

The Virginia Tech – U.S. Forest Service

January 2018

Housing Commentary: Section II



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Table of Contents

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

Slide 37: [Private Indicators](#)

Slide 80: [Demographics](#)

Slide 94: [Economics](#)

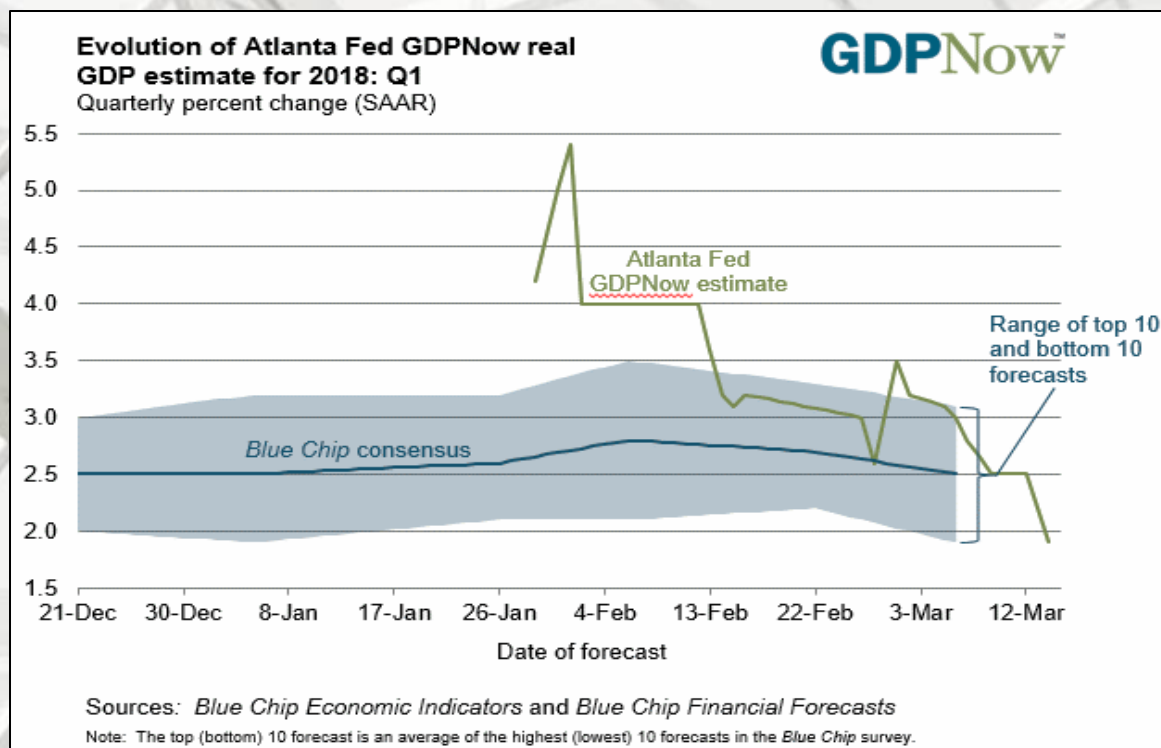
Slide 102: [Virginia Tech Disclaimer](#)

Slide 103: [USDA Disclaimer](#)



Federal Reserve System and Private Indicators

U.S. Economic Indicators



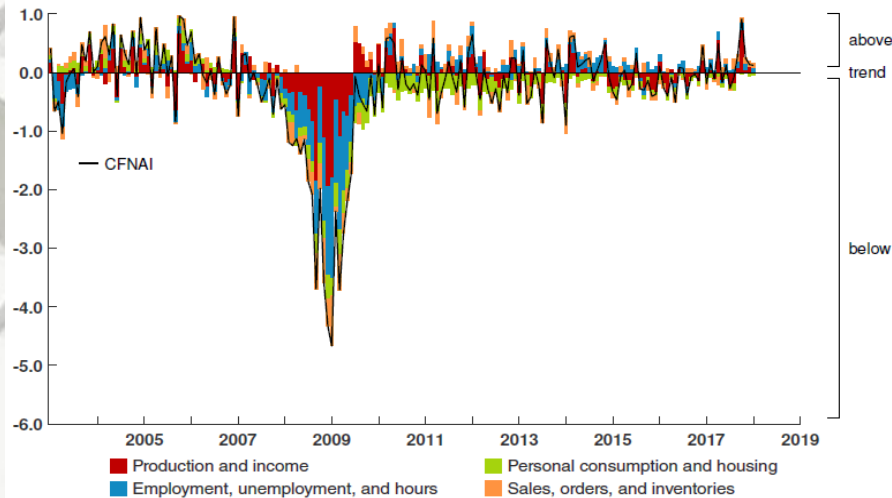
Atlanta Fed GDPNow™

Latest forecast: 1.9 percent — March 14, 2018

“The GDPNow model estimate for real GDP growth (seasonally adjusted annual rate) in the first quarter of 2018 is **1.9 percent** on March 14, down from 2.5 percent on March 9. After yesterday's Consumer Price Index release from the U.S. Bureau of Labor Statistics and this morning's retail sales report from the U.S. Census Bureau, the nowcast of first-quarter real personal consumption expenditures growth fell from 2.2 percent to 1.4 percent.” – Pat Higgins, Economist, Federal Reserve Bank of Atlanta

Chicago Fed: National Activity Index

Chicago Fed National Activity Index, by Categories



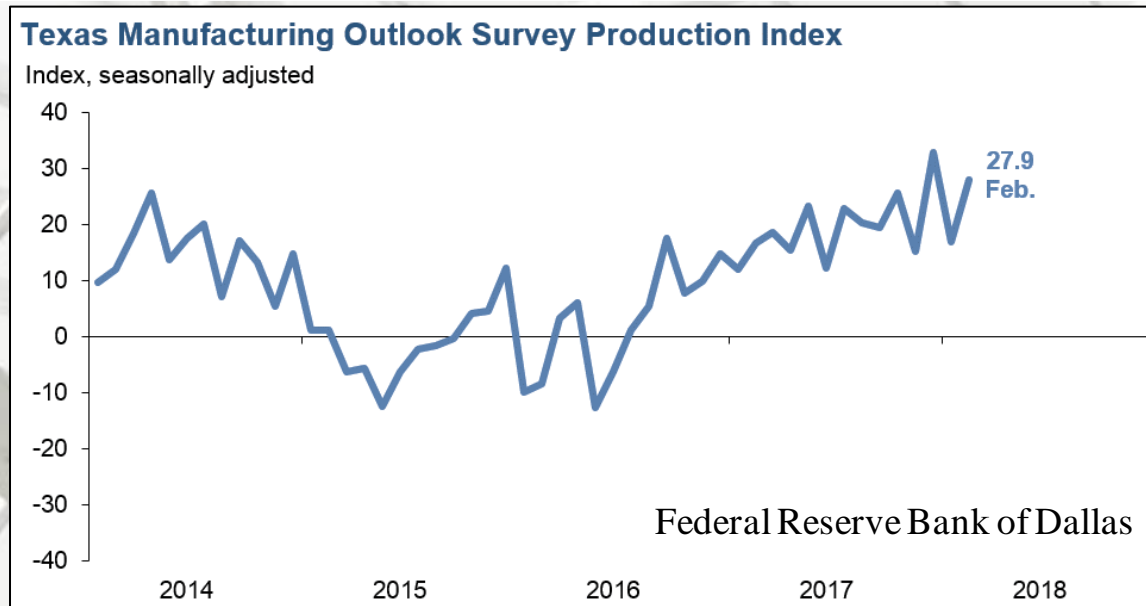
“The Chicago Fed National Activity Index (CFNAI) ticked down to +0.12 in January from +0.14 in December. Two of the four broad categories of indicators that make up the index decreased from December, and two of the four categories made negative contributions to the index in January. The index’s three-month moving average, CFNAI-MA3, decreased to +0.17 in January from +0.43 in December.

Index Points to little change in economic growth in January

Production-related indicators contributed -0.01 to the CFNAI in January, down from $+0.11$ in December. Total industrial production decreased 0.1 percent in January after increasing 0.4 percent in December. The sales, orders, and inventories category made a contribution of $+0.07$ to the CFNAI in January, down slightly from $+0.09$ in December. The Institute for Supply Management’s Manufacturing New Orders Index decreased to 65.4 in January from 67.4 in the previous month.

Employment-related indicators contributed $+0.09$ to the CFNAI in January, up from -0.02 in December. Nonfarm payrolls increased by 200,000 in January after increasing by 160,000 in December. The contribution of the personal consumption and housing category to the CFNAI edged up to -0.03 in January from -0.05 in December. Housing starts increased to 1,326,000 annualized units in January from 1,209,000 in December.” – Laura LaBarbera, Media Relations, Federal Reserve Bank of Chicago

U.S. Economic Indicators



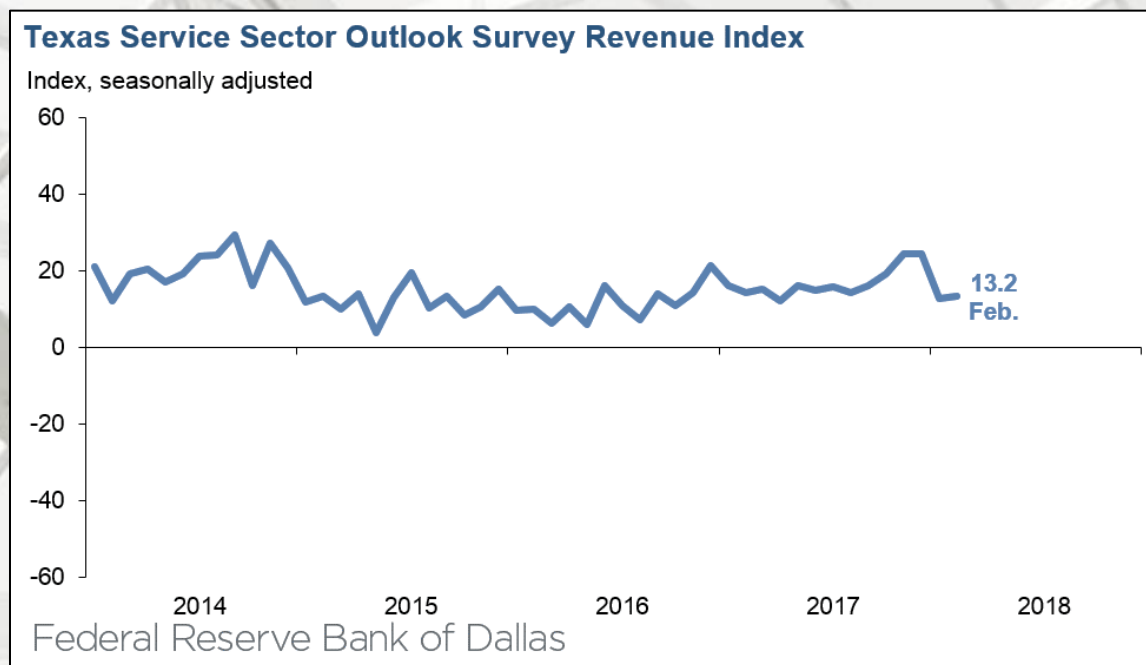
Growth in Texas Manufacturing Accelerates in February

“Texas factory activity expanded at a faster pace in February, according to business executives responding to the Texas Manufacturing Outlook Survey. The production index, a key measure of state manufacturing conditions, rose 11 points to 27.9, signaling a pickup in output growth.

Demand growth continued at roughly the same pace as in January, while some other measures of manufacturing activity pointed to slightly stronger growth this month. The new orders and growth rate of orders indexes held steady at 25.3 and 15.3, respectively. The capacity utilization index rose five points, coming in at 19.6. The shipments index also rose five points and reached 32.1, its highest reading since 2006.

Perceptions of broader business conditions improved further in February. The general business activity index pushed up to 37.2, its highest reading in 12 years. The company outlook index climbed four points to 31.5, on par with its December 2017 reading, which was also the highest in 12 years.” – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas

U.S. Economic Indicators



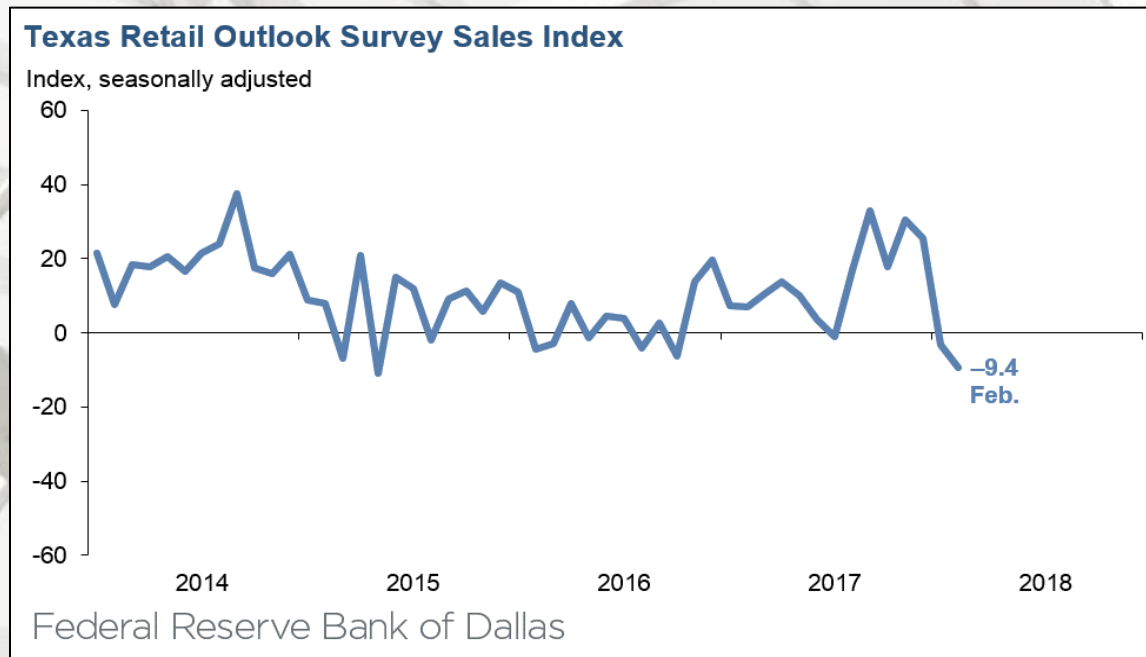
Texas Service Sector Activity Continues to Increase

“Texas service sector activity continued to reflect expansion in February, according to business executives responding to the Texas Service Sector Outlook Survey. The revenue index, a key measure of state service sector conditions, came in at a reading of 13.2, similar to January.

Labor market indicators reflected faster employment growth and slightly longer workweeks this month. The employment index rose from 6.8 to 12.3. The hours worked index was unchanged at 3.8.

Perceptions of broader economic conditions reflected less optimism in February. The general business activity index fell five points to 17.5. The company outlook index moved down eight points to 12.9, with 24 percent of respondents noting their outlook improved from last month and 11 percent noting it worsened.” – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

U.S. Economic Indicators



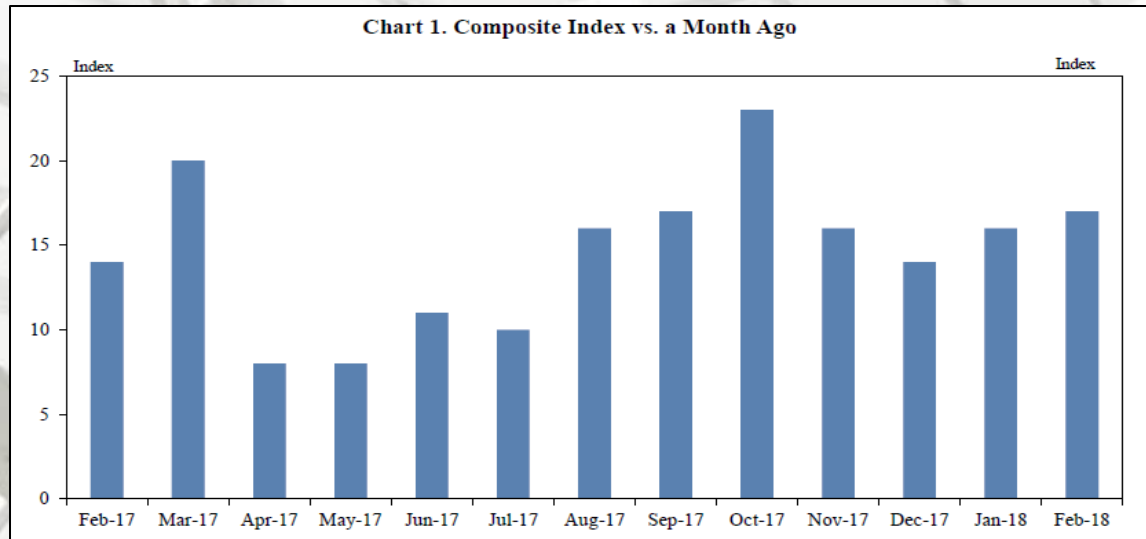
Retail Sales Continue to Decline

“Retail sales continued to fall in February for the second consecutive month, according to business executives responding to the Texas Retail Outlook Survey. The sales index fell from -3.2 in January to -9.4 in February. Inventories increased at a slower pace than last month.

Labor market measures indicated faster retail employment growth and longer workweeks this month. The employment index jumped from 1.6 to 12.1. The hours worked index rose four points to 5.5.

Retailers’ perceptions of broader economic conditions reflected less optimism in February. The general business activity index plunged 13 points to 4.4, its lowest level in seven months. The company outlook index dropped 10 points to 2.4, with 20 percent of respondents reporting that their outlook improved from last month and 17 percent noting it worsened.” – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

U.S. Economic Indicators



The Federal Reserve Bank of Kansas City

Tenth District Manufacturing Survey Posted Continued Solid Growth

“The Tenth District manufacturing survey posted continued solid growth in February, and firms’ expectations for future activity increased moderately. Most price indexes rose further, with some indexes at their highest levels in seven to ten years.

The month-over-month composite index was 17 in February, higher than 16 in January and 13 in December (... Chart 1). The composite index is an average of the production, new orders, employment, supplier delivery time, and raw materials inventory indexes. Factory activity grew at both durable and non-durable goods plants, particularly for metals, machinery, and plastics products. Most month-over-month indexes also increased. The shipments, new orders, and employment indexes all rose moderately. The order backlog index fell from 20 to 13, and the new orders for exports index also eased somewhat. The raw materials inventory index decreased from 15 to 8, while the finished goods inventory index was basically unchanged.” – Pam Campbell, The Federal Reserve Bank of Kansas City

U.S. Economic Indicators

The Federal Reserve Bank of Kansas City

“February was another good month for factories in our region. A rising number of firms reported higher input and selling prices.” – Chad Wilkerson, Vice President and Economist, The Federal Reserve Bank of Kansas City

“Most year-over-year factory indexes were higher in February. The composite index rose from 35 to 38, and the production, shipments, new orders, and order backlog indexes also increased. The employment index climbed from 31 to 39, and the capital expenditures index inched slightly higher. The raw materials inventory index fell from 38 to 23, while the finished goods inventory index increased slightly.

Future factory activity expectations improved moderately over the previous month. The future composite index rose from 29 to 38, and the future production, shipments, new orders, and order backlog indexes also increased. The future employment index jumped from 33 to 41, while the future capital expenditures index moved slightly lower. The future raw materials inventory index increased from 15 to 23, while the future finished goods inventory index decreased modestly.

Most price indexes continued to increase in February. The month-over-month finished goods price index rose from 21 to 26, and the raw materials price index increased considerably, with both reaching their highest levels in the last seven to nine years. The year-over-year finished goods price index edged up from 49 to 51, its highest level since September 2011, and the year-over-year raw materials price index moved moderately higher. The future finished goods price index climbed from 44 to 53, reaching a ten-year high, and the future raw materials price index jumped to its highest level in seven years.” – Pam Campbell, The Federal Reserve Bank of Kansas City

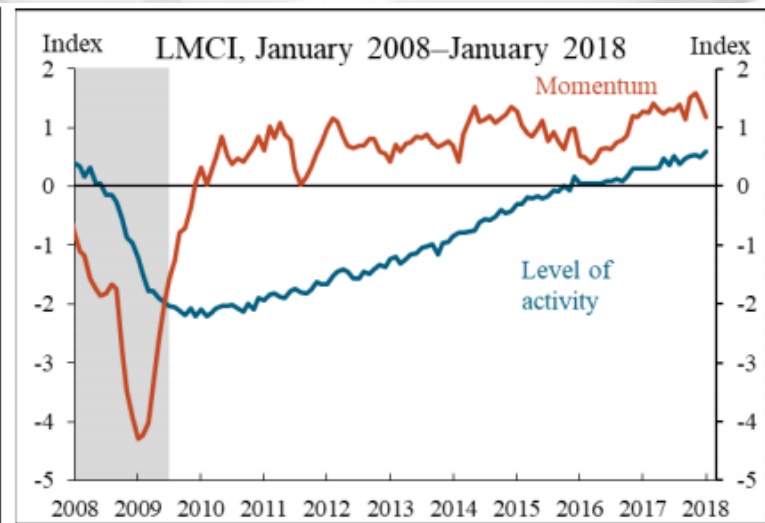
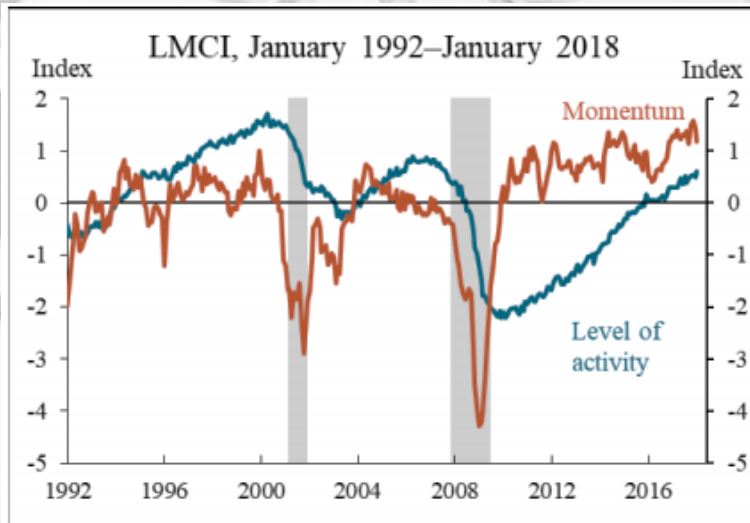
U.S. Economic Indicators

The Federal Reserve Bank of Kansas City LMCI suggest the level of activity increased and momentum remained high in January

“The Kansas City Fed Labor Market Conditions Indicators (LMCI) suggest the level of activity increased and momentum remained high in January. The level of activity indicator increased in January from 0.49 to 0.59, while the momentum indicator decelerated from 1.42 to 1.18.

The table in the current release 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 January 2018. The activity indicator increased 0.07 over the last six months. The largest contribution came from an increase in average hourly earnings. Sixteen variables made a positive contribution, and eight variables made a negative contribution. The momentum indicator was 1.18 in January, where the largest contributor to momentum was initial claims. Fifteen variables made a positive contribution, and nine 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

Contributions to the increase in the <i>level of activity</i> indicator over the last six months	Positive contributions to the <i>momentum</i> indicator in January 2018
Average hourly earnings	Initial claims
Unemployed 27 or more weeks	Expected job availability (U of Michigan)
Job availability index (Conference Board)	Labor force participation rate
Unemployment forecast (Blue Chip)	Expected job availability (Conference Board)
Working part time for economic reasons	Manufacturing employment index (ISM)

Note: Contributions are ordered from largest to smallest.

U.S. Economic Indicators

Empire State Manufacturing Survey

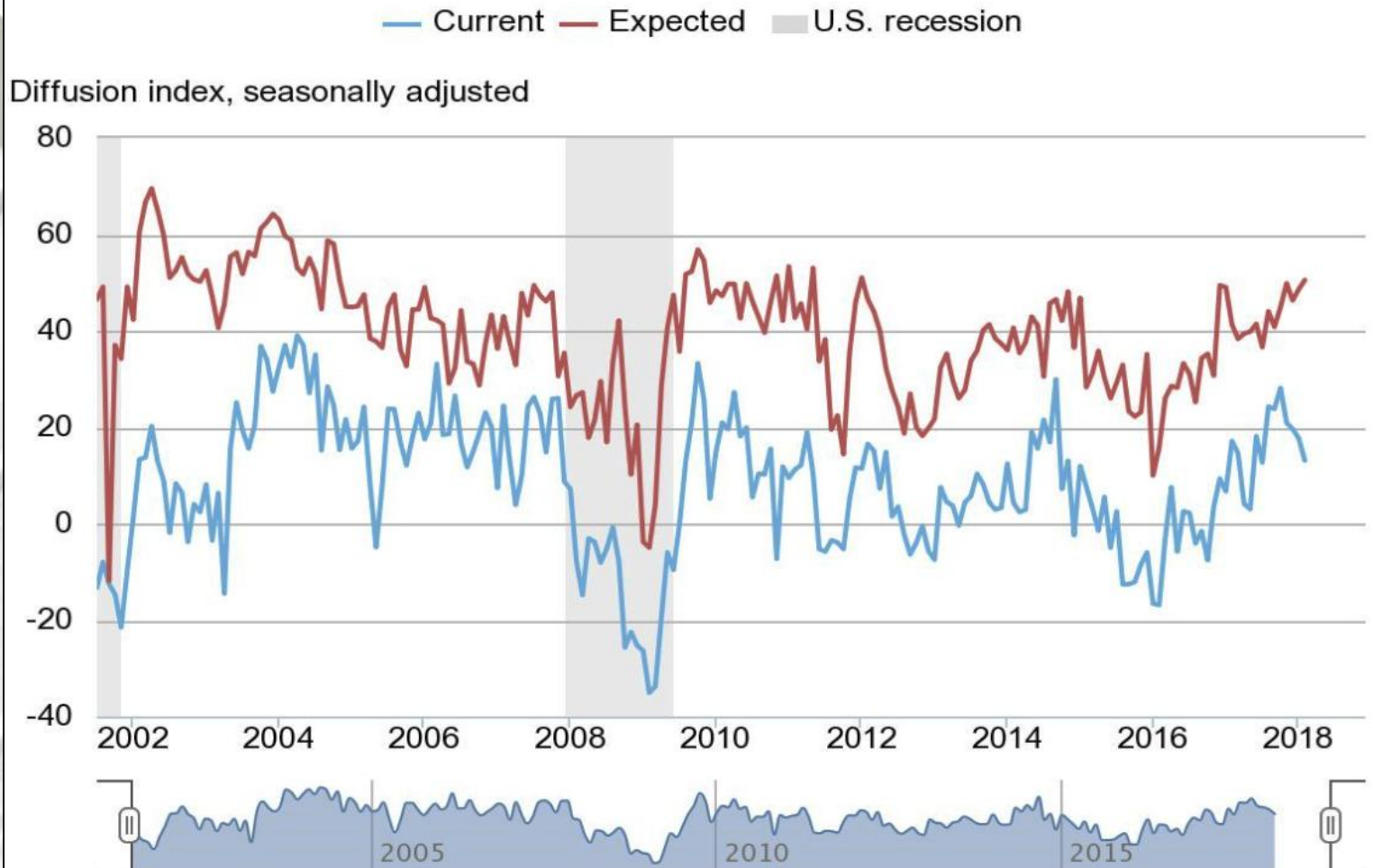
Growth Continues

“Business activity continued to expand in New York State, according to firms responding to the *February 2018 Empire State Manufacturing Survey*. The headline general business conditions index fell five points to 13.1, suggesting a somewhat slower pace of growth than in January. The new orders index and the shipments index were little changed, and indicated ongoing growth in orders and shipments. Unfilled orders increased slightly, and delivery times lengthened. Labor market conditions pointed to a modest increase in employment and hours worked. Input price increases picked up noticeably, with the prices paid index reaching its highest level in several years. Firms remained very optimistic about future business conditions, and capital spending plans continued to be robust.

Manufacturing firms in New York State reported that business activity continued to expand, though at a somewhat slower pace than last month. The general business conditions index moved down five points to 13.1. Thirty-seven percent of respondents reported that conditions had improved over the month, while 24 percent reported that conditions had worsened. The new orders index was little changed at 13.5, and the shipments index was also little changed at 12.5 — readings that indicated ongoing growth in orders and shipments. The unfilled orders index remained positive for a second consecutive month, reflecting a small increase in unfilled orders. The delivery time index rose eight points to 11.1, a sign that delivery times lengthened. The inventories index declined but remained positive at 4.9, suggesting that inventory levels edged higher.” – Richard Deitz and Jason Bram, The Federal Reserve Bank of New York

U.S. Economic Indicators

General Business Conditions



U.S. Economic Indicators

Empire State Manufacturing Survey

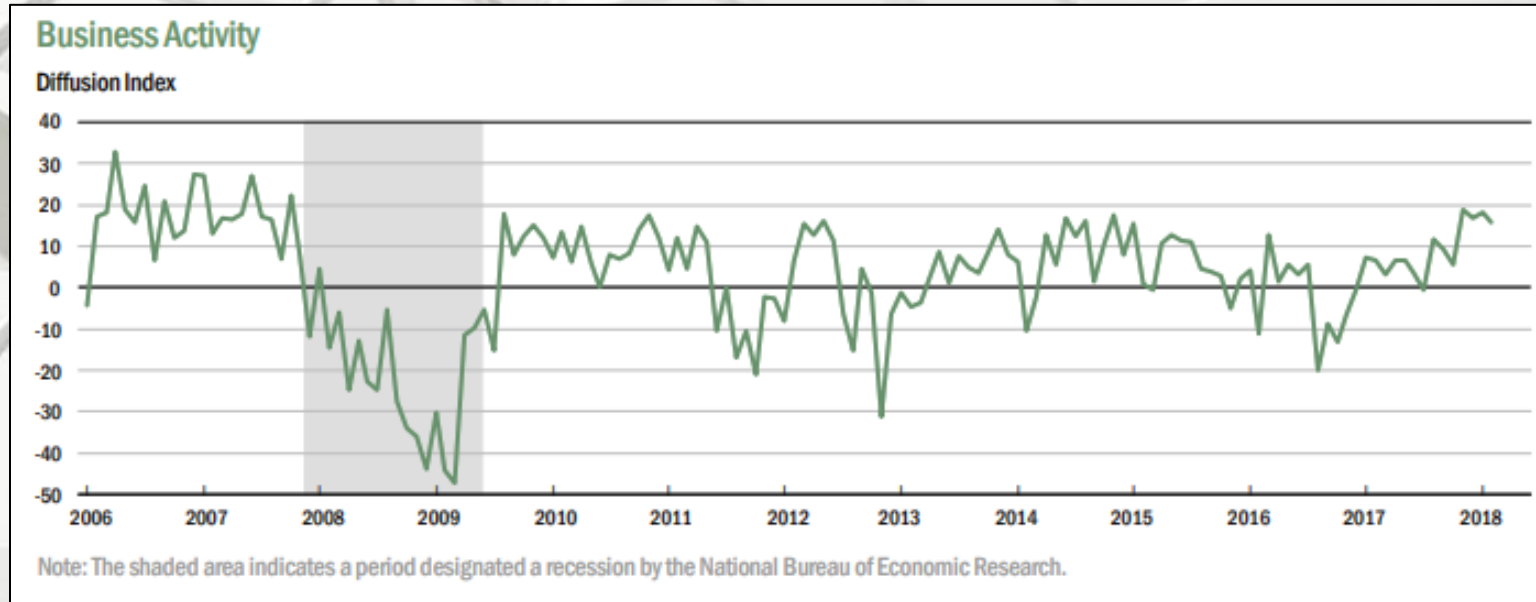
Input Increases Pick Up

“The index for number of employees rose to 10.9, signaling a modest increase in employment levels, and the average workweek index rose to 4.6, indicating that hours worked also climbed. Input price increases were noticeably higher. The prices paid index climbed twelve points to 48.6, its highest level in nearly six years. The prices received index held steady at 21.5, a level pointing to continued moderate selling price increases.

Firms Remain Optimistic about Future Conditions

Looking ahead, firms continued to be optimistic about the six-month outlook. The index for future business conditions edged up two points to 50.5. The index for future delivery times reached a record high of 15.3, indicating that firms expected longer delivery times in the months ahead. The index for future prices paid stayed close to last month’s multiyear high, and the capital expenditures index, at 31.9, showed that firms’ capital spending plans remained strong.” – Richard Deitz and Jason Bram, The Federal Reserve Bank of New York

U.S. Economic Indicators



Business Leaders Survey (Services) Business Climate Index Hits Record High

“The region’s services sector continues to experience solid growth, according to the New York Fed’s February [Business Leaders Survey](#). The survey’s business climate index reached a record high, and the activity, employment, and capital spending indexes were all fairly steady at high levels, indicating continued expansion. Firms were increasingly optimistic about future business conditions, and strong gains in employment were expected in the months ahead. Notably, price pressures picked up, with the prices paid index advancing to a level not seen since 2014, and the prices received measure reaching its highest mark in six years.” – Jason Bram and Richard Deitz, The Federal Reserve Bank of New York

U.S. Economic Indicators

Business Leaders Survey

“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 February 2018 *Business Leaders Survey*. The survey’s headline business activity index edged down two points but remained firmly positive at 15.9. The business climate index rose five points to 21.1, a record high, signaling that firms, on balance, regarded the business climate as better than normal. The employment index moved up five points to 15.5, indicating that employment continued to increase moderately. The wages index climbed five points to 41.7, its highest level in more than a year, suggesting that wage growth accelerated. The indexes for input prices and selling prices both reached multiyear highs, a sign that price increases accelerated. Indexes for the six-month outlook suggested that firms were very optimistic about future conditions.

Business activity in the region’s service sector continued to grow strongly. The headline business activity index edged down two points to 15.9, pointing to a slightly slower pace of growth than last month. Forty-one percent of respondents reported that conditions improved over the month, while 25 percent said that conditions worsened. The business climate index moved up five points to a record-high reading of 21.1, signaling that, on balance, firms viewed the business climate as better than normal and did so to the greatest extent in years.” – Jason Bram and Richard Deitz, The Federal Reserve Bank of New York

U.S. Economic Indicators

Business Leaders Survey

Price Increases Continue to Pick Up

“The employment index rose five points to 15.5, indicating that employment levels continued to increase moderately. The wages index moved up for a second consecutive month, climbing five points to 41.7, a sign that wages increased at a faster pace. The prices paid index advanced seven points to 56.1, its highest level since 2014, pointing to an acceleration in input price increases. The prices received index rose four points to 20.5, its highest level in more than six years, indicating that selling price increases also picked up. The capital spending index advanced to 21.5, a sign that capital spending increased at its fastest pace in two years.

Optimism Remains Widespread

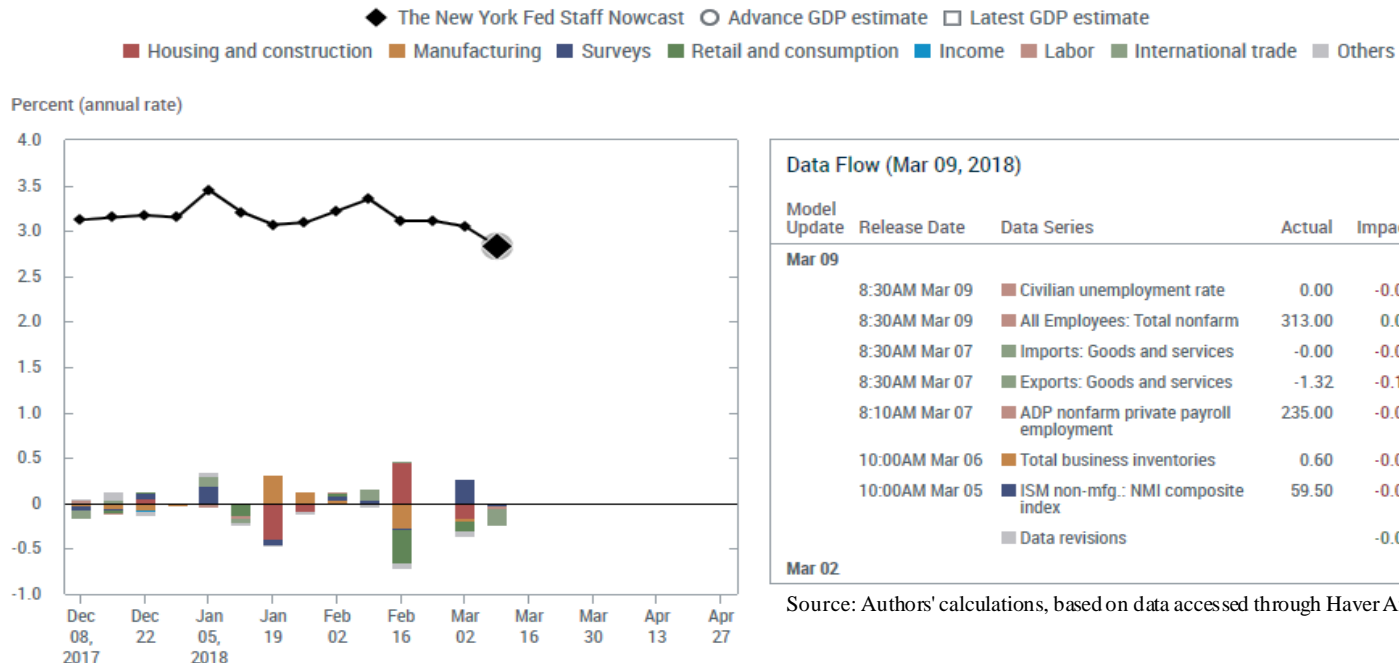
Businesses continued to be very optimistic about the six-month outlook. The index for future business activity rose three points to 50.0, and the index for future business climate moved up three points to 38.6. The index for future employment suggested that respondents expected employment to increase in the months ahead, and indexes for future prices pointed to an expectation that prices would continue to rise. The index for planned capital spending rose four points to 30.1.” – Jason Bram and Richard Deitz, The Federal Reserve Bank of New York

U.S. Economic Indicators

The Federal Reserve Bank of New York Nowcast

2018:Q2 | 2018:Q1 | 2017:Q4 | 2017:Q3

Last Release 11:15am EST Mar 09, 2018



Notes: We start reporting the Nowcast for a reference quarter about one month before the quarter begins; we stop updating it about one month after the quarter closes. Colored bars reflect the impact of each broad category of data on the Nowcast; the impact of specific data releases is shown in the accompanying table.

March 9, 2018: Highlights

- “The New York Fed Staff Nowcast stands at 2.8% for 2018:Q1 and 3.0% for 2018:Q2.” – The Federal Reserve Bank of New York

U.S. Economic Indicators

The New York Fed DSGE Model Forecast—March 2018

Model Forecast								
	2018		2019		2020		2021	
	Mar	Nov	Mar	Nov	Mar	Nov	Mar	Nov
GDP growth (Q4/Q4)	2.1	1.8	1.9	2.1	2.1	2.2	2.1	2.2
Core PCE inflation (Q4/Q4)	1.8	1.3	1.5	1.4	1.6	1.5	1.7	1.7
Real natural rate of interest (Q4)	1.0	0.8	1.2	1.1	1.4	1.2	1.4	1.4

“We describe our forecast very briefly and highlight its change since November 2017. As usual, we wish to remind our readers that the DSGE model forecast is not an official New York Fed forecast, but only an input to the Research staff’s overall forecasting process. For more information about the model and variables discussed here, see our DSGE model Q & A. The March model forecast for 2018–21 is summarized in the table below, alongside the November 2017 forecast for the same period, and in the charts that follow. The model uses quarterly macroeconomic data released through the fourth quarter of 2017 and available financial data and staff forecasts through February 21, 2018.” – Michael Cai, Marco Del Negro, Abhi Gupta, and Pearl Li, The Federal Reserve Bank of New York

U.S. Economic Indicators

The New York Fed DSGE Model Forecast—March 2018

How do the latest forecasts compare with the November forecasts?

“The current Q4/Q4 GDP growth forecast for 2018, at 2.1 percent, is higher than in November. Favorable financial conditions continue to provide stimulus to the economy. Moreover, growth in the fourth quarter of 2017 was stronger than predicted by the model in November. Growth is expected to moderate to 1.9 percent in 2019 before accelerating again to about 2.1 percent in the following years, roughly comparable with the November forecast.

Short-run inflation forecasts are much higher than they were in November. However, inflation is still projected to decline in the medium run, reaching 1.7 percent in 2021.

Largely reflecting the continued improvement in financial conditions, the model’s estimate of the real natural rate of interest — the real rate of interest that would prevail in the economy absent nominal rigidities and markup shocks — is higher over the forecast horizon relative to the November estimate. The natural rate is projected to increase throughout the forecast horizon, reaching 1.0 percent at the end of 2018 and 1.4 percent in 2019.” – Michael Cai, Marco Del Negro, Abhi Gupta, and Pearl Li, The Federal Reserve Bank of New York

U.S. Economic Indicators

February 2018 Manufacturing Business Outlook Survey

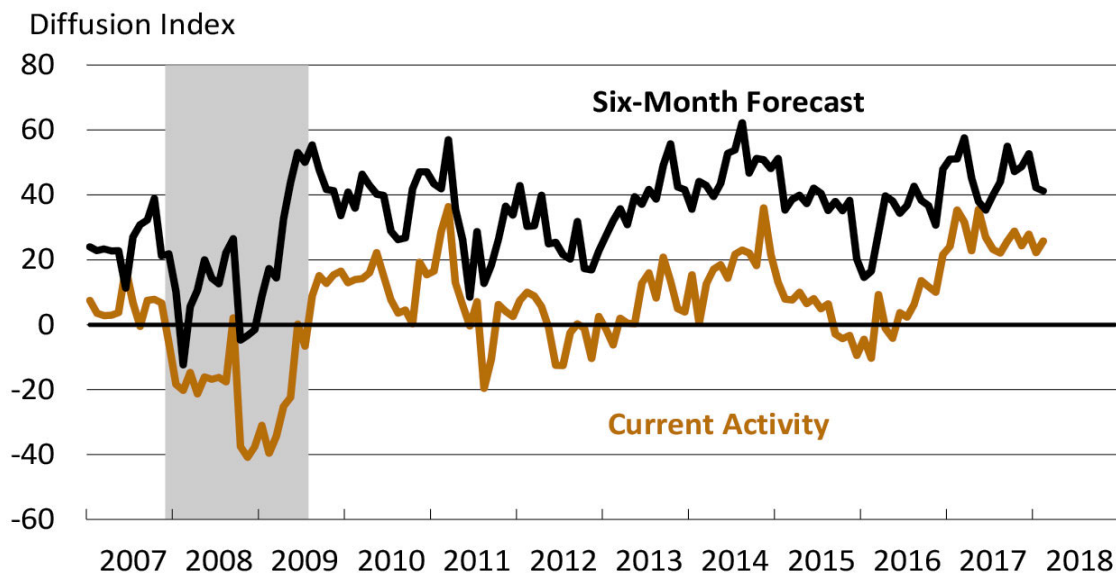
Most Current Indicators Improved This Month

“Results from the *Manufacturing Business Outlook Survey* suggest that the region’s manufacturing sector continues to expand in February. The indexes for general activity, new orders, and employment were all positive this month and increased from their readings last month. Price increases for inputs were more widespread this month, according to the respondents. The survey’s future indexes, reflecting expectations for the next six months, suggest continued optimism.

The index for current manufacturing activity increased 4 points in February to a reading of 25.8. The index has stayed within a relatively narrow range over the past nine months (see Chart 1). Nearly 41 percent of the firms indicated increases in activity this month, while 15 percent reported decreases. The demand for manufactured goods, as measured by the survey’s current new orders index, showed notable improvement: The diffusion index increased 14 points, with 41 percent of the firms reporting an increase in new orders this month. The current shipments index remained positive but fell 15 points to 15.5. Both the unfilled orders and delivery times indexes were positive, suggesting an increase in unfilled orders and slower deliveries.” – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

U.S. Economic Indicators

Chart 1. Current and Future General Activity Indexes
January 2007 to February 2018



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

February 2018 Manufacturing Business Outlook Survey

“The survey’s indicators for labor market conditions suggest a pickup in hiring this month. Over 30 percent of the firms reported increases in employment this month, up from 24 percent in January. The employment index increased 8 points. The firms also reported overall higher average work hours in February, although the workweek index fell 3 points to 13.7.” – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

U.S. Economic Indicators

February 2018 Manufacturing Business Outlook Survey Input Prices Increases Are More Widespread

“Cost pressures were more widespread this month among the reporting manufacturers: The prices paid index increased 12 points to 45.0, its highest reading since May 2011... . Forty-six percent of the firms reported higher input prices this month compared with 33 percent in January. With respect to prices received for manufactured goods, 25 percent of the firms reported higher prices, and 1 percent reported lower prices. The prices received index edged down 1 point to 23.9.

Firms Remain Optimistic

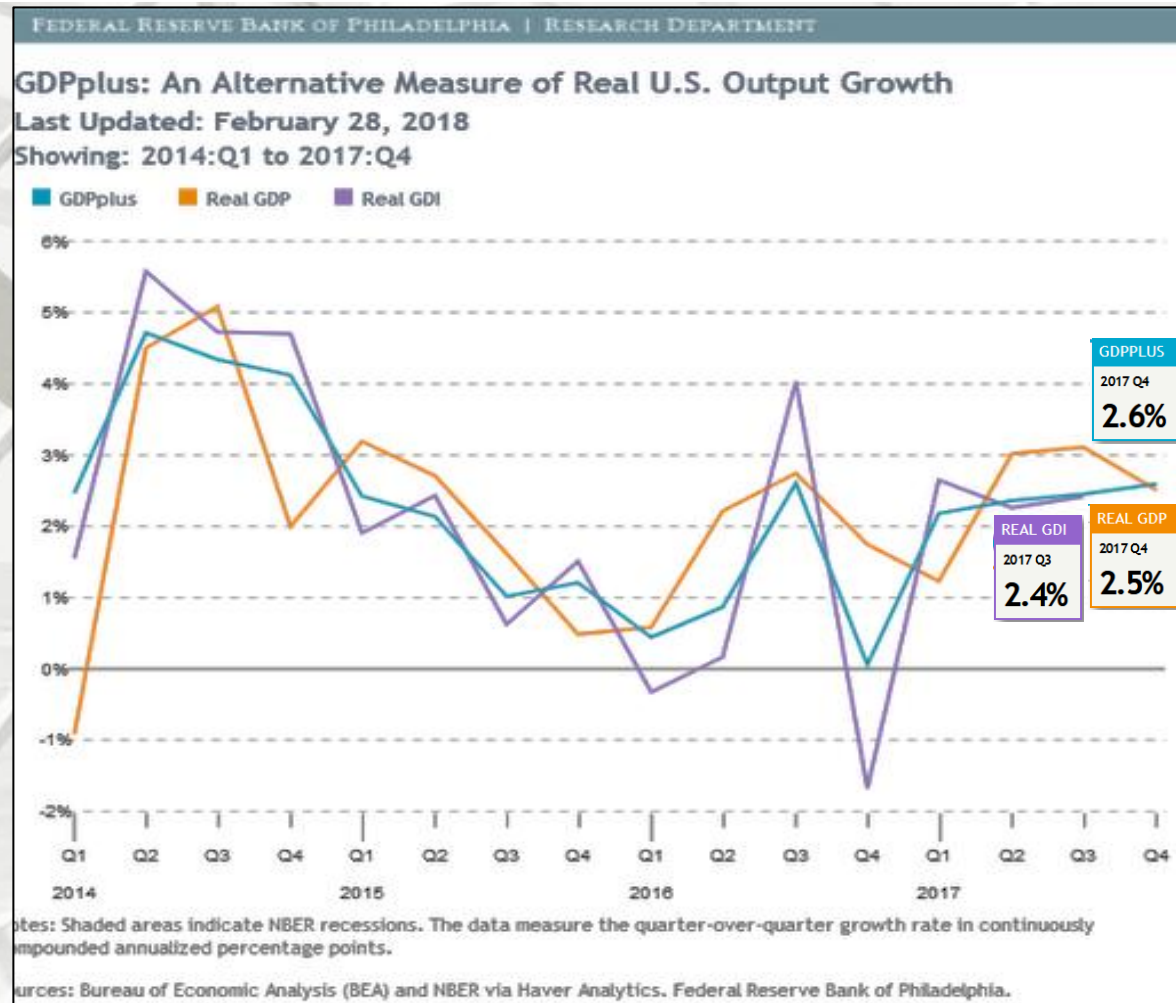
The survey’s six-month indicators remained at high readings in February. The diffusion index for future general activity declined 1 point to 41.2 in February (see Chart 1). Over 55 percent of the manufacturers expect increases in activity over the next six months, while 14 percent expect declines. The indexes for future new orders and shipments improved: The future new orders index increased 3 points, while the future shipments index increased 2 points. The future employment diffusion index increased 6 points to 40.4. Forty-five percent of the firms expect to increase employment over the next six months. Over 44 percent of the responding firms expect to increase capital spending over the next six months, with the future capital spending index increasing 4 points in February, its highest reading since April 1984.”
– Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

U.S. Economic Indicators

February 2018 Manufacturing Business Outlook Survey Summary

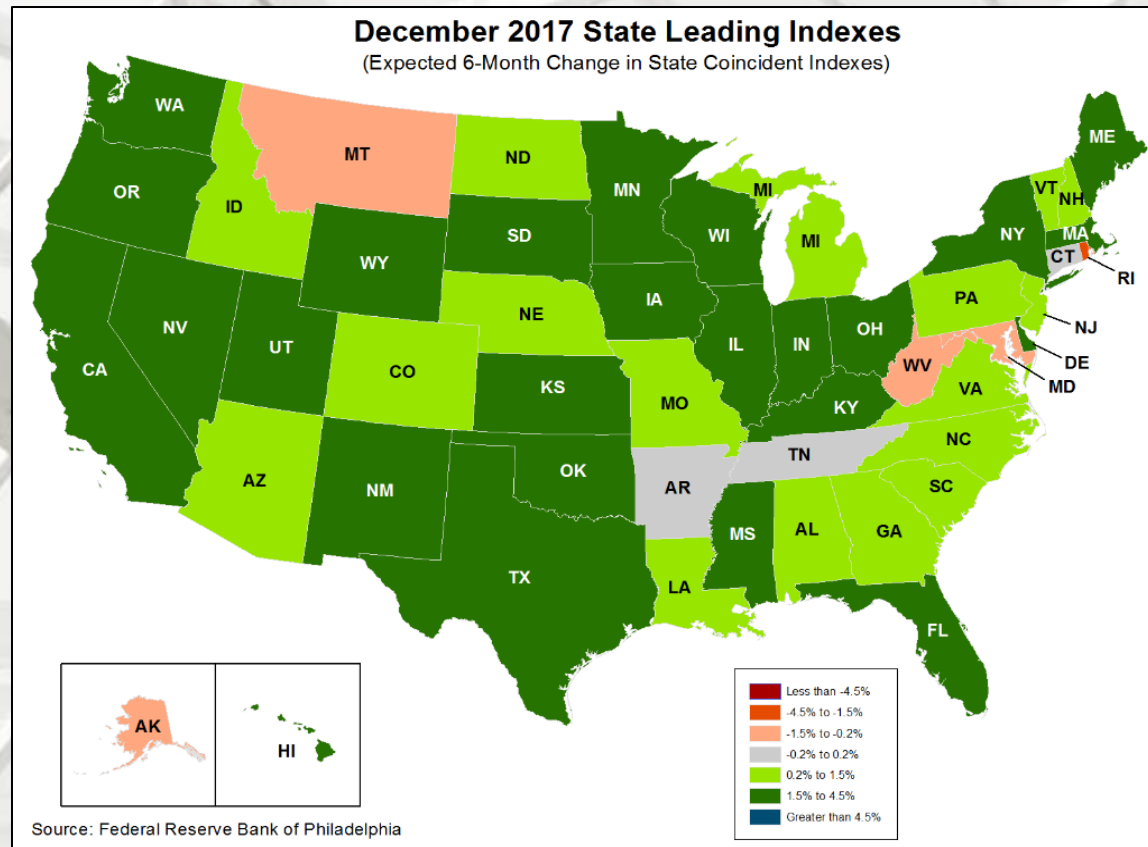
“The February *Manufacturing Business Outlook Survey* indicates continued growth in regional manufacturing this month. The demand for manufactured goods, as reflected in new orders, showed improvement this month, and more firms added to their payrolls. The firms reported more widespread price increases for purchased inputs this month. In special questions this month, the firms’ forecast for their own price changes for the next year edged higher compared with their forecast three months ago. The indicators reflecting the firms’ overall expectations for manufacturing conditions over the next six months remained at high levels. The firms’ expectations for future employment and capital spending showed notable improvement this month.” – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

Philadelphia Fed: GDPplus



“As of February 28 Q4 2017 GDPplus = 2.6%; Real GDP = 2.5%; and Real GDI = 2.4%.” – The Federal Reserve Bank of Philadelphia

Philadelphia Fed



“The Federal Reserve Bank of Philadelphia has released the leading indexes for the 50 states for December 2017. The indexes are a six-month forecast of the state coincident indexes (also released by the Bank). Forty-four state coincident indexes are projected to grow over the next six months, and six are projected to decrease.

For comparison purposes, the Philadelphia Fed has also developed a similar leading index for its U.S. coincident index, which is projected to grow 1.4 percent over the next six months.” – Daniel Mazzone, The Federal Reserve Bank of Philadelphia

U.S. Economic Indicators

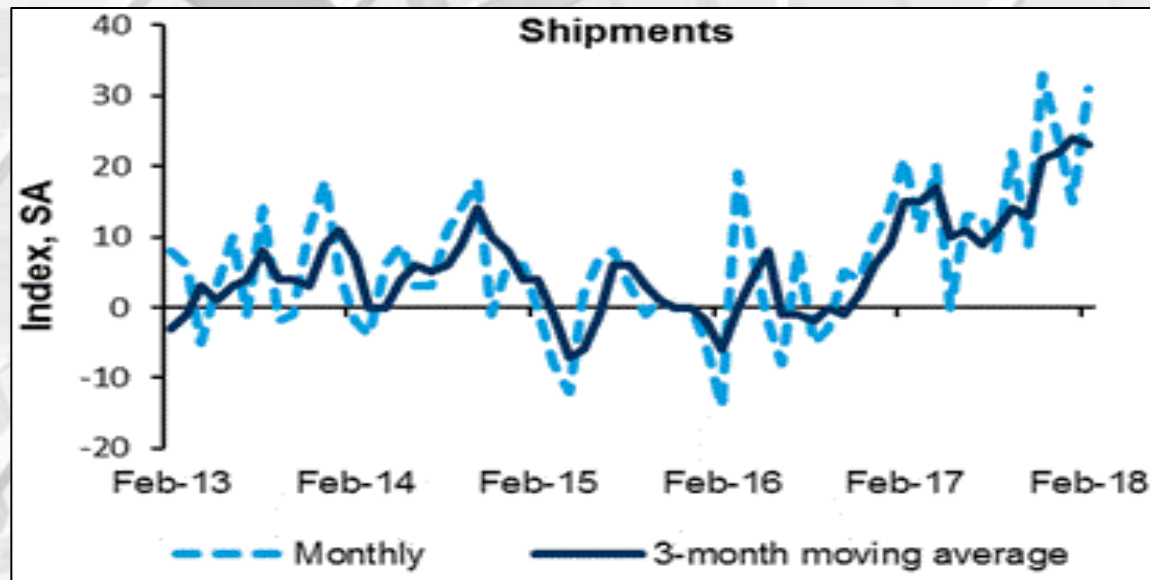
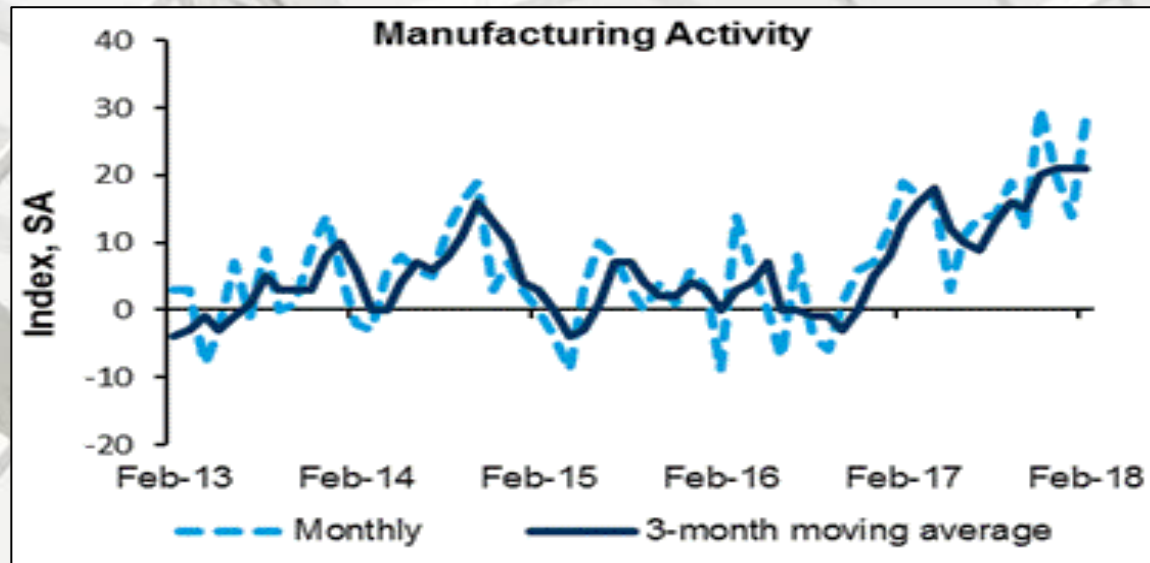
The Federal Reserve Bank of Richmond

Fifth District Manufacturing Firms Reported Robust Growth in February

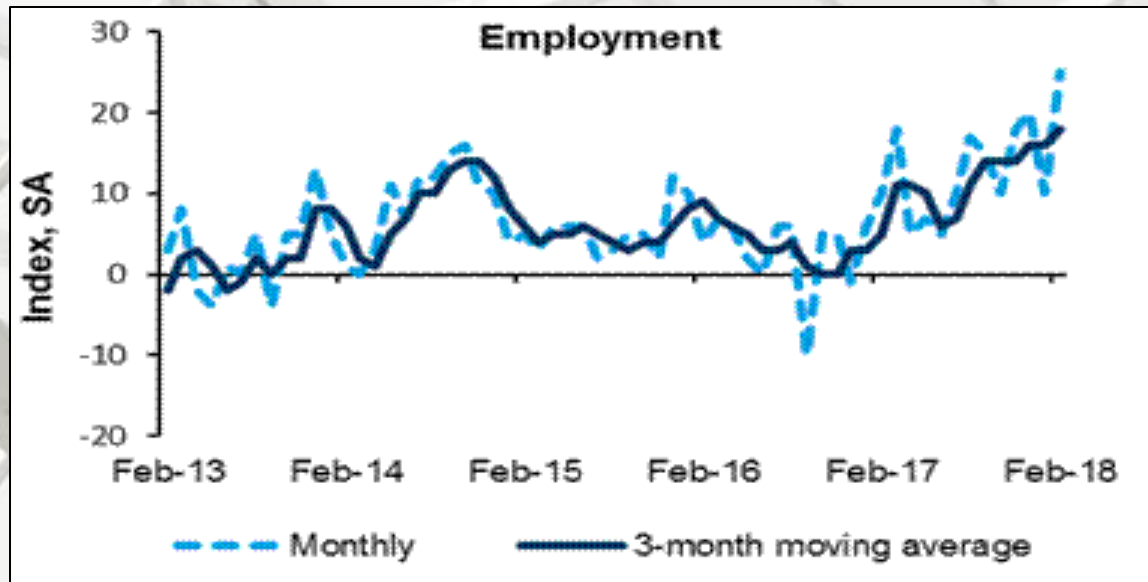
“Fifth District manufacturing firms saw robust growth in February, according to the results from the latest survey by the Federal Reserve Bank of Richmond. The composite manufacturing index jumped from 14 in January to 28 in February, the second highest value on record, driven by increases in shipments, orders, and employment. The wages index remained in positive territory at 23, while the available skills metric dropped from -10 in January to -17 in February. Despite greater difficulty finding skilled workers, District manufacturing firms saw strong growth in employment and the average workweek in February. Survey results show that manufacturers expect to see continued growth in the coming months.

Manufacturing firms saw growth accelerate for both prices paid and prices received, with each increasing at the highest rate since April 2017. Firms expect prices to continue to grow at a faster rate in the near future.” – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond

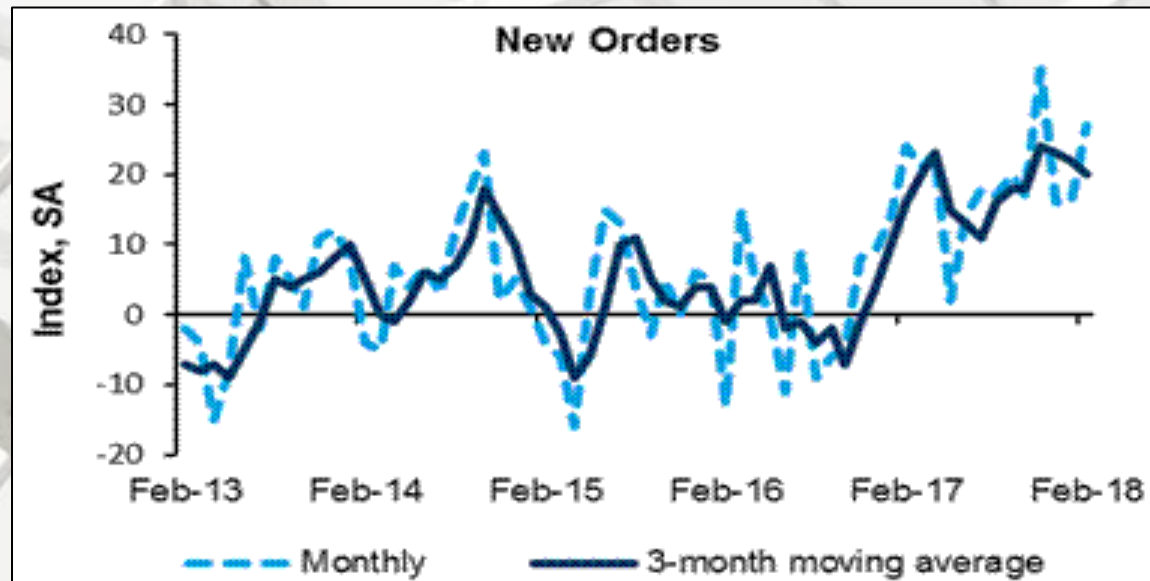
U.S. Economic Indicators



U.S. Economic Indicators



U.S. Economic Indicators



U.S. Economic Indicators

The Federal Reserve Bank of San Francisco

FRBSF FedViews

- “Based on the advance estimate of the Bureau of Economic Analysis, real GDP expanded at an annual rate of 2.6 percent for the fourth quarter of 2017 and 2.5 percent for the year overall. The bulk of the strength in real GDP growth can be attributed to robust consumer spending, which in turn reflects household wage gains, increased equity prices, and supportive financial conditions. As monetary policy continues to normalize over the next two to three years, we expect growth gradually to fall back to our trend growth estimate of about 1.8%.
- Recent employment gains remain solid. Nonfarm payroll employment in January rose by 200,000 jobs. During 2017, payroll gains have averaged around 181,000 jobs per month.
- The unemployment rate remained at 4.1% in January, unchanged since October. We expect this rate to fall below 4% in 2018 before gradually returning to our estimate for its natural level at 4.75%.
- Inflation continues to remain below the Federal Reserve’s 2% target. Overall inflation in the twelve months through December, as measured by the price index for personal consumption expenditures was 1.7%. Core inflation, which excludes volatile food and energy prices, rose 1.5% in the twelve months through December. Given the strong labor market conditions, we expect overall and core consumer price inflation to rise gradually and reach our 2% target over the next couple of years.” – Fernanda Nechio, Research Advisor, The Federal Reserve Bank of San Francisco

U.S. Economic Indicators

The Federal Reserve Bank of San Francisco

FRBSF FedViews

- “The developed world is undergoing a dramatic demographic transition. In most advanced economies, actual and expected longevity have increased steadily, while the median retirement age has changed little, leading to longer retirement periods. Meanwhile, population growth rates are declining and in some cases, even becoming negative.
- Changing demographics can affect the natural real rate of interest, r -star; the inflation-adjusted interest rate that is consistent with steady inflation at the Fed’s target and the economy growing at its potential. Demographic trends affect the equilibrium rate by changing incentives to save and consume. Lengthier retirement periods may raise some households’ desire to save rather than consume, lowering r -star. At the same time, declining population growth increases the share of older households in the economy, who generally have higher marginal propensities to consume, raising consumption and r -star. As population growth declines, it could also reduce real GDP growth and productivity, thereby putting downward pressure on r -star.
- In the United States, these demographic changes have already put significant downward pressure on interest rates between 1990 and 2017. As demographic movements tend to be long-lasting, the effects on interest rates may be ongoing. A lower equilibrium rate has the potential to limit the scope for the Federal Reserve to cut interest rates in response to future recessionary shocks.” – Fernanda Nechio, 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

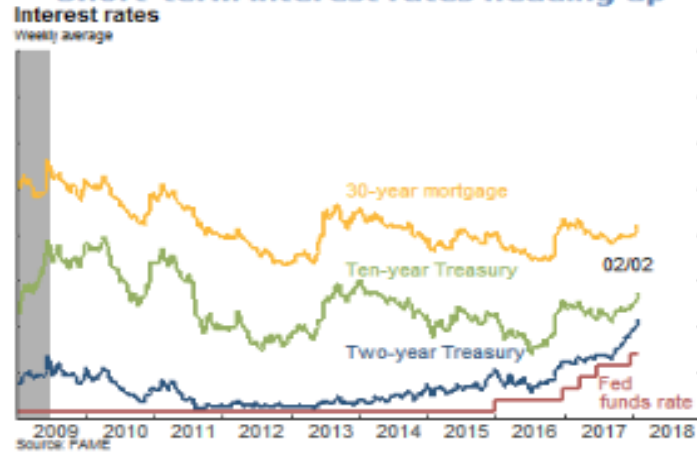


Inflation expected to increase gradually

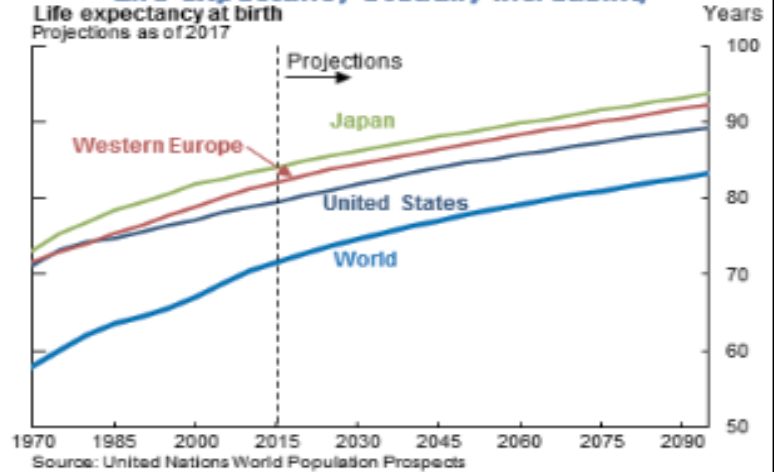


U.S. Economic Indicators

Short-term interest rates heading up



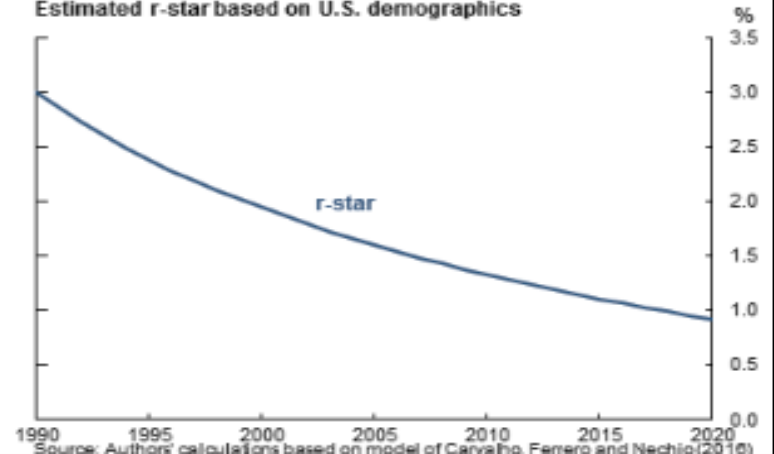
Life expectancy steadily increasing



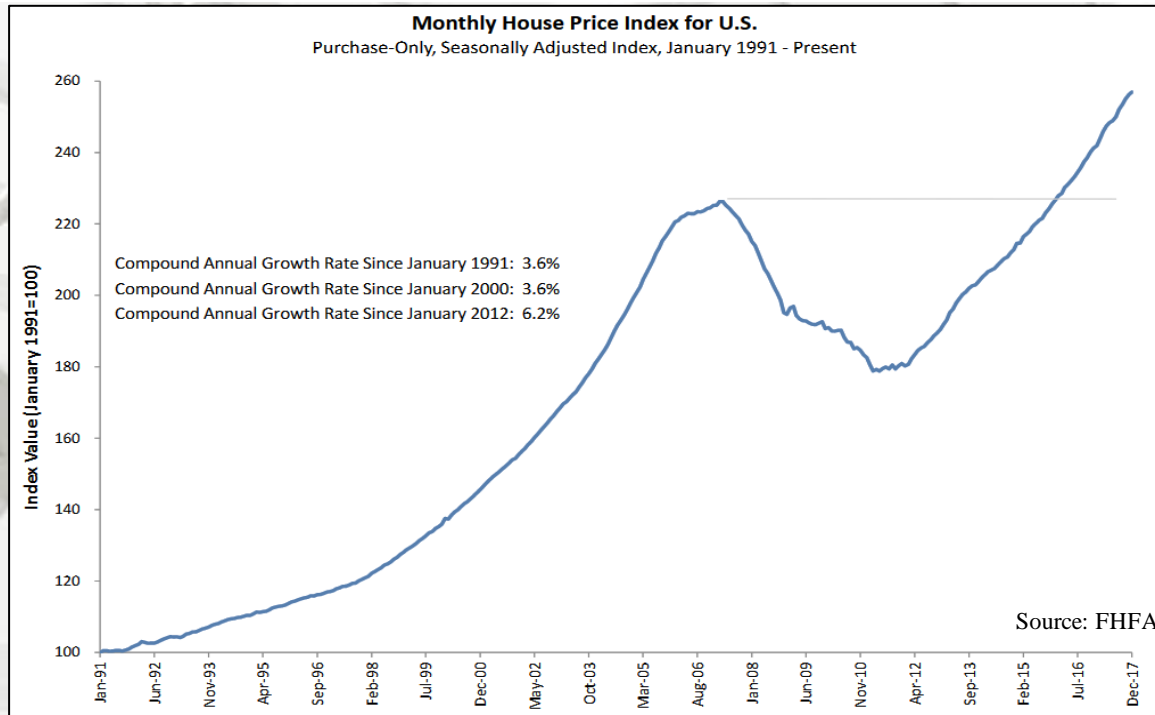
Population growth declining



Lower r-star limits response to recessions
Estimated r-star based on U.S. demographics



U.S. Economic Indicators



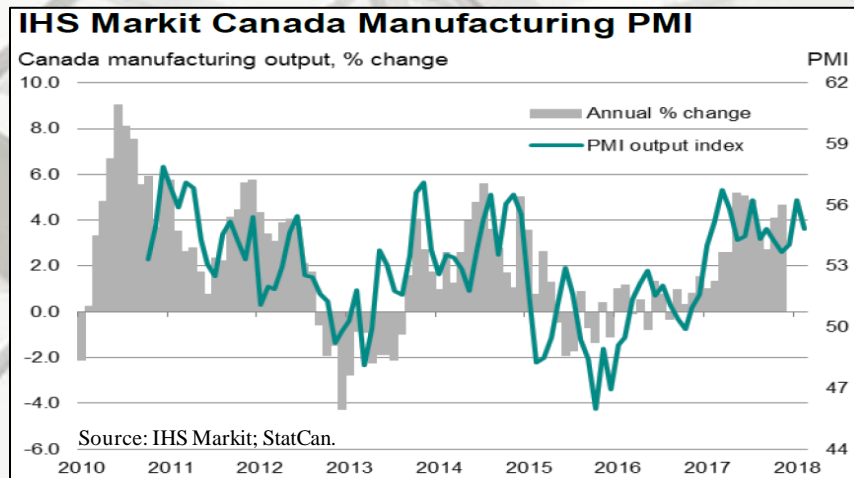
FHFA House Price Index

FHFA House Price Index Up 1.6 Percent in Fourth Quarter

“U.S. house prices rose **1.6** percent in the fourth quarter of 2017 according to the Federal Housing Finance Agency (FHFA) House Price Index (HPI). House prices rose **6.7** percent from the fourth quarter of 2016 to the fourth quarter of 2017. FHFA's seasonally adjusted monthly index for December was up **0.3** percent from November.” – Stefanie Johnson and Corinne Russell, FHFA

Home price appreciation in the fourth quarter showed absolutely no letup throughout the U.S. As we begin to evaluate home prices in the first quarter, we will monitor whether new headwinds—higher mortgage rates and changes in tax laws—will lead to any moderation in the rate of house price growth.” – Dr. Andrew Leventis, Deputy Chief Economist, FHFA

Private Indicators: Global



Markit Canada Manufacturing PMI™

“At 55.6 in February, the seasonally adjusted **IHS Markit Canada Manufacturing Purchasing Managers’ Index® (PMI™)** eased only slightly from 55.9 in January and remained well above the 50.0 no-change threshold. Improving business conditions have been recorded in each month since March 2016.

Manufacturing rebound continues, helped by fastest rise in export sales since November 2014

February data pointed to a relatively strong improvement in overall business conditions, which continued the positive start to 2018 for the manufacturing sector. Robust rises in output and new orders contributed to the sharpest pace of job creation for six months.

February data indicates that the manufacturing sector maintained its positive start to 2018. Job creation reached a six-month high and input buying was the strongest since early-2011, suggesting that goods producers are gearing up for a sustained improvement in demand conditions. Canadian manufacturers widely commented on feeling a positive impact from the strengthening U.S. economy, which meant that export sales performed particularly well in February.

However, stronger demand for raw materials resulted in intense pressure on manufacturing supply chains, especially in relation to transportation capacity. Manufacturers noted that logistics bottlenecks had pushed up input costs and encouraged inventory building in February. ...”– Tim Moore, Associate Director at Survey Compilers, IHS Markit

Private Indicators: Global



Caixin China General Manufacturing PMI™

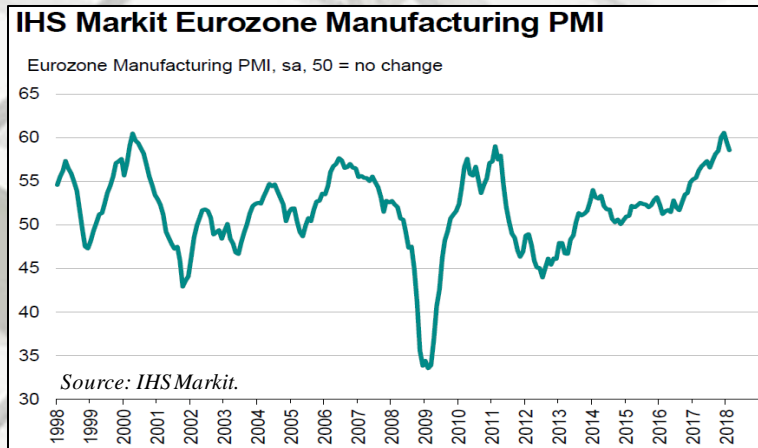
Manufacturing sector continues to improve at modest pace in February

“Adjusted for seasonal factors, including the Chinese New Year, the headline Purchasing Managers’ Index™ (PMI™) – a composite indicator designed to provide a single-figure snapshot of operating conditions in the manufacturing economy – edged up to 51.6 in February, from 51.5 in January, to signal a further improvement in the health of the sector. Though only modest, the latest reading signalled the strongest improvement in operating conditions for six months.

Business conditions continued to improve across China’s manufacturing sector in February. Although growth in production softened from that seen in January, total new work expanded at a slightly faster pace. Meanwhile, companies continued to shed staff as part of efforts to reduce costs, which contributed to a further rise in the level of outstanding work. Although the rate of input price inflation eased further in February, it remained sharp overall and remained much stronger than that seen for output charges. Business sentiment remained strongly positive in February, with the degree of optimism reaching an 11-month high.

The stocks of finished products and stocks of purchases indices on average showed increases in the range that indicates economic expansion, reflecting that companies were making active preparations to start work in March. This was also reflected in a rise for the future output index. For now, the durability of the Chinese economy will persist. Looking ahead, whether demand generated from the beginning of work in March will gain strength will be key in determining China’s economic direction for 2018.” – Dr. Zhengsheng Zhong, Director of Macroeconomic Analysis, CEBM Group

Private Indicators: Global



Markit Eurozone Manufacturing PMI®

“The final *IHS Markit Eurozone Manufacturing PMI*® eased to a four-month low of 58.6 in February, down from 59.6 in January, better than the earlier flash estimate of 58.5 and well above its long-run average of 51.8. The PMI has remained above the 50.0 no-change mark, signalling expansion, for 56 months.

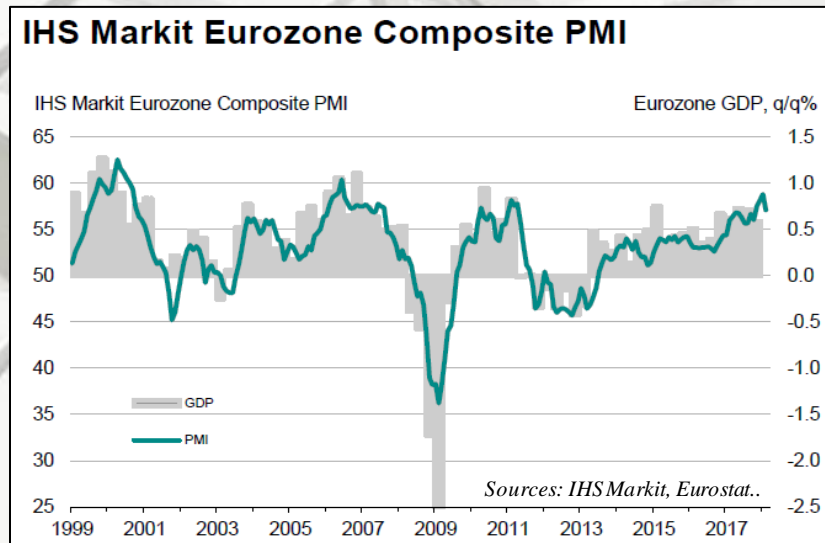
Eurozone manufacturing upturn remains robust in February

The eurozone manufacturing sector continued to expand at a robust pace in February. Although rates of increase in output and new orders eased further from the highs reached before the turn of the year, the sector is still enjoying one of its best growth spells over the past 18 years.

Although the Eurozone Manufacturing PMI fell for a second successive month in February, the survey data indicate that factories are still enjoying their best growth spell for 18 years. The average PMI for the first quarter so far is the second-highest since the spring of 2000, falling just short of the near-record peak seen in the fourth quarter of last year.

The broad-based nature of the upturn is especially welcome, with all surveyed countries reporting solid rates of expansion. Even Greece is enjoying its fastest growth for 18 years. There are signs, however, that growth could cool further in coming months. A slowdown in growth of new export* order inflows to an 11-month low suggests that the appreciation of the euro may be starting to curb export sales. Job creation, while still among the highest seen in the twenty-year survey history, has meanwhile moderated as a result of the slower inflows of orders, adding to suspicions that the manufacturing growth peak is behind us. . . .” – Chris Williamson, Chief Business Economist, Markit®

Private Indicators: Global



Markit Eurozone Composite PMI®

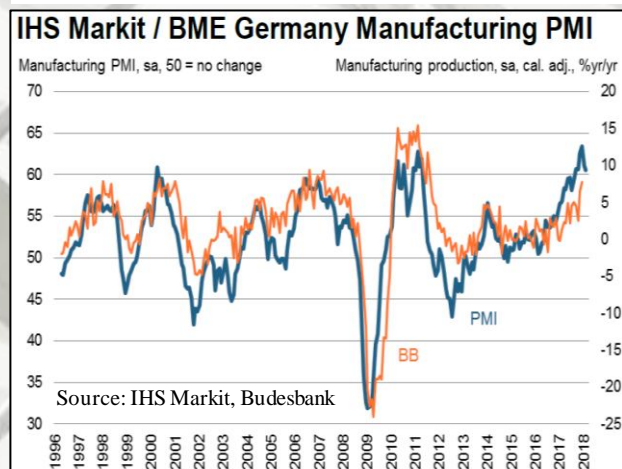
“The final **IHS Markit Eurozone PMI® Composite Output Index** posted 57.1 in February, down from January’s near 12-year high of 58.8, but well above the series average of 53.0. The headline index has signalled expansion in each of the past 56 months, although the latest reading was slightly below the flash estimate of 57.5.

Eurozone economic growth remains elevated in February

Although pulling back from January’s near 12-year high to a four-month low in February, the rate of output growth in the euro area remained robust. Manufacturers and service providers saw continued strong inflows of new business, while job creation and price pressures also remained elevated. The manufacturing sector again registered stronger output growth than services. Both sectors also continued to enjoy the best periods of expansion for seven years, despite seeing rates of increase in output and new orders easing across the board in February.

The upturn also remains as broad as it is strong. Italy is set for its best quarter for 12 years while Germany is enjoying the steepest growth for seven years so far this year. French growth remains strong despite easing slightly since the final quarter of last year, and Spain is set for its best quarter since the strong upturn seen in the spring of 2017.” – Chris Williamson, Chief Business Economist, Markit®

Private Indicators: Global



Markit/BME Germany Manufacturing PMI®

“The headline IHS Markit/BME Germany Manufacturing PMI – a single-figure snapshot of the performance of the manufacturing economy – dipped to 60.6 in February, from January’s 61.1. The latest reading was well above the 50.0 no-change mark, indicating another month of strong growth within the sector. However, since reaching a record-high at the end of 2017, the PMI has retreated for two consecutive months, down to its lowest level since last October.

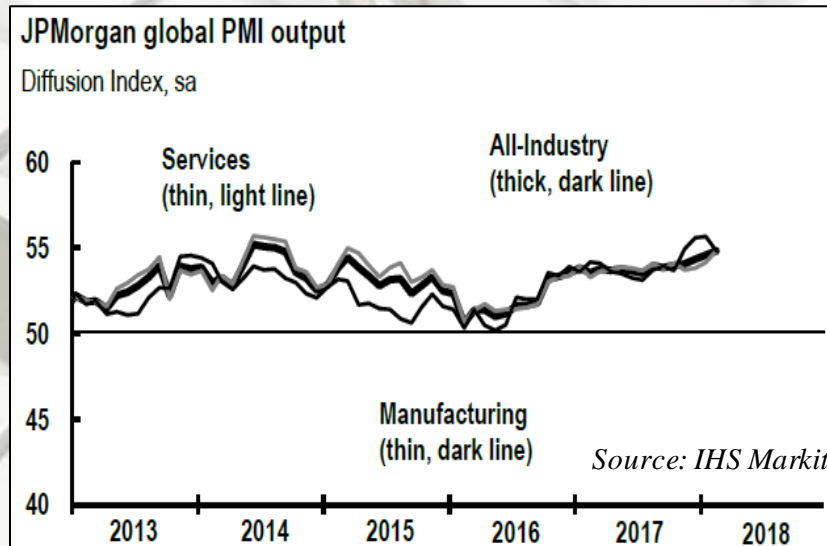
Manufacturing boom shows signs of easing amid supply-chain constraints

Germany’s booming manufacturing sector grew at a slightly slower rate in February, according to the latest PMI® survey data from IHS Markit and BME, with reports of supply-chain bottlenecks helping drive up costs and prices charged at the factory gate. Despite easing in February, output growth across Germany’s factories remained strong and among the highest seen since early-2011. The expansion was led by consumer and capital goods sectors, which both recorded similarly steep increases in levels of output.

Although February’s final manufacturing PMI reading came in higher than the preliminary ‘flash’ estimate, the overall message from the survey data is unchanged: the sector continues to grow strongly but is showing signs of easing off from the record highs seen at the end of 2017. Insight into why the pace of growth has tempered slightly can be gleaned from some of the survey’s sub-indices. Recent months have seen manufacturers hiking up output prices, under pressure from spiralling costs. The problem lies largely in supply chains, where capacity issues have led to bottlenecks forming and allowed vendors to negotiate higher prices as demand outstrips supply. The seriousness of the problem is highlighted by the survey’s measure of delivery times, which in February showed the greatest deterioration in supplier performance in 22 years of data collection.” – Phil Smith, Principal Economist, IHSMarkit®

Source: <https://www.markiteconomics.com/Survey/PressRelease.mvc/34af65ffd0ff48329cd55d6665adea49>; 3/1/18

Private Indicators: Global



JP Morgan Global Manufacturing PMI™

“The J.P. Morgan Global All-Industry Output Index – which is produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – rose to a 41-month high of 54.8 in February, up from 54.6 in January. The headline index has now signalled expansion for 65 successive months. Output index readings were identical for manufacturing and services, representing a four-month low for the former and 35-month high for the latter.

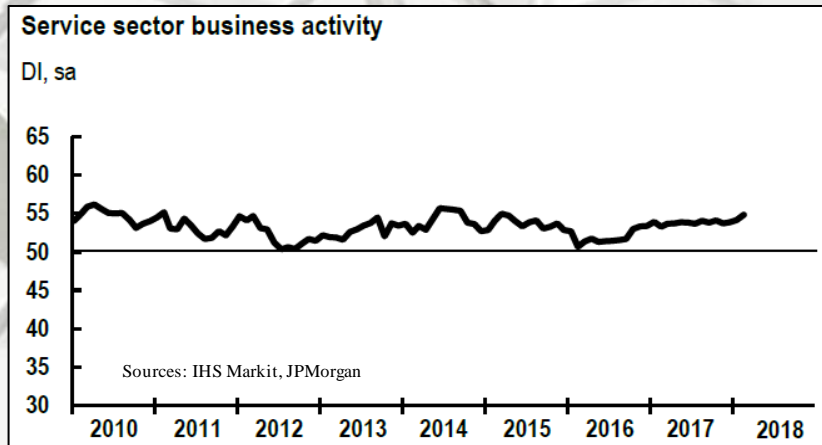
Global economic growth strengthens in February

The rate of expansion in global economic output accelerated to a near three-and-a-half year high in February, as stronger growth in the service sector offset a slightly weaker upturn at manufacturers. The upturn remained broad-based by sub-sector, with output rising across the six areas of economic activity covered by the survey in February. The fastest increases were in the business services, consumer goods and financial services categories, all of which saw growth pick up. Rates of expansion eased in the consumer services, intermediate goods and investment goods sectors.

The level of incoming new business rose to the greatest extent since June 2014. This led to another increase in backlogs of work, which companies responded to by raising capacity.

The February PMI surveys signalled a further acceleration in the rate of expansion in global economic output. According to the PMI, growth hit a near three-and-a-half year high, as inflows of new business strengthened. The acceleration was mainly led by the service economy, as signs of growth slowdown from recent highs were observed in manufacturing. With economic conditions remaining solid overall, global growth should remain solid in coming months.” – David Hensley, Global Economist, J.P. Morgan

Private Indicators: Global



JP Morgan Global Services PMI™

“The J.P. Morgan Global Services Business Activity Index – a composite index produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – rose to 54.8 in February, up from 54.1 in January. The headline index has now signalled expansion for 103 months in a row.

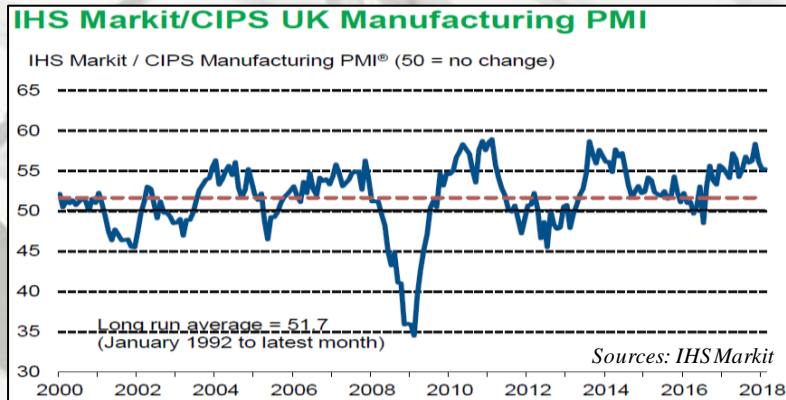
Global services growth accelerates in February

The upturn in the global service sector gathered further momentum in February. Business activity rose at the fastest pace in almost three years, as new order inflows showed the steepest gain since September 2014. Job creation also strengthened, with employment increasing to the greatest extent in 33 months.

Business activity rose across the business, consumer and financial services categories in February. The financial services sector saw the sharpest increase in output, followed closely by business services, with rates of growth improving in both cases. The weakest expansion was registered in consumer services, which was the only sector to see growth slow over the month.

The upturn in the global service sector gathered further pace in February, with rates of expansion in output, new business and employment all accelerating. Price pressures continued to rise, however, as a combination of stronger cost increases and improving demand led to the steepest pace of output charge inflation in the series history.” – David Hensley, Global Economist, J.P. Morgan

Private Indicators: Global



Markit/CIPS UK Manufacturing PMI™

“The upturn in the UK manufacturing sector slowed further during February. At 55.2, the seasonally adjusted IHS Markit/CIPS Purchasing Managers’ Index® (PMI®) fell to an eight-month low and lost further ground after hitting a 51-month high last November.

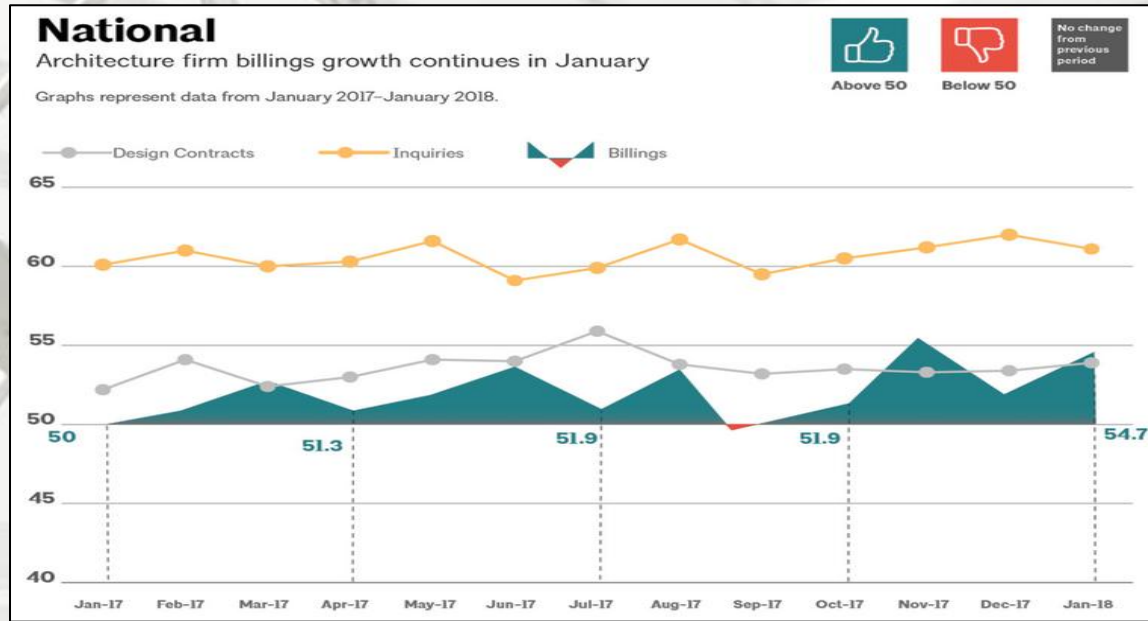
UK PMI slips to eight-month low as slower output growth offsets stronger new order inflows

Manufacturing production increased at the slowest pace for 11 months in February, with decelerations seen across the consumer, intermediate and investment goods sectors. Brighter news was provided by the trend in new orders, which rose at a faster pace than in January. Companies indicated that domestic demand strengthened, while new export business rose at a solid (albeit slower) pace.

The February survey provided mixed signals on the health of the UK manufacturing sector. The PMI’s Output Index fell to its second-lowest level since the EU referendum and, based on its past relationship with official ONS data, is consistent with only a subdued 0.4% quarterly pace of growth in production volumes. This would represent a marked downshift from the 1.3% increase signalled for the final quarter of 2017, providing a further brake on the rate of expansion in the wider economy. However, positive news was provided by other survey indicators that are suggesting output growth may revive in the coming months. New orders showed the largest monthly gain since November and are outpacing the rate of growth in output to one of the greatest extents in more than a decade. Stocks of finished goods fell, raising the forward looking new orders to inventory ratio, while companies remained sufficiently confident in the outlook to take on more staff. . . .” – Rob Dobson, Director & Senior Economist, IHS Markit

Private Indicators

American Institute of Architects (AIA)

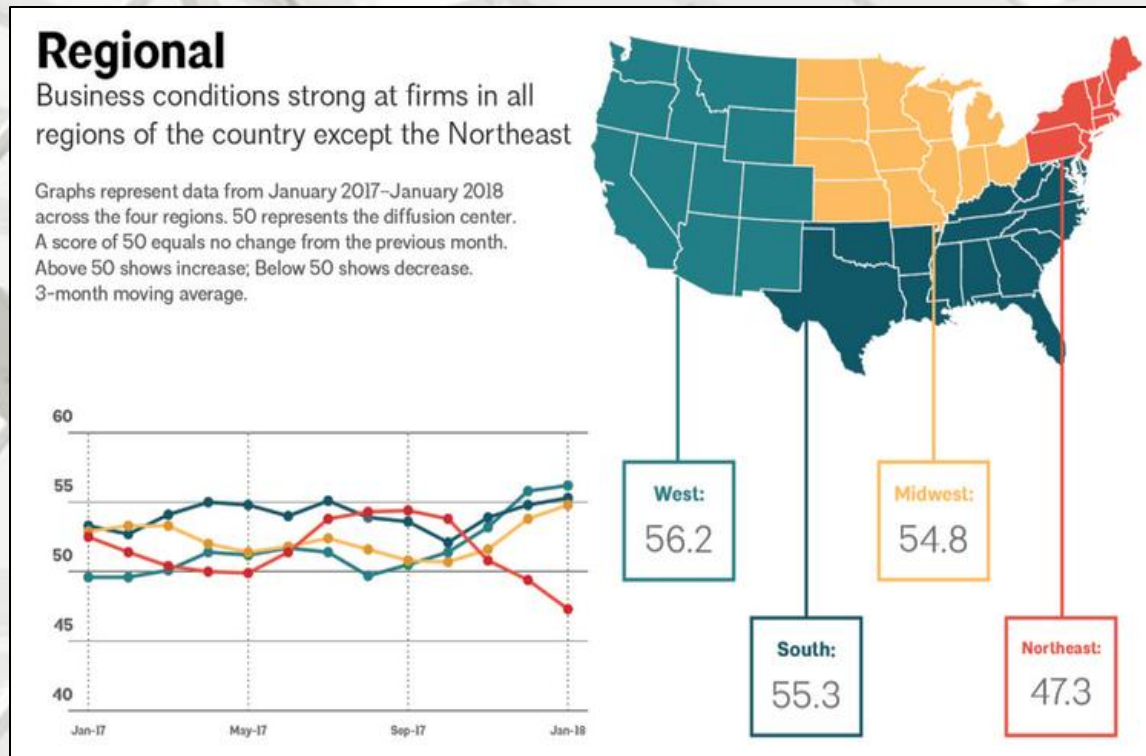


January Architecture Billings Index

Firms start the year with strong billings

“Architecture firms started 2018 on a positive note as AIA’s Architecture Billings Index (ABI) score rose to 54.7, its highest January score since 2007. Any score over 50 indicates an increase in billings, and a higher score than in December of 2017 means that billings continues to grow in the new year. Inquiries into new projects also remained strong, as did the share of firms reporting an increase in the value of new signed design contracts — a good indicator of work in the pipeline. Firms have seen consistently strong growth in new project activity for the last 15 months.” – Kermit Baker, Chief Economist, AIA, Honorable AIA

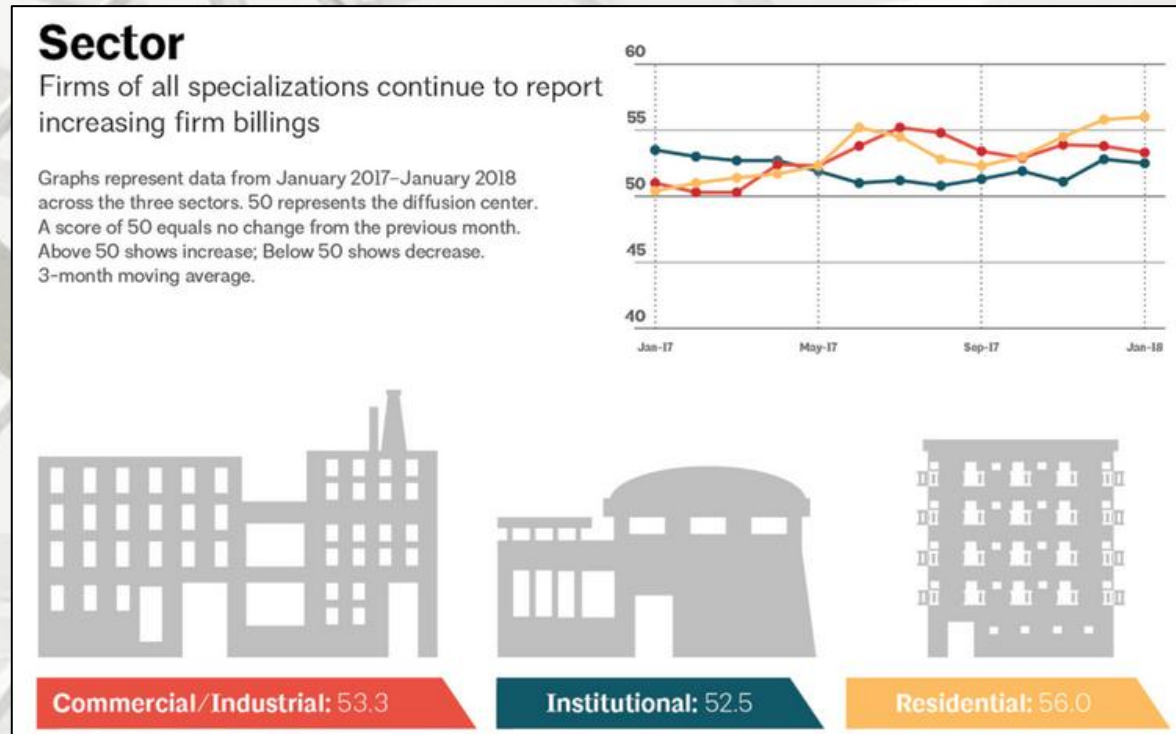
Private Indicators: AIA



Region

“Business conditions also remained strong at architecture firms around the country in January, with the exception of those located in the Northeast. Billings softened there in December after a generally strong 2017, and declined further in January. Although ABI data are seasonally adjusted, the decline may be at least partially due to the unseasonably cold weather that gripped much of the Northeast in early January.” – Kermit Baker, Chief Economist, AIA , Honorable AIA

Private Indicators: AIA



Sector

“Billings growth was also strong across the board for firms of all specializations.” – Kermit Baker, Chief Economist, AIA , Honorable AIA

Private Indicators

Dodge Data & Analytics

January Construction Starts Slip 2 Percent

Public Works Weakens, While Nonresidential Building Edges Up and Multifamily Housing Rebounds

“The value of new construction starts in January receded 2% to a seasonally adjusted annual rate of \$725.9 billion, easing slightly after December’s 13% hike, according to Dodge Data & Analytics. The nonbuilding construction sector, comprised of public works and electric utilities/gas plants, pulled back 18% after surging 45% in December, In addition, residential building climbed 7% in January, helped by a rebound for multifamily housing after three straight months of declines. On an unadjusted basis, total construction starts in January were \$52.2 billion, down 7% from the same month a year ago. On a twelve-month moving total basis, total construction starts in the twelve months ending January 2018 were up 2% from the twelve months ending January 2017.

The January statistics produced a reading of 154 for the Dodge Index (2000=100), compared to December’s upwardly revised 156. During 2017, the pattern of construction starts frequently showed an up-and-down pattern, which was present towards the end of last year when the Dodge Index fell to 138 in November followed by 156 in December. The 154 reading for the Dodge Index in January, along with December’s 156, shows construction starts climbing back close to last year’s mid-range of activity. For 2017 as a whole, the Dodge Index averaged 159.” – Benjamin Gorelick, Spector & Associates

Private Indicators

Dodge Data & Analytics

“Although the expansion for the construction industry lost some momentum during 2017, on a broad level it can be characterized as deceleration as opposed to decline. January’s level of activity, which held close to last year’s mid-range, is consistent with the picture of a decelerating expansion. The factors affecting construction activity going forward in 2018 have become more varied. Some dampening may come from higher material prices and tight labor markets, yet while interest rates are rising the increases are expected to stay moderate this year. The tax reform legislation is anticipated to lift economic growth in the near term, which may benefit commercial building and manufacturing construction starts. The Trump Administration has provided the outline of an infrastructure program, but the details need to be worked out by Congress against the backdrop of a growing federal budget deficit, which may limit any benefit this year for public works. One plus for 2018 is that the institutional side of nonresidential building should stay close to last year’s elevated pace.

Useful perspective is made possible by looking at twelve-month moving totals, in this case the twelve months ending January 2018 versus the twelve months ending January 2017, which reveal total construction starts advancing 2%. By major sector, nonbuilding construction grew 2%, with public works up 12% and electric utilities/gas plants down 29%. Nonresidential building increased 3%, with institutional building up 7%, commercial building down 5%, while manufacturing plant starts climbed 26%. Residential building grew 2%, with single family housing up 8% while multifamily housing fell 12%.” – Robert A. Murray, Chief Economist, Dodge Data & Analytics

Private Indicators

Dodge Data & Analytics

“**Residential building** in January was \$331.3 billion (annual rate), up 7%. Multifamily housing jumped 39%, showing renewed strength after the loss of momentum that took place during the closing months of 2017. During January, there were eleven multifamily projects valued at \$100 million or more that reached groundbreaking, compared to four such projects in December. The largest January multifamily projects were the \$260 million multifamily portion of a \$289 million mixed-use complex in San Jose CA, a \$250 million multifamily high-rise in Jersey City NJ, and a \$175 million multifamily high-rise in Houston TX.

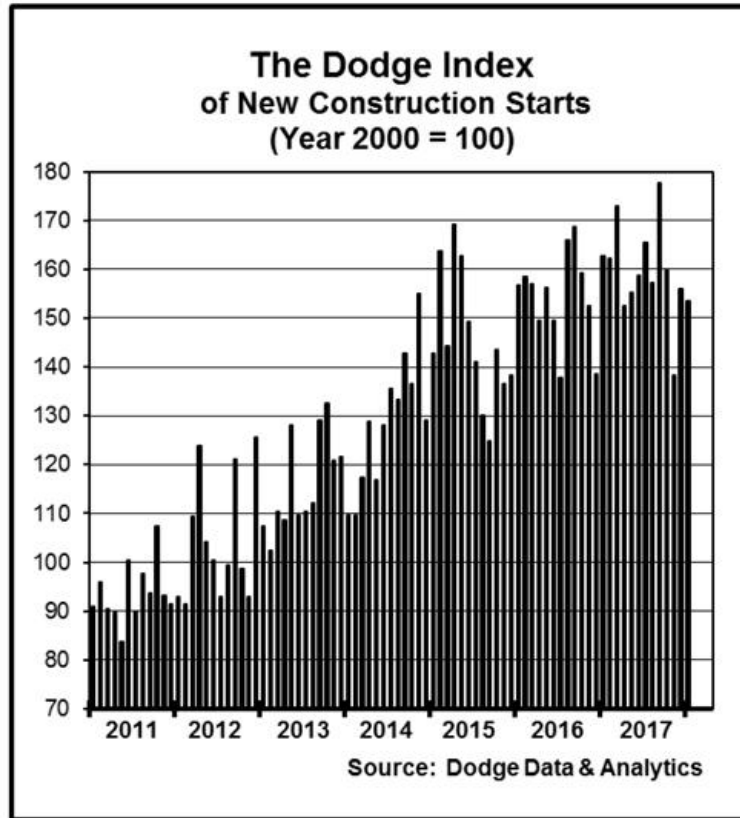
In January, the top five metropolitan markets ranked by the dollar amount of multifamily starts were – New York NY, Miami FL, Boston MA, Houston TX, and Washington DC. Metropolitan areas ranked 6 through 10 were – San Jose CA, Philadelphia PA, San Francisco CA, St. Louis MO, and Seattle WA.

Single family housing in January receded 3%, settling back after the modest gains reported during the previous five months. In January, single family housing showed this pattern by major region – the West, down 11%; the South Central, down 2%; the South Atlantic, down 1%; the Midwest, unchanged; and the Northeast, up 9%.”– Robert A. Murray, Chief Economist, Dodge Data & Analytics

Private Indicators

January 2018 Construction Starts

January 2018 Construction Starts



Monthly Summary of Construction Starts

Prepared by Dodge Data & Analytics

Monthly Construction Starts

Seasonally Adjusted Annual Rates, in Millions of Dollars

	<u>January 2018</u>	<u>December 2017</u>	<u>% Change</u>
Nonresidential Building	\$240,831	\$238,903	+1
Residential Building	331,312	310,120	+7
Nonbuilding Construction	<u>153,751</u>	<u>188,217</u>	-18
Total Construction	\$725,894	\$737,240	-2

The Dodge Index

Year 2000=100, Seasonally Adjusted

January 2018154

December 2017 ..156

Year-to-Date Construction Starts

Unadjusted Totals, in Millions of Dollars

	<u>1 Mo. 2018</u>	<u>1 Mo. 2017</u>	<u>% Change</u>
Nonresidential Building	\$18,204	\$22,623	-20
Residential Building	22,784	22,559	+1
Nonbuilding Construction	<u>11,206</u>	<u>10,773</u>	+4
Total Construction	\$52,194	\$55,955	-7
Total Construction, excluding electric utilities/gas plants	\$50,895	\$54,571	-7

Private Indicators

Dodge Data & Analytics

Commercial and Multifamily Construction Starts in 2017 Settled Back in Many of the Top U.S. Metropolitan Areas

Moderate Declines Followed Elevated Activity in 2016

“Many of the leading U.S. metropolitan areas for commercial and multifamily construction starts showed reduced activity in 2017 compared to levels reported during 2016, according to Dodge Data & Analytics. Of the top ten markets ranked by the dollar amount of construction starts, seven registered declines, one was essentially unchanged, and just two showed greater activity in 2017. For the metropolitan areas ranked 11 through 20, the 2017 performance was more evenly balanced, with four reporting declines, one essentially unchanged, and five reporting gains. At the national level, the volume of commercial and multifamily construction starts was \$194.7 billion, down 7% from 2016, although still 8% above the amount reported for 2015.

The New York NY metropolitan area, at \$25.2 billion in 2017, continued to be the leading market in the U.S. for commercial and multifamily construction starts, although it dropped 16% from its 2016 amount. New York NY’s share of the U.S. total was 13% in 2017, down from 14% in 2016 and 19% in 2015. After reaching its most recent peak back in 2015 at an exceptional \$34.9 billion, New York NY has seen its commercial and multifamily dollar amount slide by 28%. The other six metropolitan areas in the 2017 top ten with declines from their 2016 amounts were – Los Angeles CA (\$8.1 billion), down 20%; Dallas-Ft. Worth TX (\$7.5 billion), down 17%; Washington DC (\$7.3 billion), down 16%; Miami FL (\$6.6 billion), down 20%; Chicago IL (\$6.5 billion), down 26%; and Boston MA (\$5.4 billion), down 26%. Each of these six metropolitan areas had registered double-digit gains of at least 25% during 2016, and while each retreated during 2017 five were able to stay above their respective 2015 amounts (the exception being Miami FL). Holding steady in 2017 was Seattle WA (\$6.0 billion), while 2017 gains were reported for San Francisco CA (\$7.3 billion), up 29%; and Atlanta GA (\$6.5 billion), up 24%. ...” – Benjamin Gorelick, Spector & Associates

Private Indicators

Top 20 Metropolitan Areas - Full Year 2017

Commercial Building and Multifamily Housing Construction Starts

Millions of Dollars

	2015	2016	2017	Percent Change '16/'15	Percent Change '17/'16
1. New York-Northern New Jersey-Long Island, NY-NJ-PA	34,868	29,917	25,221	-14	-16
2. Los Angeles-Long Beach-Santa Ana, CA	7,076	10,067	8,074	+42	-20
3. Dallas-Fort Worth-Arlington, TX	7,079	9,022	7,516	+27	-17
4. Washington-Arlington-Alexandria, DC-VA-MD-WV	6,301	8,702	7,306	+38	-16
5. San Francisco-Oakland-Fremont, CA	2,890	5,624	7,277	+95	+29
6. Miami-Fort Lauderdale-Miami Beach, FL	6,622	8,271	6,604	+25	-20
7. Atlanta-Sandy Springs-Marietta, GA	3,328	5,228	6,503	+57	+24
8. Chicago-Naperville-Joliet, IL-IN-WI	6,342	8,785	6,479	+39	-26
9. Seattle-Tacoma-Bellevue, WA	4,693	6,016	6,000	+28	-0-
10. Boston-Cambridge-Quincy, MA-NH	4,765	7,290	5,394	+53	-26
11. Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	2,601	3,145	4,134	+21	+31
12. Houston-Baytown-Sugar Land, TX	4,675	3,883	3,892	-17	-0-
13. Denver-Aurora, CO	3,045	4,216	3,181	+38	-25
14. Austin-Round Rock, TX	2,674	3,102	3,161	+16	+2
15. Orlando, FL	2,103	2,379	2,942	+13	+24
16. Baltimore-Towson, MD	1,815	2,613	2,716	+44	+4
17. San Diego-Carlsbad-San Marcos, CA	1,537	2,442	2,635	+59	+8
18. Phoenix-Mesa-Scottsdale, AZ	2,202	3,034	2,582	+38	-15
19. Nashville-Davidson--Murfreesboro, TN	2,000	2,727	2,500	+36	-8
20. San Jose-Sunnyvale-Santa Clara, CA	2,024	2,480	2,467	+23	-1
Total U.S.	180,325	209,155	194,652	+16	-7

Source: Dodge Data & Analytics

Private Indicators

Dodge Data & Analytics

Commercial and Multifamily Construction Starts in 2017 Settled Back in Many of the Top U.S. Metropolitan Areas

“For the metropolitan areas ranked 11 through 20, decreased commercial and multifamily construction starts for 2017 were reported for Denver CO (\$3.2 billion), down 25%; Phoenix AZ (\$2.6 billion), down 15%; Nashville TN (\$2.5 billion), down 8%; and San Jose CA (\$2.5 billion), down 1%. Houston TX (\$3.9 billion), held steady with its 2016 amount even with the dislocations caused by Hurricane Harvey. Double-digit growth was reported in 2017 for Philadelphia PA (\$4.1 billion), up 31%; and Orlando FL (\$2.9 billion), up 24%. More modest increases were reported for Austin TX (\$3.2 billion), up 2%; Baltimore MD (\$2.7 billion), up 4%; and San Diego CA (\$2.6 billion), up 8%.

The commercial and multifamily total is comprised of office buildings, stores, hotels, warehouses, commercial garages, and multifamily housing. The 7% drop for commercial and multifamily construction starts at the U.S. level in 2017 reflected mostly a multifamily pullback. Multifamily construction starts at the U.S. level in 2017 dropped 12% to \$84.9 billion, which followed a 10% increase in 2016 (\$96.1 billion). Commercial building construction starts in 2017 slipped 3% to \$109.8 billion, staying close to the 2016 level (\$113.1 billion) achieved with a 22% hike that year.”
– Benjamin Gorelick, Spector & Associates

Private Indicators

Dodge Data & Analytics

Commercial and Multifamily Construction Starts in 2017 Settled Back in Many of the Top U.S. Metropolitan Areas

“Of the commercial and multifamily project types, multifamily housing is the one that appears to have already reached its peak and is now heading downward, as shown by the 12% decline in dollar terms during 2017. The expansion for multifamily housing began back in 2010, and in 2015 it benefitted from a surge of activity in the New York NY metropolitan area and then in 2016 it showed broader growth geographically due to strong gains by other major metropolitan areas. That pattern shifted in 2017, as markets such as Los Angeles CA, Dallas-Ft. Worth TX, and Washington DC retreated from the levels posted during 2016. Multifamily vacancy rates, while still low historically, have been edging up slightly on a year-over-year basis for almost two years. In addition, the banking sector has taken a more cautious stance towards lending for multifamily projects. In the most recent survey of bank lending officers by the Federal Reserve, 16% of the respondents indicated that they had tightened standards for multifamily loans during the fourth quarter of 2017, compared to just 1% of the respondents that reported tightening for nonresidential building project loans. At the same time, the downturn for multifamily housing at the national level is expected to stay moderate for the near term, as the latecomers to the multifamily expansion, particularly in the smaller markets, continue to see growth.

By geography, eight of the top ten commercial and multifamily markets in 2017 registered declines for multifamily housing – New York NY, down 4%; Los Angeles CA, down 17%; Dallas-Ft. Worth TX, down 26%; Washington DC, down 23%; Miami FL, down 50%; Chicago IL, down 24%; Seattle WA, down 10%; and Boston MA, down 29%. The two markets in the top ten showing multifamily gains in 2017 were San Francisco CA, up 3%; and Atlanta GA, up 26%.” – Robert A. Murray, Chief Economist, Dodge Data & Analytics

Private Indicators

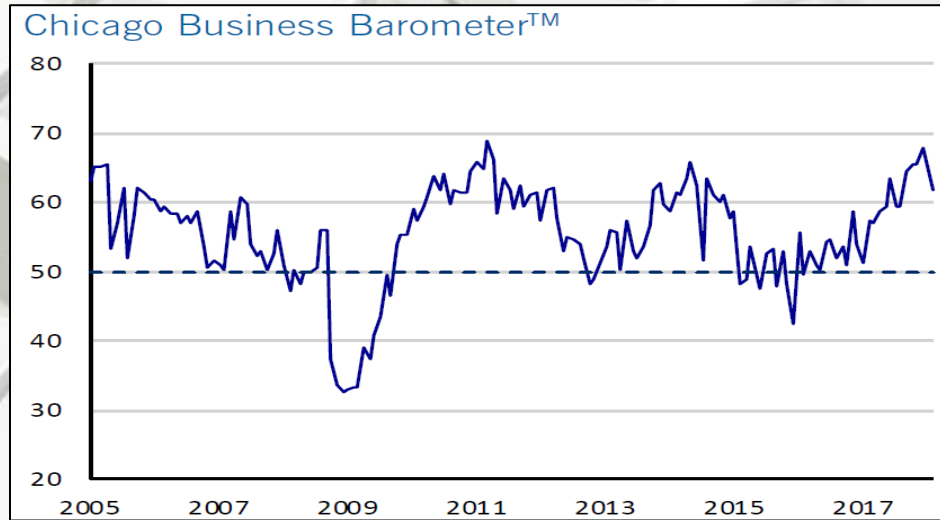
Dodge Data & Analytics

Commercial and Multifamily Construction Starts in 2017 Settled Back in Many of the Top U.S. Metropolitan Areas

“The picture for commercial building is mixed, as both office buildings and warehouses seem to still be in the process of reaching a peak. Although downtown and suburban office vacancy rates edged up slightly in the fourth quarter of 2017, they remain low by recent standards, and warehouse vacancy rates have not yet begun to rise in a sustained manner. At the same time, the lodging sector is seeing slower growth for revenue per available room compared to a few years ago, and hotel construction starts are easing back, particularly from 2016 which saw several very large hotel and casino projects reach the construction start stage. As for store construction, its 10% retreat in dollar terms at the national level during 2017 is consistent with its weak performance in the overall expansion for commercial building to date.

By geography, six of the top ten commercial and multifamily markets in 2017 registered declines for commercial building – New York NY, down 28%; Los Angeles CA, down 23%; Dallas-Ft. Worth TX, down 12%; Washington DC, down 8%; Chicago IL, down 28%; and Boston MA, down 22%. The four markets in the top ten showing commercial building gains in 2017 were San Francisco CA, up 57%; Miami FL, up 40%; Atlanta GA, up 24%; and Seattle WA, up 8%.” – Robert A. Murray, Chief Economist, Dodge Data & Analytics

Private Indicators



MNI Chicago February Chicago Business Barometer Declines to 61.9

“The MNI Chicago Business Barometer fell 3.8 points to 61.9 in February, down from 65.7 in January, to the lowest level since August 2017.

New Orders Fall to Six-Month Low; Input Price Inflation Eases

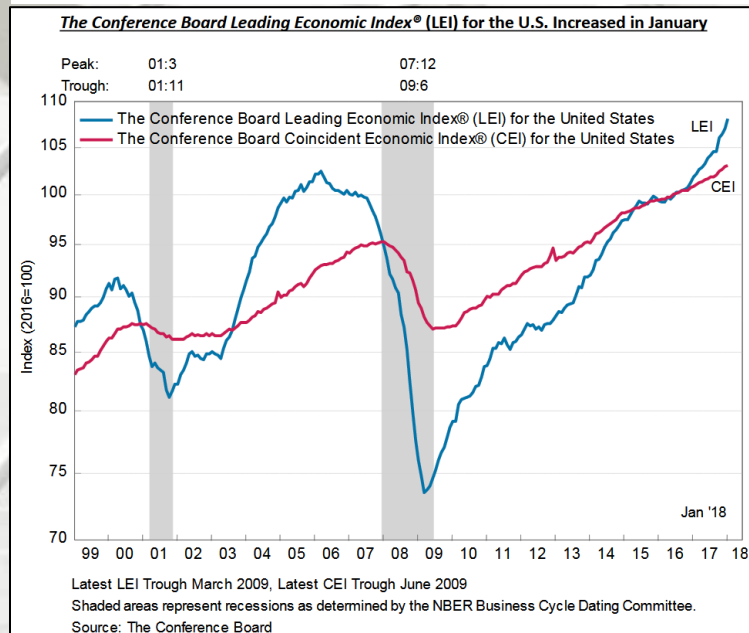
Business activity continued to expand in February, although at a softer pace than in January. All five of the Barometer components receded on the month, but despite a second straight monthly fall, the Barometer was still up 8% on last February and above the 2017 average of 60.8. As in January, firms reported a slower pace of both incoming orders and output in February. The New Orders indicator fell to a six-month low, contributing the most to the Barometer’s decline, while the Production indicator also fell in February, down to a level last seen lower in September. Despite trending lower recently, however, both indicators remain elevated relative to recent years.

Disruptive weather conditions this month and large promotions at the back-end of last year appear to have weighed on demand and output in February, but despite the Barometer’s broad-based decline activity remains upbeat. That said, a large proportion of firms are anxious about the cost of input materials, and warn they could pass on these higher costs to consumers if inflationary pressures do not abate.” – Jamie Satchi, Economist, MNI Indicators

Private Indicators

The Conference Board Leading Economic Index® (LEI) for the U.S. increased 1.0 percent in January to 108.1 (2016 = 100), following a 0.6 percent increase in December, and a 0.4 percent increase in November..

U.S. Composite Economic Indexes (2016 = 100)



Economic Growth to Continue Through First Half of 2018

“The U.S. LEI accelerated further in January and continues to point to robust economic growth in the first half of 2018. While the recent stock market volatility will not be reflected in the U.S. LEI until next month, consumers’ and business’ outlook on the economy had been improving for several months and should not be greatly impacted. The leading indicators reflect an economy with widespread strengths coming from financial conditions, manufacturing, residential construction, and labor markets.” – Ataman Ozyildirim, Director of Business Cycles and Growth Research, The Conference Board

“**The Conference Board Coincident Economic Index® (CEI)** for the U.S. increased 0.1 percent in January to 103.0 (2016 = 100), following a 0.3 percent increase in December, and a 0.2 percent increase in November.

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

Private Indicators



The Conference Board Help Wanted OnLine® (HWOL) Online Job Ads Decreased 185,700 in February 2018

- “ February 2018 shows large drop following a flat January
- Loss widespread across most States and MSAs

Online advertised vacancies decreased 185,700 to 4,717,600 in February, according to **The Conference Board Help Wanted OnLine® (HWOL) Data Series**, released today. The January Supply/Demand rate stands at 1.36 unemployed for each advertised vacancy, with a total of 1.8 million more unemployed workers than the number of advertised vacancies. The number of unemployed was approximately 6.7 million in January.

The Professional occupational category saw changes in Healthcare practitioners and technical (-88.5) and Computer and mathematical science (14.9). The Services/Production occupational category saw losses in Sales (-27.6), Transportation(-24.1), and Office and admin (-20.6).” – Carol Courter, The Conference Board

Private Indicators

Equipment Leasing and Finance Association

Confidence Remains High in February

“The [Equipment Leasing & Finance Foundation](#) (the Foundation) releases the February 2018 [Monthly Confidence Index for the Equipment Finance Industry](#) (MCI-EFI) today. 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 73.2 in February, easing from 75.3 in January, which was an all-time high level for the index.” – Anneliese DeDiemar, Author, Equipment Leasing & Finance Association

“Our strong start to the year could be tempered with the recent volatility of the stock market and overall fears of rate increases. I believe by the end of the quarter we will have a strong picture regarding demand for the year. At this point, indications look favorable for continued positive trends in equipment acquisition and for financing for those transactions.” – Valerie Hayes Jester, President, Brandywine Capital Associates

Private Indicators

Equipment Leasing and Finance Association

February 2018 Survey Results:

“The overall MCI-EFI is 73.2 in February, easing from 75.3 in January.

- When asked to assess their business conditions over the next four months, 46.4% of executives responding said they believe business conditions will improve over the next four months, a decrease from 67.7% in January. 53.6% of respondents believe business conditions will remain the same over the next four months, an increase from 29.0% the previous month. None believe business conditions will worsen, down from 3.2% who believed so the previous month.
- 67.6% of survey respondents believe demand for leases and loans to fund capital expenditures (capex) will increase over the next four months, relatively unchanged from 67.7% in January. 32.1% believe demand will “remain the same” during the same four-month time period, up from 29.0% the previous month. None believe demand will decline, a decrease from 3.2% who believed so in January.
- 28.6% of the respondents expect more access to capital to fund equipment acquisitions over the next four months, down from 35.5% in January. 67.9% of executives indicate they expect the “same” access to capital to fund business, an increase from 61.3% last month. 3.6% expect “less” access to capital, up from 3.2% last month.” – Anneliese DeDiemar, Author, Equipment Leasing & Finance Association

Private Indicators

Equipment Leasing and Finance Association

February 2018 Survey Results:

- “When asked, 42.9% of the executives report they expect to hire more employees over the next four months, an increase from 41.9% in January. 53.6% expect no change in headcount over the next four months, a decrease from 54.8% last month. 3.6% expect to hire fewer employees, up from 3.2% in January.
- 25.0% of the leadership evaluate the current U.S. economy as “excellent,” down from 25.8% last month. 75.0% of the leadership evaluate the current U.S. economy as “fair,” up from 74.2% in January. None evaluate it as “poor,” unchanged from last month.
- 60.7% of the survey respondents believe that U.S. economic conditions will get “better” over the next six months, a decrease from 61.3% in January. 35.7% of survey respondents indicate they believe the U.S. economy will “stay the same” over the next six months, a decrease from 38.7% the previous month. 3.6% believe economic conditions in the U.S. will worsen over the next six months, an increase from none in January.
- In February, 53.6% of respondents indicate they believe their company will increase spending on business development activities during the next six months, a decrease from 61.3% in January. 46.4% believe there will be “no change” in business development spending, an increase from 35.5% the previous month. None believe there will be a decrease in spending, a decrease from 3.2% last month.” – Anneliese DeDiemar, Author, Equipment Leasing & Finance Association

Private Indicators

Equipment Leasing and Finance Association

Monthly Leasing & Finance Index: January 2018

January New Business Volume Up 10 Percent Year-over-year

“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 January was \$6.9 billion, up 10 percent year-over-year from new business volume in January 2017. Volume was down 46 percent month-to-month from \$12.8 billion in December, following the typical end-of-quarter, end-of-year spike in new business activity.

Receivables over 30 days were 1.90 percent, up from 1.50 percent the previous month and up from 1.70 percent the same period in 2017. Charge-offs were 0.34 percent, down from 0.48 percent the previous month, and down from 0.43 percent in the year-earlier period.

Credit approvals totaled 76.9 percent in January, down from 77.6 percent in December. Total headcount for equipment finance companies was up 1.9 percent year over year. Previously, headcount was elevated due to acquisition activity at an MLFI reporting company.” – Amy Vogt, Vice President, Communications and Marketing, ELFA

Private Indicators

Equipment Leasing and Finance Association January New Business Volume Up 10 Percent Year-over-year

“Separately, the Equipment Leasing & Finance Foundation’s Monthly Confidence Index (MCI-EFI) in February is 73.2, easing from 75.3 in January, which was an all-time high level for the index.” – Amy Vogt, Vice President, Communications and Marketing, ELFA

“A confident commercial sector of the U.S. economy showed itself with double-digit growth in the dollar volume of financed equipment for the month of January. Despite a spike in delinquencies, which bears a watchful eye for signs of deterioration in credit markets in the coming months, the new year gets off to a strong start for the equipment finance industry. Business owners continue to expand their operations and acquire productive assets, even as interest rates edge up ever so slightly and the Fed is poised to cool an overheated economy.” – Ralph Petta, President and CEO, ELFA

“The equipment finance industry enjoyed a great year in 2017 and is maintaining that momentum through January as evidenced by this month's MLFI. Optimism continues to be fueled by tax reform and favorable interest rates. Potential borrowers planning for the upcoming lease accounting changes in 2019 have spurred a wave of innovation towards consumption models and managed services agreements in lieu of traditional financing products. Barring larger macroeconomic events, all of this should result in a dynamic and growing equipment finance market in 2018.” – James Cress, Vice President and General Manager, ELFA

Private Indicators

Equipment Leasing and Finance Association

Monthly Leasing & Finance Index: January 2018

“January 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 Jaschik, President, BB&T Equipment Finance

February 2018 Manufacturing ISM® Report On Business®

January PMI® at 60.8%

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

“Economic activity in the **manufacturing sector** expanded in January, and the **overall economy** grew for the 106th consecutive month, say the nation's supply executives in the latest **Manufacturing ISM® Report On Business®**. The February PMI® registered 60.8 percent, an increase of 1.7 percentage points from the January reading of 59.1 percent.

The New Orders Index registered 64.2 percent, a decrease of 1.2 percentage points from the January reading of 65.4 percent.

The Production Index registered 62 percent, a 2.5 percentage point decrease compared to the January reading of 64.5 percent.

The Employment Index registered 59.7 percent, an increase of 5.5 percentage points from the January reading of 54.2 percent.

The Supplier Deliveries Index registered 61.1 percent, a 2 percentage point increase from the January reading of 59.1 percent.

The Inventories Index registered 56.7 percent, an increase of 4.4 percentage points from the January reading of 52.3 percent.

The Prices Index registered 74.2 percent in February, a 1.5 percentage point increase from the January reading of 72.7 percent, indicating higher raw materials prices for the 24th consecutive month.

Comments from the panel reflect expanding business conditions, with new orders and production maintaining high levels of expansion; employment expanding at a faster rate to support production; order backlogs expanding at a faster rate; and export orders and imports continuing to grow faster in February. Supplier deliveries continued to slow (improving) at a faster rate. Price increases occurred across most industry sectors. The Customers' Inventories Index indicates levels remain too low. Capital expenditure lead times improved by five days while production material supplier lead times extended four days during the month of February.” – Timothy R. Fiore, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee

Source: <https://www.instituteforsupplymanagement.org/ISMReport/MfgROB.cfm?navItemNumber=12942>; 3/1/18

Private Indicators

February 2018 Non-Manufacturing ISM® Report On Business®

February NMI® at 59.5%

**Business Activity Index at 62.8%; New Orders Index at 64.8%;
Employment Index at 55.0%**

“Economic activity in the non-manufacturing sector grew in February for the 97th consecutive month, say the nation's purchasing and supply executives in the latest **Non-Manufacturing ISM® Report On Business®**. The NMI® registered 59.5 percent, which is 0.4 percentage point lower than the January reading of 59.9 percent. This represents continued growth in the non-manufacturing sector at a slightly slower rate.

The Non-Manufacturing Business Activity Index increased to 62.8 percent, 3 percentage points higher than the January reading of 59.8 percent, reflecting growth for the 103rd consecutive month, at a faster rate in February.

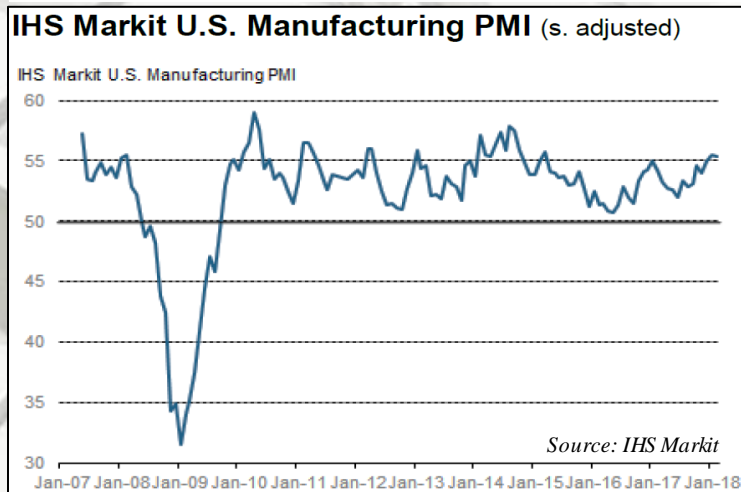
The New Orders Index registered 64.8 percent, 2.1 percentage points higher than the reading of 62.7 percent in January.

The Employment Index decreased 6.6 percentage points in February to 55 percent from the January reading of 61.6 percent.

The Prices Index decreased by 0.9 percentage point from the January reading of 61.9 percent to 61 percent, indicating that prices increased in February for the 24th consecutive month.

According to the NMI®, 16 non-manufacturing industries reported growth. The non-manufacturing sector reflected the second consecutive month of strong growth in February. The decrease in the Employment Index possibly prevented an even stronger reading for the NMI® composite index. The majority of respondents' continue to be positive about business conditions and the economy.” – Anthony Nieves, CPSM, C.P.M., CFPM, Chair of the Institute for Supply Management® (ISM®) Non-Manufacturing Business Survey Committee

Private Indicators



Markit U.S. Manufacturing PMI™

“The seasonally adjusted **IHS Markit final U.S. Manufacturing Purchasing Managers’ Index™ (PMI™)** registered 55.3 in February, down slightly from 55.5 in January. Although below January’s 34-month high, the overall improvement in operating conditions across the manufacturing sector was one of the strongest recorded since late-2014.

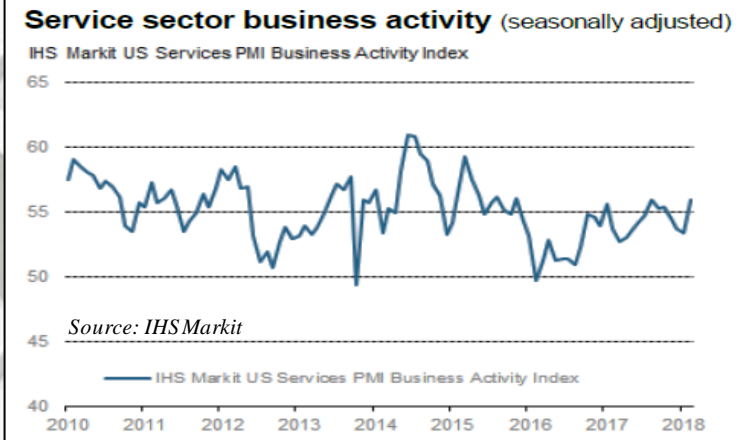
PMI close to three-year peak as new order inflows hit 13-month high

February survey data signalled one of the strongest improvements in the health of the U.S. manufacturing sector seen over the past three years, led by a sharp expansion in new orders. Meanwhile, inflationary pressures intensified with rates of both input and output price inflation reaching multi-year highs. At the same time, business confidence towards output in the year-ahead improved, which supported further widespread job creation. Growth of manufacturing output remained solid in February, despite easing slightly to a three-month low. The sustained upturn in production was widely linked to greater client demand and increased order book volumes.

US factories are enjoying one of the best growth spells seen since 2014, boding well for the sector to make a solid contribution to GDP in the first quarter. The survey’s output index readings for the first two months of 2018 are indicative of the sector growing at an annualised rate of just under 3%.

The most encouraging news was another surge in new order inflows, which helped boost optimism about the year ahead and drive further widespread job gains. Manufacturers are clearly in expansion mode, enjoying robust demand from home alongside rising export orders. ...” – Chris Williamson, Chief Economist, Markit®

Private Indicators



Markit U.S. Services PMI™

“The seasonally adjusted final **IHS Markit U.S. Services Business Activity Index** registered 55.9 in February, up from 53.3 in January. Following a nine-month low in the previous survey period, the rate of expansion in business activity picked up to the fastest since August 2017. Service providers generally attributed the sharp rise in output to greater client demand.

Business activity expansion accelerates to six-month high

Business activity across the U.S. service sector expanded sharply in February, according to the latest PMI data. The upturn in output accelerated to the fastest since August 2017. In addition, greater client demand led to a steep rise in new business, which rose at the strongest pace in almost three years. Capacity pressures intensified as a result of the upswing in demand, with backlogs of work accumulating to the greatest extent since March 2015.

More favourable demand conditions drove the latest rise in new business, with panellists linking the upturn to the acquisition of new clients and investment in new facilities. Moreover, the rate of growth accelerated for the second consecutive month to the quickest in almost three years.

A surge in service sector activity comes as welcome news after a disappointing couple of months, especially as it was accompanied by further robust manufacturing growth in February. So far, the two PMI surveys point to the economy expanding at a steady 2.5% annualised rate in the first quarter. With growth of new orders across the two sectors collectively growing at the fastest rate for three years, March could also prove to be a good month for business activity, rounding off a solid opening quarter or the year.” – Chris Williamson, Chief Economist, Markit®

Private Indicators

National Association of Credit Management – Credit Managers' Index

“Can it be true? Are we really seeing a positive trend emerge as far as NACM’s Credit Managers’ Index (CMI) is concerned? The numbers for this month’s combined score are up – 56.5 as compared to the 55.1 that was noted last month. This latest reading is almost as high as it was last November when it reached 56.6. The index of favorable factors also improved, and by quite a lot – moving from 61.4 to 64.9. This is again close to the numbers that were seen last November when the reading was 65.7. There was similar progress in the index for unfavorable factors – 50.9 for February from 50.8 in January. The movement in the unfavorable categories has been slight for some time, which has been an ongoing concern.

The details have been interesting – as is usually the case. The majority of the movement has been in the favorable categories, but there was some significant movement in the unfavorables as well. The sales category made a big jump from 63 to 66.8, marking the highest point since September of last year when it hit 67.3. One of the themes you may have noticed already is that this month’s numbers are back to what they were in the latter part of last year when the economy as a whole was growing at around 3%. The new credit applications category jumped back into the 60s by moving from 59.8 in January to the current reading of 63.3. There was a similar pattern as far as dollar collections were concerned, as last month the reading was 58.7 and this month the reading is 62.9. To complete the favorable sweep, there was the reading for amount of credit extended (64.3 to 66.4). These are really very healthy numbers and all rival the highs seen last fall.” – Adam Fusco, Associate Editor, NACM

Private Indicators

National Association of Credit Management – Credit Managers' Index

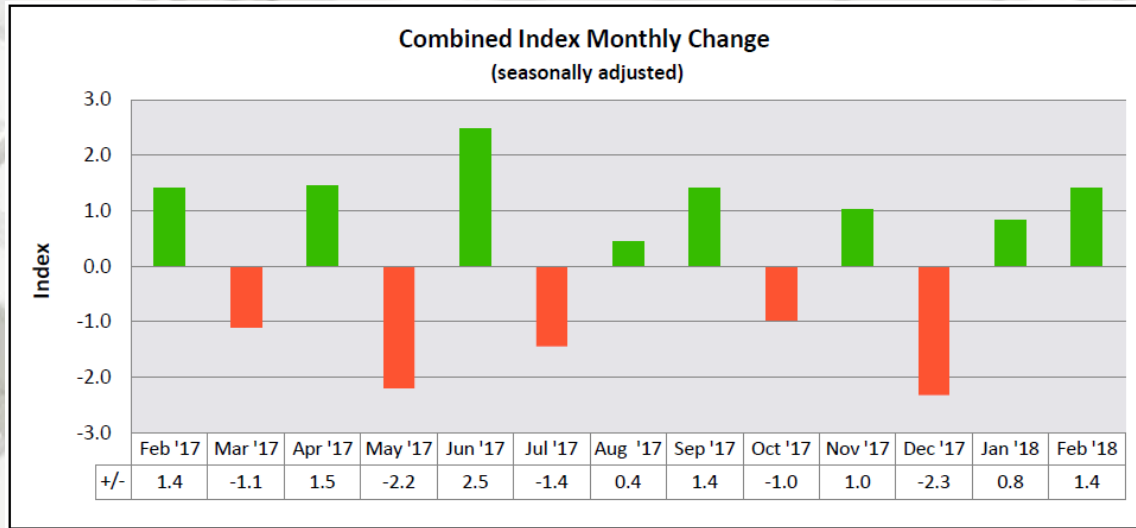
“There was also a substantial dip in accounts placed for collection as the numbers fell from 51.7 back to contraction territory (anything under 50) with a 49.8 reading. The disputes category stayed the same – better than falling, but still in contraction at 49.6. The dollar amount beyond terms category has been a problem all year as companies fall into the slow-pay category one month and manage to escape it the next. This month there was an improvement from 47 to 49.9, but that is still in the contraction zone. There was a slight reduction in the numbers for amount of customer deductions from 49.7 to 49.1. The only reading that really seemed to improve was filings for bankruptcies (55.2 to 55.4).” – Adam Fusco, Associate Editor, NACM

“To be honest, two good months in a row hardly constitutes a trend, but it has been many months in a row for all this up and down gyration. It is gratifying to see two consecutive months of solid performance. The good news for the moment is that these readings have been relatively stable and even getting a little better.

The bottom line here is that there are still lots of companies that are struggling and have not yet participated in the recovery that has been driving the economy as a whole. As a matter of fact, there is some additional risk these days as competitors feeling that growth start to push everyone to keep pace – some will simply not be able to keep up.

Ready or not, there are companies seeking credit to expand and stay with the competition, but are not qualified to get what they seek. Companies are still in trouble and are likely to react more negatively as expansion pressure grows. The most important observation from the unfavorable list is that four of the six readings are in contraction territory – albeit less dramatically than was the case the previous month.” – Dr. Chris Kuehl, Economist, NACM

Private Indicators

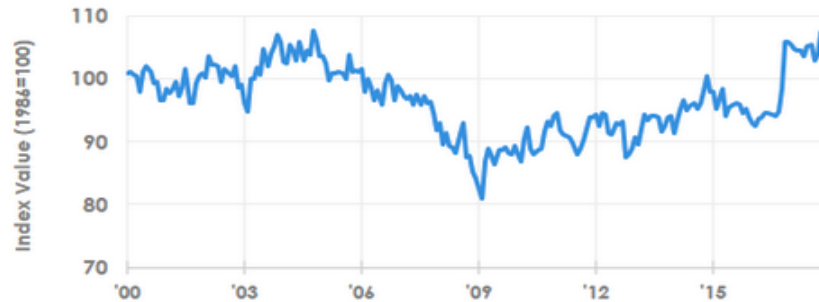


Combined Manufacturing and Service Sectors (seasonally adjusted)	Feb '17	Mar '17	Apr '17	May '17	Jun '17	Jul '17	Aug '17	Sep '17	Oct '17	Nov '17	Dec '17	Jan '18	Feb '18
Sales	62.6	61.2	63.8	60.6	66.5	62.8	62.2	67.3	66.8	68.3	59.2	63.0	66.8
New credit applications	62.0	60.5	62.0	59.3	59.8	59.7	61.2	60.5	62.8	63.7	57.3	59.8	63.3
Dollar collections	63.0	56.4	61.2	56.7	62.5	60.2	58.9	60.0	60.2	63.1	59.1	58.7	62.9
Amount of credit extended	66.8	64.4	67.2	63.6	66.8	64.1	66.7	66.3	65.5	67.8	61.8	64.3	66.4
Index of favorable factors	63.6	60.6	63.6	60.0	63.9	61.7	62.2	63.5	63.8	65.7	59.4	61.4	64.9
Rejections of credit applications	51.4	51.6	52.1	52.4	52.6	51.9	52.2	52.5	51.8	52.4	51.4	51.8	51.5
Accounts placed for collection	48.2	49.8	49.0	48.5	49.3	48.9	48.7	50.3	49.5	50.5	49.8	51.7	49.8
Disputes	48.7	48.5	49.1	47.9	50.4	48.8	49.1	51.7	47.6	48.3	49.7	49.6	49.6
Dollar amount beyond terms	51.0	47.4	51.0	45.9	50.4	48.3	47.4	50.4	47.3	47.5	49.3	47.0	49.9
Dollar amount of customer deductions	47.6	49.8	49.2	48.7	49.1	48.1	49.2	49.8	48.7	48.9	49.7	49.7	49.1
Filings for bankruptcies	53.2	53.8	53.5	52.7	53.4	53.6	55.3	56.2	55.3	55.1	55.0	55.2	55.4
Index of unfavorable factors	50.0	50.2	50.6	49.3	50.9	49.9	50.3	51.8	50.0	50.4	50.8	50.8	50.9
NACM Combined CMI	55.4	54.3	55.8	53.6	56.1	54.6	55.1	56.5	55.5	56.6	54.2	55.1	56.5

Private Indicators

Small Business Optimism Index Increases to 107.6

Based on 10 survey indicators, seasonally adjusted, Jan. '00 – Feb. '18



NFIB.com/sboi

February 2018 Report:

“Small business owners are showing unprecedented confidence in the economy as the optimism index continues at record high numbers, rising to 107.6 in February, according to the NFIB [Small Business Economic Trends Survey](#), released March 13. The historically high numbers include a jump in small business owners increasing capital outlays and raising compensation.” – Holly Wade, NFIB

Small Business Economy Heats Up After Years on the Sideline

Optimism, capital spending, compensation, job creation – all up, according to the NFIB Small Business Economic Trends survey

“For the first time since 2006, taxes received the fewest votes as the number 1 business problem for small business. The February report shows several components of the Index reached noteworthy highs. In a sign that small businesses are confident and expect growth, owners are spending capital with a net 22 percent planning to raise worker compensation and 66 percent reported capital outlays, up 5 points from January and the highest reading since 2004.

Moreover, owners expecting higher real sales rose 3 points to a net 28 percent, one of the best readings since 2007. Owners also reported higher nominal sales in the past three months at a net 8 percent of all owners. The net percent of owners reporting inventory increases rose 3 percentage points to a net 7 percent on top of a 6-point rise in January.” – Holly Wade, NFIB

Private Indicators

Commentary

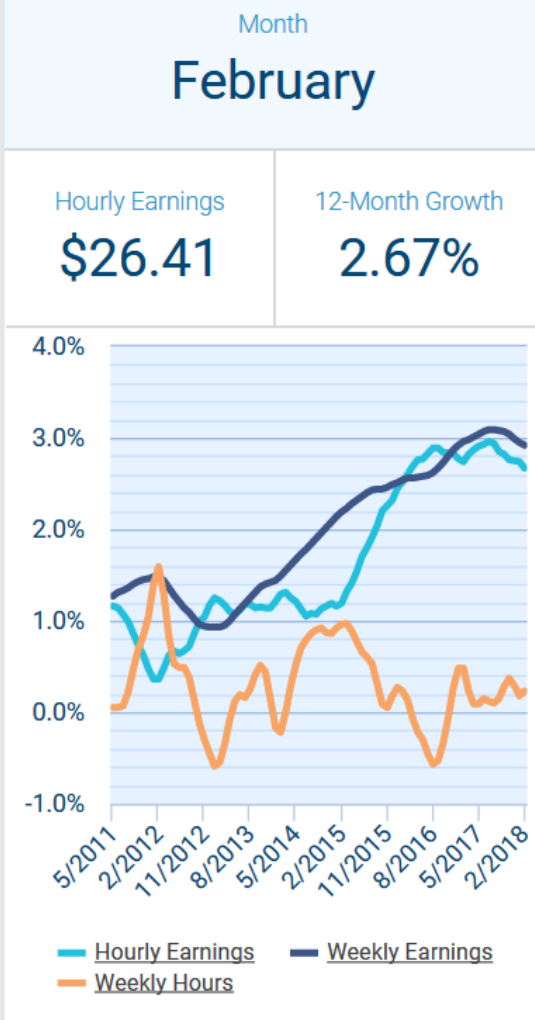
“Small business owners are telling us loud and clear that they’re optimistic, ready to hire, and prepared to raise wages – it’s one of the strongest readings I’ve seen in the 45-year history of the Index. The fact that several components saw significant increases tells us that small businesses are flourishing in a way we haven’t seen in over a decade.” – William C. Dunkelberg, Chief Economist, NFIB

“When small business owners have confidence and certainty in the economy, they’re able to hire more workers and invest in their business. The historically high readings indicate that policy changes – lower taxes and fewer regulations – are transformative for small businesses. After years of standing on the sidelines and not benefiting from the so-called recovery, Main Street is on fire again.” – Juanita Duggan, President and CEO, NFIB

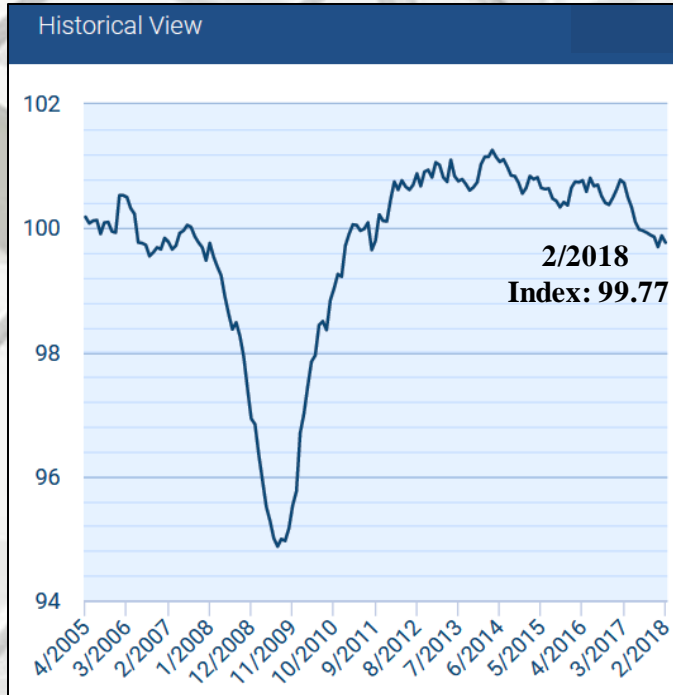
“Job creation remained strong in February, as reported in the [NFIB February Jobs Report](#), released last week. Finding qualified workers remained as the number one problem for small business owners, surpassing taxes and regulations which have held the top two spots for years.” – Holly Wade, NFIB

Private Indicators

The Paychex | IHS Markit Small Business Employment Watch



Private Indicators

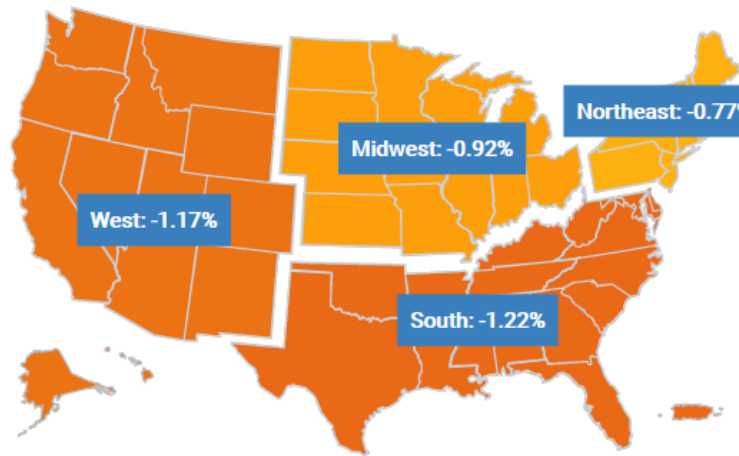


The Paychex | IHS Small Business Jobs Index National Jobs Index

- “At 99.77, the Paychex | IHS Markit Small Business Jobs Index is down 1.00 percent from last year.
- February marks the eighth consecutive month the national index has been below 100.” – James Diffley, Chief Regional Economist, IHS Markit

Private Indicators

Regional Performance



Region	Index	Change
Midwest	99.7	-0.92%
Northeast	99.68	-0.77%
South	100.34	-1.22%
West	99.32	-1.17%

Change

The Paychex | IHS Small Business Jobs Index Regional Jobs Index

- “At 100.34, the South ranks first among regions for the 22nd consecutive month and is the only region above 100.
- The Northeast ranks third among regions, but has the best one-month and 12-month growth rates.” – James Diffley, Chief Regional Economist, IHS Markit

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

Private Indicators

“S&P Dow Jones Indices today released the latest results for the S&P CoreLogic Case-Shiller Indices, the leading measure of U.S. home prices. Data released today for December 2017 shows that home prices continued their rise across the country over the last 12 months.

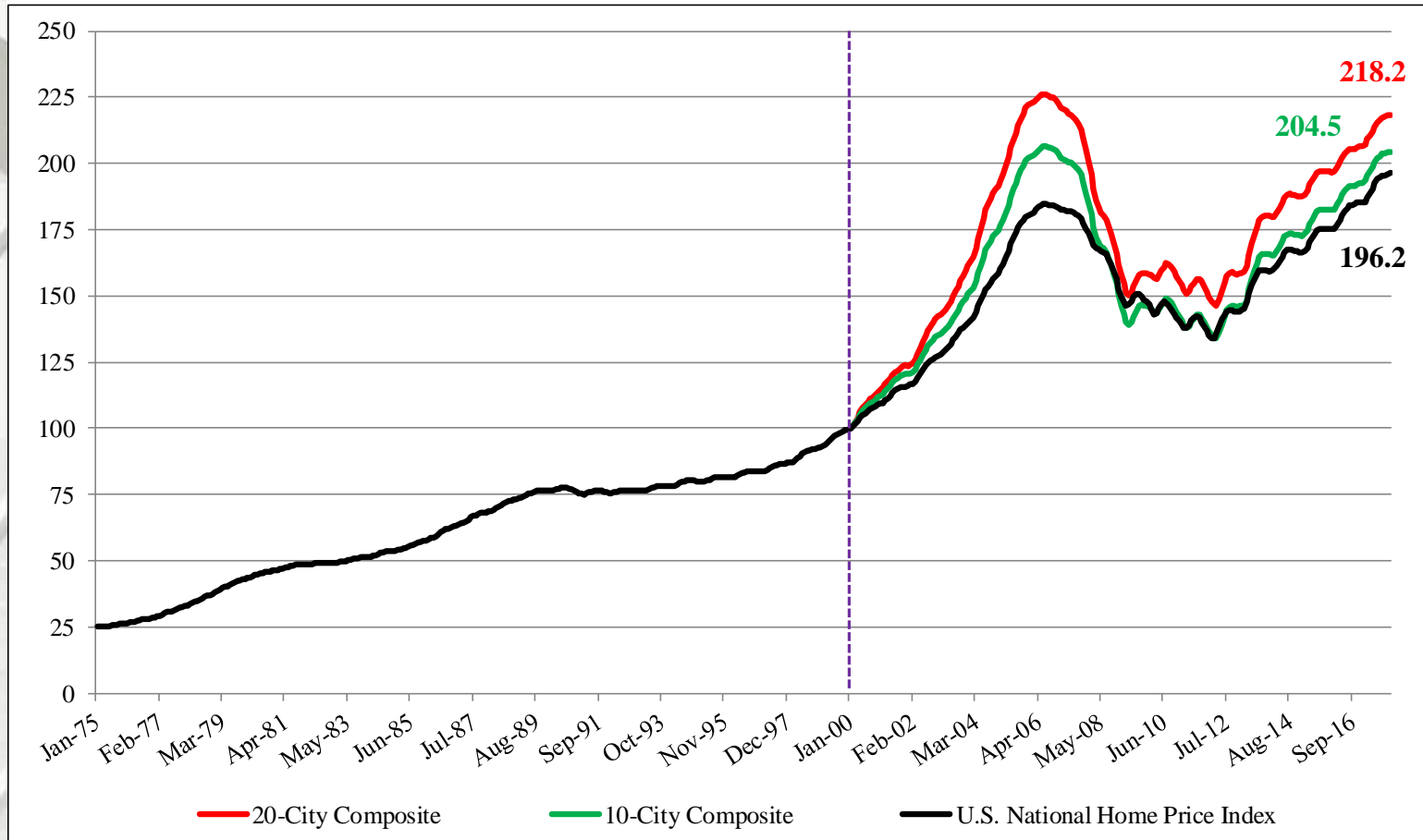
S&P CoreLogic Case-Shiller National Home Price Index Shows Home Prices End The Year 6.3% Higher Than 2016

The rise in home prices should be causing the same nervous wonder aimed at the stock market after its recent bout of volatility. Across the 20 cities covered by S&P Corelogic Case Shiller Home Price Indices, the average increase from the financial crisis low is 62%; over the same period, inflation was 12.4%. None of the cities covered in this release saw real, inflation-adjusted prices fall in 2017. The National Index, which reached its low point in 2012, is up 38% in six years after adjusting for inflation, a real annual gain of 5.3%. The National Index’s average annual real gain from 1976 to 2017 was 1.3%. Even considering the recovery from the financial crisis, we are experiencing a boom in home prices.

Within the last few months, there are beginning to be some signs that gains in housing may be leveling off. Sales of existing homes fell in December and January after seasonal adjustment and are now as low as any month in 2017. Pending sales of existing homes are roughly flat over the last several months. New home sales appear to be following the same trend as existing home sales. While the price increases do not suggest any weakening of demand, mortgage rates rose from 4% to 4.4% since the start of the year. It is too early to tell if the housing recovery is slowing. If it is, some moderation in price gains could be seen later this year.” – David Blitzer, Managing Director and Chairman of the Index Committee, S&P Dow Jones

Private Indicators

S&P/Case-Shiller Home Price Indices



“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

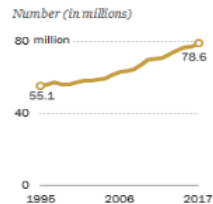
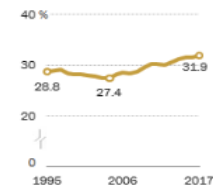
Sources: S&P Dow Jones Indices and CoreLogic; Data through August 2018

Demographics

Nearly one-in-three adults in U.S. are 'doubled up' in housing

Nearly one-in-three adults in U.S. are 'doubled up' in housing

% of adults living in a shared household; that is, a household with at least one adult who is not the household head, the spouse or unmarried partner of the head, or an 18- to 24-year-old student.



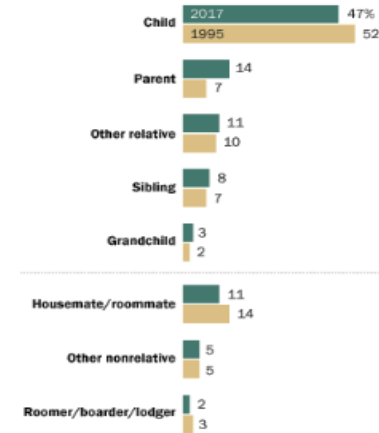
Note: In top panel, data labels shown are for 1995, 2004 and 2017. Living in a shared household refers to living in a household with an extra adult, that is, an adult who is not the household head, the spouse or cohabiting partner of the head, or an 18- to 24-year-old student.
Source: Pew Research Center analysis of the 1995-2017 Current Population Survey, Annual Social and Economic Supplement (IPUMS).

PEW RESEARCH CENTER

Parents(s) living in their adult child's home is increasingly common

Parent(s) living in their adult child's home is increasingly common

The extra adult is the _____ of the household head (in %)



* Less than 0.5%.

Note: Figures may not add to 100% due to rounding. An extra adult lives in a household and is not the household head, the spouse or cohabiting partner of the head, or an 18- to 24-year-old student.
Source: Pew Research Center analysis of the 1995 and 2017 Current Population Survey, Annual Social and Economic Supplement (IPUMS).

PEW RESEARCH CENTER

More adults now share their living space, driven in part by parents living with their adult children

“American adults are increasingly sharing a home with other adults with whom they are not romantically involved. This arrangement, known as “doubling up” or shared living, [gained notice](#) in the wake of the Great Recession, and nearly a decade later, the prevalence of [shared living](#) has continued to grow.” – Richard Fry, Senior Researcher, Pew Research Center

Demographics

Living arrangements of U.S. adults, 2017

Living arrangements of U.S. adults, 2017

In a shared household

Household head	24,850,000
Spouse of head	9,640,000
Unmarried partner of head	798,000
18 to 24 and enrolled in school/college	3,232,000

Extra adults	40,040,000
Total	78,560,000

Not in a shared household

Group quarters	167,400,000
Group quarters	339,000
Total	246,300,000

Note: Figures do not add to total indicated due to rounding. There are some 18- to 24-year-old students who are either the household head, or the spouse or unmarried partner of the head that are not included in the student number above but are included within their respective relationship category. Group quarters only includes non-institutionalized group quarters.

Source: Pew Research Center analysis of the 2017 Current Population Survey, Annual Social and Economic Supplement (IPUMS).

PEW RESEARCH CENTER

More adults now share their living space, driven in part by parents living with their adult children

“While the rise in shared living during and immediately after the recession was attributed in large part to a growing number of Millennials [moving back in with their parents](#), the longer-term increase has been partially driven by a different phenomenon: parents moving in with their adult children.

In 2017, nearly 79 million adults (31.9% of the adult population) lived in a shared household – that is, a household with at least one “extra adult” who is not the household head, the spouse or unmarried partner of the head, or an 18- to 24-year-old student. In 1995, the earliest year with comparable data, 55 million adults (28.8%) lived in a shared household. In 2004, at the [peak of homeownership](#) and before the onset of the home foreclosure crisis, 27.4% of adults shared a household.” – Richard Fry, Senior Researcher, Pew Research Center

Demographics

More adults now share their living space, driven in part by parents living with their adult children

“A shared household is defined somewhat differently from a [multigenerational household](#) (although the two can overlap), as shared households can include unrelated adults and adult siblings. More adults live in shared households than multigenerational households: In 2014, [61 million Americans](#) (including children) resided in multigenerational households.

The nearly 79 million adults living in a shared household include about 25 million adults who own or rent the household. An additional 10 million adults are the spouse or unmarried partner of the head of the household. Another 40 million, or 16% of all adults, are the “extra adult” in the shared household. This share living in someone else’s household is up from 14% in 1995.

Adults who live in someone else’s household typically live with a relative. Today, 14% of adults living in someone else’s household are a parent of the household head, up from 7% in 1995. Some 47% of extra adults today are adult children living in their mom and/or dad’s home, down from 52% in 1995. Other examples of extra adults are a sibling living in the home of a brother or sister, or a roommate.

In 2017, only 18% of extra adults lived in a household in which the head was unrelated (typically a housemate or roommate). Living with nonrelatives has become less prevalent since 1995, when 22% of extra adults lived with a nonrelative.

Regardless of their relationship to the household head, young adults are more likely than middle-aged or older adults to live in someone else’s household. Among those younger than 35, 30% were the extra adult in someone else’s household in 2017, up from 26% in 1995. Among 35- to 54-year-olds, 12% were living in someone else’s household, an increase from 9% in 1995. Today 10% of 55- to 64-year-olds are an extra adult, up from 6% in 1995. The only adult group that isn’t more likely than before to live in another adult’s household is those ages 75 and older (10% in both years).” – Richard Fry, Senior Researcher, Pew Research Center

Demographics

More adults now share their living space, driven in part by parents living with their adult children

“The rise in shared living may have implications for the nature of household finances – that is, how income and expenses are shared among members.

In addition, the increase in “doubling up” is offsetting other social trends bearing on the nature of the nation’s households and demand for housing. While Americans are less likely to be [living with a spouse](#) or unmarried partner in their household, the rise in doubling up means more adults are living with nonrelatives and with relatives other than romantic partners. As a result, the average number of adults per household has not declined since 1995, and consequently, the number of households per adult has not increased.

In fact, household formation, or the number of households for every 100 adults, has recently fallen to very modest levels for several age groups. For example, in 2017 there were 31 households headed by an adult younger than 35 for every 100 adults in that age bracket (adjusted for the [age bias in head-of-household status](#)), among the lowest rate of household formation for this age group since the early 1970s. Decreased household formation is not confined to young adults. Last year there were 61 households headed by a 65- to 74-year-old for every 100 65- to 74-year-olds. While this marked a slight statistical increase from 2014, the last time household formation rates were that low among this demographic was 1972.

The rise in shared living is likely not simply a response to rising housing costs and weak incomes. Nonwhite adults are much more likely than white adults to be doubled up, mirroring their [greater propensity to live](#) in multigenerational households. Nonwhite adults are a growing share of the adult population, and thus some of the rise in shared living arrangements is due to longer-running demographic change.” – Richard Fry, Senior Researcher, Pew Research Center

Demographics

How Generation X Could Change the American Dream

Gen Xers are a bellwether for the nation — and the future isn't looking good.

“In the United States, many people have long believed that hard work and ambition determine economic success and that this country is exceptional at promoting opportunity from the bottom up. It is the essence of the American Dream — the idea that each subsequent generation will do better than the one that came before and that together a rising tide will lift all boats. But for many, the dream is fading. The Pew Research Center has found that just [37 percent of Americans believe children today will be financially better off](#) than their parents, a lower share than in 21 other nations in a global survey.

Americans may be right to be worried about today's children, but we won't know for several decades whether they exceed their parents' financial standing. Economic mobility — the study of how people move up and down the economic ladder over time — is a backward-looking measure; we can only know whether people are better off than their parents or their peers once they've had enough time to go to school, build a career, and hopefully acquire wealth. So we get a much better sense of the future of the American Dream by looking at today's adults, and in particular, that small and sometimes overlooked group known as Generation X.

Born between 1965 and 1980, Gen X is a bellwether cohort to examine for evidence of generational progress. Now mostly in their 30s and 40s, many have completed their educations, established work histories, and started families. They have two decades in the labor market and are in their prime working years, resulting in a lot of good data on how they're doing, not just financially but in terms of their economic mobility as well. What we know shows why so many people have concerns about the American Dream.” – Erin Currier, Director-Family Financial Security and Mobility, The Pew Charitable Trusts

Demographics

How Generation X Could Change the American Dream

“Sixty-five million [Gen Xers are sandwiched between two much larger and louder cohorts](#): the 76.4 million baby boomers and the 83 million millennials. In many ways, the coming of age of Gen Xers has corresponded to a turning point in the American story. Consider just a few of the social and economic dynamics at work for Gen Xers. They are the first cohort to experience a labor market that practically demands postsecondary education for economic success (over a lifetime, the average college graduate earns \$570,000 more than the average person with only a high school diploma), and they have responded with higher educational attainment. By age 33, 18 percent of Gen X men and 20 percent of Gen X women had earned a four-year degree, compared with 17 percent of men and 14 percent of women in the baby-boom generation.

But along with the earnings gains, Gen Xers have also seen the cost of college soar. Since 1980, college tuition has far outpaced inflation and median income growth, and student debt among this group has grown exponentially. In 1977, when the youngest Gen Xers were in fourth grade, a third of students borrowed for college. By the time this generation was finishing school in 2000, 65 percent did.

Data Points

\$43,000 About how much the typical Generation X household earns annually.

This is a sizable increase from the \$31,000 earned by their parents at the same age. In fact, three-quarters of Gen Xers have higher family incomes than their parents did.

56% of Generation Xers hold mortgage debt, the most of any generation.

43 percent hold car loans (the most of any generation), and 26 percent have education loans (topped only by millennials, 41 percent of whom have student debt). These findings are from The Pew Charitable Trusts’ Survey of American Family Finances.

40% of Generation Xers who were raised at the bottom of the income ladder, and stayed there, are black.” – Erin Currier, Director-Family Financial Security and Mobility, The Pew Charitable Trusts

Demographics

PERCENTAGE WITH:	ALL HOUSEHOLDS	SILENT GENERATION	BABY BOOMERS	GENERATION X	MILLENNIALS
Any debt	80%	58%	80%	89%	86%
Mortgage debt	44%	28%	47%	56%	33%
Car loans	37%	21%	35%	43%	41%
Education loans	21%	3%	13%	26%	41%
Median amount among those with debt	\$67,900	\$30,000	\$70,102	\$103,800	\$46,000

How Generation X Could Change the American Dream

“Gen Xers are also the first generation to experience nearly equitable labor force participation between women and men; about three-quarters of Gen X women were in the labor force in 2000, compared with a little more than half of similarly aged women who worked in 1975. (In the case of couples, that added earner has been critical for family financial security, because median wages for men have been nearly flat over the past two decades.)

And Gen Xers are much more racially diverse than groups that came before. In 1963, just 16 percent of 18- to 33-year-olds in the silent generation were nonwhite. By 1988, when Gen Xers were the same age, that percentage had more than doubled to 34. And millennials continue the trend, with 43 percent of that cohort Americans of color.

These social and economic trends suggest that the rules of the game have shifted dramatically for Gen Xers, and they provide an important backdrop for reviewing this generation’s success in [achieving the American Dream](#).” – Erin Currier, Director-Family Financial Security and Mobility, The Pew Charitable Trusts

Demographics

How Generation X Could Change the American Dream

Gen X's finances

“There are a number of ways to assess the financial security of Gen Xers, but it’s easiest to start with how they stack up against their parents. Despite experiencing flat earnings for much of their careers, the typical Gen X household earns about \$43,000 annually, a sizable increase from the \$31,000 earned by their parents at the same age. In fact, three-quarters of Gen Xers have higher family incomes than their parents did, a bright spot in the financial picture for this group. More women working and adding a second earner to many families certainly helped this metric. These income totals are adjusted for inflation and family size, and since families have gotten smaller across the generation, Gen Xers’ extra income is also spread among fewer people. So on the basis of this metric alone, one could argue that Gen X is doing better than the generation that came before.

However, economic well-being includes more than just family income, and taking a more holistic view of Gen X finances reveals some vulnerabilities. Namely, Gen Xers haven’t been able to translate their extra income into wealth. Not including home equity, the typical Gen Xer has just over \$13,000 in wealth (defined as total assets minus total debts), compared with the \$18,000 held by a typical Gen Xer’s parents when they were the same ages. Just 36 percent of Gen Xers have higher family wealth than their parents did — a notable difference from their intergenerational income gains. But they are falling short by this measure in large part because, among those with debt, Gen Xers have six times more than their parents did.

In fact, right now Gen Xers have higher debt than pretty much everyone: In The Pew Charitable Trusts’ Survey of American Family Finances, 9 in 10 Gen Xers reported holding debt, the highest proportion of any group, including millennials. Fifty-six percent of Gen Xers hold mortgage debt (the most of any generation), 43 percent hold car loans (the most of any generation), and 26 percent have education loans (the most of any generation except millennials, 41 percent of whom have student debt).” – Erin Currier, Director-Family Financial Security and Mobility, The Pew Charitable Trusts

Demographics

How Generation X Could Change the American Dream

Gen X's finances

“To some degree, this is to be expected. Gen Xers are in their prime debt-acquiring years, buying houses and cars, and even though they’re well into their careers, some still have student loan debt. Debt is not inherently bad, especially if it’s leveraged for things that build income and wealth, such as college education and homeownership. And the presence of debt signals access to credit, a good indicator of financial security.


But the weight of Gen Xers’ debt, especially without higher assets to offset it, stands in contrast to the generations that came before, threatening this group's wealth acquisition in the short term and its retirement preparedness in the long term.

The Great Recession didn’t help. Gen Xers were already behind previous cohorts before the economic downturn: In 2007, the typical Gen Xer had fewer financial assets — in the form of money held in savings accounts, 401(k)s, pensions, and individual retirement accounts — than baby boomers held at the same age. But the timing of the recession was particularly challenging for Gen Xers, many of whom purchased homes during the housing bubble. While all groups experienced wealth losses in the recession, Gen X took the hardest hit. From 2007 to 2010, Gen Xers lost nearly half of their wealth, an average of about \$33,000.

As a result, Gen Xers are not on track for a secure retirement. If current trends continue, they’re slated to replace just 50 percent of their working-age income through savings when retired. Most financial planners recommend that number be closer to 70 or 80 percent.

Taken together, these facts don’t paint a rosy picture. A holistic accounting of Gen X balance sheets suggests that, unless something changes, this generation may not, in fact, do better than the one that came before it.” – Erin Currier, Director-Family Financial Security and Mobility, The Pew Charitable Trusts

Demographics



EDUCATION, FAMILY STRUCTURE, AND RACE STRONGLY INFLUENCE GEN Xers' INCOME MOBILITY

	ALL	GEN XERS RAISED IN AND STUCK AT THE BOTTOM	GEN XERS RAISED IN AND STUCK AT THE TOP
Median non-home-equity wealth	\$13,087	\$778	\$69,319
In a couple	72%	44%	85%
College graduate	30%	2%	71%
Black	12%	39%	—
Average family size	2.8	3.1	2.5
Parents' median non-home-equity wealth	\$18,350	\$1,031	\$93,862
Parents in a couple	88%	59%	96%
At least one parent was a college graduate	29%	3%	75%
Parents' average family size	4.6	5	4.3

How Generation X Could Change the American Dream

Gen X's finances

“But what about another definition of the American Dream — the idea that anyone can pull himself or herself up by the bootstraps and that hard work and ambition are the keys to economic success? Looking at the typical Gen Xer obscures the diversity of experience across this generation, and if Gen Xers raised at the bottom of the economic ladder were significantly upwardly mobile, one could feel confident that despite shaky balance sheets the American Dream is just fine. Answering that question requires a deeper dive into the metrics of economic mobility — and specifically exploring which Gen Xers move up the economic ladder and how far.” – Erin Currier, Director-Family Financial Security and Mobility, The Pew Charitable Trusts

Demographics

How Generation X Could Change the American Dream

A tale of two Gen Xs

“Studies examining [economic mobility in the nation as a whole](#) have found notable “stickiness” at the top and bottom of the income ladder across generations: About 40 percent of those raised by low-income parents remain low-income themselves, and about 40 percent of those raised by high-income parents end up high income.

For Gen X, this stickiness at the bottom is even more pronounced than for other generations: Half of Gen Xers raised at the bottom remain stuck there themselves, and nearly three-quarters never reach the middle. Similarly, 40 percent of those raised at the top remain there as adults, and more than two-thirds never fall to the middle. In fact, 7 in 10 Gen Xers at the top rung of the income ladder in their 30s were raised by parents who were also above the middle in their 30s.

A whole host of things influence whether a person will end up in the bottom, middle, or top of the economic ladder as an adult. Family background clearly plays a sizable role, but so does educational attainment, family structure, and race — and all these are exemplified in the balance sheets of Gen Xers: College-educated, partnered, or white Gen Xers typically have higher income and wealth totals than do their counterparts who have less education, are single, or are black. Those with a college degree have \$25,000 a year more in family income, \$9,000 more in non-home-equity wealth, and \$26,000 more in home equity than do their non-college-educated peers. Gen Xers who are part of a couple have \$13,000 more income and three times the non-home-equity wealth and home equity of their single peers. And typical white Gen Xers have about \$17,000 more in family income and hold over four times the non-home-equity wealth and home equity of typical black Gen Xers, underscoring powerful and persistent racial wealth gaps.” – Erin Currier, Director-Family Financial Security and Mobility, The Pew Charitable Trusts

Demographics

How Generation X Could Change the American Dream

A tale of two Gen Xs

“But family background, education, and race aren’t just contributing factors to who enters the top of the income ladder within one cohort; these demographic characteristics fuel a cycle of immobility and growing inequality between the two ends of the economic spectrum, generation after generation. In fact, the space between the haves and have nots is so wide that Gen Xers raised in and stuck at the top of the income ladder have very little in common with those raised in and stuck at the bottom.

For instance, 83 percent of those raised in and currently at the top of the income ladder are in a couple, compared with just 44 percent of those raised in and stuck at the bottom. Of those at the top, nearly all of them — 96 percent — also had parents who were in a couple, while far fewer (59 percent) of those stuck at the bottom did. Seven in 10 Gen Xers at the top have a college degree, and in 75 percent of cases, at least one of their parents does, too. In contrast, a mere 2 percent of their peers at the bottom are college-educated, and only 3 percent have at least one parent who is. Less than 1 percent of Gen Xers who were raised in and remain at the top of the income ladder are black, in large part because so few black children were raised there. In contrast, 4 in 10 Gen Xers raised in and stuck at the bottom are black.

Simply put, Gen Xers raised in the top come from financially comfortable, well-educated, and nearly always white parents and become financially comfortable and well-educated themselves, while Gen Xers raised in the bottom have the exact opposite family background, race, and economic outcome. This story is not significantly different from the mobility experience of other generations, which also see stickiness at the ends driven in part by these demographic characteristics. But the fact that Gen Xers’ stickiness is more pronounced, that the economic repercussions of an economically stable (or unstable) upbringing are more powerful for this generation than for groups that came before, should be seen as a wake-up call to Americans.” – Erin Currier, Director-Family Financial Security and Mobility, The Pew Charitable Trusts

Demographics

How Generation X Could Change the American Dream

A tale of two Gen Xs

“Now, family background is not destiny. Of those Gen Xers raised in the bottom fifth of the income distribution, 27 percent of them made it to the middle of the income ladder or higher as adults. Three percent made it to the top fifth. These are hardly impressive numbers, but they do show that people can overcome difficult economic circumstances to become both financially secure and even extremely wealthy.

Still, these data represent an existential threat to the notion of the American Dream, to the belief that America is indeed a land of opportunity for even the least financially secure. Broad, national data on economic mobility already challenged the often accepted notion of equality of opportunity in the United States, but the specifics of the Gen X experience are an exclamation point to those broader trends.

These data also make answering the question “Is this generation better off than the one that came before?” a relatively complicated task. Looking at the educational attainment, income, and wealth of those raised in the top fifth (or even the top half) of the income distribution, the answer could be a resounding yes. There are examples of success stories that show people are making it.

But looking at the education, income, and wealth of Gen Xers raised in the bottom fifth of the income distribution, the answer is just the opposite. This generation is not better off, and efforts to improve upward mobility from the bottom must grapple not just with income and education, but also with race.” – Erin Currier, Director-Family Financial Security and Mobility, The Pew Charitable Trusts

Demographics

How Generation X Could Change the American Dream

A tale of two Gen Xs

“These data on Gen Xers make clear that our current economy, built within an increasingly globally competitive world, will remain a classic tale of the haves and the have nots, unless there are changes in policy to ensure broader economic opportunity.

But there is no single solution to these concerns. Improving economic mobility — especially upward mobility from the bottom — requires a multifaceted approach that recognizes the systems of advantage and disadvantage at work within communities and institutions, as well as acknowledgment that the majority of those in need of help are families of color. The current lack of mobility from the bottom is a result of policy choices, so reversing these trends means a collective agreement to prioritize equity in general and racial equity in particular.

The lessons from Gen X are sobering and have implications for everyone. They are also a call to action for policymakers, community leaders, employers, and philanthropists to work together and find the concrete changes needed to create more equality of opportunity. Not to act on these data and find ways to alter these trends will forever change the American Dream for those generations still to come.” – Erin Currier, Director-Family Financial Security and Mobility, The Pew Charitable Trusts

THE TAKEAWAY

A holistic accounting of Gen X balance sheets suggests that, unless something changes, this generation may not do better than the one that came before it, presenting new concerns about the fate of the American Dream.

Economics

Board of Governors of the Federal Reserve System

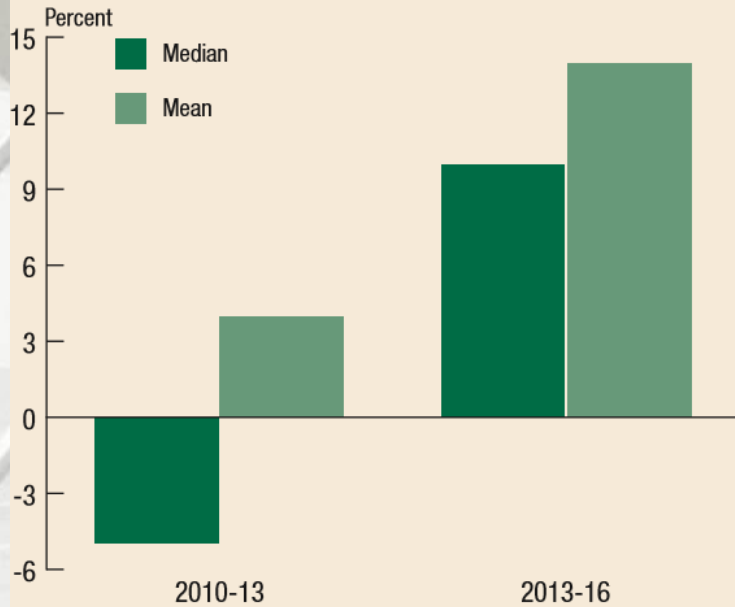
Changes in U.S. Family Finances from 2013 to 2016: Evidence from the Survey of Consumer Finances

“During the three years between the beginning of the 2013 and 2016 surveys, real gross domestic product grew at an annual rate of 2.2 percent, the civilian unemployment rate fell from 7.5 percent to 5 percent, and the annual rate of change in the consumer price index averaged 0.8 percent. These changes in aggregate economic performance led to broad-based income gains across many different types of families. Several observations from the SCF about family incomes stand out:

- Between 2013 and 2016, median family income grew 10 percent, and mean family income grew 14 percent (figure 1).
- Families throughout the income distribution experienced gains in average real incomes between 2013 and 2016, reversing the trend from 2010 to 2013, when real incomes fell or remained stagnant for all but the top of the income distribution.
- Families at the top of the income distribution saw larger gains in income between 2013 and 2016 than other families, consistent with widening income inequality.
- Families without a high school diploma and nonwhite and Hispanic families experienced larger proportional gains in incomes than other families between 2013 and 2016, although more-educated families and white non-Hispanic families continue to have higher incomes than other families.” – Jesse Bricker, Lisa Detling, Alice Henriques, Joanne Hsu, Lindsay Jacobs, Kevin Moore, Sarah Pack, John Sabelhaus, Jeffrey Thompson, and Richard Windle; Division of Research and Statistics; Board of Governors of the Federal Reserve System

Economics

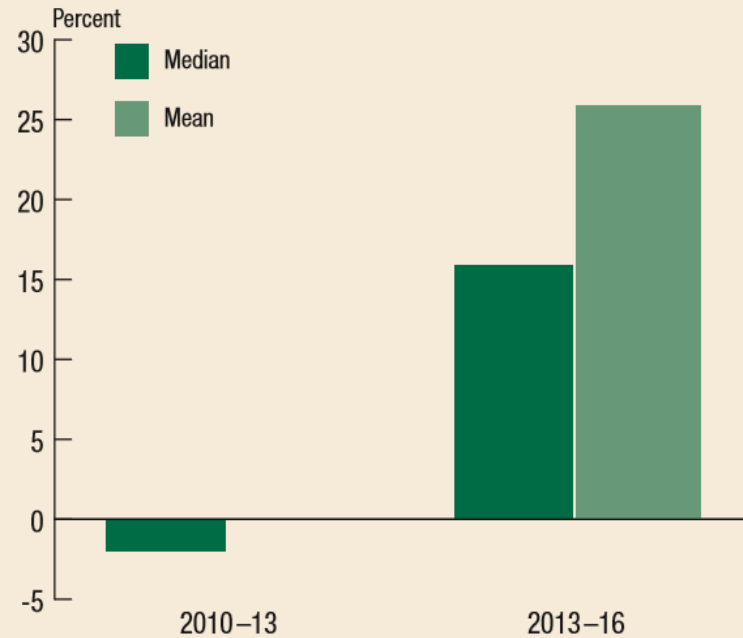
Figure 1. Change in median and mean family incomes, 2010–16 surveys



Note: Changes are based on inflation-adjusted dollars.

Source: Here and in subsequent figures and tables, Federal Reserve Board, Survey of Consumer Finances.

Figure 2. Change in median and mean family net worth, 2010–16 surveys



Note: Changes are based on inflation-adjusted dollars.

Economics

Board of Governors of the Federal Reserve System

“Overall, between 2013 and 2016, median net worth grew 16 percent, and mean net worth grew 26 percent (figure 2).

- Families at the top of the income and wealth distributions experienced large gains in mean and median net worth after experiencing modest gains between 2010 and 2013.
- Families near the bottom of the income and wealth distribution experienced large gains in mean and median net worth after experiencing large declines between 2010 and 2013.
- Families without a college education and nonwhite and Hispanic families experienced larger proportional increases in net worth than other types of families, although more-educated families and white non-Hispanic families continue to have higher wealth than other families.
- Homeownership rates decreased between 2013 and 2016 to 63.7 percent, continuing a decline from their peak of 69.1 percent in 2004. For families that own a home, mean net housing values (value of a home minus outstanding mortgages) rose.” – Jesse Bricker *et al.*; Division of Research and Statistics; Board of Governors of the Federal Reserve System

Economics

Board of Governors of the Federal Reserve System

“Overall, between 2013 and 2016, median net worth grew 16 percent, and mean net worth grew 26 percent (figure 2).

- Retirement plan participation and retirement account asset values rose between 2013 and 2016 for families across the income distribution, with the largest proportional increases in participation occurring among families in the bottom half of the income distribution.
- Ownership rates and the value of direct and indirect holdings of corporate equities increased between 2013 and 2016, with the largest proportional increase in ownership among families in the bottom and upper-middle parts of the income distribution.
- Business ownership increased from 2013 to 2016 to 13.0 percent, nearing its 2010 level. These gains were broad based, occurring throughout the income distribution, with the largest proportional gains occurring among the highest earners.

Income

Median and mean inflation-adjusted before-tax family incomes increased between 2013 and 2016. Overall, median income rose 10 percent between 2013 and 2016, from \$48,100 to \$52,700 (table 1). Mean income increased 14 percent, from \$89,900 to \$102,700. The relatively larger rise in mean income relative to median income is consistent with a widening income distribution during this period.” – Jesse Bricker *et al.*; Division of Research and Statistics; Board of Governors of the Federal Reserve System

Economics

Table 1. Before-tax median and mean family income, by selected characteristics of families, 2013 and 2016 surveys

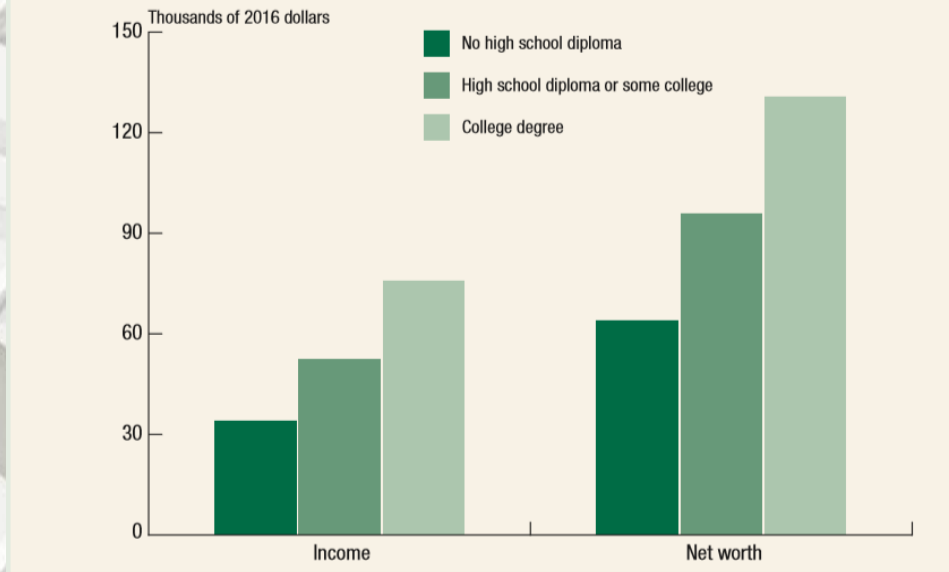
Thousands of 2016 dollars, except as noted

Family characteristic	Median income			Mean income		
	2013	2016	Percent change 2013-16	2013	2016	Percent change 2013-16
All families	48.1 (.8)	52.7 (.7)	10	89.9 (1.6)	102.7 (2.0)	14
Percentile of usual income						
Less than 20	15.7	16.2	3	15.7	17.1	9
20-39.9	31.4	33.1	5	31.4	34.2	9
40-59.9	50.2	54.1	8	51.1	54.0	7
60-79.9	80.3	86.1	7	82.5	94.1	14
80-99.9	125.5	135.3	8	127.3	139.4	10
90-100	230.1	251.5	9	400.9	487.5	19
Age of head (years)						
Less than 35	36.4	40.5	11	50.2	56.4	12
35-44	62.8	65.8	5	105.2	97.1	-8
45-54	62.8	69.5	11	107.1	131.4	23
55-64	56.8	61.0	7	113.5	141.3	24
65-74	47.4	50.1	6	101.9	106.6	5
75 or more	29.4	40.0	36	54.8	77.1	41
Education of head						
No high school diploma	23.1	26.5	15	31.0	38.8	25
High school diploma	38.1	40.5	6	52.3	57.2	9
Some college	45.0	47.7	6	67.2	67.4	0
College degree	90.2	92.1	2	165.1	180.7	15
Race or ethnicity of respondent						
White non-Hispanic	57.5	61.2	6	107.8	123.4	14
Black or African-American non-Hispanic	32.2	35.4	10	44.3	54.0	22
Hispanic or Latino	33.5	38.5	15	45.4	57.3	26
Other or multiple race	42.5	50.6	19	72.7	86.0	20
Housing status						
Owner	65.3	71.2	9	115.9	134.0	16
Renter or other	28.7	31.6	10	41.3	47.8	16
Urbanicity						
Metropolitan statistical area (MSA)	50.2	55.2	10	95.2	109.7	15
Non-MSA	37.8	38.7	2	54.3	54.1	0
Percentile of net worth						
Less than 25	24.5	25.3	3	32.4	34.2	6
25-49.9	39.8	42.0	6	48.3	50.0	5
50-74.9	57.5	64.8	13	67.0	74.0	10
75-99.9	90.2	90.8	1	103.1	113.4	10
90-100	189.1	215.9	14	372.4	456.0	23

Note: Income is measured for the year prior to the survey. See the appendix for details on standard errors (shown in parentheses below the first row of data for the means and medians).

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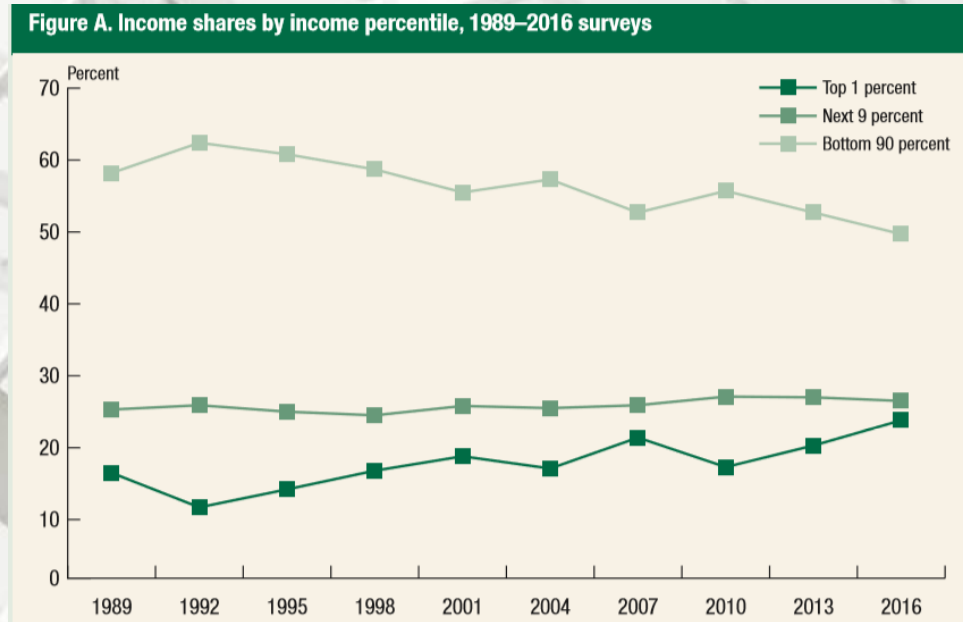
Figure C. Median income and net worth by parental educational attainment, 2016 survey



Board of Governors of the Federal Reserve System Parental Educational Attainment

“Higher levels of parental education are associated with higher incomes and wealth-holding (figure C). The typical family in which at least one of the respondent’s parents has a four-year college degree had a little more than double the income and wealth of families in which neither of the respondent’s parents had a high school diploma. However, the relationship between parental education and income and wealth is not as strong as the relationship between a respondent’s own education and income and wealth. In 2016, the typical family headed by respondents with a college degree had over 3 times more income and almost 13 times more wealth than families headed by respondents without a high school diploma (tables 1 and 2 of the main text).” – Jesse Bricker *et al.*; Division of Research and Statistics; Board of Governors of the Federal Reserve System

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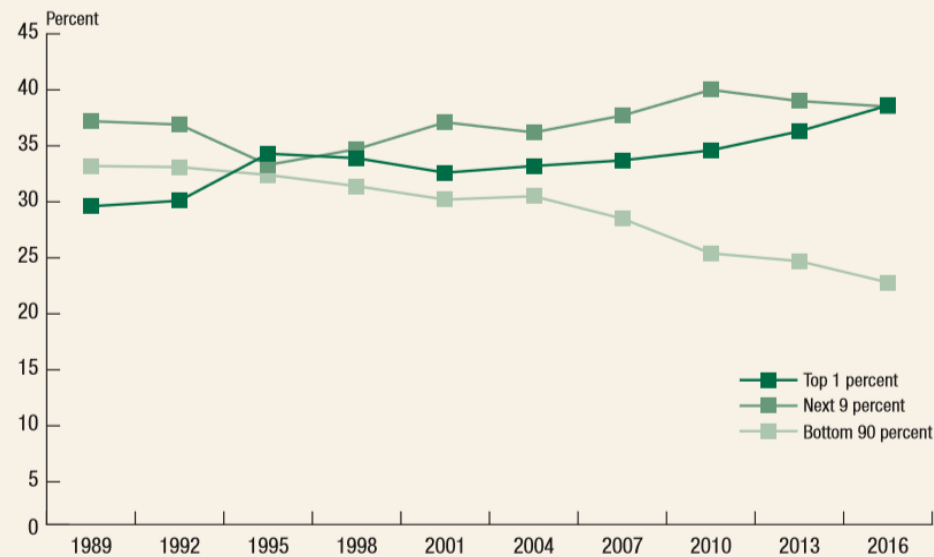
Recent Trends in the Distribution of Income and Wealth

“Data from the 2016 SCF indicate that the shares of income and wealth held by affluent families have reached historically high levels since the modern SCF began in 1989. The share of income received by the top 1 percent of families was 20.3 percent in 2013 and rose to 23.8 percent in 2016 (figure A). The top 1 percent of families now receives nearly as large a share of total income as the next highest 9 percent of families combined (percentiles 91 through 99), who received 26.5 percent of all income. This share has remained fairly stable over the past quarter of a century.

Correspondingly, the rising income share of the top 1 percent mirrors the declining income share of the bottom 90 percent of the distribution, which fell to 49.7 percent in 2016.” – Jesse Bricker *et al.*; Division of Research and Statistics; Board of Governors of the Federal Reserve System

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Figure B. Wealth shares by wealth percentile, 1989–2016 surveys



Board of Governors of the Federal Reserve System Recent Trends in the Distribution of Income and Wealth

“The wealth share of the top 1 percent climbed from 36.3 percent in 2013 to 38.6 percent in 2016, slightly surpassing the wealth share of the next highest 9 percent of families combined (figure B). After rising over the second half of the 1990s and most of the 2000s, the wealth share of the next highest 9 percent of families has been falling since 2010, reaching 38.5 percent in 2016. Similar to the situation with income, the wealth share of the bottom 90 percent of families has been falling over most of the past 25 years, dropping from 33.2 percent in 1989 to 22.8 percent in 2016. Although the SCF measure of wealth is fairly comprehensive, some assets that may be widely held, such as defined-benefit pension and Social Security wealth, are not included in net worth definitions because of the many assumptions required to estimate their values.” – Jesse Bricker *et al.*; Division of Research and Statistics; Board of Governors of the Federal Reserve System

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