unchanged, while the employment and capital expenditures indexes fell slightly. The raw materials inventory index jumped from 15 to 38, and the finished goods inventory index also increased.

Future factory activity expectations improved moderately over the previous month. The future composite index increased from 23 to 29, and the future production, shipments, new orders, and order backlog indexes also rose. The future capital expenditures index jumped from 22 to 38, while the future employment index edged lower. The future raw materials inventory index increased from 7 to 15, and the future finished goods inventory index moved slightly higher.

Most price indexes increased moderately in January. The month-over-month finished goods price index climbed from 11 to 21, and the raw materials price index rose considerably, with both reaching their highest level in approximately six years. The year-over-year finished goods price index increased from 37 to 49, its highest level since July 2011, and the year-over-year raw materials price index moved moderately higher. The future finished goods price index jumped from 31 to 44, reaching a ten-year high, and the future raw materials price index also increased.” – Chad Wilkerson, Vice President and Economist, The Federal Reserve Bank of Kansas City

The KC Fed LMCI suggest the level of activity declined modestly and momentum remained high in December.

“The Kansas City Fed Labor Market Conditions Indicators (LMCI) suggest the level of activity declined modestly and momentum remained high in December. The level of activity indicator declined modestly in December from 0.51 to 0.44, while the momentum indicator decelerated from 1.68 to 1.46.

The table on the following page shows the five labor market variables that made the largest contributions to the increase in the activity indicator over the last six months and the five variables that made the largest positive contributions to the momentum indicator in December 2017. The activity indicator increased 0.07 over the last six months. The largest contribution came from an increase in the percent of firms planning to increase employment (NFIB). Fifteen variables made a positive contribution, one variable made no contribution, and eight variables made a negative contribution. The momentum indicator was 1.46 in December, where the largest contributor to momentum was initial claims. Eighteen variables made a positive contribution, and six variables made a negative contribution.” – Bill Medley, Director, Public Affairs, The Federal Reserve Bank of Kansas City

U.S. Economic Indicators

Largest Contributions to the LMCI

<table>
<thead>
<tr>
<th>Contributions to the increase in the level of activity indicator over the last six months</th>
<th>Positive contributions to the momentum indicator in December 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of firms planning to increase employment (NFIB)</td>
<td>Initial claims</td>
</tr>
<tr>
<td>Job flows from U to E</td>
<td>Expected job availability (U of Michigan)</td>
</tr>
<tr>
<td>Job availability index (Conference Board)</td>
<td>Manufacturing employment index (ISM)</td>
</tr>
<tr>
<td>Unemployed 27 or more weeks</td>
<td>Labor force participation rate</td>
</tr>
<tr>
<td>Working part time for economic reasons</td>
<td>Aggregate weekly hours</td>
</tr>
</tbody>
</table>

Note: Contributions are ordered from largest to smallest.

“Business activity continued to grow at a solid clip in New York State, according to firms responding to the January 2018 Empire State Manufacturing Survey. The headline general business conditions index, at 17.7, was little changed from last month’s level. The new orders index and the shipments index both showed ongoing growth, although at a slower pace than in December. Unfilled orders and delivery times increased slightly, and inventory levels were higher. Labor market conditions pointed to a modest increase in employment and steady workweeks. Both input prices and selling prices increased at a faster pace than last month. Firms remained very optimistic about future business conditions, and capital spending plans were robust.

Manufacturing firms in New York State reported that business activity continued to expand strongly. The general business conditions index was little changed at 17.7. Thirty-two percent of respondents reported that conditions had improved over the month, while 15 percent reported that conditions had worsened. The new orders index moved down seven points to 11.9, and the shipments index declined nine points to 14.4 – readings that indicated ongoing growth in orders and shipments, although at a slower pace than last month. The unfilled orders index climbed into positive territory and, at 4.3, indicated a small increase in unfilled orders. The delivery time index was 3.6, indicating that delivery times lengthened somewhat, and the inventories index rose to 13.8, a sign that inventory levels grew moderately.”– The Federal Reserve Bank of New York

Source: https://www.newyorkfed.org/survey/empire/empiresurvey_overview.html; 1/16/18
U.S. Economic Indicators

General Business Conditions

Diffusion index, seasonally adjusted

Source: https://www.newyorkfed.org/survey/empire/empiresurvey_overview.html; 1/16/18
Empire State Manufacturing Survey

Price Increases Pick Up for a Second Consecutive Month

“The index for number of employees fell nineteen points to 3.8, a level suggesting only a small increase in employment levels. The average workweek index fell to a level near zero, indicating that hours worked were unchanged. Price increases continued to pick up. The prices paid index climbed seven points to 36.2, and the prices received index moved up ten points to 21.7.

Firms Remain Optimistic about Future Conditions

Looking ahead, firms remained optimistic about the six-month outlook. The index for future business conditions edged up two points to 48.6. The index for future inventories rose to 20.3, a record high, indicating that firms expect to build up inventories significantly in the months ahead. The index for future number of employees rose three points to 26.9, a multiyear high. The capital expenditures index edged up to 34.8, also a multiyear high, suggesting capital spending plans were solid.” – The Federal Reserve Bank of New York

Source: https://www.newyorkfed.org/survey/empire/empiresurvey_overview.html; 1/15/18
Business Leaders Survey (Services)

Business Climate Remains Positive for a Second Consecutive Month

“Activity in the region’s service sector continued to grow at a solid pace, according to firms responding to the Federal Reserve Bank of New York’s January 2018 Business Leaders Survey. The survey’s headline business activity index was little changed at 18.1. The business climate index rose seven points to 16.4, its highest level in more than a decade, signaling that firms, on balance, regarded the business climate as better than normal. The employment index held steady at 10.5, indicating that employment continued to increase moderately. The wages index moved up eleven points to 37.1, suggesting that wages grew at a faster pace than last month. The indexes for input prices and selling prices edged higher, a sign that prices increased at a somewhat faster pace. Indexes for the six-month outlook suggested that firms were very optimistic about future conditions.” – The Federal Reserve Bank of New York

Source: https://www.newyorkfed.org/survey/business_leaders/bls_overview.html; 1/17/18
U.S. Economic Indicators

Business Leaders Survey

“Business activity in the region’s service sector continued to grow strongly. The headline business activity index was little changed at 18.1. Thirty-six percent of respondents reported that conditions improved over the month, while 18 percent said that conditions worsened. The business climate index advanced seven points to 16.4, its highest level in more than ten years, signaling that, on balance, firms viewed the business climate as better than normal.

Wages and Prices Increase at a Faster Clip

The employment index remained close to last month’s level at 10.5, indicating that employment levels continued to increase moderately. The wages index climbed eleven points to 37.1, a sign that wages increased at a faster pace than in December. The prices paid index edged up four points to 49.3 and the prices received index rose five points to 16.6, indicating that prices increased at a faster pace than last month. The capital spending index advanced to 14.8, suggesting that capital spending increased moderately.

Optimism More Widespread

Businesses were very optimistic about the six-month outlook. The index for future business activity increased fourteen points to 47.2, and the index for future business climate moved up twelve points to 35.4. The index for future employment suggested that respondents expected employment to increase in the months ahead, and the index for future wages held steady at 55.8, pointing to an expectation that wages would grow. The index for planned capital spending was little changed at 26.1.” – The Federal Reserve Bank of New York

Source: https://www.newyorkfed.org/survey/business_leaders/bls_overview.html; 1/17/18
February 9, 2018: Highlights

- “The New York Fed Staff Nowcast for 2018:Q1 stands at 3.3%.
- News from this week’s data releases increased the nowcast by 0.1 percentage point.
- Positive surprises from imports and exports data accounted for most of the increase.” – The Federal Reserve Bank of New York
January 2018 Manufacturing Business Outlook Survey

Current Indicators Show Continued Growth

“Economic growth continued in January, according to the firms responding to this month’s Manufacturing Business Outlook Survey. The broadest measures of current conditions remained positive this month, although indexes for general activity, new orders, and employment declined from their readings in December. The firms reported higher prices for both inputs and their own manufactured goods this month. The future indexes reflecting expected growth over the next six months remained at high levels, although the indexes fell from their readings in December.

The index for current manufacturing activity in the region decreased from a revised reading of 27.9 in December to 22.2 this month. Although now at its lowest reading in five months, the index has stayed within a relatively narrow range over the past eight months (Chart 1). The other broad indicators continue to suggest overall growth. The shipments index remained at a high reading and increased 6 points. The index for current new orders, however, decreased 18 points. Nearly 36 percent of the firms reported an increase in new orders this month, but 26 percent reported declines. Both the delivery times and unfilled orders indexes decreased this month: The unfilled orders index was negative for the first time in 16 months, and the index of delivery times fell to its lowest reading in 10 months.” – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

January 2018 Manufacturing Business Outlook Survey

“The firms reported an increase in manufacturing employment this month. The current employment index, while still positive, fell 3 points to 16.8. The percentage of firms reporting an increase in employment (24 percent) exceeded the percentage reporting a decrease (8 percent). The firms reported a slight increase in work hours this month: The average workweek index increased 4 points to 16.7.” – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

As of December 21 Q3 2018 GDPplus = 2.2%; Real GDP = 3.1%; and Real GDI = 2.0%.

– The Federal Reserve Bank of Philadelphia
“The Federal Reserve Bank of Philadelphia has released the coincident indexes for the 50 states for December 2017. Over the past three months, the indexes increased in 42 states and decreased in eight, for a three-month diffusion index of 68. In the past month, the indexes increased in 37 states, decreased in 10, and remained stable in three, for a one-month diffusion index of 54. For comparison purposes, the Philadelphia Fed has also developed a similar coincident index for the entire United States. The Philadelphia Fed’s U.S. index rose 0.7 percent over the past three months and 0.2 percent in December.” – Daniel Mazone, The Federal Reserve Bank of Philadelphia
“According to the latest survey by the Federal Reserve Bank of Richmond, Fifth District manufacturing firms saw slower growth in January, even as each of the expansion metrics remained positive. The composite index moved down from 20 to 14. This decrease resulted from a decline in the metrics for both shipments and employment. The third component, new orders, held steady. However, manufacturing firms saw an increase in backlogs in January, after a decrease in December, as the index rose from −4 to 5. Firms reported that they expect growth to strengthen in the coming months.

District manufacturing firms saw continued price increases in January. However, prices received grew at a slower rate than they had in December, while increases in prices paid was unchanged. Firms expect prices to rise at a faster rate in the next six months, although expectations of price growth were below their December values.” – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond
U.S. Economic Indicators

Manufacturing Activity

Shipments

U.S. Economic Indicators

New Orders

Vendor Lead Time

“Real GDP grew at an annual rate of 3.2% in the third quarter, according to the final estimate of the Bureau of Economic Analysis. We forecast that GDP growth averaged 2.5% for 2017. The momentum in GDP growth reflects strong gains in personal income and consumer confidence, supported by continued strength in the labor and financial markets. As monetary policy continues to normalize over the next two to three years, we expect growth to gradually fall back to our trend growth estimate of about 1.7%.

We continue to see strengthening in labor market conditions. Nonfarm payroll employment increased by 148,000 jobs in December, a bit below expectations. Over the past six months, job gains have averaged close to 166,000, well above the amount needed to absorb the flow of new workers into the labor force.

Inflation remains below the FOMC’s target of 2%. In November, the personal consumption expenditure (PCE) price index rose 1.8% over the past 12 months, and the core PCE price index, which removes volatile food and energy prices, rose 1.5%. Transitory developments for a few categories of goods and services held down inflation in 2017. As these developments loosen their hold, we expect continued tightness in the labor market will push inflation up in the coming year.

Various factors can influence cost pressures independently of economic strength. For example, labor market frictions, such as changes in bargaining power, labor force participation, or long-term unemployment can push up the natural rate of unemployment. Oil prices, the strength of the US dollar, or import prices can similarly affect cost pressures in the economy.” – Vasco Curdia, Research Advisor, The Federal Reserve Bank of San Francisco
U.S. Economic Indicators

Above-trend growth continues

Job growth remains strong

Unemployment below natural rate

Inflation expected to increase gradually

U.S. Economic Indicators

FHFA House Price Index

FHFA House Price Index Up 0.4 Percent in November

“U.S. house prices rose in November, up **0.4 percent** from the previous month, according to the Federal Housing Finance Agency (FHFA) seasonally adjusted monthly House Price Index (HPI). The previously reported 0.5 percent increase in October was revised upward to 0.6 percent.” – Stefanie Johnson and Corinne Russell, FHFA

Source: https://www.fhfa.gov/AboutUs/Reports/ReportDocuments/MonthlyHPI_Jan242018.pdf; 1/24/18
Global Growth Outlook Reflects Sustained Recovery

“Global growth accelerated in 2017, supported by strengthening labor markets and external demand. Although inflation concerns among advanced countries abated, risks remain and are mostly tilted to the downside. Concerns are centered on trade policy changes and entrenched protectionist attitudes, uncertainty about shifting U.S. policy and its global spillovers, and the consequences of tighter global financial conditions and asset volatility. High levels of public and private indebtedness, political and geopolitical risks, and uncertainty about the strength of the cyclical recovery also weigh on the outlook.

Global Growth to Remain Solid in 2018–19

The world is expected to reach 3.1 percent annual growth in 2018, slipping to 3.0 percent in 2019. Those forecasts follow on the heels of solid 3.4 percent year-over-year growth in third quarter 2017. The ongoing improvement – expected to continue into 2018 – is partly driven by a broadening cyclical rebound in major advanced economies, notably in the euro area and Japan. Advanced economies’ expansion has firmed since early 2016, with annual growth projected to be 2.1 percent in 2018 and 1.8 percent in 2019.

Emerging economies are anticipated to expand around 4.3 percent during 2018–19. Tailwinds from firming commodity prices aiding key exporters (Russia, Brazil) as well as better-than-anticipated strength in China are expected to offset weakness elsewhere (Venezuela, South Africa). Growth in India is on course to outpace growth in China despite the lingering effects of the Indian banknote demonetization in November 2016 and implementation of the goods-and-services tax in July 2017.”

– Enrique Martínez-García, Senior Research Economist and Arthur Hinojosa, Research Analyst; The Federal Reserve Bank of Dallas
Mexico Economic Growth Rebounds in Fourth Quarter

“Mexico’s economic output recovered sharply in the fourth quarter, rising 4.1 percent after falling in the third quarter as a result of the September earthquakes. Mexico’s gross domestic product (GDP) grew 1.6 percent in 2017 (four-quarter change), below last year’s forecast and the slowest annual growth in four years. The consensus GDP growth forecast for 2018 calls for a slight acceleration in activity to 2.2 percent (annual average growth).

Despite robust GDP growth in the fourth quarter, other recent data are mixed. Exports and employment posted positive growth, but industrial production and retail sales fell. Inflation ticked up, but the peso recovered some ground against the dollar in January.

**Fourth-Quarter Output Surges**

Mexico GDP expanded at a 4.1 percent annualized rate in the fourth quarter (Chart 1). Goods-producing industries (manufacturing, construction, utilities and mining) ticked up 0.4 percent. Service-related activities (wholesale and retail trade, transportation and business services) gained 4.9 percent. Agricultural output spiked 13 percent.

**Export Growth Continues in December After Strong November**

Total exports increased 0.5 percent in December after jumping 5.6 percent in November. December manufactured goods exports fell 1.2 percent, while oil exports surged 22.4 percent. All three-month moving averages increased (Chart 2). In 2017, total exports grew 7.5 percent, manufacturing exports rose 6.4 percent and oil exports climbed 23.8 percent. The rise in oil exports last year stemmed largely from higher oil prices, not increased volume of exports.” – Jesus Cañas, Senior Research Economist and Alexander Abraham, Research Assistant; The Federal Reserve Bank of Dallas
U.S. Global Economic Indicators

Chart 1
Fourth-Quarter Gross Domestic Product Rebounds
Percent*

2007–16 monthly average growth = 2.2%

Chart 2
Recent Export Growth Broad Based
Index, January 2007 = 100*

Manufacturing PMI signals resurgent growth at the start of 2018

Canadian manufacturers reported a strong start to 2018, underpinned by faster rises in output volumes, new business intakes and staff recruitment. There were also signs that the resurgence in production schedules would continue in the months ahead, with incomplete workloads accumulating at the fastest pace since the survey began in October 2010. Improved demand conditions and sharp input cost inflation meanwhile led to the largest increase in factory gate prices for almost seven years.

January data signalled an impressive start to 2018 for the Canadian manufacturing sector, with the latest upturn in business conditions among the fastest seen over the past seven years. Strong momentum was recorded for both domestic and export sales, helped by the improving economic backdrop and greater spending by US clients in particular.” – Tim Moore, Associate Director at Survey Compilers, IHS Markit

Markit Canada Manufacturing PMI™

“The seasonally adjusted IHS Markit Canada Manufacturing Purchasing Managers’ Index® (PMI™) picked up to 55.9 in January from 54.7 in December, to remain well above the 50.0 no-change threshold. Moreover, the latest PMI reading signalled the joint-strongest improvement in business conditions since April 2011.
China’s manufacturing sector continued to expand at the start of 2018, with production rising to the greatest extent in just over a year. Growth was supported by further, albeit slightly softer, increases in total new work and new export sales. Higher production requirements led firms to increase their buying activity, while employment fell at the weakest pace for nearly three years. Capacity pressures meanwhile persisted, with backlogs of work rising to the greatest extent since early 2011. Prices data showed that input cost inflation eased to a five-month low and factory gate charges rose only slightly.

The Caixin China General Manufacturing Purchasing Managers’ Index came in at 51.5 in January, unchanged from the previous month, suggesting that operating conditions continued to improve at a modest pace. … The manufacturing industry had a good start to 2018. Going forward, we should keep a close eye on the stability of the demand side.” – Dr. Zhengsheng Zhong, Director of Macroeconomic Analysis, CEBM Group
“The final IHS Markit Eurozone Manufacturing PMI® posted a three-month low of 59.6 in January, down from December’s record high of 60.6 and identical to the earlier flash estimate. The PMI has signaled expansion in each of the past 55 months.

Eurozone manufacturing stays close to record high in January

The eurozone manufacturing sector made a strong start to 2018. Although January saw rates of growth in output and new orders ease from near-record highs at the end of last year, they remained among the best seen since the survey began in 1997.

Sector data signalled solid growth across the consumer, intermediate and investment goods categories, with the steepest rates of expansion in the latter two. This was despite consumer goods being the only category to see growth accelerate during the latest survey month.

The eurozone’s manufacturing boom continued in full swing in January. Output grew at one of the fastest rates recorded over the survey’s 20-year history, matched by a further near-record surge in new orders. Employment likewise showed one of the largest gains yet recorded by the survey as firms expanded capacity in line with rising demand.

The extent to which demand has surged in recent months nevertheless continued to run ahead of capacity, leading to near-record increases in both backlogs of uncompleted orders and suppliers’ delivery times” – Chris Williamson, Chief Business Economist, Markit®
The final IHS Markit Eurozone PMI® Composite Output Index posted 58.8 in January, its highest level since June 2006 and above the earlier flash estimate of 58.6. The headline index has signalled expansion for 55 successive index months.

Eurozone economic growth nears 12-year high in January

The start of 2018 saw the eurozone economy continue its recent advance. Output growth accelerated to a near 12-year high, underpinned by solid inflows of new business and accompanied by the strongest phase of job creation since late-2000.

Growth of manufacturing production continued to outpace that of service sector activity in January. Although easing over the month, the rate of expansion in manufacturing output stayed close to December’s near-record high. The performance of the service sector continued to strengthen, with business activity growth accelerating to its best since August 2007.

The strong upturn is also broad-based, which adds to the potential for the growth to become more self-sustaining as demand rises across the single currency area, feeding through to higher job creation as spare capacity is increasingly eroded. The survey data are therefore indicating that the eurozone has started 2018 with very good growth momentum, and that price pressures are building commensurately. If such impressive numbers continue to be seen in coming months, expect policymakers to sound increasingly hawkish.” – Chris Williamson, Chief Business Economist, Markit®
“The final IHS Markit/BME Germany Manufacturing PMI ... registered 61.1 in January, down from a survey-record high of 63.3 in December but still signalling one of the greatest improvements in overall business conditions since the survey began in 1996.

Manufacturing sector shows sustained strong growth at start of 2018

Germany’s manufacturing sector enjoyed a strong start to 2018, despite seeing a softer pace of growth than the record performance in December, according to the latest PMI® survey data from IHS Markit and BME. Price pressures were meanwhile shown to be the highest since early-2011, driven by rising commodity prices and capacity constraints in supply chains. The Manufacturing PMI remains in very positive territory in the context of the survey’s history, notwithstanding the downturn from December’s record high. Factories continue to ramp up production at a pace rarely seen over the past two decades of collection, and the sustained strong rate of job creation suggests there’s appetite for further capacity expansion amid a positive outlook for the year ahead.

A key insight from the latest survey was a pick-up in price pressures to the highest seen since early-2011, as a continued supply-side squeeze inflated purchasing costs and prices charged at the factory gate. It remains to be seen whether the record high at the end of 2017 represents the peak of the current cycle, but the intensification of price pressures will inevitably cause some drag on demand, while the euro’s recent gain against the dollar may weigh on exports.” – Phil Smith, Principal Economist, IHSMarkit®
“The global manufacturing sector made a positive start to 2018, with rates of growth in output and new orders staying close to highs reached before the turn of the year. At 54.4 in January, the J.P. Morgan Global Manufacturing PMI™ – a composite index produced by J.P. Morgan and IHS Markit with ISM and IFPSM – was only a tick below December’s near seven-year record.

Global manufacturing growth remains solid at start of 2018

The upturn remained broad-based, with growth signalled in the consumer, intermediate and investment goods industries and across almost all of the nations covered by the survey. The sole exception was Indonesia, where operating conditions were broadly stagnant during January. The euro area remained the principal growth engine of global manufacturing expansion during January. Although the eurozone PMI slipped to a three-month low, from December’s record high, solid expansions were still registered across all of the nations within the currency union covered by the survey.

The start of 2018 saw a continuation of the solid upturn in global manufacturing performance, with rates of growth in production and new orders remaining close to December’s highs. With business confidence still robust and further job creation reported, the sector is on course to sustain its current solid pace of expansion into the coming months.” – David Hensley, Global Economist, J.P. Morgan
Global economic growth at 40-month high in January

The start of 2018 saw a further solid and broad-based expansion of global economic activity, with growth rising to a 40-month high. Output increased across the six categories of manufacturing and service sector activity tracked and in almost all of the national PMI surveys available at the time of publication.

Manufacturing production increased at a pace matching December 2017’s near seven-year high, while output growth in the service sector improved to the fastest in three months. Economic activity increased at faster rates in four of the six sub-sectors covered by the survey (consumer and intermediate goods as well as consumer and financial services). Output also expanded in the business services and intermediate goods categories.

The world economy sustained its strong upturns in output and new business at the start of 2018, as manufacturers and service providers benefitted from a synchronised upswing in global market conditions and growth. Forward-looking indicators such as new orders, backlogs of work and business confidence also suggest that this solid phase of expansion will be maintained in coming months.” – David Hensley, Global Economist, J.P. Morgan
UK manufacturing growth slows at start of 2018 as price pressures intensify

Manufacturing output continued to rise at a solid pace, although the rate of expansion eased to a six-month low. Higher production reflected rising new order intakes, albeit the slowest in seven January saw the trend in new export order inflows strengthen. Foreign demand improved at one of the quickest rates over the past four years. There were reports of increased sales to clients in North America, China, mainland Europe, the Middle East and Japan.

The UK manufacturing sector reported an unwelcome combination of slower growth and rising prices at the start of 2018. Encouragingly, despite the slowdown, the latest survey is consistent with production rising at a solid quarterly rate of around 0.6% in January, with jobs also being added at a faster pace. However, output growth has slowed sharply since last November’s high, and the more forward-looking new orders index has slipped to a seven-month low. The trend in demand will need to strengthen in the near-term to prevent further growth momentum being lost in the coming months.” – Rob Dobson, Director & Senior Economist, IHS Markit

Source: https://www.markiteconomics.com/Survey/PressRelease.mvc/bf2ab87f08504cf08b3e63b3d61535b7; 2/1/18
The Architecture Billings Index (ABI) concluded the year in positive terrain, with the December reading capping off three straight months of growth in design billings. The American Institute of Architects (AIA) reported the December ABI score was 52.9, down from a score of 55.0 in the previous month. This score still reflects an increase in design services provided by U.S. architecture firms. The year 2017 ended with architecture firms continuing to report strong firm billings. An Architecture Billings Index (ABI) score of 52.9 for December meant that, for 10 of the year’s 12 months, architecture firms saw increases in billings (any score above 50 indicates an increase in billings). The new projects inquiry index was 61.9, up from a reading of 61.1 the previous month, while the new design contracts index decreased slightly from 53.2 to 52.7. Firms also continued to report strong backlogs of about six months in December — as they had throughout the year — and inquiries into new projects and the value of newly signed design contracts also remained robust, serving as additional indicators of plenty of work remaining in the pipeline for the coming months.

Overall, 2017 turned out to be a strong year for architecture firms. All but two months saw ABI scores in positive territory. Additionally, the overall strength of the fourth quarter lays a good foundation for healthy growth in construction activity in 2018.” – Kermit Baker, Chief Economist, AIA, Honorable AIA
Private Indicators
American Institute of Architects

National
Business conditions at architecture firms remain strong in December

Graphs represent data from December 2016-December 2017.

Source: https://www.aia.org/; 1/25/18
“Firms located in the South continued to report billings growth every month of the year in 2017, the fifth year in a row without any decline in billings for the region. Firms located in the West saw business conditions continue to improve in December, after starting the year with some soft conditions and following a modest slowdown in August. Firms located in the Midwest saw billings growth every month of the year except September, and growth remained strong through the end of the year. Firms located in the Northeast were the only ones to end the year with a modest decrease in billings, and generally saw softer conditions throughout 2017 than those in other areas.” – Kermit Baker, Chief Economist, AIA, Honorable AIA

"Firms of all specializations ended the year on a strong note, particularly those with residential and commercial/industrial specializations. These firms also averaged the highest scores throughout 2017, although firms with an institutional specialization also reported billings growth every month of the year.” – Kermit Baker, Chief Economist, AIA, Honorable AIA
New construction starts in December rebounded by 12 percent; annual total for 2017 advanced by 3 percent to $745.9 billion.

“New construction starts in December climbed 12% to a seasonally adjusted annual rate of $733.3 billion, bouncing back following November’s 12% decline, according to Dodge Data & Analytics. December’s gain for total construction reflected varied improvement by each of the three main construction sectors. Nonbuilding construction (public works and electric utilities/gas plants) jumped 43%, lifted by the start of the $2.3 billion I-66 Corridor Improvements Project in northern Virginia. Nonresidential building rose 10%, aided by the start of two large data center projects, while residential building edged up 1%. For all of 2017, total construction starts grew 3% to $745.9 billion, which followed the 6% increase reported for 2016. The full year 2017 gain was dampened by a 35% downturn for the electric utility/gas plant category. If electric utilities and gas plants are excluded, total construction starts for 2017 would be 5% higher than the corresponding amount for 2016.

The December statistics produced a reading of 155 for the Dodge Index (2000=100), up from November’s 138. For the full year 2017, the Dodge Index averaged 158.” – Benjamin Gorelick, Spector & Associates

“After weaker activity was reported in both October and November, the December rebound for total construction starts eased the extent of the decline that took place during the fourth quarter. On a quarterly basis, growth in 2017 was reported during the first and third quarters, while activity retreated during the second and fourth quarters, continuing the up-and-down pattern around an upward trend that was present during 2016. On the positive side for 2017, institutional building assumed a leading role in keeping the nonresidential building expansion going, reflecting elevated activity for transportation terminal starts and further improvement by educational facilities. Manufacturing plant construction starts strengthened, ending a two-year decline, and commercial building was able to stay close to its heightened 2016 amount. Residential building in 2017 showed more growth for single family housing, offsetting a downturn for multifamily housing. And, public works construction in 2017 was able to strengthen, helped by the start of several very large pipeline projects and a moderate gain for highway and bridge construction.

The construction industry over the past two years has made the transition to a more mature stage of expansion, characterized by slower rates of growth for total construction compared to the 11% to 13% yearly gains during the 2012-2015 period. For 2018, the construction expansion is anticipated to continue at a modest pace. The tax reform package is expected to provide a near term lift to overall economic growth, and the likely beneficiaries would be commercial building and multifamily housing. Funding support for institutional building will come from the state and local bond measures passed in recent years. Passage of a new infrastructure program at the federal level could be a plus for public works, although the impact at the construction site is likely to be felt more in 2019 than in 2018, as the program would feature incentives to boost funding from state, local, and private sources.” – Robert A. Murray, Chief Economist, Dodge Data & Analytics
Private Indicators

Dodge Data & Analytics

New Construction Starts in December Rebound 12 Percent

“Residential building in December was $308.1 billion (annual rate), up 1%. The single family side of the housing market rose 1%, continuing to show the modest improvement that’s been present during the second half of 2017 after the slight loss of momentum reported last spring. Multifamily housing in December was unchanged from its November pace. December featured groundbreaking for four large multifamily projects valued each at $100 million or more – … . The 2017 amount for residential building was $302.0 billion, a 2% gain that followed a 9% increase in 2016. Single family housing maintained its moderate upward track, rising 8% which matched its rate of growth in dollar terms for 2016. By geography, single family housing in 2017 showed this pattern for the five major regions – the South Atlantic, up 12%; the South Central and West, each up 8%; the Midwest, up 5%; and the Northeast, down 2%.

Multifamily housing in 2017 headed in the opposite direction, falling 12% after seven straight years of expansion. New York NY, the nation’s leading multifamily market by dollar volume, registered a relatively modest 4% decline in 2017, after sliding a substantial 27% in 2016. However, the pullback for multifamily housing broadened on a geographic basis during 2017, as 7 of the remaining 9 metropolitan markets in the top ten showed weaker activity, with only San Francisco CA and Atlanta GA reporting gains. Rounding out the top five multifamily markets by the 2017 dollar volume, with their percent change from 2016, were the following – Los Angeles CA, down 17%; Washington DC, down 23%; Chicago IL, down 24%; and San Francisco CA, up 3%. Multifamily markets ranked 6 through 10 showed this performance – Boston MA, down 29%; Atlanta GA, up 26%; Miami FL, down 50%; Seattle WA, down 10%; and Dallas-Ft. Worth TX, down 26.” – Robert A. Murray, Chief Economist, Dodge Data & Analytics

Private Indicators

December 2017 Construction Starts

The Dodge Index of New Construction Starts (Year 2000 = 100)

Source: Dodge Data & Analytics

December 2017 Construction Starts

Monthly Summary of Construction Starts
Prepared by Dodge Data & Analytics

<table>
<thead>
<tr>
<th>Monthly Construction Starts</th>
<th>Seasonally Adjusted Annual Rates, in Millions of Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>December 2017</td>
</tr>
<tr>
<td>Nonresidential Building</td>
<td>$240,311</td>
</tr>
<tr>
<td>Residential Building</td>
<td>306,092</td>
</tr>
<tr>
<td>Nonbuilding Construction</td>
<td>184,932</td>
</tr>
<tr>
<td>Total Construction</td>
<td>$735,335</td>
</tr>
</tbody>
</table>

The Dodge Index
Year 2000=100, Seasonally Adjusted
December 2017 ..... 155
November 2017 ..... 138

Year-to-Date Construction Starts
Unadjusted Totals, in Millions of Dollars

<table>
<thead>
<tr>
<th></th>
<th>12 Mos. 2017</th>
<th>12 Mos. 2016</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonresidential Building</td>
<td>$270,701</td>
<td>$253,330</td>
<td>+7</td>
</tr>
<tr>
<td>Residential Building</td>
<td>302,018</td>
<td>297,202</td>
<td>+2</td>
</tr>
<tr>
<td>Nonbuilding Construction</td>
<td>173,180</td>
<td>176,560</td>
<td>-2</td>
</tr>
<tr>
<td>Total Construction</td>
<td>$745,909</td>
<td>$727,092</td>
<td>+3</td>
</tr>
<tr>
<td>Total Construction, excluding electric utilities/gas plants</td>
<td>$715,715</td>
<td>$680,684</td>
<td>+5</td>
</tr>
</tbody>
</table>

Private Indicators

MNI Chicago
January Chicago Business Barometer Falls to 65.7

“The MNI Chicago Business Barometer fell 2.1 points to 65.7 in January from a previously revised 67.8 in December. Three of the five components that comprise the Barometer fell on the month, with only Employment and Supplier Deliveries notching up gains in January.

Employment Up to Near-6-Year High; Prices Paid Highest Since Sep

Despite losing some ground in January, the Barometer continued in the same vein of form it displayed in the second half of 2017, making for an encouraging start to the New Year. The Barometer was up 28.3% on last January and at 65.7, stands above the H2 2017 average of 63.7.

Firms reported a moderately slower pace of both incoming orders and output in January. The New Orders indicator fell to a five-month low, contributing most to the Barometer’s decline, while the Production indicator also fell in January, albeit to a lesser extent. With less activity on these fronts it gave firms the chance to target their backlog of unfilled orders. The Order Backlogs indicator fell to its lowest level since May.

Official data in Q1 tends to come in weaker than in reality, but our survey suggests that despite softening a little, sentiment among businesses remains robust. This was the best January result in seven years, capped off by the Employment indicator rising to its highest level in almost 6 years.” – Jamie Satchi, Economist, MNI Indicators

Source: https://www.ism-chicago.org/index.cfm; 1/28/18
The Conference Board Leading Economic Index® (LEI) for the U.S. increased 0.6 percent in December to 107.0 (2016 = 100), following a 0.5 percent increase in November, and a 1.3 percent increase in October.

Economic Growth to Continue Through First Half of 2018

“The U.S. LEI continued rising rapidly in December, pointing to a continuation of strong economic growth in the first half of 2018. The passing of the tax plan is likely to provide even more tailwind to the current expansion. The gains among the leading indicators have been widespread, with most of the strength concentrated in new orders in manufacturing, consumers’ outlook on the economy, improving stock markets and financial conditions.” – Ataman Ozyildirim, Director of Business Cycles and Growth Research, The Conference Board

The Conference Board Coincident Economic Index® (CEI) for the U.S. increased 0.3 percent in December to 102.8 (2016 = 100), following a 0.1 percent increase in November, and a 0.4 percent increase in October.

The Conference Board Lagging Economic Index® (LAG) for the U.S. increased 0.7 percent in December to 104.0 (2016 = 100), following a 0.1 percent increase in November and a 0.3 percent increase in October.” – The Conference Board

Source: https://www.conference-board.org/data/bcicountry.cfm; 1/25/18
Online advertised vacancies increased 1,200 to 4,903,300 in January, according to The Conference Board Help Wanted OnLine® (HWOL) Data Series. The December Supply/Demand rate stands at 1.34 unemployed for each advertised vacancy, with a total of 1.7 million more unemployed workers than the number of advertised vacancies. The number of unemployed was approximately 6.6 million in December.

The Professional occupational category saw changes in Education, Training, and Library (-60.4), Computer and mathematical science (23.2) and Healthcare practitioners and technical (-12.9). The Services/Production occupational category saw gains in Sales and related (30.8), Transportation (10.7), and Installation, maintenance, and repair (8.1).” – Carol Courter, The Conference Board

Source: https://www.conference-board.org/data/helpwantedonline.cfm; 1/31/18
“The Equipment Leasing & Finance Foundation (the Foundation) releases the January 2018 Monthly Confidence Index for the Equipment Finance Industry (MCI-EFI). Designed to collect leadership data, the index reports a qualitative assessment of both the prevailing business conditions and expectations for the future as reported by key executives from the $1 trillion equipment finance sector. Overall, confidence in the equipment finance market is 75.3 in January, an increase from 69.4 in December, and the highest level since the index was launched in 2009.” – Anneliese DeDiemar, Author, Equipment Leasing & Finance Association

“Activity has picked up since the midpoint of the fourth quarter and 2017 closed on a very positive note. The year is off to a great start even with some of the weather issues plaguing the country. I'm hoping the new tax laws will keep this optimism in full gear.” – Valerie Hayes Jester, President, Brandywine Capital Associates
Private Indicators

Equipment Leasing and Finance Association
January 2018 Survey Results:

“The overall MCI-EFI is 75.3 in January, up from 69.4 in December.

• When asked to assess their business conditions over the next four months, 67.7% of executives responding said they believe business conditions will improve over the next four months, an increase from 32.1% in December. 29.0% of respondents believe business conditions will remain the same over the next four months, a decrease from 67.9% the previous month. 3.2% believe business conditions will worsen, up from none who believed so the previous month.

• 67.7% of survey respondents believe demand for leases and loans to fund capital expenditures (capex) will increase over the next four months, an increase from 46.4% in December. 29.0% believe demand will “remain the same” during the same four-month time period, down from 53.6% the previous month. 3.2% believe demand will decline, an increase from none who believed so in December.

• 35.5% of the respondents expect more access to capital to fund equipment acquisitions over the next four months, up from 25.0% in December. 61.3% of executives indicate they expect the “same” access to capital to fund business, a decrease from 67.9% last month. 3.2% expect “less” access to capital, down from 7.1% last month.” – Anneliese DeDiemar, Author, Equipment Leasing & Finance Association

Private Indicators

Equipment Leasing and Finance Association
January 2018 Survey Results:

• “When asked, 41.9% of the executives report they expect to hire more employees over the next four months, a decrease from 53.6% in December. 54.8% expect no change in headcount over the next four months, an increase from 46.4% last month. 3.2% expect to hire fewer employees, an increase from none in December.

• 25.8% of the leadership evaluate the current U.S. economy as “excellent,” up from 10.7% last month. 74.2% of the leadership evaluate the current U.S. economy as “fair,” a decrease from 89.3% in December. None evaluate it as “poor,” unchanged from last month.

• 61.3% of the survey respondents believe that U.S. economic conditions will get “better” over the next six months, an increase from 42.9% in December. 38.7% of survey respondents indicate they believe the U.S. economy will “stay the same” over the next six months, a decrease from 57.1% the previous month. None believe economic conditions in the U.S. will worsen over the next six months, unchanged from December.

• In January, 61.3% of respondents indicate they believe their company will increase spending on business development activities during the next six months, an increase from 57.1% in December. 35.5% believe there will be “no change” in business development spending, a decrease from 42.9% the previous month. 3.2% believe there will be a decrease in spending, an increase from none last month.” – Anneliese DeDieimar, Author, Equipment Leasing & Finance Association

“The Equipment Leasing and Finance Association’s (ELFA) Monthly Leasing and Finance Index (MLFI-25), which reports economic activity from 25 companies representing a cross section of the $1 trillion equipment finance sector, showed their overall new business volume for December was $12.8 billion, up 6 percent year-over-year from new business volume in December 2016. Volume was up 71 percent month-to-month from $7.5 billion in November in a typical end-of-year spike. Cumulative new business volume for 2017 was up 5 percent from 2016.

Receivables over 30 days were 1.50 percent, unchanged from the previous month and up from 1.40 percent the same period in 2016. Charge-offs were 0.48 percent, up from 0.42 percent the previous month, and up from 0.42 percent in the year-earlier period.

Credit approvals totaled 77.6 percent in December, up from 73.6 percent in November. Total headcount for equipment finance companies was up 15.1 percent year over year, largely attributable to continued acquisition activity at an MLFI reporting company.

Separately, the Equipment Leasing & Finance Foundation’s Monthly Confidence Index (MCI-EFI) in January is at an all-time high of 75.3, up from 69.4 in December.” – Anneliese DeDiemar, Author, Equipment Leasing & Finance Association
Private Indicators

Equipment Leasing and Finance Association

Monthly Leasing & Finance Index: December 2017

“December new business volume registered the typical end-of-quarter, end-of-year spike as member companies scrambled to close out the year. While 2017 was a good year, overall, for the equipment finance industry, most industry observers look for even stronger business activity in 2018. The reasons for this optimistic outlook? A continued healthy and growing economy, an abundance of liquidity, strong capex demand buoyed by recent tax law changes, and a sense of confidence by the business community not seen since just after the 2016 election. Absent a wild card event or external shock of some sort, we are bullish about 2018.” – Ralph Petta, President and CEO, ELFA

“The equipment finance industry finished 2017 with a strong uptick in new business volume. This was due in large part to renewed optimism for future economic performance as well as improving industry conditions in key capital-intensive industries such as energy and transportation. Industry participants are very bullish on the prospects for 2018 as evidenced by the record high in the Monthly Confidence Index. With lower corporate taxes and favorable interest rates and credit environment, as well as an economy poised to breakout from its pattern of modest growth, I believe these dynamics will create the perfect storm to accelerate growth in the equipment finance industry in 2018.” – Thomas M. Jaschik, President, BB&T Equipment Finance

Private Indicators

MLFI-25 New Business Volume
(Year-Over-Year Comparison)

MLFI Cumulative YTD* Comparison (2016/2017):
2016*: $95.2 ($B)
2017*: $99.7 ($B)
% chg*: +4.7

* YTD NBV numbers will not match the numbers from the chart due to rounding

Private Indicators

Credit Approvals As % of All Decisions Submitted

Private Indicators

Total Number of Employees % CHG YOY

January 2018 Manufacturing ISM® Report On Business®

January PMI® at 59.1%

New Orders, Production, and Employment Continue Growing
Supplier Deliveries Slowing at Faster Rate; Backlog Growing
Raw Materials Inventories Growing, Customers’ Inventories Too Low
Prices Increasing at Faster Rate

“Economic activity in the manufacturing sector expanded in January, and the overall economy grew for the 105th consecutive month, say the nation's supply executives in the latest Manufacturing ISM® Report On Business®. The January PMI® registered 59.1 percent, a decrease of 0.2 percentage point from the seasonally adjusted December reading of 59.3 percent. The New Orders Index registered 65.4 percent, a decrease of 2 percentage points from the seasonally adjusted December reading of 67.4 percent. The Production Index registered 64.5 percent, a 0.7 percentage point decrease compared to the seasonally adjusted December reading of 65.2 percent. The Employment Index registered 54.2 percent, a decrease of 3.9 percentage points from the seasonally adjusted December reading of 58.1 percent. The Supplier Deliveries Index registered 59.1 percent, a 1.9 percentage point increase from the seasonally adjusted December reading of 57.2 percent. The Inventories Index registered 52.3 percent, an increase of 3.8 percentage points from the December reading of 48.5 percent. The Prices Index registered 72.7 percent in January, a 4.4 percentage point increase from the December reading of 68.3 percent, indicating higher raw materials prices for the 23rd consecutive month.

Comments from the panel reflect expanding business conditions, with new orders and production maintaining high levels of expansion; employment expanding at a slower rate; order backlogs expanding at a faster rate; and export orders and imports continuing to grow faster in January. Supplier deliveries continued to slow (improving) at a faster rate. Price increases occurred across all industry sectors. The Customers’ Inventories Index indicates levels are still too low. Capital expenditure lead times increased 8 percent during the month of January.” – Timothy R. Fiore, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee
Private Indicators

January 2018 Non-Manufacturing ISM® Report On Business®

January NMI® at 59.9%

Business Activity Index at 59.8%; New Orders Index at 62.7%; Employment Index at 61.6%

“Economic activity in the non-manufacturing sector grew in January for the 96th consecutive month, say the nation's purchasing and supply executives in the latest Non-Manufacturing ISM® Report On Business®. The NMI® registered 59.9 percent, which is 3.9 percentage points higher than the seasonally adjusted December reading of 56 percent. This represents continued growth in the non-manufacturing sector at a faster rate.

The Non-Manufacturing Business Activity Index increased to 59.8 percent, 2 percentage points higher than the seasonally adjusted December reading of 57.8 percent, reflecting growth for the 102nd consecutive month, at a faster rate in January.

The New Orders Index registered 62.7 percent, 8.2 percentage points higher than the seasonally adjusted reading of 54.5 percent in December.

The Employment Index increased 5.3 percentage points in January to 61.6 percent from the seasonally adjusted December reading of 56.3 percent.

The Prices Index increased by 2 percentage points from the seasonally adjusted December reading of 59.9 percent to 61.9 percent, indicating that prices increased in January for the 23rd consecutive month.

According to the NMI®, 15 non-manufacturing industries reported growth. The non-manufacturing sector reflected strong growth in January after two consecutive months of pullback. Overall, the majority of respondents’ comments are positive about business conditions and the economy. They also indicated that recent tax changes have had a positive impact on their respective businesses.” – Anthony Nieves, CPSM, C.P.M., CFPM, Chair of the Institute for Supply Management® (ISM®) Non-Manufacturing Business Survey Committee

Source: https://www.instituteforsupplymanagement.org/ISMReport/NonMfgROB.cfm; 1/5/18
The seasonally adjusted IHS Markit final US Manufacturing Purchasing Managers’ Index™ (PMI™) registered 55.5 in January, up from 55.1 in December. The latest index reading indicated a strong improvement in business conditions across the manufacturing sector. Moreover, the index signalled the strongest upturn in the health of the sector for over two-and-a-half years.

January PMI signals strongest manufacturing growth since March 2015

Operating conditions across the US manufacturing sector continued to improve in January, with the latest survey data indicating the strongest upturn since March 2015. Moreover, production levels and new orders grew at the quickest rates in twelve months. Rising global demand also drove a faster expansion in new export orders.

US manufacturing started 2018 in fine fettle, with the PMI up to its highest for over two-and-a-half years. Output growth accelerated in response to fuller order books, the latter buoyed by the twin drivers of robust domestic demand and rising exports. Factory payroll growth remained among the highest seen over the past three years, underscoring the bullish mood evident across the manufacturing sector.

Pricing power is also returning as a result of strengthening demand, which should help bolster profit margins, but is likely to also feed through to higher consumer prices. The acceleration of manufacturing growth and upward price trends are grist to the mill for Fed hawks, adding to the likelihood of interest rates rising in March.” – Chris Williamson, Chief Economist, Markit®
U.S. business activity growth eases to nine-month low

January survey data indicated a solid rise in U.S. service sector business activity, though the rate of growth eased for a third month running to reach a nine-month low. That said, new business continued to expand strongly, with the upturn accelerating to the fastest since last September.

A slowdown in the service sector comes as a disappointment, though was partially offset by faster manufacturing growth during the month. Combined, the two PMI surveys point to the economy expanding at a reasonably solid, albeit not exciting, 2-2.5% annualised rate at the start of the first quarter.

Beneath the headline numbers, the survey findings are more encouraging, and suggest the pace of economic growth could accelerate in coming months. Most importantly, growth of new orders jumped higher in both sectors in January, registering the largest upturn in new work since last August and one of the biggest gains seen over the past three years.

This upturn in client demand was a key factor behind another month of strong hiring, but also encouraged firms to hike prices. Selling price inflation accelerated in both manufacturing and services as pricing power continued to return.” – Chris Williamson, Chief Economist, Markit®

Source: https://www.markiteconomics.com/Survey/PressRelease.mvc/442f04ee15444e7a8257437bdcf8f39d; 2/5/18
Private Indicators

National Association of Credit Management – Credit Managers’ Index

“After a record-setting December, credit managers are reporting a slight step back in the latest Credit Managers’ Index (CMI). The drop in the performance of the favorable factors was dramatic and not the least expected given the patterns that have been noted for the last several months.

The overall score in December was 56.6 and has fallen to 54.2 – the lowest reading since May. More distressing is the reason for the decline, as the biggest drop was in the favorable factors. They fell from an overall score of 65.7 to 59.4, the first time this category has dropped out of the 60s in well over a year. The unfavorable category was the bright spot this month, as it scarcely changed – increasing from 50.4 to 50.8.

All of the favorable measures suffered this month. Some dropped like a stone. Sales fell hard from 68.3 to 59.2 – nearly a 10-point decline – hitting a low point not reached since December 2016. The new credit applications also fell from the 60s to 57.3. The dollar collections category slipped out of the 60s by the narrowest of margins (63.1 to 59.1). Only amount of credit extended managed to stay in the 60s, with a reading of 61.8 after December’s 67.8.

There was considerably less movement in the unfavorable categories, which is a good thing this month. There were even some minor improvements. The rejections of credit applications stayed in the 50s, but slid slightly from 52.4 to 51.4. Accounts placed for collection fell out of the 50s again by slipping to 49.8 from December’s 50.5. This category has been slipping back and forth across the barrier between expansion (over 50) and contraction (under 50) all year. The disputes category increased a little, but still stayed in the contraction zone – 49.7 as compared to the 48.3 notched in December.” – Adam Fusco, Associate Editor, NACM

Source: http://web.nacm.org/CMI/PDF/CMIcurrent.pdf; 1/31/18
Private Indicators

National Association of Credit Management – Credit Managers’ Index

“In December, the sense was that real progress was ahead and many people have been speaking of 2018 with great expectations. It may yet work out that way. This month may be written off as an anomaly, but it may also signal that some of those weaknesses that had been warned about are manifesting.

The dollar amount beyond terms has been a challenge all year as the slow pays show up one month and not so much the next. This time the reading was better than it was the month before, but still hovers in the 40s.

It begs the question – which of these is the anomaly? Is it the good growth that has been showing up in the GDP numbers or is this month an oddity for the credit managers? Both the manufacturing and service sectors have seen this decline, so it isn’t a matter of one part of the economy struggling. This is the point that demands some attention to the pattern that has been established with the CMI in the past. Given that credit activity precedes a great deal of the business cycle, the CMI often serves as an early warning system. Still, even with the big declines, the overall score is comfortably above the line and in expansion territory. The favorable categories have been near record levels much of the year. Perhaps it was time for them to come back to earth. It is hoped that this is not the beginning of a more serious slide.”

– Dr. Chris Kuehl, Economist, NACM

Source: http://web.nacm.org/CMI/PDF/CMIcurrent.pdf; 1/31/18
### Private Indicators

#### Combined Index Monthly Change (seasonally adjusted)

<table>
<thead>
<tr>
<th>Index</th>
<th>Dec '16</th>
<th>Jan '17</th>
<th>Feb '17</th>
<th>Mar '17</th>
<th>Apr '17</th>
<th>May '17</th>
<th>Jun '17</th>
<th>Jul '17</th>
<th>Aug '17</th>
<th>Sep '17</th>
<th>Oct '17</th>
<th>Nov '17</th>
<th>Dec '17</th>
</tr>
</thead>
<tbody>
<tr>
<td>+/−</td>
<td>1.2</td>
<td>-0.1</td>
<td>1.4</td>
<td>-1.1</td>
<td>1.5</td>
<td>-2.2</td>
<td>2.5</td>
<td>-1.4</td>
<td>0.4</td>
<td>1.4</td>
<td>-1.0</td>
<td>1.0</td>
<td>-2.3</td>
</tr>
</tbody>
</table>

#### Combined Manufacturing and Service Sectors (seasonally adjusted)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Dec '16</th>
<th>Jan '17</th>
<th>Feb '17</th>
<th>Mar '17</th>
<th>Apr '17</th>
<th>May '17</th>
<th>Jun '17</th>
<th>Jul '17</th>
<th>Aug '17</th>
<th>Sep '17</th>
<th>Oct '17</th>
<th>Nov '17</th>
<th>Dec '17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>58.6</td>
<td>60.1</td>
<td>62.6</td>
<td>61.2</td>
<td>63.8</td>
<td>60.6</td>
<td>66.5</td>
<td>62.8</td>
<td>62.2</td>
<td>67.3</td>
<td>66.8</td>
<td>68.3</td>
<td>59.2</td>
</tr>
<tr>
<td>New credit applications</td>
<td>57.0</td>
<td>60.8</td>
<td>62.0</td>
<td>60.5</td>
<td>62.0</td>
<td>59.3</td>
<td>59.8</td>
<td>59.7</td>
<td>61.2</td>
<td>60.5</td>
<td>62.8</td>
<td>63.7</td>
<td>57.3</td>
</tr>
<tr>
<td>Dollar collections</td>
<td>59.5</td>
<td>58.2</td>
<td>63.0</td>
<td>56.4</td>
<td>61.2</td>
<td>56.7</td>
<td>62.5</td>
<td>60.2</td>
<td>58.9</td>
<td>60.0</td>
<td>60.2</td>
<td>63.1</td>
<td>59.1</td>
</tr>
<tr>
<td>Amount of credit extended</td>
<td>61.4</td>
<td>64.1</td>
<td>66.8</td>
<td>64.4</td>
<td>67.2</td>
<td>63.6</td>
<td>66.8</td>
<td>64.1</td>
<td>66.7</td>
<td>66.3</td>
<td>65.5</td>
<td>67.8</td>
<td>61.8</td>
</tr>
<tr>
<td>Index of favorable factors</td>
<td>59.1</td>
<td>60.8</td>
<td>63.6</td>
<td>60.6</td>
<td>63.6</td>
<td>60.0</td>
<td>63.9</td>
<td>61.7</td>
<td>62.2</td>
<td>63.5</td>
<td>63.8</td>
<td>65.7</td>
<td>59.4</td>
</tr>
<tr>
<td>Rejections of credit applications</td>
<td>51.3</td>
<td>50.6</td>
<td>51.4</td>
<td>51.6</td>
<td>52.1</td>
<td>52.4</td>
<td>52.6</td>
<td>51.9</td>
<td>52.2</td>
<td>52.5</td>
<td>51.8</td>
<td>52.4</td>
<td>51.4</td>
</tr>
<tr>
<td>Accounts placed for collection</td>
<td>49.7</td>
<td>49.4</td>
<td>48.2</td>
<td>49.8</td>
<td>49.0</td>
<td>48.5</td>
<td>49.3</td>
<td>48.9</td>
<td>48.7</td>
<td>50.3</td>
<td>49.5</td>
<td>50.5</td>
<td>49.8</td>
</tr>
<tr>
<td>Disputes</td>
<td>49.8</td>
<td>46.0</td>
<td>48.7</td>
<td>48.5</td>
<td>49.1</td>
<td>47.9</td>
<td>50.4</td>
<td>48.8</td>
<td>49.1</td>
<td>51.7</td>
<td>47.6</td>
<td>48.3</td>
<td>49.7</td>
</tr>
<tr>
<td>Dollar amount beyond terms</td>
<td>49.3</td>
<td>48.4</td>
<td>51.0</td>
<td>47.4</td>
<td>51.0</td>
<td>45.9</td>
<td>50.4</td>
<td>48.3</td>
<td>47.4</td>
<td>50.4</td>
<td>47.3</td>
<td>47.5</td>
<td>49.3</td>
</tr>
<tr>
<td>Dollar amount of customer deductions</td>
<td>49.8</td>
<td>48.7</td>
<td>47.6</td>
<td>49.8</td>
<td>49.2</td>
<td>48.7</td>
<td>49.1</td>
<td>48.1</td>
<td>49.2</td>
<td>49.8</td>
<td>48.7</td>
<td>48.9</td>
<td>49.7</td>
</tr>
<tr>
<td>Filings for bankruptcies</td>
<td>55.0</td>
<td>53.9</td>
<td>53.2</td>
<td>53.8</td>
<td>53.5</td>
<td>52.7</td>
<td>53.4</td>
<td>53.6</td>
<td>55.3</td>
<td>56.2</td>
<td>55.3</td>
<td>55.1</td>
<td>55.0</td>
</tr>
<tr>
<td>Index of unfavorable factors</td>
<td>50.8</td>
<td>49.5</td>
<td>50.0</td>
<td>50.2</td>
<td>50.6</td>
<td>49.3</td>
<td>50.9</td>
<td>49.9</td>
<td>50.3</td>
<td>51.8</td>
<td>50.0</td>
<td>50.4</td>
<td>50.8</td>
</tr>
<tr>
<td>NACM Combined CMI</td>
<td>54.1</td>
<td>54.0</td>
<td>55.4</td>
<td>54.3</td>
<td>55.8</td>
<td>53.6</td>
<td>56.1</td>
<td>54.6</td>
<td>55.1</td>
<td>56.5</td>
<td>55.5</td>
<td>56.6</td>
<td>54.2</td>
</tr>
</tbody>
</table>

Source: http://web.nacm.org/CMI/PDF/CMIcurrent.pdf; 1/31/18
January 2018 Report:
Expansion reading sets a 45-year high in the NFIB Optimism Index
“The Small Business Optimism Index jumped two points to 106.9 in January and set a record with the number of small business owners saying Now Is a Good Time to Expand, according to NFIB’s Small Business Economic Trends Survey, released today.” – Holly Wade, NFIB

Record Number of Small Business Owners Say ‘Now is Good Time to Expand’
“Main Street is roaring. Small business owners are not only reporting better profits, but they’re also ready to grow and expand. The record level of enthusiasm for expansion follows a year of record-breaking optimism among small businesses.” – Juanita Duggan, NFIB President and CEO, NFIB
“The historically high index readings over the last year tell us small business owners have never been more positive about the economy. This is in large response to the new management in Washington tackling the biggest concerns of small business owners – high taxes and regulations.” – William C. Dunkelberg, Chief Economist, NFIB
“Now Is a Good Time to Expand registered at 32 percent, the highest level in the history of the NFIB survey, which began in 1973. Actual Earnings climbed up 11 points from December, the highest level reported since 1988. Plans to make Capital Outlays jumped up two points, and Plans to Increase Inventories gained four points.” – Holly Wade, NFIB

Commentary

“The historically high index readings over the last year tell us small business owners have never been more positive about the economy.” – William C. Dunkelberg, Chief Economist, NFIB

“As small business owners struggle to find qualified workers for open positions, reports of higher worker compensation rose four percentage points to a net 31 percent, the highest reading since 2000 and among the highest in the 45 years of NFIB’s survey. Plans to raise compensation also rose one point to a net 24 percent, the highest reading since 1989.” – Holly Wade, NFIB

“Finding qualified workers now exceeds taxes and regulations as the top concern for small businesses.” – Juanita Duggan, NFIB President and CEO, NFIB

• “At 99.70 in December, the Paychex | IHS Market Small Business Jobs Index has fallen a full percentage point from its February level, 100.78.
• After moderating just below 100 for several months, the national index dropped more in December (0.16 percent) than the past four months combined (0.1 percent).” – James Diffley, Chief Regional Economist, IHS Markit
At 100.37, the South is the only region with an index above 100, and has ranked first every month in 2018.

All four regions declined from last month and last year. At the division level, only the West South Central, with the oil recovery, and New England improved the pace of small business job growth year-over-year.”

– James Diffley, Chief Regional Economist, IHS Markit

Note: Percentages displayed in the regional heat map reflect 1-month changes.
Private Indicators

The Paychex | IHS Markit Small Business Employment Watch

Small Business Wage Data

<table>
<thead>
<tr>
<th>Month</th>
<th>Hourly Earnings</th>
<th>12-Month Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>$26.38</td>
<td>2.81%</td>
</tr>
</tbody>
</table>

Small Business Jobs Index

<table>
<thead>
<tr>
<th>Month</th>
<th>Index</th>
<th>12-Month Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>99.88</td>
<td>-0.74%</td>
</tr>
</tbody>
</table>

Source: https://www.paychex.com/employment-watch/?; 1/30/18
Cities In The West: Seattle, Las Vegas And San Francisco Lead Gains In S&P CoreLogic Case-Shiller Home Price Indices

Home prices continue to rise three times faster than the rate of inflation. The S&P CoreLogic Case-Shiller National Index year-over-year increases have been 5% or more for 16 months; the 20-City index has climbed at this pace for 28 months. Given slow population and income growth since the financial crisis, demand is not the primary factor in rising home prices. Construction costs, as measured by National Income and Product Accounts, recovered after the financial crisis, increasing between 2% and 4% annually, but do not explain all of the home price gains. From 2010 to the latest month of data, the construction of single family homes slowed, with single family home starts averaging 632,000 annually. This is less than the annual rate during the 2007-2009 financial crisis of 698,000, which is far less than the long-term average of slightly more than one million annually from 1959 to 2000 and 1.5 million during the 2001-2006 boom years. Without more supply, home prices may continue to substantially outpace inflation.

Looking across the 20 cities covered here, those that enjoyed the fastest price increases before the 2007-2009 financial crisis are again among those cities experiencing the largest gains. San Diego, Los Angeles, Miami and Las Vegas, price leaders in the boom before the crisis, are again seeing strong price gains. They have been joined by three cities where prices were above average during the financial crisis and continue to rise rapidly – Dallas, Portland OR, and Seattle.” – David Blitzer, Managing Director and Chairman of the Index Committee, S&P Dow Jones

Source: http://us.spindices.com/index-family/real-estate/sp-corelogic-case-shiller; 1/30/18
“The indices have a base value of 110 in January 2000; thus, for example, a current index value of 150 translates to a 50% appreciation rate since January 2000 for a typical home located within the subject market.” – S&P CoreLogic

Sources: S&P Dow Jones Indices and CoreLogic; Data through August 2018

Source: http://us.spindices.com/index-family/real-estate/sp-corelogic-case-shiller; 1/30/18
“Small business owners began 2018 feeling very positive about the overall economy and outlook for their businesses. The Wells Fargo/Gallup Small Business Index rose 4 points in the first quarter to 107. The survey was taken just after the start of the New Year and comes on the heels of a solid holiday shopping season and very strong fourth quarter. Most of the increase came in the more forward looking components of the survey. The future expectations series, which reflects how optimistic business owners are about the economy and their business for the coming year, rose 5 points in the first quarter to 65, which is the highest it has been since December 2006. Business owners’ assessment of current conditions was little changed, with the present situation series slipping one point to 42 in the first quarter. The slight drop left the present situation series roughly in line with its average for the previous four quarters and well above levels in the years prior to that.” – Mark Vitner, Senior Economist, Wells Fargo Securities Economics Group
Business Owners Are Expecting More Growth This Year

“The persistent improvement in small business confidence and notable increase in expectations for the coming year suggest that more business owners are likely to expand their operations this year, which means increased investment in plants and equipment. The proportion of business owners expecting to increase capital spending rose 5 points to 38, which ties the all-time high for this series, last hit in December 2003. Moreover, the proportion of firms stating they plan to increase capital spending ‘a lot’ rose to 10 percent, which is the highest ever seen. Capital spending plans have been rising for the better part of a year and actual capital spending, which includes outlays for computers, machinery, facilities, or other long-term investments, has also increased. The proportion of business owners noting that they had increased capital spending over the past year was unchanged in the first quarter at 30 percent. Fifty-four percent of firms said that capital spending remained at the same level, while just 15 percent of business owners noted a drop in capital outlays.” – Mark Vitner, Senior Economist, Wells Fargo Securities Economics Group

Source: http://image.mail1.wf.com/lib/fe8d13727664027a7c/m/2/wf-small-business-20180125.pdf; 1/25/18
Older Workers Account for All Net Job Growth Since 2000

“Prime-age workers” are those between 25 and 54.¹ Numbering almost 100 million in December 2017, this age group is both the largest and most productive set of workers.²” – William Emmons, Lead Economist, Center for Household Financial Stability, The Federal Reserve Bank of St. Louis

Demographics

Older Workers Account for All Net Job Growth Since 2000

“One important consideration on this topic is that the rapid aging of our workforce is unlikely to continue at this pace. Two important trends contributed to the rapid increase in the share of employment of older workers shown in the chart:

• A rapid increase in the share of older people in the population
• Diverging employment-to-population ratios by age group

The share of the U.S. adult population aged 55 or older increased from 27 to 36 percent between 2000 and 2017. This rapid change, due to the aging of the baby boomers, is unprecedented and is not expected to continue.

At the same time, the employment-to-population ratio of people aged 55 or older increased from 31 to 39 percent, while the ratio declined from 77 to 72 percent among people under 55. It seems unlikely, although not impossible, that these trends will continue to diverge so significantly.” – William Emmons, Lead Economist, Center for Household Financial Stability, The Federal Reserve Bank of St. Louis

Demographics

Older Workers Account for All Net Job Growth Since 2000

Future Share of Older Workers

“It is possible to forecast future employment shares by age group using Census Bureau population projections of detailed age groups and assumptions about future employment-to-population ratios.

For simplicity, I assumed that the age-specific employment-to-population ratios in the fourth quarter of 2017 will remain constant in the future. The results for employment by age group are shown in the table below for two break points — age 55 and age 65.

The first table shows that workers 55 and older are likely to become a slightly larger share of the workforce by 2027, but the share likely will decline after that. The second table shows that workers 65 and older are likely to become a larger share of the workforce over the next 20 years.” – William Emmons, Lead Economist, Center for Household Financial Stability, The Federal Reserve Bank of St. Louis

## Demographics

### Employment by Age Group in Millions

#### Over and Under Age 55

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2007</th>
<th>2017</th>
<th>2027</th>
<th>2037</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 55</td>
<td>119.2</td>
<td>120.0</td>
<td>118.5</td>
<td>128.8</td>
<td>136.2</td>
</tr>
<tr>
<td>55 or Older</td>
<td>18.4</td>
<td>26.2</td>
<td>35.5</td>
<td>40.0</td>
<td>40.3</td>
</tr>
<tr>
<td>As Percent of Total</td>
<td>13.4%</td>
<td>17.9%</td>
<td>23.1%</td>
<td>23.7%</td>
<td>22.8%</td>
</tr>
</tbody>
</table>

**NOTES:** Employment projections are based on Census Bureau projections of population by age group and age-specific employment-to-population ratios as of Q4:2017. Numbers are as of December each year.


Federal Reserve Bank of St. Louis

---

#### Employment by Age Group in Millions

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2007</th>
<th>2017</th>
<th>2027</th>
<th>2037</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 65</td>
<td>133.5</td>
<td>140.5</td>
<td>144.5</td>
<td>154.5</td>
<td>161.4</td>
</tr>
<tr>
<td>65 or Older</td>
<td>4.1</td>
<td>5.8</td>
<td>9.5</td>
<td>14.2</td>
<td>15.4</td>
</tr>
<tr>
<td>As Percent of Total</td>
<td>3.0%</td>
<td>4.0%</td>
<td>6.2%</td>
<td>8.4%</td>
<td>8.7%</td>
</tr>
</tbody>
</table>

**NOTES:** Employment projections are based on Census Bureau projections of population by age group and age-specific employment-to-population ratios as of Q4:2017. Numbers are as of December each year.


Federal Reserve Bank of St. Louis

Demographics

Older Workers Account for All Net Job Growth Since 2000

Long-Term Workforce Changes

“The figures below show long-range projections of cumulative increases in employment for older and younger workers, using first age 55 and then age 65 as break points.

As the results in the tables suggested, the figures also show that the rapid increase in workers age 55 and older (or 65 and older) likely will not continue to outstrip younger workers for long. Within a decade or so, growth of younger workers (however defined) will once again begin to outstrip the growth of older workers.

A Silver Lining to the Graying of the Workforce

If it’s true that our aging workforce has held back economic growth in recent years, then the likely return to more normal patterns of job growth by age group is a reason to be optimistic. The Census Bureau expects the age structure of the population to shift permanently toward an older population, but the most rapid changes relevant for the workforce will have occurred within the next decade or so.” – William Emmons, Lead Economist, Center for Household Financial Stability, The Federal Reserve Bank of St. Louis

Demographics

Projected Cumulative Change in Employment

Over and Under 55

<table>
<thead>
<tr>
<th>Year</th>
<th>Under 55</th>
<th>55 and Older</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2019</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2021</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2023</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>2025</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>2027</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>2029</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>2031</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>2033</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>2035</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>2037</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>2039</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>2041</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>2043</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>2045</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>2047</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>2049</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>2051</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>2053</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>2055</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>2057</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>2059</td>
<td>41</td>
<td>41</td>
</tr>
</tbody>
</table>

NOTE: Employment projections are based on Census Bureau projections of population by age group and age-specific employment-to-population ratios as of Q4:2017.

SOURCE: Census Bureau.

FEDERAL RESERVE BANK OF ST. LOUIS

Demographics

Projected Cumulative Change in Employment

Over and Under 65

<table>
<thead>
<tr>
<th>Year</th>
<th>Under 65</th>
<th>65 and Older</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2019</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2021</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2023</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2025</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2027</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2029</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2031</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2033</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2035</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2037</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2039</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2041</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2043</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2045</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2047</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2049</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2051</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2053</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2055</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2057</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2059</td>
<td>0.0</td>
<td>1.5</td>
</tr>
</tbody>
</table>

NOTE: Employment projections are based on Census Bureau projections of population by age group and age-specific employment-to-population ratios as of Q4:2017.

SOURCE: Census Bureau.

Watch for the Rise of Suburbia and More in 2018

There are two “interesting shifts” at hand.

“Aging Millennials will move back to the suburbs, reversing the previous tide of urban living and working. So says David Rabin, managing director of Private Real Estate at CenterSquare Investment Management.

“This is an interesting shift in suburban demographics that will increase demand for suburban multifamily, which will outperform the high-end urban multifamily market, where rents have peaked due to excess supply and affordability challenges,” Rabin tells GlobeSt.com. “Well-located and properly amenitized suburban office will be another beneficiary as Millennials seek an urbanesque environment in the suburbs.”

Rabin also predicts shifting perceptions in big box industrial. As was the case with the enthusiasm that surrounded urban multifamily, he expects the appeal of big box industrial investment will begin to soften in late 2018. (Here’s how lenders are targeting multifamily sector gaps.)

“With prices already beginning to exceed replacement cost, further development occurring and a growing pipeline, the market will either meet its equilibrium or become oversaturated,” predicts Rabin. “Higher supply and lack of optimal locations for the new product will impact the ability to achieve occupancy and rent targets therefore providing headwinds to valuations going into 2019.” – Jennifer LeClaire, Journalist, GlobeSt.com
Demographics

Watch for the Rise of Suburbia and More in 2018
There are two “interesting shifts” at hand.

“Clearly, the market for big box industrial is inherently limited, with fewer companies existing to serve as end users of such large spaces. Rabin says rent levels face ceilings as well with supply being less constrained as developers move further out to find cheaper land combined and big users who will move to save a penny in rent.

A broader demand pool exists for companies targeting mid-size and smaller spaces at infill locations that can help them access and service their customer base,” he says. “Furthermore, supply in the smaller, infill industrial space is limited as high land prices and obsolete functionality have made new development uneconomical in the face of declining inventory. Collectively, these demand and supply forces should provide support for strong fundamental performance in this sector.” – Jennifer LeClaire, Journalist, GlobeSt.com

The U.S. economy looks stronger now than it did three months ago, according to 36 forecasters surveyed by the Federal Reserve Bank of Philadelphia. The forecasters predict real GDP will grow at an annual rate of 3.0 percent this quarter and 2.9 percent next quarter. On an annual-average over annual-average basis, the forecasters predict real GDP growing 2.8 percent in 2018, 2.5 percent in 2019, and 2.0 percent in 2020. The forecasts for 2018, 2019, and 2020 are higher than the estimates of three months ago. For 2021, real GDP is estimated to grow 1.7 percent.

A brighter outlook for the labor market accompanies the outlook for stronger output growth. The forecasters predict the unemployment rate will average 4.0 percent in 2018, 3.8 percent in 2019, 3.9 percent in 2020, and 4.0 percent in 2021. The projections for 2018, 2019, and 2020 are below those of the last survey, indicating a brighter outlook for unemployment.

The panelists also predict an improvement in employment for 2018. The projections for the annual-average level of nonfarm payroll employment suggest job gains at a monthly rate of 175,100 in 2018, up from the previous estimate of 163,400. (These annual-average estimates are computed as the year-to-year change in the annual-average level of nonfarm payroll employment, converted to a monthly rate.)” – Tom Stark, The Federal Reserve Bank of Philadelphia
## Median Forecasts for Selected Variables in the Current and Previous Surveys

<table>
<thead>
<tr>
<th>Quarterly data:</th>
<th>Real GDP (%)</th>
<th>Unemployment Rate (%)</th>
<th>Payrolls (000s/month)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Previous</td>
<td>New</td>
<td>Previous</td>
</tr>
<tr>
<td>2018:Q1</td>
<td>2.4</td>
<td>3.0</td>
<td>4.1</td>
</tr>
<tr>
<td>2018:Q2</td>
<td>2.4</td>
<td>2.9</td>
<td>4.1</td>
</tr>
<tr>
<td>2018:Q3</td>
<td>2.1</td>
<td>2.8</td>
<td>4.1</td>
</tr>
<tr>
<td>2018:Q4</td>
<td>2.3</td>
<td>2.5</td>
<td>4.0</td>
</tr>
<tr>
<td>2019:Q1</td>
<td>N.A.</td>
<td>2.4</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

### Annual data (projections are based on annual-average levels):

<table>
<thead>
<tr>
<th></th>
<th>Real GDP (%)</th>
<th>Unemployment Rate (%)</th>
<th>Payrolls (000s/month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>2.5</td>
<td>2.8</td>
<td>4.1</td>
</tr>
<tr>
<td>2019</td>
<td>2.1</td>
<td>2.5</td>
<td>4.0</td>
</tr>
<tr>
<td>2020</td>
<td>1.9</td>
<td>2.0</td>
<td>4.1</td>
</tr>
<tr>
<td>2021</td>
<td>N.A.</td>
<td>1.7</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

Roundtable Sentiment Index Suggests Some Qualms About The Future

“Participants in our Q1 Index survey also report that current market conditions may not last throughout next year.”

“The Real Estate Roundtable’s Q1 2018 Sentiment Index inched up one point from the last quarter of 2017 to register at a solid 54. The score was a reflection of commercial real estate executives’ anticipation of “strong near term asset values and capital availability,” according to Roundtable CEO Jeff DeBoer. “Strong, growing commercial real estate markets go hand in hand with overall positive economic growth,” he said in a prepared statement.” – Erika Morphy, Writer, GlobeST.com
Roundtable Sentiment Index Suggests

“However executives are less confident about future conditions, as evidenced by the score of 51 for the Future Conditions Index — a decrease by one point from the previous quarter. Moreover, there is a noticeable gap between the scores for current conditions (57) and future conditions (51). “Participants in our Q1 Index survey also report that current market conditions may not last throughout next year,” DeBoer said. Indeed the Roundtable noted in its report that while responders are feeling comfortable about the stability of the real estate market in 2018, many have expressed concerns about what the market may look like in 2019.” – Erika Morphy, Writer, GlobeST.com

**Virginia Tech Disclaimer**

**Disclaimer of Non-endorsement**
Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not constitute or imply its endorsement, recommendation, or favoring by Virginia Tech. The views and opinions of authors expressed herein do not necessarily state or reflect those of Virginia Tech, and shall not be used for advertising or product endorsement purposes.

**Disclaimer of Liability**
With respect to documents sent out or made available from this server, neither Virginia Tech nor any of its employees, makes any warranty, expressed or implied, including the warranties of merchantability and fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

**Disclaimer for External Links**
The appearance of external hyperlinks does not constitute endorsement by Virginia Tech of the linked web sites, or the information, products or services contained therein. Unless otherwise specified, Virginia Tech does not exercise any editorial control over the information you December find at these locations. All links are provided with the intent of meeting the mission of Virginia Tech’s web site. Please let us know about existing external links you believe are inappropriate and about specific additional external links you believe ought to be included.

**Nondiscrimination Notice**
Virginia Tech prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the author. Virginia Tech is an equal opportunity provider and employer.
U.S. Department of Agriculture Disclaimer

Disclaimer of Non-endorsement
Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government, and shall not be used for advertising or product endorsement purposes.

Disclaimer of Liability
With respect to documents available from this server, neither the United States Government nor any of its employees, makes any warranty, express or implied, including the warranties of merchantability and fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

Disclaimer for External Links
The appearance of external hyperlinks does not constitute endorsement by the U.S. Department of Agriculture of the linked web sites, or the information, products or services contained therein. Unless otherwise specified, the Department does not exercise any editorial control over the information you December find at these locations. All links are provided with the intent of meeting the mission of the Department and the Forest Service web site. Please let us know about existing external links you believe are inappropriate and about specific additional external links you believe ought to be included.

Nondiscrimination Notice
The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202.110.21100 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-11411 or call 1100.11115.3211 (voice) or 202.110.11311 (TDD). The USDA is an equal opportunity provider and employer.