The Virginia Tech – U.S. Forest Service June 2018 Housing Commentary: Section II





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Table of Contents

Slide 3: Federal Reserve System Indicators

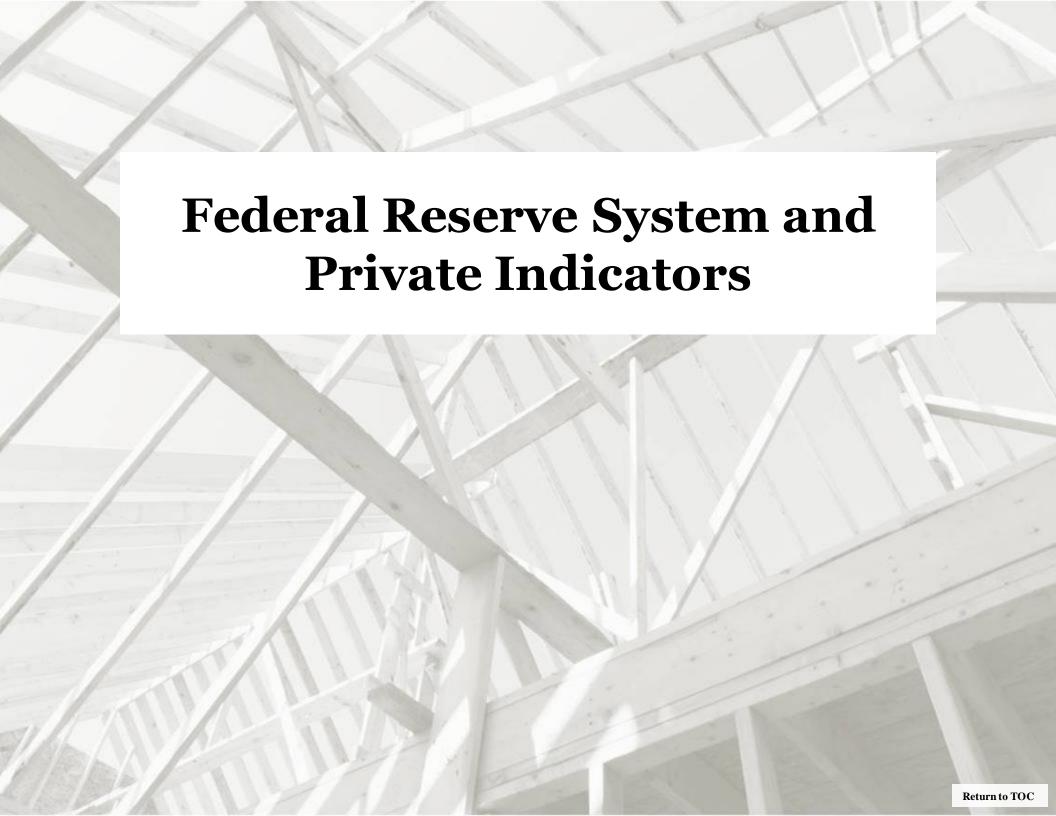
Slide 53: Private Indicators

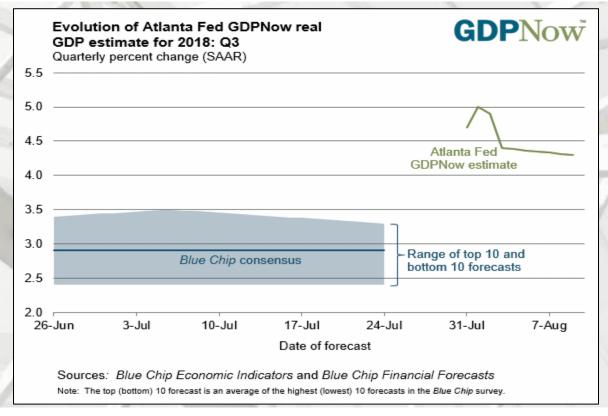
Slide 101: Demographics

Slide 113: Economics

Slide 123: Virginia Tech Disclaimer

Slide 124: <u>USDA Disclaimer</u>





Atlanta Fed GDPNowTM

Latest forecast: 4.3 percent — August 9, 2018

"The GDPNow model estimate for real GDP growth (seasonally adjusted annual rate) in the third quarter of 2018 is 4.3 percent on August 9, down from 4.4 percent on August 3. After this morning's wholesale trade report from the U.S. Census Bureau and this morning's Producer Price Index release from the U.S. Bureau of Labor Statistics, the nowcast of the contribution of inventory investment to third-quarter real GDP growth declined from 1.95 percentage points to 1.91 percentage points." – Pat Higgins, Economist, Federal Reserve Bank of Atlanta

The Federal Reserve Bank of Boston: New England Economic Indicators

Economic activity continued to improve in 2018

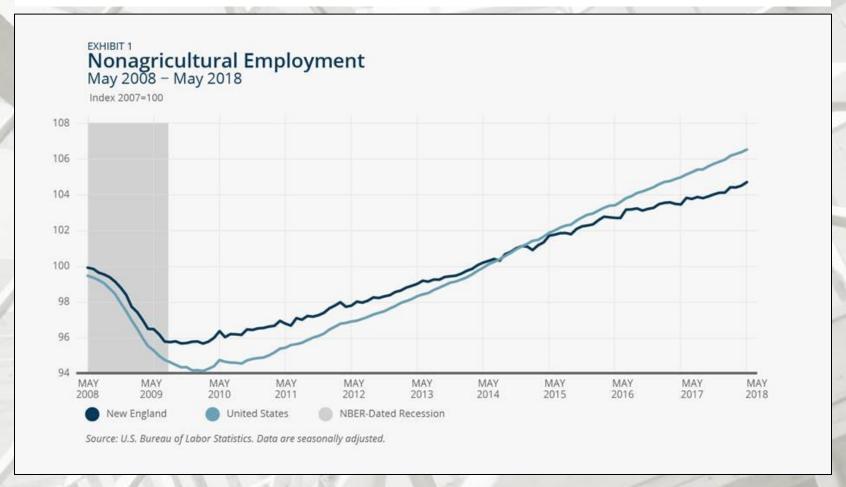
"In the early months of 2018, New England and the United States continued to see improvements in economic indicators. Through May 2018, employment increased and unemployment rates fell relative to one year prior. Through the first quarter of 2018, home prices continued to climb both regionally and nationally compared to the same period in 2017.

Employment grows in New England at a slightly slower pace than the nation New England continued to post job gains through May 2018. Between Payroll employment increased 1.6 percent nationally and 1.3 percent regionally between May 2017 and May 2018 (Exhibit 1). Although employment increased over this period in each of the New England states, the job growth rates varied and were all below the national growth rate. Within New England, New Hampshire posted the strongest year-over-year job gains through May 2018, increasing 1.9 percent (Exhibit 2). Year-over-year payroll employment was weakest in Vermont, growing by 0.4 percent.

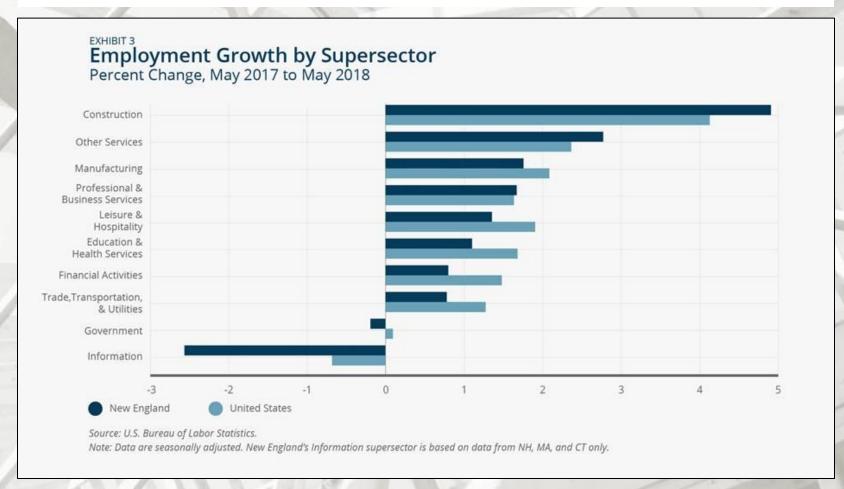
Construction job gains in New England outpace national growth

In May 2018, the construction supersector led the region in employment growth, with year-over-year gains (4.9 percent) that outpaced national employment growth in construction (4.1 percent). Similarly, regional job growth in the professional & business services supersector and the leisure & hospitality supersector both exceeded national job growth in those supersectors. Over the same time period, government employment shrank in the region by 0.2 percent while nationally, government jobs grew 0.1 percent. Manufacturing employment increased in five of the six New England states; Maine (2.9 percent), Connecticut (2.6 percent), Rhode Island (2.5 percent), and New Hampshire (2.5 percent) all experienced manufacturing job growth above the national rate for that supersector (2.0 percent). Employment in the information supersector dropped 2.6 percent year-over-year in New England and fell 0.7 percent nationally." – Riley Sullivan, Senior Policy Analyst, The Federal Reserve Bank of Boston

The Federal Reserve Bank of Boston: New England Economic Indicators



The Federal Reserve Bank of Boston: New England Economic Indicators



The Federal Reserve Bank of Chicago: Midwest Economy Index

Index Points to Slower Midwest Economic Growth in June

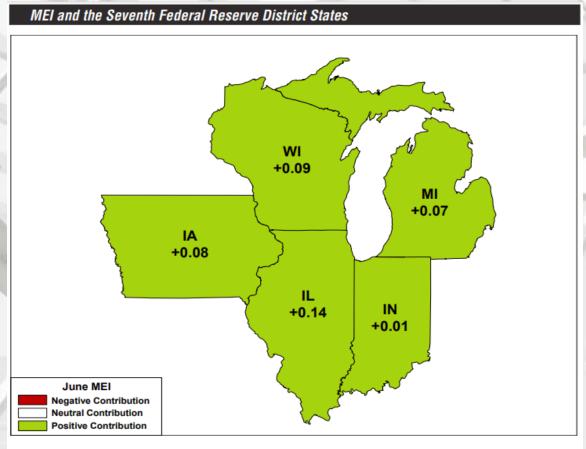
The manufacturing sector's contribution to the MEI decreased to +0.35 in June from +0.44 in May. The pace of manufacturing activity decreased in Indiana, Iowa, Michigan, and Wisconsin, but increased in Illinois. Manufacturing's contribution to the relative MEI rose to +0.24 in June from +0.01 in May.

The construction and mining sector's contribution to the MEI moved down to +0.01 in June from +0.08 in May. The pace of construction and mining activity was slower in Indiana, Michigan, and Wisconsin, but unchanged in Illinois and Iowa. Construction and mining made a contribution of +0.02 to the relative MEI in June, down slightly from +0.06 in May

The service sector contributed -0.07 to the MEI in June, down slightly from -0.04 in May. The pace of service sector activity was down in Michigan and Wisconsin, but up in Iowa and unchanged in Illinois and Indiana. The service sector's contribution to the relative MEI increased to -0.30 in June from -0.44 in May.

The contribution from consumer spending indicators to the MEI was unchanged at +0.10 in June. Consumer spending indicators were, on balance, up in Illinois and Iowa, but down in Wisconsin and steady in Indiana and Michigan. Consumer spending made a contribution of +0.04 to the relative MEI in June, up slightly from a neutral contribution in May." – Laura LaBarbera, Media Relations, The Federal Reserve Bank of Chicago

Chicago Fed: Midwest Economy Index



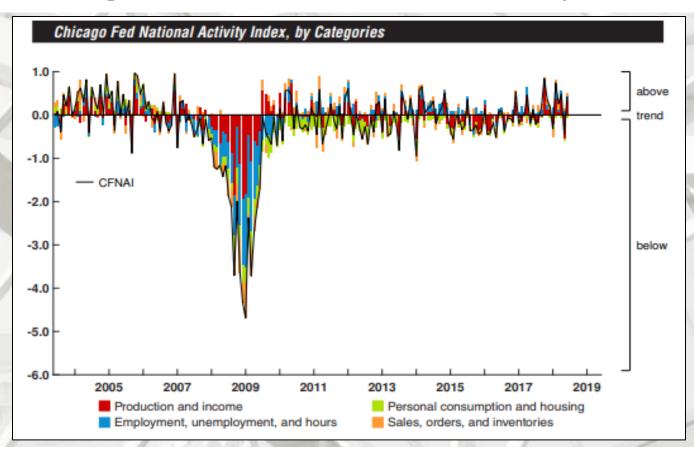
Note: The map's shading summarizes the most recent contribution to growth in Midwest economic activity from each of the five states in the Seventh Federal Reserve District (Illinois, Indiana, Iowa, Michigan, and Wisconsin).

Index Points to Slower Midwest Economic Growth in June

"The Midwest Economy Index (MEI) decreased to +0.40 in June from +0.58 in May. Contributions to the June MEI from three of the four broad sectors of nonfarm business activity and four of the five Seventh Federal Reserve District states decreased from May. The relative MEI rose to +0.01 in June from -0.37 in May. Contributions to the June relative MEI from three of the four sectors and all five states increased from May." – Laura LaBarbera, Media Relations, The Federal Reserve Bank of Chicago

Return to TOC

Chicago Fed: National Activity Index



Index Points to a Rebound in Economic Growth in June

"Led by improvements in production-related indicators, the Chicago Fed National Activity Index (CFNAI) rebounded to +0.43 in June from -0.45 in May. Two of the four broad categories of indicators that make up the index increased from May, and three of the four categories made positive contributions to the index in June. The index's three-month moving average, CFNAI-MA3, edged up to +0.16 in June from +0.10 in May." – Laura LaBarbera, Media Relations, The Federal Reserve Bank of Chicago

Chicago Fed: National Activity Index

Index Points to a Rebound in Economic Growth in June

"The CFNAI Diffusion Index, which is also a three-month moving average, was unchanged at +0.15 in June. Forty-five of the 85 individual indicators made positive contributions to the CFNAI in June, while 40 made negative contributions. Forty-five indicators improved from May to June, while 40 indicators deteriorated. Of the indicators that improved, 12 made negative contributions.

Production-related indicators contributed +0.36 to the CFNAI in June, up from -0.56 in May. Manufacturing industrial production increased 0.8 percent in June after declining 1.0 percent in May. The sales, orders, and inventories category made a contribution of +0.06 to the CFNAI in June, up slightly from +0.03 in May.

Employment-related indicators contributed +0.08 to the CFNAI in June, down slightly from +0.11 in May. Nonfarm payrolls increased by 213,000 in June after rising by 244,000 in May. The contribution of the personal consumption and housing category to the CFNAI ticked down to -0.06 in June from -0.04 in May. Housing starts decreased to 1,173,000 annualized units in June from 1,337,000 in May, and housing permits moved down to 1,273,000 annualized units in June from 1,301,000 in the previous month." – Laura LaBarbera, Media Relations, The Federal Reserve Bank of Chicago

Cleveland Fed: Fourth District Beige Book

The Federal Reserve Bank of Cleveland Summary of Economic Activity

"Business activity in the Fourth District grew moderately during the survey period. Demand was strong in many sectors, but hiring continued at about the same pace as in the previous survey period as a dearth of qualified workers constrained hiring. Wages rose moderately, and increases were in line with recent trends. Upward pressure on input costs was strong, notably for fuel and metals. Contacts widely attributed the cost increases to import tariffs. However, final selling prices rose only moderately. Firms raised their prices to cover, at least partially, their increased raw materials and transportation costs. Otherwise, businesses were cautious about raising their selling prices. Consumer demand, including for autos, was stable to slightly higher. Manufacturing capacity utilization rose to meet strong demand, but a number of producers remarked that they were struggling to keep up with orders. Freight volumes trended higher. Construction activity remained strong.

Manufacturing

The strong manufacturing demand seen earlier in the year showed no signs of letting up in the current survey period. Contacts mostly attributed the momentum to strong US economic growth that broadly supported demand in end markets. One pump and motor manufacturer noted increased demand from customers in primary metals manufacturing and extractive industries. An industrial metals producer cited strong demand from the construction sector. Some manufacturers noted that capacity utilization had risen to meet demand and that a few contacts mentioned they struggled to keep up with orders. Contacts remarked that concerns about future trade- and inflation-related price increases had prompted some customers to accelerate purchases. Most manufacturers expected that continued economic growth would lead to stronger customer demand in the near term. However, one auto-related manufacturer expected import tariffs to lead to weaker sales because of the consequent increase in prices." – The Federal Reserve Bank of Cleveland

The Federal Reserve Bank of Cleveland Employment and Wages

"District businesses added workers at a pace that was moderate and similar to that of the previous survey period. Most firms reported strong customer demand and optimism about the economy's near-term prospects as supporting their hiring decisions. Very few firms reduced headcount, and a sizable share reported creating new positions. Hiring was strongest among construction firms thanks to high project volumes. Also, strong demand for technology services enabled professional services to add workers at a healthy clip. Contacts reported the dearth of qualified workers constrained hiring across an array of occupations. The problem was most often highlighted by manufacturing, construction, and transportation companies. One steel contact noted the company had significantly increased overtime hours to cope with the worker challenge. A nonresidential builder noticed that worker turnover was somewhat higher than normal. Despite tightness in the overall job market, wage pressures remained consistent with recent trends in the District. In general, employers raised wages moderately as part of cost-of-living increases or annual merit raises or to fulfill union contracts.

Prices

Upward pressure on input costs remained strong, especially for fuel and metals. Manufacturers and builders commented widely that import tariffs were lifting steel and aluminum prices. In some cases, manufacturers noted a rush to purchase metals in anticipation of additional price increases. To a lesser extent, construction contacts also noted lumber price increases. Aside from the manufacturing, construction, and transportation sectors, contacts noted moderate cost increases that were consistent with recent trends. Retailers pointed out that prices for cotton and raw food ingredients rose for their suppliers. Final selling prices rose moderately, with little change compared with those of the previous survey period. Overall, firms managed to raise their prices to compensate, at least partially, for rising raw materials and transportation costs. Aside from that, firms either held their prices or cautiously nudged them higher." – The Federal Reserve Bank of Cleveland

The Federal Reserve Bank of Cleveland

Consumer Spending

"Retail demand improved moderately, extending a streak that started in the final months of 2017. In addition to a seasonal boost, food retailers and clothing retailers noted that continued strong consumer confidence lifted sales. A few contacts noted slight improvement in sales of discretionary items and higher quality products. Retail sales in the Fourth District were reported to be mostly in line with activity in the rest of the country. Inventories and profits were stable.

Auto demand and vehicle financing conditions held steady. One auto dealer noted that leasing activity had weakened as manufacturers reduced their support. All contacts reported that sales of passenger vehicles lagged those of crossovers, SUVs, and trucks. One contact speculated that the market share for such vehicles would increase because of increased vehicle fuel economy, older customers' need for comfort, and a younger generation of customers starting families. Expectations for vehicle sales in the near-term were mixed. One dealer was concerned that price increases and higher interest rates could sap demand. Another dealer was optimistic that activity in the energy industry could lift sales in the region.

Financial Services

Most banking contacts reported that steady economic growth had kept loan demand stable. Deposits fell during the last two months because of seasonal changes following the tax-filing season. Some bankers noted that strong revenue growth combined with higher borrowing costs drove some customers to fund capital expenditures and expansions with cash rather than with credit. Most contacts reported that delinquency rates remained steady, although rising interest rates were cited as a risk to the outlook." – The Federal Reserve Bank of Cleveland

The Federal Reserve Bank of Cleveland

Nonfinancial Services

"Nonfinancial services firms reported strong demand thanks to generally favorable economic conditions. Business advisory firms and software developers reported strong activity. In addition to tax savings and ongoing strong confidence, contacts remarked that their services were in demand because businesses were modernizing their IT infrastructures and attempting to understand the implications of worker scarcities. Capital investments held steady, although one financial consultant remarked that Chinese capital controls had caused an expected investment to fall through. Transportation firms reported continued increases in freight volumes. Railroad contacts attributed some of their volume growth to ongoing capacity constraints in the trucking industry. One trucking contact noted an increase in demand for home deliveries.

Real Estate and Construction

Demand for new homes grew modestly in the current survey period. Homebuilders noted that rising interest rates and concern about rising materials prices motivated some customers to move their purchases forward. Contacts widely expected stable demand in the coming quarter. Real estate agents noted demand for Section 8 vouchers was stable. However, reports of first-time buyers' home demand were mixed. Sales of houses priced below \$400,000 and those priced between \$600,000 and \$800,000 strengthened, according to some contacts. Financing conditions for homebuyers were mostly stable.

Nonresidential builders noted that the strong demand of recent periods continued in the current period and that backlogs ticked higher as firms struggled with labor constraints. Capital investment plans were mostly unchanged, although one commercial builder stated that the firm boosted spending to use drones for surveying to make up for the shortage of workers. Most contacts expected the current momentum in customer demand to continue in the near term. However, there was some concern that demand from industrial clients could weaken depending on the course taken by trade disputes."—The Federal Reserve Bank of Cleveland

Robust Expansion in Texas Manufacturing Continues; Uncertainty Picks Up

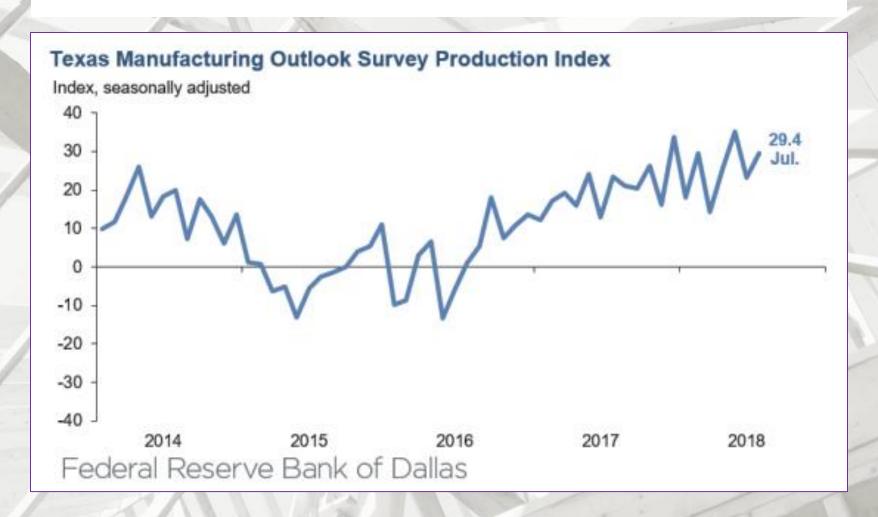
"The robust expansion in Texas factory activity continued in July, according to business executives responding to the *Texas Manufacturing Outlook Survey*. The production index, a key measure of state manufacturing conditions, rose six points to 29.4, signaling an acceleration in output growth.

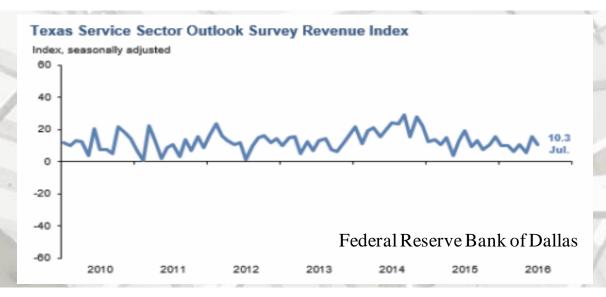
Other indexes of manufacturing activity also indicated continued solid expansion in July. The survey's demand measures — the new orders and growth rate of orders indexes — moved down but remained well above average at 23.3 and 17.0, respectively. The shipments index climbed five points to 30.8, and the capacity utilization index edged up to 25.0.

Perceptions of broader business conditions were a bit less positive this month versus June, and uncertainty increased. The general business activity index slipped four points to 32.3. The company outlook index dropped 13 points to 20.4, which is the second-lowest reading this year but still elevated relative to the average. A new question introduced to the survey in January 2018 asks, "How has uncertainty regarding your company's outlook changed in the current month vs. prior month?" In July, a quarter of firms said uncertainty increased, while only 8 percent said it decreased — bringing the outlook uncertainty index* to 17.0, well above its June reading and the highest level to date.

Price and wage pressures remained highly elevated this month. While still well above average, the raw materials prices index moved down five points to 48.6, and the finished goods prices index ticked down to 22.9. Compensation costs continued to rise at a faster clip than normal, with the wages and benefits index holding fairly steady at 32.4.

Expectations regarding future business conditions remained largely optimistic in July. The indexes of future general business activity and future company outlook were largely unchanged at 36.2 and 37.2, respectively. Other indexes for future manufacturing activity showed mixed movements but remained in solidly positive territory." – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas





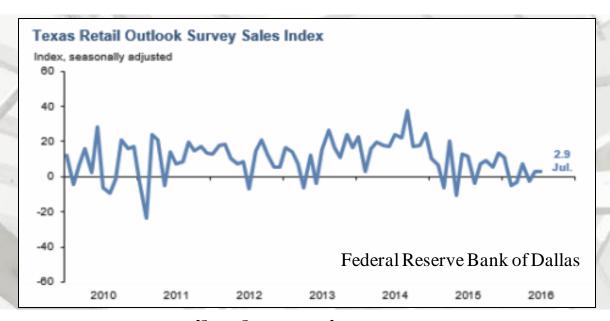
Texas Service Sector Increases At A Slower Pace

"Texas service sector activity continued to reflect expansion in July, according to business executives responding to the Texas Service Sector Outlook Survey. The revenue index, a key measure of state service sector conditions, fell from 15.6 to 10.3, indicating activity increased at a slower pace than last month.

Perceptions of broader economic conditions were mixed again in July. The general business activity index remained pessimistic for a seventh consecutive month, but moved up from -7.7 to -1.3, suggesting pessimism waned. The company outlook index rose slightly from a reading near zero to 1.0, with 16 percent of respondents reporting that their outlook improved from last month and 15 percent noting it worsened.

Price and wage pressures eased this month. The selling prices index fell slightly from 5.7 to 3.6. The wages and benefits index moved down from 15.7 to 10.4, although the vast majority of firms continued to note no change in compensation costs. Respondents' expectations regarding future business conditions improved in July. The index of future general business activity jumped up from a reading near zero to 10.1.

The index of future company outlook rose from 8.4 to 14.0, reflecting more optimism. Indexes of future service sector activity, such as future revenue and employment, reflected more optimism this month." – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas



Retail Sales Continue to Grow

"Retail sales increased modestly in July, according to business executives responding to the *Texas Retail Outlook Survey*. Remaining positive for a second consecutive month, the sales index was unchanged from last month at 2.9. Inventories declined in July after holding steady last month.

Retailers' perceptions of broader economic conditions were mixed in July. The general business activity index climbed from -10.2 to a reading near zero. The company outlook index was positive for a second consecutive month and rose from 3.2 to 8.9, with 21 percent of respondents reporting that their outlook improved and 13 percent noting that it worsened. Retail price pressures eased, while wage pressures increased this month. The selling prices index moved down from 15.5 to 11.5. The wages and benefits index edged up from 8.6 to 10.2. Retailers' perceptions of future broader economic conditions improved in July.

The index of future general business activity surged from -4.9 to 16.4. The index of future company outlook rose slightly from 13.9 to 16.9. Indexes of future retail sector activity reflected more optimism this month.

Labor market indicators improved this month. The employment index rebounded from negative territory, rising from -2.1 to 2.5. After four consecutive negative readings, the hours worked index advanced 8 points into positive territory to a reading of 4.9, suggesting longer work weeks." – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

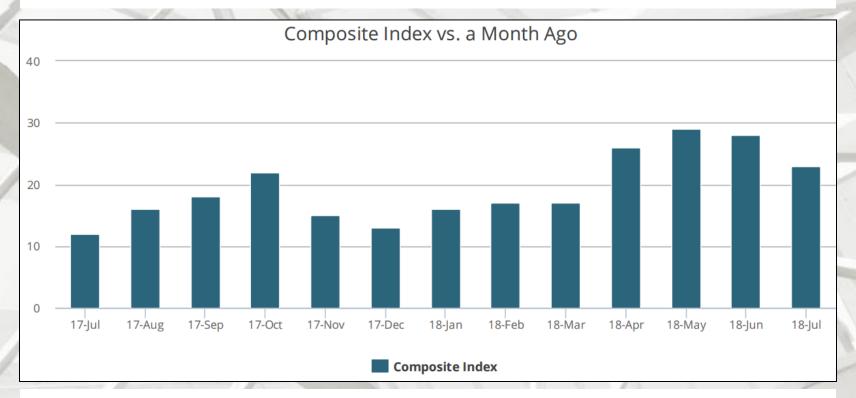
The Federal Reserve Bank of Kansas City Tenth District Manufacturing Activity Continued To Expand Solidly

"Tenth District manufacturing activity continued to expand solidly in July, with the composite index dipping slightly after May's record-high reading. Expectations for future growth remained high, despite many firms citing labor tightness and tariffs as increasingly worrisome. Price indexes also continued to rise. The month-over-month composite index was 23 in July, down from readings of 28 in June and 29 in May (Chart 1).

The composite index is an average of the production, new orders, employment, supplier delivery time, and raw materials inventory indexes. Factory activity increased solidly at durable and nondurable goods plants, particularly for petroleum and coal products, minerals, fabricated metal, computers and electronics, and transportation equipment. Month-over-month indexes were mixed compared with the previous month, but most indexes remained at high levels. The employment index inched up while the order backlog and new orders for exports indexes were virtually unchanged. The production and shipments indexes fell moderately, and the new orders index eased somewhat. The raw materials index fell modestly and the finished goods inventory index also dipped slightly.

Most year-over-year factory indexes inched up in July. The composite index increased marginally from 43 to 44. The production, order backlog, capital expenditures, and new orders for exports all improved. However, the shipments and new orders indexes declined modestly and the employment index was mostly unchanged. The raw materials inventory index dipped from 36 to 32 and the finished goods inventory index eased from 26 to 23.

Most price indexes increased in July. The month-over-month finished goods price index rose from 22 to 27 and the raw materials price index increased from 47 to 52. The year-over-year finished goods price index was unchanged at 60, while the year-over-year raw materials price index rose from 79 to 86. The future finished goods price index grew from 40 to 43 and the future raw materials price index inched up from 67 to 68." – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, The Federal Reserve Bank of Kansas City



The Federal Reserve Bank of Kansas City

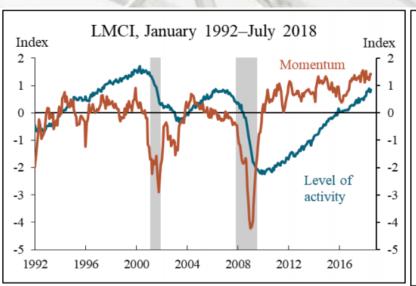
"Future factory activity indexes were mixed, but remained at high levels. The future composite index eased from 36 to 34. The future order backlog and employment indexes both improved modestly, and the capital expenditures and new orders for exports indexes inched up. The future shipments index remained at 52 while the future production and new order indexes dipped slightly. The future raw materials index moderated from 30 to 15, while the future finished goods inventory index declined from 23 to 7." – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, The Federal Reserve Bank of Kansas City

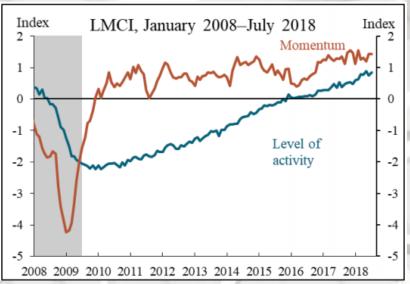
The Federal Reserve Bank of Kansas City Labor Market Conditions Indicators (LMCI)

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

"The Kansas City Fed Labor Market Conditions Indicators (LMCI) suggest the level of activity increased modestly and momentum remained high in July. The level of activity indicator increased in July from 0.75 to 0.84, while the momentum indicator was little changed at 1.43.

The table on the following page shows the five labor market variables that made the largest contributions to the increase in the activity indicator over the last six months and the five variables that made the largest positive contributions to the momentum indicator in July 2018. The activity indicator increased 0.25 over the last six months. The largest contribution came from an increase in job leavers. Seventeen variables made a positive contribution, and seven variables made a negative contribution. The momentum indicator was 1.43 in July, where the largest contributor to momentum was initial claims. Seventeen variables made a positive contribution, and seven variables made a negative contribution. "—Bill Medley, Director, Public Affairs, The Federal Reserve Bank of Kansas City





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 July 2018
Job leavers	Initial claims
Quits rate	Expected job availability (U of Michigan)
Percent of firms planning to increase employment (NFIB)	Manufacturing employment index (ISM)
Percent of firms with positions not able to fill right now (NFIB)	Labor force participation rate
Job availability index (Conference Board)	Expected job availability (Conference Board)
Note: Contributions are ordered from largest to smallest.	

The Federal Reserve Bank of Minneapolis

Minneapolis Beige Book: "Looks like this will be a good summer"

"The Ninth District economy grew moderately overall since the last report. Employment grew modestly, with robust hiring demand continuing to be restrained by tight labor supply. Wage and price pressures were moderate since the previous report. The District economy showed growth in manufacturing, residential construction, commercial real estate, energy, and tourism. But consumer spending and commercial construction were mixed, residential real estate slowed, and agriculture remained weak.

The Minneapolis Fed's most recent Beige Book report on current business conditions found that hiring demand remained robust in the Ninth District, but continued to be restrained by a tight labor supply. Price pressures appeared to be increasing, in part from growing concern among manufacturers over steep increases in aluminum and steel costs in reaction to tariff announcements. But manufacturers were otherwise upbeat, as contacts reported very strong activity so far this year.

Summer tourism was also showing optimism. Lodging and accommodation tax collections in Montana have been higher every month this year, including May, compared with 2017. Gaming receipts from casinos in Spearfish, S.D., were down about 4 percent during the spring months, but summer bookings at hotels and campgrounds in the region were up, according to local officials. Minnesota's hotel sector saw demand increase 7 percent over a year earlier. An industry contact said, "It looks like this will be a good summer for the state's hotel industry." – Ronald Wirtz, Director, Director, Regional Outreach, The Federal Reserve Bank of Minneapolis

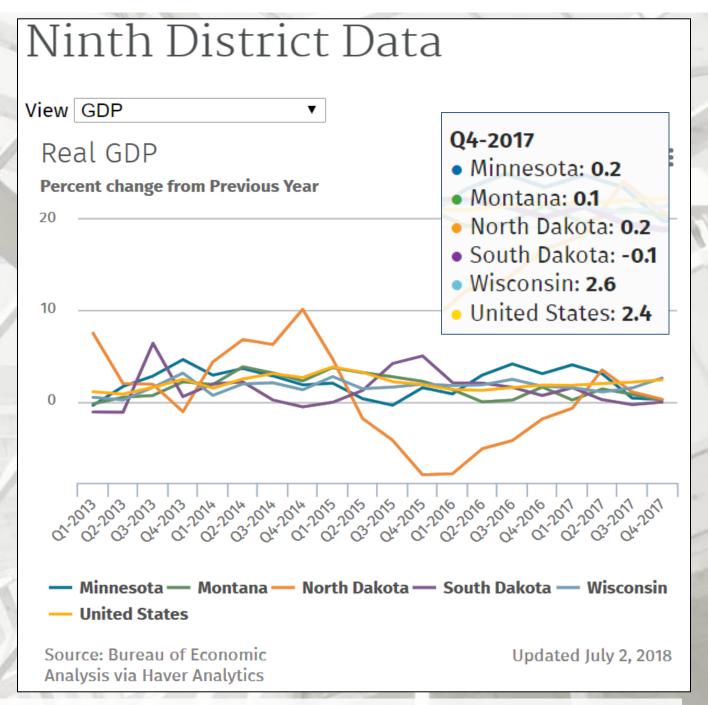
The Federal Reserve Bank of Minneapolis

Construction and Real Estate

"Commercial real estate grew modestly since the last report. In Minneapolis-St. Paul, multifamily vacancy rates continued to be low despite strong delivery of new units to the market, though lease rates have been mostly steady. Despite the continued closure of large retail stores in Minneapolis-St. Paul, this space was being absorbed and "keeping vacancies tight," according to an industry source. Residential real estate fell, with a few isolated exceptions. May home sales in Minnesota dropped 11 percent compared with a year earlier and also fell in western and northern regions of Wisconsin, and in Bismarck. Sioux Falls sales were flat, and Montana metro markets were mixed, with slower May sales in Great Falls and Helena, but higher sales in Bozeman and Missoula..

Manufacturing

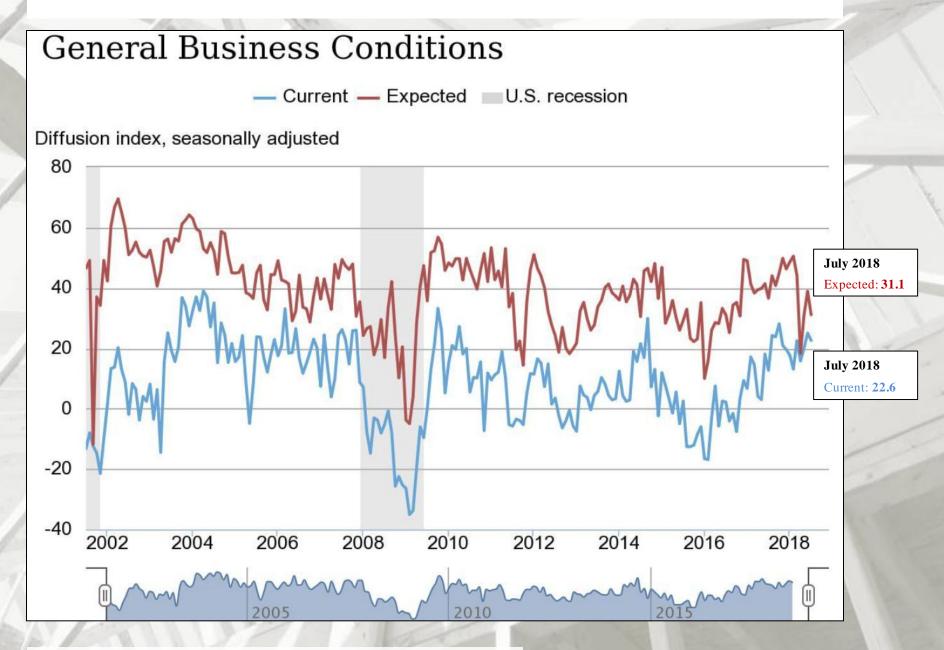
District manufacturing activity increased briskly. An index of manufacturing conditions indicated increased activity in June compared with a month earlier in Minnesota and the Dakotas. Contacts from across the manufacturing sector reported very strong activity so far this year. A dealer of stamping and metal forming machinery said that the market for capital equipment was as busy as they'd ever seen. Producers of hydraulic equipment reported similarly strong demand, with some seeing double-digit growth this year." – Ronald Wirtz, Director, Director, Regional Outreach, The Federal Reserve Bank of Minneapolis



Empire State Manufacturing Survey Business Activity Continues To Expand

"Business activity continued to grow at a fairly brisk pace in New York State, according to firms responding to the *July 2018 Empire State Manufacturing Survey*. The headline general business conditions index edged down by over two points to 22.6 – still a high level, suggesting a continuation of robust growth. The new orders index dipped three points to 18.2, while the shipments index fell nine points to 14.6, pointing to a modest pullback in growth of orders and shipments. Delivery times continued to rise, and inventories fell marginally. Labor market indicators pointed to continued sturdy growth in employment and a modest increase in the workweek. The prices paid index slipped ten points to 42.7 – still a fairly high level indicative of widespread ongoing input price pressures; the prices received index was little changed at 22.2, signaling continued moderate increases in selling prices. Looking ahead, firms were slightly less optimistic about the six-month outlook than they were last month.

Manufacturing firms in New York State reported that business activity expanded at about the same brisk pace as in June. The general business conditions index, which had climbed to an eight-month high in June, edged back down just over two points to 22.6. Roughly 40 percent of respondents reported that conditions had improved over the month, while 17 percent indicated they had worsened. The new orders index dipped three points to 18.2, while the shipments index fell nine points to 14.6, suggesting only a modest deceleration in orders and shipments. Unfilled orders leveled off, and inventories edged down. Delivery times continued to lengthen, though by a narrower margin than in recent months." – Richard Deitz and Jason Bram, The Federal Reserve Bank of New York



Empire State Manufacturing Survey Hiring Continues At A Moderate Pace

"The index for number of employees, which had climbed to its highest level of the year in June, edged back two points to 17.2, pointing to ongoing moderate growth in employment. The average workweek index fell six points to 5.6, suggesting more modest increases in hours worked than in recent months. Price increases remained widespread. The prices paid index retreated ten points from last month's measure, just below May's multiyear high, but remained elevated at 42.7. The prices received index was little changed at 22.2, signaling ongoing moderate rises in selling prices.

Firms Slightly Less Optimistic

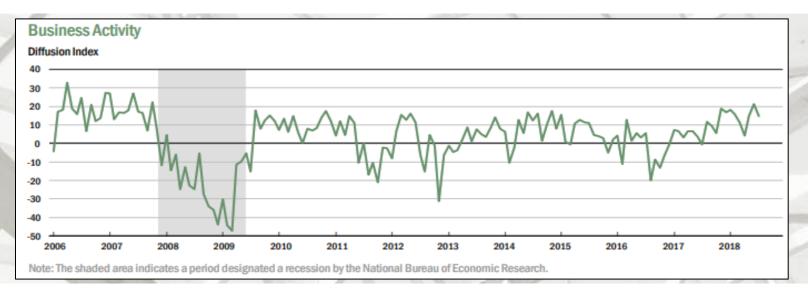
Optimism about the six-month outlook slipped this month. The index for future business conditions fell eight points to 31.1, essentially reversing last month's gain. Manufacturers continue to expect fairly swift increases in employment in the months ahead, and the indexes for future prices remained elevated. The index for planned capital expenditures fell ten points to 17.1, and the technology spending index slipped eight points to 9.4; both are at their lowest levels in roughly a year." – Richard Deitz and Jason Bram, The Federal Reserve Bank of New York

Business Leaders Survey (Services)

"Growth in the region's service sector moderated somewhat but was still fairly brisk, according to firms responding to the Federal Reserve Bank of New York's July 2018 *Business Leaders Survey*. The survey's headline business activity index retreated seven points to 14.8, after reaching its highest level in more than a decade in June. The business climate index fell eight points to 13.3 — still indicative of a fairly positive view of the business climate. The employment index slipped five points to 12.9, suggesting a modest slowing in hiring activity, and the wages index was little changed at a fairly elevated level. The prices paid index retreated from a multiyear high, edging down four points to 58.6, suggesting ongoing widespread input price increases. The prices received index edged up to 24.6. Indexes assessing the sixmonth outlook generally declined modestly, suggesting that firms have become somewhat less optimistic about future conditions than they had been earlier this year.

Activity Continues to Grow at a Solid Clip

Growth in business activity in the region's service sector slowed slightly but was still fairly brisk. After reaching its highest level since 2007 in June, the headline business activity index retreated seven points to 14.8 in July — still a fairly high level consistent with moderate growth. Just under 40 percent of respondents reported that conditions improved over the month, while 25 percent said that conditions worsened. The business climate index slipped eight points to 13.3 in July, remaining positive for an eighth consecutive month, signaling that, on balance, firms continued to view the business climate as better than normal."—Jason Bram and Richard Deitz, The Federal Reserve Bank of New York



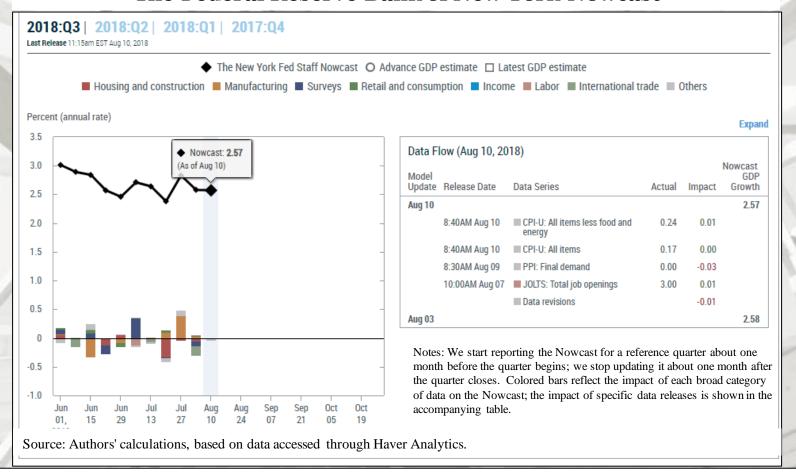
Business Leaders Survey (Services) Job Growth Slows; Input Price Pressures Persis

"The employment index declined five points to 12.9 in July, indicating a slight slowing in the pace of job growth. The wages index edged down two points but remained quite elevated at 39.1, reflecting ongoing wage growth. The prices paid index, which had climbed to a multi-year high in June, edged back four points to 58.6 in July, indicating that input prices continued to rise at a fairly brisk pace. The prices received index rose marginally to 24.6, a level consistent with a moderate escalation in selling prices. The capital spending index was virtually unchanged at 12.4, suggesting that capital spending continued to increase moderately.

Firms Slightly Less Optimistic

Firms became slightly less optimistic about the six-month outlook. The index for future business activity slipped four points to 32.4, and the index for future business climate fell seven points to 13.9. Indexes for future wages and prices paid were down slightly but still at high levels, while the index for planned capital spending slipped to its lowest level this year, suggesting a modest reduction in capital spending plans." – Jason Bram and Richard Deitz, The Federal Reserve Bank of New York

The Federal Reserve Bank of New York Nowcast



August 10, 2018: Highlights

- "The New York Fed Staff Nowcast for 2018:Q3 stands at 2.6%.
- News from this week's data releases left the nowcast for 2018:Q3 broadly unchanged." –
 The Federal Reserve Bank of New York

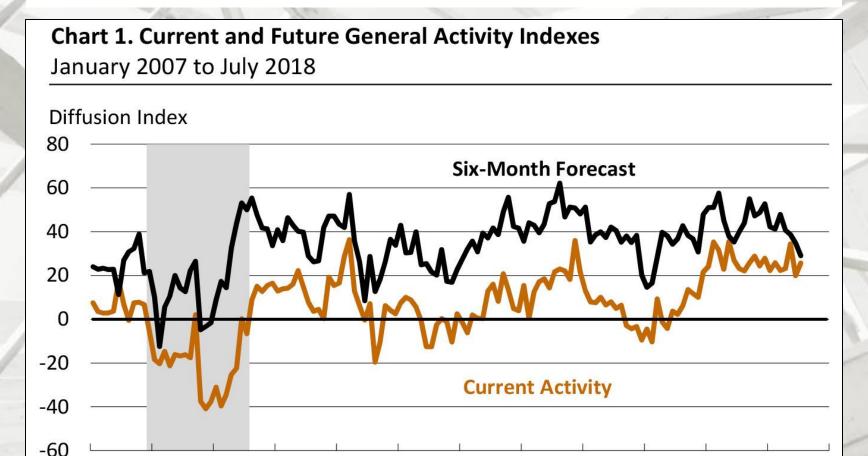
The Federal Reserve Bank of Philadelphia July 2018 Manufacturing Business Outlook Survey

Current Indicators Suggest Continued Growth

"Regional manufacturing activity continued to expand in July, according to results from this month's *Manufacturing Business Outlook Survey*. All the broad indicators remained positive, with the general activity and new orders indexes improving this month. The survey's price indexes suggest widespread increases for purchased inputs, and more firms reported price increases for their own manufactured goods. Expectations for the next six months continued to moderate but remain positive overall.

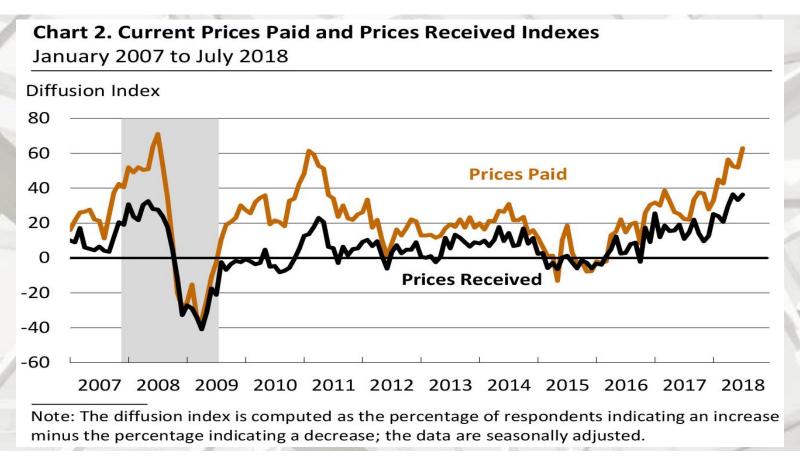
The diffusion index for current general activity increased 6 points this month (see Chart 1). Over 44 percent of the manufacturers reported increases in overall activity this month, while 19 percent reported decreases. The new orders index rebounded 14 points after falling 23 points in June. Nearly 46 percent of the firms reported an increase in orders, and 14 percent reported declines. The current shipments index, however, decreased 4 points. The firms reported, on balance, increases in unfilled orders and longer delivery times this month.

The firms continued to report overall higher employment, but increases were not as widespread this month. Over 24 percent of the responding firms reported increases in employment this month, down from 34 percent last month. The current employment index fell 14 points to 16.8. The current average workweek index declined 11 points." – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia



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.

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018



June 2018 Manufacturing Business Outlook Survey More Firms Report Price Increases

"The manufacturers continued to report higher prices for both purchased inputs and their own manufactured goods. Price increases for purchased inputs were reported by 63 percent of the manufacturers this month, up from 54 percent last month. The index has now risen 30 points since January (see Chart 2). The current prices received index, reflecting the manufacturers' own prices, increased 3 points. Over 36 percent of the firms reported higher prices for their manufactured goods this month." – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

June 2018 Manufacturing Business Outlook Survey Fewer Firms Report Summer Slowdowns This Year

"In this month's special questions (see <u>Special Questions</u>), firms were asked to assess the importance of seasonal factors in production and whether these seasonal factors have changed in importance over time. Most firms (61 percent) reported that seasonal factors were not significant; however, 36 percent indicated that they were. The firms continued to report that the most common pattern was increased production during the spring and fall and decreased activity in midsummer and during the winter months. Similar to the pattern reported last year, nearly 52 percent of the firms with seasonal patterns reported no difference in seasonal effects, 26 percent saw seasonal patterns as less important, and only 8 percent indicated they were more significant. The firms were also asked about whether they were scheduling plant shutdowns or production slowdowns during the summer months this year. Over 19 percent indicated that such slowdowns were scheduled this summer, down from 26 percent when the question was asked last year.

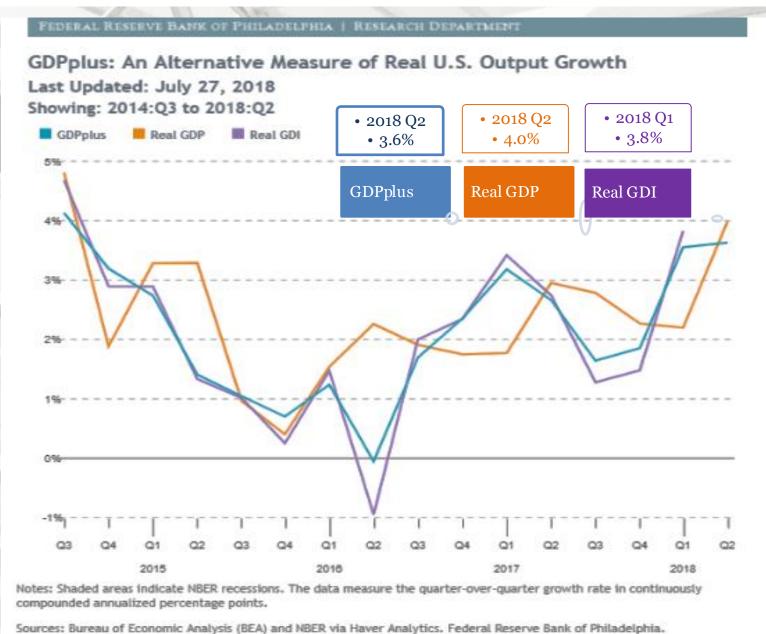
Six-Month Indicators Continue to Moderate

The diffusion index for future general activity decreased for the fourth consecutive month, falling from 34.8 in June to 29.0 this month (see Chart 1). Over 42 percent of the firms expect increases in activity over the next six months, while 13 percent expect declines. The future new orders index decreased 10 points, but the future shipments index was virtually unchanged. More than 60 percent of the firms expect price increases for purchased inputs over the next six months. Over 52 percent expect higher prices for their own manufactured goods. The future employment index decreased 7 points to a reading of 27.5, with almost 35 percent of the firms expecting to add workers over the next six months.

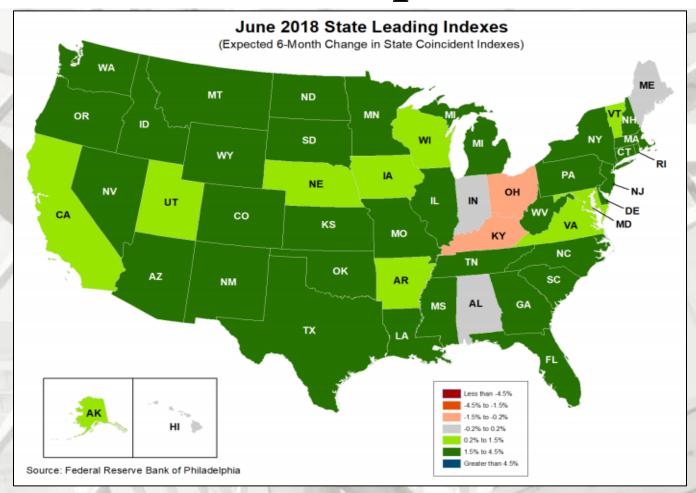
Summary

Responses to the July Manufacturing Business Outlook Survey indicate continued expansion for the region's manufacturing sector. The firms reported increases in new orders, but employment growth was less widespread than in June. The firms also continued to report higher prices for inputs and their own manufactured goods. Looking ahead six months, the firms remain optimistic overall, but the survey's future indicators continued to moderate."—Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

The Federal Reserve Bank of Philadelphia: GDPplus



The Federal Reserve Bank of Philadelphia



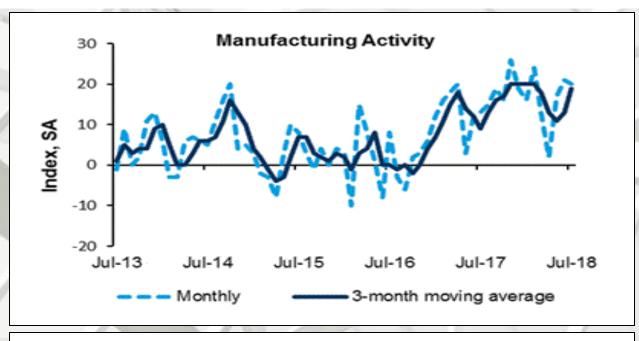
"The Federal Reserve Bank of Philadelphia has released the leading indexes for the 50 states for June 2018. The indexes are a six-month forecast of the state coincident indexes (also released by the Bank). Forty-six state coincident indexes are projected to grow over the next six months, and four are expected to decrease. For comparison purposes, the Philadelphia Fed has also developed a similar leading index for its U.S. coincident index, which is projected to grow 1.4 percent over the next six months."—Daniel Mazone, Research Department, The Federal Reserve Bank of Philadelphia

The Federal Reserve Bank of Richmond Fifth District Manufacturing Firms Saw Slowing Growth in July

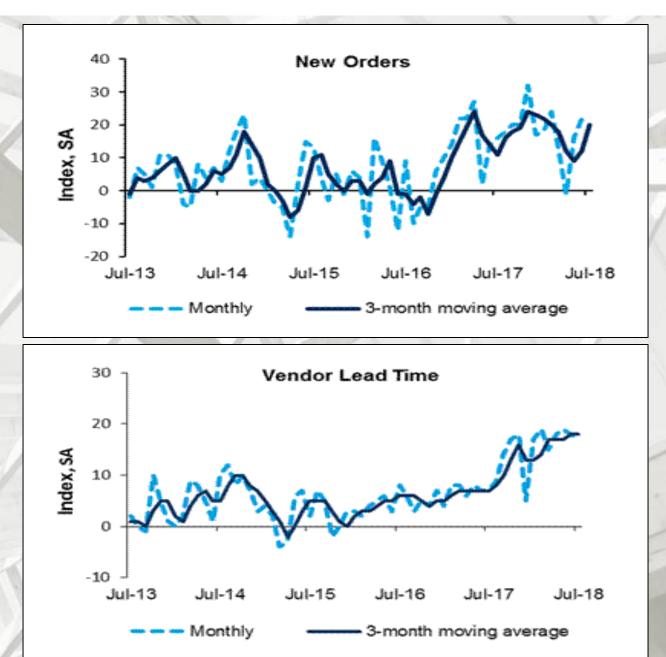
"Fifth District manufacturing expanded at a slower pace in July, according to results of the most recent survey from the Federal Reserve Bank of Richmond. The composite manufacturing index fell from 21 in June to 20 in July, but it remained in solid expansionary territory. This decrease resulted from a decrease in the employment and shipments indexes, as the other component (new orders) held steady. Firms were optimistic in July, expecting to see robust growth across most indicators in the coming months.

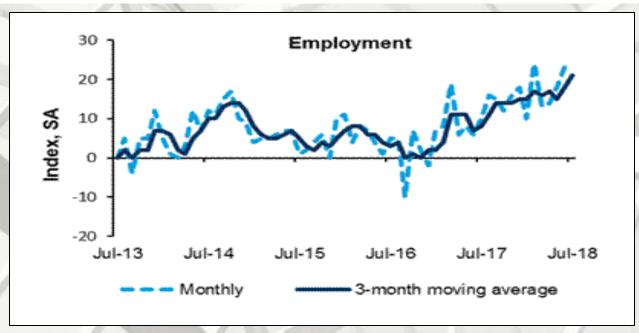
Manufacturing employment growth slowed in July, as the employment index fell from 23 in June to 22 in July. Firms continued to struggle to find workers with the skills they needed and expect this struggle to continue in the next six months.

Manufacturing firms reported that the gap between growth in prices paid and prices received narrowed in July, although both increased. Respondents expect growth in prices received to continue to accelerate in coming months but anticipate a slowing in growth of prices paid." – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond











The Federal Reserve Bank of St. Louis Summary of Economic Activity

"Economic conditions in the District have improved slightly since our previous report. Firms reported modest increases in employment despite continued difficulties finding workers. Wages continued to increase modestly. Price pressures have increased modestly as freight costs have increased across all sectors. Reports from consumer spending contacts remained mixed. Manufacturers reported increases in production and new orders. Residential real estate activity improved modestly while construction activity picked up slightly. District bankers reported increased lending activity as commercial and industrial loan growth continued to be robust. Agriculture and natural resources conditions have been relatively unchanged since the previous report.

Manufacturing

Manufacturing activity has increased at a moderate pace since our previous report. Overall manufacturing activity was stronger than one month earlier in both Arkansas and Missouri, and the pace of expansion increased in each. New orders and production also rose in both states. Several companies that manufacture motor vehicles and motor vehicle parts reported plans to expand facilities and increase production. Contacts in the paper packaging manufacturing industry reported running at nearly full capacity. Similarly, contacts in the recycled metal industry noted record volumes, and contacts in the mining equipment manufacturing industry reported experiencing backlogs. On the other hand, a manufacturer of plastic products for appliances indicated that sales were down. Several manufacturers noted increases in input prices, which they linked to tariffs."—The Federal Reserve Bank of St. Louis

The Federal Reserve Bank of St. Louis Employment and Wages

"Employment has increased modestly since the previous report. Several manufacturing companies, including multiple steel producers, announced plans to expand and hire new employees. Furthermore, survey-based employment indexes indicated modest increases in June manufacturing employment across Missouri and Arkansas. To attract and retain employees, firms reported lowering hiring standards, offering more-generous non-wage benefits, and establishing training programs through partnerships with local schools and non-profit organizations. Contacts noted difficulties filling construction and trucking positions in particular. Wages have increased modestly since the previous report. Contacts reported that the continued tight labor market has led to increased wages in the services sector, particularly for entry-level positions. Retail and food-service firms reported having to raise wages of existing employees to match the higher rates for new employees. One trucking company offered the largest one-time pay increase in its history. Wages paid by small business in the St. Louis metro area grew slightly.

Prices

Price pressures have increased modestly in general since the previous report. Local contacts reported robust increases in shipping costs across all sectors due to higher fuel prices and driver shortages. Tariffs and trade restrictions have had a mixed effect on prices. U.S.-imposed tariffs have raised the prices of steel and aluminum, increasing input costs for several business contacts. Those contacts in construction lamented that rising prices pressured the industry before this tariff-induced inflation of metal costs. In contrast, proposed tariffs by China have led to an overall downturn in agricultural commodity prices, particularly the price of soybeans. These lower agricultural commodity prices have been passed on to food retailers, who reported that lower food prices have more than offset increased freight costs." – The Federal Reserve Bank of St. Louis

The Federal Reserve Bank of St. Louis Consumer Spending

"Reports from general retailers, auto dealers, and hoteliers indicate mixed consumer spending activity. Real sales tax collections modestly increased in Arkansas relative to a year ago, but declined slightly in Missouri, Kentucky, and West Tennessee. The consumer outlook in West Tennessee has improved since the first quarter, and households, on net, expect to increase spending in the next few months relative to a year ago. Retailers in Tennessee indicated that year-to-date sales have been above last year's levels and expect this trend to continue through the rest of the year. In response to the recent Supreme Court ruling, internet-based retailers indicated that they will likely "eat the cost" from collecting sales tax in the medium term. However, they expect to pass the cost to consumers in the long run through the prices they charge for shipping and by changing eligibility for free shipping. Reports from auto dealers were mixed: Memphis auto dealers reported an increase in sales year over year, while dealers in Louisville and Little Rock reported a decrease. Memphis and Little Rock auto dealers also indicated a shift in demand toward SUVs and crossovers. Hoteliers in Little Rock and Memphis reported strong and stable demand, and St. Louis hospitality contacts continued to express a positive outlook for the coming months.

Agriculture and Natural Resources

Agriculture conditions weakened slightly from the previous reporting period, but improved slightly from the same time last year. The percentages of corn, cotton, and rice rated fair or better in June declined slightly relative to the prior month, while that of soybeans increased modestly. However, both the corn and soybeans percentages were higher than a year ago, the cotton percentage was little changed, and the rice percentage was down slightly. Estimated soybean acreage saw a substantial upward adjustment in Illinois relative to March planting intentions but was revised downward in Missouri. Natural resource extraction conditions were essentially unchanged from May to June, with seasonally adjusted coal production up 0.1 percent. However, June production was 6 percent below prior-year levels." – The Federal Reserve Bank of St. Louis

The Federal Reserve Bank of St. Louis Real Estate and Construction

"Residential real estate activity has improved modestly since the previous report. Seasonally adjusted home sales were slightly higher in April. Inventory levels remained low, and contacts continued to report a shortage of homes in the market with newly listed homes selling quickly.

Residential construction activity has improved slightly. Permit activity in May was flat relative to the prior month. A contact in Louisville reported seeing a robust level of new construction under way, and a contact in Little Rock noted that a healthy demand for single-family homes has led to new prospective developments. St. Louis builders expect 2018 permits to exceed the total from last year.

Commercial real estate activity has been unchanged since the previous report. Contacts in Little Rock reported that the market is generally healthy across most property types but were apprehensive over how future interest rate increases may impact profits and cash flows. Commercial construction activity was flat. Some contacts in Little Rock expressed concerns that new hotel construction under way risks oversaturating the market. A Louisville contact reported continued robust multifamily construction." – The Federal Reserve Bank of St. Louis

The Federal Reserve Bank of San Francisco FRBSF FedViews

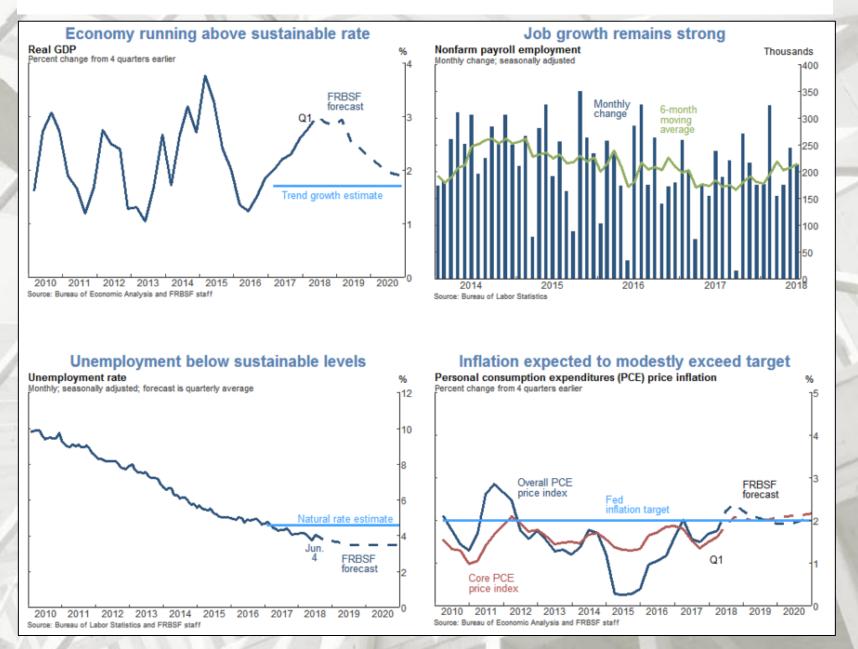
- "The economy continues to grow at a solid pace. GDP growth is expected to be particularly strong in the second quarter, followed by slower growth in the second half of the year that is still expected to be above its sustainable pace. Overall, 2018 should register growth of about 2.8%, followed by gradual slowing towards our estimated sustainable pace of just under 2% by 2020.
- The strong economic performance has fueled continued firming in the U.S. labor market. Nonfarm payroll employment rose by 213,000 jobs in June, exceeding expectations, and April and May figures were revised upwards.
- The strong payroll growth figures were accompanied by an upward tick in the unemployment rate from 3.8% to 4.0%. This increase was in part driven by a rise in labor force participation and was generally perceived as additional evidence of labor market strength.
- Our forecast is for the unemployment rate to continue its long decline, falling further below our current estimate of the natural rate, around 4.6%.
- Inflation has moved up near the Federal Open Market Committee's (FOMC's) 2% target. With continued tightening in labor markets and economic growth above its sustainable pace, we expect the upward trend in inflation to continue and core inflation to modestly overshoot the 2% target over the medium term.
- Interest rates have increased with ongoing policy normalization, and the majority of FOMC participants in the June meeting forecast further gradual increases in the federal funds rate. Policy rates remain accommodative and are still below estimates of the long-run "neutral" federal funds rate of around 2.5%." Mark Spiegel, Vice President, The Federal Reserve Bank of San Francisco

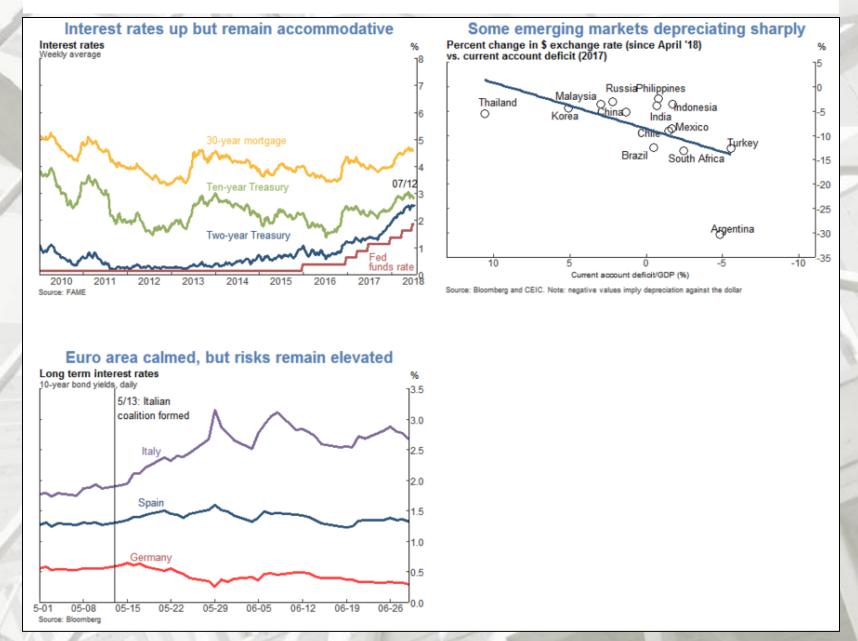
The Federal Reserve Bank of San Francisco FRBSF FedViews

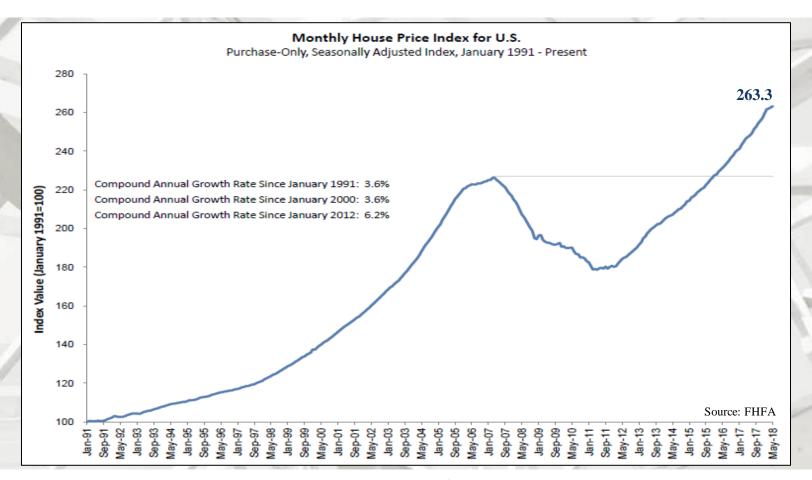
- "The U.S. economy faces several potential global risks.
- First, ongoing policy normalization and higher interest rates in the United States have contributed to an appreciation of the dollar, creating potential difficulties for foreign borrowers with dollar-denominated debt obligations and local currency revenue. This has recently resulted in a modest general selloff of emerging market assets and depreciation of emerging market currencies.
- However, the extent of recent foreign currency depreciation also has reflected prevailing domestic macroeconomic conditions in these countries. Countries that ran larger current account deficits in 2017 experienced relatively larger currency depreciations.
- Another source of global risk concerns recent events in the euro area, particularly those associated with political developments in Italy. A new government coalition formed in May resulted in higher yields on long-term Italian sovereign debt.
- Subsequent statements confirming the government's commitment to remaining in the euro area, as well as changes in the new government cabinet, halted the deterioration in financial conditions. Nevertheless, long-term Italian yields remain elevated relative to their German counterparts. Notably, long-term yields of other euro-area "periphery" countries, such as Spain, were relatively unaffected by the Italian developments.
- Finally, recent changes in U.S. trade policies and countervailing measures by our primary trading partners also pose a risk for the outlook. On the U.S. side, these include tariffs imposed on imports of steel and aluminum, as well as a range of other goods from China, and ongoing negotiations with NAFTA partners Mexico and Canada. Foreign trading partners have announced countervailing restrictions on U.S. exports." Mark Spiegel, Vice President, The Federal Reserve Bank of San Francisco

The Federal Reserve Bank of San Francisco FRBSF FedViews

- "It is premature to assess the ultimate impact of recent trade policy developments on the U.S. economy and its primary foreign trading partners. Most analysts have suggested that, although some specific industries are likely to be substantively affected, the overall impact of policies announced to date on the U.S. economy should be relatively contained.
- However, the minutes of the June FOMC meeting noted that meeting participants expressed concerns about the potential for adverse effects of tariffs and other proposed trade restrictions, both domestically and abroad, as well as the uncertainty surrounding future trade policy on business sentiment and investment activity."—Mark Spiegel, Vice President, The Federal Reserve Bank of San Francisco

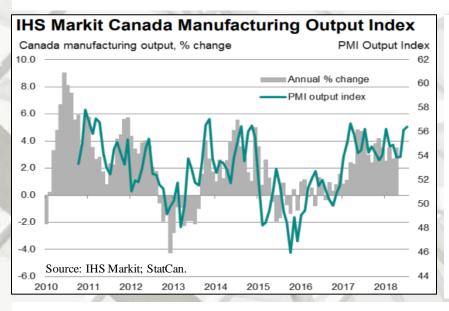






FHFA House Price Index House Price Index Up 0.2 Percent in May 2018

"The FHFA House Price Index (HPI) reported a 0.2 percent increase in U.S. house prices in May from the previous month. From May 2017 to May 2018, house prices were up 6.4 percent. For the nine census divisions, seasonally adjusted monthly price changes from April 2018 to May 2018 ranged from -0.6 percent in the East North Central division to +1.5 percent in the East South Central division. The 12-month changes were all positive, ranging from +4.9 percent in the West South Central division to +9.1 percent in the Mountain division." – Stefanie Johnson and Corinne Russell, FHFA



Markit Canada Manufacturing PMI™

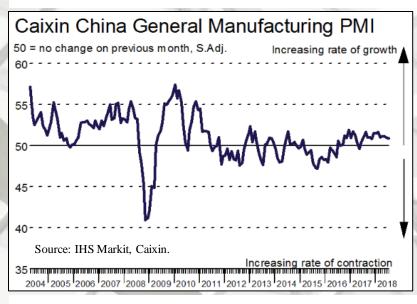
"At 56.9 in July, the seasonally adjusted **IHS Markit Canada Manufacturing** *Purchasing Managers'Index*® *(PMITM)* fell only slightly from June's survey record high of 57.1 and remained indicative of a strong improvement in overall business conditions. The headline index was supported by the fastest rise in production volumes since March 2017, which partially offset softer rates of new business growth and job creation compared to the previous month.

Strong manufacturing growth maintained in July. Prices charged rise at survey-record pace.

Canadian manufacturers recorded robust rises in output, new orders and employment during July, thereby signalling another marked improvement in overall business conditions across the sector. However, the latest survey also signalled a steep and accelerated rise in prices charged by manufacturing firms, which was widely linked to the impact of U.S. trade tariffs on steel and aluminium. At the same time, strong demand for raw materials and transportation bottlenecks led to a survey record lengthening of delivery times from suppliers."—Joanna Vickers, Corporate Communications, IHS Markit

"The manufacturing sector continued to perform strongly during July, with growth proving resilient against a backdrop of intense supply chain pressures and escalating concerns about global trade. Output volumes expanded at the fastest pace for almost a year-and-a-half, supported by strong order books and successful efforts to rebuild production capacity in response to rising client demand.

While domestic sales remained the main growth impetus in July, the latest survey indicated another solid upturn in new export orders. Delivery times for raw materials lengthened to the greatest extent for over seven-and-a-half years, reflecting shortages of freight capacity and forward purchasing ahead of U.S. trade tariffs. ..."— Christian Buhagiar, President and CEO, SCMA



Caixin China General Manufacturing PMI™ Manufacturing PMI slips to eight-month low in July

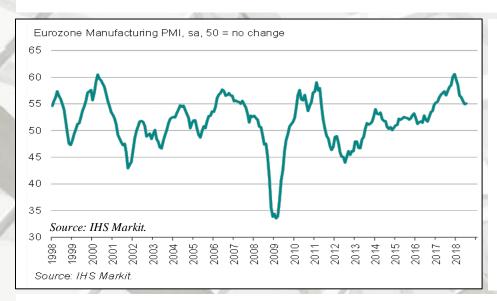
"The headline seasonally adjusted *Purchasing Managers' Index*TM (*PMI*TM) – a composite indicator designed to provide a single-figure snapshot of operating conditions in the manufacturing economy – fell from 51.0 in June to 50.8 in July. Although still above the neutral 50.0 mark, the latest figure highlighted the slowest improvement in the health of the sector since November 2017.

The Caixin China General Manufacturing PMI slipped to 50.8 in July from June. The reading has not been this low since November 2017. The sub-indexes for output and new orders both fell, but remained in expansionary territory, while the employment sub-index picked up despite remaining in contractionary territory. New export orders shrunk at the fastest pace since June 2016, indicating the export market continued to deteriorate.

The sub-indexes for output charges and input prices both dropped, but remained in expansionary territory, pointing to easing pressure on prices. The sub-index for future output edged up, reflecting that goods producers were more optimistic that production would grow over the next 12 months.

The sub-index for stocks of finished items contracted at a steeper rate in July, while the sub-index for stocks of purchased items started expanding again — a positive sign that companies had reduced their stocks of finished products and replenished stocks of purchases. The sub-index for suppliers' delivery times rose, even though it failed to make it into expansionary territory, which might imply an improved capital turnover among manufacturers.

In general, the survey signaled a weakening manufacturing trend as a grim export market dragged on the sector's performance. The positive drivers were the increase in stocks of purchases and easing pressure on capital turnover." – Dr. Zhengsheng Zhong, Director of Macroeconomic Analysis, CEBM Group



Markit Eurozone Manufacturing PMI®

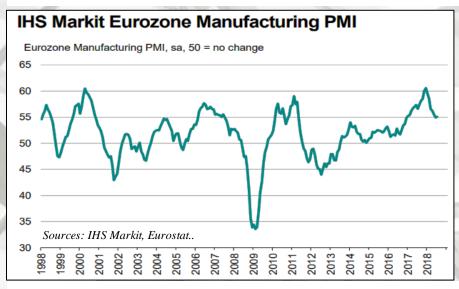
"The performance of the euro area manufacturing sector remained subdued at the start of the third quarter. Although the final *IHS Markit Eurozone Manufacturing PMI®* posted 55.1 in July, unchanged from the earlier flash estimate, this was only a minor recovery from June's 18-month low of 54.9 and over five points below the record high registered at the end of 2017.

Eurozone Manufacturing growth remains subdued at start of quarter three

Sector data signalled that business conditions improved across the consumer, intermediate and investment goods sectors, with mild growth upticks signalled in the latter two. Similar to the trend at the all-manufacturing level, rates of expansion were weaker than at the turn of the year in all three sub-industries.

A marginal uptick in the PMI provides little cause for cheer given it is the second weakest number for more than one-and-a-half years. The past two months have seen the most subdued spell of factory output growth since late-2016. Worse may be to come. Even this reduced rate of output growth continued to outpace order book growth, resulting in the smallest rise in order book backlogs for two years. The clear implication is that manufacturers may have to adjust production down in coming months unless demand revives.

Clues to the current soft patch lie in the export growth trend, which has deteriorated dramatically since the start of the year across all member states to reach a near-two year low, with France and Austria seeing exports fall into decline in July. The survey responses indicate that the slowdown likely reflects worries about trade wars, tariffs and rising prices, as well as general uncertainty about the economic outlook. Optimism about the future remained at one of the lowest levels seen over the past two years."—Chris Williamson, Chief Business Economist, Markit®



Markit Eurozone Composite PMI®

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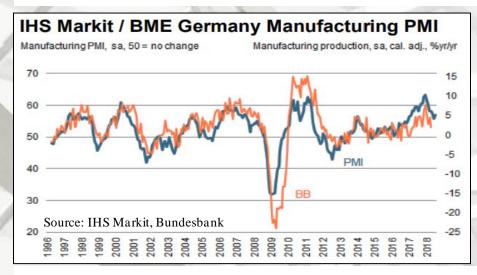
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Markit/BME Germany Manufacturing PMI®

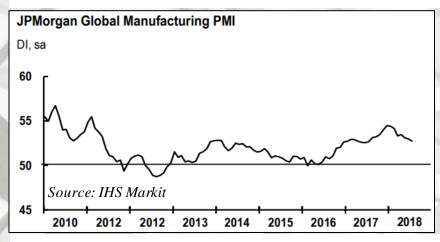
"The headline IHS Markit/BME Germany Manufacturing PMI—a single-figure snapshot of the performance of the manufacturing economy—posted 56.9 in July, up from 55.9 in June. The start of the third quarter indicated a sharp improvement in operating conditions, with manufacturing growth regaining momentum.

PMI rises amid faster output and new order growth

The German manufacturing sector regained growth momentum in July, with the headline PMI rising from June's 18-month low. Rates of output and new order growth accelerated from recent lows in June, although increases did not recover to the respective paces seen at the start of the year. Consequently, the rate of job creation remained steep and purchasing activity rose at a faster pace.

The beginning of the second half of the year brought a faster rise in manufacturing growth among German manufacturers. Following a dip in overall performance in June, the upturn in output and new orders strengthened. That said, the increase in production continued to outpace that of new orders as firms expanded their efforts to clear backlogs. Although slightly weaker than June, employment growth continued to grow sharply, with greater production requirements a key factor behind sustained job creation. Panellists also reported stronger optimism towards future output growth, the most robust since April.

Concerns were raised however, with some respondents noting uncertainty surrounding tariffs and further marked rises in input costs as risks to future growth. In turn, pressure on supply chains remained significant as firms continued to comment on bottlenecks at suppliers."—Sian Jones, Economist, IHSMarkit®



$\begin{tabular}{ll} JP & Morgan & Global \\ Manufacturing & PMI^{\tiny TM} \\ \end{tabular}$

"The rate of global manufacturing expansion slowed again at the start of the third quarter. At 52.7 in July, down from 53.0 in June, the J.P. Morgan Global Manufacturing PMITM – a composite index 1 produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – posted its lowest reading for one year.

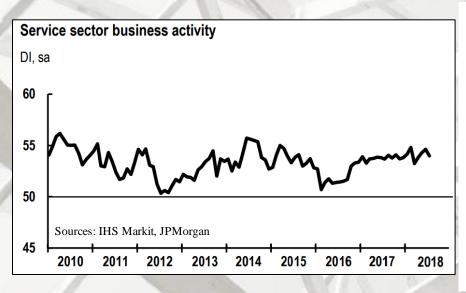
Global Manufacturing growth slows at start of third quarter

The slowdown reflected weaker growth in the consumer and investment goods industries. PMI readings for these subsectors fell to 13- and ten-month lows respectively, as rates of expansion eased for both production and new orders. The intermediate goods sector PMI ticked up to a three-month high, with its output and new business components signalling stronger increases compared to June.

Global manufacturing production and new orders both continued to increase in July, albeit at the weakest rates since September 2016. Part of the slowdown in new business growth reflected a subdued picture for international trade flows. The pace of increase in new export orders eased to near-stagnation and was the weakest during the current two-year sequence of expansion. New export business declined in the US, China, France, Russia, Indonesia, Brazil, and Austria. A solid increase was signalled (on average) for the eurozone manufacturing sector.

Global manufacturing employment increased for the twenty-third month running in July. Among the largest industrial nations, staffing levels were raised in the euro area, the US and Japan, but reduced in China. Meanwhile, price pressures continued to ease, with rates of inflation slowing for both output charges and input prices.

July PMI data signaled a further slowdown in the rates of expansion of both output and new orders. The manufacturing upturn has lost sizeable momentum since the start of the year. However, with final demand growth having firmed in recent months and signs that an inventory drag is nearing an end, we think output gains will strengthen in coming months."—David Hensley, Global Economist, J.P. Morgan



JP Morgan Global Services PMI™

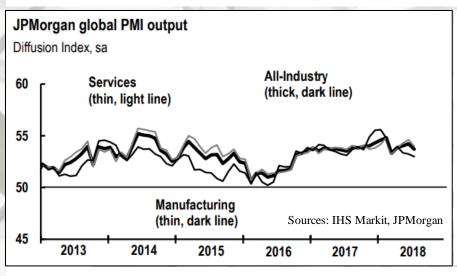
"The rate of expansion in global service sector output eased to a three-month low in July, as intakes of new work rose at the weakest pace since last October. The J.P. Morgan Global Services Business Activity Index – a composite index produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – posted 54.0, down from 54.6 in June, and has remained above the neutral 50.0 mark for 108 consecutive months.

Global service sector growth eases in July

Output rose across the business, consumer and financial services sectors in July. Rates of expansion improved in the latter two, but slowed to a four-month low at business service providers. Slower trends in new order growth were evident across all three sectors.

The upturn also remained broad-based by country, with output rising across all of the national service economies covered by the July survey. Slower rates of expansion were also seen in the majority of nations, with only Russia, India and Brazil managing to buck that trend.

"The July PMI data signalled that global service sector output growth slowed at the start of the third quarter, following a tandem weakening in the pace of expansion of incoming new orders. There was some positive news on the margins front, however, as input cost inflation slowed at a time when output charges are rising at a series-record pace." – David Hensley, Global Economist, J.P. Morgan



JP Morgan Global Composite PMI™

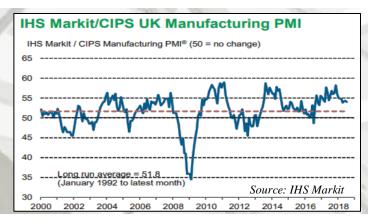
"The J.P. Morgan Global All-Industry Output Index – which is produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – posted 53.7 in July, down from 54.2 in June, registering its second-lowest reading during the past year. The headline index has nonetheless signaled expansion for 70 months in a row.

Global economic growth eases to four-month low in July

The rate of global economic expansion eased to a four month low at the start of the third quarter. Output growth eased in the manufacturing and service sectors, as both experienced concurrent weakening in the pace of increase of new order intakes. The slowdown filtered through to business confidence, which dipped to a 20-month low in July.

Output expanded across the six sub-industries covered by the survey. Growth accelerations were signalled in the consumer services, financial services and intermediate goods sectors, whereas weaker increases were seen in the business services, consumer goods and investment goods categories. Evidence of slowdown was more widespread in relation to the trend in new orders. Although new work intakes rose across all six sectors, only intermediate goods producers registered an improved pace of growth.

The July PMI data suggest that the rate of global economic expansion slowed to a four-month low, with rates of increase losing traction in both the manufacturing and service sectors. Although growth of new order intakes slowed at the start of the third quarter, an expected firming of final demand in the coming months combined with the inventory-drag in manufacturing nearing its end should hopefully provide a platform for global GDP growth to revive later in the year." – David Hensley, Global Economist, J.P. Morgan



Markit/CIPS UK Manufacturing PMI™

"The seasonally adjusted IHS Markit/CIPS Purchasing Managers' Index® (PMI®) fell to a three-month low of 54.0 in July, down from 54.3 in June and well below the highs achieved around the turn of the year. That said, the PMI remains comfortably above its long-run average of 51.8.

Manufacturing sector remains subdued at end of second quarter

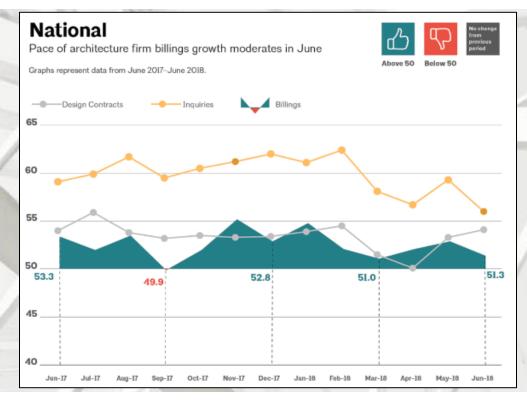
The softer growth patch of the UK manufacturing sector continued at the start of the third quarter. July saw slower rates of expansion in both output and new orders, as weaker growth of new work from domestic sources offset a stronger increase in new export orders. Price pressures also remained elevated as a strong increase in average input costs led to the steepest rise in selling prices since February.

UK manufacturing started the third quarter on a softer footing, with rates of expansion in output and new orders losing steam. The upturn in the sector has eased noticeably since the back-end of 2017, meaning that manufacturing has failed to provide any meaningful boost to headline GDP growth through the year-so-far.

The July survey data also shows that the performance of the sector is becoming more uneven, with solid output growth in the investment goods industry being largely offset by intermediate goods production contracting for the first time in two years. As the intermediate goods sector supplies other manufacturers, taken alongside weaker growth of total new orders and a drop in business confidence to a 21 -month low, this all suggests industry is unlikely to exit this soft patch in the near future.

"The prices picture remained mixed in July. Cost inflation eased, whereas selling prices rose at the quickest pace in five months. The financial markets still seem to have an interest rate increase nailed on for August. However, if the combination of weaker growth and a softening of pipeline cost pressures at manufacturers is mirrored in the larger service sector, the Bank of England's decision will be far from unanimous and they may even yet find some cause for pause."—Rob Dobson, Director & Senior Economist, IHS Markit

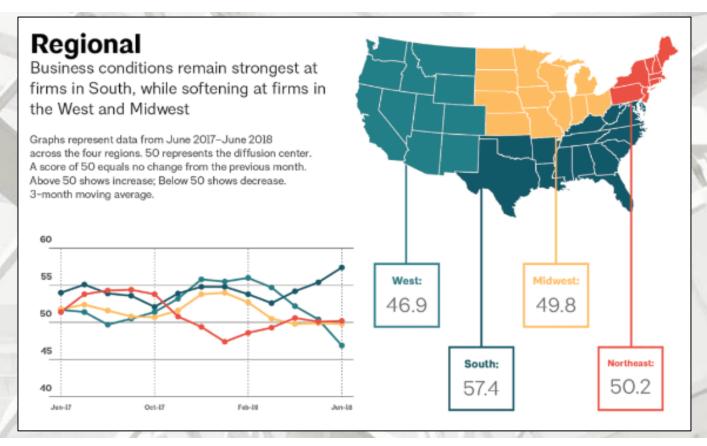
Private Indicators American Institute of Architects (AIA)



June Architecture Billings Index Billings grow at modestly slower pace

"Architecture firm billings increased for the ninth consecutive month in June. Although the ABI score of 51.3 indicates that fewer firms reported an increase in billings than in May, which had a score of 52.8, billings still remain strong overall (any score over 50 indicates billings growth). In addition, the value of new design contracts at firms strongly increased for the second month in a row, and firms continued to report robust backlogs of 6.3 months for the second consecutive quarter. This remains the strongest that backlogs have been since the recession. Architects continue to see increases in demand for their services this summer, with new project work coming in at a healthy pace." – The American Institute of Architects

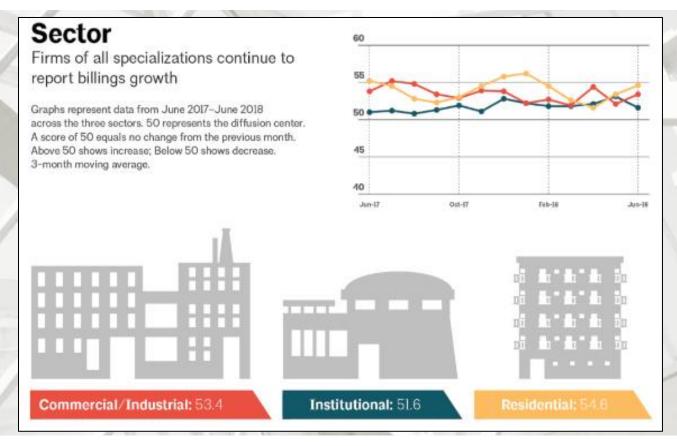
Private Indicators: AIA



Region

"However, business conditions are beginning to vary across the country. While essentially remaining flat in the Northeast and Midwest, billings jumped in the South while dropping in the West. Regionally, architecture firm billings were more variable in June. Billings have declined modestly for the last three months at firms located in the Midwest, and have also dropped at firms located in the West. Only firms located in the South have seen consistently strong billings throughout the year so far." – The American Institute of Architects

Private Indicators: AIA



Sector

"The pace of growth slowed modestly at firms with an institutional specialization in June but still remains generally strong, as firms with this specialization have not reported declining billings for more than a year and a half." – The American Institute of Architects

Dodge Data & Analytics June Construction Starts Jump 11 Percent

Nonresidential Building Soars, Lifted by Large Manufacturing and Office Projects

"New construction starts in June climbed 11% to a seasonally adjusted annual rate of \$896.3 billion, according to Dodge Data & Analytics. June's data raised the Dodge Index to 190 (2000=100), compared to an upwardly revised 170 for May. The increase marked the second double-digit gain in a row, following the 15% hike that was reported for May.

Boosting activity in June was a sharp 57% advance for nonresidential building, which benefitted from the start of two massive manufacturing plant projects and two massive office building projects. The two large manufacturing projects were a \$6.5 billion uranium processing facility in Oak Ridge TN and a \$1.7 billion petrochemical plant in Port Arthur TX, while the two large office projects were the \$1.8 billion Spiral office tower in New York NY and a \$665 million office tower in Chicago IL. **Residential building** in June grew 4%, helped by growth for multifamily housing. The nonbuilding construction sector (public works and electric utilities) retreated 28% in June, pulling back after the sharp 37% increase reported in May that reflected the start of several large natural gas pipelines and rail-related projects. Through the first six months of 2018, total construction starts on an unadjusted basis were \$395.7 billion, up 1% from the same period a year ago. If the volatile electric utility/gas plant category is excluded, total construction starts during the first six months of 2018 would be up 3% relative to last year." – Benjamin Gorelick, Spector & Associates

Dodge Data & Analytics

"The monthly pattern for construction starts will often reflect the presence or absence of very large projects, and after May received a lift from unusually large projects, it was even more true in June. Following the lackluster activity in April, the strength shown during May and June enabled the second quarter average for total construction starts to be up 3% from the first quarter, which itself was up 2% from the final three months of 2017. On that basis, one can say that the expansion for construction starts continued at a modest pace during the first half of 2018. At the same time, it's not expected that July will get the same support from large projects that took place in June.

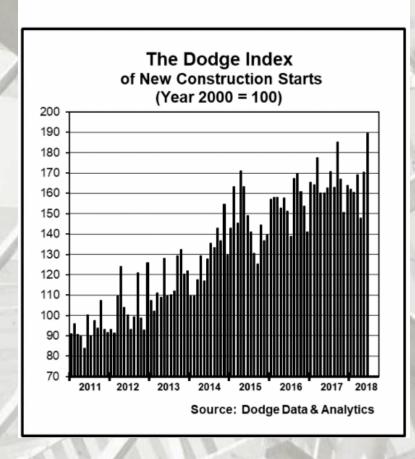
Several features of the first half of 2018 stand out, as shown by the construction start statistics. Nonresidential building so far this year has seen gains for manufacturing buildings, educational facilities, and amusement-related facilities, while office building starts have stayed close to last year's pace. However, transportation terminal starts have not proceeded at the same robust volume that occurred in early 2017, and store construction has weakened further. **Residential building** is seeing surprising resilience from multifamily housing, even as apartment vacancy rates have moved up gradually. The public works sector is showing widespread increases this year, outweighing a slightly slower (yet still strong) pace for new pipeline projects compared to a year ago. The electric utility/gas plant category continues to decline, exerting a downward pull on total construction starts in similarity to what occurred during 2016 and 2017. Although the construction industry is facing increased headwinds during 2018, namely higher material prices and rising interest rates, these have yet to have a discernible negative impact on the broad level of construction starts. On the plus side, the construction industry is benefitting currently from the tailwinds of a strong economy, some easing of bank lending standards, and greater funding for federal public works programs as the result of the omnibus appropriations legislation passed in March." - Robert A. Murray, Chief Economist, Dodge Data & Analytics

Dodge Data & Analytics

"**Residential building** in June was \$323.0 billion (annual rate), up 4%. Multifamily housing grew 9% in June, advancing for the second month in a row after weak activity in April. There were seven projects valued each at \$100 million or more that were reported as construction starts in June, compared to six such projects in May. The large June projects included the \$213 million Aston Martin multifamily tower in Miami FL, the \$195 million multifamily portion of the \$260 million Essex Crossing mixed-use building in New York NY, and the \$186 million multifamily portion of a \$215 million mixed-use tower in Boston MA. Through the first half of 2018, the top five metropolitan areas ranked by the dollar amount of multifamily starts were – New York NY, Miami FL, Washington DC, Boston MA, and Seattle WA. Metropolitan areas ranked 6 through 10 were – San Francisco CA, Los Angeles CA, Dallas-Ft. Worth TX, Philadelphia PA, and Atlanta GA. The top ten multifamily metropolitan areas in the first half of 2018 showed a fairly balanced mix of gains and declines relative to last year, with six showing gains (including a 22% increase for New York NY), while four showed declines. In contrast, the full year 2017 showed declines for seven of the top ten metropolitan areas. Single family housing in June grew 2%, and during the first half of 2018 essentially hovered around the improved level of activity that was reported at the end of 2017. By region, the first half of 2018 showed this performance for single family housing compared to last year – the West, up 11%; the South Atlantic, up 5%; the South Central, up 4%; the Northeast, up 2%; and the Midwest, up 1%.

The 1% increase for total construction starts on an unadjusted basis for the first six months of 2018 compared to last year was due to a mixed performance by major sector. Nonresidential building year-to-date dropped 3%, due to this pattern by segment – commercial building down 8%, institutional building down 6%, and manufacturing building up 49%. **Residential building year-to-date** rose 6%, with multifamily housing up 8% and single family housing up 5%. Nonbuilding construction year-to-date was essentially even with last year, with public works up 9% and electric utilities/gas plants down 48%. By major region, total construction starts during the first six months of 2018 showed this behavior – the South Central, up 10%; the South Atlantic, up 4%; the Northeast, down 1%; the Midwest, down 3%; and the West, down 4%." – Robert A. Murray, Chief Economist, Dodge Data & Analytics

June 2018 Construction Starts



June 2018 Construction Starts

Monthly Summary of Construction Starts

Prepared by Dodge Data & Analytics

Monthly Construction Starts

Seasonally Adjusted Annual Rates, in Millions of Dollars

	June 2018	May 2018	% Change
Nonresidential Building	\$402,273	\$256,962	+57
Residential Building	323,013	311,678	+4
Nonbuilding Construction	<u>171,034</u>	236,011	-28
Total Construction	\$896,320	\$804,651	+11

The Dodge Index

Year 2000=100, Seasonally Adjusted

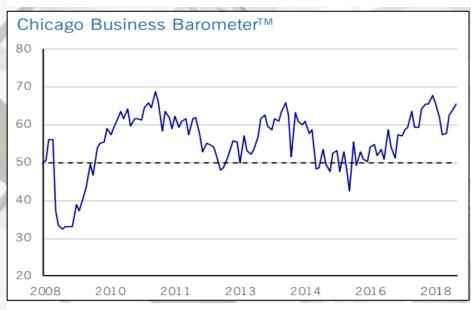
June 2018190

May 2018170

Year-to-Date Construction Starts

Unadjusted Totals, in Millions of Dollars

	6 Mos. 2018	6 Mos. 2017	% Change
Nonresidential Building	\$136,770	\$140,793	-3
Residential Building	166,212	156,547	+6
Nonbuilding Construction	92,755	93,079	<u>-0-</u>
Total Construction	\$395,737	\$390,419	+1
Total Construction, exclud	ing		
electric utilities/gas plants	\$387,997	\$375,492	+3



MNI Chicago MNI Chicago Business Barometer Rises to 65.5 in July

"The MNI Chicago Business Barometer rose to a six-month high of 65.5 in June, up 1.4 points from 64.1 in June. Businesses' operations rose at a swifter pace in July, with activity up for the fourth straight month. All but one of the Barometer components rose on the month, with only Supplier Deliveries losing ground, leaving the Barometer up 10.1% on the year.

New Orders, Production Bolstered as Prices Paid Hits 10-Year High

Like the headline index, both New Orders and Production recorded six-month highs in July, traditionally a busy month for firms coinciding with the summer holiday season. Both indicators sit comfortably above the neutral-50 mark, up 8.0% and 10.6% on the year respectively, and continue to signal robust demand.

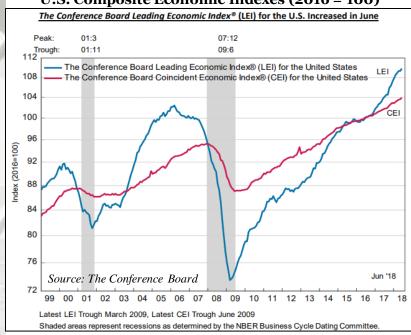
Alongside a further pickup in demand growth, firms' level of unfinished orders continued to grow. The Order Backlogs indicator capped a third straight rise by hitting a nine-month high, with some firms reporting a demand hangover from June while others blamed inefficiencies in production and a lack of employees. Lead times on key materials remained significantly elevated, despite easing marginally in July, and continue to impair firms' productive capacity. Consistent with the longer wait times, stock levels of principal items eased in July, down to an 18-month low. ...

The MNI Chicago Business Barometer started the third quarter in bullish form, with business activity supported by robust demand and output. Both, like the headline index, registered 6-month highs and the majority of firms expect demand to increase further over Q3. Input prices continue to be a thorn in the side of businesses, however, with the Prices Paid indicator at the highest in a decade and continuing to signal pipeline inflation." – Jamie Satchi, Economist, MNI Indicators

The Conference Board Leading Economic Index® (LEI) for the U.S. Increased in June

The Conference Board Leading Economic Index® (LEI) for the U.S. increased 0.5 percent in June to 109.8 (2016 = 100), following no change in May, and a 0.4 percent increase in April.

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

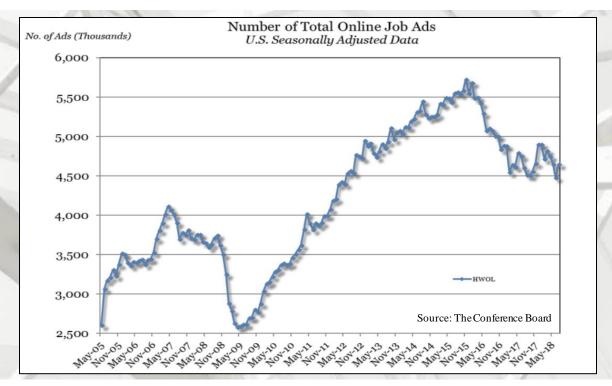


"The U.S. LEI increased in June, pointing to continuing solid growth in the U.S. economy. The widespread growth in leading indicators, with the exception of housing permits which declined once again, does not suggest any considerable growth slowdown in the short-term." – Ataman Ozyildirim, Director of Business Cycles and Growth Research, The Conference Board

Indicators Point to Continuing Economic Growth

"The Conference Board Coincident Economic Index® (CEI) for the U.S. increased 0.3 percent in June to 103.9 (2016 = 100), following a 0.1 percent increase in May, and a 0.2 percent increase in April.

The Conference Board Lagging Economic Index® (LAG) for the U.S. increased 0.3 percent in June to 105.4 (2016 = 100), following a 0.5 percent increase in May and a 0.4 percent increase in April." – The Conference Board



The Conference Board Help Wanted OnLine® (HWOL) Online Job Ads Increased 170,800 in July

- "Increases widespread across virtually all States and MSAs
- Most occupations showed gains over the month

Online advertised vacancies increased 170,800 to 4,651,500 in July, according to *The Conference Board Help Wanted OnLine® (HWOL) Data Series*, released today. The June Supply/Demand rate stands at 1.46 unemployed for each advertised vacancy, with a total of 2.1 million more unemployed workers than the number of advertised vacancies. The number of unemployed was approximately 6.6 million in June.

The Professional occupational category saw changes in Healthcare practitioners (23.9), Management (22.1), and Business (18.5). The Services/Production occupational category saw changes in Sales (28.2), Transportation (23.3), and Food prep (16.3)."—Carol Courter, The Conference Board

Equipment Leasing and Finance Association Equipment Leasing and Finance Industry Confidence Eases in July

"The Equipment Leasing & Finance Foundation (the Foundation) releases the July 2018 Monthly Confidence Index for the Equipment Finance Industry (MCI-EFI). Designed to collect leadership data, the index reports a qualitative assessment of both the prevailing business conditions and expectations for the future as reported by key executives from the \$1 trillion equipment finance sector. Overall, confidence in the equipment finance market is 62.8 in July, easing from the June index of 66.2." – Anneliese DeDiemar, Author, Equipment Leasing & Finance Association

"Customers continue to digest the changes related to tax reform to determine how best to finance capital investment. Some customers are delaying capital investment until they better understand the impacts related to tariffs." – Michael Romanowski, President, Farm Credit Leasing Services Corporation

"Businesses continue to invest in equipment and financing those purchases. The manic nature of the stock markets and our government leadership seems to be having minimal impact on the decisions of our small business customers. It will be an interesting second half of the year as we observe expansion trends among our customers." – Valerie Hayes Jester, President, Brandywine Capital Associates

"Demand for new and used equipment remains strong so applications are up, and we are seeing some better quality so approvals are up, too. All of this is growing our originations." – David T. Schaefer, CEO, Mintaka Financial, LLC

"Times are good in the U.S. There are no pending problems that can have a significant economic effect." – Harry Kaplun, President, Specialty Finance, Frost Bank

Equipment Leasing and Finance Association June 2018 Survey Results:

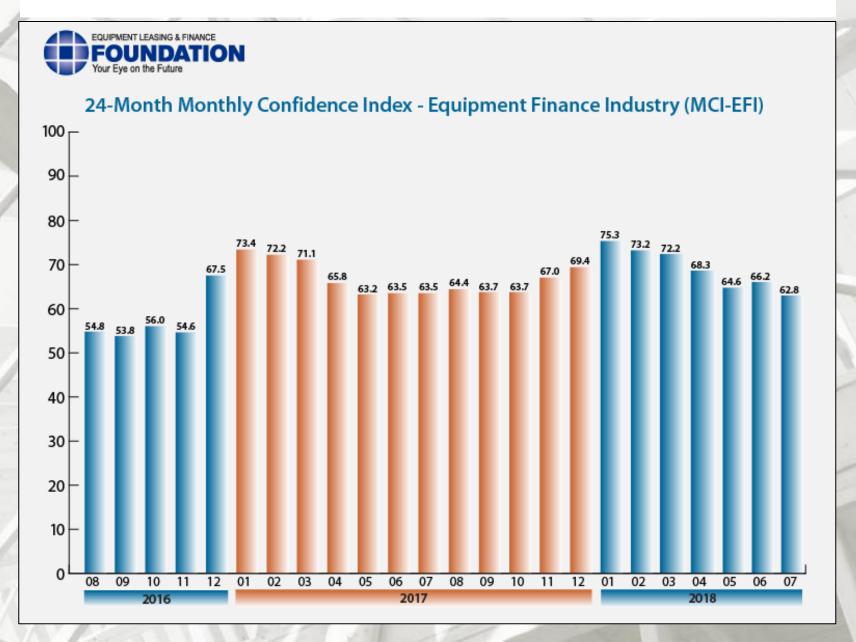
"The overall MCI-EFI is 62.8 in July, a decrease from 66.2 in June.

- When asked to assess their business conditions over the next four months, 19.4% of executives responding said they believe business conditions will improve over the next four months, a decrease from 33.3% in June. 77.4% of respondents believe business conditions will remain the same over the next four months, an increase from 63.6% the previous month. 3.2% believe business conditions will worsen, relatively unchanged from 3.0% who believed so the previous month.
- 19.4% of survey respondents believe demand for leases and loans to fund capital expenditures (capex) will increase over the next four months, a decrease from 24.2% in June. 77.4% believe demand will "remain the same" during the same four-month time period, an increase from 75.8% the previous month. 3.2% believe demand will decline, up from none who believed so in June.
- 16.1% of the respondents expect more access to capital to fund equipment acquisitions over the next four months, up from 15.2% in June. 83.9% of executives indicate they expect the "same" access to capital to fund business, a decrease from 84.9% last month. None expect "less" access to capital, unchanged from last month." Anneliese DeDiemar, Author, Equipment Leasing & Finance Association

Equipment Leasing and Finance Association

June 2018 Survey Results:

- "When asked, 45.2% of the executives report they expect to hire more employees over the next four months, a decrease from 57.6% in June. 51.6% expect no change in headcount over the next four months, an increase from 42.4% last month. 3.2% expect to hire fewer employees, an increase from none in June.
- 41.9% of the leadership evaluate the current U.S. economy as "excellent," up from 39.4% last month. 58.1% of the leadership evaluate the current U.S. economy as "fair," down from 60.6% in June. None evaluate it as "poor," unchanged from last month.
- 12.9% of the survey respondents believe that U.S. economic conditions will get "better" over the next six months, a decrease from 24.2% in June. 77.4% of survey respondents indicate they believe the U.S. economy will "stay the same" over the next six months, an increase from 69.7% the previous month. 9.7% believe economic conditions in the U.S. will worsen over the next six months, an increase from 6.1% in June.
- In July, 45.2% of respondents indicate they believe their company will increase spending on business development activities during the next six months, an increase from 42.4% in June. 54.8% believe there will be "no change" in business development spending, a decrease from 57.6% the previous month. None believe there will be a decrease in spending, unchanged from last month." Anneliese DeDiemar, Author, Equipment Leasing & Finance Association



Equipment Leasing and Finance Association Monthly Leasing and Finance Index: June 2018

June New Business Volume Down 7 Percent Year-over-year, Up 18 Percent Month-to-Month, Up 4 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 June was \$9.1 billion, down 7 percent year-over-year from new business volume in June 2017. Volume was up 18 percent month-to-month from \$7.7 billion in May. Year to date, cumulative new business volume was up 4 percent compared to 2017.

Receivables over 30 days were 1.40 percent, down from 1.60 percent the previous month and up from 1.30 percent the same period in 2017. Charge-offs were 0.33 percent, up from 0.31 percent the previous month, and down from 0.38 percent in the year-earlier period.

Credit approvals totaled 75.8 percent in June, down from 76.8 percent in May. Total headcount for equipment finance companies was down 0.2 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 July is 62.8, easing from the June index of 66.2." – Amy Vogt, Vice President, Communications and Marketing, ELFA

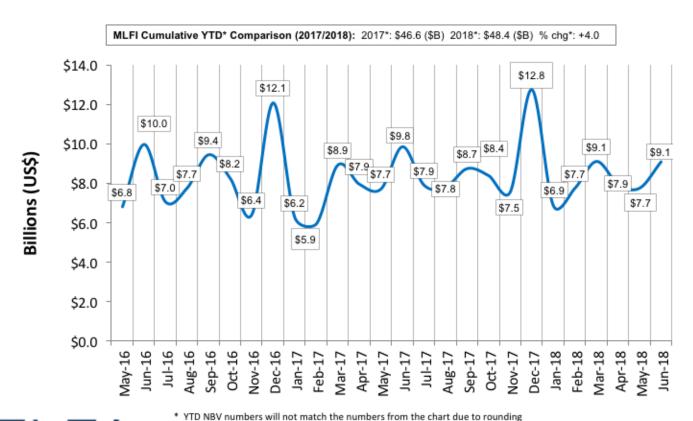
Equipment Leasing and Finance Association Monthly Leasing & Finance Index: June 2018

June New Business Volume Down 7 Percent Year-over-year, Up 18 Percent Month-to-Month, Up 4 Percent Year-to-date

"Most sectors of the equipment finance industry are performing well, as the economy's underlying fundamentals continue to hold up in the face of slowly rising interest rates. A strong corporate earnings season and continued strength in the labor markets create a positive environment for capex spending. Hopefully, potential disruption in the global supply chain created by frictions with our trading partners does not upend this positive scenario." – Ralph Petta, President and CEO, ELFA

"The overall equipment financing industry activity has been strong during the first six months of 2018. In the technology sector, customers continue to shift their buying behaviors toward pay-per-use models, cloud-based models and bundled solutions that may include hardware, software and services. As a result, we expect captive finance companies to grow in importance as a strategic underpinning for business and economic growth throughout the remainder of the year." – Kris Snow, President, Cisco Capital

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







July 2018 Manufacturing ISM® Report On Business® July PMI® at 58.1%

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

"Economic activity in the **manufacturing sector** expanded in June, and the **overall economy** grew for the 111th consecutive month, say the nation's supply executives in the latest **Manufacturing ISM**® *Report On Business*®. The July PMI® registered 58.1 percent, a decrease of 2.1 percentage points from the June reading of 60.2 percent.

The New Orders Index registered 60.2 percent, a decrease of 3.3 percentage points from the June reading of 63.5 percent.

The Production Index registered 58.5 percent, a 3.8 percentage point decrease compared to the June reading of 62.3 percent.

The Employment Index registered 56.5 percent, an increase of 0.5 percentage point from the June reading of 56 percent.

The Supplier Deliveries Index registered 62.1 percent, a 6.1 percentage point decrease from the June reading of 68.2 percent.

The Inventories Index registered 53.3 percent, an increase of 2.5 percentage points from the June reading of 50.8 percent.

The Prices Index registered 73.2 percent in July, a 3.6 percentage point decrease from the June reading of 76.8 percent, indicating higher raw materials prices for the 29th consecutive month." – Timothy R. Fiore, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee

June 2018 Manufacturing ISM® Report On Business® June PMI® at 60.2%

"Comments from the panel reflect continued expanding business strength. Demand remains strong, with the New Orders Index at 60 percent or above for the 15th straight month, and the Customers' Inventories Index remaining low. The Backlog of Orders Index continued to expand, but at lower levels. Production and employment continues to expand in spite of labor and material shortages. Inputs — expressed as supplier deliveries, inventories and imports — had expansion increases, due primarily to negative supply chain issues, but at easing levels compared to the prior month. Lead-time extensions, steel and aluminum disruptions, supplier labor issues, and transportation difficulties continue. Export orders expanded, but at lower levels. Price pressure remains strong, but the index softened for the second straight month. Demand remains robust, but the nation's employment resources and supply chains continue to struggle. Respondents are again overwhelmingly concerned about how tariff-related activity, including reciprocal tariffs, will continue to affect their business." — Timothy R. Fiore, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee

July 2018 Non-Manufacturing ISM® Report On Business®

July PMI® at 55.7%

Business Activity Index at 56.5%; New Orders Index at 57.0%; Employment Index at 56.1%

"Economic activity in the **non-manufacturing sector** grew in July for the 102nd consecutive month, say the nation's purchasing and supply executives in the latest **Non-Manufacturing ISM**® **Report On Business**®.

The NMI® registered 55.7 percent, which is 3.4 percentage points lower than the June reading of 59.1 percent. This represents continued growth in the non-manufacturing sector at a slower rate.

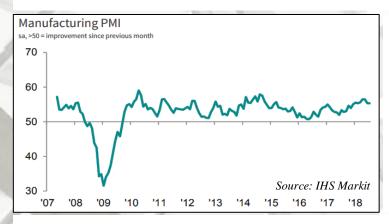
There was a notable decrease in the Business Activity Index, which fell to 56.5 percent, 7.4 percentage points lower than the June reading of 63.9 percent. The July figure still reflects growth for the 108th consecutive month, at a slower rate.

The New Orders Index registered 57 percent, 6.2 percentage points lower than the reading of 63.2 percent in June.

The Employment Index increased 2.5 percentage points in July to 56.1 percent from the June reading of 53.6 percent.

The Prices Index increased by 2.7 percentage points from the June reading of 60.7 percent to 63.4 percent, indicating that prices increased in July for the 29th consecutive month.

According to the NMI®, 16 non-manufacturing industries reported growth. There has been a 'cooling off' in growth for the non-manufacturing sector. Tariffs and deliveries are an ongoing concern. The majority of respondents remain positive about business conditions and the economy." – Timothy R. Fiore, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee



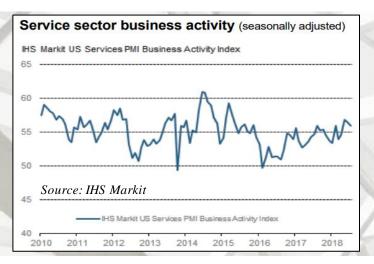
"The seasonally adjusted IHS Markit final **U.S. Manufacturing Purchasing Managers' Index**(**PMI**TM) registered 55.3 in July, down slightly from 55.4 in June. Overall, the latest improvement in the health of the sector was the joint weakest in 2018 to date, but remained strong in the context of historical data.

PMI dips to five-month low in July

U.S. manufacturing firms signalled a strong improvement in operating conditions in July, despite the headline PMI falling to a five-month low. Weaker rises in output and employment were seen in July, while export sales fell for the second month in a row. Meanwhile, companies reported the greatest deterioration in vendor performance since the series began and a faster rate of input cost inflation. That said, business confidence remained strongly positive, and was supported by hopes of further increases in overall new orders.

The US manufacturing sector continued to expand in July, but shows increasing signs of struggling against headwinds of supply shortages, rising prices and deteriorating exports. The latest survey showed output rising at a rate roughly equivalent to an annualised 1% pace of expansion, which is the weakest since late last year. While a weakening of new export orders for a second successive month suggested foreign demand has waned compared to earlier in the year, the slowdown can be also in part attributed to increased difficulties in sourcing sufficient quantities of inputs. Suppliers' delivery delays were more widespread than at any time in the survey's history. With producers often scrambling to buy enough raw materials, suppliers enjoyed greater pricing power. Not surprisingly, with tariffs also kicking in, cost pressures spiked higher again.

Some relief for manufacturers came from strong domestic demand, which meant firms were increasingly able to pass higher costs on to customers. Average prices charged for goods consequently rose at the steepest rate for seven years, which is likely to feed through to higher consumer prices in coming months."—Chris Williamson, Chief Economist, Markit®



Markit U.S. Services PMI™

"The seasonally adjusted final **IHS Markit U.S. Services Business Activity Index** registered 56.0 in July, down from 56.5 in June. The rise in output was steep overall, despite softening to the weakest since April. Where an increase in business activity was reported, panellists linked this to favourable demand conditions and more robust client demand. Although the rate of growth eased from recent peaks, it remained one of the fastest in the last three years.

Service sector business activity growth remains sharp, but prices charged rise at fastest rate in almost four years

July survey data signalled a further robust increase in business activity across the U.S. service sector. Although the latest upturn eased to a three-month low, it was sharp nonetheless and one of the fastest in the last three years. Similarly, the rate of new business growth softened to the weakest in six months, but remained steep overall. Backlogs contracted for the first time since April 2017, as strong employment growth reduced pressure on capacity. Meanwhile, output charge inflation accelerated on the back of strong demand and higher input costs.

US service providers experienced strong growth conditions at the start of the third quarter, with business activity rising at only a slightly softer pace than in June. Strong domestic demand helped to support another improvement in new order levels and a solid expansion of payroll numbers in July. However, business expectations across the service economy edged down to a six-month low. Survey respondents cited concerns about rising costs and trade frictions, alongside difficulties sustaining the tempo of new business growth seen in the second quarter of 2018.

Rising operating expenses continued to place pressure on margins in the service economy, partly reflecting higher wages and fuel bills in July. There were signs that higher input costs have started to shift through to consumers, as service providers recorded the fastest increase in their average prices charged since September 2014."—Chris Williamson, Chief Economist, Markit®

HIS Markit U.S. PMI and Manufacturing™

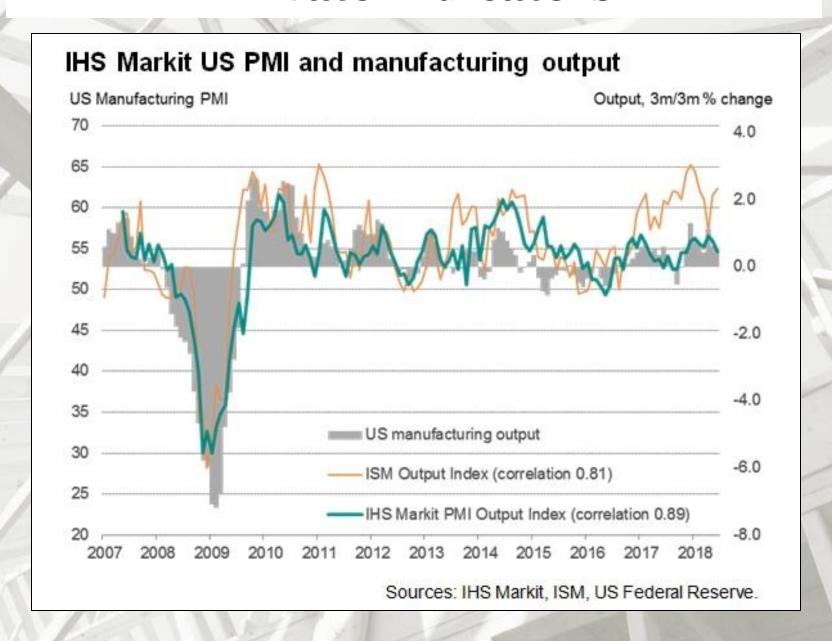
Official data confirm solid second quarter for US manufacturing, but outlook clouded by tariff and price worries

"Official data confirmed the survey data signal that US manufacturing output growth picked up in the second quarter, but the survey data indicate that the growth trend appears to be softening as we head into the third quarter. Worries about the impact of tariffs and higher prices were meanwhile reported as the most common threats to the business outlook.

According to the Fed's latest estimates of manufacturing production, output rose 0.5% in the three months to June compared to the prior three months. That was up slightly from 0.4% in the three months to March, meaning growth accelerated slightly between the first and second quarters, adding to signs that the economy has picked up momentum.

This respectable second quarter performance had already been indicated accurately by the IHS Markit PMI survey. We use a simple model based on a regression using the PMI survey's output index as the sole explanatory variable of the official growth rate (note that we don't use the headline PMI in our model, as this composite index includes variables such as employment and new orders). This model showed that the average PMI output index reading of 55.7 in the second quarter was historically consistent with output rising by just over 0.5%.

By comparison, a similar regression-based model for the ISM survey output index produces an estimated second quarter rise of 1.0% (after a 1.4% increase in the first quarter), once again highlighting how ISM survey data appear to have been overstating manufacturing growth in recent years." – Chris Williamson, Chief Economist, Markit®



Softer underlying trend

"However, there are signs from the survey that growth may be weakening. The June output index reading of 54.6 represented the weakest monthly increase in production since last November, and indicates that the quarterly growth rate slowed to just under 0.3% in June alone.

Although new orders continued to grow at a faster rate than output, the June inflow of orders was also the lowest since last November, hinting at slowing demand growth. Export orders slipped into decline for the first time in nearly a year.

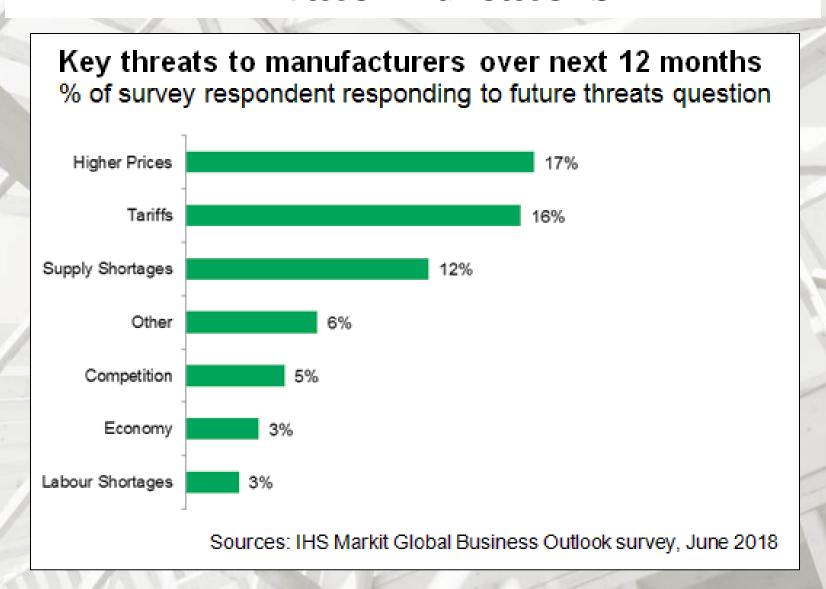
Firms worried by tariffs and prices

Companies' expectations have improved relative to other countries, but trade war and price worries are widespread, with one-in-four companies seeing tariffs and rising raw material prices as key threats.

The PMI's sister tri-annual Business Outlook Survey, which tracks sentiment from PMI survey respondents about the year ahead, showed that US manufacturers were unusual in becoming more upbeat about the year ahead in June compared to the prior survey, conducted back in February.

The net balance of manufacturing companies expecting business activity to rise over the coming year minus those expecting a decline rose from 28% back in February to 32% in June. However, this is down from 38% last October, suggesting companies are less upbeat than they were late last year.

The waning of optimism relative to last year has been in part due to the survey also recording increased worries about the adverse effect of tariffs, in conjunction with growing concerns about rising prices. Of the 320 companies that responded to a question asking about which key threats faced their business over the coming year, 16% of firms explicitly cited tariffs as a concern in June, with a further 17% reporting worries relating to the impact of rising input costs or raw material prices, often in turn linked to tariffs and trade wars." – Chris Williamson, Chief Economist, Markit[®]



Softer underlying trend

"Supply shortages, reflecting a recent record lengthening of supplier delivery times in the monthly PMI survey, were cited by 12% of companies that responded to the future threats question.

Tariff, price and supply worries in fact far exceeded all other areas of concern. The threat of business being stymied by a weakening of the economy or low demand was cited by just 3% of manufacturers, suggesting companies remain upbeat about the underlying health of the economy, with a similarly low proportion citing competition as a key threat.

Perhaps surprisingly for an economy with historically low unemployment, labour shortages were seen as a threat to business growth by only 3% of manufacturers.

By comparison, the February 2018 Outlook survey saw just 1% of companies report that tariffs and trade wars represented a threat to their business, and only 7% saw a threat from rising input costs. Material shortages as a threat were only cited by 4%.

Few beneficiaries of tariffs

When asked about key opportunities facing their companies in the year ahead, just 4 of the 320 companies reporting a possible threat to future business activity in the June Business Outlook Survey (around 1%), explicitly reported that they expected tariffs or trade wars to benefit their company. By far the most common opportunity reported by companies was the expected benefits associated with investing in the expansion of their business, in terms of building-out new capacity, launching new products and boosting sales and marketing expenditure." – Chris Williamson, Chief Economist, Markit[®]

National Association of Credit Management – Credit Managers' Index

July 2018's CMI Forecasts Negative Outlooks in Long Term

"There have been lots of troublesome rumblings as far as the performance of the economy is concerned. One can already see people shaking their heads and mumbling about the ways of the economist – always finding the dark cloud behind the silver lining. What could be wrong with an economy that is sporting the fastest quarterly growth seen in four years (4.1% in Q2), the lowest rates of unemployment in years (between 3.8% and 4%) and a dramatic expansion of exports?

Looking at this month's Credit Managers' Index (CMI), there are several areas that seem less than encouraging. The combined score slipped a bit from 56.3 to 55.5 – still well into the mid-50s and the expansion zone (anything above 50), but with a score lower than it has been the last two months. The index of favorable factors dropped, but it remained thoroughly within expansion territory at 63.1 after hitting 64.9 the month prior and 65.7 the month before that. The index of unfavorable factors stayed close to what it had been previously – 50.5 after a reading of 50.6 in both May and June. As always, the story is in the details.

The sales category fell from its unusually high level of 69.6 to a reading of 63.9, the lowest since January. Kuehl noted the impact of the tax cuts may have started to fade, but these numbers are thoroughly in the 60s and still solid. The new credit applications category improved over last month with a mark of 61.2 compared to 60.5. This is quite a bit less than was notched the month before in May when it hit 63.8. The always mercurial dollar collections number dropped by quite a bit, but still stayed in the 60s as it went from 63.2 to 61, while the amount of credit extended stayed close to what it has been for the last few months at 66.1. It was at 66.2 in June and 66.8 in May." – Adam Fusco, Associate Editor, NACM

National Association of Credit Management – Credit Managers' Index

July 2018's CMI Forecasts Negative Outlooks in Long Term

"It seems that credit managers are seeing some of these warning signs and are not as impressed with these good news reports. In fact, some of the issues can be read in those same reports. Much of what drove the fast growth in Q2 came from higher export levels, which took place as buyers of soybeans and other agriculture products rushed to get their orders filled before tariffs took effect. Sales will now start to fall like a rock.

The fear now is that some of the factors that had been keeping the economy functioning reasonably well are starting to fade. Inflation threats are becoming very real with the recent rise of wages to accompany the rise in commodity prices. If there are further hikes due to the tariff and trade wars, the inflation threat becomes imminent and serious and very difficult to walk back from.

The sector that seemed to get the biggest boost from the tax cuts was manufacturing as many of the small- and medium-sized companies struggling to emerge from the recession were finally able to purchase the machines they had needed for years. The larger companies spent more of that windfall on stock buybacks and internal activity, but the mid-market stuff has been taking off. The problem that lies ahead is that this same group will feel the impact of the trade wars and tariff battles through the end of this year and into next. This has been a volatile number all year, but has recently calmed down quite a bit as it seems that fewer of the manufacturers are having cash flow issues." – Dr. Chris Kuehl, Economist, NACM

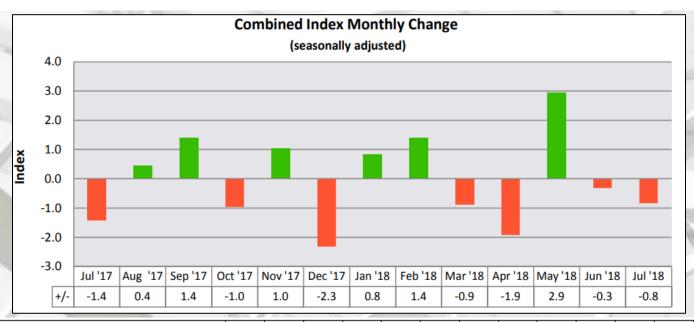
National Association of Credit Management – Credit Managers' Index

July 2018's CMI Forecasts Negative Outlooks in Long Term

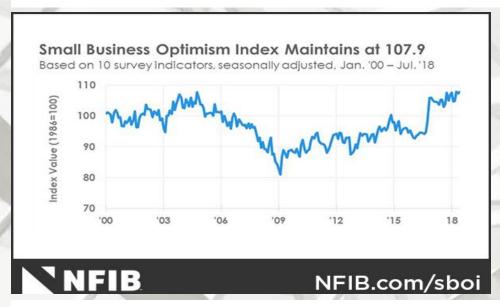
"Manufacturing has been on a roll for the bulk of the year. That has been obvious by looking at the favorable factors and their persistent positioning in the 60s. What is worrisome is that there are still lots of sagging readings in the nonfavorable sectors. If companies are still struggling to get out of a rut this long into a robust recovery, what will they look like when there are issues later with a slowing economy?

July 2018 versus July 2017

The month-to-month curve has been pretty flat — basically a good thing given the fact that the favorable factors have been in the 60s consistently and the nonfavorables have been clinging to the bottom of what would be termed expansion territory." – Dr. Chris Kuehl, Economist, NACM



Combined Manufacturing and Service Sectors (seasonally adjusted)	Jul '17	Aug '17	Sep '17	Oct '17	Nov '17	Dec '17	Jan '18	Feb '18	Mar '18	Apr '18	May '18	Jun '18	Jul '18
Sales	62.8	62.2	67.3	66.8	68.3	59.2	63.0	66.8	64.1	65.8	69.6	69.6	63.9
New credit applications	59.7	61.2	60.5	62.8	63.7	57.3	59.8	63.3	62.7	62.2	63.8	60.5	61.2
Dollar collections	60.2	58.9	60.0	60.2	63.1	59.1	58.7	62.9	59.6	46.7	62.5	63.2	61.0
Amount of credit extended	64.1	66.7	66.3	65.5	67.8	61.8	64.3	66.4	66.2	66.1	66.8	66.2	66.1
Index of favorable factors	61.7	62.2	63.5	63.8	65.7	59.4	61.4	64.9	63.2	60.2	65.7	64.9	63.1
Rejections of credit applications	51.9	52.2	52.5	51.8	52.4	51.4	51.8	51.5	53.3	51.0	51.3	51.2	52.5
Accounts placed for collection	48.9	48.7	50.3	49.5	50.5	49.8	51.7	49.8	50.4	48.7	49.0	51.3	49.9
Disputes	48.8	49.1	51.7	47.6	48.3	49.7	49.6	49.6	47.7	48.0	48.1	48.3	47.7
Dollar amount beyond terms	48.3	47.4	50.4	47.3	47.5	49.3	47.0	49.9	47.2	46.4	49.4	49.2	47.4
Dollar amount of customer deductions	48.1	49.2	49.8	48.7	48.9	49.7	49.7	49.1	49.8	48.4	49.7	48.1	47.9
Filings for bankruptcies	53.6	55.3	56.2	55.3	55.1	55.0	55.2	55.4	55.2	53.8	56.4	55.7	57.4
Index of unfavorable factors	49.9	50.3	51.8	50.0	50.4	50.8	50.8	50.9	50.6	49.4	50.6	50.6	50.5
NACM Combined CMI	54.6	55.1	56.5	55.5	56.6	54.2	55.1	56.5	55.6	53.7	56.6	56.3	55.5



July 2018 Report:

"A net eight percent of all owners (seasonally adjusted) reported higher nominal sales in the past three months compared to the prior three months. July is the eighth consecutive strong month of reported sales gains after years of low or negative numbers. A net 35 percent of owners expect better business conditions, ticking up two points from June.

Small Business Optimism Index Nears Survey High in July

The Small Business Optimism Index marked its second highest level in the survey's 45-year history at 107.9, rising to within 0.1 point of the July 1983 record-high of 108. The July 2018 report also set new records in terms of owners reporting job creation plans and those with job openings. A seasonally-adjusted net 23 percent are planning to create new jobs, up three points from June. Thirty-seven percent of all owners reported job openings they could not fill in the current period, a one-point increase from June.

- The percent of owners citing the availability of qualified workers as their number one business problem landed one point below the record high.
- Reports of compensation increases remained strong.
- Capital spending maintained a respectable pace but did not display the exuberance of its fellow indicators, although spending plans did post a gain.
- Plans to add to inventory holdings were strong as strong sales continue to deplete stocks.
- Profits continued to perform, and more firms raised prices, something that is easier when demand is strong." – Holly Wade, NFIB

"Small business owners are leading this economy and expressing optimism rivaling the highest levels in history. Expansion continues to be a priority for small businesses who show no signs of slowing as they anticipate more sales and better business conditions." – Juanita Duggan, President and CEO, NFIB

"Small business owners have never been so optimistic for so long, helping to power the second longest expansion in history. Despite challenges in finding qualified workers to fill a record number of job openings, they're taking advantage of this economy and pursuing growth." – William C. Dunkelberg, Chief Economist, NFIB

"Fifty-nine percent reported hiring or trying to hire (down four points), but 52 percent (88 percent of those hiring or trying to hire) reported few or no qualified applicants for the positions they were trying to fill. Twenty-three percent of owners cited the difficulty of finding qualified workers as their single most important business problem (up two points), one point below the 45-year record high.

Although some panned any celebration of the 4.1 percent second quarter GDP growth, small business owners beg to disagree. At least in the small business sector of the economy, Main Street's performance over the last 21 months is unprecedented based on reports for the past 45 years by hundreds of thousands of NFIB's member firms. Owners have never been so optimistic for so long. This has translated to improved employment and investment spending that buoys GDP growth, even at the end of what will be the longest expansion in modern history." – Holly Wade, NFIB

The Paychex | IHS Markit Small Business Employment Watch Jobs and Wage Growth Slow in July

- "The Small Business Jobs Index decreased 0.06 percent in July to 99.34
- At \$26.70, hourly earnings growth slowed to 2.42 percent YOY (\$0.63)
- Employment growth remains strongest in the South; the West remains the best region for wage growth
- Arizona and Phoenix rank first in both jobs and wage growth among states and metros, respectively
- Manufacturing shows positive YOY employment gains; Leisure and Hospitality ranks first among industries in wage growth.

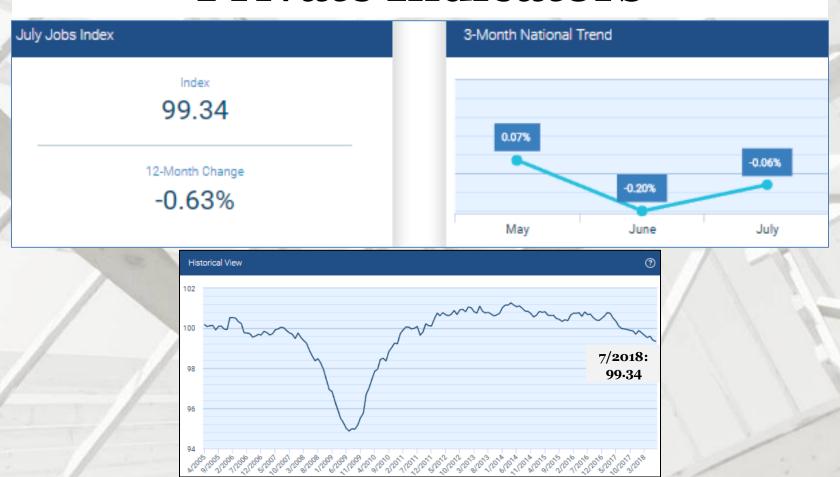
The Small Business Jobs Index slipped slightly again in July, to 99.34. It has been on a steady downtrend for the past 18 months, falling 1.43 percent during that time, while large employers have expanded payrolls." – James Diffley, Chief Regional Economist, IHS Markit

"We continue to see declining wage growth, which is unexpected in such a tight labor market. We recently surveyed business owners to look into this further. Of those who don't plan to raise wages this year, the majority (65 percent) indicated they're not making enough profit to do so, others are choosing to invest in other aspects of their business (28 percent)." – Martin Mucci, President and CEO, Paychex



The Paychex | IHS Markit Small Business Employment Watch Jobs and Wage Growth Slow in July

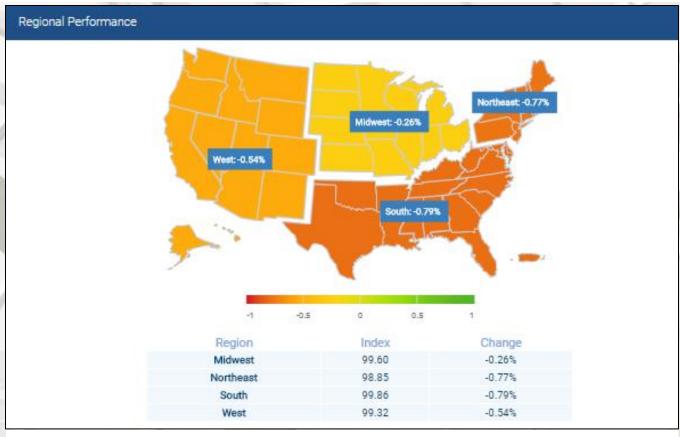
"The Paychex | IHS Markit Small Business Employment Watch for July shows slight declines in the rates of small business jobs and wage growth. At 99.34 in July, the Small Business Jobs Index is down 0.63 percent year-over-year. Hourly earnings growth stands at 2.42 percent, up \$0.63 from a year ago. Since last July, hourly earnings growth has slowed 0.54 percent." – James Diffley, Chief Regional Economist, IHS Markit



The Paychex | IHS Small Business Jobs Index

National Jobs Index

- "The national index continued its slow decline, down 0.19 percent during the past quarter and 0.63 percent during the past year.
- Reflecting tightening labor markets, the 12-month change in the index has been negative since March 2017." James Diffley, Chief Regional Economist, IHS Markit



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

The Paychex | IHS Small Business Jobs Index Regional Jobs Index

- "With an index below 99, the Northeast is the weakest region for small business employment growth.
- The South has been the strongest region for more than two years, but its employment growth has slowed the most year-over-year, 0.79 percent."— James Diffley, Chief Regional Economist, IHS Markit

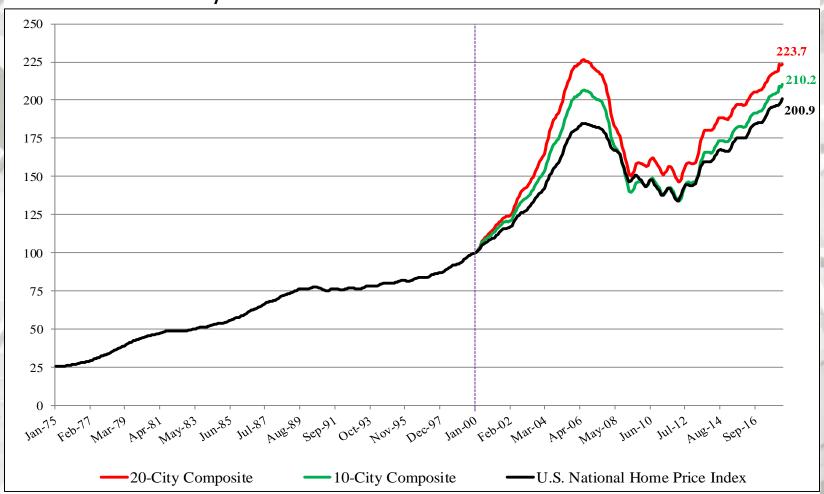
"The S&P CoreLogic Case-Shiller U.S. National Home Price NSA Index, covering all nine U.S. census divisions, reported a 6.4% annual gain in May, remaining the same as in the previous month. The 10-City Composite annual increase came in at 6.1%, down from 6.4% in the previous month. The 20-City Composite posted a 6.5% year-over-year gain, down from 6.7% in the previous month.

Rise in Home Prices Remains Steady at 6.4% According to S&P CoreLogic Case-Shiller Index

Home prices continue to rack up gains two to three times greater than the inflation rate. The year-over-year increases in the S&P CoreLogic Case-Shiller National Index have topped 5% every month since August 2016. Unlike the boom-bust period surrounding the financial crisis, price gains are consistent across the 20 cities tracked in the release; currently, the range of the largest to smallest price change is 10 percentage points compared to a 20 percentage point range since 2001, and a 25 percentage point range between 2006 and 2009. Not only are prices rising consistently, they are doing so across the country.

Continuing price increases appear to be affecting other housing statistics. Sales of existing single family homes – the market covered by the S&P CoreLogic Case-Shiller Indices – peaked last November and have declined for three months in a row. The number of pending home sales is drifting lower as is the number of existing homes for sale. Sales of new homes are also down and housing starts are flattening. Affordability – a measure based on income, mortgage rates and home prices – has gotten consistently worse over the last 18 months. All these indicators suggest that the combination of rising home prices and rising mortgage rates are beginning to affect the housing market." – David Blitzer, Managing Director and Chairman of the Index Committee, S&P Dow Jones Indices

S&P/Case-Shiller Home Price Indices



"Before seasonal adjustment, the National Index posted a month-over-month gain of 1.1% in May. The 10-City and 20-City Composites reported increases of 0.5% and 0.7%, respectively. After seasonal adjustment, the National Index recorded a 0.4% month-over-month increase in May. The 10-City and 20-City Composites posted 0.1% and 0.2% month-over-month increases, respectively. Nineteen of 20 cities reported increases in May before seasonal adjustment, while 16 of 20 cities reported increases after seasonal adjustment. The indices have a base value of 110 in July 2018; thus, for example, a current index value of 150 translates to a 50% appreciation rate since June 1975 for a typical home located within the subject market." – S&P CoreLogic

Gen X rebounds as the only generation to recover the wealth lost after the housing crash

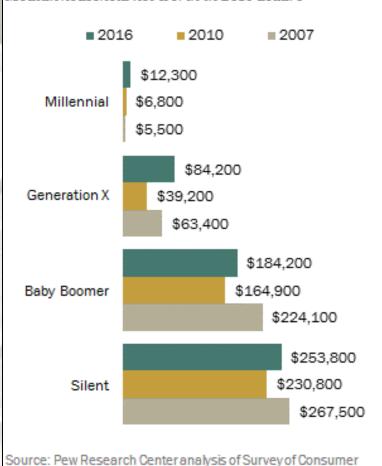
"Few American homeowners were spared from the broad housing collapse a decade ago, but Generation Xers were hit particularly hard. Newer to the housing market, more likely to be buying at peak prices and taking on more mortgage debt to buy their homes, they lost more wealth than other generations. But a new Pew Research Center analysis of Federal Reserve data finds that Gen Xers are the only generation of households to recover the wealth they lost during the Great Recession.

Wealth tends to <u>rise most rapidly at younger ages</u> before peaking once people reach their early 70s. The more robust wealth recovery of Gen Xers compared with the older Boomer and Silent generations fits this pattern. Wealth, or net worth – the difference between the value of a household's assets and debts – is an important dimension of household well-being because it is a measure of a family's "nest egg," resources that can sustain members through job layoffs or emergencies as well as provide income during retirement.

For many American households the bulk of their wealth is in their home, and this was especially the case for <u>households headed by Gen Xers</u> (then ages 27 to 42) in 2007. About half of the assets they owned were in the value of their primary residence, whereas households headed by a member of the Baby Boom or Silent generation had a higher share of their money in financial assets such as checking or retirement accounts."—Richard Fry, Senior Researcher; Pew Charitable Trust

Gen X households are the only ones to recover the wealth lost in the Great Recession

Median household net worth in 2016 dollars



Finances public-use data.

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The generations defined

Millennial generation

Born: 1981 to 1996 Age in 2016: 20 to 35

Generation X

Born: 1965 to 1980 Age in 2016: 36 to 51

Baby Boom generation

Born: 1946 to 1964 Age in 2016: 52 to 70

Silent Generation

Born: 1928 to 1945 Age in 2016: 71 to 88

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Gen X's economic hard times

"The median net worth of Gen X households had declined 38% from 2007 (\$63,400) to 2010 (\$39,200), while the typical wealth loss for Boomer and Silent households was not as steep (26% and 14%, respectively). Millennials, who were beginning to form households and accumulate wealth (the oldest was only 26 in 2007), were <a href="https://hitthard.org/hitthar

During the downturn, Gen X homeowners experienced the largest decline in home equity, the difference between what the primary residence is worth and all the debts secured by the home. The median home equity of Gen X homeowners fell 43% from 2007 (\$66,000) to 2010 (\$37,600). Boomer and Silent homeowners had smaller declines in median home equity (28% and 15%, respectively).

Stock prices also plunged after 2007, and most households (Millennials being the exception) had declines in financial holdings. The median value of the financial assets owned by Gen X households fell 20% from 2007 to 2010. Typical Boomer and Silent households had modestly larger declines in their financial assets." – Richard Fry, Senior Researcher; Pew Charitable Trust

Bouncing back

"But while the economic downturn had a disproportionately negative impact on Gen Xers, their fortunes have rebounded more than those of other generations during the post-recession economic expansion and as home and stock prices have risen. Since 2010, the median net worth of Gen X households has risen 115%. In fact, in 2016, the most recent year with available data, the net worth of a typical Gen X household had surpassed what it was in 2007 (\$84,200 vs. \$63,400). As of 2016, the median wealth of households headed by Boomers and the Silent Generation remains below 2007 levels, though their household wealth still exceeds that of Gen X.

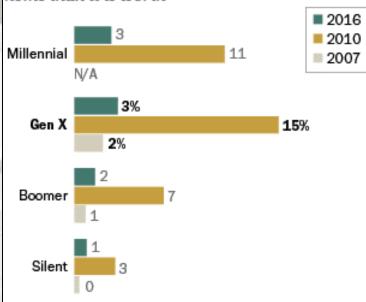
The full wealth recovery of households headed by Gen Xers stems from several factors.

First, they are the only generation to have recovered the home equity they lost in the downturn. The typical home equity level of Gen X homeowners has doubled since 2010, though this was not achieved without considerable borrower distress. According to Federal Reserve data, 15% of Gen X's homeowners were "underwater" on their homes in 2010 (meaning they owed more than they owned). By 2016 only 3% were underwater. This improvement is due to lenders foreclosing on homeowners as well as appreciating home values and mortgage modifications. Still, reducing the ranks of homeowners with negative equity in their homes boosts wealth." – Richard Fry, Senior Researcher; Pew Charitable Trust

Typical Gen X homeowner has more home equity than before the housing collapse

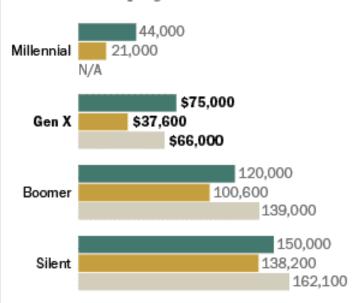
Fewer Gen X homeowners are "underwater" ...

% of homeowners who owe more on their home than it is worth



... and their median home equity has doubled since 2010

Median home equity in 2016 dollars



Note: Home equity is the value of the primary residence minus debts secured by the home (such as mortgages and home equity lines of credit). The value is based on the respondent's report. There were an insufficient number of Millennial homeowners in 2007 to provide a reliable estimate.

Source: Pew Research Center analysis of Survey of Consumer Finances public-use data.

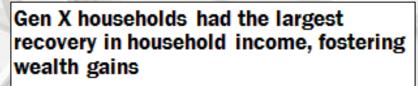
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Bouncing back

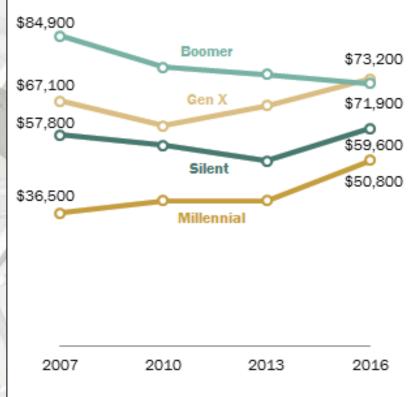
"Gen X households also experienced a stronger recovery in financial assets than Boomer and Silent households. The median financial assets of Gen X households nearly doubled from 2010 (\$11,300) to 2016 (\$21,600). In comparison, Boomer and Silent households' financial assets are at a level similar to before the Great Recession..

In addition, unlike their older counterparts, Gen Xers are still of prime working age. Higher household income tends to boost wealth because it <u>enables families to save</u> and add to wealth. Gen X's ability to rebuild its wealth may reflect its relatively robust household income growth since 2010. The median <u>adjusted household income</u> of Gen X households increased more than 20% and, at \$73,200 in 2016, surpassed that of other generations. The oldest Gen Xer was 51 as of 2016, meaning that Gen X workers are still approaching their <u>peak earning</u> years. The number of Gen Xers in the labor force has remained stable since 2008, whereas the <u>Boomer and Silent labor force</u> has shrunk through retirements and deaths.

Through first-hand experience Gen Xers learned the painful consequences of economic contractions. At least in terms of wealth, they are now better positioned to weather the next one." – Richard Fry, Senior Researcher; Pew Charitable Trust

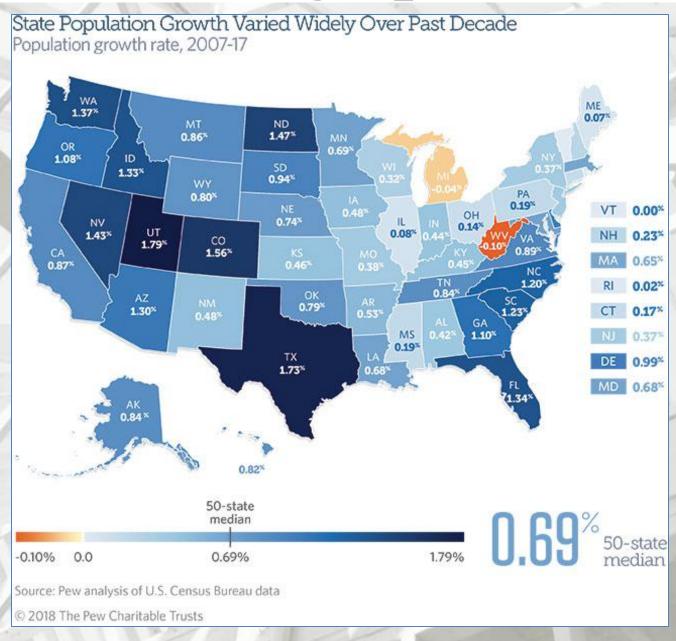


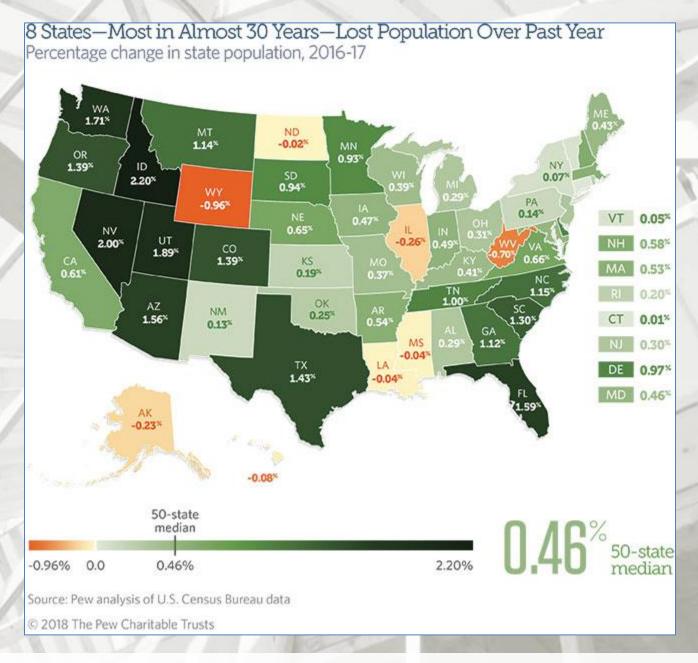
Median household income, in 2016 dollars and scaled to reflect a three-person household



Note: Household incomes are adjusted for household size. Source: Pew Research Center analysis of Survey of Consumer Finances public-use data.

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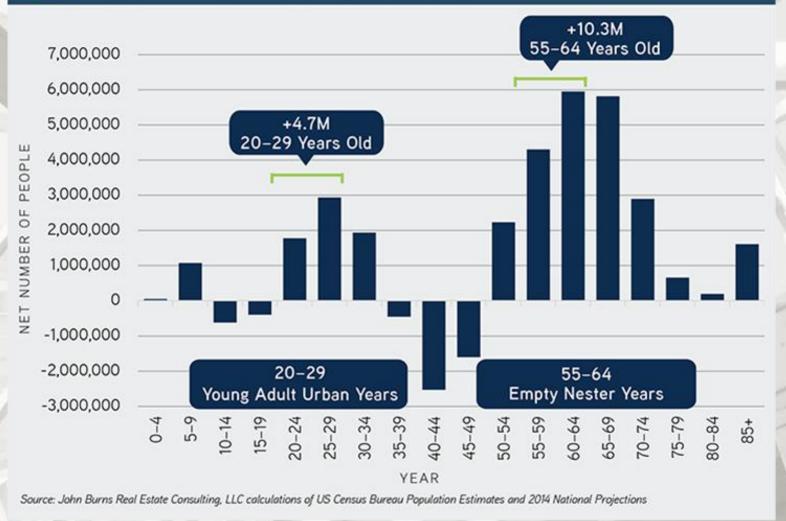


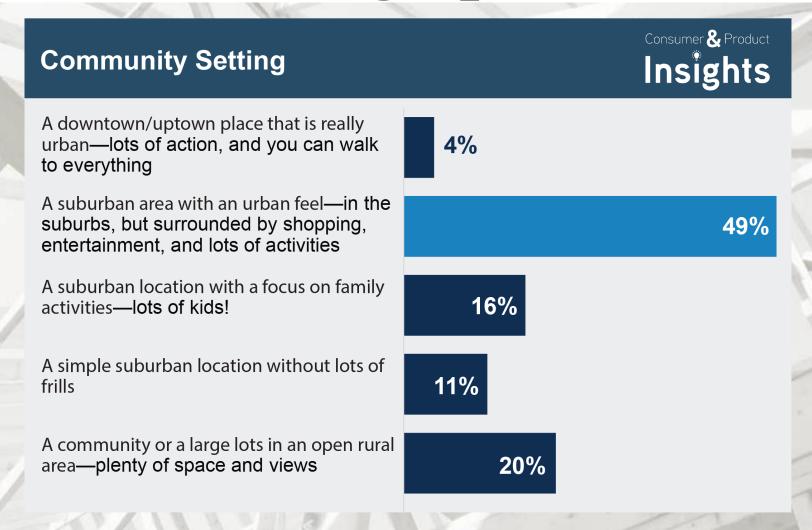


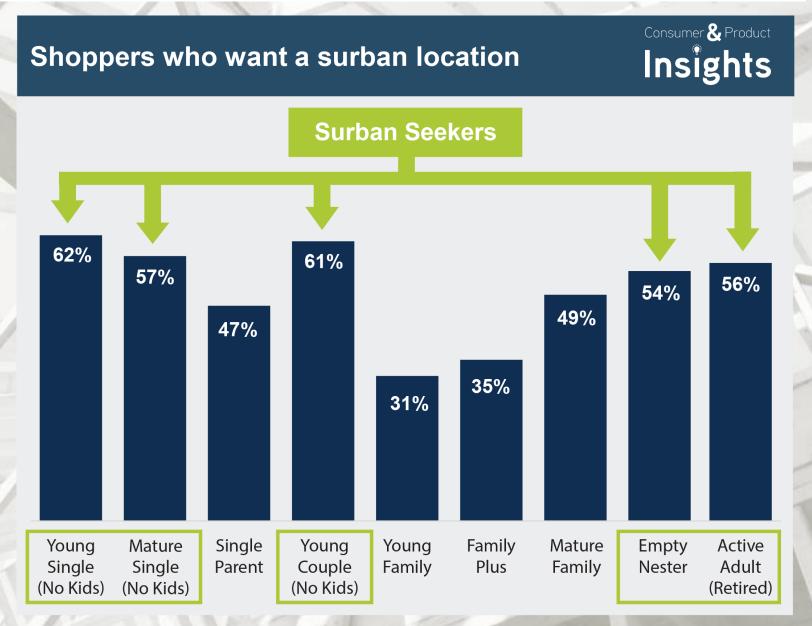


POPULATION GROWTH HAS BEEN SKEWED TO URBAN

FIGURE 10.4 Change in Population by Age, 2005-2015







United States Economic Forecast 2nd Quarter 2018

Introduction: Why be normal?

"**NORMALCY**. The word wasn't invented by President Warren G. Harding, as some people claim.¹ But it caught on in a country anxious to settle down after the chaos of the Great War. Today, everybody is anxious to finally move on from the experience of the financial crisis and the subsequent slow recovery, and to see the economy return to normal. But that creates a question: What is normal?

The Fed is wrestling with this question as it watches the unemployment rate sink lower and lower with wages hardly budging and little indication of the labor market reaching equilibrium.² Just how low is a "normal" unemployment rate? Fed officials have offered steadily falling answers to that question. In March 2014, more than half of Federal Open Market Committee (FOMC) participants expected the long-run level for the unemployment rate to stay between 5.2 and 6.0 percent.³ Four years later, FOMC projections saw most participants forecasting the long-run rate to hover between 4.2 and 4.8 percent.⁴

Financial markets are struggling to determine what normal interest rates should be. If *normal* was the world before the Great Recession, the 10-year Treasury yield should be about 130 basis points above the Fed funds rate, since that was the average from 1985 to 2007.⁵ In fact, economists in the Wall Street Journal Survey are forecasting a much lower spread. Is this a new normal?" – Dr. Daniel Bachman, Senior Manager, and Rumki Majumdar, Manager and Economist; Deloitte Services LP

United States Economic Forecast 2nd Quarter 2018

Introduction: Why be normal?

"Builders, real estate agents, and home buyers are struggling to understand what a normal housing market looks like. How many new houses can the country absorb? How difficult is it to get a mortgage (and should it be so hard)? Do younger people really prefer living in dense urban areas, or is that just a result of their difficulties in finding affordable single-family houses and financing for those houses?

The current tax and fiscal policy further complicates forecasting a return to normal. Congress passed a significant fiscal stimulus that will partially reverse by 2020, creating a potential drag on growth in that year and the next.⁶ Is normal the economy under the stimulus, after the stimulus goes away ... or some theoretical idea that will always remain out of reach?

Our Deloitte forecast does, despite these lingering questions, assume that the economy will move toward normal, which we define as consistent with past historical behavior. Though our scenarios explore some of the implications of different definitions of normal, the past remains the best source of knowledge about what the economy might be like in the future. It's always a good idea to be skeptical that "this time is different." – Dr. Daniel Bachman, Senior Manager, and Rumki Majumdar, Manager and Economist; Deloitte Services LP

United States Economic Forecast 2nd Quarter 2018

Scenarios

"Our scenarios are designed to demonstrate the different paths down which the administration's policies and congressional action might take the American economy. Foreign risks have not dissipated, and we've incorporated them into the scenarios. But for now, we view the greatest uncertainty in the US economy to be that generated within the nation's borders.

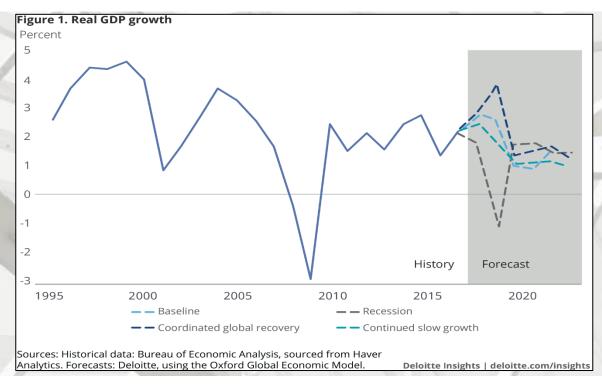
The baseline (55 percent probability): Consumer spending continues to grow. A pickup in foreign growth helps to tamp down the dollar and increase demand for US exports, adding to demand. Fiscal stimulus from the tax cut bill and the budget agreement pushes growth up to close to 3.0 percent in 2018 and above 2.5 percent in 2019. With the economy near full employment, the faster GDP growth creates inflationary pressures. The Fed responds with an aggressive interest-rate policy, and long-term rates rise quickly as alternative assets (abroad) become more appealing. A small increase in trade restrictions adds to business costs in the medium term, but this is offset by lower regulatory costs. As the impact of stimulus fades and the economy feels the effect of higher interest rates, growth slows below potential in 2020 and '21." – Dr. Daniel Bachman, Senior Manager, and Rumki Majumdar, Manager and Economist; Deloitte Services LP

United States Economic Forecast 2nd Quarter 2018

Scenarios

"Recession (15 percent): Dubious policy and financial market decisions in the United States, Europe, and China trigger a global financial crisis. The Fed and the European Central Bank act to ease conditions, and the financial system recovers relatively rapidly. GDP falls in the fourth quarter of 2018 and first two quarters of 2019, and then recovers.

Slower growth (20 percent): Business tax cuts induce little investment spending, while households save their tax cuts. Meanwhile, the administration places significant restrictions on US imports, raising costs and disrupting supply chains. Businesses hold back on investments to restructure their supply chains because of uncertainty about future policy. The higher spending authorization from the budget bill translates only slowly into additional federal outlays, reducing the budget bill's impact on the economy. GDP growth falls to less than 1.5 percent over the forecast period, while the unemployment rate rises to about 6.0 percent." – Dr. Daniel Bachman, Senior Manager, and Rumki Majumdar, Manager and Economist; Deloitte Services LP



United States Economic Forecast 2nd Quarter 2018

Scenarios

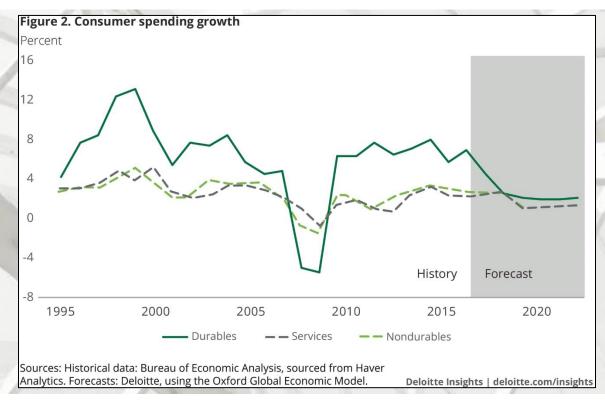
"Productivity bonanza (10 percent): Technological advances in manufacturing begin to lower corporate costs, as deregulation improves business confidence. Improved infrastructure boosts demand in the short run and, in the long run, capacity and the productivity of private capital. The economy grows 3.5 percent in 2018 and 2019, and growth stays above 2.0 percent between 2020 and 2022, while inflation remains subdued." – Dr. Daniel Bachman, Senior Manager, and Rumki Majumdar, Manager and Economist; Deloitte Services LP

United States Economic Forecast Sectors: Consumer Spending

"The household sector has provided an underpinning of steady growth for the US economy over the past few years. Even while business investment was weak, exports faced substantial headwinds, and housing stalled, consumer spending grew steadily. But that's unsurprising, since job growth has been quite strong. Even with relatively low wage growth, those jobs have helped put money in consumers' pockets, enabling households to continue to increase their spending. The continued steady (if modest) growth in house prices has helped, too, since houses are most households' main form of wealth.

For all the daily speculation about how political developments might affect consumer choices when it comes to spending decisions, political noise seems to be just that — in the background — to consumers who seem focused on their own situations. As long as job growth holds up and house prices keep rising, consumer spending should remain strong. And the tax cut, while modest for most consumers, will likely bolster their confidence that they can safely spend, notwithstanding a dip in 2018 Q1.7 More importantly, the tax bill's fiscal stimulus may tighten the job market even further. If wages begin to rise, consumer spending is likely to get a further boost.

The medium term presents a different picture. Many American consumers spent the 1990s and '00s trying to maintain spending even as incomes stagnated. But now they are wiser (and older, which is another challenge, as many baby boomers face imminent retirement with inadequate savings⁸). That may constrain spending and require higher savings in the future. That could be a shock, since a key feature of the current consumer boom is a decline in the savings rate (from an average of 6.1 percent in 2015 to just 2.6 percent at the end of 2017, although the savings rate ticked up in 2018 Q1)." – Dr. Daniel Bachman, Senior Manager, and Rumki Majumdar, Manager and Economist; Deloitte Services LP



United States Economic Forecast Sectors: Consumer Spending

"Although American households seem to face fewer obstacles in their pursuit of the "good life" than just a few years ago, growing income inequality poses a significant challenge for the sector's long-run health. For instance, low unemployment hasn't alleviated many people's economic insecurity: Four in 10 adults would be able to cover an unexpected \$400 expense only by borrowing money or selling something. For more about inequality, see *Income inequality in the United States: What do we know and what does it mean?*, 10 Deloitte's most recent examination of the issue." – Dr. Daniel Bachman, Senior Manager, and Rumki Majumdar, Manager and Economist; Deloitte Services LP

United States Economic Forecast Sectors: Housing

"Every year, thousands of young Americans abandon the nest and start their own households. But more than usual stayed put after the recession: The number of households didn't grow nearly enough to account for all the newly minted young adults. We expect those young adults would prefer to live on their own and create new households; as the economy continues to recover, they will likely do exactly that — as previous generations have.

This should mean some positive fundamentals for housing construction in the short run. Since 2008, the United States has been building fewer new housing units than the population would normally require; in fact, housing construction was hit so hard that the oversupply turned into an undersupply. But the hole is shallower than one might think with several factors offsetting each other. Household size has stabilized after falling for several years. If it starts falling again — something to be expected as the population ages — the demand for housing would rise. The vacancy rate is still a bit higher than the historical norm, so there is some room for demand to be absorbed by filling vacant housing units.

Our best guess, based on a model of the housing market, ¹¹ is that there is room for a short-term boom in housing construction, to levels of perhaps 1.35 million units per year. A couple of years of housing starts at this level would fill any pent-up demand, leaving only the need for perhaps 1.1 million units, the number we estimate would meet demand in the medium term. This means that our forecast includes a small boom in the housing market, followed by several years of slowly declining construction. For the economy as a whole, that is not a major problem — housing remains a smaller share of GDP than it reached during the housing boom before the Great Recession." – Dr. Daniel Bachman, Senior Manager, and Rumki Majumdar, Manager and Economist; Deloitte Services LP



Table 2. Housing												
	History						Forecast					
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Real investment in private housing	13.5	11.9	3.5	10.2	5.5	1.8	3.7	-0.9	-5.7	-3.5	-2.6	-1.5
Housing starts (millions)	0.78	0.93	1.00	1.11	1.18	1.21	1.35	1.31	1.21	1.18	1.14	1.11
Stock of houses (millions)	133	133	134	135	136	137	138	138	139	140	141	142
30-year fixed mortgage rate (percent)	3.66	3.98	4.17	3.85	3.65	3.99	4.61	5.08	5.57	6.01	6.15	6.29

Sources: Historical data: US government agencies and Oxford Economics. Forecast: Deloitte, using the Oxford Global Economic Model.

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