

The Virginia Tech – U.S. Forest Service

April 2018

Housing Commentary: Section II



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2018

Virginia Polytechnic Institute and State University

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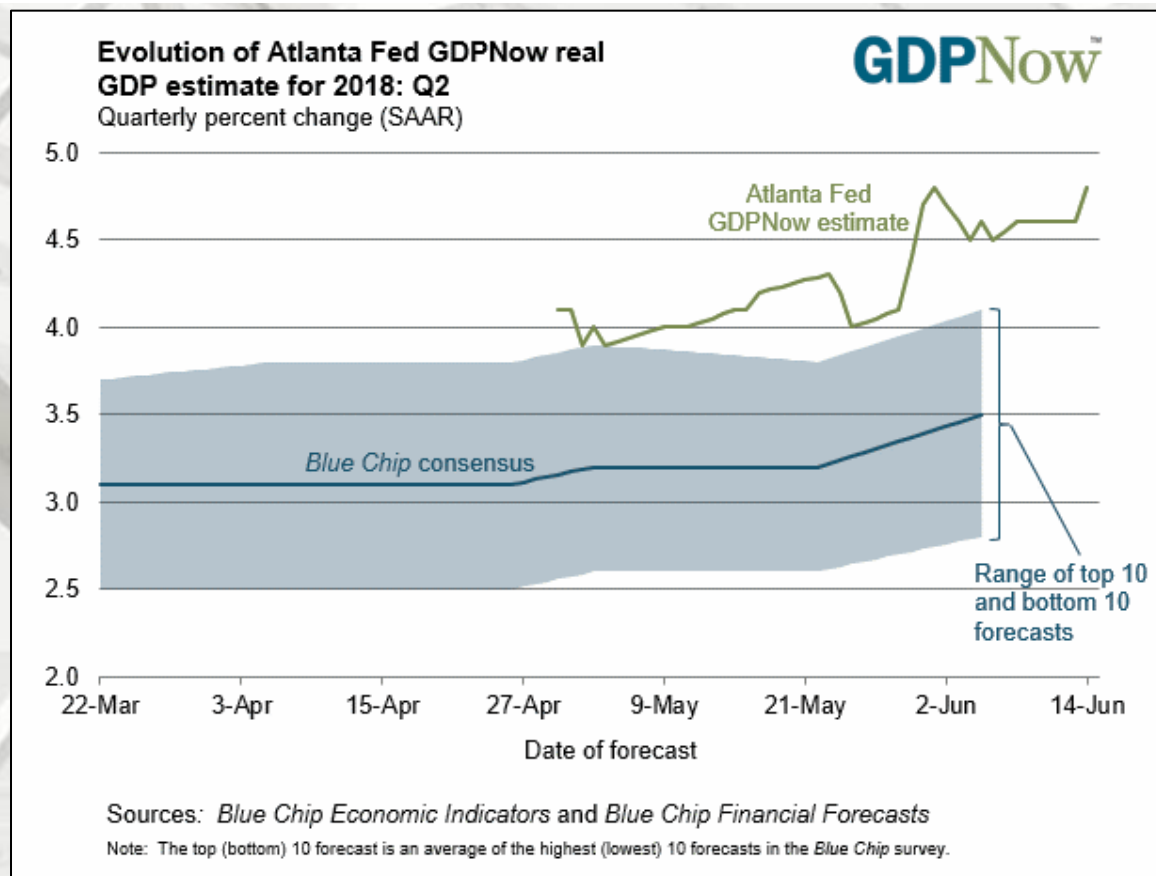
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Federal Reserve System and Private Indicators

U.S. Economic Indicators



Atlanta Fed GDPNow™

Latest forecast: 4.8 percent — June 14, 2018

“The GDPNow model estimate for real GDP growth (seasonally adjusted annual rate) in the second quarter of 2018 is **4.8 percent** on June 14, up from 4.6 percent on June 8. After this morning's retail sales release from the U.S. Census Bureau, the nowcast of second-quarter real personal consumption expenditures growth increased from 3.4 percent to 3.6 percent.” — Pat Higgins, Economist, Federal Reserve Bank of Atlanta

U.S. Economic Indicators

The Federal Reserve Bank of Boston

Q1 2018: Snapshot of the New England Economy through March 28, 2018

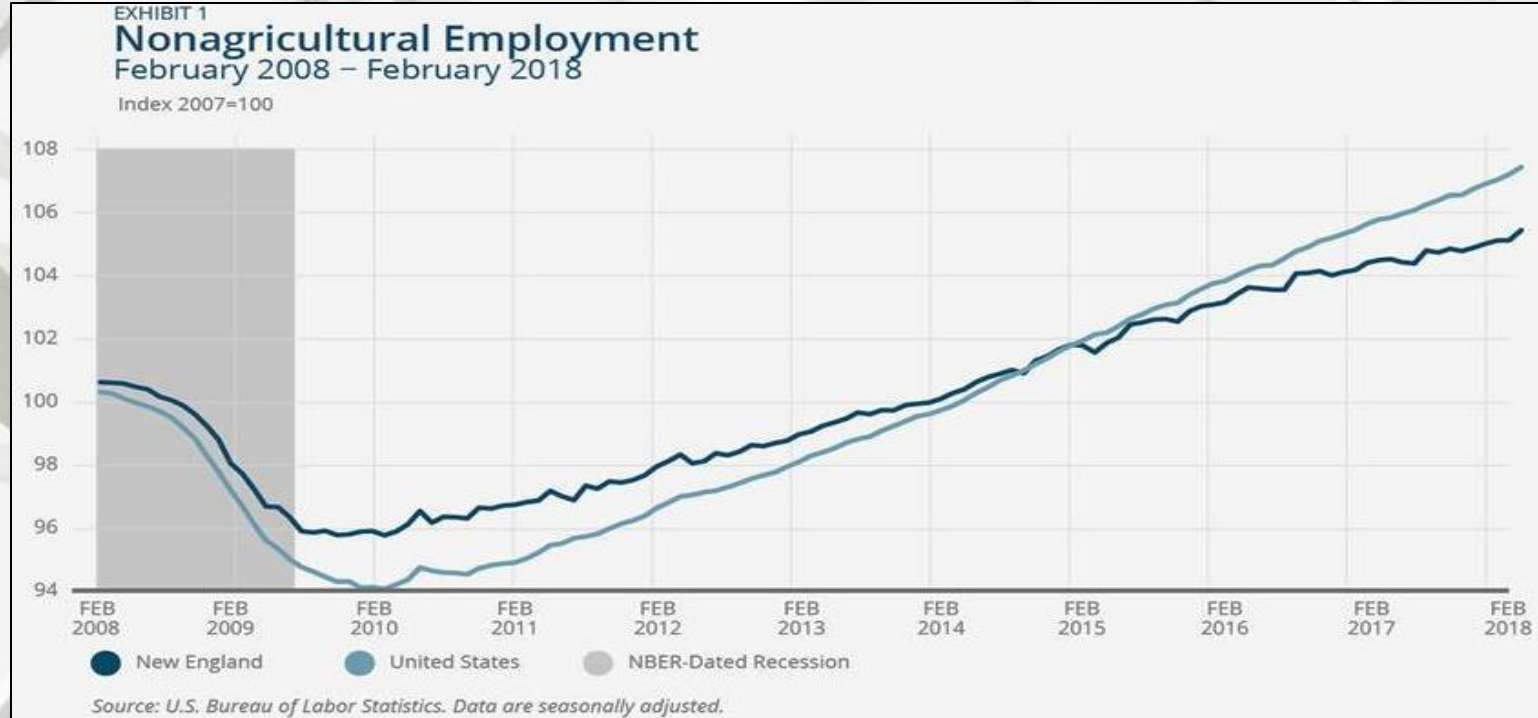
Economic activity continued to increase into 2018

“In the first months of 2018, New England and the United States continued to see improvements in economic indicators. Through February 2018, employment increased and unemployment rates fell relative to one year prior. Through the fourth quarter of 2017, wage and salary income continued to climb both regionally and nationally compared to the same period in 2016.

Payroll Employment Employment gains in 2018

The United States and New England continued to post job gains through February 2018. Between February 2017 and February 2018, payroll employment increased 1.6 percent nationally and 0.9 percent regionally (Exhibit 1). Although employment increased since February 2017 in each of the New England states, the job growth rates varied and were all below the national average. Within New England, New Hampshire posted the strongest year-over-year job gains through February 2018, increasing 1.4 percent. Year-over-year payroll employment was weakest in Vermont, growing by less than 0.1 percent.” – Riley Sullivan, Policy Analyst, New England Public Policy Center, The Federal Reserve Bank of Boston

U.S. Economic Indicators

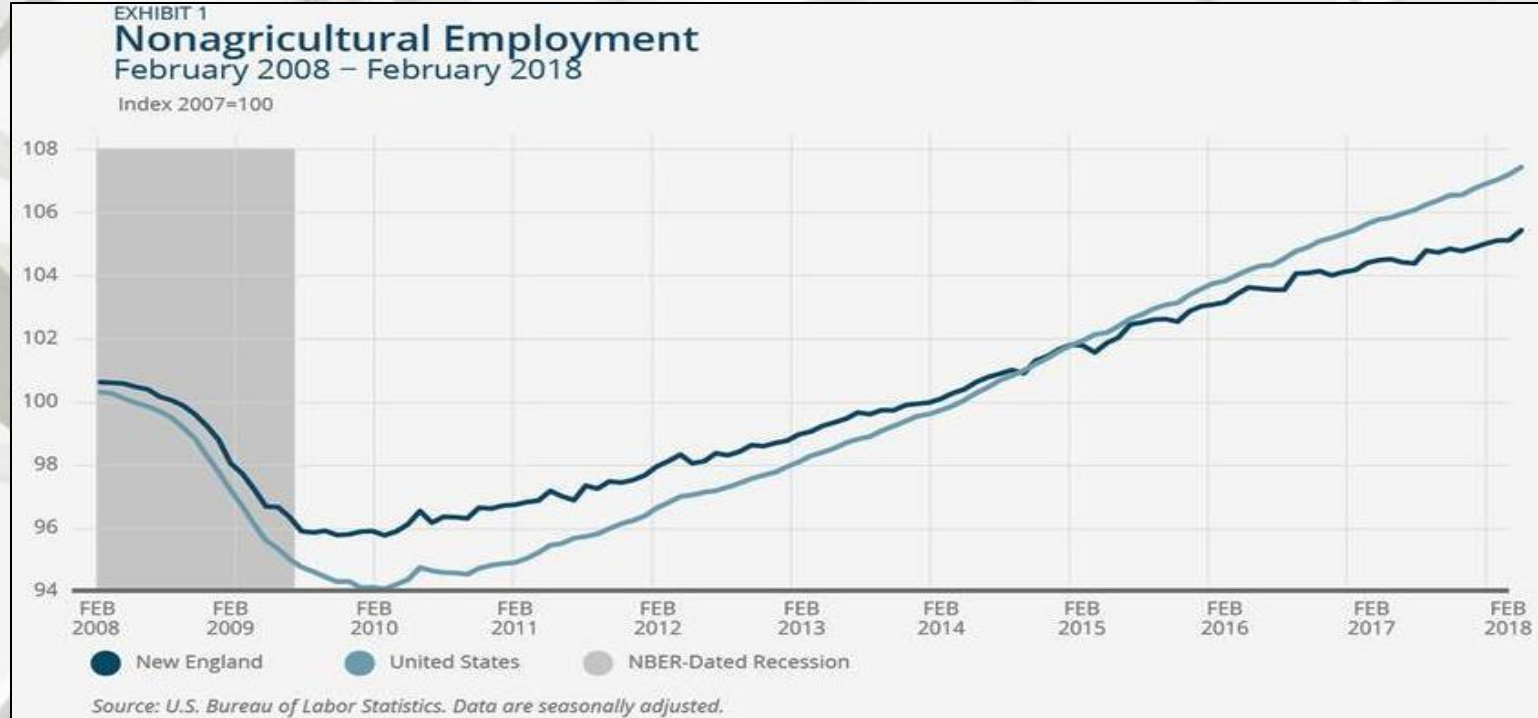


The Federal Reserve Bank of Boston

Construction job gains in New England continue to outpace the national average

“Over the year to February 2018, the Construction supersector led the region in employment growth, with gains that outpaced the national average for Construction (Exhibit 2). Over the same time period, Government employment shrank in the region by 0.5 percent while nationally Government employment grew 0.2 percent. Manufacturing employment increased in five of the six New England states; Rhode Island (2.2 percent), New Hampshire (2.3 percent), and Connecticut (3.5 percent) all experienced Manufacturing job growth above the national average for that supersector (1.8 percent). Employment in the Information supersector dropped 2.2 percent year-over-year both nationally and in New England.” – Riley Sullivan, Policy Analyst, New England Public Policy Center, The Federal Reserve Bank of Boston

U.S. Economic Indicators

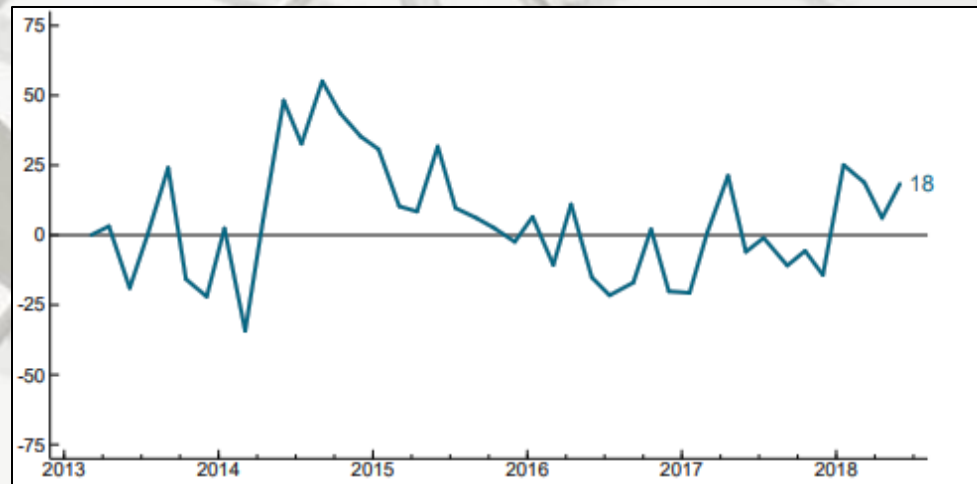


The Federal Reserve Bank of Boston

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Chicago Fed: Survey of Business Conditions

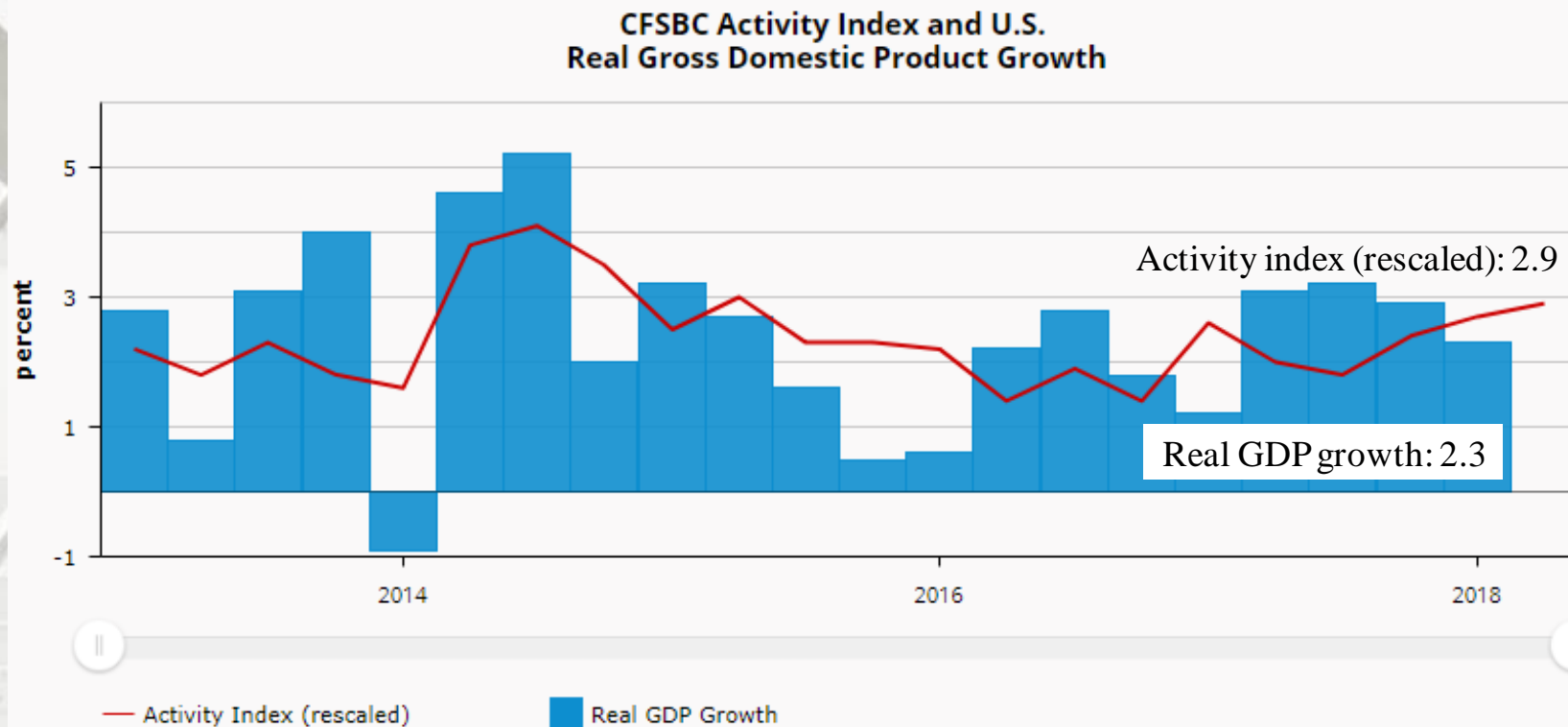


“The *Chicago Fed Survey of Business Conditions* (CFSBC) Activity Index moved up to +18 from +6, suggesting that growth in economic activity remained at a moderate pace in April and early May. The CFSBC Manufacturing Activity Index increased to +40 from +4, and the CFSBC Nonmanufacturing Activity Index was unchanged at +8.

Survey Shows Growth increased in April and early May

- Respondents’ outlooks for the U.S. economy for the next six to 12 months improved slightly, and remained optimistic on balance. Respondents with optimistic outlooks highlighted good economic data, the federal tax reform, and increased demand for their firms’ products.
- Respondents with pessimistic outlooks highlighted elevated policy uncertainty under the current U.S. presidential administration, particularly in regard to trade policy.
- The pace of current hiring slowed some, though respondents’ expectations for the pace of hiring over the next six to 12 months edged up. Both hiring indexes remained in positive territory.
- The pace of current capital spending was unchanged, but respondents’ expectations for the pace of capital spending over the next six to 12 months declined. Both capital spending indexes remained in negative territory.
- The wage cost pressures index decreased, but the nonwage cost pressures index increased. Both cost pressures indexes remained positive.” – Laura LaBarbera, Media Relations, Federal Reserve Bank of Chicago

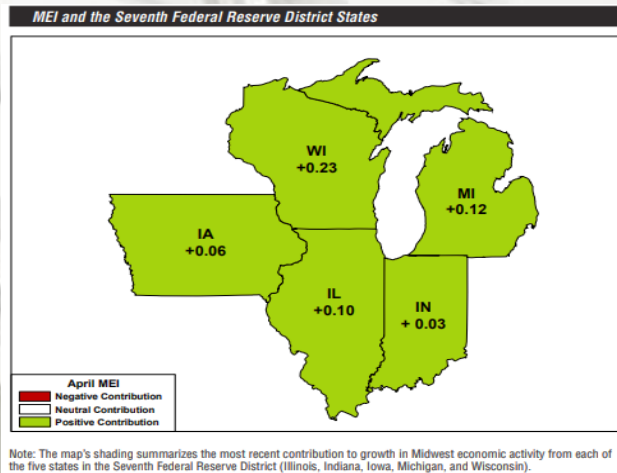
Chicago Fed: Survey of Business Conditions



“Notes: Real gross domestic product (GDP) growth is presented at an annualized quarterly rate. The CFSBC Activity Index is converted from a biquarterly to quarterly frequency by taking the quarterly average of the available data. After averaging, the CFSBC Activity Index values are rescaled by taking the fitted values from a regression of GDP growth on the CFSBC Activity Index.

Sources: Chicago Fed staff calculations and GDP data from the U.S. Bureau of Economic Analysis from the Federal Reserve Economic Data (FRED) service of the Federal Reserve Bank of St. Louis.” – Laura LaBarbera, Media Relations, Federal Reserve Bank of Chicago

Chicago Fed: Midwest Economy Index



“The Midwest Economy Index (MEI) ticked up to +0.53 in April from +0.52 in March. Contributions to the April MEI from three of the four broad sectors of nonfarm business activity and two of the five Seventh Federal Reserve District states increased from March. The relative MEI moved down to +0.18 in April from +0.31 in March. Contributions to the April relative MEI from three of the four sectors and four of the five states decreased from March.

Index points to little change in Midwest economic growth in April

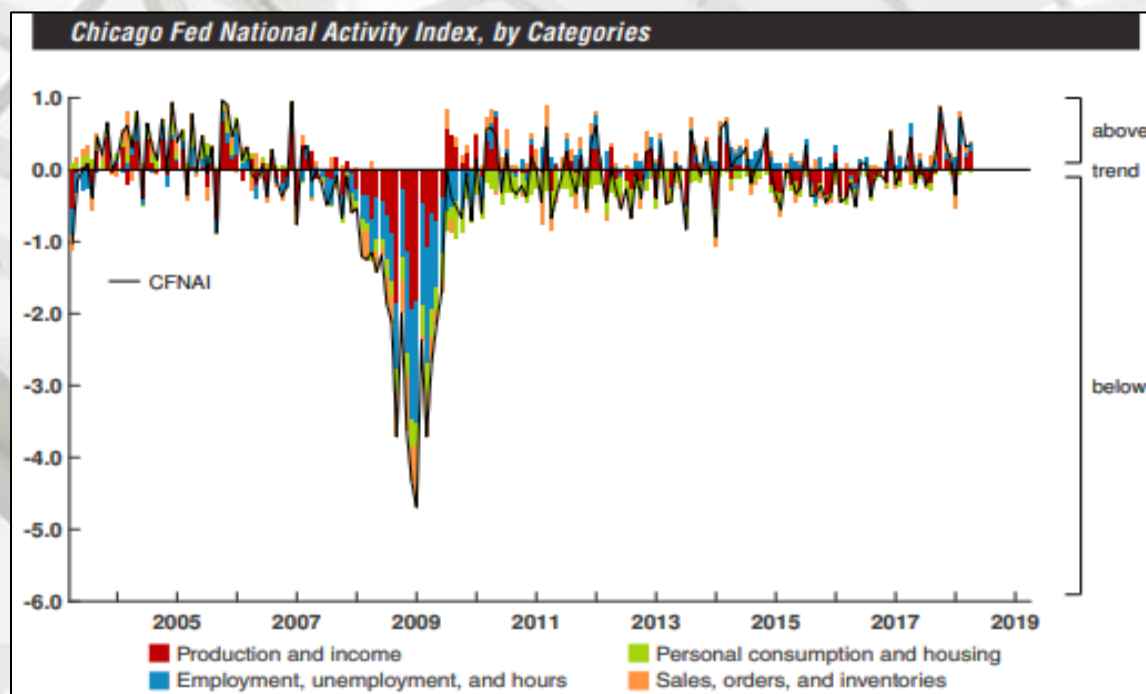
The manufacturing sector’s contribution to the MEI edged down to +0.42 in April from +0.46 in March. The pace of manufacturing activity decreased in Illinois, but increased in Michigan and was unchanged in Indiana, Iowa, and Wisconsin. Manufacturing’s contribution to the relative MEI decreased to +0.29 in April from +0.39 in March.

The construction and mining sector’s contribution to the MEI ticked up to +0.08 in April from +0.07 in March. The pace of construction and mining activity was stronger in Illinois and Iowa, but weaker in Indiana and Michigan and unchanged in Wisconsin. Construction and mining made a contribution of +0.11 to the relative MEI in April, down slightly from +0.12 in March.

The service sector contributed –0.03 to the MEI in April, up slightly from –0.04 in March. The pace of service sector activity was up in Illinois and Indiana, but down in Michigan and Wisconsin and unchanged in Iowa. The service sector’s contribution to the relative MEI decreased to –0.26 in April from –0.22 in March. Consumer spending indicators made a contribution of +0.06 to the MEI in April, up from +0.02 in March. Consumer spending indicators were, on balance, up in Illinois, Iowa, and Wisconsin, but steady in Indiana and Michigan. Consumer spending’s contribution to the relative MEI edged up to +0.03 in April from +0.01 in March.

Consumer spending indicators made a contribution of +0.06 to the MEI in April, up from +0.02 in March. Consumer spending indicators were, on balance, up in Illinois, Iowa, and Wisconsin, but steady in Indiana and Michigan. Consumer spending’s contribution to the relative MEI edged up to +0.03 in April from +0.01 in March.” – Laura LaBarbera, Media Relations, Federal Reserve Bank of Chicago

Chicago Fed: National Activity Index



Index Points to little change in economic growth in April

“The Chicago Fed National Activity Index (CFNAI) ticked up to +0.34 in April from +0.32 in March. Two of the four broad categories of indicators that make up the index increased from March, and three of the four categories made positive contributions to the index in April. The index’s three-month moving average, CFNAI-MA3, increased to +0.46 in April from +0.23 in March.

The CFNAI Diffusion Index, which is also a three-month moving average, moved up to +0.23 in April from +0.11 in March. Fifty of the 85 individual indicators made positive contributions to the CFNAI in April, while 35 made negative contributions. Thirty-five indicators improved from March to April, while 50 indicators deteriorated. Of the indicators that improved, eight made negative contributions.” – Laura LaBarbera, Media Relations, Federal Reserve Bank of Chicago

Chicago Fed: National Activity Index

Index Points to a moderation in economic growth in April

“Production-related indicators contributed +0.27 to the CFNAI in April, up from +0.19 in March. Manufacturing industrial production increased by 0.5 percent in April after being unchanged in March. The sales, orders, and inventories category made a contribution of +0.02 to the CFNAI in April, down slightly from +0.08 in March.

Employment-related indicators contributed +0.10 to the CFNAI in April, up from +0.04 in March. The civilian unemployment rate decreased to 3.9 percent in April from 4.1 percent in March. The contribution of the personal consumption and housing category to the CFNAI edged down to -0.05 in April from +0.02 in March. Housing starts decreased to 1,287,000 annualized units in April from 1,336,000 in March, and housing permits decreased to 1,352,000 annualized units in April from 1,377,000 in the previous month.

The CFNAI was constructed using data available as of May 17, 2018. At that time, April data for 51 of the 85 indicators had been published. For all missing data, estimates were used in constructing the index. The March monthly index value was revised to +0.32 from an initial estimate of +0.10, and the February monthly index value was revised to +0.73 from last month’s estimate of +0.98. Revisions to the monthly index can be attributed to two main factors: revisions in previously published data and differences between the estimates of previously unavailable data and subsequently published data. The revision to the March monthly index value was primarily due to the latter, while the revision to the February monthly index value was primarily due to the former.” – Laura LaBarbera, Media Relations, Federal Reserve Bank of Chicago

U.S. Economic Indicators

Texas Economic Growth Continues at Healthy Pace

“The Texas economy remains in a broad-based expansion. Job growth in the first quarter was a robust 3.5 percent, maintaining the solid gains seen in fourth quarter 2017. The state’s energy sector continues to boom, and areas of the state tied to oil and gas are growing at their strongest pace since 2014. The Dallas Fed’s *Texas Business Outlook Surveys* (TBOS) suggest sustained growth in the state’s manufacturing and service sectors through April. With this strength, the Dallas Fed’s Texas Employment Forecast projects growth of 3.4 percent for the year.

Employment Growth Accelerates Across Most Industries, Metros

Texas job growth moderated in March to a 2.3 percent annualized rate. However, growth in February was revised up by a percentage point to 4.2 percent. Along with January’s healthy pace, this brought overall growth in the first quarter to 3.5 percent.

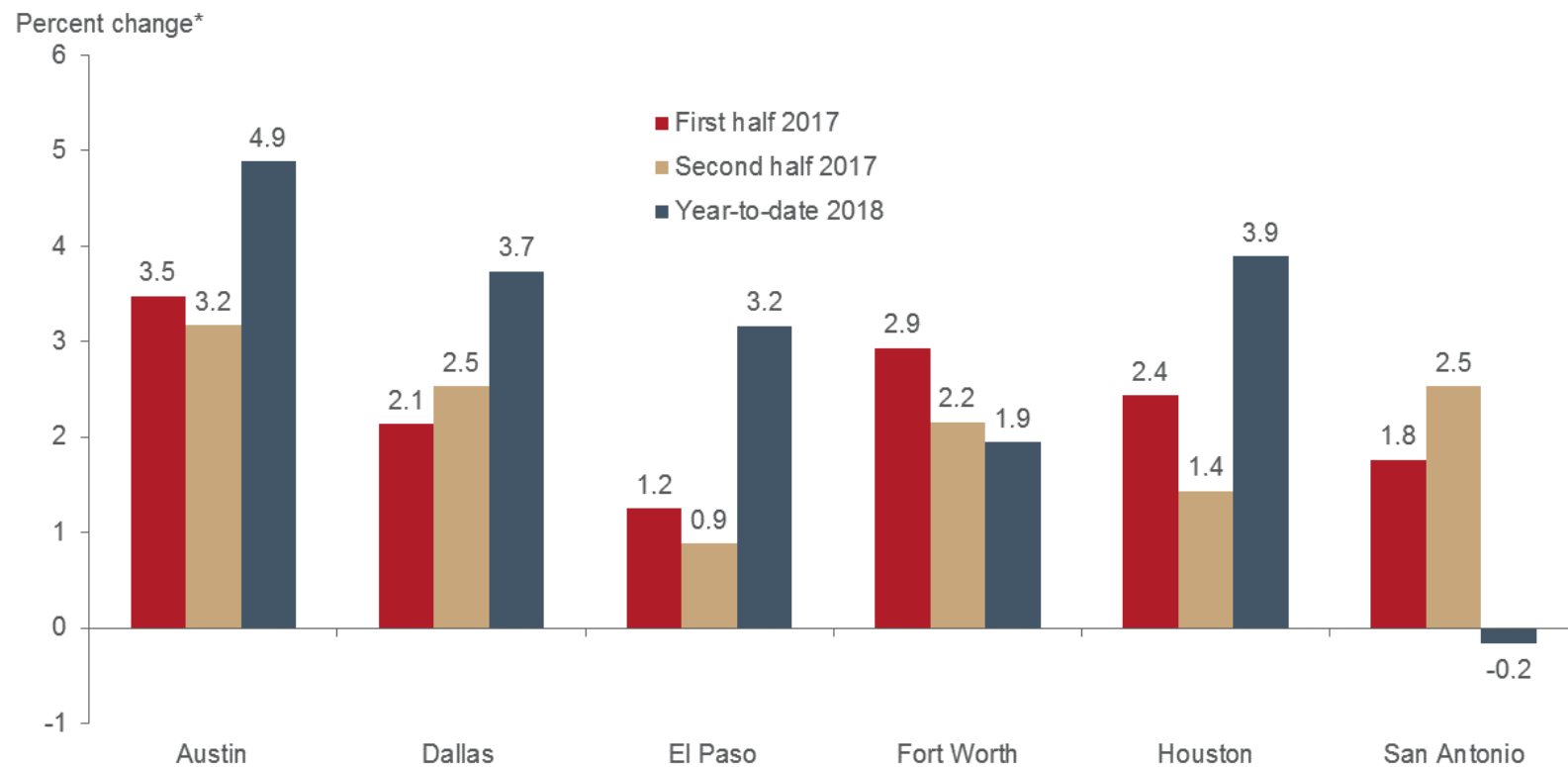
Across the state’s major metros, growth was mostly broad based (Chart 1). Continued expansion in the energy sector has disproportionately benefited Houston job growth, which accelerated from 1.4 percent in the second half of 2017 to 3.9 percent, or 29,000 net new jobs, in the first quarter. Dallas and Austin also saw a significant pickup in jobs, growing at 3.7 percent and 4.9 percent, respectively. San Antonio saw an unusual weakening in the first quarter, likely due in part to moderating effects following a strong surge in post-Hurricane Harvey leisure and hospitality hiring.

The outlook for state employment remains strong. The Texas Leading Index increased 1.6 percent over the first quarter, bolstered mainly by increases in the U.S. leading index and decreases in initial claims for unemployment insurance. Combined with recent strength in job growth, the Dallas Fed’s Texas Employment Forecast suggests that 2018 job growth will be 3.4 percent.” – Christopher Slijk, Assistant Economist, and Jason Saving, Senior Research Economist and Advisor; The Federal Reserve Bank of Dallas

U.S. Economic Indicators

Chart 1
First-Quarter Job Growth Strong in Most of Texas' Large Metros

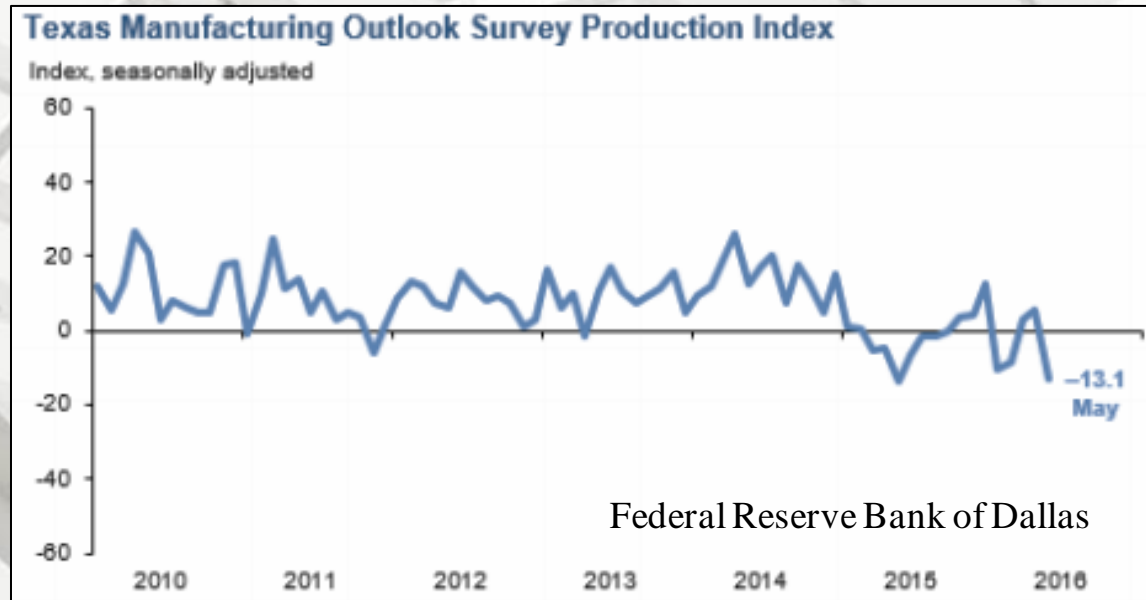
Federal Reserve Bank of Dallas



*Seasonally adjusted, annualized rate.

SOURCES: Bureau of Labor Statistics; Texas Workforce Commission; seasonal and other adjustments by Federal Reserve Bank of Dallas.

U.S. Economic Indicators



Texas Manufacturing Activity Declines

“Texas factory activity declined in May after two months of increases, according to business executives responding to the *Texas Manufacturing Outlook Survey*. The production index, a key measure of state manufacturing conditions, fell from 5.8 to -13.1, hitting its lowest reading in a year.

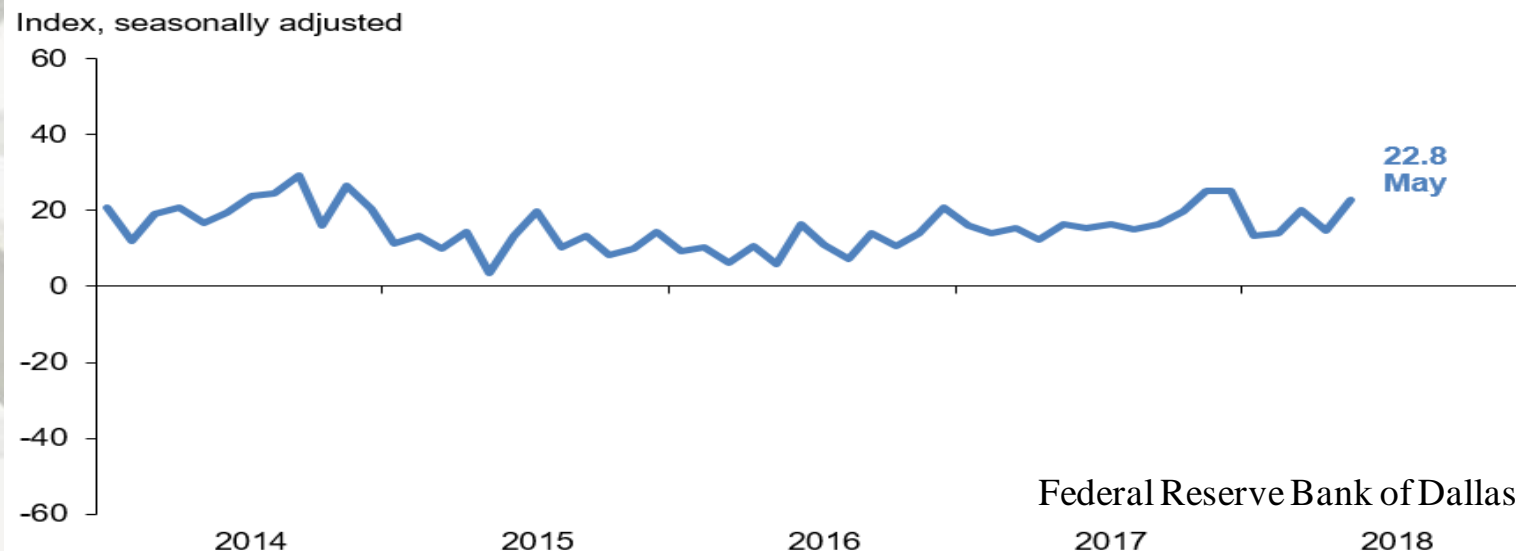
Other measures of current manufacturing activity also reflected contraction this month. The new orders index fell more than 20 points to -14.9 after pushing into positive territory last month. The growth rate of orders index has been negative since late 2014 and fell to -14.7 in May after climbing to near zero in April. The capacity utilization and shipments indexes returned to negative territory after two months of positive readings, coming in at yearlong lows of -11.0 and -11.5, respectively.

Perceptions of broader business conditions were more pessimistic this month. The general business activity index declined from -13.9 to -20.8, and the company outlook index fell 10 points to -16.1.

Expectations regarding future business conditions were mixed in May. The index of future general business activity fell 2 points to -1.8, while the index measuring future company outlook remained positive but moved down to 4.4 this month. Indexes for future manufacturing activity fell but remained solidly positive” – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas

U.S. Economic Indicators

Texas Service Sector Outlook Survey Revenue Index



Texas Service Sector Activity Expands at an Accelerated Pace

“Texas service sector activity accelerated sharply in May, according to business executives responding to the Texas Service Sector Outlook Survey. The revenue index, a key measure of state service sector conditions, increased from 14.7 in April to 22.8 in May, reaching its highest reading so far this year.

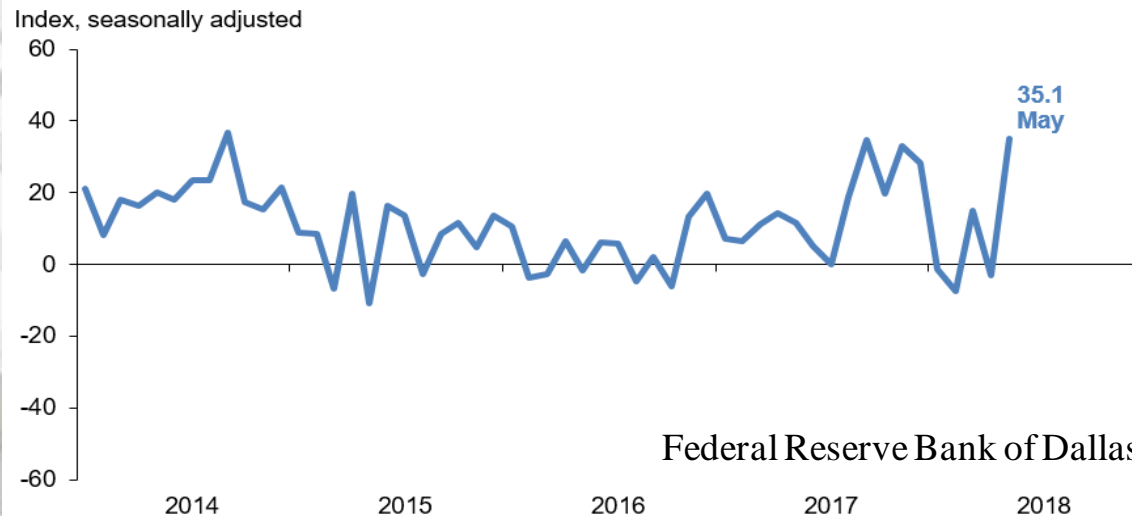
Labor market indicators reflected continued employment growth and longer workweeks this month. The employment index held mostly steady at 16.6, its highest reading since mid-2014. The hours worked index edged up to a six-year high of 10.4 from 8.0 in April.

Perceptions of broader economic conditions reflected further optimism in May. The general business activity index advanced four points to 18.5, while the company outlook index rose slightly to 15.4 from 12.7 in April.

Respondents’ expectations regarding future business conditions reflected slightly more optimism in May. The indexes of future general business activity and future company outlook edged up slightly to 25.7 and 26.8, respectively, with both measures remaining significantly above their average readings. Wage expectations also increased, as the future wage and benefits index rose to an 11-year high. Indexes of future service sector activity, such as revenue and employment, also reflected growing optimism this month.” – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

U.S. Economic Indicators

Texas Retail Outlook Survey Sales Index



Retail Sales Rebound as Index Rises to Multiyear High

“Retail sales surged in May, according to business executives responding to the *Texas Retail Outlook Survey*. The sales index climbed to 35.1 in May, up from its April value of -3.1, and reached its highest reading since before the beginning of the oil bust in 2015. Inventories declined, with the index plummeting over 20 points to -8.6.

Labor market measures indicated continued retail employment growth and lengthening of workweeks this month. The employment index dipped to 8.4, a reading well above its average level. The hours worked index picked up to 4.6.

Retailers’ perceptions of broader economic conditions improved significantly in May. The general business activity index rebounded from -1.6 to 14.9. The company outlook index rose sharply from 1.5 to 13.2.

Retailers’ perceptions of future broader economic conditions reflected increased optimism in May. The index of future general business activity advanced nearly seven points to 20.7, while the index of future company outlook surged from 7.6 to 23.7. Indexes of future retail sector activity picked up, with the future sales index increasing to its highest level this year.” – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

U.S. Economic Indicators

The Federal Reserve Bank of Kansas City

Tenth District Manufacturing Activity Continued to Expand Rapidly

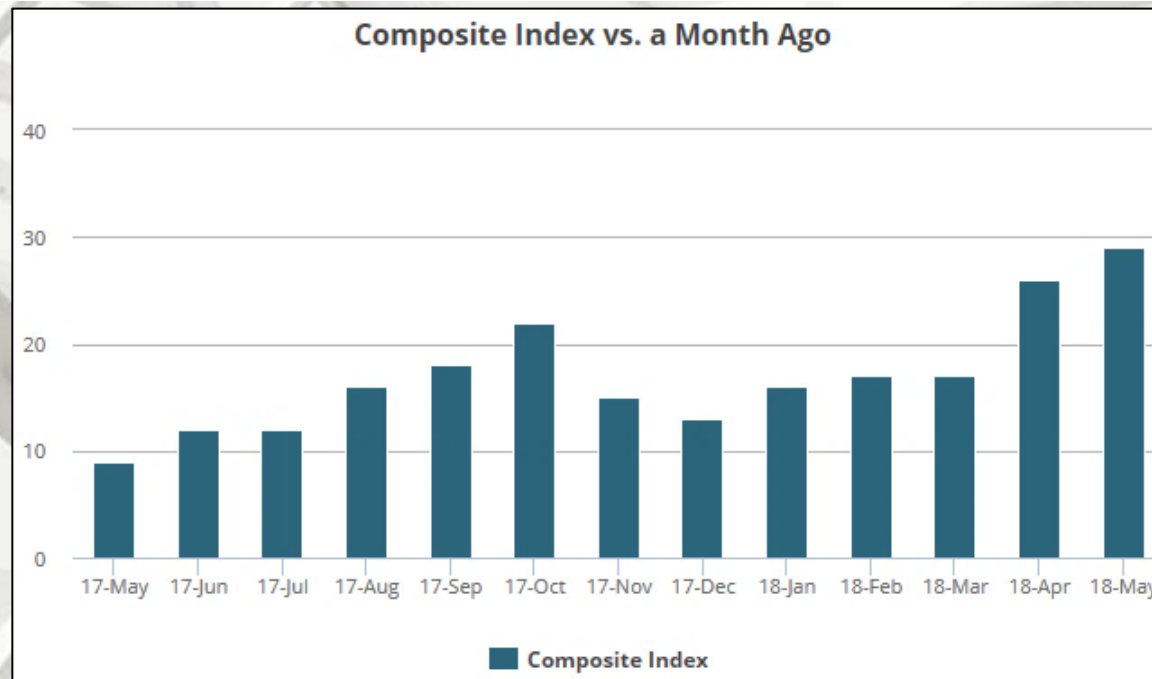
“Tenth District manufacturing activity continued to expand rapidly, with the composite index at its highest level in survey history for the second consecutive month. In addition, contacts remained optimistic about future activity. Price indexes were little changed, but generally remained at high levels.

The month-over-month composite index was 29 in May, up from readings of 26 in April and 17 in March. The composite index is an average of the production, new orders, employment, supplier delivery time, and raw materials inventory indexes. Factory activity increased at both durable and nondurable goods plants, particularly at nondurable plants producing chemicals and food. Most month-over-month indexes continued to rise. The production index jumped from 33 to 41, and the shipments, new orders, and new orders for exports indexes also moved higher. In contrast, the order backlog and employment indexes eased somewhat. The raw materials inventory index edged up from 17 to 19, and the finished goods inventory index also increased.

Year-over-year factory indexes increased considerably over the previous month. The composite index rose from 36 to 45, and the production, shipments, order backlog, and new orders indexes also moved higher. The capital expenditures index jumped from 26 to 33, and the employment index reached its highest level in survey history. The raw materials inventory index inched lower from 32 to 28, while the finished goods inventory index increased.

Most price indexes were little changed in May but remained at high levels. The month-over month finished goods price index eased from 29 to 22, while the raw materials price index was basically unchanged. The year-over-year finished goods price index slipped from 60 to 56, while the year-over-year raw materials price index inched higher. The future finished goods price index fell from 53 to 44, and the future raw materials price index moderated slightly.” – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, The Federal Reserve Bank of Kansas City

U.S. Economic Indicators



The Federal Reserve Bank of Kansas City

Tenth District manufacturing activity continued to expand at a rapid pace, and optimism remained high for future activity.

“Future factory activity expectations moderated slightly but remained solid overall. The future composite index slipped from 31 to 26, and the future production, shipments, new orders and order backlog indexes also fell somewhat. The future capital expenditures index eased from 37 to 33, while the future employment index was unchanged. The future raw materials inventory index decreased from 19 to 7, and the future finished goods inventory index also edged lower.” – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, The Federal Reserve Bank of Kansas City

U.S. Economic Indicators

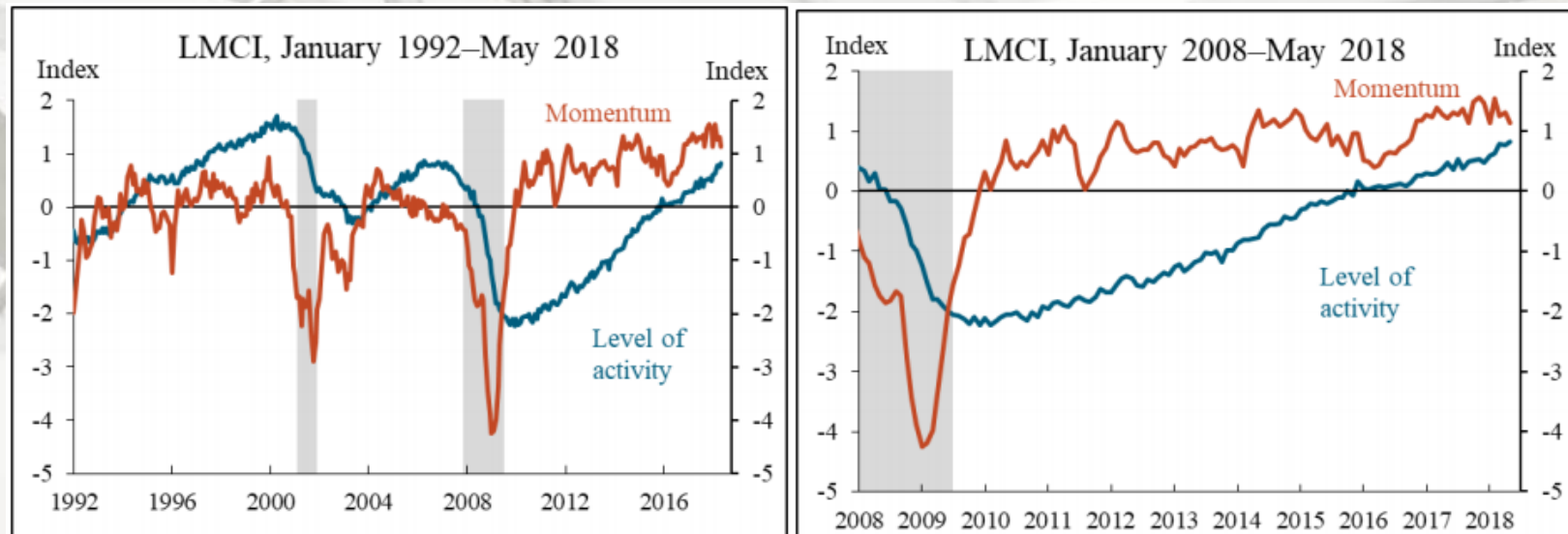
The Federal Reserve Bank of Kansas City Labor Market Conditions Indicators (LMCI)

LMCI suggest the level of activity increased modestly and momentum remained high in May

“The Kansas City Fed Labor Market Conditions Indicators (LMCI) suggest the level of activity increased modestly and momentum remained high in May. The level of activity indicator increased modestly in May from 0.76 to 0.83, while the momentum indicator decelerated moderately from 1.32 to 1.14.

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 May 2018. The activity indicator increased 0.30 over the last six months. The largest contribution came from an increase in job leavers. Eighteen variables made a positive contribution, one variable made no contribution, and five variables made a negative contribution. The momentum indicator was 1.14 in May, where the largest contributor to momentum was initial claims. Sixteen variables made a positive contribution, and eight 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 May 2018
Job leavers	Initial claims
Average hourly earnings	Labor force participation rate
Unemployed 27 or more weeks	Manufacturing employment index (ISM)
Percent of firms with positions not able to fill right now (NFIB)	Expected job availability (U of Michigan)
Job availability index (Conference Board)	Expected job availability (Conference Board)

Note: Contributions are ordered from largest to smallest.

U.S. Economic Indicators

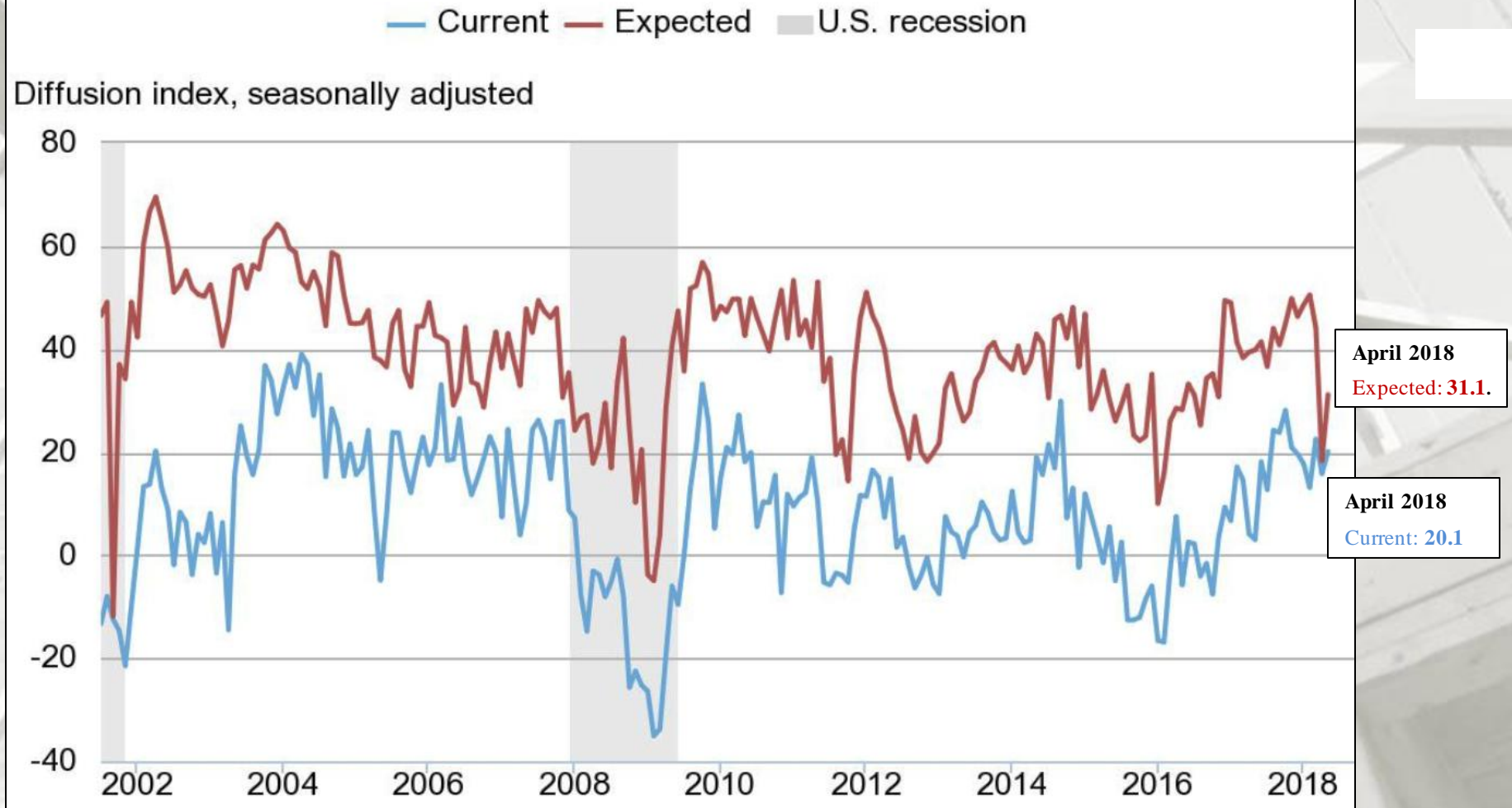
Empire State Manufacturing Survey Business Activity Grows At A Solid Clip

“Business activity grew strongly in New York State, according to firms responding to the *May 2018 Empire State Manufacturing Survey*. The headline general business conditions index climbed four points to 20.1, indicating a faster pace of growth than in April. The new orders index rose seven points to 16.0, and the shipments index was little changed at 19.1, suggesting ongoing growth in orders and shipments. Delivery times continued to lengthen, and inventories moved higher. Labor market indicators pointed to a modest increase in employment and longer workweeks. The prices paid index rose to its highest level in several years, indicating significant input price increases, and the prices received index remained elevated. Looking ahead, firms were somewhat more optimistic about the six-month outlook than they were in April, though less so than earlier this year.

Manufacturing firms in New York State reported that business activity expanded at a faster pace than in April. The general business conditions index rose four points to 20.1. Forty percent of respondents reported that conditions had improved over the month, while 20 percent reported that conditions had worsened. The new orders index rose seven points to 16.0 and the shipments index was little changed at 19.1, indicating that orders and shipments again grew strongly. Unfilled orders increased, and inventories moved higher. The delivery time index was close to last month’s level at 13.7, a sign that delivery times continued to lengthen.” – 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 Price Increases Pick Up

“The index for number of employees edged up three points to 8.7, while the average workweek index fell to 11.1, readings pointing to a modest increase in employment and hours worked. Price increases remained elevated. The prices paid index moved up seven points to 54.0, its highest level since 2011, indicating a pickup in input price increases. The prices received index rose two points to 23.0, suggesting ongoing moderate selling price increases.

Outlook Improves, But Optimism Remains Subdued

Optimism about the six-month outlook increased, but fell short of levels enjoyed in recent months. The index for future business conditions, which plunged to 18.3 in April after remaining above 40 for most of the past year and a half, regained thirteen points to reach 31.1 in May. Employment was expected to increase in the months ahead, and the indexes for future prices remained elevated. The capital expenditures index moved up four points to 29.5, and the technology spending index rose to 23.0.” – Richard Deitz and Jason Bram, The Federal Reserve Bank of New York

U.S. Economic Indicators

Business Leaders Survey (Services)

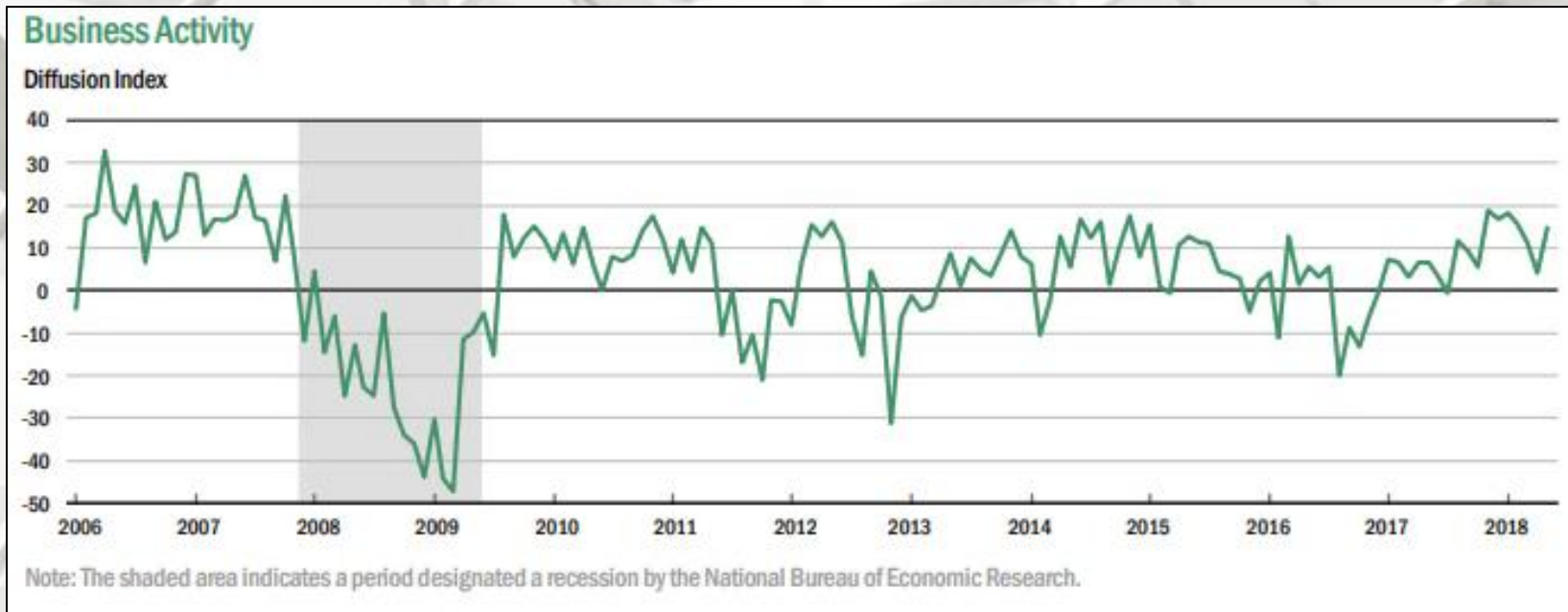
Growth Picks Up

“Activity in the region’s service sector grew at a solid clip, according to firms responding to the Federal Reserve Bank of New York’s May 2018 *Business Leaders Survey*. The survey’s headline business activity index climbed eleven points to 14.9, pointing to a stronger pace of growth than in April. The business climate index increased eight points to 11.9, a sign that firms, on balance, regarded the business climate as better than normal. The employment index edged up two points to 12.4, and the wages index rose five points to 44.1, indicating faster growth in employment and wages this month. The prices paid index was little changed at 52.1, suggesting ongoing widespread input price increases, and the selling price index fell two points to 22.8. After sliding sharply last month, indexes assessing the six-month outlook suggested that firms were more optimistic about future conditions than they were in April.

Wages and Prices Increase at a Faster Pace

The employment index edged up two points to 12.4, indicating that employment levels increased. The wages index climbed five points to 44.1, reflecting stronger wage growth than last month. The prices paid index was little changed at 52.1, indicating that input price increases remained elevated. The prices received index moved down two points to 22.8, a level pointing to ongoing moderate increases in selling prices. The capital spending index came in at 11.5, suggesting that capital spending continued to increase moderately.” – Jason Bram and Richard Deitz, The Federal Reserve Bank of New York

U.S. Economic Indicators



Business Leaders Survey (Services) Optimism Improves Somewhat

“After slipping last month, optimism about the six-month outlook was somewhat higher in May. The index for future business activity rose nine points to 37.5. The index for future business climate, at 19.4, was unchanged. Indexes for future wages and prices moved higher, and the index for planned capital spending edged down to 27.5.” – 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:Q3 | 2018:Q2 | 2018:Q1 | 2017:Q4

Last Release 11:15am EST Jun 08, 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.

June 8, 2018: Highlights

- “The New York Fed Staff Nowcast stands at 3.1% for 2018:Q2 and 2.9% for 2018:Q3.
- News from this week's data releases decreased the nowcast for 2018:Q2 by 0.2 percentage point and decreased the nowcast for 2018:Q3 by 0.1 percentage point.
- Negative surprises from lower than expected exports and imports data accounted for the decrease.”
– The Federal Reserve Bank of New York

U.S. Economic Indicators

April 2018 Manufacturing Business Outlook Survey

Current Indicators Suggest a Pickup in Growth

“Results from the May *Manufacturing Business Outlook Survey* suggest a pickup in growth of the region’s manufacturing sector. The survey’s indexes for general activity, new orders, shipments, and employment increased from their readings in April. A notable share of firms also reported higher prices for their own manufactured goods this month. The survey’s future indexes, measuring expectations for the next six months, reflected continued optimism.

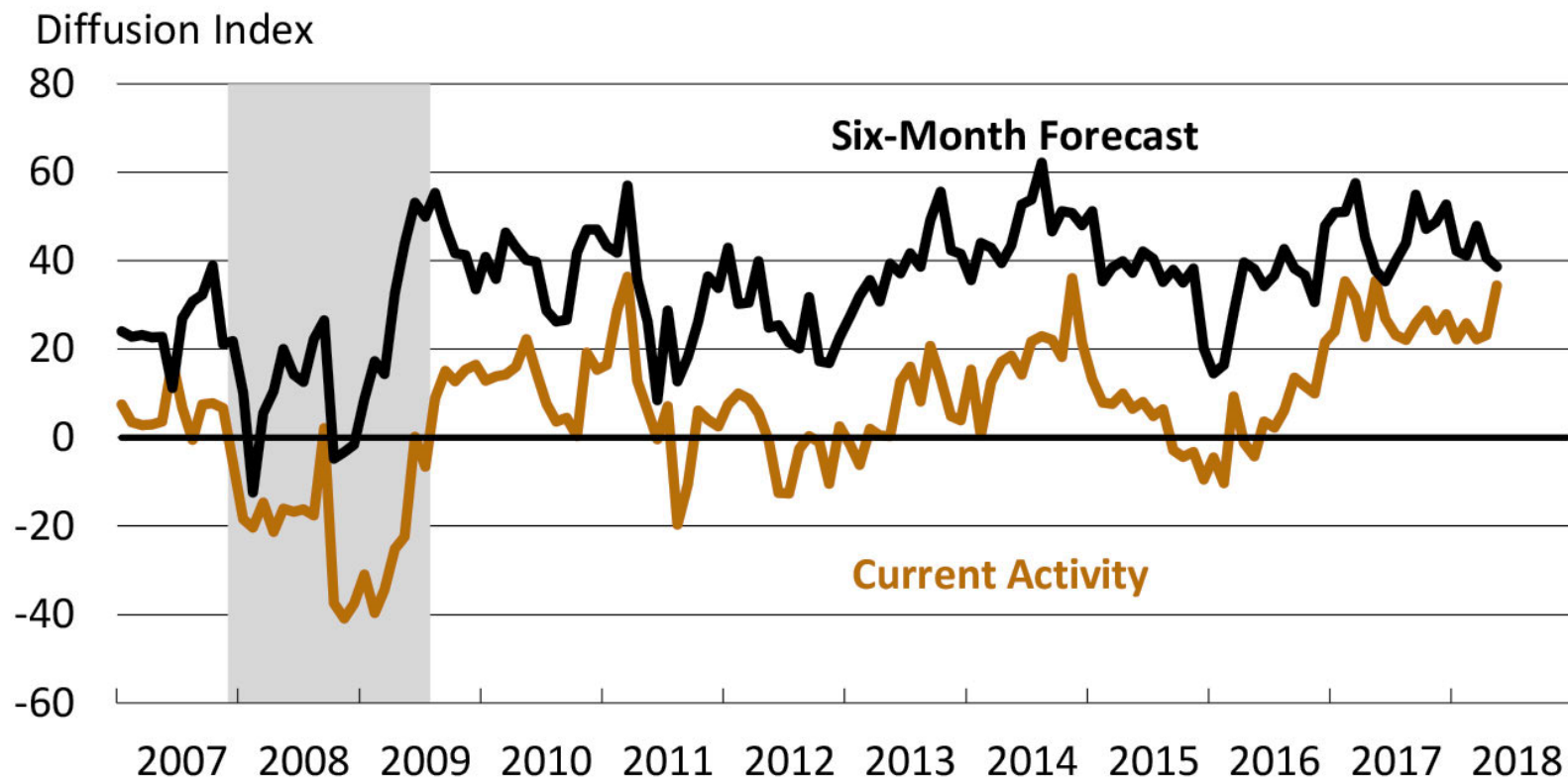
The diffusion index for current general activity increased 11 points, from 23.2 in April to 34.4 this month (see Chart 1). Over 43 percent of the manufacturers reported increases in overall activity this month, while 9 percent reported decreases. Both current new orders and shipments indexes improved this month, increasing 22 points and 2 points, respectively. Both the delivery times and unfilled orders indexes remained positive, suggesting longer delivery times and increases in unfilled orders. Inventories were, on balance, slightly higher this month: The percentage of firms reporting an increase in inventories (25 percent) was higher than the percentage reporting a decrease (17 percent).

The firms continued to report overall increases in employment. Nearly 37 percent of the responding firms reported increases in employment, while 6 percent reported decreases this month. The current employment index edged 3 points higher to 30.2, its highest reading in seven months. The firms also reported a longer average workweek this month: The current average workweek index increased 13 points.” – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

U.S. Economic Indicators

Chart 1. Current and Future General Activity Indexes

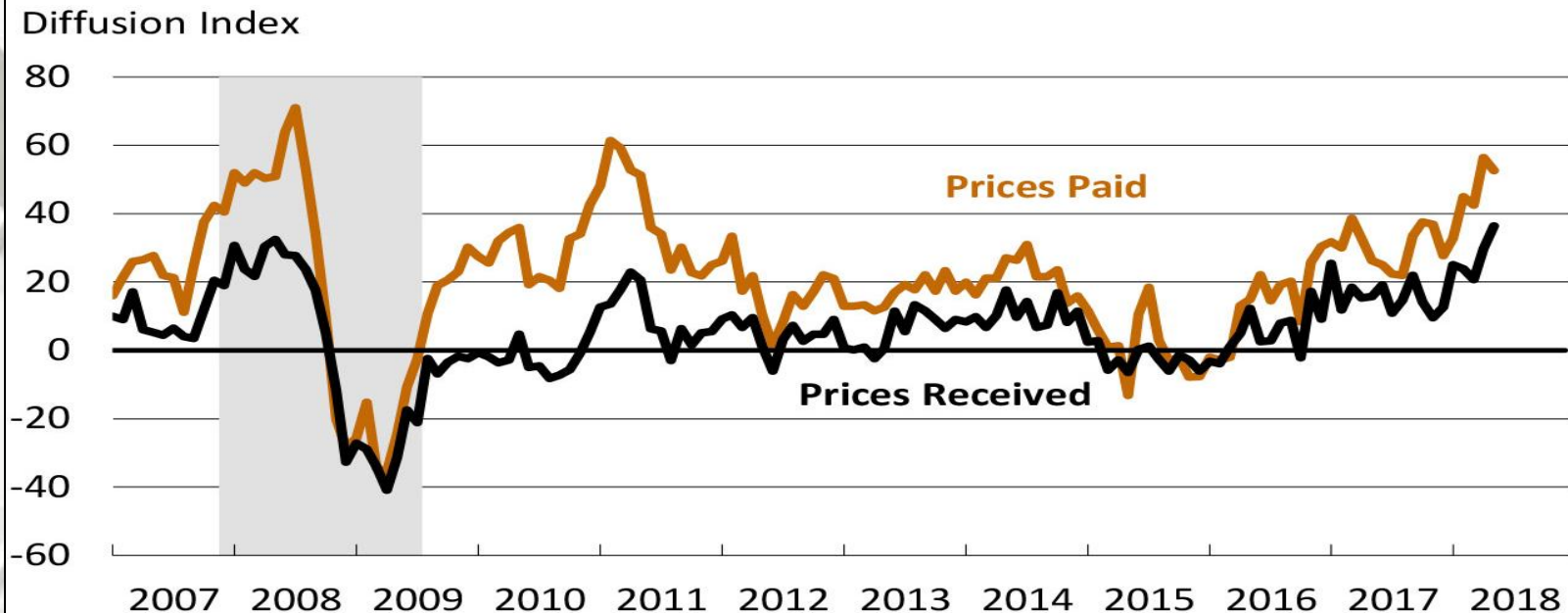
January 2007 to May 2018



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.

U.S. Economic Indicators

Chart 2. Current Prices Paid and Prices Received Indexes
January 2007 to May 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.

April 2018 Manufacturing Business Outlook Survey

Price Indexes Suggest Increasing Prices

“Price increases for purchased inputs were reported by 55 percent of the manufacturers this month, down slightly from 59 percent in April. The prices paid diffusion index fell 4 points but remains at an elevated level (see Chart 2). The current prices received index, reflecting the manufacturers’ own prices, increased 7 points to a reading of 36.4, its second consecutive month of increase and highest reading since February 1989.” – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

U.S. Economic Indicators

May 2018 Manufacturing Business Outlook Survey

Firms Remain Optimistic

“The diffusion index for future general activity decreased from 40.7 in April to 38.7 this month (see Chart 1). Over 48 percent of the firms expect increases in activity over the next six months, while 10 percent expect declines. The future new orders index edged 3 points higher, while the future shipments index declined 1 point. Nearly 64 percent of the firms expect price increases for purchased inputs over the next six months, and 36 percent expect higher prices for their own manufactured goods. Over 49 percent of the firms expect to add workers over the next six months, up from 42 percent in April. The future employment index increased 8 points to a reading of 42.8, its highest reading since August 1983.

Firms Expect Own Prices to Exceed Inflation Rate

In this month’s special questions, the firms were asked to forecast the changes in the prices of their own products and for U.S. consumers over the next four quarters. Regarding their own prices, the firms’ median forecast was for an increase of 3.0 percent, the same as when the same question was last asked in February. When asked about the rate of inflation for U.S. consumers over the next year, the firms’ median forecast was 2.5 percent, also the same as the previous forecast. The firms expect their employee compensation costs (wages plus benefits on a per employee basis) to rise 3.0 percent over the next four quarters, the same as the previous forecast. The firms’ forecast for the long-run (10-year average) inflation rate fell from 3.0 percent to 2.0 percent.

Summary

Responses to the May *Manufacturing Business Outlook Survey* indicate a pickup in growth for the region’s manufacturing sector. The indexes for general activity, new orders, shipments, and employment all improved from their readings last month. The indexes for prices paid and received continued to suggest price pressures. Looking ahead six months, the firms continued to be optimistic about the outlook for manufacturing activity.”—Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

U.S. Economic Indicators

Second Quarter 2018 Survey of Professional Forecasters Slightly Brighter Outlook for Growth and Labor Markets in 2018 and 2019

“The U.S. economy looks slightly stronger now than it did three months ago, according to 36 forecasters surveyed by the Federal Reserve Bank of Philadelphia. The forecasters predict real GDP will grow at an annual rate of 3.0 percent this quarter and next quarter, up slightly from the estimates of three months ago. On an annual-average over annual-average basis, the forecasters predict real GDP growing 2.8 percent in 2018, 2.7 percent in 2019, 1.9 percent in 2020, and 2.0 percent in 2021.

The forecasters see a marginally brighter outlook for the unemployment rate. The forecasters predict the unemployment rate will average 3.9 percent in 2018, 3.7 percent in 2019, 3.9 percent in 2020, and 4.0 percent in 2021. The projections for 2018 and 2019 are slightly below those of the last survey, indicating a better outlook for unemployment.

The panelists also predict an improvement in employment for 2018 and 2019. The projections for the annual-average level of nonfarm payroll employment suggest job gains at a monthly rate of 185,900 in 2018, up from the previous estimate of 185,100, and 160,800 in 2019, up from 150,300 estimated three months ago. (These annual-average estimates are computed as the year-to-year change in the annual-average level of nonfarm payroll employment, converted to a monthly rate.)”
– Research Department, The Federal Reserve Bank of Philadelphia

U.S. Economic Indicators

Median Forecasts for Selected Variables in the Current and Previous Surveys

	Real GDP (%)		Unemployment Rate (%)		Payrolls (000s/month)	
	Previous	New	Previous	New	Previous	New
Quarterly data:						
2018:Q2	2.9	3.0	4.0	3.9	171.1	181.0
2018:Q3	2.8	3.0	3.9	3.9	168.7	175.0
2018:Q4	2.5	2.8	3.8	3.8	151.8	160.4
2019:Q1	2.4	2.4	3.8	3.8	172.9	160.9
2019:Q2	N.A.	2.6	N.A.	3.7	N.A.	151.7
Annual data (projections are based on annual-average levels):						
2018	2.8	2.8	4.0	3.9	175.1	185.9
2019	2.5	2.7	3.8	3.7	150.3	160.8
2020	2.0	1.9	3.9	3.9	N.A.	N.A.
2021	1.7	2.0	4.0	4.0	N.A.	N.A.

U.S. Economic Indicators

Second Quarter 2018 Survey of Professional Forecasters

Higher Inflation in 2018

“The forecasters expect current-year headline CPI inflation to average 2.5 percent, up from 2.1 percent in the last survey. Headline PCE inflation for 2018 will be 2.1 percent, up 0.2 percentage point from the previous estimate.

However, the forecasters’ projections for inflation beyond 2018 are mostly unchanged compared with the previous survey. Headline CPI inflation is expected to average 2.2 percent in 2019 and 2.3 percent in 2020, unchanged from the last survey. The forecasters have revised slightly their projections for headline PCE inflation in 2019 and 2020 to 2.1 percent, from 2.0 percent previously.

Over the next 10 years, 2018 to 2027, the forecasters expect headline CPI inflation to average 2.30 percent at an annual rate, up marginally from the previous estimate of 2.25 percent. The corresponding estimate for 10-year annual-average PCE inflation is 2.00 percent, unchanged from the estimate of three months ago.” – Research Department, The Federal Reserve Bank of Philadelphia

Low Risk of a Negative Quarter

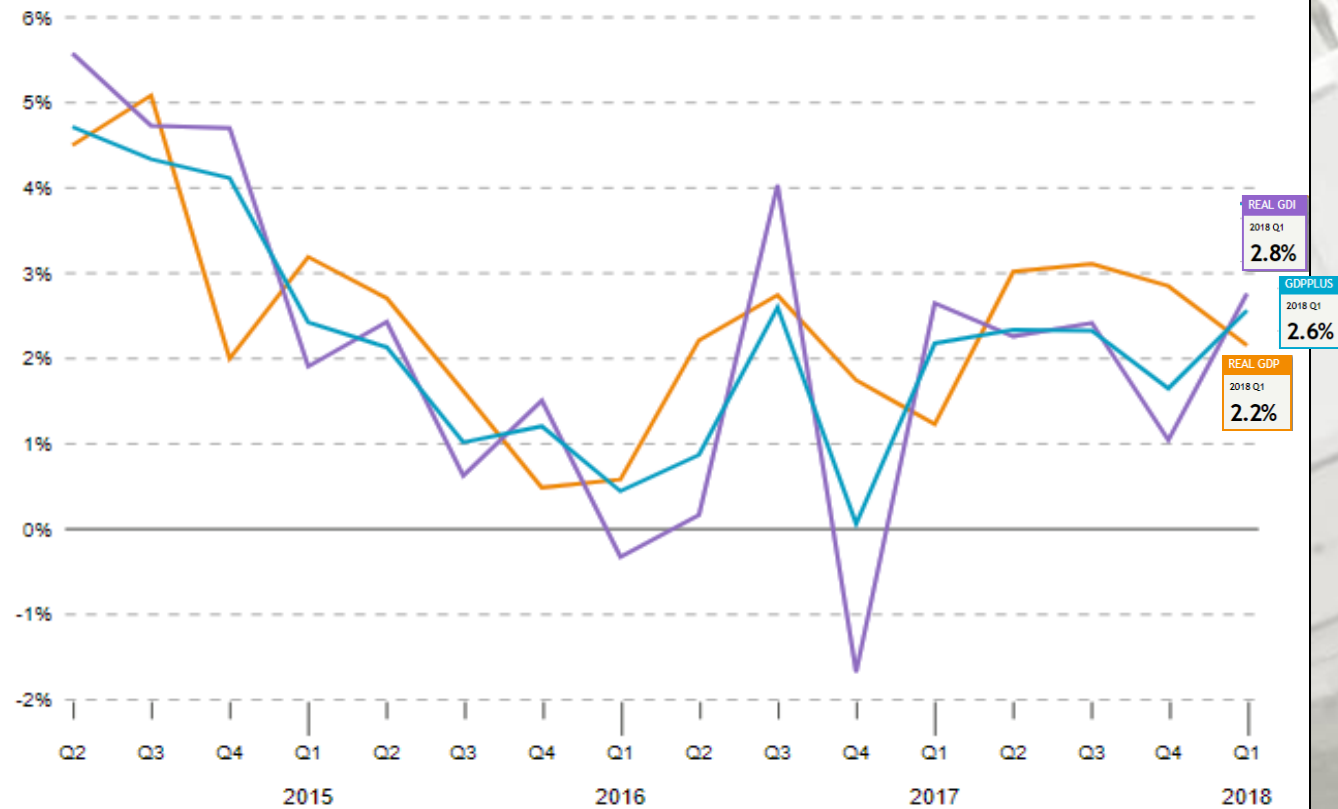
“The forecasters have revised downward the chance of a contraction in real GDP in any of the next four quarters. For the current quarter, the forecasters predict a 5.3 percent chance of negative growth, down from 9.1 percent in the survey of three months ago. The panelists have also made downward revisions to their probability estimates for the next three quarters.” – Research Department, The Federal Reserve Bank of Philadelphia

Philadelphia Fed: GDPplus

GDPplus: An Alternative Measure of Real U.S. Output Growth Last Updated: May 30, 2018

■ GDPplus ⓘ ■ Real GDP ⓘ ■ Real GDI ⓘ

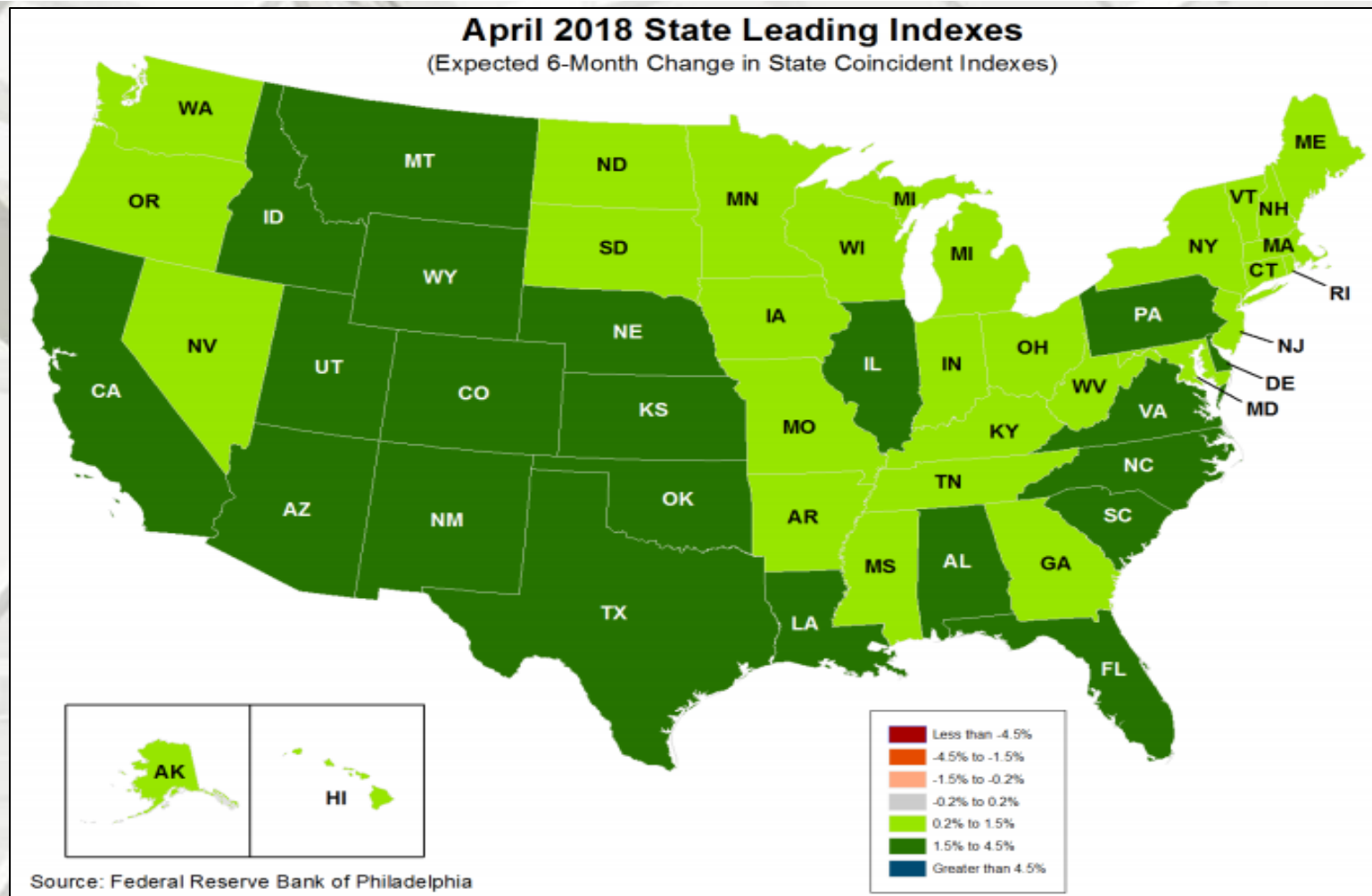
from 2014 ▼ Q2 ▼ to 2018 ▼ Q1 ▼



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

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

Philadelphia Fed



“The Federal Reserve Bank of Philadelphia has released the leading indexes for the 50 states for April 2018. The indexes are a six-month forecast of the state coincident indexes (also released by the Bank). All 50 state coincident indexes are projected to increase over the next six months. For comparison purposes, the Philadelphia Fed has also developed a similar leading index for its U.S. coincident index, which is projected to increase 1.6 percent over the next six months.” – Daniel Mazone, Research Department, The Federal Reserve Bank of Philadelphia

U.S. Economic Indicators

The Federal Reserve Bank of Richmond

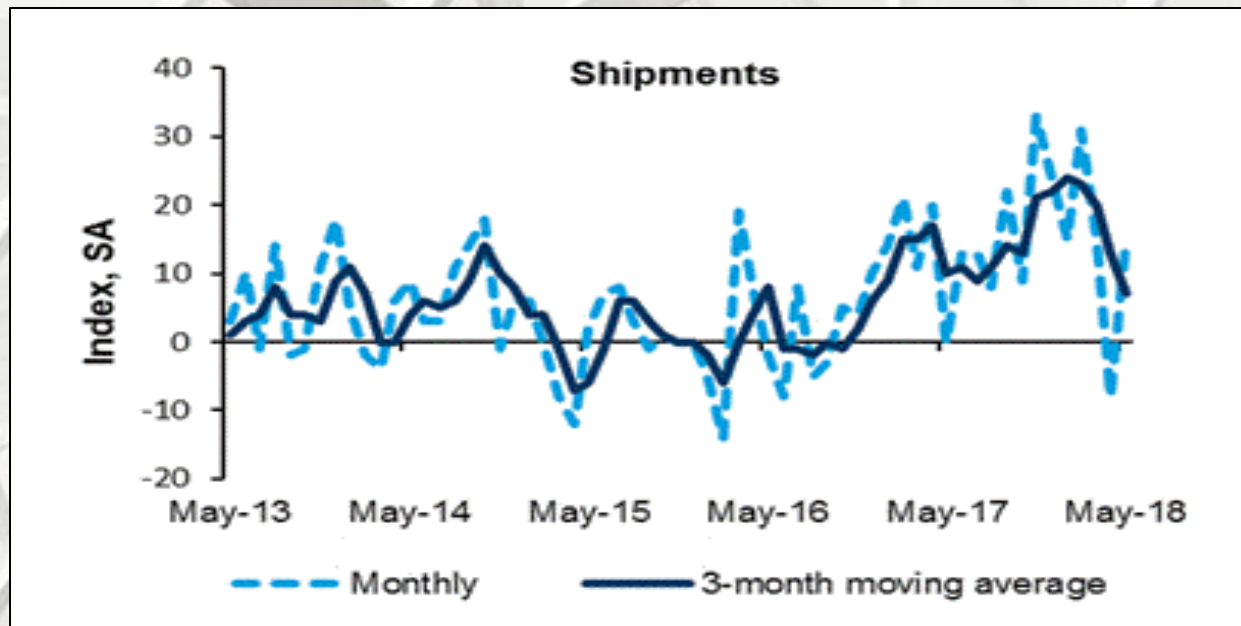
Fifth District Manufacturing Firms Reported Robust Growth in May

“Fifth District manufacturing firms saw robust growth in May, according to survey results from the Federal Reserve Bank of Richmond. The composite index swung from -3 in April to 16 in May, boosted by growth in the indexes for shipments, new orders, and employment. Local business conditions also moved back into expansionary territory, after weakening in April, and firms remained optimistic that growth would continue in coming months.

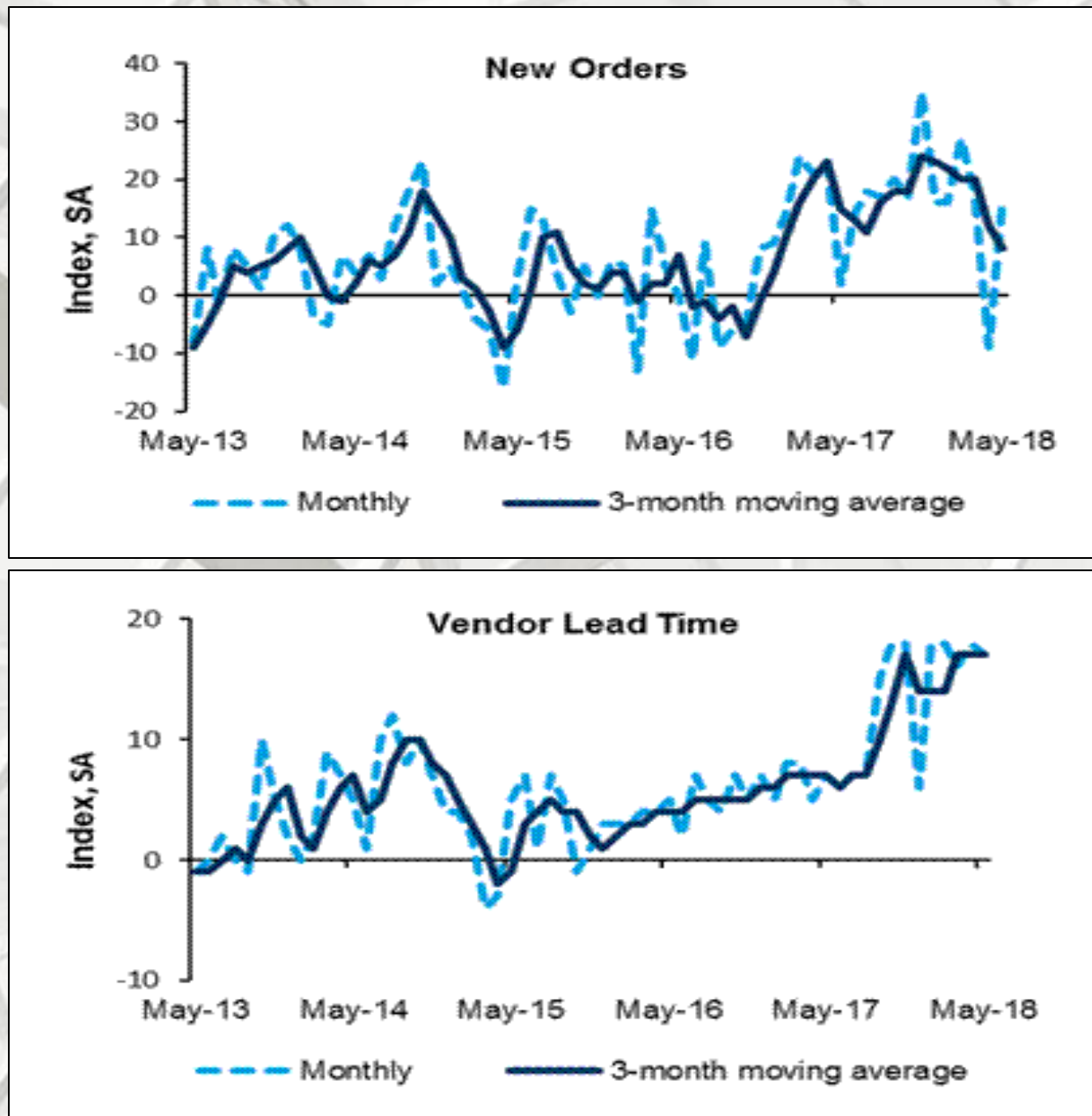
Survey results indicate that both employment and wages rose among manufacturing firms in May, however, firms still struggled to find the skills they needed. They expect this struggle to continue in the next six months and also expect employment and wages to increase further.

Many manufacturing firms continued to increase spending in May. The growth rate of prices paid continued to rise, on average, but firms seemed able to pass some of change through to customers, as prices received also grew at a faster rate.” – 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

- “Gross domestic product in the first quarter of 2018 increased 2.3% at an annual rate according to the latest estimate from the Bureau of Economic Analysis. This follows the strong pace of 2.9% in the fourth quarter of 2017. While consumer spending was softer than expected, we view this change as transitory and expect a rebound in the second quarter of this year. We estimate 2.8% GDP growth in 2018, a full percentage point above our estimate of the long-run sustainable growth rate.
- This faster pace of growth is supporting a robust labor market. The economy added 164,000 jobs in April, and the unemployment rate fell to 3.9%. We expect unemployment to decline further this year and through 2019, and remain below our estimate of the long-run rate of 4.7% for some time.
- Although interest rates have increased as the Federal Open Market Committee (FOMC) gradually raises its target rate, financial conditions remain supportive of continued growth. These increases also reflect inflation moving close to the FOMC’s 2% target. We expect core personal consumption expenditure price inflation to end 2018 at 2%.
- While many indicators point to a strong and growing economy, labor force participation has remained level for the past few months and is likely to resume a downward path, driven by demographic and economic factors unrelated to the business cycle.” – Nicolas Petrosky-Nadeau, Senior Research Advisor , The Federal Reserve Bank of San Francisco

U.S. Economic Indicators

The Federal Reserve Bank of San Francisco

FRBSF FedViews

- “Looking north to Canada provides some insights into the reasons for declining participation in the United States and how to raise future participation. Labor force participation rates were around 76% in both countries until 1996. Then Canada began to pull ahead principally due to strong gains by prime-age (25 to 54) Canadian women relative to their U.S. counterparts. By 2017, Canada reached 83%, a full 8 percentage points above the U.S. participation rate.
- Canada has made greater strides increasing the rate of post-secondary education relative to the United States since the 1990s. The bulk of the difference in Canada’s labor participation trends is explained by the changes in the participation rates within education groups. Over the past two decades, participation rates for Canadian women with a college degree have increased, and rates for Canadian women with a high school diploma have stayed the same. American women of both levels of educational attainment instead have reduced their rates of participation in the labor force over the same period.
- One way to understand the importance of this difference is to consider a scenario in which American women in these two educational attainment levels were participating in the labor force at the same rate as Canadian women. If this were the case, most of the gap observed between the two countries would disappear.
- There is certainly a mix of factors at play in explaining these trends. However, one likely key to the story is the mix of policies in Canada aimed at providing employment protection for parents, and expansions of parental leave with income support. Indeed, a large gap has developed between the participation rates for women with children in the United States and Canada over this same period, which mirrors the overall gap between prime-age women’s participation rates in both countries.” – Nicolas Petrosky-Nadeau, Senior Research Advisor , The Federal Reserve Bank of San Francisco

U.S. Economic Indicators

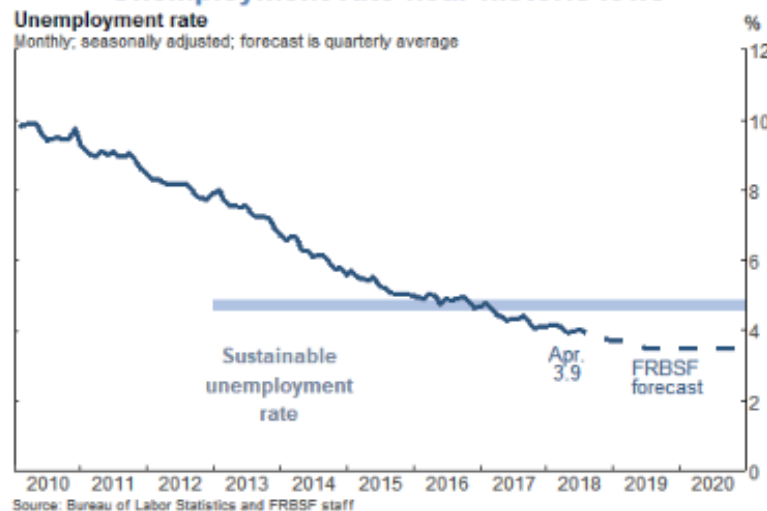
Growth expected to remain above trend



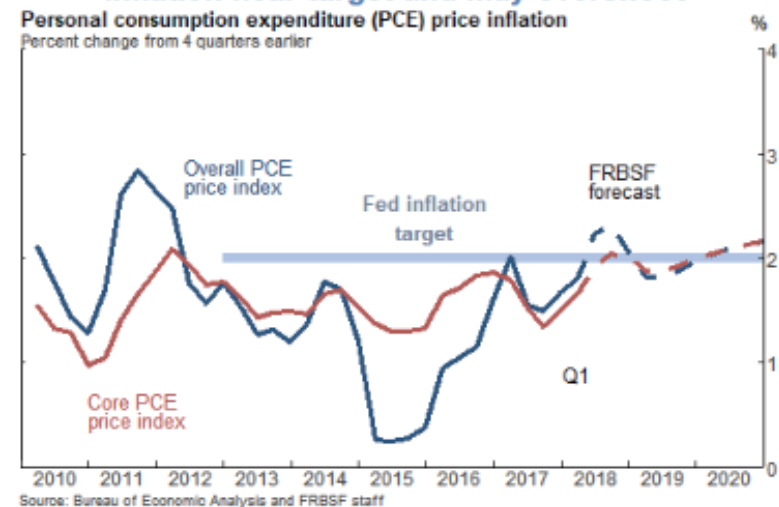
Healthy rate of job gains



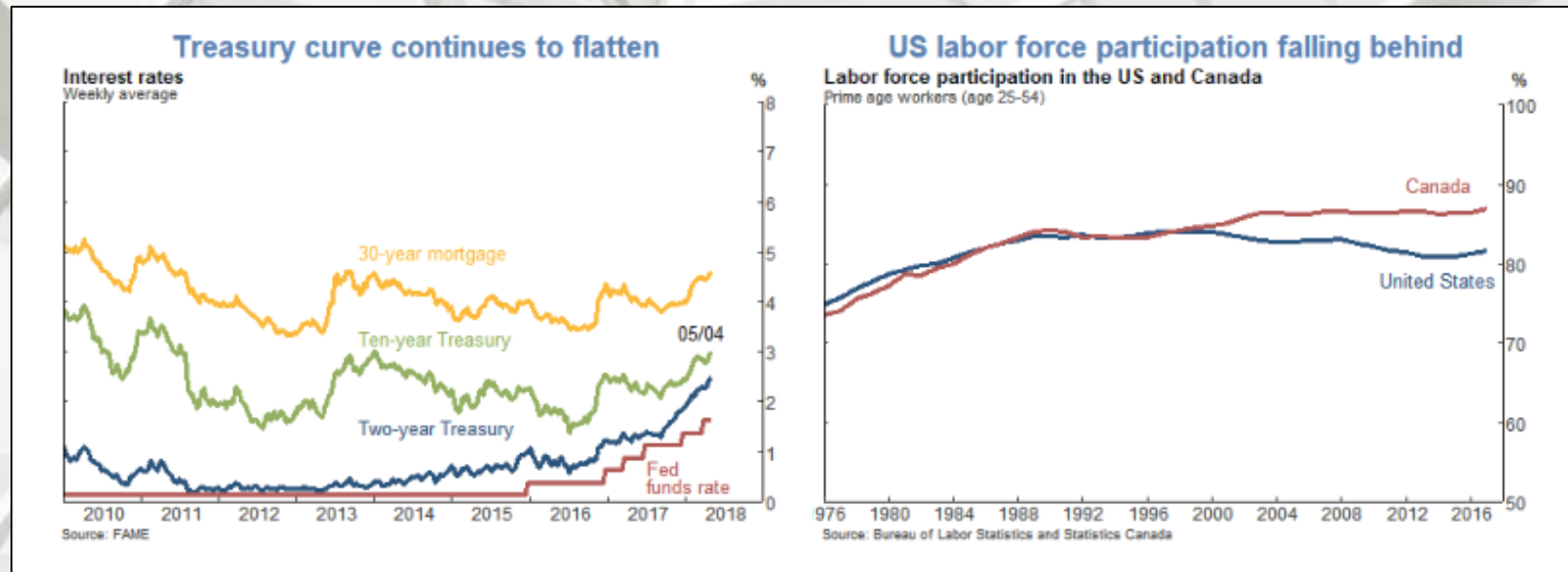
Unemployment rate near historic lows



Inflation near target and may overshoot



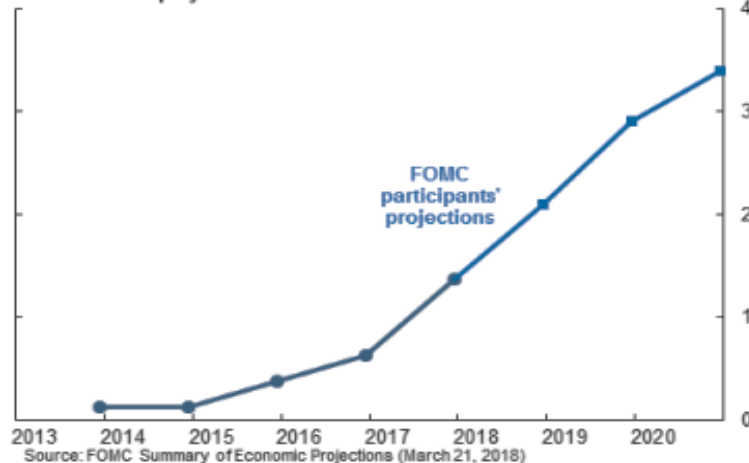
U.S. Economic Indicators



U.S. Economic Indicators

Gradual normalization of policy

Median FOMC projection for the federal funds rate



Wage growth only slowly ratcheting up

Wage growth and unemployment rate
12-month moving avg of year-over-year wage growth



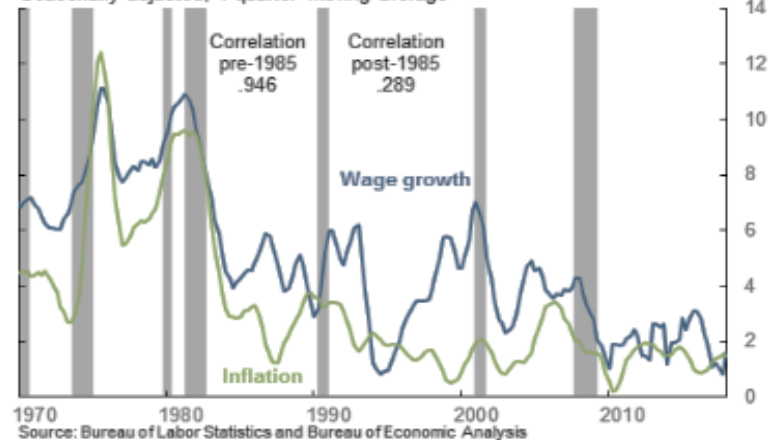
Few signs wage growth is running away

Wage growth dispersion
12m moving avg of median percent change in hourly wage in Feb 2018

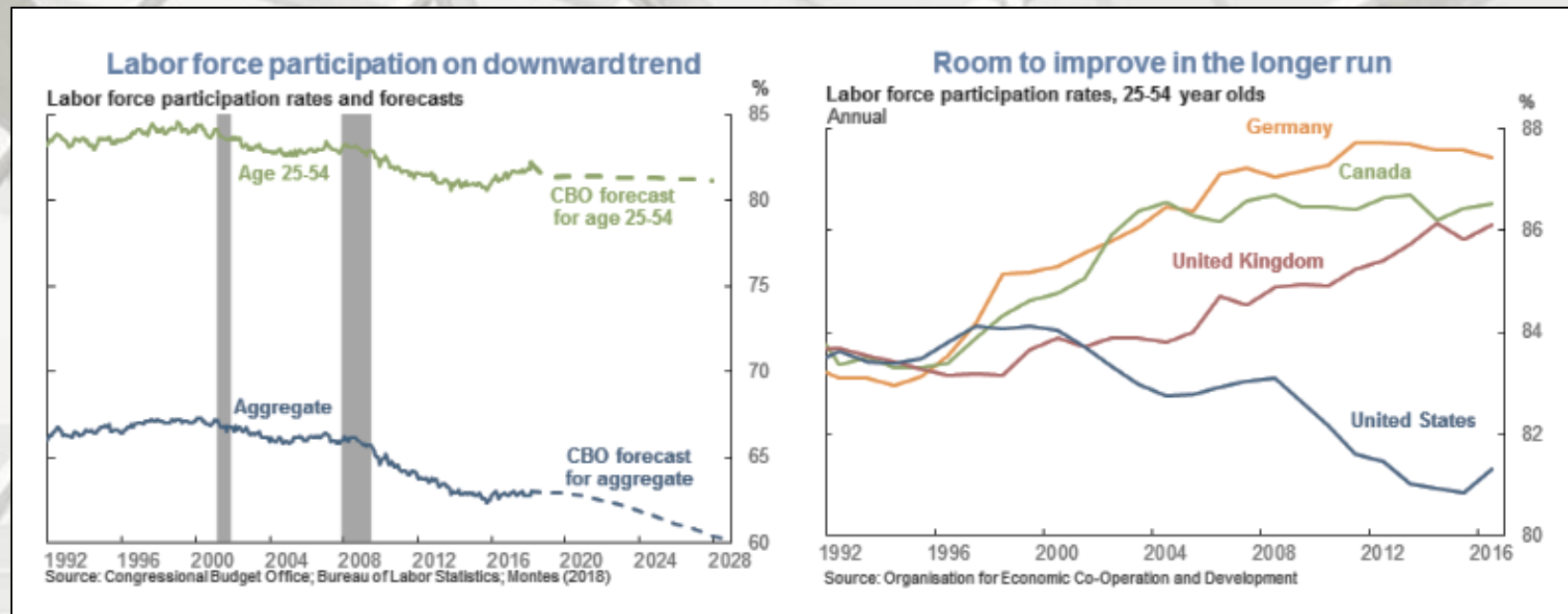


Wage growth and inflation link muted

Wage growth and inflation
Seasonally adjusted, 4-quarter moving average



U.S. Economic Indicators



Global Economic Indicators

The Federal Reserve Bank of Dallas

Mexico Economy Expands at a Strong Pace in First Quarter

“Mexico’s gross domestic product (GDP) grew at an annualized 4.5 percent pace in first quarter 2018 – its highest quarterly growth since mid-2016. More recent data on exports, employment, industrial production and retail sales also improved. Inflation fell for the third consecutive month in March, and the peso appreciated against the dollar. The consensus growth forecast for 2018 is 2.2 percent.

Output Growth Solid

Mexico’s solid GDP growth in the first quarter was mostly driven by increased activity in the service sector (Chart 1). Service-related activities (wholesale and retail trade, transportation and business services) rose 4.8 percent, while goods-producing industries (manufacturing, construction, utilities and mining) expanded 2.8 percent. Agricultural output grew 3.2 percent.

Export Growth Returns in March

Total exports rose 2.7 percent in March after falling 2.6 percent in February. Manufactured goods exports grew 2.8 percent, and oil exports slid 2 percent. Three-month moving averages of total and manufacturing exports show consistent growth since late 2017, although oil exports ticked down in early 2018. Over the past 12 months, total exports have increased 9.9 percent, with manufacturing exports up 7.9 percent and oil exports up 31.3 percent. The rise in oil exports over the past year stems largely from higher oil prices rather than an increased volume of exports.

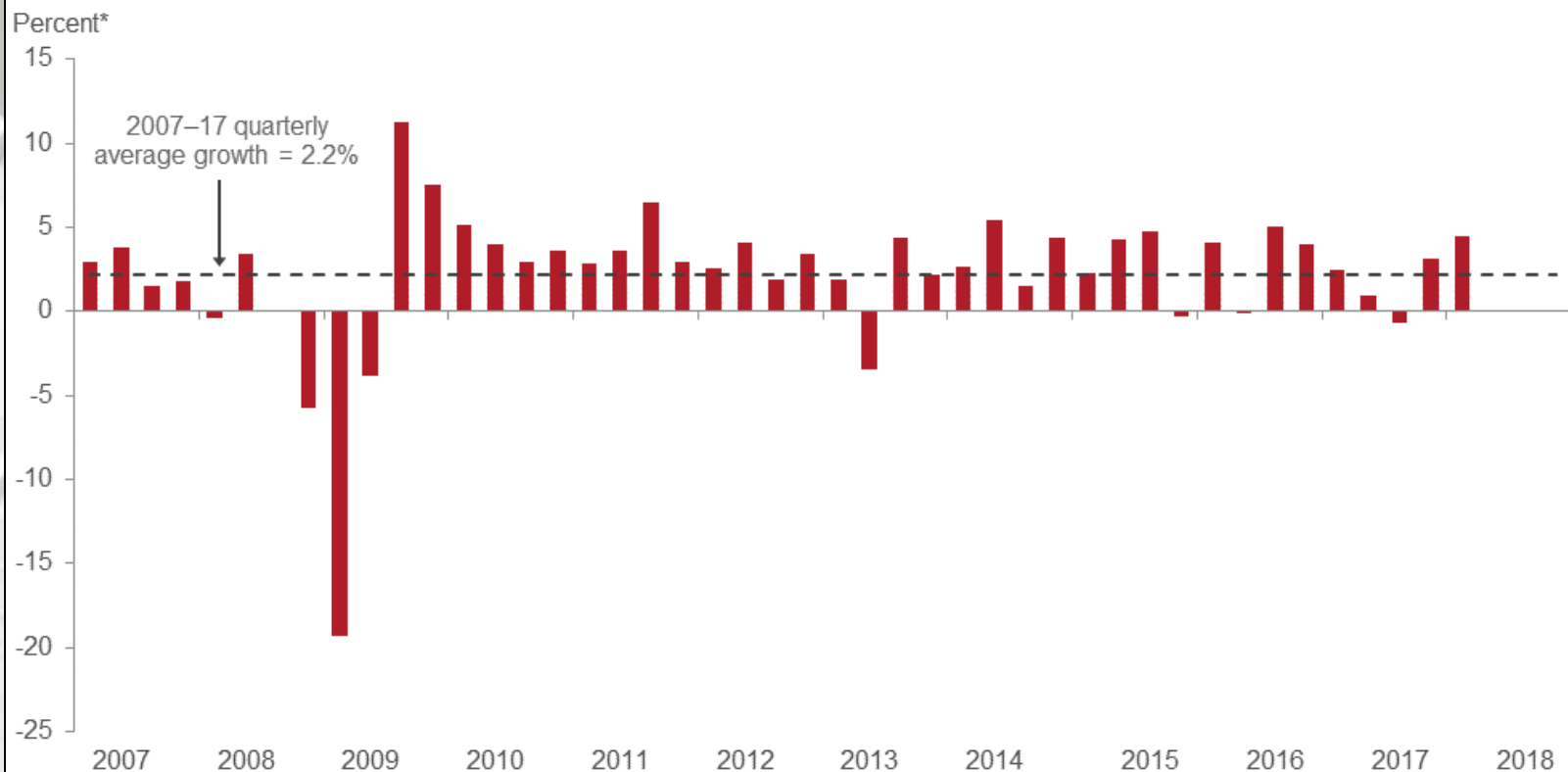
Industrial Production Up Overall, but Manufacturing Stays Flat

Mexico’s industrial production (IP), which includes manufacturing, construction, oil and gas extraction, and utilities, ticked up 0.5 percent in February after coming in flat in January. Manufacturing IP was flat in both January and February. As a result, the moving average went up for total IP but moved sideways for manufacturing. U.S. IP grew 0.4 percent in both February and March.” – Jesus Cañas, Senior Business Economist and Alexander Abraham, Economic Programmer; Research Department, The Federal Reserve Bank of Dallas

Global Economic Indicators

Chart 1

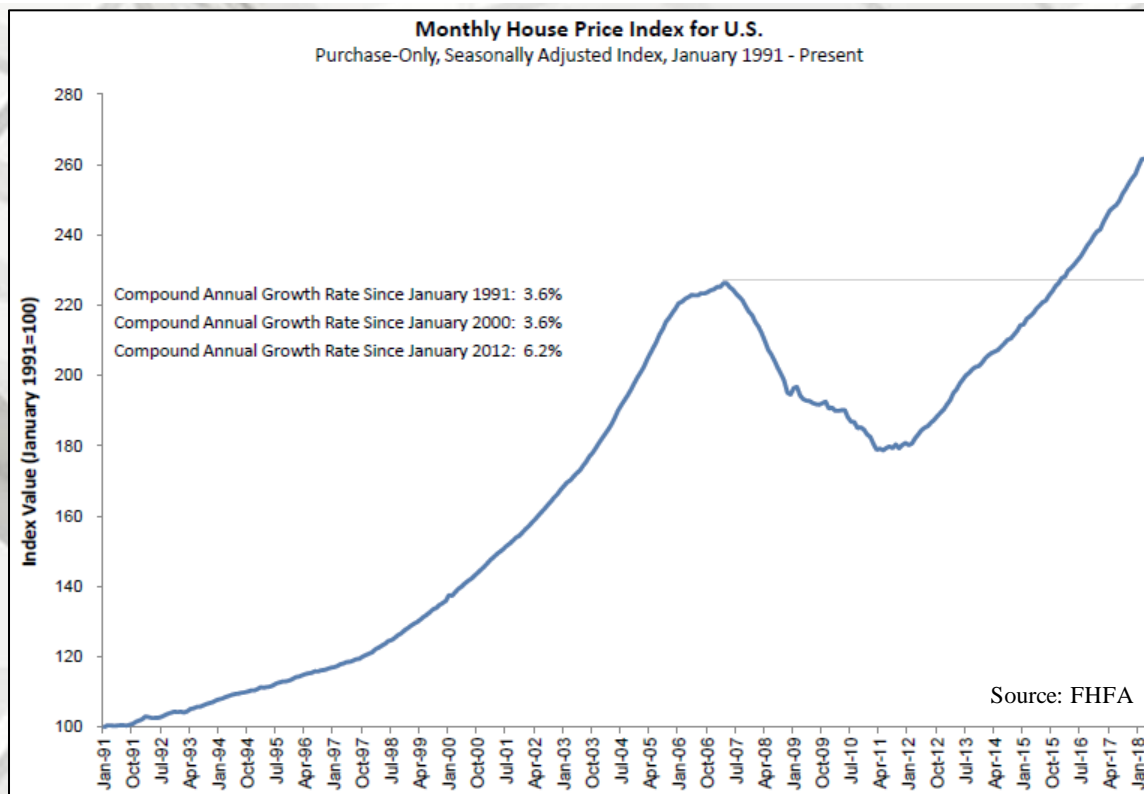
First-Quarter Gross Domestic Product Jumps



*Quarter/quarter, real pesos; seasonally adjusted, annualized rate.

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

U.S. Economic Indicators



FHFA House Price Index

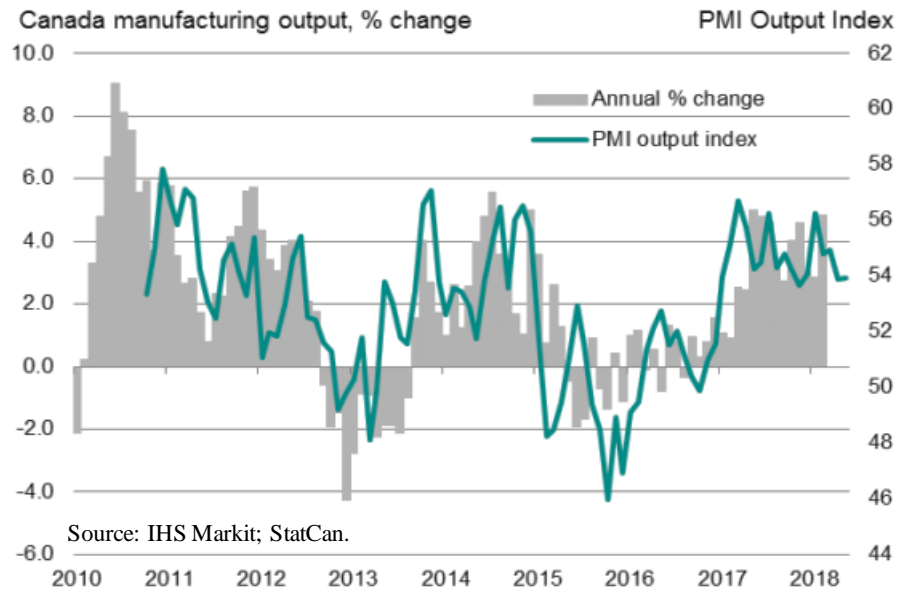
U.S. House Price Index Report - 1Q 2018 / March

“U.S. house prices rose **1.7 percent** in the first quarter of 2018 according to the Federal Housing Finance Agency (FHFA) House Price Index (HPI). House prices rose **6.9 percent** from the first quarter of 2017 to the first quarter of 2018. FHFA's seasonally adjusted monthly index for March was up **0.1 percent** from February.” – Stefanie Johnson and Corinne Russell, FHFA

“Home prices continue to rise across the U.S. but there are signs of tapering. Since housing markets began to rebound in 2012, house price appreciation has been positive because demand has outpaced supply. In the last month, however, some regions reflect a slowing or even flattening of house price growth.” – Dr. William Doerner, Senior Economist, FHFA

Private Indicators: Global

IHS Markit Canada Manufacturing Output Index



Markit Canada Manufacturing PMI™

“At 56.2, up from 55.5 in April, the headline seasonally adjusted **IHS Markit Canada Manufacturing Purchasing Managers’ Index® (PMI™)** posted to the strongest overall improvement in business conditions since April 2011. A faster rate of new order growth was a key factor behind the rise in the headline PMI during May, alongside a steeper upturn in pre-production inventories. The headline index has posted above the 50.0 ‘no-change’ value in each month since March 2016.

Strongest improvement in manufacturing business conditions since April 2011

“The manufacturing sector experienced a strong improvement in business conditions during May, underpinned by a faster rise in new business volumes. Export sales were a key driver of growth, with the latest increase in new work from abroad the steepest seen since March 2011.

Canadian manufacturers achieved their strongest overall performance since April 2011, with the headline PMI reading boosted by faster new order growth and the greatest increase in pre-production inventories for six years. The combination of rising workloads and increased stock building bodes well for near-term output growth.

May data highlighted stronger cost pressures across the manufacturing sector, led by rising prices for metals and energy-intensive goods. A combination of higher input costs and robust demand conditions meant that manufacturers increased their output charges to the largest extent for seven years.” – Tim Moore, Associate Director at Survey Compilers, IHS Markit

Private Indicators: Global



Caixin China General Manufacturing PMI™

Manufacturing sector expands modestly in May

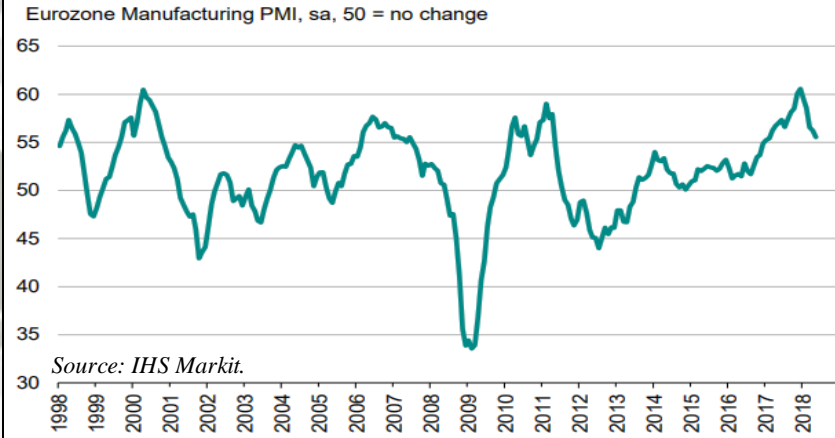
“The headline seasonally adjusted *Purchasing Managers’ Index*™ (*PMI*™) – a composite indicator designed to provide a single-figure snapshot of operating conditions in the manufacturing economy – was unchanged from the previous month at 51.1 in May. The reading signalled a further modest improvement in the health of the sector. Operating conditions have now strengthened in each month for the past year.

“May survey data pointed to only a modest expansion of China’s manufacturing sector. Growth in production and new orders picked up slightly from April, while firms reported a further fall in new export sales. At the same time, companies reduced staffing levels again as part of efforts to cut costs and raise efficiency. This, in part, drove a further increase in outstanding workloads. Inflationary pressures meanwhile intensified, with both input costs and output charges rising at solid rates. Although confidence towards the 12-month outlook for production improved in May, optimism remained subdued by historical standards.

The Caixin China General Manufacturing PMI stood at 51.1 in May, the same as the reading in April, showing that growth was sustained. The output and new order indices both rose, while the employment index dipped, indicating a stable supply and demand situation, but no signs of job creation in the sector. The index for new export orders picked up in May, but remained in contraction territory, reflecting that the export situation was still grim. The indices for output charges and input prices both rose, showing that product supply got tighter and price pressures remained high, which can help boost manufacturers' profits. Accordingly, the future output index rose slightly. The index measuring stocks of finished goods dropped, while the stocks of purchases index was unchanged from April, suggesting that product demand has been sufficient. Overall, operating conditions across the manufacturing sector remained stable. The growth in the price of industrial products has gained momentum, however, the export situation was still disappointing.” – Dr. Zhengsheng Zhong, Director of Macroeconomic Analysis, CEBM Group

Private Indicators: Global

IHS Markit Eurozone Manufacturing PMI



Markit Eurozone Manufacturing PMI®

“The final IHS Markit Eurozone Manufacturing PMI® posted a 15-month low of 55.5 in May, down from 56.2 in April and unchanged from the earlier flash estimate. The rate of increase has eased in each of month since hitting a record high in December. The PMI has signalled expansion for 59 months in a row and remained above its long-run average (51.9).”

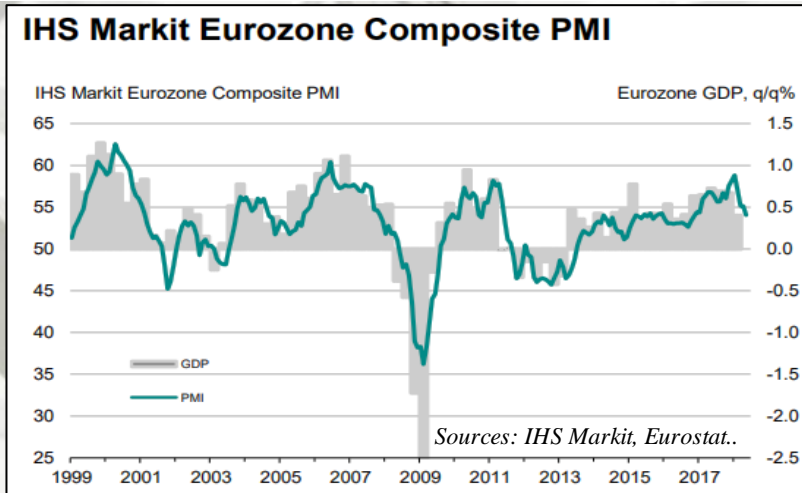
Eurozone manufacturing upturn slows further in May

The upturn in the eurozone manufacturing sector showed further signs of cooling in May. Rates of expansion in output and new orders both slowed, with increases in employment and backlogs of work also losing momentum. Input cost inflation rose for the first time in four months, whereas the rate of increase in output charges slowed further.

The eurozone manufacturing sector reported its weakest expansion for 15 months in May. Some of the weakness may have been related to a higher than usual number of holidays during the month, but risks appear tilted towards growth remaining subdued or even cooling further in coming months. Slowing export sales have been a key drag on both production and order book growth, with the May survey indicating that new export orders rose at the weakest rate for nearly two years, linked in part to the appreciation of the euro alongside reports of weakened key market demand for imports, notably the US.

There are signs that the soft patch has further to run. Despite the production trend slowing markedly in recent months, the order book slowdown has been even sharper. Output has consequently grown at a faster rate than new orders in each of the past six months, which suggests that manufacturers will come under pressure to rein-in production and staffing levels in coming months unless demand revives. Not surprisingly, manufacturers’ expectations of future production have sunk to a 20-month low, underscoring the gloomier economic picture.” – Chris Williamson, Chief Business Economist, Markit®

Private Indicators: Global



Markit Eurozone Composite PMI®

“The final **IHS Markit Eurozone PMI® Composite Output Index** posted 54.1 in May, unchanged from the earlier flash estimate and its lowest level since November 2016. The headline index has nevertheless signalled expansion in each of the past 59 months. Rates of increase eased in both the manufacturing (18-month low) and service (16-month low) sectors.

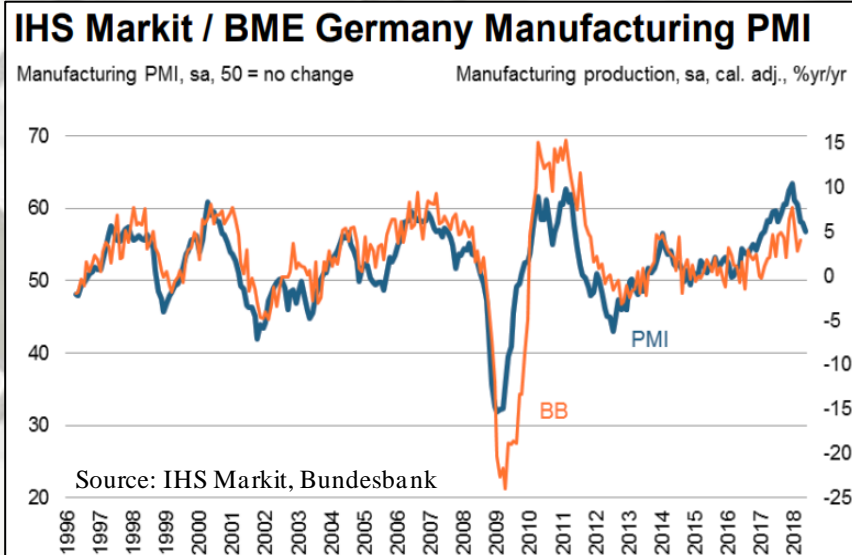
Eurozone economic growth at one-and-a-half year low in May

The rate of expansion in eurozone economic activity eased to a one-and-a-half year low in May. Although growth remained relatively solid, the cooling seen since the turn of the year and a similar trend in new orders suggest that the outlook for the economy is less bright than in the opening quarter

The pace of eurozone economic growth sank to a one-and-a-half year low in May, and has now slowed continually since January's peak to suggest that the region is on course for its worst quarter since 2016. ... On the upside, companies reported business to have been disrupted by an unusually high number of holidays in May, especially in France and Germany, suggesting growth could rebound in June. But many other companies reported that demand has softened compared to earlier in the year.

Measured across both manufacturing and services, both new order inflows and expectations regarding future business activity have descended to 18-month lows, meaning hiring has also been scaled back. Pricing power has also waned in line with weaker growth of demand. The slowdown since earlier in the year has been broad-based, though Spain has shown the greatest degree of resilience. Crisis-torn Italy has meanwhile reported the weakest expansion of the four largest euro member states for the fourth month running. With the economic indicators turning down at the same time as political uncertainty has spiked higher, the eurozone's outlook has darkened dramatically compared to the sunny forecast seen at the start of the year.” – 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 – registered 56.9 in May, down from 58.1 in April. Although still well above the 50.0 no-change threshold, and therefore indicative of a robust overall rate of expansion, the latest reading was the lowest seen for 15 months and well below last December’s recent peak (63.3).

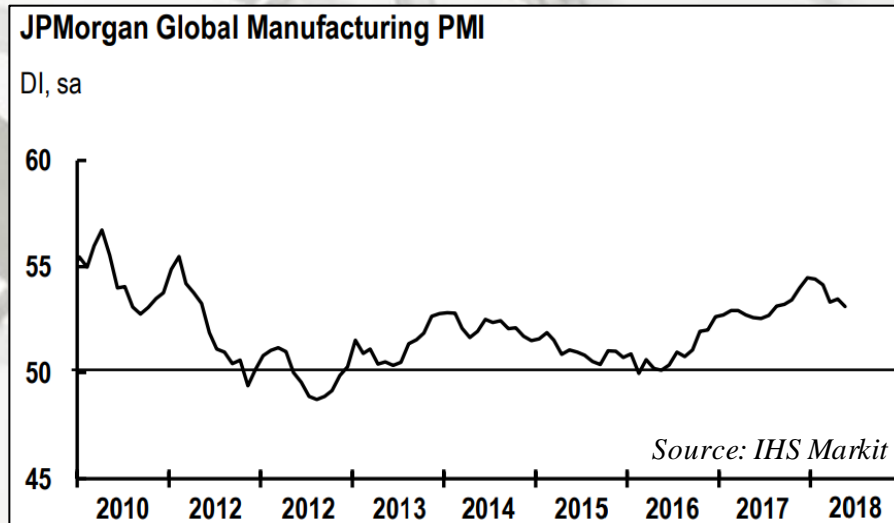
Manufacturing PMI hits 15-month low as sector experiences further slowdown

May saw a further slowdown in the pace of growth of Germany’s manufacturing sector, with output, new orders and employment all rising at a weaker rate. Business confidence was also found to have deteriorated, with expectations towards future output the lowest for over two-and-a-half years. Rising oil prices and ongoing capacity constraints in supply chains meanwhile added further pressure on manufacturers by way of an acceleration in input cost inflation.

In times gone by a PMI reading of 56.9 would have been greeted with cheer; however, in the context of the current cycle this latest figure signifies a further loss of momentum in the manufacturing sector. Capacity constraints have been a big part of the slowdown seen so far in 2018, and May’s survey continued to highlight widespread delays in supply chains and found evidence of this resulting in lost sales. A slowdown in global trade flows has added to the equation, with a sharp deterioration of export order growth to a two-year low the most worrying development to come out of the latest figures.

In terms of prospects in the year ahead, manufacturers have significantly downgraded their expectations, with such modest growth forecasts not seen since late-2015.” – Phil Smith, Principal Economist, IHSMarkit®

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 – posted a nine-month low of 53.1 in May, down from 53.5 in April. The average reading so far in quarter two (53.3) is indicative of a mild growth deceleration compared to the opening quarter (54.0).

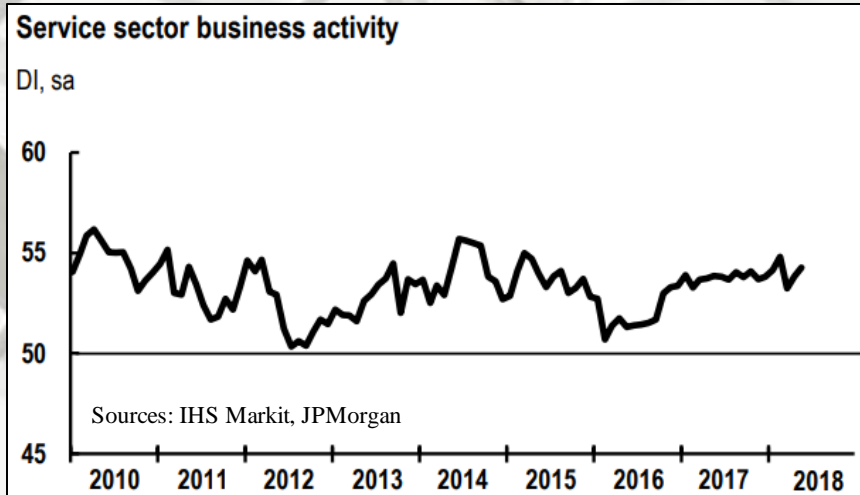
Global Manufacturing PMI at nine-month low in May

May PMI data indicated that global manufacturing production rose at the same pace as March’s eight-month low. The main constraint on achieving faster output growth was a moderation in the pace of expansion of new business to the lowest since June 2017. A further factor was a slowdown in growth of new export orders to near-stagnation.

The best performing sub-sector was investment goods in May. This was the only industry covered to see an improved PMI level – to a five-month high – and faster growth of both output and new orders. In contrast, the PMI readings for the consumer and intermediate goods categories fell to two- and 11-month lows respectively, as both sectors saw rates of expansion in production and new work ease.

The May PMI data suggest global manufacturing output growth is holding up well. Output growth is down from the robust pace of 2H17 but it remains solid. Our separate measures of global final goods demand are firming this quarter, supporting output growth. However, the PMI suggests that inventory growth may be decreasing. Such a shift in the mix of demand would be positive for the future” – David Hensley, Global Economist, J.P. Morgan

Private Indicators: Global



JP Morgan Global Services PMI™

“May saw global services output expand at the second highest rate during the past three years. At 54.3, 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 – has signalled growth for 106 months in a row.

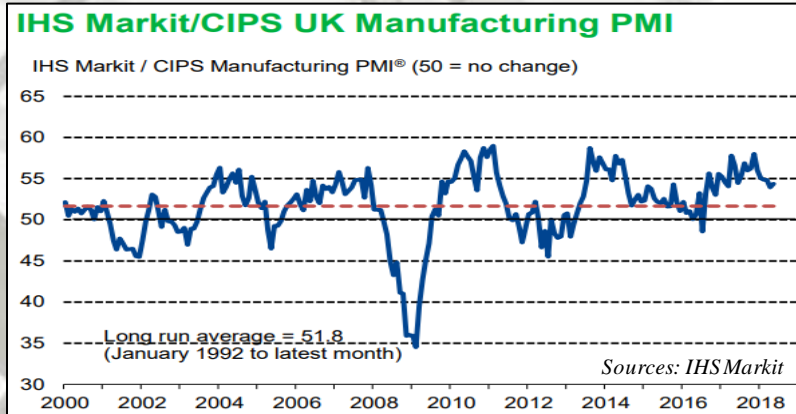
Global services output expands at faster pace in May

Sector data indicated that the acceleration was centred on the business services category, where output growth hit a 38-month record. In contrast, rates of increase slowed at both consumer and financial service providers.

The US was a bright spot in the global service economy during May. Business activity in the US rose at the fastest pace in over three years with the upturn the best among the nations covered by the survey. The UK, Italy and Spain also saw faster growth (three-month highs in all cases), as did Australia (ten-month high). However, slower expansions in Germany and France meant growth (on average) across the eurozone service sector was the weakest in 16 months. ...

The global service sector continued to gather steam in May, with output expanding at the second-fastest rate in over three years. New order growth also remained solid, despite slowing, while employment and backlogs of work both rose further. This combination should ensure that further robust output growth is achieved in the months ahead.” – David Hensley, Global Economist, J.P. Morgan

Private Indicators: Global



Markit/CIPS UK Manufacturing PMI™

“May saw a mild improvement in the performance of the UK manufacturing sector. The seasonally adjusted IHS Markit/CIPS Purchasing Managers’ Index® (PMI®) rose to 54.4, up slightly from April’s 17-month low of 53.9, to signal growth for the twenty-second straight month.

Mild output growth acceleration masks underlying weaknesses

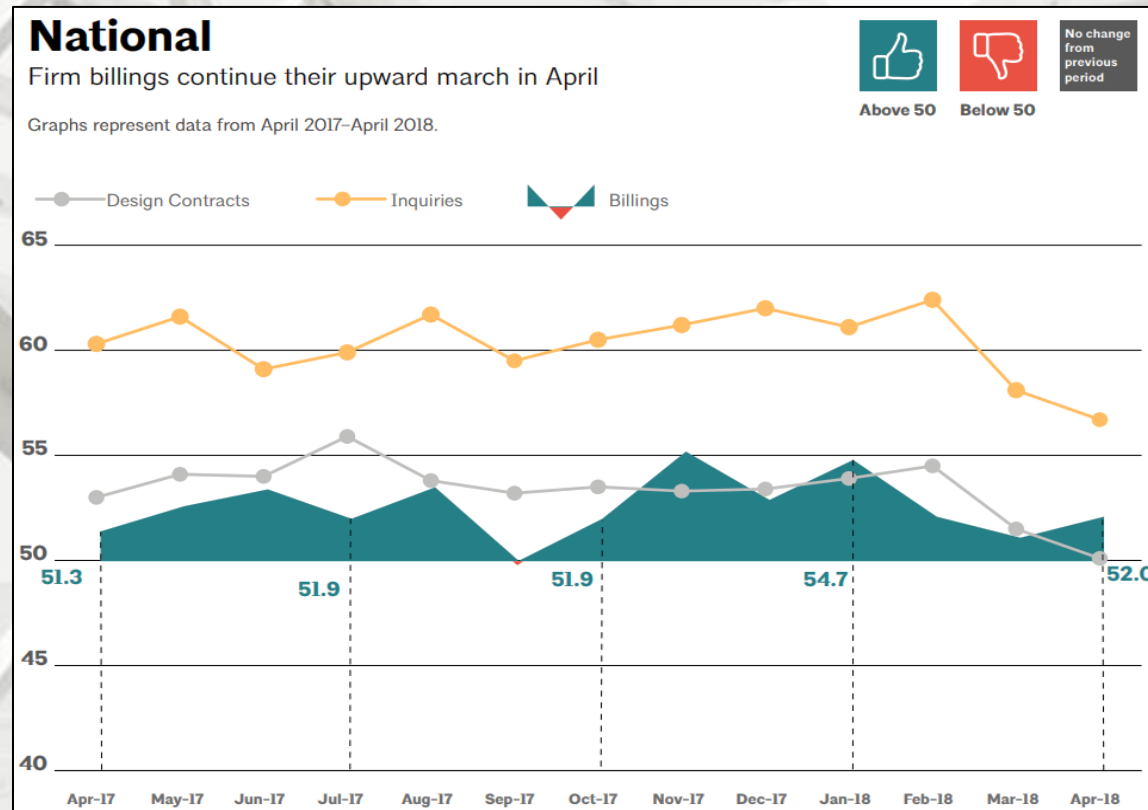
The improved trend signalled by the PMI masked several areas of potential concern. Although growth of production accelerated to its best during the year-so-far, this was mainly achieved through the steepest build-up of finished goods inventories in the 26-year survey history and a sharp reduction in backlogs of work.

At first glance, the mild acceleration in the rate of output growth and rise in the headline PMI would appear positive outcomes given the backdrop of the slowdown seen in manufacturing since the turn of the year. However, scratch beneath the surface and the rebound in the PMI from April’s 17-month low is far from convincing. A slowdown in new order inflows meant the expansion in production was achieved only by firms working through their backlogs of work. Weaker than expected sales meanwhile led to the largest rise in unsold stock in the survey’s 26-year history. This suggests that manufacturers have yet to fully adjust their production to the weakening trend in new business growth and there will need to be a rapid improvement in demand if output volumes are to be sustained in the coming months

Manufacturers will also likely be constrained if the resurgence in both cost inflation and supply-chain pressures becomes more firmly embedded. Input price inflation accelerated for the first time since January as general cost increases, often linked to higher oil prices, were exacerbated by shortages of certain inputs. Average vendor lead times – a key bellwether of supply-side constraints – lengthened to the greatest extent during 2018 so far. These price and supply headwinds, combined with a further slowdown in new order growth, could jeopardise any further expansion of the manufacturing sector” – Rob Dobson, Director & Senior Economist, IHS Markit

Private Indicators

American Institute of Architects (AIA)

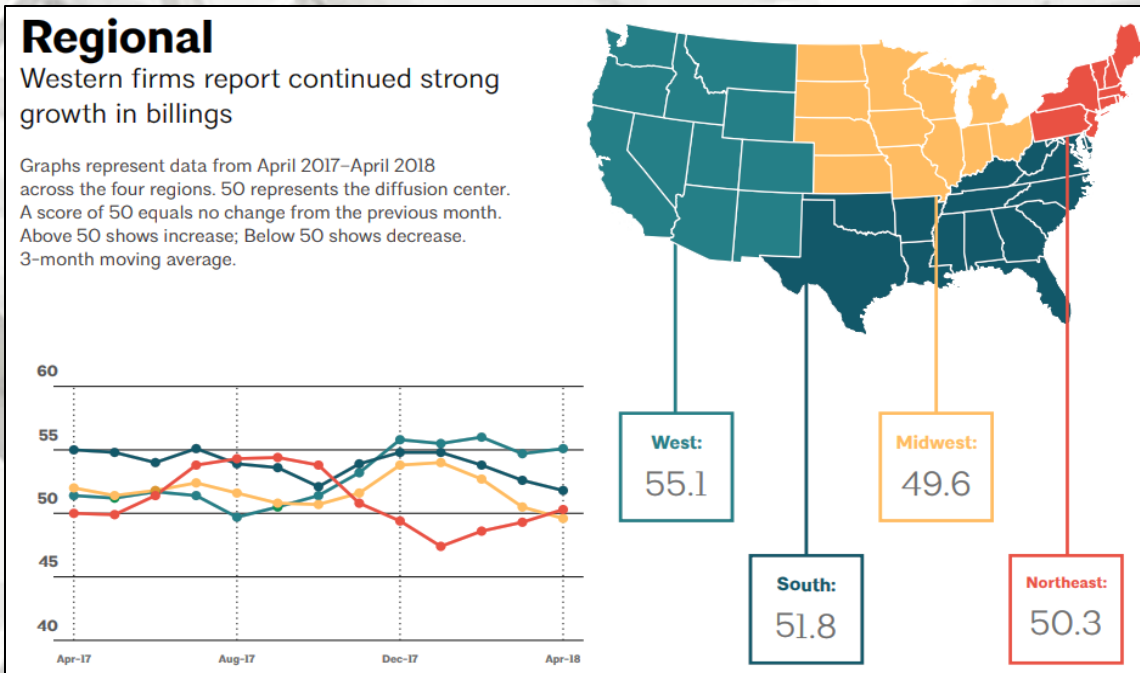


April Architecture Billings Index

Healthy growth in billings continues

“April extended the string to seven straight months that US architecture firms have reported gains in design billings, as the Architecture Billings Index score of 52.0 was a slight improvement over the 51.0 reading for March. Growth rates for billings, inquiries, and new design contracts are basically keeping pace with 2017, so architecture firms should see another solid year of business activity.” – The American Institute of Architects

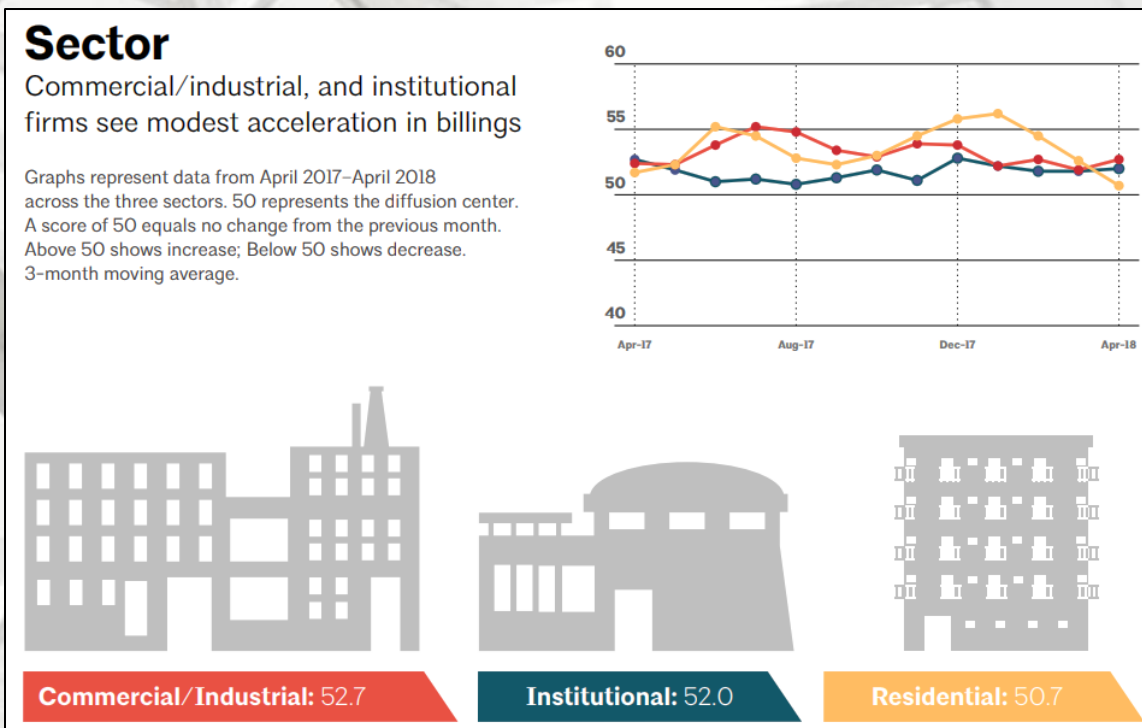
Private Indicators: AIA



Region

“However, the performance of firms across the country is beginning to show some separation. The ABI reading of 50.3 for firms in the Northeast shows only a modest increase over the pace in March, and is the first monthly reading over 50 since last November. The 49.6 reading for Midwestern firms signifies a slight decline in billings, and is the latest in a three month slowdown in billings for firms in this region. In contrast, firms in the South and West are reporting more robust business conditions. In the West, in particular, the 55.1 regional ABI score extends a stretch of solid monthly readings. The ABI score for firms in the South was a modest 51.8, but continues the steady positive monthly readings for this region to six years.” – The American Institute of Architects

Private Indicators: AIA



Sector

“While the regional ABI scores are beginning to show more variation, the building sectors are reflecting greater consistency. Firms with a multifamily residential specialization have slowed a bit from torrid pace of growth in recent months, while firms with a commercial/industrial or institutional specialization reported a modest acceleration in billings in April. Both of these specializations, but in particular firms focused on the institutional sector, have the potential for further upside growth this year.” – The American Institute of Architects

Private Indicators

Dodge Data & Analytics

New Construction Starts in April Pull Back 13 Percent

*Decreased Activity Reported for Public Works,
Institutional Building, and Housing*

“The value of new construction starts in April fell 13% from the previous month to a seasonally adjusted annual rate of \$674.3 billion, according to Dodge Data & Analytics. The decline follows the 11% gain reported for March, which was the highest level of construction starts over the preceding six months. The loss of momentum in April was widespread, involving each of the three main construction sectors. Nonbuilding construction (public works and electric utilities/gas plants) plunged 22% after its 74% hike in March that featured the start of the \$3.5 billion Mountain Valley Pipeline expansion in West Virginia and Virginia, as well as several large highway projects. Nonresidential building retreated 12% due to a slower pace by its institutional and manufacturing segments. Residential building dropped 9% with reduced activity for both single family and multifamily housing. During the first four months of 2018, total construction starts on an unadjusted basis were \$223.5 billion, down 7% from the same period of 2017 (which included very strong amounts for airport terminals and natural gas pipelines). On a twelve-month moving total basis, total construction starts for the twelve months ending April 2018 matched the dollar amount that was reported for the twelve months ending April 2017.

April’s data lowered the Dodge Index to 143 (2000=100), down from a revised 165 for March. Taking the average for March and April produces an Index reading of 154, slightly above the 152 average for January and February, although still below the 161 average for the full year 2017.” – Benjamin Gorelick, Spector & Associates

Private Indicators

Dodge Data & Analytics

New Construction Starts in April Pull Back 13 Percent

“The construction start statistics can be volatile on a monthly basis, and given the wide swings present in March and April it’s probably best to take the average of the two months in assessing the current health of the construction industry. The average for March and April shows that construction starts so far in 2018 are proceeding slightly behind last year’s average pace. Even with this modest slowdown in early 2018, there are several factors in the current environment that should help construction activity to stay close to recent levels. Job growth continues to be strong, with the unemployment rate at the lowest level since 2000, which should limit any upward movement by commercial vacancy rates this year. In its latest quarterly survey of bank lending standards, the Federal Reserve indicated that lending standards for nonresidential building projects eased slightly on net during the first quarter of 2018, following the tightening that took place from late 2015 through 2017. In March, Congress reached agreement on fiscal 2018 appropriations, providing additional funding for several public works programs. And, while interest rates are rising, the upward movement so far has been measured, with the ten-year Treasury bill stabilizing at about 3% from March through mid-May.” – Robert A. Murray, Chief Economist, Dodge Data & Analytics

Private Indicators

Dodge Data & Analytics

“**Residential building** in April was \$303.8 billion (annual rate), down 9%. Multifamily housing declined 20%, retreating for the second month in a row following its improved activity during the first two months of this year. April’s volume of multifamily housing was down 7% from the average monthly pace reported during 2017. There were four multifamily projects valued each at \$100 million or more that reached groundbreaking in April, compared to 13 such projects in March. The four largest multifamily projects entered as April starts were the \$550 million Queens Plaza Park Apartments in Long Island City NY, the \$429 million multifamily portion of a \$516 million mixed-use development in Seattle WA, and two multifamily projects in Ft. Lauderdale FL valued respectively at \$154 million and \$150 million.

In April, the top five metropolitan areas ranked by the dollar amount of multifamily starts were – New York NY, Seattle WA, Miami FL, Los Angeles CA, and Washington DC. Metropolitan areas ranked 6 through 10 were – Dallas-Ft. Worth TX, San Francisco CA, Boston MA, Minneapolis-St. Paul MN, and Philadelphia PA. Single family housing in April fell 4%, settling back from the steady activity that was present during the previous five months. By major region, single family housing performed as follows in April – the West, down 6%; the Midwest and South Atlantic, each down 4%; the Northeast, down 2%; and the South Central, unchanged from the previous month.” – Robert A. Murray, Chief Economist, Dodge Data & Analytics

Private Indicators

Dodge Data & Analytics

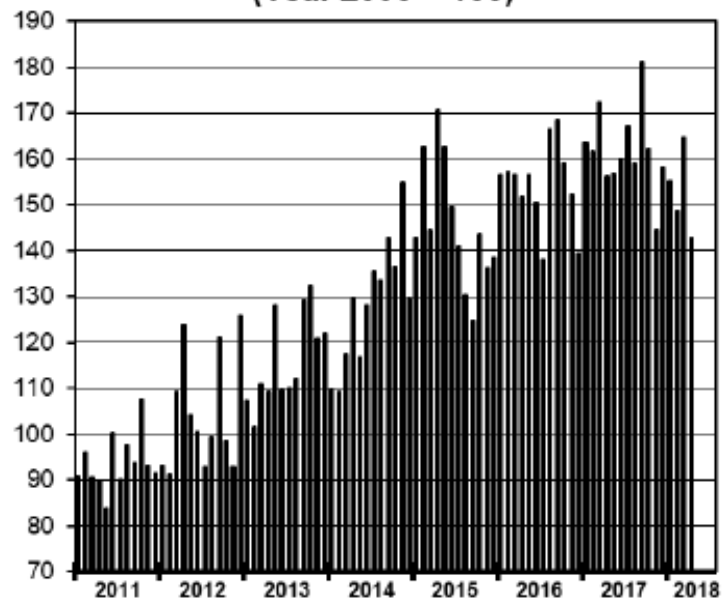
“The 7% downturn for total construction starts on an unadjusted basis during the January-April period of 2018 was due to reduced activity for two of the three main construction sectors. Nonresidential building dropped 18% year-to-date, with commercial building down 16% and institutional building down 25%, while manufacturing building advanced 14%. The year-to-date comparisons are relative to particularly strong activity during the first four months of 2017, Nonbuilding construction fell 10% year-to-date, with public works down 5% and electric utilities/gas plants down 45%. **Residential building** increased 4% year-to-date, with 4% gains registered by both single family and multifamily housing. By geography, total construction starts during the first four months of 2018 showed this pattern – the Midwest, down 13%; the West, down 11%; the Northeast, down 8%; the South Central, down 5%; and the South Atlantic, down 1%.

Additional perspective is made possible by looking at twelve-month moving totals, in this case the twelve months ending April 2018 versus the twelve months ending April 2017. On this basis, total construction starts held steady with the volume of the previous period. By major sector, nonresidential building dropped 3%, with commercial building down 8%. institutional building down 3%, and manufacturing building up 32%. Nonbuilding construction rose 1%, with public works up 5% while electric utilities/gas plants fell 14%. **Residential building** grew 3%, with *single family housing* up 7% and multifamily housing down 7%.” – Robert A. Murray, Chief Economist, Dodge Data & Analytics

Private Indicators

April 2018 Construction Starts

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



Source: Dodge Data & Analytics

April 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>April 2018</u>	<u>March 2018</u>	<u>% Change</u>
Nonresidential Building	\$211,505	\$240,549	-12
Residential Building	303,767	332,938	-9
Nonbuilding Construction	<u>159,013</u>	<u>204,734</u>	<u>-22</u>
Total Construction	\$674,285	\$778,221	-13

The Dodge Index

Year 2000=100, Seasonally Adjusted

April 2018143

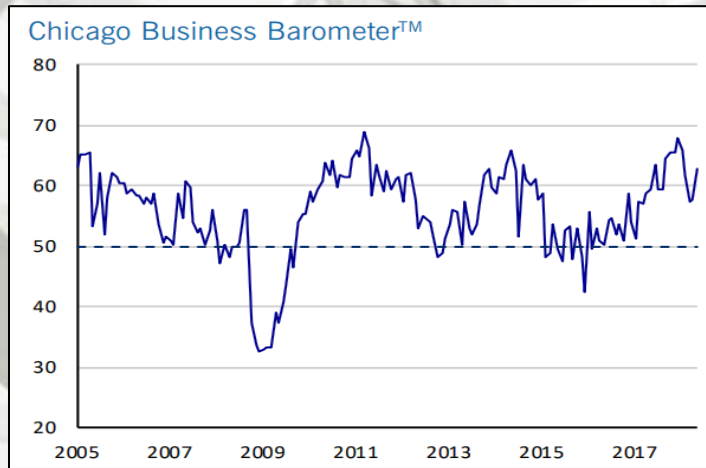
March 2018.....165

Year-to-Date Construction Starts

Unadjusted Totals, in Millions of Dollars

	<u>4 Mos. 2018</u>	<u>4 Mos. 2017</u>	<u>% Change</u>
Nonresidential Building	\$70,519	\$86,328	-18
Residential Building	103,428	99,380	+4
Nonbuilding Construction	<u>49,530</u>	<u>55,275</u>	<u>-10</u>
Total Construction	\$223,477	\$240,983	-7
Total Construction, excluding electric utilities/gas plants	\$219,086	\$233,019	-6

Private Indicators



MNI Chicago Chicago Business Barometer Rises to 62.7 in May

“The MNI Chicago Business Barometer rose 5.1 points to 62.7 in May, up from 57.6 in April, hitting the highest level since January

Output, Demand Pick Up in May; Supply-side Constraints Intensify

Business activity gained traction in May, with growth in firms’ operations up for only the second time this year. All five Barometer components rose on the month, helping take the Barometer’s year-over-year growth back into the black.

While broad based, the Barometer’s gain was largely driven by an acceleration in both output levels and orders. Having ended a run of three consecutive falls last month, the Production indicator notched another gain on its belt, rising to a three-month high. New Orders also increased in May, the first sign of order book growth this year, rising to a four-month high. The two indicators account for the lion’s share of the headline index, two thirds exactly, and stand 3.7% and 2.1% above their respective May 2017 levels.

Having trended lower since the end of 2017, companies’ unfulfilled orders surged in May. The Order Backlogs indicator ended a run of four straight declines, rebounding to a level last seen higher in October 2017. ...

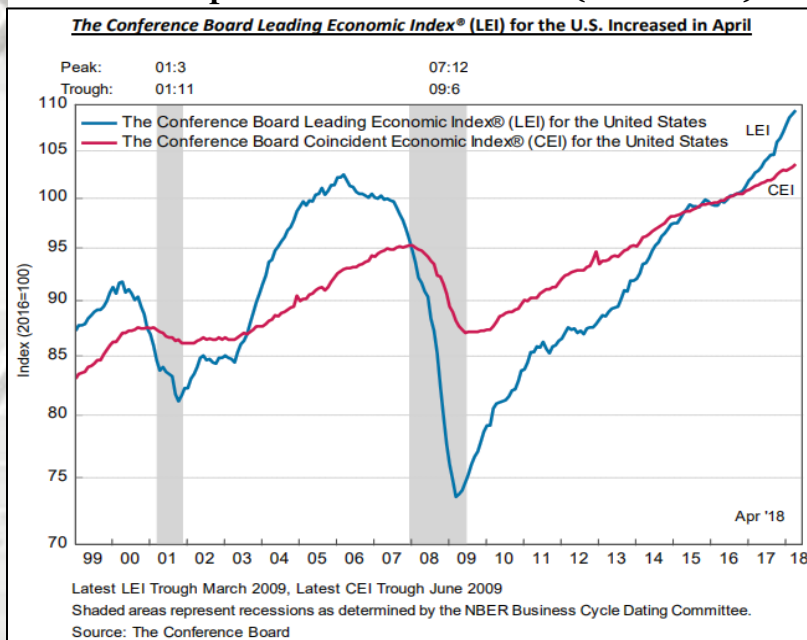
It had been a somewhat sluggish start to the year, perhaps unsurprising after the stellar end to 2017, but the MNI Chicago Business Barometer found a higher gear in May. Although broad based, the rise was largely thanks to a rebound in demand and back-to-back growth in output. The result was, however, assisted by the intensification of supply side constraints, with order backlogs surging and lead times on key materials up sharply.” – Jamie Satchi, Economist, MNI Indicators

Private Indicators

The Conference Board Leading Economic Index® (LEI) for the U.S. Increased in April Solid Economic Growth to Continue Through 2018

The Conference Board Leading Economic Index® (LEI) for the U.S. increased 0.4 percent in April to 109.4 (2016 = 100), following a 0.4 percent increase in March, and a 0.7 percent increase in February.

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

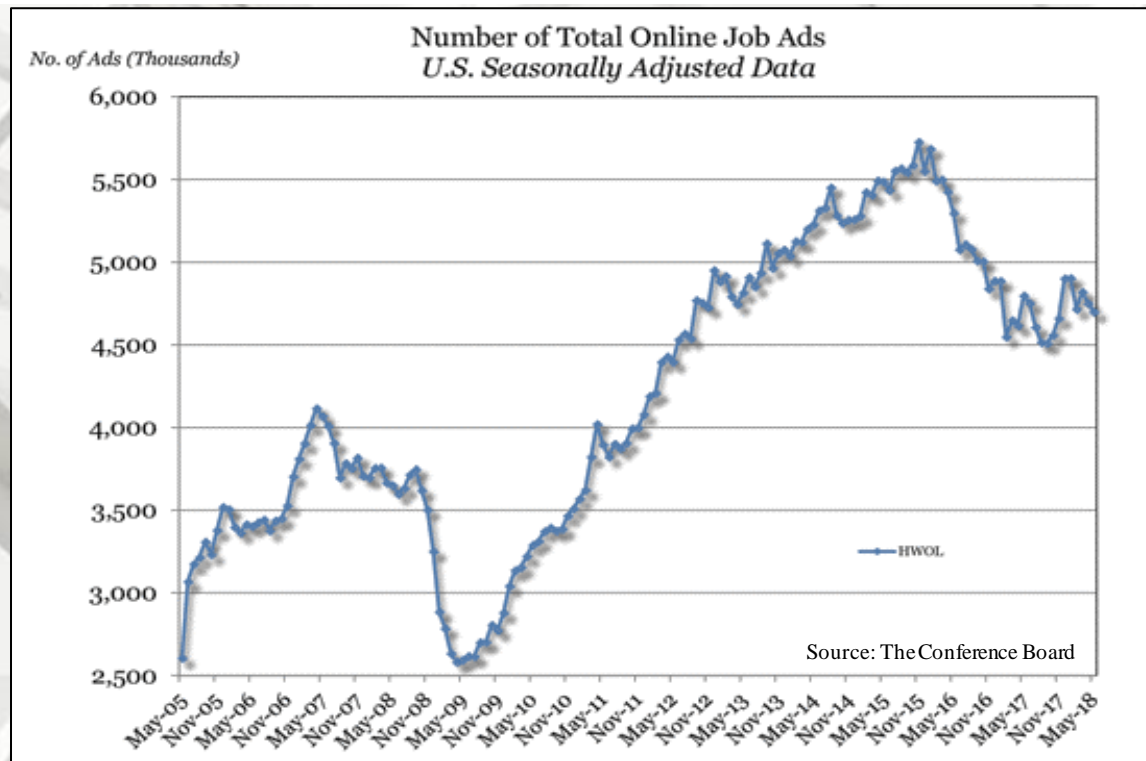


“April’s increase and continued uptrend in the U.S. LEI suggest solid growth should continue in the second half of 2018. However, the LEI’s six-month growth rate has recently moderated somewhat, suggesting growth is unlikely to strongly accelerate. In April, stock prices and housing permits were the only negative contributors, whereas the labor market components, which made negative contributions in March, improved.” – Ataman Ozyildirim, Director of Business Cycles and Growth Research, The Conference Board

“The Conference Board Coincident Economic Index® (CEI) for the U.S. increased 0.3 percent in April to 103.5 (2016 = 100), following a 0.2 percent increase in March, and a 0.2 percent increase in February.

The Conference Board Lagging Economic Index® (LAG) for the U.S. increased 0.3 percent in April to 104.7 (2016 = 100), following a 0.1 percent decrease in March, and a 0.3 percent increase in February.” – The Conference Board

Private Indicators



The Conference Board Help Wanted OnLine® (HWOL) Online Job Ads Decreased 51,000 in May

- “Losses widespread across virtually all States and MSAs
- Most occupations showed losses over the month.

Online advertised vacancies decreased 51,000 to 4,699,500 in May, according to **The Conference Board Help Wanted OnLine® (HWOL) Data Series**, The April Supply/Demand rate stands at 1.34 unemployed for each advertised vacancy, with a total of 1.6 million more unemployed workers than the number of advertised vacancies. The number of unemployed was approximately 6.35 million in April.

The Professional occupational category saw changes in Education (-8.4), Computer and math (+5.0) and Management (-5.9). The Services/Production occupational category saw changes in Transportation (-27.2), Protective service (+5.1), and Construction (-4.8).” – Carol Courter, The Conference Board

Private Indicators

Equipment Leasing and Finance Association

Industry Confidence Eases in April

“The [Equipment Leasing & Finance Foundation](#) (the Foundation) releases the May 2018 [Monthly Confidence Index for the Equipment Finance Industry](#) (MCI-EFI). Designed to collect leadership data, the index reports a qualitative assessment of both the prevailing business conditions and expectations for the future as reported by key executives from the \$1 trillion equipment finance sector. Overall, confidence in the equipment finance market eased further in May to 64.6, down from the April index of 68.3.” – Anneliese DeDiemar, Author, Equipment Leasing & Finance Association

“Customers are continuing to work through the impacts of tax law changes and making decisions on how best to finance capital investments. Projects are beginning and we anticipate an increase in purchase leaseback activity in the last quarter of the year.” – Michael Romanowski, President, Farm Credit Leasing Services Corporation

“Demand is strong this spring. Small business seems determined to move forward and to keep investing in equipment that will produce income. In spite of the manic performance of Wall Street and the ongoing drama in Washington, Main Street America continues to stay the course.” – Valerie Hayes Jester, President, Brandywine Capital Associates

“Stronger economic conditions continue, and in spite of deterrents like rising interest rates, the advantages of tax reform offset them.” – Harry Kaplun, President, Specialty Finance, Frost Bank

Private Indicators

Equipment Leasing and Finance Association

May 2018 Survey Results:

“The overall MCI-EFI is 68.3 in 64.6 in May, a decrease from 68.3 in April.

- When asked to assess their business conditions over the next four months, 22.2% of executives responding said they believe business conditions will improve over the next four months, a decrease from 33.3% in April. 74.1% of respondents believe business conditions will remain the same over the next four months, an increase from 63.3% the previous month. 3.7% believe business conditions will worsen, relatively unchanged from 3.3% who believed so the previous month.
- 29.6% of survey respondents believe demand for leases and loans to fund capital expenditures (capex) will increase over the next four months, a decrease from 46.7% in April. 70.4% believe demand will “remain the same” during the same four-month time period, an increase from 50% the previous month. None believe demand will decline, a decrease from 3.3% in April.
- 25.9% of the respondents expect more access to capital to fund equipment acquisitions over the next four months, down slightly from 26.7% in April. 74.1% of executives indicate they expect the “same” access to capital to fund business, an increase from 73% last month. None expect “less” access to capital, unchanged from last month.
- When asked, 44.4% of the executives report they expect to hire more employees over the next four months, a decrease from 46.7% in April. 55.6% expect no change in headcount over the next four months, an increase from 50% last month. None expect to hire fewer employees, down from 3.3% in April.” – Anneliese DeDiemar, Author, Equipment Leasing & Finance Association

Private Indicators

Equipment Leasing and Finance Association

May 2018 Survey Results:

- “22.2% of the leadership evaluate the current U.S. economy as “excellent,” down from 30% last month. 77.8% of the leadership evaluate the current U.S. economy as “fair,” up from 70% in April. None evaluate it as “poor,” unchanged from last month.
- 25.9% of the survey respondents believe that U.S. economic conditions will get “better” over the next six months, a decrease from 30% in April. 70.4% of survey respondents indicate they believe the U.S. economy will “stay the same” over the next six months, an increase from 63.3% the previous month. 3.7% believe economic conditions in the U.S. will worsen over the next six months, a decrease from 6.7% in April.
- In May, 37% of respondents indicate they believe their company will increase spending on business development activities during the next six months, a decrease from 53.3% in April. 63% believe there will be “no change” in business development spending, an increase from 43.3% the previous month. None believe there will be a decrease in spending, down from 3.3% who believed so last month.” – Anneliese DeDiemar, Author, Equipment Leasing & Finance Association

Private Indicators

Equipment Leasing and Finance Association

Monthly Leasing and Finance Index

April New Business Volume Flat Year-over-year, Down 13 Percent Month-to-Month, Up 9 Percent Year-to-date

“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 April was \$7.9 billion, unchanged year-over-year from new business volume in April 2017. Volume was down 13 percent month-to-month from \$9.1 billion in March. Year to date, cumulative new business volume was **up 9 percent** compared to 2017.

Receivables over 30 days were 2.40 percent, up from 1.70 percent the previous month and up from 1.30 percent the same period in 2017. Charge-offs were 0.30 percent, down from 0.51 percent the previous month, and down from 0.38 percent in the year-earlier period.

Credit approvals totaled 76.2 percent in April, up from 75.2 percent in March. Total headcount for equipment finance companies was up 0.7 percent year over year. During 2017, headcount was elevated due to acquisition activity at an MLFI reporting company.

Separately, the Equipment Leasing & Finance Foundation’s Monthly Confidence Index (MCI-EFI) in May is 64.6, down from the April index of 68.3.” – Amy Vogt, Vice President, Communications and Marketing, ELFA

Private Indicators

Equipment Leasing and Finance Association

Monthly Leasing & Finance Index: April 2018

“Responding members continue to show solid growth in new business volume, reflecting sound fundamentals in the U.S. economy. Effects of new tax legislation signed into law late last year – bringing lower corporate tax rates, 100% expensing of new and used equipment, and the ability to continue to deduct business interest expense – are serving to buoy business confidence and contribute to healthy capex levels. Delinquencies spiked during the period and, should a trend in credit quality emerge, bears watching.” – Ralph Petta, President and CEO, ELFA

“The April MLFI index and increase in year-over-year new business volume are reflective of our results and what we see across the industry. In the transportation sector, order volume for Class 8 trucks continues at a pace well above industry capacity, driven by accelerating economic growth and near-record level freight volumes. Recent tax law changes and new lease accounting standards are positively impacting equipment procurement and the lease versus buy decision. We expect to see continued robust growth in both transportation and leasing and maintain a positive outlook for 2018” – Brian Holland, President and CFO, Fleet Advantage

May 2018 Manufacturing ISM® Report On Business®

May PMI® at 58.7%

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 April, and the **overall economy** grew for the 109th consecutive month, say the nation's supply executives in the latest **Manufacturing ISM® Report On Business®**. The May PMI® registered 58.7 percent, an increase of 1.4 percentage points from the April reading of 57.3 percent.

The New Orders Index registered 63.7 percent, an increase of 2.5 percentage points from the April reading of 61.2 percent.

The Production Index registered 61.5 percent, a 4.3 percentage point increase compared to the April reading of 57.2 percent.

The Employment Index registered 56.3 percent, an increase of 2.1 percentage points from the April reading of 54.2 percent.

The Supplier Deliveries Index registered 62 percent, a 0.9 percentage point increase from the April reading of 61.1 percent.

The Inventories Index registered 50.2 percent, a decrease of 2.7 percentage points from the April reading of 52.9 percent.

The Prices Index registered 79.5 percent in May, a 0.2 percentage point increase from the April reading of 79.3 percent, indicating higher raw materials prices for the 27th consecutive month.” – Timothy R. Fiore, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee

May 2018 Manufacturing ISM® Report On Business®

May PMI® at 58.7%

“Comments from the panel reflect continued expanding business strength. Demand remains strong, with the New Orders Index at 60 or above for the 13th straight month, and the Customers’ Inventories Index remaining at very low levels. The Backlog of Orders Index continued expanding, with its highest reading since April 2004, when it registered 66.5 percent. Consumption, described as production and employment, continues to expand in spite of labor and skill shortages. Inputs, expressed as supplier deliveries, inventories and imports, had expansion declines, due primarily to inventory reductions likely caused by supplier performance issues. Lead-time extensions, steel and aluminum disruptions, supplier labor issues, and transportation difficulties continue. Export orders expanded at slower rates. The Prices Index is at its highest level since April 2011, when it registered 82.6 percent. Demand remains robust, but the nation’s employment resources and supply chains continue to struggle. Respondents say price pressure at their companies is causing price-increase discussions as we prepare to enter H2.” – Timothy R. Fiore, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee

May 2018 Non-Manufacturing ISM® Report On Business®

May PMI® at 58.6%

Business Activity Index at 61.3%; New Orders Index at 60.5%

Employment Index at 54.1%

“Economic activity in the **non-manufacturing sector** grew in April for the 100th consecutive month, say the nation’s purchasing and supply executives in the latest **Non-Manufacturing ISM® Report On Business®**.

The NMI® registered 58.6 percent, which is 1.8 percentage points higher than the April reading of 56.8 percent. This represents continued growth in the non-manufacturing sector at a faster rate.

The Non-Manufacturing Business Activity Index increased to 61.3 percent, 2.2 percentage points higher than the April reading of 59.1 percent, reflecting growth for the 106th consecutive month, at a faster rate in May.

The New Orders Index registered 60.5 percent, 0.5 percentage point higher than the reading of 60 percent in April.

The Employment Index increased 0.5 percentage point in May to 54.1 percent from the April reading of 53.6 percent.

The Prices Index increased by 2.5 percentage points from the April reading of 61.8 percent to 64.3 percent, indicating that prices increased in May for the 27th consecutive month.

According to the NMI®, 14 non-manufacturing industries reported growth. The majority of respondents are optimistic about business conditions and the overall economy. There continue to be concerns about the uncertainty surrounding tariffs, trade agreements and the impact on cost of goods sold.” – Timothy R. Fiore, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee

Private Indicators

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



Markit U.S. Manufacturing PMI™

“The seasonally adjusted **IHS Markit final U.S. Manufacturing Purchasing Managers’ Index™ (PMI™)** registered 56.4 in May, down fractionally from 56.5 in April. The reading marked the second strongest improvement in the health of the sector since September 2014. The upturn was largely driven by sharp increases in production and new business. The greatest lengthening in supplier delivery times since the series began in October 2009 also contributed to the headline figure.

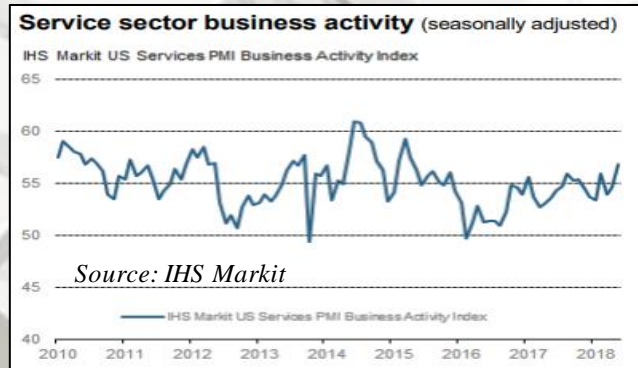
May PMI signals further steep improvement in business conditions

Latest survey data signalled a marked improvement in business conditions across the U.S. manufacturing sector in May. The strong performance reflected sharp expansions in output and new orders. Strong client demand meant operating capacity came under greater strain, with backlogs increasing at the fastest pace since September 2015 and supplier delivery times lengthening to the greatest extent on record. Strong demand for inputs contributed to a sharp rise in purchasing costs, which in turn fed through to a marked rise in output prices.

The US manufacturing sector enjoyed another bumper month in May, though continues to run hot. The past two months have seen the strongest back-to-back improvements in order books since the fall of 2014, fueled by strengthening domestic demand. New orders have in fact now grown at a faster rate than output in each of the past five months, highlighting how producers have struggled to boost production to meet sales. In the words of one manufacturer, “we’re selling more than we can make”. ...

With sales growing faster than production, backlogs of work are accumulating at the fastest rate for nearly four years, which should support further production growth in coming months. Business expectations regarding future production in fact picked up again to one of the highest levels seen over the past three years, adding to signs that strong growth will persist through the summer months – Chris Williamson, Chief Economist, Markit®

Private Indicators



Markit U.S. Services PMI™

“In line with sustained upturns in business activity and new orders, service sector firms increased their hiring in May. The upturn in staffing levels was the strongest since September 2015 and above the long-run series average.

Services business activity growth accelerates to fastest since April 2015

The seasonally adjusted final IHS Markit U.S. Services Business Activity Index registered 56.8 in May, up from 54.6 in April. The latest survey data signalled the fastest output expansion since April 2015. The sharp increase in business activity was widely attributed to more favourable economic conditions and greater client demand. Increased marketing activity and customer interest was successfully converted to client wins in May, with new business levels rising at a steep pace. Although slightly weaker than that seen in April, the rate of expansion of new work was the third sharpest seen over the past three years.

According to the latest survey data, business activity increased at a sharp rate across the U.S. service sector in May. Although the pace of new business growth softened slightly, it remained among the fastest in the last three years. Backlogs of work meanwhile accumulated at the quickest pace in over three years, prompting companies to boost capacity by upping the rate of job creation to the strongest since September 2015. The survey also showed rates of both input cost and selling price inflation accelerating.

The US economy kicked up a gear in May. A markedly improved service sector performance takes the final composite PMI reading above the flash estimate and to its highest for over three years. The composite PMI is a reliable leading indicator of GDP, and has risen to a level which is consistent with the economy growing at an annualised rate of approximately 3.5%. ...

However, the survey also reveals increased concerns regarding rising costs and the impact of tariffs. Across both manufacturing and services, companies' costs are now rising at one of the strongest rates seen over the past seven years, which will likely feed through to higher consumer prices in coming months.” – Chris Williamson, Chief Economist, Markit®

National Association of Credit Management – Credit Managers' Index

“The combined score for this month’s CMI was back to what it had been through most of the year. It now stands at 56.6, nearly the same as it was in February when it stood at 56.5. The index of favorable factors rebounded strongly as well, hitting 65.7. It had not been this high since last November. The index of non-favorable factors recovered a little and left the contraction zone (anything below 50) by moving from 49.4 to 50.6 — exactly the same reading as March.

Lately, there have been more than a few sighs of relief heard as people try to review the state of the current economy. Some of the indicators attracting the most attention have stuttered and pointed to big declines only to stage a rebound later. Inflation numbers jumped with the ferment in the Middle East and then calmed. There were also a series of reactions to the steel and aluminum tariffs and other indicators of a trade war. The CMI has had its share of scares as well.

As is generally the case, the interesting data is contained in the sub-index readings. This month looks like a return to positive news across the board as far as the favorable numbers. The sales category jumped as high as it has been since the recession with a reading of 69.6—just a hair shy of 70.

The unfavorable factors remain generally low, but there is not much indication that conditions are getting any worse. The rejections of credit applications improved just slightly from 51 to 51.3. The accounts placed for collection stayed in the contraction zone, only shifting from 48.7 to 49. The disputes category showed much the same behavior with a slight improvement over what it was the month before (48 to 48.1), continuing to languish in contraction territory. The other marker that is watched as carefully as the dollar collection data is dollar amount beyond terms. It shows that creditors are trying to stretch their terms. This reading is still in contraction territory but not nearly as deeply, moving from 46.4 to 49.4. The dollar amount of customer deductions also stayed in the 40s but improved from 48.4 to 49.7. The filings for bankruptcies remained thoroughly in expansion territory at 56.4 compared to 53.8 in April. Only two of the six are in the 50s, which demonstrates some continued fragility. On the plus side, they are all trending in a generally positive direction and might break into expansion territory sooner than later.” – Adam Fusco, Associate Editor, NACM

Private Indicators

National Association of Credit Management – Credit Managers' Index

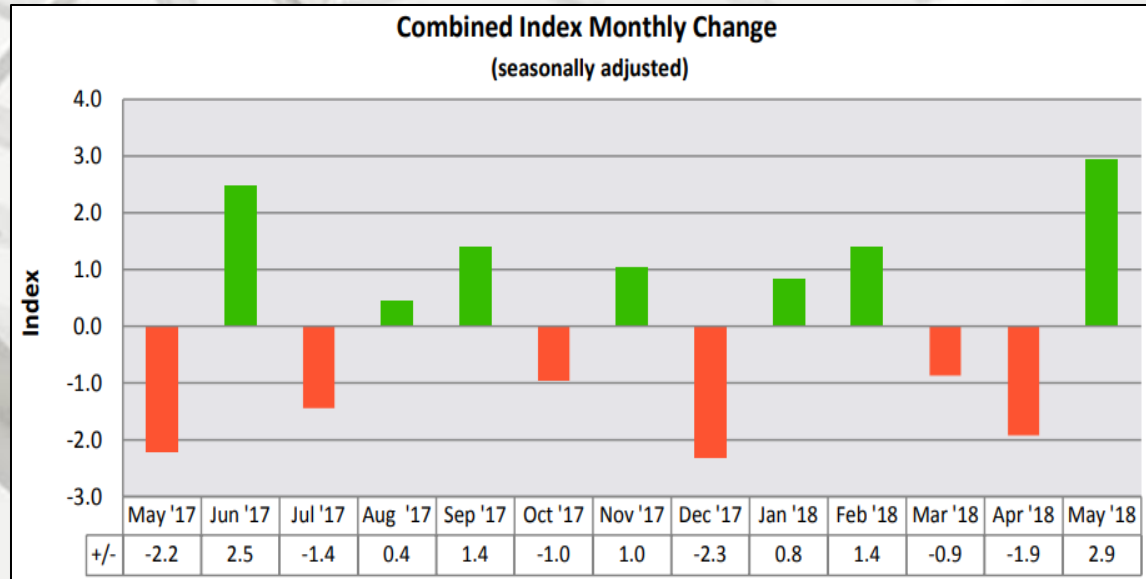
“In April’s report, the bottom fell out of the dollar collection category, but this month it has bounced back to a more expected position. The April reading now seems an anomaly, but one that could occur again. The drop was drastic in April, but there has been up-and-down movement in that category for over a year – just not usually to this extreme.

This data tracks with much of the other data releases, such as durable goods orders and capacity utilization, as well as the data from the Purchasing Managers’ Index. The best theory on this dramatic drop has been that many companies suddenly began to protect their cash flow and stalled their creditors for a while. These were the weeks of maximum unease over the impact of the tariff and trade war threats

Although these numbers all saw some improvement, the majority of the categories are still showing contraction.

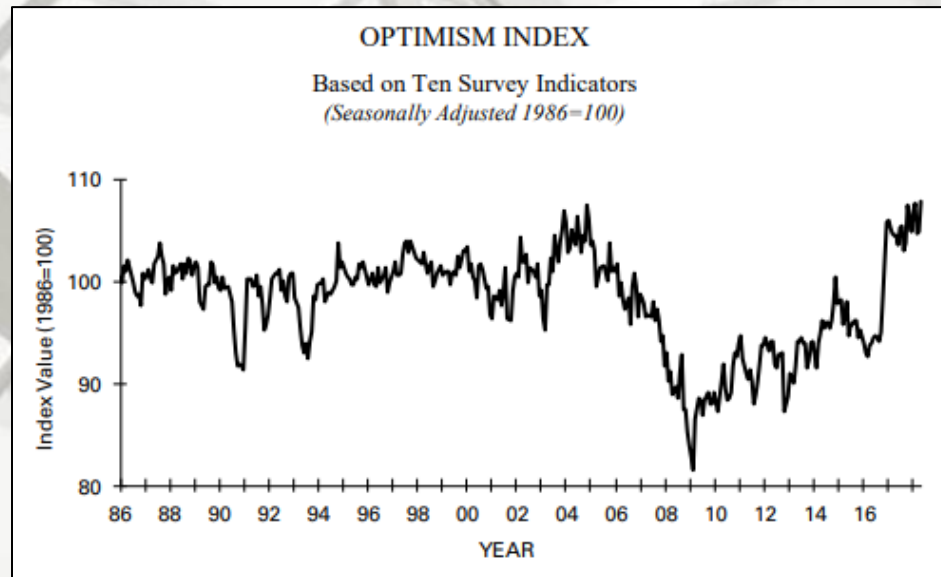
There is generally good news on the manufacturing front, which is more than a little encouraging and somewhat unexpected. The manufacturing sector overall has been riding some impressive waves up and down. The tax cuts at the start of the year really had a stimulating impact on the small- and medium-sized manufacturers because they were able to do the purchasing they had been putting off. On the other hand, the sector was left dealing with the uncertainty of tariffs on key commodities, like steel and aluminum, as well as the looming threat of trade wars with China, NAFTA nations, Europe and almost every other nation they sell to. Much of the data from manufacturing looks like the overall CMI this month.” – Dr. Chris Kuehl, Economist, NACM

Private Indicators



Combined Manufacturing and Service Sectors (seasonally adjusted)	May '17	Jun '17	Jul '17	Aug '17	Sep '17	Oct '17	Nov '17	Dec '17	Jan '18	Feb '18	Mar '18	Apr '18	May '18
Sales	60.6	66.5	62.8	62.2	67.3	66.8	68.3	59.2	63.0	66.8	64.1	65.8	69.6
New credit applications	59.3	59.8	59.7	61.2	60.5	62.8	63.7	57.3	59.8	63.3	62.7	62.2	63.8
Dollar collections	56.7	62.5	60.2	58.9	60.0	60.2	63.1	59.1	58.7	62.9	59.6	46.7	62.5
Amount of credit extended	63.6	66.8	64.1	66.7	66.3	65.5	67.8	61.8	64.3	66.4	66.2	66.1	66.8
Index of favorable factors	60.0	63.9	61.7	62.2	63.5	63.8	65.7	59.4	61.4	64.9	63.2	60.2	65.7
Rejections of credit applications	52.4	52.6	51.9	52.2	52.5	51.8	52.4	51.4	51.8	51.5	53.3	51.0	51.3
Accounts placed for collection	48.5	49.3	48.9	48.7	50.3	49.5	50.5	49.8	51.7	49.8	50.4	48.7	49.0
Disputes	47.9	50.4	48.8	49.1	51.7	47.6	48.3	49.7	49.6	49.6	47.7	48.0	48.1
Dollar amount beyond terms	45.9	50.4	48.3	47.4	50.4	47.3	47.5	49.3	47.0	49.9	47.2	46.4	49.4
Dollar amount of customer deductions	48.7	49.1	48.1	49.2	49.8	48.7	48.9	49.7	49.7	49.1	49.8	48.4	49.7
Filings for bankruptcies	52.7	53.4	53.6	55.3	56.2	55.3	55.1	55.0	55.2	55.4	55.2	53.8	56.4
Index of unfavorable factors	49.3	50.9	49.9	50.3	51.8	50.0	50.4	50.8	50.8	50.9	50.6	49.4	50.6
NACM Combined CMI	53.6	56.1	54.6	55.1	56.5	55.5	56.6	54.2	55.1	56.5	55.6	53.7	56.6

Private Indicators



May 2018 Report:

“The Small Business Optimism Index increased in May to the second highest level in the NFIB survey’s 45-year history. The index rose to 107.8, a three-point gain, with small businesses reporting high numbers in several key areas including compensation, profits, and sales trends.” – Holly Wade, NFIB

Small Business Optimism Index Soars, Continuing Historic Run, Hitting Several Records in May

“The May report hit several records:

- Compensation increases hit a 45-year high at a record net 35 percent.
- Positive earnings trends reached a survey high at a net three percent.
- Positive sales trends are at the highest level since 1995.
- Expansion plans are the most robust in survey history.

In another interesting marker, a net 19 percent of small business owners are planning price increases, the highest since 2008 and a signal of a strong economy. A net three percent reported positive profit trends, up four points and the best reading in the survey’s history. In addition, a net 15 percent reported higher nominal sales in the past three months, up an astonishing seven points and the sixth consecutive strong month for sales.” – Holly Wade, NFIB

Private Indicators

“Main Street optimism is on a stratospheric trajectory thanks to recent tax cuts and regulatory changes. For years, owners have continuously signaled that when taxes and regulations ease, earnings and employee compensation increase.” – Juanita Duggan, President and CEO, NFIB

“Small business owners are continuing an 18-month streak of unprecedented optimism which is leading to more hiring and raising wages. While they continue to face challenges in hiring qualified workers, they now have more resources to commit to attracting candidates” – William C. Dunkelberg, Chief Economist, NFIB

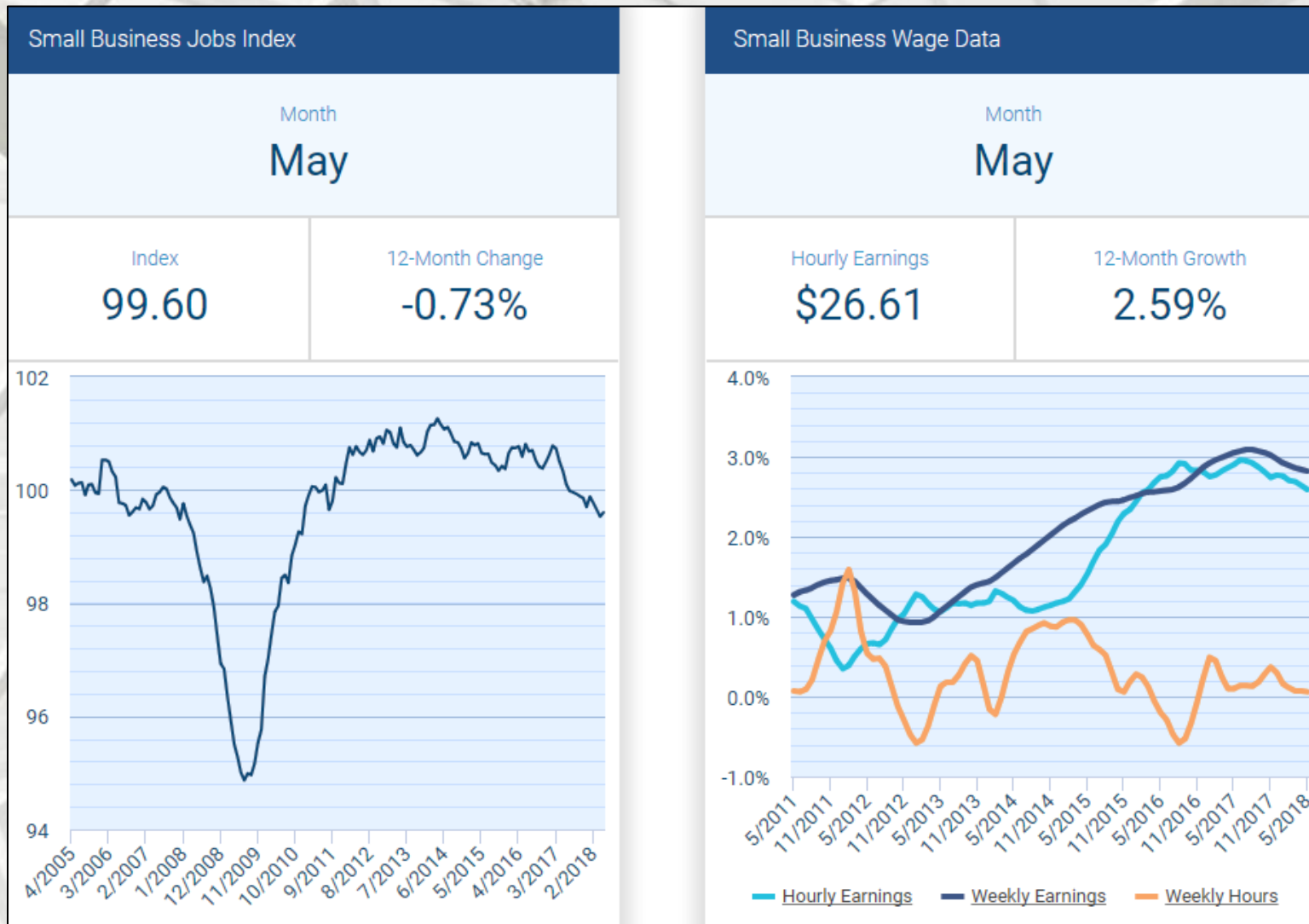
“Small business owners continue to hire with a seasonally-adjusted net 18 percent planning to create new jobs. Twenty-nine percent of owners have job openings for skilled workers, the third highest reading since 2000. Twelve percent have job openings for unskilled workers, with the strongest demand in the transportation, travel, communications, and utilities sector. To compete in the job market, 35 percent of owners reported increases in labor compensation to attract job applicants.

The percentage of owners reporting capital outlays moved up one point to 62 percent, with 47 percent reporting spending on new equipment, 24 percent acquiring vehicles, and 16 percent improving expanded facilities. Thirty percent plan capital outlays in the next few months.

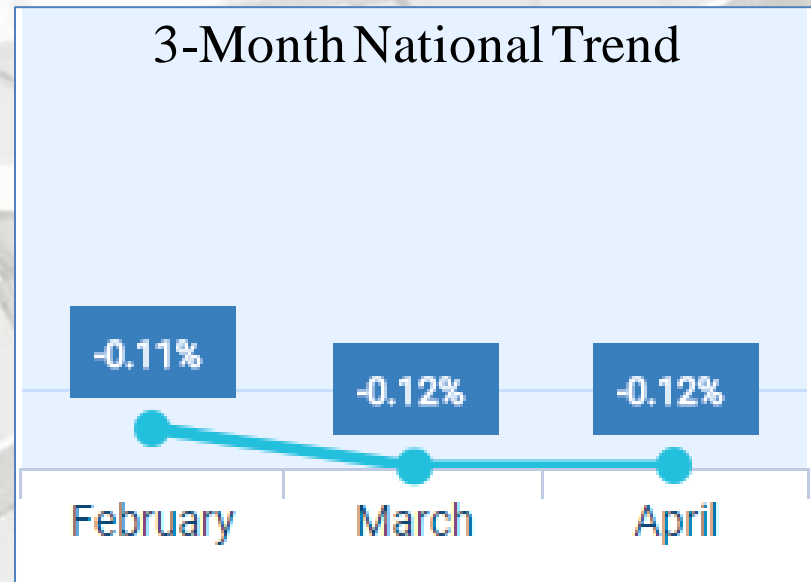
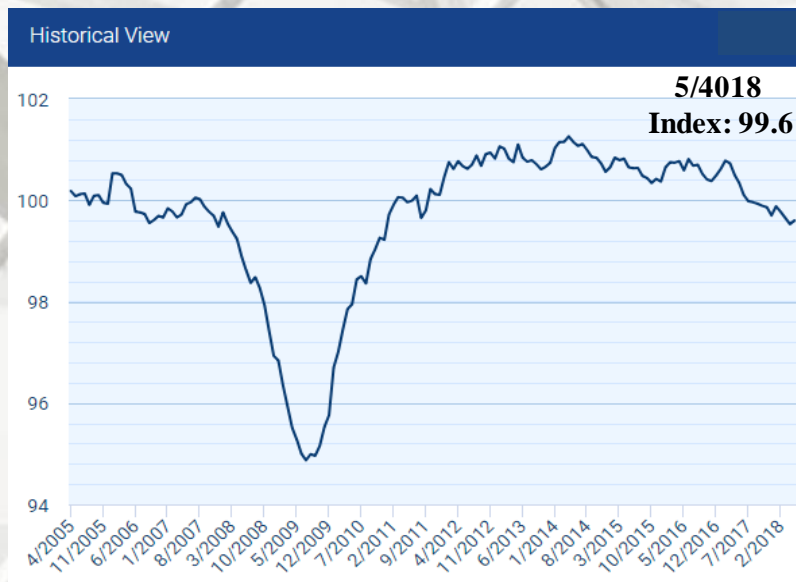
As reported in NFIB’s May jobs report, 23 percent of owners cited the difficulty of finding qualified workers as their Single Most Important Business Problem, followed by taxes at 17 percent and regulations at 13 percent. Fifty-eight percent reported hiring or trying to hire, up one point from last month but 83 percent of those reported few or no qualified workers.” – Holly Wade, NFIB

Private Indicators

The Paychex | IHS Markit Small Small Business Employment Watch



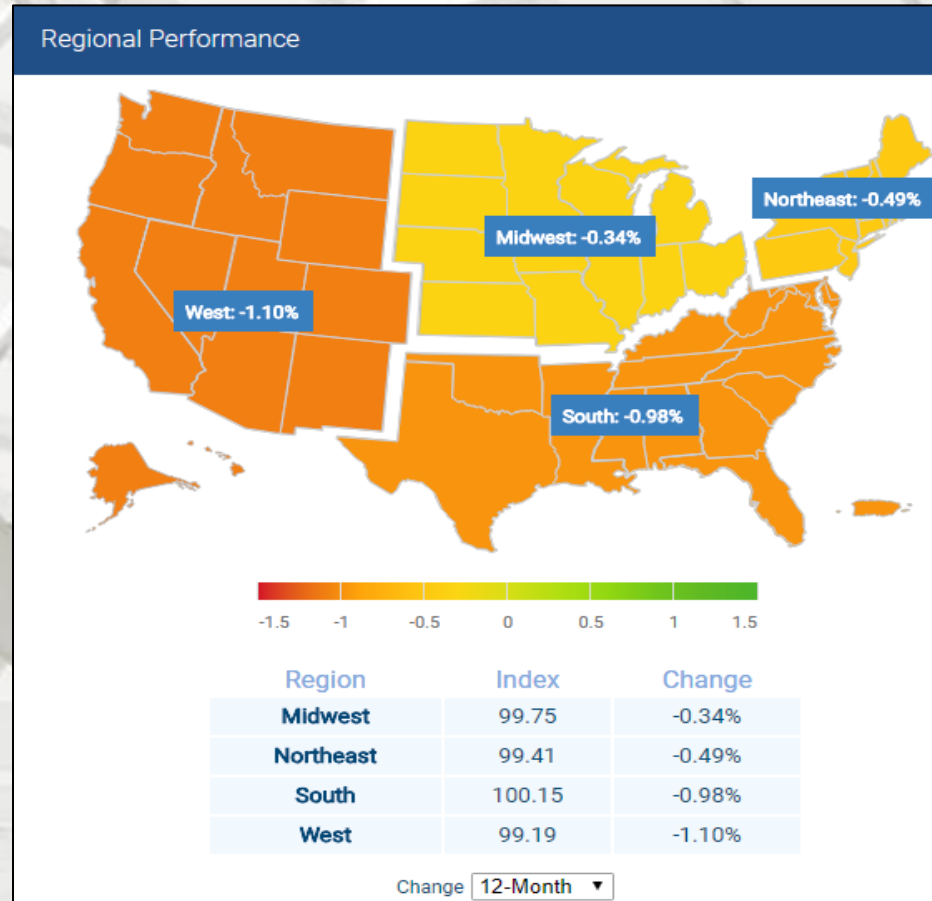
Private Indicators



The Paychex | IHS Small Business Jobs Index National Jobs Index

- “At 99.60, the Small Business Jobs Index increased slightly in May, but is down 0.73 percent year-over-year.
- Reflecting tightening labor markets, the 12-month growth rate has been negative since March 2017.” – James Diffley, Chief Regional Economist, IHS Markit

Private Indicators



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

The Paychex | IHS Small Business Jobs Index Regional Jobs Index

- “Back over 99, the West had its best one month gain in more than a year, 0.21 percent.
- The Midwest was the only region to decrease in May, declining slightly (0.07 percent) to 99.75— James Diffley, Chief Regional Economist, IHS Markit

Private Indicators

“The S&P CoreLogic Case-Shiller U.S. National Home Price NSA Index, covering all nine U.S. census divisions, reported a 6.5% annual gain in March, the same as the previous month. The 10-City Composite annual increase came in at 6.5%, up from 6.4% in the previous month. The 20-City Composite posted a 6.8% year-over-year gain, no change from the previous month. ... March 2018 shows that home prices continued their rise across the country over the last 12 months.

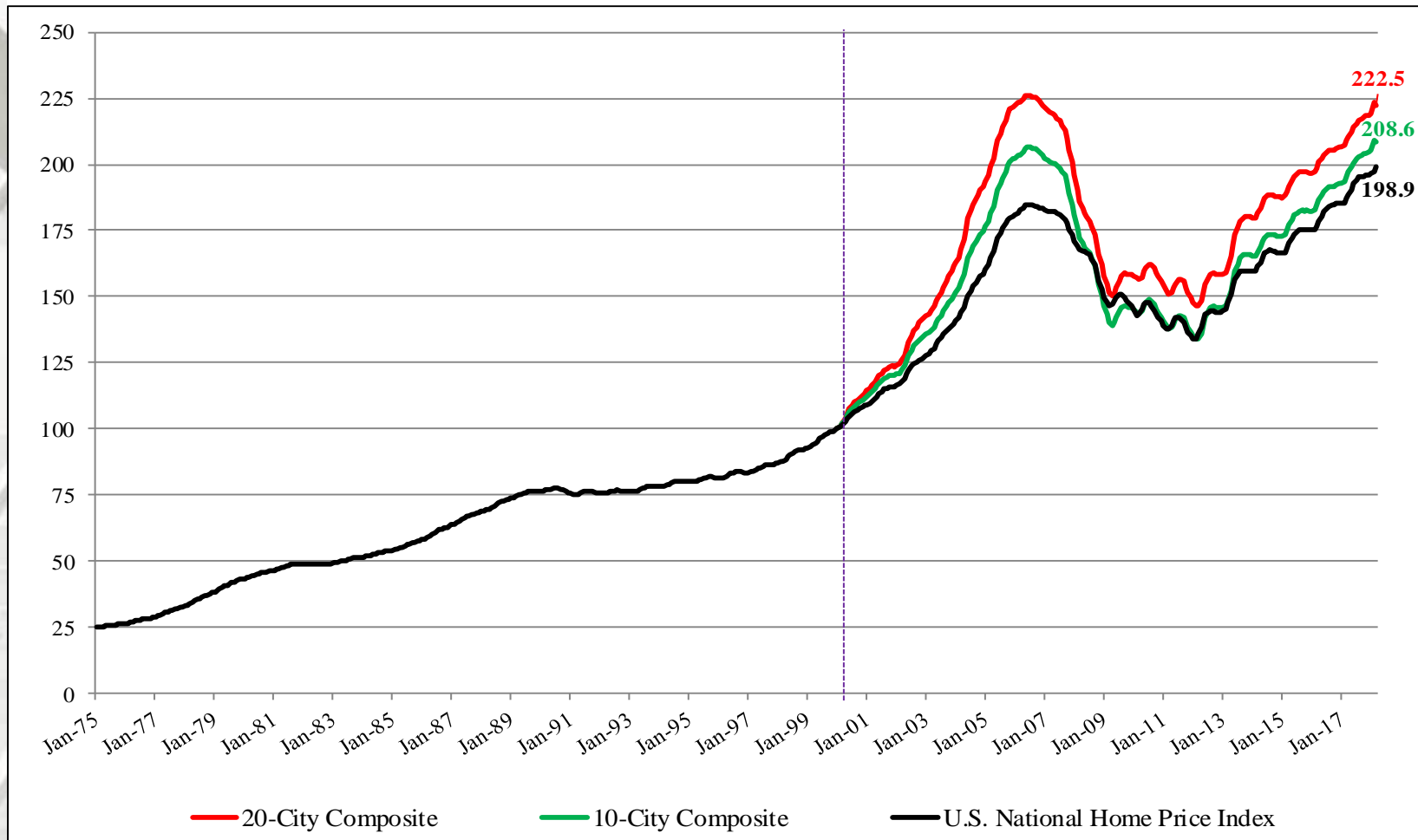
Home Prices Not Slowing Down According to S&P Corelogic Case-Shiller Index

“The home price increases continue with the National Index rising at 6.5% per year. Seattle continues to report the fastest rising prices at 13% per year, double the National Index pace. While Seattle has been the city with the largest gains for 19 months, the ranking among other cities varies. Las Vegas and San Francisco saw the second and third largest annual gains of 12.4% and 11.3%. A year ago, they ranked 10th and 16th. Any doubts that real, or inflation-adjusted, home prices are climbing rapidly are eliminated by considering Chicago; the city reported the lowest 12-month gain among all cities in the index of 2.8%, almost a percentage point ahead of the inflation rate.

Looking across various national statistics on sales of new or existing homes, permits for new construction, and financing terms, two figures that stand out are rapidly rising home prices and low inventories of existing homes for sale. Months-supply, which combines inventory levels and sales, is currently at 3.8 months, lower than the levels of the 1990s, before the housing boom and bust. Until inventories increase faster than sales, or the economy slows significantly, home prices are likely to continue rising. Compared to the price gains of the last boom in the early 2000s, things are calmer today. Gains in the National Index peaked at 14.5% in September 2005, more quickly than Seattle is rising now.” – 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 April 2000; thus, for example, a current index value of 150 translates to a 50% appreciation rate since April 2000 for a typical home located within the subject market.” – S&P CoreLogic

Economics

What the Shrinking Middle Class Means for Housing

“The widening gap in income distribution trends in the US has significant implications for home buying activity and homeownership. The shrinking size of the American middle class (those who make between two-thirds and double the median US household income*) has resulted in:

- More rental demand
- More demand for homes at the highest and lowest price points
- Less demand for median-priced homes

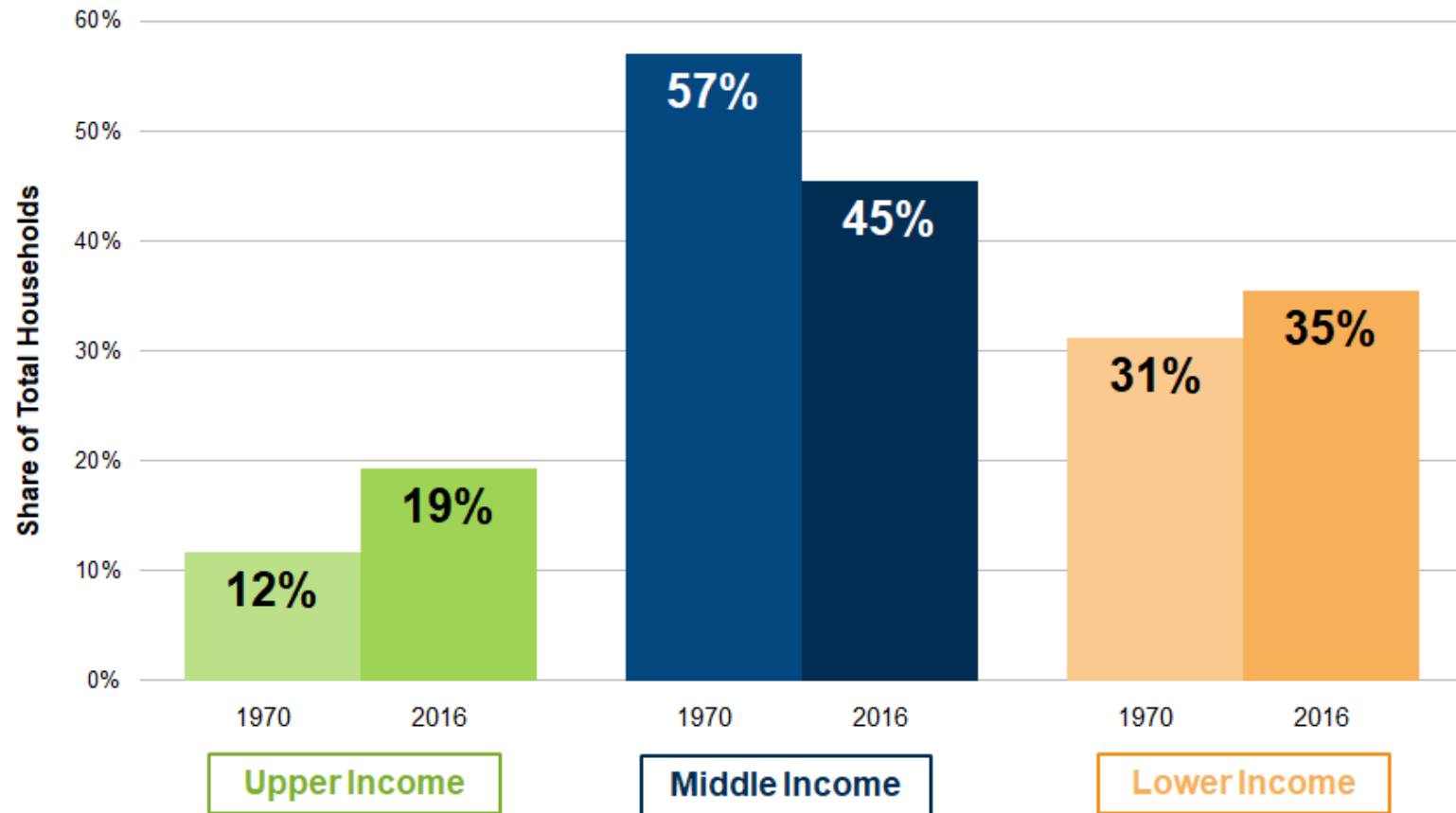
Among households headed by those under age 65, middle-income households plunged from 57% of American households in 1970 to only 45% today — a decline of 12%. (Though today’s 45% is up slightly from an average of 43% over the previous seven years.) The result has been a:

- 7% increase in the percentage of households who earn more than double the US median income, from 12% in 1970 to 19% in 2016
- 4% increase in the percentage of households who earn less than 80% of the US median income, from 31% in 1970 to 35% in 2016.” – Mikaela Sharp, Consultant; Chris Porter, Chief Demographer; and John Burns, CEO; John Burns Real Estate Consulting LLC

Economics

Share of Total Households by Income Tier, 1970 and 2016

Household Head under Age 65



Sources: John Burns Real Estate Consulting, calculations of US Census Bureau, Current Population Survey, Annual Social and Economic Supplements via IPUM-CPS.

Economics

What the Shrinking Middle Class Means for Housing

“What do these income trends mean for housing?”

- **More rental demand and downward pressure on homeownership.**
With 35% of working-age households earning less than 2/3 of the US median income, compared to 31% in 1970, a lower percentage of households are able to qualify to purchase a home, and thus more will rent.
- **More demand for lower-priced homes.**
The lowest-priced homes in the market have even more demand. In most markets, the months of supply and days on market of the lowest-priced homes are extremely low.
- **Less demand for median-priced homes.**
The shrinking middle class (down 12% in share of households and 22% in share of aggregate income) creates less demand in the middle of the market.
- **More high-end home demand.**
With a larger share of households having more than double the median income and a rising share who are buying later in life due to delays in marriage and having children, a rising percentage of households are buying a more expensive than usual first-time home. In our experience, this isn't showing up in the very highest price points, but rather for homes priced up to 50% higher than the median home price in a market. Home builders in particular have benefitted from this demand, selling higher-density new homes in great locations to first-time buyers.” – Mikaela Sharp, Consultant; Chris Porter, Chief Demographer; and John Burns, CEO; John Burns Real Estate Consulting LLC

* Defined by the Pew Research Center to be households who earn between two-thirds and twice the US median household income, including an adjustment for household size. We excluded households headed by those over the age of 65 and included only wage and salary income, which accounts for +/-90% of total household income.

Economics

School of Hard Knocks:

Why Today's College Grads Earn More, and Still Live at Home

- “The number of college-educated twenty-somethings has increased by 75 percent or more since 2005 in the coastal tech hubs of San Jose, San Francisco and Seattle, in addition to more-affordable southern markets including Houston, Orlando and Charlotte.
- San Jose, San Francisco and Seattle also have the highest shares of young college graduates working in tech. But Midwestern manufacturing cities including Detroit, Kansas City, and Columbus also have perhaps surprisingly large shares of young tech workers.
- The median young, college-educated person earns more than the median American worker, but the inflation-adjusted wage growth of recent grads has been slightly worse (-2.4 percent) since 2005.
- Despite relatively high wages, more than a quarter of young college graduates live with a parent, up from nineteen percent before the recession.

New college grads have flocked to West Coast tech hubs over the past decade-plus, attracted by abundant opportunity in the growing tech sector and the healthy salaries it provides. But as those markets rapidly become less affordable, recent data hints at a changing tide – and suggests rising housing costs nationwide are putting a squeeze on grads’ ability to strike out on their own.

As the college class of 2018 decides where to live and work, the characteristics of younger, highly-educated millennials is sparking speculation among both employers and advertisers. A Zillow analysis of Census data on young college graduates [\[1\]](#) paints a nuanced picture of where they are likely to live and work, and how that has changed over time.” – Lauren Bretz, Data Scientist, Housing Economic Research, Zillow

Economics

School of Hard Knocks:

Why Today's College Grads Earn More, and Still Live at Home

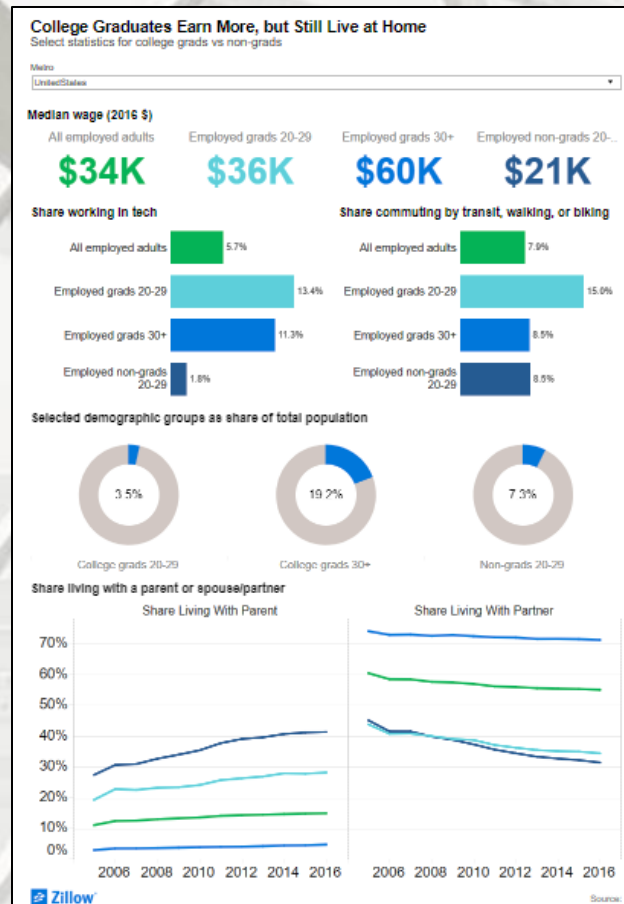
“Between 2005 and 2016, the population of 20-somethings with a college degree exploded in the main West Coast tech centers of San Jose (up 103.7%), San Francisco (+93.3%), and Seattle (+82.3%). But more-affordable markets across the Southeast and Southwest have also seen large influxes of college-educated twenty-somethings over the past decade or so, including Houston (+80.4%), Orlando (+76.3%), and Charlotte (+75.5%).

Several markets that offer the highest earnings potential for college graduates also have the largest shares working in tech. [2] In San Jose, 39.7 percent of young, college-educated workers are employed in the tech industry. In Seattle, that share is 24 percent and in San Francisco, 22.7 percent. The 10 markets with the greatest share of young college graduates working in tech also has healthy representation from the Midwest. In Detroit, 18.9 percent of recent college graduates work in tech-related jobs, likely due to the city’s burgeoning startup scene and the large number of engineers employed by local automakers. Similarly, Kansas City and Columbus employ 16.8 percent and 16.7 percent, respectively, of their young college grads in technical jobs, often in engineering roles for manufacturing and technology companies.

Young graduates’ motivations for flocking to these cities is no mystery: Among large metros, San Jose, San Francisco, and Houston offer the highest median wages for employed recent grads at \$60,000, \$54,000, and \$45,000, respectively. These numbers contrast dramatically with those of twenty-somethings without college degrees; in those same cities, grads’ less-educated peers make just \$23,000, \$25,000, and \$20,000, respectively.” – Lauren Bretz, Data Scientist, Housing Economic Research, Zillow

Economics

School of Hard Knocks: Parents as Roommates



“Despite the enormous income advantage of twenty-somethings who hold college degrees, they have not been spared the wage growth woes of the rest of the country. Nationally, the typical employed adult made 1.2 percent less in 2016 than they did in 2005; the median recent grad fared even worse, making 2.4 percent less. [3] This phenomenon is fairly widespread: in 23 of the largest 35 metros, young grads today make less than their pre-recession counterparts did.

And even as wage growth stagnates, rents and homes values nationwide keep going up – to say nothing of mounting student debt. This might help explain why more than a quarter (28.2 percent) of U.S. twenty-somethings with college degrees live with a parent, up 8.8 percentage points in a little more than a decade.” – Lauren Bretz, Data Scientist, Housing Economic Research, Zillow

Economics

Parents as Roommates

“This trend toward rooming with mom and dad holds across all 35 major metropolitan areas, but it’s especially dramatic in places that were particularly affected by the housing bubble and subsequent crash. In Riverside, Calif., for example, a majority (51.5 percent) of young grads live at home, a startling 24.3 percentage point increase from the pre-recession era. Similarly, Las Vegas saw a 25.5 percentage point jump (to 38.6 percent) in the share of recent college grads living with a parent between 2005 and 2016. In seven other major metros, at least one-third of twenty-somethings with college degrees live at home, including in the hard-hit Rust Belt cities of Detroit and Chicago.

When the housing bubble was at its height around 2005, it was much easier to get a loan, and the building boom meant there were many more homes available to choose from. For young college graduates at the time, moving out was a more manageable option. Today, tighter lending standards, high home prices and constrained inventory make breaking into the home-buying market more difficult for recent graduates.

And as if we needed to prove the point that living with one’s parents isn’t exactly sexy, the parent-as-roommate propensity dovetails neatly with an overall decline in the share of college-educated twenty-somethings who live with a romantic partner. Nationally, one-third (34.5 percent) of young graduates reported living with a partner in 2016, down 9.4 percentage points from 2005. While recent grads are more likely to live with a partner in Midwestern locales like Kansas City (45.4 percent) rather than in coastal cities such as New York (22.3 percent), the share has declined in every major metropolitan area over the past decade. This trend may be partially attributed to young people choosing to delay marriage outright, but another likely cause is that many twenty-somethings today simply cannot afford to move out of their parents’ homes.” – Lauren Bretz, Data Scientist, Housing Economic Research, Zillow

Economics

Tough Trade-Offs

“Younger, highly-educated millennials are often depicted as awash in happy hours and brunches, with gleaming apartments in the downtown cores of coastal cities, and in a few key ways these characterizations hold some truth. Young college graduates earn more than the median American worker (and dramatically more than their non-college-educated counterparts), they make up a growing share of urban populations and they are disproportionately likely to work in tech.

On the other hand, inflation-adjusted wages of recent graduates have declined since 2005, beyond the broader national stagnation, and over a quarter of twenty-something with college degrees live with their parents, a share that has only increased over time. As the cost of living continues to rise against flat wages, and as these graduates must face student loan repayment, brunches and downtown lofts may be increasingly out of reach for many.” – Lauren Bretz, Data Scientist, Housing Economic Research, Zillow

[1] Steven Ruggles, Katie Genadek, Ronald Goeken, Josiah Grover, and Matthew Sobek. *Integrated Public Use Microdata Series: Version 7.0* [dataset]. Minneapolis: University of Minnesota, 2018. <https://doi.org/10.18128/D010.V7.0>.

[2] Technology occupations are defined here to include Computer and Mathematical Occupations; Architecture and Engineering Occupations; and Life, Physical, and Social Science Occupations [as categorized by the American Community Survey](#).

[3] After adjusting for inflation (2016 USD)”

Economics

The Federal Reserve Bank of St. Louis

Accounting for Age: The Financial Health of Millennials

- “Millennials and Generation X were the youngest working generations in 2016 and 2001, respectively. How do their balance sheets compare?
- Because of fewer assets and more debt, millennial households had an average net worth of about \$90,000 in 2016 versus \$130,000 for Generation X households in 2001.
- Spending more time in school and delaying marriage and other major life events may explain why millennials have a lower net worth.

There is no shortage of news articles written on the saving and investment behaviors of millennials. What is lacking, however, is a clear picture of what these young people are doing with their money.

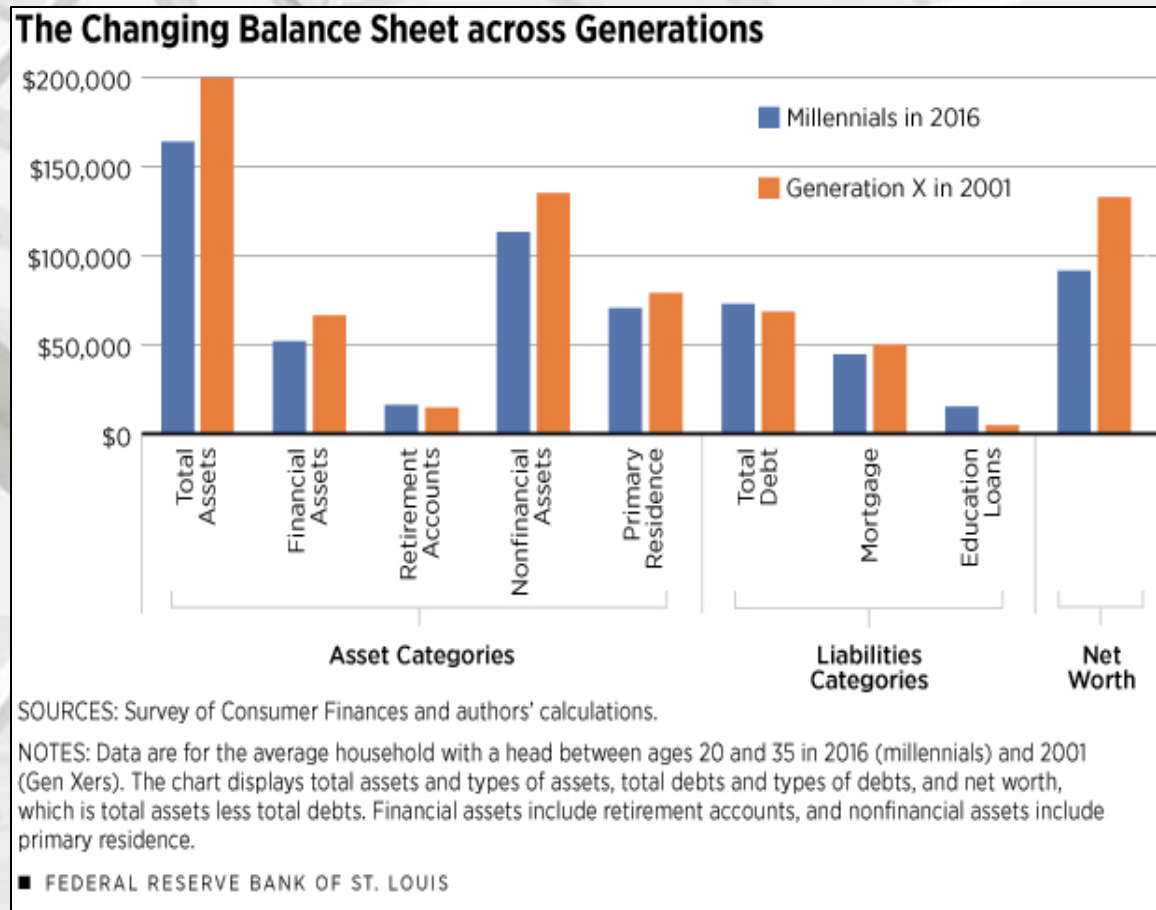
The Wall Street Journal has reported concerns about low levels of saving related to mounting student loan and credit card debt. By contrast, the personal finance website NerdWallet pointed out that some millennials are saving considerable amounts for retirement.

There are also conflicting reports on their home buying behavior. Real estate news website The Real Deal noted that millennials are not buying homes because of high student loan balances, but *Business Insider* reported that they are waiting longer to purchase their first homes and tend to purchase homes that are more expensive when they do buy.

Given that these articles fail to come to any consensus, we aim to offer a glimpse into the state of millennials’ household finances. To see how millennials fared relative to the previous young generation, Generation X, we compared millennial households’ finances in 2016 to those of Gen X back in 2001.¹ We analyzed the average asset and liability positions and their compositions using household-level data from the Survey of Consumer Finances (SCF).²

Overall, our analysis indicates that reductions in both financial assets and nonfinancial assets (e.g., a home) contributed to millennials’ having fewer overall assets than Gen Xers had in 2001. In terms of liabilities, the millennials were slightly more indebted on average, as they held a higher amount of student loans that outweighed reductions in mortgage and credit card debt.³” – YiLi Chien, Senior Economist and Paul Morris, Senior Research Associate, The Federal Reserve Bank of St. Louis

Economics



The Federal Reserve Bank of St. Louis

A Lower Net Worth

“The average value of total assets was lower among millennials than Gen Xers. As shown in Figure 1, millennials held an average of \$162,000 of assets relative to Gen X’s average of \$198,000.”⁴ – YiLi Chien, Senior Economist and Paul Morris, Senior Research Associate, The Federal Reserve Bank of St. Louis

Economics

The Federal Reserve Bank of St. Louis

A Lower Net Worth

“The reduction occurred in both financial and nonfinancial assets. The average financial asset position was around \$15,000 lower than in 2001, dropping from \$65,000 to \$50,000. The reduction of nonfinancial assets was \$22,000, dropping from \$133,000 to \$111,000.

Part of the reduction of the nonfinancial asset position occurred in housing. Millennials held an average of \$69,000 in their primary residence, while Gen Xers held an average of \$78,000. While millennials held lower levels of assets on average, they had a slight advantage in average retirement account balance, at \$15,500 relative to Gen X’s \$13,600.

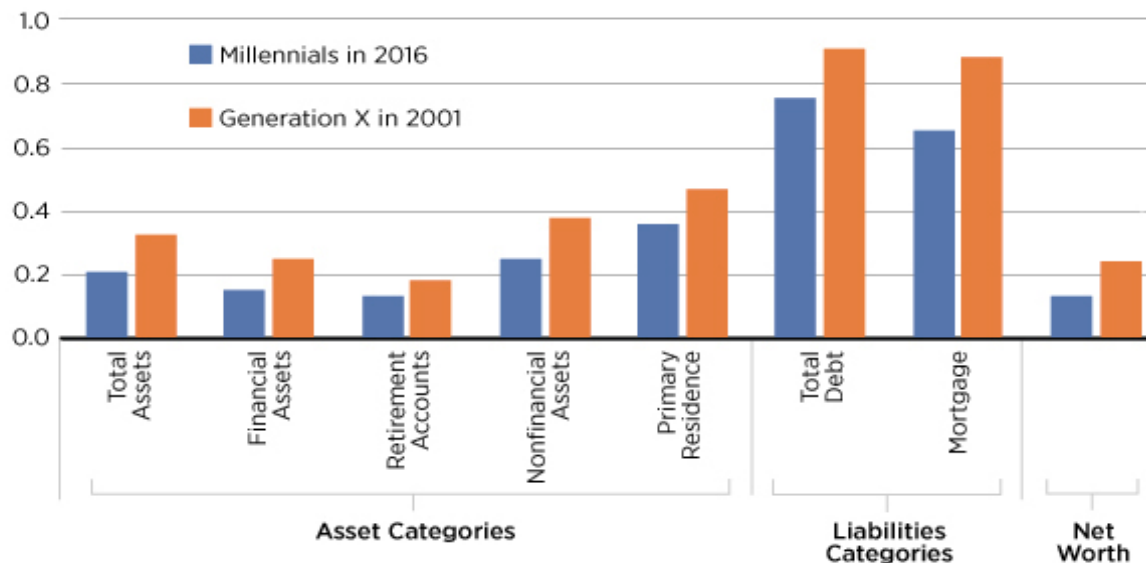
Millennials held a slightly higher level of total debt, at an average of \$72,000 compared to Gen X’s average of \$67,000. While the average levels of debt were similar across the two generations, the composition was markedly different. Average student loan levels surged from \$4,200 for Gen X to \$14,700 for millennials. Because of the smaller average value of housing assets for millennials, the level of mortgage debt was also smaller at \$43,000 compared to \$49,000 for Gen X.

We also observed that the burden of credit card debt among millennials was actually lower than that of the previous generation. The unpaid credit card balance stood at \$1,800, which was lower than Gen X’s average \$2,700 (not shown in Figure 1).

In short, we see that millennials’ average asset position was lower, while they held slightly more debt, which led to an average net worth of \$90,000 for millennials and \$130,000 for Gen X.” – YiLi Chien, Senior Economist and Paul Morris, Senior Research Associate, The Federal Reserve Bank of St. Louis

Economics

Ratio of Balance Sheet Value of Young Generations to Average Value of All Ages



SOURCES: Survey of Consumer Finances and authors' calculations.

NOTES: The chart represents the ratio of balance sheet values for the average household with a head between ages 20 and 35 in 2016 (millennials) and 2001 (Gen Xers) relative to the average value for all households that year. The data are for total assets and types of assets, total debts and mortgage debts, and net worth, which is total assets less total debts. Financial assets include retirement accounts, and nonfinancial assets include primary residence. Education loans are excluded because the average value for all households is much smaller than the average value for households headed by young adults, leading to ratios well over 1.

■ FEDERAL RESERVE BANK OF ST. LOUIS

The Federal Reserve Bank of St. Louis

A Robustness Check

“The prices of some asset categories may have changed significantly from 2001 to 2016. While the dollar values in the SCF are inflation-adjusted to 2016 dollars, this does not account for swings in the relative prices between asset categories that could make one category disproportionately more expensive in one year than another.” – YiLi Chien, Senior Economist and Paul Morris, Senior Research Associate, The Federal Reserve Bank of St. Louis

Economics

The Federal Reserve Bank of St. Louis **A Robustness Check**

“To alleviate this concern, we performed a simple robustness check. For each asset category, we computed the ratio of the average value for each generation to the average of all households in those respective years. We report the results in Figure 2.

These ratios are best interpreted as a percentage of the average value for all households. For example, a ratio of 0.2 indicates that the generation in question held assets or liabilities equal to 20 percent of the average value across all households in that year.

The orange bar in the total assets category of Figure 2 represents the ratio of the average total assets of Gen X to those of all households in 2001, while the blue bar represents a similar ratio for millennials in 2016.

In this relative measure, the millennials had a significantly smaller asset ratio (21 percent) than Gen Xers (32 percent). The financial assets, nonfinancial assets and housing ratios for millennials each dropped about 10 percentage points, and the retirement account ratio fell by about 5 percentage points.

By contrast, the average debt ratio was lower for millennials. Compared to those of Generation X, the total debt and mortgage ratios were down around 15 and 23 percentage points, respectively. Yet, these lower debt ratios were outweighed by lower asset ratios, thus pushing millennials’ net worth ratio down to 13 percent from 24 percent for Generation X.⁵” – YiLi Chien, Senior Economist and Paul Morris, Senior Research Associate, The Federal Reserve Bank of St. Louis

Economics

The Federal Reserve Bank of St. Louis

Changing Priorities

“The net worth of the youngest working generation fell since 2001, as they held fewer assets and more debt on average.

However, this is not necessarily an indictment of millennials’ spending and saving habits. Society is in a state of transition as the life cycle continues to extend. People have been living longer and retiring later, and with that has come a multitude of other demographic shifts.

Relative to previous generations, more millennials have opted to delay entering the labor market, with many deciding to pursue higher levels of education. The labor force participation rate for 20- to 24-year-olds dropped to 70.5 percent in 2016 from 77.1 percent in 2001. Over the same period, the share of those ages 25 to 29 with four years of college or more increased from 28.4 percent to 36.1 percent. In addition, a higher percentage of young adults are living with their parents, and the median age at first marriage has been increasing for both men and women.⁶

We observe that millennials have been going to school longer and delaying major life events. Thus, it makes sense that they hold lower levels of assets. They have had less time in the labor force, and a smaller share of them have moved out on their own, which contributes to the lower levels of residential assets. However, they have shown a higher propensity to save for retirement and to avoid credit card debt.

While millennials hold higher levels of student loans, education is often an investment that improves productivity and future earnings. Given these considerations, the concerns regarding millennials’ spending and saving habits may be at least partially eased, as they will likely have more time in the labor force to accrue assets and pay off their debts.” – YiLi Chien, Senior Economist and Paul Morris, Senior Research Associate, The Federal Reserve Bank of St. Louis

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Endnotes

We define millennial households as those whose heads are between ages 20 and 35 as of 2016, and we define Generation X households as those whose heads were in the same age range back in 2001. While there is no clear demarcation of generational boundaries, our definitions roughly match those popularly referenced.

The survey provides cross-sectional data on U.S. households' demographic characteristics, incomes, balance sheets and pensions every three years.

In addition to average asset and liability positions, we also compared median asset and liability positions across generations. The results are qualitatively similar to the averages. However, the median levels of housing assets, retirement account balances and mortgage debt were zero, making comparisons infeasible. For example, more than half of millennials had no housing assets.

The dollar numbers reported in the SCF data are inflation-adjusted to 2016 dollars and therefore can be compared directly. In this article, dollar amounts of \$20,000 and greater have been rounded to the nearest \$1,000; those lower than \$20,000 have been rounded to the nearest \$100.

As always, we cannot rule out that other underlying factors could possibly bias the results shown in both Figures 1 and 2. However, we see similar patterns across both figures, implying a consistent story that millennials hold lower levels of assets and have lower net worth than Generation X on average.

The labor force participation rate data are from the Bureau of Labor Statistics, and the demographic data are from the Census Bureau.

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The Federal Reserve Bank of New York

Household Debt Continues Its Increase in the First Quarter of 2018

“The CMD’s latest [*Quarterly Report on Household Debt and Credit*](#) reveals that total household debt reached a new peak in the first quarter of 2018, rising \$63 billion to reach \$13.21 trillion. It was the 15th consecutive quarter with an increase, and the total is now \$536 billion higher than the previous peak of \$12.68 trillion, from the third quarter of 2008. Further, overall household debt is now 18.5% above the post-financial-crisis trough reached during the second quarter of 2013. Balances climbed 0.6 percent on mortgages, 0.7 percent on auto loans, and 2.1 percent on student loans this past quarter, while they declined by 2.3 percent on credit cards. The Report is based on data from the New York Fed's Consumer Credit Panel, a nationally representative sample of individual- and household-level debt and credit records drawn from anonymized Equifax credit data..

Aggregate household debt balances increased in the first quarter of 2018, for the fifteenth consecutive quarter, and are now \$526 billion higher than the previous (2008:Q3) peak of \$12.68 trillion. As of March 31, 2018, total household indebtedness was \$13.21 trillion, a \$63 billion (0.5 percent) increase from the fourth quarter of 2017. Overall household debt is now 18.5 percent above the 2013:Q2 trough.

Mortgage balances, the largest component of household debt, increased somewhat during the first quarter. Mortgage balances shown on consumer credit reports on March 31 stood at \$8.94 trillion, an increase of \$57 billion from the fourth quarter of 2017.

Balances on home equity lines of credit (HELOC), in stark contrast to mortgage balances, have been continuously declining; in the first quarter, they fell by \$8 billion and now stand at \$436 billion.” – The Federal Reserve Bank of New York

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The Federal Reserve Bank of New York

Housing Debt

- While mortgage balances increased modestly, originations declined slightly, to \$428 billion, versus \$452 billion in the fourth quarter.
- Mortgage delinquencies continued to improve, with 1.2% of mortgage balances 90 or more days delinquent in the first quarter. The share of mortgages in early delinquency that “cured” by transitioning to current improved to 40.5%, from 35.9% in the fourth quarter.

Non-Housing Debt

- Outstanding student loan debt grew by 2.1%, to \$1.41 trillion, from \$1.38 trillion at year-end 2017.
- Auto loan balances continued their six-year upward trend, increasing by \$8 billion in the quarter, to \$1.23 trillion.
- Credit card balances declined by \$19 billion, or 2.3%, which is consistent with the seasonal pattern.” – The Federal Reserve Bank of New York

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The Federal Reserve Bank of New York

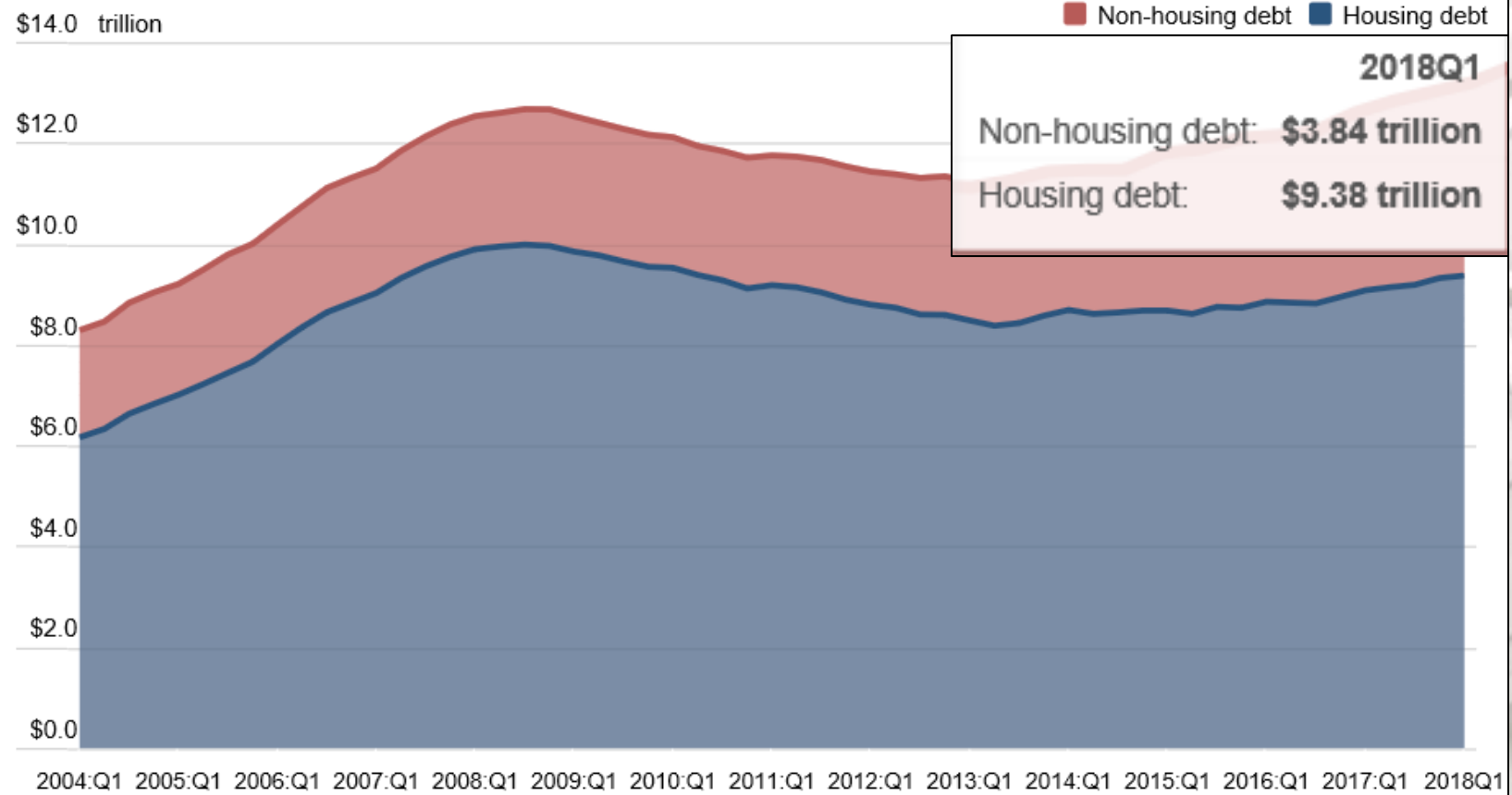
“Delinquencies, Bankruptcies, and Credit Inquiries

- Credit card delinquency rates rose by about half a percentage point, with 8% of balances 90 or more days delinquent as of March 31.
- For student loans, 10.7% of aggregate debt was 90 or more days delinquent or in default at the end of the first quarter, a decline of three-tenths of a percentage point from the previous quarter.
- Auto loan delinquency rates edged higher, with 4.3% of auto loan balances 90 or more days delinquent as of March 31, versus 4.1% at year-end.
- About 192,000 consumers had a bankruptcy notation added to their credit reports in the first quarter, the lowest observed in the 19 year history of the data.

The number of credit inquiries within the past six months – an indicator of consumer credit demand – declined in the first quarter to 146 million, the lowest level seen in the history of the data.” – The Federal Reserve Bank of New York

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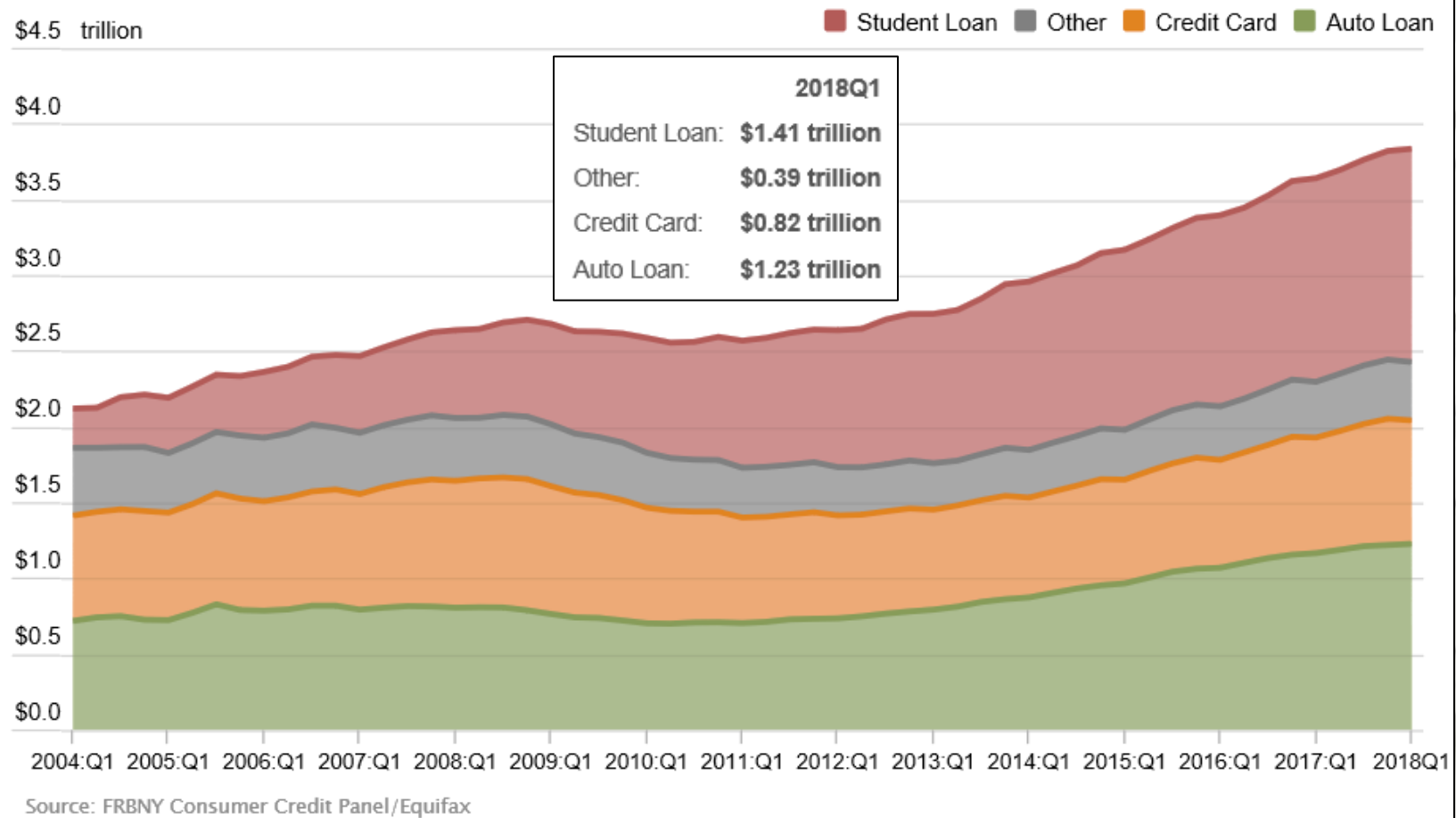
Total Debt Balance



Source: FRBNY Consumer Credit Panel/Equifax

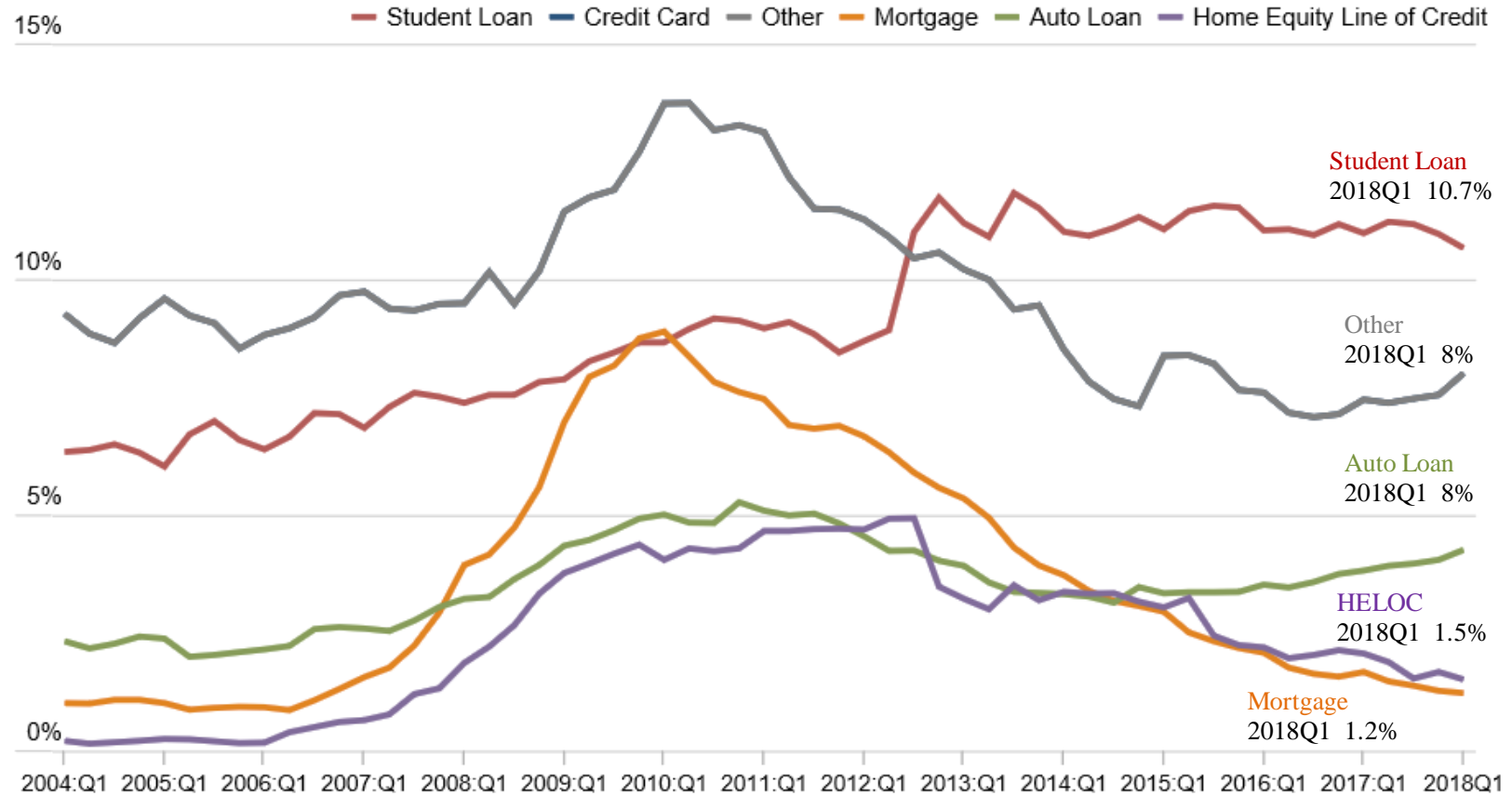
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Non-Housing Debt Balance



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Percent of Balance 90+ Days Delinquent



Source: FRBNY Consumer Credit Panel/Equifax

The Federal Reserve Bank of New York

“Aggregate delinquency rates continued to improve in the first quarter of 2018. As of March 31, 4.6 percent of outstanding debt was in some stage of delinquency. Of the \$605 billion of debt that is delinquent, \$407 billion is seriously delinquent (at least 90 days late or “severely derogatory”). The flow into 90+ days delinquency for credit card balances has been increasing notably since the middle of 2016, while the flow into 90+ days delinquency for auto loan balances has been slowly increasing since 2012.” – The Federal Reserve Bank of New York

Source: <https://www.newyorkfed.org/microeconomics/hhdc/>; 5/17/18

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Flashing Red

Percentage of newly delinquent auto loans per 100,000 initial jobless claims:



Source: Moody's

A Worrying Turn Ahead for Auto Loans

Auto loan delinquencies are too high considering the strong economy

“... But in the two areas where lenders have been most aggressive over the past few years – [credit cards](#) and [auto loans](#) – delinquencies have continued to mount. Credit-card loans that are more than 90 days delinquent rose to 8% of total balances in the first quarter from 7.5% a year earlier, according to Fed data. The portion of delinquent auto loans rose to 4.3% from 3.8%. ...” – Aaron Back, Heard on the Street Columnist, *The Wall Street Journal*

Economics

ALICE: A NEW LENS FOR FINANCIAL HARDSHIP 40% in U.S. can't afford middle-class basics

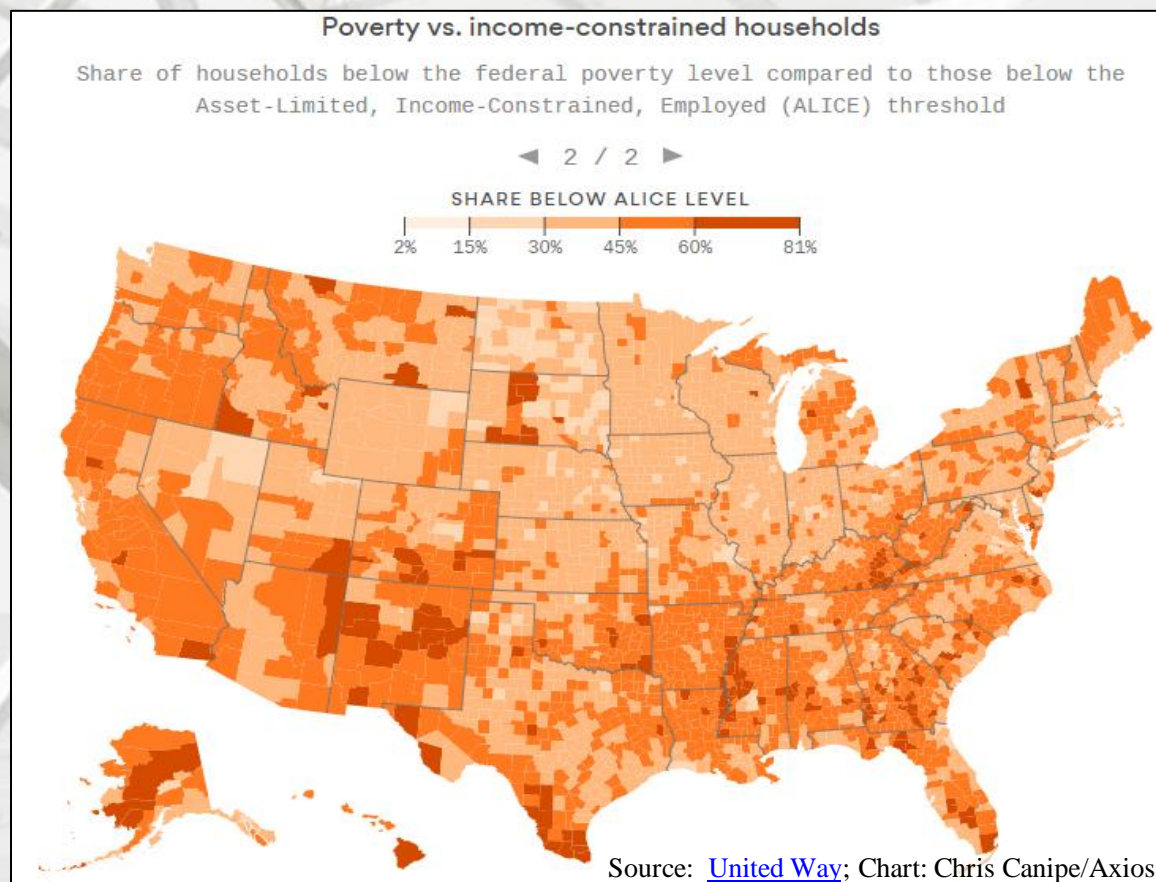
“At a time of rock-bottom joblessness, high corporate profits and a booming stock market, more than 40% of U.S. households cannot pay the basics of a middle-class lifestyle – rent, transportation, child care and a cellphone, according to a new study.

Quick take: The study, conducted by United Way, found a wide band of working U.S. households that live above the official poverty line, but below the cost of paying ordinary expenses. Based on 2016 data, there were 34.7 million households in that group – double the 16.1 million that are in actual poverty, project director Stephanie Hoopes tells Axios.

Why it matters: For two years, U.S. politics has been dominated by the anger and resentment of a self-identified “forgotten” class, some left behind economically and others [threatened by changes](#) to their way of life.

- **The United Way study**, suggests that the *economically forgotten* are a far bigger group than many studies assume – and, according to Hoopes, appear to be growing larger despite the improving economy.
- **The study dubs that middle group** between poverty and the middle class “ALICE” families, for Asset-limited, Income-constrained, Employed. (The map on next slide, by Axios' Chris Canipe, depicts that state-by-state population in dark brown.)
- **These are households with adults** who are working but earning too little – 66% of Americans earn less than \$20 an hour, or about \$40,000 a year if they are working full time.”” – Steve LeVine and Chris Canipe, Axios

Economics



40% in U.S. can't afford middle-class basics

“When you add them together with the people living in poverty, you get 51 million households. “It’s a magnitude of financial hardship that we haven’t been able to capture until now,” Hoopes said.

By the numbers: Using 2016 data collected from the states, the study found that North Dakota has the smallest population of combined poor and ALICE families, at 32% of its households. The largest is 49%, in California, Hawaii and New Mexico. “49% is shocking. 32% is also shocking,” Hoopes said.” – Steve LeVine and Chris Canipe, Axios

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