The Virginia Tech – U.S. Forest Service **April 2017 Housing Commentary: Section II**





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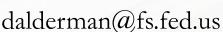
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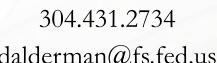
Forest Products Marketing Unit

Forest Products Laboratory



U.S. Forest Service Madison, WI





2017

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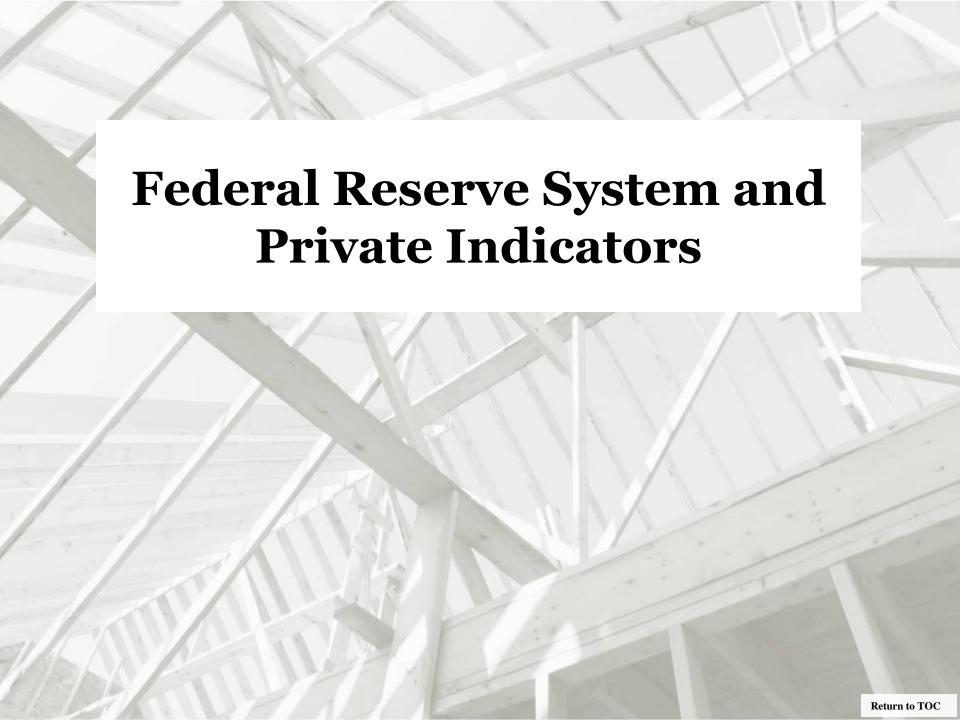
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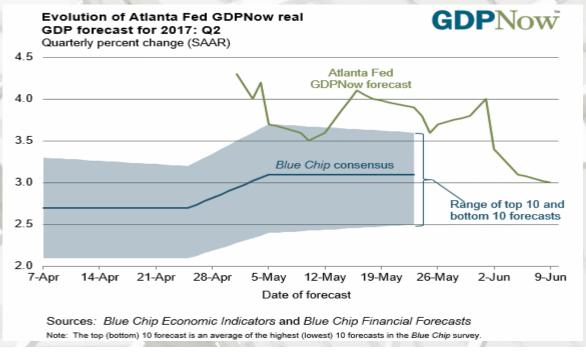
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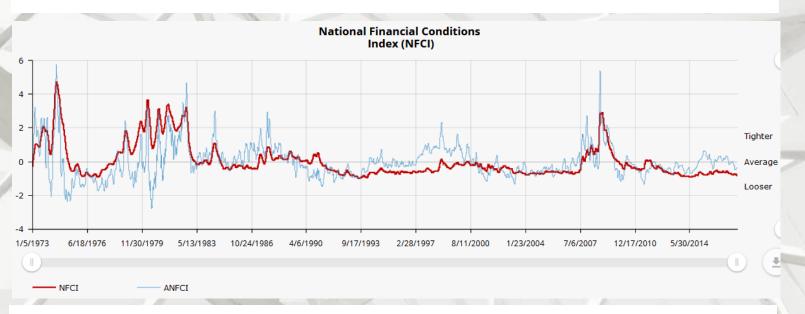




Atlanta Fed GDPNowTM

Latest forecast: 3.0 percent — June 9, 2017

"The GDPNow model forecast for real GDP growth (seasonally adjusted annual rate) in the second quarter of 2017 is **3.0 percent** on June 9, down from 3.4 percent on June 2. The forecast for second-quarter real GDP growth fell from 3.4 percent to 3.1 percent on June 5 after the U.S. Census Bureau's manufacturing report and the incorporation of motor vehicle sales estimates released by the U.S. Bureau of Economic Analysis on the prior business day. The forecast of the contribution of inventory investment to second-quarter growth declined from 0.87 percentage points to 0.77 percentage points after this morning's wholesale trade report from the Census Bureau." — Pat Higgins, Economist, Federal Reserve Bank of Atlanta

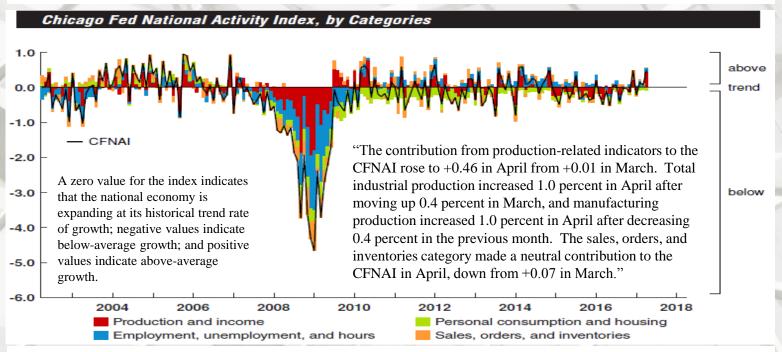


The Federal Reserve Bank of Chicago NFCI and ANFCI Tick Down in Week Ending June 9

"The NFCI ticked down to -0.86 in the week ending June 9. The risk and credit subindexes both decreased slightly from the previous week, while both the leverage and nonfinancial leverage subindexes were unchanged. The ANFCI also ticked down from the previous week, to -0.42.

The current level of the ANFCI indicates that financial conditions in the latest week were roughly consistent with what would typically be suggested by current economic conditions as captured by the three-month moving average of the Chicago Fed National Activity Index (CFNAI-MA3) and three-month total inflation according to the Price Index for Personal Consumption Expenditures (PCE)." – Scott Brave, Economic Research, The Federal Reserve Bank of Chicago

Chicago Fed: National Activity Index

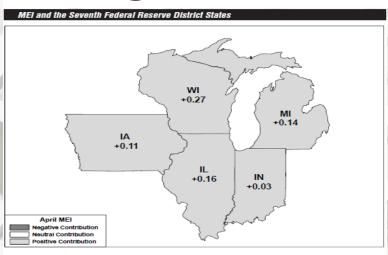


Index Points to Increased Economic Growth in April

"Led by improvements in production-related indicators, the Chicago Fed National Activity Index (CFNAI) rose to +0.49 in April from +0.07 in March. Two of the four broad categories of indicators that make up the index increased from March, and only one category made a negative contribution to the index in April. The index's three-month moving average, CFNAI-MA3, increased to +0.23 in April from a neutral reading in March.

The CFNAI Diffusion Index, which is also a three-month moving average, moved to +0.16 in April from +0.06 in March. Forty-six of the 85 individual indicators made positive contributions to the CFNAI in April, while 39 made negative contributions. Forty indicators improved from March to April, while 44 indicators deteriorated and one was unchanged. Of the indicators that improved, nine made negative contributions." – Laura LaBarbera, Media Relations, The Federal Reserve Bank of Chicago

Chicago Fed: Midwest Economy Index



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

Midwest Economy Index

"The Midwest Economy Index (MEI) increased to +0.70 in April from +0.61 in March, reaching its highest value since June 2014. All four broad sectors of nonfarm business activity and all five Seventh Federal Reserve District states made positive contributions to the MEI in April. The relative MEI rose to +0.64 in April from +0.44 in March. All four sectors and four of the five states made positive contributions to the relative MEI in April." – Laura LaBarbera, Media Relations, Chicago Fed

Index Points to Increased Midwest Economic Growth in April

"The manufacturing sector's contribution to the MEI increased to +0.34 in April from +0.23 in March. The pace of manufacturing activity increased in Illinois, Iowa, and Michigan, but decreased in Indiana and was unchanged in Wisconsin. Manufacturing's contribution to the relative MEI increased to +0.29 in April from +0.14 in March.

The construction and mining sector's contribution to the MEI decreased to +0.10 in April from +0.13 in March. The pace of construction and mining activity was lower in Indiana and Wisconsin, but higher in Iowa and unchanged in Illinois and Michigan. Construction and mining made a contribution of +0.14 to the relative MEI in April, down from +0.17 in March.

The service sector made a contribution of +0.06 to the MEI in April, down from +0.11 in March. The pace of service sector activity was down in Illinois, Indiana, Iowa, and Michigan, but up in Wisconsin. The service sector's contribution to the relative MEI ticked up to +0.06 in April from +0.04 in March.

The contribution from consumer spending indicators to the MEI increased to +0.20 in April from +0.13 in March. Consumer spending indicators were, on balance, up in Illinois, Indiana, Michigan, and Wisconsin, and unchanged in Iowa. Consumer spending's contribution to the relative MEI increased to +0.15 in April from +0.08 in March." – Laura LaBarbera, Media Relations, The Federal Reserve Bank of Chicago

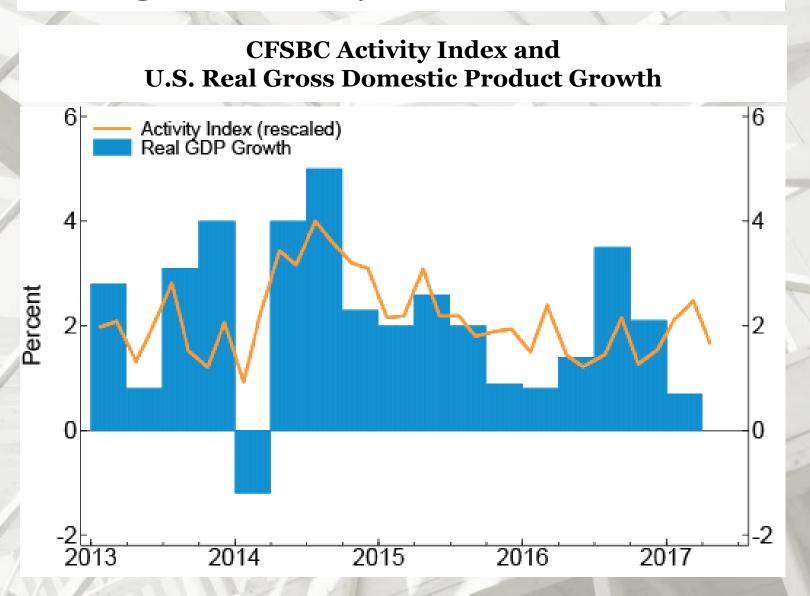
Chicago Fed: Survey of Business Conditions

Survey shows growth increased in April and early May

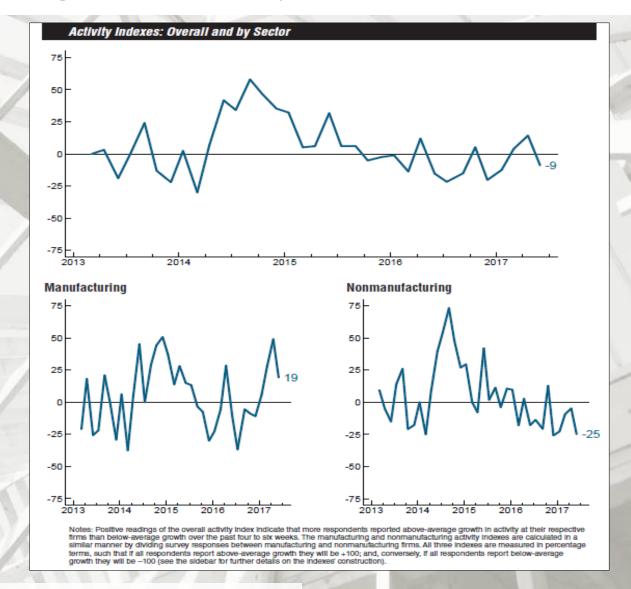
"The Chicago Fed Survey of Business Conditions (CFSBC) Activity Index decreased to -9 from +14, suggesting that growth in economic activity slowed to a modest pace in April and early May. The CFSBC Manufacturing Activity Index declined to +19 from +45, while the CFSBC Nonmanufacturing Activity Index moved down to -25 from -5.

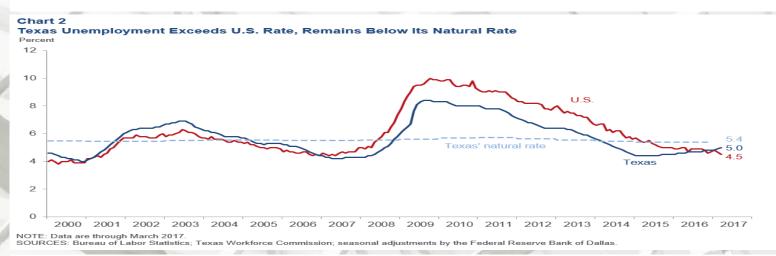
- Respondents' outlooks for the U.S. economy for the next six to 12 months retreated some, but remained optimistic on balance. Respondents with optimistic outlooks highlighted increased demand for their firms' products and the potential for fiscal stimulus and tax and regulatory reform. Respondents with pessimistic outlooks cited the slowdown in auto sales and elevated policy uncertainty under the current U.S. presidential administration.
- The pace of current hiring increased, as did respondents' expectations for the pace of hiring over the next six to 12 months. While the current hiring index moved into positive territory, the hiring expectations index remained negative.
- The pace of current capital spending increased, although respondents' expectations for the pace of capital spending over the next six to 12 months declined. While the current capital spending index moved into positive territory, the capital spending expectations index turned negative.
- The wage cost pressures index decreased and turned negative. The nonwage cost pressures index decreased and remained negative." Laura LaBarbera, Media Relations, The Federal Reserve Bank of Chicago

Chicago Fed: Survey of Business Conditions



Chicago Fed: Survey of Business Conditions



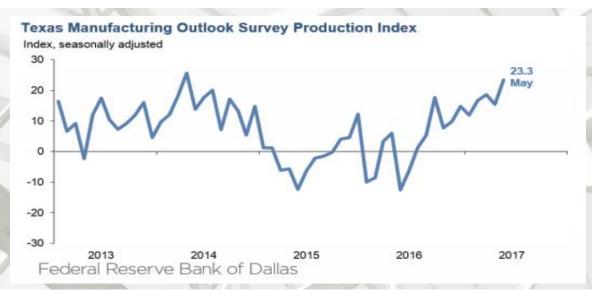


Texas Economy Expanding at a Moderate Pace

"Recent data signal moderate growth in Texas economic activity. While payroll employment growth in the first quarter decelerated slightly from the third and fourth quarters, Texas continued to exceed the U.S. rate. The state unemployment rate edged up to 5 percent in March but remained below its natural rate. *Texas Business Outlook Survey* (TBOS) headline indexes in April pointed to somewhat slower growth in manufacturing and services but a pickup in retail.

House prices continued to rise in Texas, and an examination of the data suggests that homes may be overvalued relative to key economic fundamentals. Exports have picked up recently. Positive job growth and rising rig counts indicate an ongoing energy sector recovery. The latest forecast for 2017 job growth is 2.4 percent. Sharp declines in oil prices, continued strength in the dollar, and uncertainty regarding U.S. trade and tax policy remain key downside risks.

Texas payroll employment expanded at a 1.5 percent annual rate in March, stronger than February's 0.2 percent increase. Job growth moderated slightly from an annualized 2.6 percent in the fourth quarter to 2.4 percent in the first but remained higher than the nation's 1.5 percent increase (Chart 1)."—Alex Abraham, Research Assistant, and Anil Kumar, Senior Research Economist, The Federal Reserve Bank of Dallas

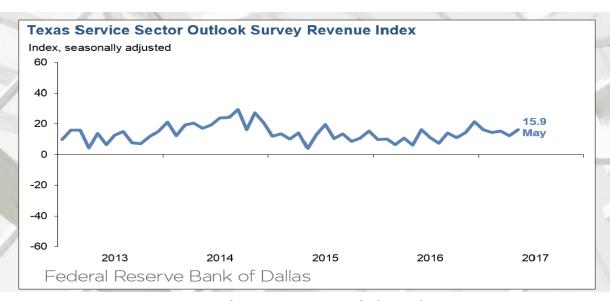


Texas Manufacturing Expansion Picks Up Pace

"Texas factory activity increased at a faster pace in May, according to business executives responding to the *Texas Manufacturing Outlook Survey*. The <u>production</u> index, a key measure of state manufacturing conditions, moved up eight points to 23.3, reaching its highest level since April 2014.

Other measures of current manufacturing activity also rose to levels not seen since mid-2014. The <u>new orders</u> index pushed up to 18.1, and the <u>growth rate of orders</u> index rose to 12.3, marking its fifth consecutive positive reading. The <u>capacity utilization</u> index moved up to 19.4, with roughly a third of firms noting increased utilization. The <u>shipments</u> index surged 15 points to 24.7, reaching a level not seen in nearly 10 years.

Perceptions of broader business conditions improved again in May. The <u>general business</u> <u>activity</u> index held fairly steady at 17.2, and the <u>company outlook</u> index rose five points to 20.2." – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas

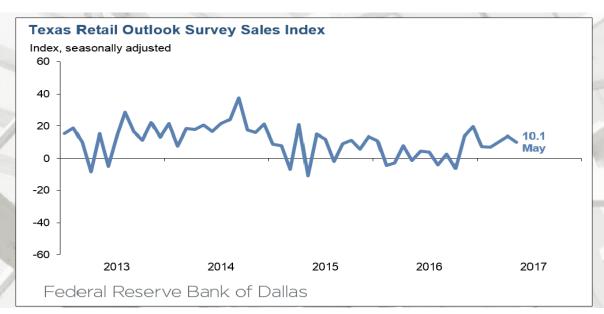


Texas Service Sector Activity Picks Up

"Texas service sector activity increased in May, according to business executives responding to the *Texas Service Sector Outlook Survey*. The <u>revenue</u> index, a key measure of state service sector conditions, rose four points to 15.9 in May.

Labor market indicators reflected faster employment growth and slightly longer workweeks this month. The <u>employment</u> index moved up from 4.5 to 7.7. The <u>hours worked</u> index remained positive but fell slightly to 2.1.

Perceptions of broader economic conditions reflected slightly less optimism in May. The <u>general business activity</u> index edged down from 9.0 to 7.7. The <u>company outlook</u> index dipped four points to 7.1, with 19 percent of respondents reporting that their outlook improved from last month and 12 percent noting it worsened." – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas



The Federal Reserve Bank of Dallas Retail Sales Increase but at a Slower Pace

"Retail sales grew in May, albeit at a slower pace than last month, according to business executives responding to the *Texas Retail Outlook Survey*. The <u>sales</u> index fell from 13.7 in April to 10.1 in May. <u>Inventories</u> increased at a slower pace this month.

Labor market indicators worsened this month. The <u>employment</u> index dropped six points to -3.0, suggesting retail employment decreased on net. The <u>hours worked</u> index fell slightly from a reading near zero to -1.7, suggesting workweeks shortened in May.

Retailers' perceptions of broader economic conditions reflected less optimism in May. The <u>general business activity</u> index moved down five points into negative territory to a reading of –2.6. The <u>company outlook</u> index fell to a reading near zero, with 17 percent of respondents reporting that their outlook improved from last month and 16 percent noting that it worsened." – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas



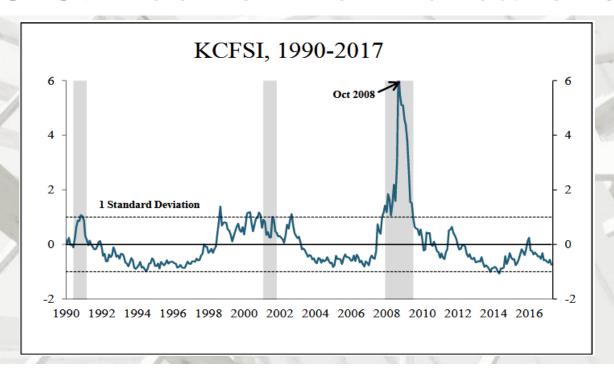
Tenth District Manufacturing Summary

"Tenth District manufacturing activity continued to expand at a moderate pace in May, and expectations for future activity increased strongly. Price indexes were mixed, but recorded little change overall." – Pam Campbell, The Federal Reserve Bank of Kansas City

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

"The month-over-month composite index was 8 in May, up from 7 in April but down from 20 in March. The composite index is an average of the production, new orders, employment, supplier delivery time, and raw materials inventory indexes. Activity at durable manufacturing plants eased slightly but remained positive, while nondurable activity improved, particularly for plastics and chemicals. Month-over-month indexes were mixed with little change overall. The production and shipments indexes edged slightly lower, while the employment and order backlog indexes inched higher. The new orders and new orders for exports indexes were both basically unchanged. The finished goods inventory index fell from 8 to 0, while the raw materials inventory index was stable." – Pam Campbell, The Federal Reserve Bank of Kansas City

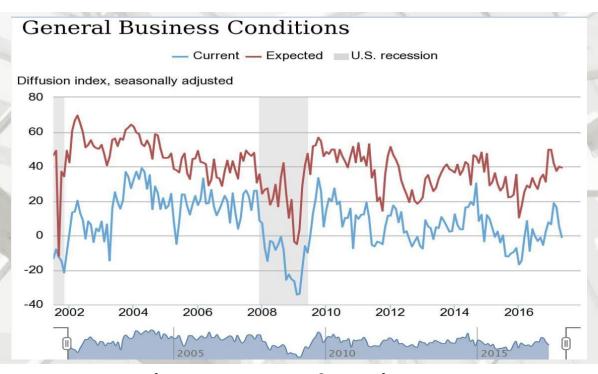
"After slowing from a rapid rate of growth in February and March, we've seen more moderate growth the past two months. But firms are about as optimistic about future growth as they've ever been." – Chad Wilkerson, Vice President and Economist, The Federal Reserve Bank of Kansas City



The Federal Reserve Bank of Kansas City The KCFSI suggests financial stress remains low

"The Kansas City Financial Stress Index (KCFSI) decreased from -0.56 in April to -0.74 in May.

The KCFSI is constructed to have a mean value of zero and a standard deviation of one. A positive value of the KCSFI indicates that financial stress is above the long-run average, while a negative value signifies that financial stress is below the long-run average. A useful way to assess the level of financial stress is to compare the index in the current month to the index during a previous episode of financial stress, such as October 2008." – Bill Medley, Media Relations, The Federal Reserve Bank of Kansas City



Empire State Manufacturing Survey

"Business activity leveled off in New York State, according to firms responding to the May 2017 *Empire State Manufacturing Survey*. The headline general business conditions index fell six points to -1.0. The new orders index dropped to -4.4, suggesting a small decline in orders, and the shipments index edged down to 10.6, indicating that shipments increased at a slightly slower pace than in April. Labor market indicators pointed to a modest increase in both employment and hours worked, and input prices and selling prices rose at a more moderate pace. Indexes assessing the six-month outlook were close to last month's levels, and continued to convey a high degree of optimism about future conditions." – The Federal Reserve Bank of New York

Empire State Manufacturing Survey

Business Activity Flattens Out after Six-Month Run

"Business activity leveled off in New York State, according to firms responding to the May 2017 Empire State Manufacturing Survey. The headline general business conditions index fell six points to -1.0. The new orders index dropped to -4.4, suggesting a small decline in orders, and the shipments index edged down to 10.6, indicating that shipments increased at a slightly slower pace than in April. Labor market indicators pointed to a modest increase in both employment and hours worked, and input prices and selling prices rose at a more moderate pace. Indexes assessing the six-month outlook were close to last month's levels, and continued to convey a high degree of optimism about future conditions."

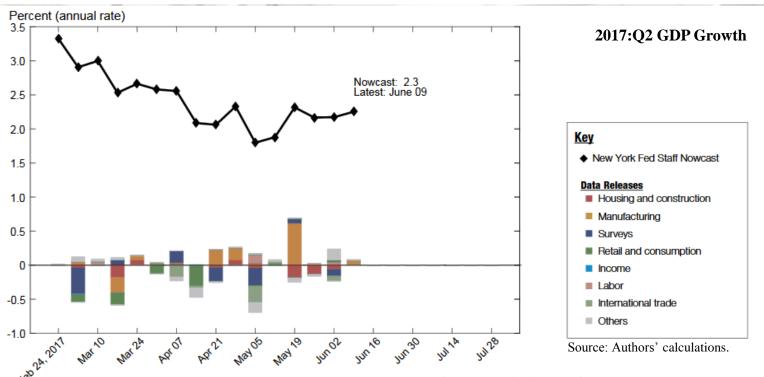
Employment Continues to Expand

Employment indexes remained positive, pointing to continued improvement in labor market conditions. The index for number of employees edged down to 11.9, and the average work week index was little changed at 7.5. Price increases slowed: The prices paid index fell twelve points to 20.9, its lowest level since November, and the prices received index moved down eight points to 4.5.

Firms Remain Optimistic

"Indexes assessing the six-month outlook suggested that firms remained optimistic about future conditions. The index for future business conditions held steady at 39.3, and indexes for future new orders and shipments were somewhat higher. Employment was expected to increase in the months ahead. The capital expenditures index fell fourteen points to 13.4, and the technology spending index also came in at 13.4." – Federal Reserve Bank of New York

The Federal Reserve Bank of New York



Notes: Colored bars reflect the relative impact of each data release on the nowcast.

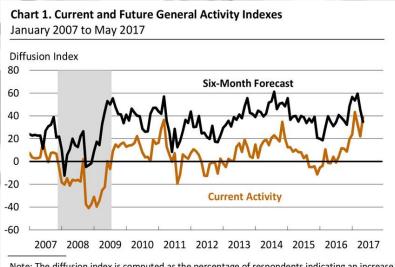
June 9, 2017: Highlights

- "The New York Fed Staff Nowcast stands at 2.3% for 2017:Q2 and 1.8% for 2017:Q3.
- The effects of the news from this week's data releases were small, leaving the nowcast for both 2017:Q2 and 2017:Q3 broadly unchanged."

Model Forecas	1				Ļ				
		2017		2018		2019		2020	
		May	Feb	May	Feb	May	Feb	May	Feb
GDP growth (Q4/Q4)		1.9	2.2	2.1	2.5	2.2	2.6	2.2	2.5
Core PCE inflation (Q	4/Q4)	1.5	1.4	1.5	1.4	1.6	1.5	1.7	1.7
Real natural rate of in	iterest (Q4)	0.7	0.5	1.0	0.9	1.1	1.1	1.2	1.3

The New York Fed DSGE Model Forecast — May 2017

- "The current GDP growth forecast is somewhat weaker than its February counterpart throughout the forecast horizon. For 2017 the change in the forecast primarily reflects slower-than-expected expansion in the first quarter. GDP is now expected to grow at 1.9 percent in 2017 (in Q4/Q4 terms) and accelerate only modestly in the following years.
- The lower forecast for GDP growth relative to February is mainly due to a lower projected path for productivity growth. This negative force is partly counteracted by low credit spreads between Baa corporate and Treasury securities, a trend that should support activity in the short and medium run.
- The core PCE inflation forecast is slightly higher than in February, which is not surprising in light of the decline in productivity. The uptick in core PCE in the first quarter of 2017 pushes the core inflation outlook up to 1.5 percent (Q4/Q4) in 2017. Inflation is projected to increase gradually to 1.7 percent (Q4/Q4) in 2020.
- The projections for both output and core PCE are surrounded by considerable uncertainty." -- Ozge Akinci, Marco Del Negro, Abhi Gupta, Pearl Li, and Erica Moszkowski; The Federal Reserve Bank of New York



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

Introduction

Results from the May *Manufacturing Business Outlook Survey* suggest that regional manufacturing activity continued to expand this month. The diffusion indexes for general activity and shipments improved notably from their April readings. The indexes for new orders and employment, however, fell modestly from last month but remained at high readings. Although most of the survey's future indicators fell this month, the readings suggest that most firms still expect growth to continue over the next six months." — Philadelphia Fed

April 2017 Manufacturing Business Outlook Survey Current Indicators Reflect Continued Growth

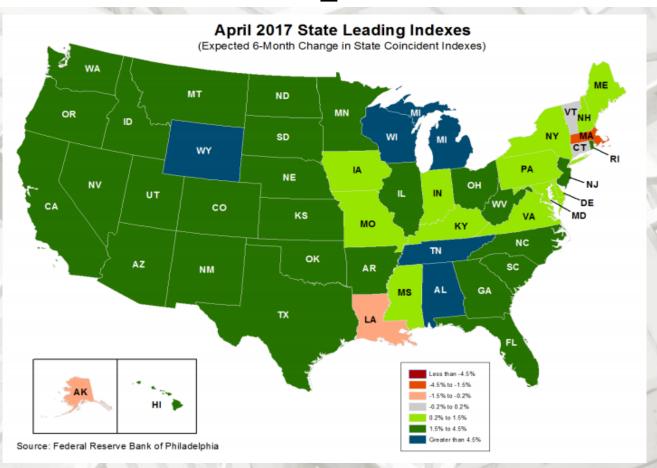
"The index for current manufacturing activity in the region increased from a reading of 22.0 in April to 38.8 this month. The index has been positive for 10 consecutive months. This month, the index recovered some of the declines of the previous two months, but it still remains slightly below its high reading of 43.3 in February (see Chart 1). Fifty-one percent of the firms indicated increases in activity in May, while 13 percent reported decreases. The current new orders and shipments indexes remained at high readings. The shipments index increased 16 points, while the new orders index declined 2 points. Both the delivery times and unfilled orders indexes were positive for the seventh consecutive month, suggesting longer delivery times and increases in unfilled orders." – Mike Trebing, Senior Economic Analyst, Federal Reserve Bank of Philadelphia

Philadelphia Fed: GDPplus



GDPplus is a measure of the quarter-over-quarter rate of growth of real GDP in annualized percentage points. It improves on the BEA's expenditure- and income-side measures, GDP_E and GDP_I, respectively. GDP_E is the "standard" GDP measure used routinely, whereas GDP_I is little used, but each contains useful information.

Philadelphia Fed



"The Federal Reserve Bank of Philadelphia has released the leading indexes for the 50 states for April 2017. 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 projected to decrease. For comparison purposes, the Philadelphia Fed has also developed a similar leading index for its U.S. coincident index, which is projected to grow 1.6 percent over the next six months." – Daneil Mazone, The Federal Reserve Bank of Philadelphia

Philadelphia Fed

Second Quarter 2017 Survey of Professional Forecasters

Forecasters Predict Slightly Brighter Outlook for Growth and Labor Markets over the Next Four Quarters

"The U.S. economy over the next four quarters looks slightly stronger now than it did three months ago, according to 37 forecasters surveyed by the Federal Reserve Bank of Philadelphia. The forecasters predict real GDP will grow at an annual rate of 3.1 percent this quarter, up from the previous estimate of 2.3 percent. Quarterly growth over the following three quarters also looks improved. On an annual-average over annual-average basis, the forecasters predict real GDP will grow 2.1 percent in 2017, 2.5 percent in 2018, 2.1 percent in 2019, and 2.3 percent in 2020.

An improved outlook for the unemployment rate accompanies the outlook for growth. The forecasters predict that the unemployment rate will average 4.5 percent in the current quarter, before falling to 4.4 percent in the next two quarters, and 4.3 percent in the first two quarters of 2018. The projections for the next four quarters (and the next four years) are below those of the last survey, indicating a brighter outlook for unemployment.

The panelists also predict an improvement in near-term employment. The forecasters see nonfarm payroll employment growing at a rate of 177,300 jobs per month this quarter, up from the previous estimate of 167,000. The projections for the following three quarters are also higher than those of the last survey. The forecasters' projections for the annual-average level of nonfarm payroll employment suggest job gains at a monthly rate of 182,600 in 2017 and 162,800 in 2018. (These annual-average estimates are computed as the year-to-year change in the annual-average level of nonfarm payroll employment, converted to a monthly rate.)" — The Federal Reserve Bank of Philadelphia

Philadelphia Fed

Median Forecasts for Selected Variables in the Current and Previous Surveys											
	Real GDP (%)		Unemploym	ent Rate (%)	Payrolls (000s/month)						
	Previous	New	Previous	New	Previous	New					
Quarterly data:											
2017:Q2	2.3	3.1	4.6	4.5	167.0	177.3					
2017:Q3	2.4	2.5	4.6	4.4	168.9	170.7					
2017:Q4	2.4	2.4	4.5	4.4	160.3	165.2					
2018:Q1	2.2	2.4	4.5	4.3	157.6	166.7					
2018:Q2	N.A.	2.7	N.A.	4.3	N.A.	159.3					
Annual data (projections are based on annual-average levels):											
2017	2.3	2.1	4.6	4.5	180.3	182.6					
2018	2.4	2.5	4.5	4.3	164.5	162.8					
2019	2.6	2.1	4.5	4.4	N.A.	N.A.					
2020	2.1	2.3	4.6	4.5	N.A.	N.A.					

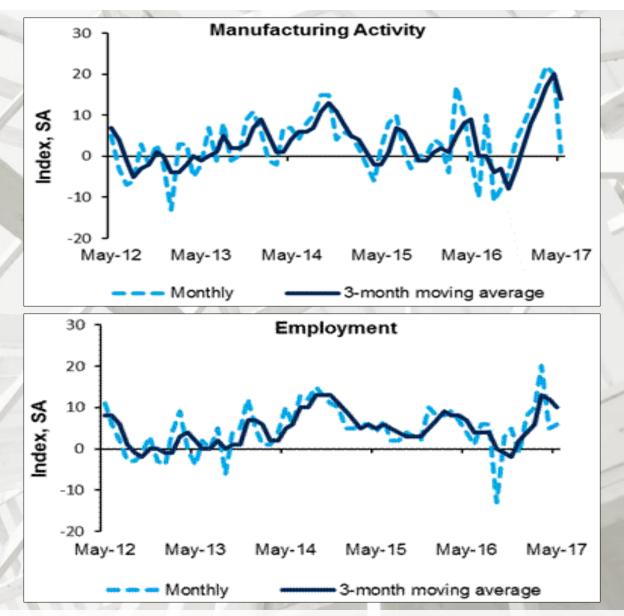
The Federal Reserve Bank of Richmond

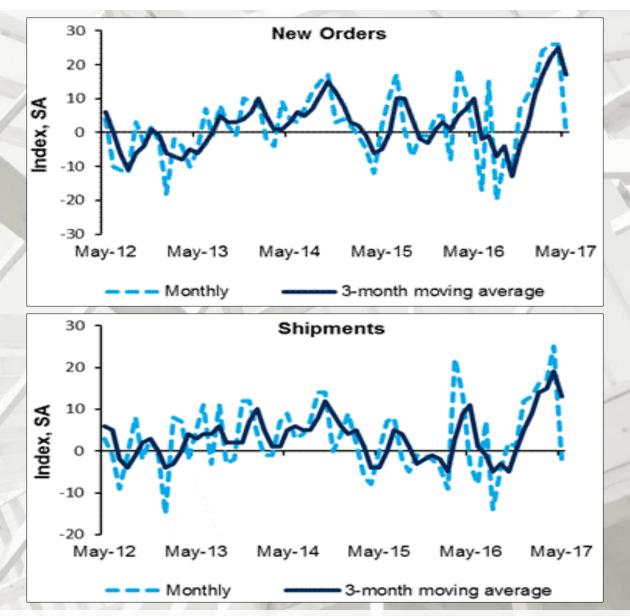
Manufacturing Firms were Somewhat Less Upbeat about Activity in May Compared to Prior Months

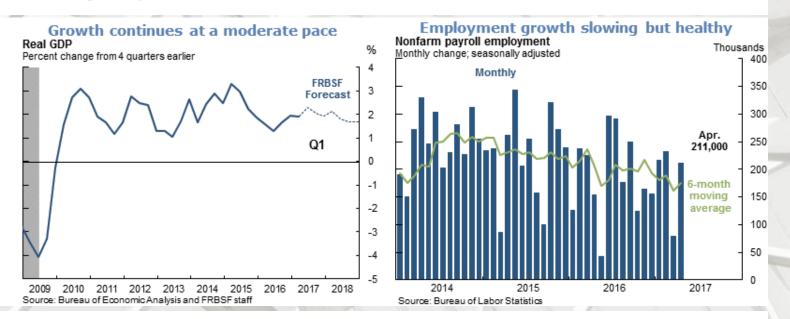
"Manufacturers in the Fifth District were somewhat less upbeat in May than in the prior three months, according to the latest survey by the Federal Reserve Bank of Richmond. The index for shipments and the index for new orders decreased notably, with the shipments index falling to slightly below 0. The index for employment was relatively flat, but the decline in the other two indexes resulted in a decline in the composite index from 20 in April to 1 in May. The majority of firms continued to report higher wages, but more firms reported a decline in the average workweek than reported an increase.

Looking six months ahead, manufacturing executives remained generally optimistic, although the only index to increase was expected capital expenditures. Nonetheless, the expected shipments index had a strong reading of 39 in May (from 42 in April) and the expected new orders index remained relatively high at a reading of 35.

Survey respondents reported that growth in both prices paid and prices received moderated somewhat." – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond



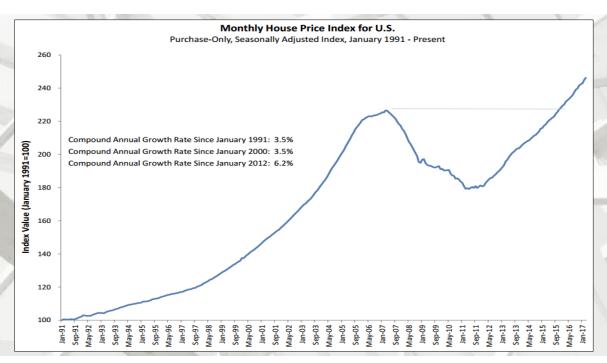




The Federal Reserve Bank of San Francisco

"Real GDP grew at an annualized rate of 0.7% in the first quarter, down significantly from the 2.1% pace of the previous quarter. Much of this weakness reflected transitory factors such as declines in inventories and reductions in spending on utilities owing to unseasonably warm weather. We expect a substantial bounceback in the coming quarters, with growth averaging around 1¾% in 2017 and 2018.

The unemployment rate fell in April to 4.4%, somewhat below our estimate of the natural rate of unemployment of between 4.8% and 5.0%, reflecting continued strong, though gradually slowing, payroll growth. We expect unemployment to fall further, reaching 4.2% towards the end of the year, before rising towards its natural rate in the coming two to three years." – Rhys Bidder, Economist, The Federal Reserve Bank of San Francisco



FHFA House Price Index

U.S. House Prices Rise 1.4 Percent in First Quarter

"U.S. house prices rose 1.4 percent in the first quarter of 2017 according to the Federal Housing Finance Agency (FHFA) House Price Index (HPI). House prices rose 6.0 percent from the first quarter of 2016 to the first quarter of 2017. FHFA's seasonally adjusted monthly index for March was up 0.6 percent from February." – Stefanie Johnson and Corinne Russell, FHFA

"The steep, multi-year rise in U.S. home prices continued in the first quarter. Mortgage rates during the quarter remained slightly elevated relative to most of last year, but demand for homes remained very strong. With housing inventories still languishing at extremely low levels, the strong demand led to another exceptionally large quarterly price increase." – Andrew Leventis, Deputy Chief Economist, FHFA.

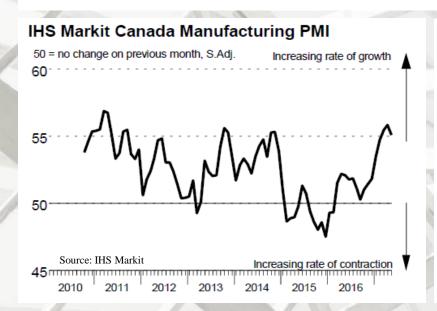
Source: https://www.fhfa.gov/AboutUs/Reports/ReportDocuments/MonthlyHPI 42517.pdf; 5/23/17

U.S. Economic Indicators: Global

Chart 1 First-Quarter Growth Solid While Fourth Quarter Revised Higher Quarterly percent change, annualized 10 -10 -15 -20 2017 2007 2008 2009 2010 2013 2014 2015 2016 2011 2012 SOURCE: Instituto Nacional de Estadística y Geografía (National Institute of Statistics and Geography).

Mexico Economy Expands in First Quarter; Fourth Quarter Revised Higher

"Mexico's economy grew solidly in the first quarter despite higher inflation, interest rates and uncertainty over trade relations with the U.S. Gross domestic product (GDP) expanded at a 2.4 percent annualized rate, while fourth-quarter output was revised higher to 2.9 percent. The consensus 2017 GDP growth forecast was revised up from 1.5 percent to 1.7 percent. Recent data on exports, industrial production, retail sales and employment showed continued expansion but at a slower pace. Inflation increased, but the peso recovered some ground against the dollar in April for a third consecutive month." – Jesus Cañas, Senior Business Economist , The Federal Reserve Bank of Dallas



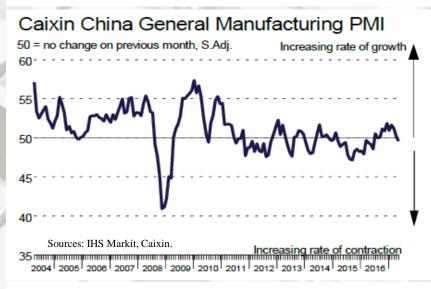
Markit Canada Manufacturing PMI™ Strong growth of manufacturing production sustained in May

"May data signalled another robust improvement in business conditions across the Canadian manufacturing sector, which continued the strong trend seen during 2017 to date. Output, new orders and employment all increased markedly, although at slightly slower rates than in April." – Markit Canada Manufacturing PMITM

"The seasonally adjusted **IHS Markit Canada Manufacturing Purchasing Managers' IndexTM** (**PMITM**) posted 55.1 in May, down only slightly from April's six-year peak of 55.9. As a result, the average reading for the second quarter of 2017 so far (55.5) points to the strongest improvement in business conditions since Q1 2011. The headline index has registered above the 50.0 no-change value in each month since March 2016.

An ongoing recovery in client demand led to greater input buying and the joint-fastest upturn in preproduction inventories since May 2012. However, the latest survey also revealed intense supply chain pressures, as lead-times from vendors lengthened to the largest extent for just over three years.

Canadian manufacturers achieved another strong upturn in their new order books during May, underpinned by rising sales across both domestic and export markets. Higher levels of new work have propelled a sharp and sustained rebound in manufacturing production so far in 2017, which contrasts with the soft patch seen during the previous two years." – Tim Moore, Senior Economist, HIS Markit



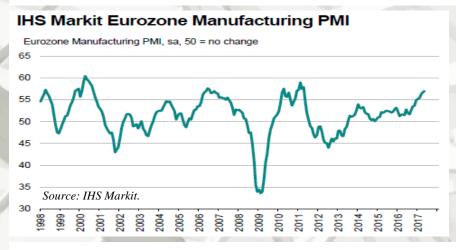
Caixin China General Manufacturing PMI™

"Operating conditions faced by Chinese goods producers deteriorated for the first time in nearly a year in May. The fall in the headline index coincided with slower increases in output and new orders, while staff numbers were cut at a quicker rate. Subdued demand conditions underpinned a renewed fall in purchasing activity, albeit only slight, and the first increase in inventories of finished items in 2017 so far."

PMI signals renewed deterioration in operating conditions

"The 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 – posted below the neutral 50.0 value at 49.6 in May. Although only indicative of a marginal deterioration in operating conditions, the index fell from 50.3 to signal the first decline in the health of the sector for 11 months.

The Caixin China General Manufacturing PMI fell 0.7 points to 49.6 in May, marking its first contraction in 11 months. The sub-indices of output and new business stayed in expansionary territory, but both fell to their lowest levels since June last year. The sub-indices of input costs and output prices dropped into contractionary territory for the first time since June 2016 and February 2016 respectively. The sub-index of stocks of purchases signalled a renewed decline, while the sub-index of stocks of finished goods rebounded, indicating that companies have stopped actively restocking as inventories began to stack up. China's manufacturing sector has come under greater pressure in May and the economy is clearly on a downward trajectory." – Dr. Zhengsheng Zhong, Director of Macroeconomic Analysis, CEBM Group



Markit Eurozone Manufacturing PMI®

"The ongoing expansion of the Eurozone manufacturing sector gathered further momentum in May. Growth in output and new orders accelerated to the best seen for around six years, to underpin the strongest job creation in the 20-year survey history."

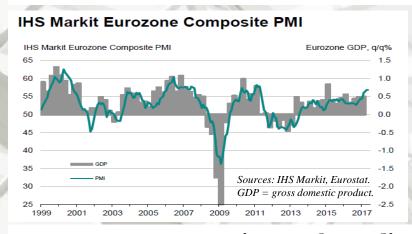
Eurozone manufacturing employment rises at 20-year survey-record pace

"The final IHS Markit Eurozone Manufacturing PMI® rose to a 73-month high of 57.0 in May, up from 56.7 in April and unchanged from the earlier flash estimate. The PMI has signalled expansion in each of the past 47 months.

Improved business conditions were signalled in seven out of the eight nations covered by the survey. The growth acceleration was mainly driven by a stronger expansion in Germany, where the rate of increase was the fastest in over six years.

The eurozone upturn is developing deeper roots as factories enjoy a spring growth spurt. Demand for goods is growing at the steepest rate for six years, encouraging manufacturers to step up production and take on extra staff at a rate not previously seen in the two-decade history of the PMI survey.

The fact that the upturn is being accompanied by such strong jobs growth sends a signal that increasing numbers of companies are moving away from a focus on cost cutting towards investing in expansion, underscoring the elevated levels of business optimism seen across the region. The record hiring adds to the sense that the upturn is looking more and more robust as each month goes by." – Chris Williamson, Chief Business Economist, Markit[®]



Markit Eurozone Composite PMI[®]

"The rate of eurozone economic growth continued to run at the quickest pace in six years during May. This was confirmed by the final **IHS Markit Eurozone** *PMI*® **Composite Output Index** posting 56.8, unchanged from the earlier flash estimate and April's final reading."

Eurozone economic growth steadies in May as Germany and France expand at fastest rates in six years

"Optimism about the one-year outlook for output rose to its highest level since data for this series were first collected in July 2012. Strong new order inflows tested capacity, leading to rising volumes of outstanding business. This in turn led to faster job creation, with employment rising at one of the quickest rates seen over the past decade.

. .

The final PMI readings add to mounting evidence that the eurozone is enjoying a strong second quarter, consistent with GDP rising at a 0.7% rate. Encouragingly, both the hard data and the surveys are revealing a broad-based upturn. So far in the second quarter the PMI surveys are running at levels indicative of 0.7% GDP growth in France and Germany, with nearly 1% being signalled for Spain and 0.5% in Italy.

The outlook for the eurozone economy therefore seem to be tilting to the upside, and it seems likely that we'll start to see many forecasters' expectations for 2017 growth revised higher." – Chris Williamson, Chief Business Economist, Markit®

IHS Markit / BME Germany Manufacturing PMI



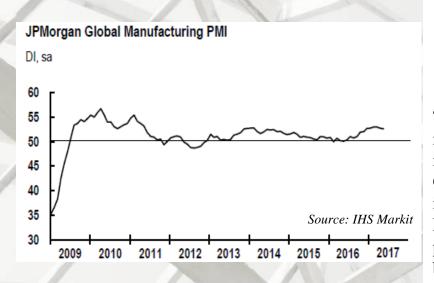
Markit/BME Germany Manufacturing PMI® German manufacturing expands at fastest pace in over six years

"The German manufacturing sector gained momentum mid-way through the second quarter, according the latest *PMI*® survey data from IHS Markit and BME. Overall operating conditions improved at the strongest pace in over six years as output, new orders and employment all expanded at faster rates. Notably, new export business increased at the sharpest clip in seven years. Meanwhile, input prices rose at the slowest pace in six months, albeit one that remained historically sharp overall."

"The PMI resumed its upward trajectory in May, rising for the fifth time in six months to 59.5 from April's 58.2. This signalled the strongest overall improvement in manufacturing business conditions in Germany since April 2011. The upward movement in the PMI reflected stronger growth rates for output, new orders and employment, as well as a more substantial lengthening of suppliers' delivery times. The current two-and-a-half year period of overall growth in the goods-producing sector is the second-longest in the 21-year survey history.

German manufacturing continued to gain momentum in May with the PMI rising for the fifth time in six months to 59.5, the highest since April 2011 and just above the earlier flash estimate of 59.4. Output, new orders and employment all increased at the fastest rates in around six years, while new export business growth hit a seven-year record. IHS Markit currently expects German industrial output to rise 2.9% in 2017 as a whole, up from growth of 1.0% in 2016." – Trevor Balchin, Senior Economist, IHSMarkit®

Private Indicators: Global



JP Morgan Global Manufacturing PMI[™] Growth of global manufacturing slips to six-month low in May

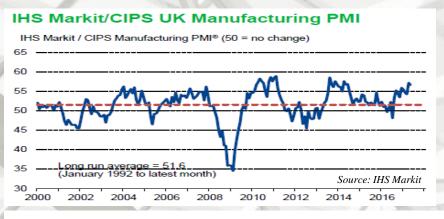
"The rate of expansion in the global manufacturing sector eased to a six-month low in May. This was signalled by the J.P. Morgan Global Manufacturing PMITM – a composite index1 produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – posting 52.6, down slightly from 52.7 in April, but still above the long-run series average of 51.4."

"Developed nations again tended to outperform emerging markets in May. Growth across emerging nations slowed to a pace only marginally above the stagnation mark. The Developed Markets PMI continued to signal solid and steady expansion.

Worldwide manufacturing production rose for the fifty-fifth successive month in May, underpinned by a solid increase in new work received. However, the rate of expansion in output moderated further to its weakest since last November. Growth of new business steadied at April's five-month low.

The global manufacturing sector continued to expand in May, achieving further steady growth. The underlying dynamics of the survey, such as fuller order books, rising employment and positive business sentiment, also bode well for the future performance of manufacturing." – David Hensley, Director of Global Economic Coordination, J.P. Morgan

Private Indicators: Global



Markit/CIPS UK Manufacturing PMI™

"Manufacturing production and new orders both expanded at above survey average rates. Companies benefited most from the continued strength of the domestic market. There was also a solid increase in new export business as well."

UK manufacturing sees further marked growth in May

"The UK manufacturing sector remained resilient in May, sustaining most of the growth momentum gained during the prior survey month. At 56.7, the seasonally adjusted IHS Markit/CIPS Purchasing Managers' Index® (PMI®) was only slightly below April's three-year high of 57.3 and signalled an improvement in operating conditions for the tenth successive month.

The strong PMI numbers suggest the manufacturing sector has gained growth momentum in the second quarter after the sluggish start of the year. The ongoing strength of the domestic market remains the main driver of the upturn. Growth of new export business played a lesser role in comparison, with the trend in foreign demand continuing to improve only in fits and starts, despite the assistance of a historically weak sterling exchange rate.

The survey also provided positive signs that the upturn may be sustained, as growth of new orders remained solid, backlogs of work rose at the quickest pace in six years and business optimism improved to a 20-month high. These underlying dynamics are proving to be a real boon for the manufacturing labour market, with May seeing jobs added at the fastest pace since mid-2014. On this basis, the sector should have sufficient momentum to see it through the uncertainty generated by the current unexpected general election and into the start of Brexit negotiations later in the quarter." – Rob Dobson, Director & Senior Economist, IHS Markit

Private Indicators American Institute of Architects (AIA)

April Architecture Billings Index ABI April 2017: Firm billings grow at slower pace

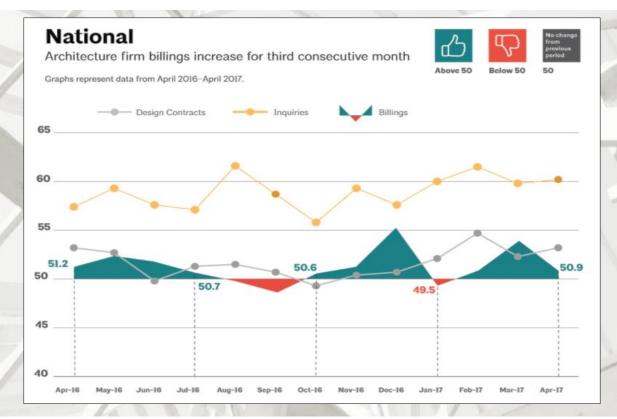
"Architecture firm billings increased for the third consecutive month in April. However, the Architecture Billings index (ABI) score of 50.9 for the month indicates that fewer firms reported billings growth this month than in March. Firms indicated that plenty of work remains in the pipeline, though, as inquiries into new projects and the value of new design contracts both increased again in April.

Probably even better news for the construction outlook is that new project work coming into architecture firms has seen exceptionally strong growth so far this year. In fact, new project activity has pushed up project backlogs at architecture firm to their highest level since the design market began its recovery earlier this decade." – Kermit Baker, Hon. AIA, Chief Economist, AIA

"Key April ABI highlights:

- Regional averages: South (55.3), Midwest (53.3), West (50.9), Northeast (50.7)
- Sector index breakdown: institutional (54.0), mixed practice (53.4), commercial / industrial (52.4), multi-family residential (49.9)
- Project inquiries index: 60.2
- Design contracts index: 53.2"

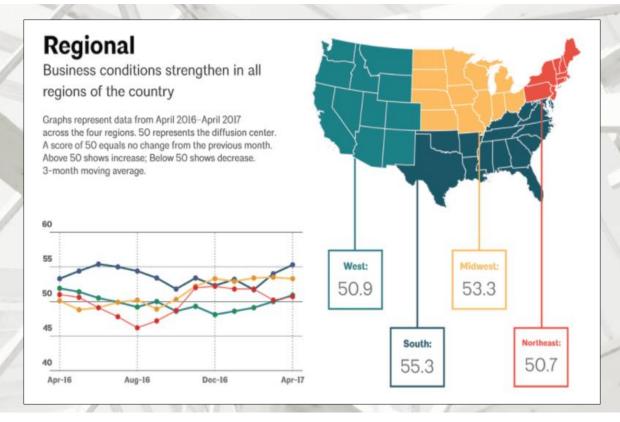
Private Indicators American Institute of Architects (AIA)



Design billings increasing entering height of construction season

"Business conditions also improved at firms in all regions of the country in April, marking only the second time in the last 12 months that this has occurred." – Kermit Baker, Hon. AIA, Chief Economist, AIA

Private Indicators: AIA



All regions report positive business conditions

"Billings growth was strongest at firms located in the midwest and south, while growth tended to be more modest at firms in the rest of the country." – Kermit Baker, Hon. AIA, Chief Economist, AIA

Private Indicators: AIA



"Firm billings also grew at firms of all specializations this month, with the exception of a very modest decline for those with a residential specialization. On the other hand, firms with an institutional specialization have seen particularly strong growth in billings over the last several months." – Kermit Baker, Hon. AIA, Chief Economist, AIA

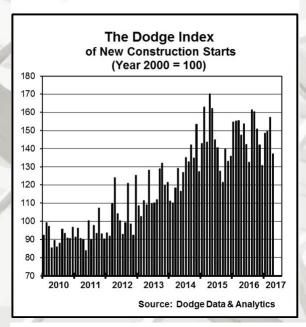
Dodge Data & Analytics

April Construction Starts Retreat 13 Percent

"The value of new construction starts in April dropped 13% from the previous month to a seasonally adjusted annual rate of \$647.8 billion, according to Dodge Data & Analytics. The decline followed three straight months of gains, which saw total construction activity rising 20% from the lackluster amount reported back in December. Much of April's slide for total construction reflected a steep 39% plunge by its nonbuilding construction sector, which had been lifted in March by the start of two large pipeline projects.... Meanwhile, residential building slipped a more moderate 5% in April, and nonresidential building receded only a slight 1% as it basically held steady with its pace in February and March. During the first four months of 2017 total construction starts on an unadjusted basis were \$213.9 billion, down 4% from last year's January-April period. If the volatile manufacturing plant and electric utility/gas plant categories are excluded, total construction starts during the first four months of 2017 would be up 4% compared to last year.

The construction start pattern so far in 2017 can be characterized as three steps forward and one step back, as the often hesitant pattern of the construction expansion continues. The first three months of this year drew support from a number of very large projects, most notably several massive pipeline and airport terminal projects. ... the boost from very large projects in April was generally less than what occurred during the first three months of this year. In addition, both residential building and public works had been trending upward through March, but then experienced a pause in April. In contrast, nonresidential building in April was able to remain essentially stable. On the plus side for construction, Congress in early May passed a continuing resolution for fiscal 2017 appropriations that includes a small increase for highway spending, bringing it up to levels called for by the FAST Act (the multiyear federal transportation legislation). And, long-term interest rates have steadied for the time being, following the increases that were reported in late 2016 and early 2017." – Robert Murray, Chief Economist, McGraw Hill Construction

April 2017 Construction Starts



Monthly Summary of Construction Starts Prepared by Dodge Data & Analytics

Monthly Construction Starts Seasonally Adjusted Annual Rates, in Millions of Dollars

	April 2017	March 2017	% Change		
Nonresidential Building	\$233,443	\$236,242	-1		
Residential Building	295,377	311,212	-5		
Nonbuilding Construction	118,950	195,795	<u>-39</u>		
Total Construction	\$647,770	\$743,249	-13		

The Dodge Index

Year 2000=100, Seasonally Adjusted
April 2017137
March 2017157

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

	4 Mos. 2017	4 Mos. 2016	% Change		
Nonresidential Building	\$72,184	\$68,731	+5		
Residential Building	93,962	94,027	-0-		
Nonbuilding Construction	47,759	60,719	<u>-21</u>		
Total Construction	\$213,905	\$223,477	-4		
Total Construction, excluding manufacturing buildings and					
electric utilities/gas plants	\$202,580	\$195,419	+4		

"Residential building, at \$295.4 billion (annual rate), settled back 5% in April. Single family housing slipped 6% in April, retreating for the second month in a row after showing modest improvement during the fourth quarter of 2016 and the first two months of 2017. April's pace for single family housing was still 5% above the average monthly pace during 2016. By geography, single family housing in April showed this performance relative to March – the South Atlantic, down 11%; the West, down 5%; the Midwest, down 4%; the South Central, down 3%; and the Northeast, up 2%. Multifamily family housing in April receded 3% from March. There were seven multifamily projects valued at \$100 million or more that reached groundbreaking in April.... In April, the top five metropolitan areas in terms of the dollar amount of multifamily starts were the following.... Through the first four months of 2017, the top five metropolitan areas were the same, although with this order – New York NY, Los Angeles CA, Chicago IL, Washington DC, and San Francisco CA." – Robert Murray, Chief Economist, McGraw Hill Construction



May Chicago Business Barometer Highest Level Since November 2014

"The MNI Chicago Business Barometer increased to 59.4 in May from 58.3 in April, the highest level since November 2014." – Shaily Mittal, Senior Economist, MNI Indicators

May Chicago Business Barometer at 59.4 vs 58.3 in April

"Optimism among firms about business conditions rose for the fourth consecutive month. Four of the five Barometer components led May's increase, with only New Orders receding.

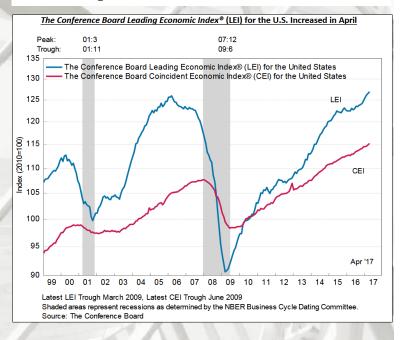
After rising for three consecutive months, demand lost ground in May. New orders fell by 4.5 points to 61.4 in May. In contrast, production continued to strengthen. The indicator was up 3.7 points to 63.2 from 59.5 in April. Order Backlogs jumped out of contractionary territory after five months of decline. Suppliers took longer to deliver key inputs, with the respective indicator at 59.6 compared with 56.0 in April. There were reports of longer delivery times due to suppliers running out of products because of maintaining low inventories.

May's rise in the MNI Chicago Business Barometer provides a further boost to the business environment. Rising pressure on backlogs and delivery times accompanied with higher production levels suggests firms' expectations of a busy summer." – Shaily Mittal, Senior Economist, MNI Indicators

The Conference Board Leading Economic Index® (LEI)

for the U.S. increased 0.3 percent in April to 126.9 (2010 = 100), following a 0.3 percent increase in March, and a 0.5 percent increase in February.

U.S. Composite Economic Indexes (2010 = 100)

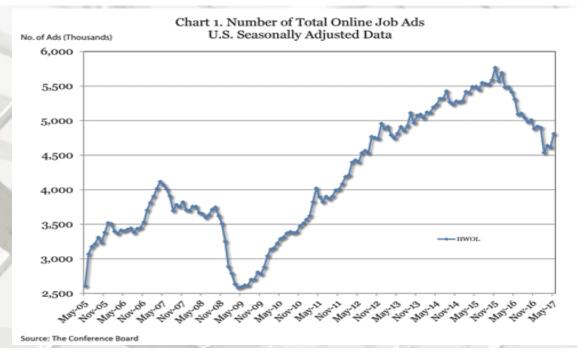


Economic Expansion to Continue, and Possibly Strengthen, in Near Term

"The recent trend in the U.S. LEI, led by the positive outlook of consumers and financial markets, continues to point to a growing economy, perhaps even a cyclical pickup. First quarter's weak GDP growth is likely a temporary hiccup as the economy returns to its long-term trend of about 2 percent. While the majority of leading indicators have been contributing positively in recent months, housing permits followed by average workweek in manufacturing have been the sources of weakness among the U.S. LEI components." – Ataman Ozyildirim, Director of Business Cycles and Growth Research, The Conference Board

"The Conference Board Coincident Economic Index® (CEI) for the U.S. increased 0.3 percent in April to 115.2 (2010 = 100), following a 0.3 percent increase in March, and a 0.1 percent increase in February.

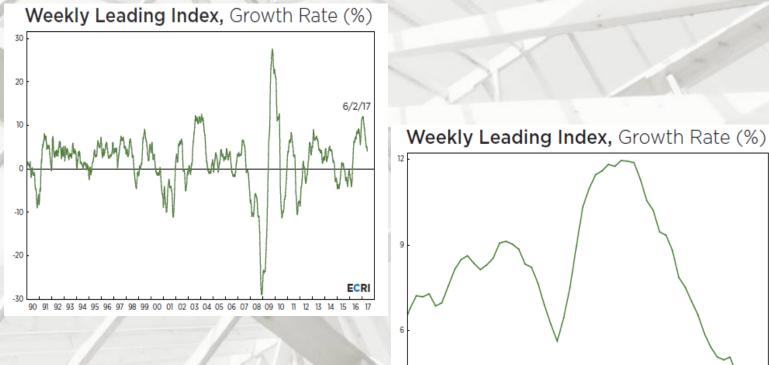
The Conference Board Lagging Economic Index® (LAG) for the U.S. increased 0.3 percent in April to 124.1 (2010 = 100), following a 0.1 percent increase in March and a 0.2 percent increase in February."

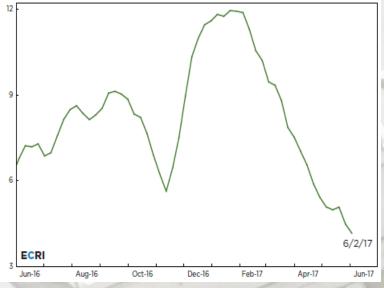


The Conference Board Help Wanted OnLine® (HWOL)

"Online advertised vacancies increased 195,600 to 4,809,200 in May, according to The Conference Board Help Wanted OnLine® (HWOL) Data Series. The April Supply/Demand rate stands at 1.53 unemployed for each advertised vacancy, with a total of 2.4 million more unemployed workers than the number of advertised vacancies. The number of unemployed was approximately 7.1 million in April.

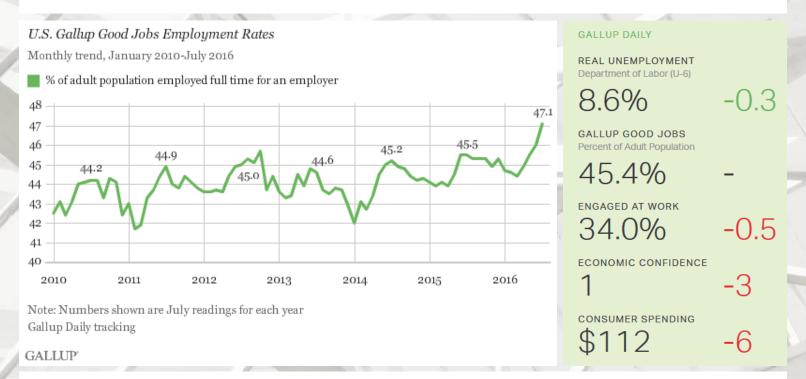
The Professional occupational category saw gains in Healthcare Practitioners (46.4), Computer/Math (25.2), and Management (23.8). The Services/Production occupational category saw gains in Sales (31.8) and Office and Administrative Support (30.6)." – Carol Courter, The Conference Board





U.S. Weekly Leading Index (WLI)

"The U.S. Weekly Leading Index (WLI) increases to 144.5 from 143.5. The growth rate ticks down to 4.2% from 4.5%." -- Lakshman Achuthan, Co-Founder & Chief Operations Officer, **ECRI**



US Gallup Good Jobs Rate Climbs to New High Again in July

- 47.1% is the highest Gallup Good Jobs rate in six years of measurement
- 5.1% is the lowest unemployment Gallup has measured in same period
- Workforce participation at 67.8%, highest since June 2013

The Gallup Good Jobs (GGJ) rate in the U.S. was 47.1% in July, an improvement from <u>June's 46.0%</u>, which had been the highest monthly rate Gallup has recorded since measurement began in 2010. The current rate is also 1.6 percentage points higher than in July 2015, suggesting an underlying increase in full-time work beyond seasonal changes in employment." – Ben Ryan, Consulting Associate, Gallup

May 2017 Manufacturing ISM® Report On Business® May NMI® at 54.9%

New Orders, Inventories and Employment Growing, Supplier Deliveries Slowing, Prices Increasing

"Economic activity in the **manufacturing sector** expanded in May, and the overall economy grew for the 96th consecutive month, say the nation's supply executives in the latest **Manufacturing ISM**® *Report On Business*®.

The May PMI® registered 54.9 percent, an increase of 0.1 percentage point from the April reading of 54.8 percent.

The New Orders Index registered 59.5 percent, an increase of 2 percentage points from the April reading of 57.5 percent.

The Production Index registered 57.1 percent, a 1.5 percentage points decrease compared to the April reading of 58.6 percent.

The Employment Index registered 53.5 percent, an increase of 1.5 percentage points from the April reading of 52 percent.

The Inventories Index registered 51.5 percent, an increase of 0.5 percentage point from the April reading of 51 percent.

The Prices Index registered 60.5 percent in May, a decrease of 8 percentage points from the April reading of 68.5 percent, indicating higher raw materials prices for the 15th consecutive month, but at a noticeably slower rate of increase in May compared with April.

Comments from the panel generally reflect stable to growing business conditions; with new orders, employment and inventories of raw materials all growing in May compared to April. The slowing of pricing pressure, especially in basic commodities, should have a positive impact on margins and buying policies as this moderation moves up the value chain." – Timothy R. Fiore, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee

May 2017 Non-Manufacturing ISM® Report On Business®

May NMI® at 56.9 %

Business Activity Index at 60.7%, New Orders Index at 57.7%, Employment Index at 57.8%

"Economic activity in the non-manufacturing sector grew in May for the 89th consecutive month, say the nation's purchasing and supply executives in the latest **Non-Manufacturing ISM**® **Report On Business**®.

"The NMI® registered 56.9 percent, which is 0.6 percentage point lower than the April reading of 57.5 percent. This represents continued growth in the non-manufacturing sector at a slightly slower rate.

The Non-Manufacturing Business Activity Index decreased to 60.7 percent, 1.7 percentage points lower than the April reading of 62.4 percent, reflecting growth for the 94th consecutive month, at a slower rate in May.

The New Orders Index registered 57.7 percent, 5.5 percentage points lower than the reading of 63.2 percent in April.

The Employment Index increased 6.4 percentage points in May to 57.8 percent from the April reading of 51.4 percent.

The Prices Index decreased 8.4 percentage points from the April reading of 57.6 percent to 49.2 percent, indicating prices decreased in May for the first time after 13 consecutive months of increasing.

According to the NMI®, 17 non-manufacturing industries reported growth. Although the non-manufacturing sector's growth rate dipped in May, the sector continues to reflect strength, buoyed by the strong rate of growth in the Employment Index. The majority of respondents' comments continue to indicate optimism about business conditions and the overall economy." – Anthony Nieves, CPSM, C.P.M., CFPM, Chair of the Institute for Supply Management® (ISM®) Non-Manufacturing Business Survey Committee



Markit U.S. Manufacturing PMI™

"At 52.7 in May, down fractionally from 52.8 in April, the seasonally adjusted **IHS Markit final US Manufacturing** *Purchasing Managers' Index*TM

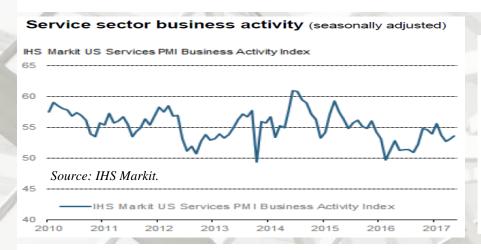
(*PMI*TM) was above the 50.0 no-change value, but signalled the weakest improvement in business conditions since last September. The latest reading pointed to a further growth slowdown from the 22-month high recorded in January (55.0). Weaker new business growth and softer job creation helped to offset a marginally stronger upturn in production volumes."

Manufacturing PMI slips to eight-month low in May

"U.S. manufacturing companies indicated an upturn in business conditions during May, but the latest survey revealed a further loss of momentum from the peak seen at the beginning of 2017. The softer overall improvement in manufacturing conditions reflected a moderation in new business growth to its weakest for eight months, alongside relatively subdued increases in output and employment. May data also pointed to more cautious inventory policies, with stocks of purchases falling at the fastest pace since August 2016.

Manufacturing growth momentum continued to ebb in May, down to its weakest since just before the presidential election. Manufacturing output, order books and employment all grew at only modest rates as sluggish sales prompted firms to scale back hiring. Exports sales remained especially lacklustre, hampered in part by the relatively strong dollar. The survey also brought signs of companies becoming more cautious about holding inventory.

Factories' raw material prices meanwhile rose at a sharply reduced rate, which should at least help take pressure off profit margins and also feed through to weaker pressure on consumer price inflation." – Chris Williamson, Chief Economist, Markit®



Markit U.S. Services PMI™

"The seasonally adjusted Business Activity Index continued to run above the crucial 50.0 no-change mark during May. A reading of 53.6, up from 53.1 in April, signalled the largest rise in overall activity since February."

New business growth accelerates in May

"Growth of business activity in the US service sector accelerated slightly in May, reaching a three-month high. This extended the current period of activity growth to 15 months. New business also expanded at a quicker pace, and grew at the fastest rate since January. Subsequently, firms added to their payrolls again with the rate of growth accelerating to a three-month high. Input price inflation softened fractionally, while prices charged by US service providers increased at a faster pace.

Although service sector business activity picked up in May, the PMI surveys for manufacturing and services collectively indicate only a modest pace of economic growth so far in the second quarter. Historical comparisons with GDP indicate the PMI is signalling second quarter GDP growth of just over 2%, suggesting there may be some downside risks to IHS Markit's current forecast of a GDP growth rebound to just over 3% in the second quarter.

However, the key message from the PMI is that the economy is enjoying steady, albeit unspectacular, growth, and that the pace of expansion has been slowly lifting higher in recent months." – Chris Williamson, Chief Economist, Markit®

National Association of Credit Management – Credit Managers' Index

Flagging Enthusiasm Could Show Up in Otherwise Strong April Credit Managers' Index

"The combined score for the CMI dipped a little from 55.4 to 54.3, despite a small gain in the unfavorable category. The very high readings in the favorable categories seen last month have faded somewhat, although most of the subcategories are still above 60. The combined favorable readings are at 60.6 after reaching 63.6 last month. This remains the third-highest reading in the last 12 months. The combined score for the unfavorable reading was 50.2, a very slight improvement over the 50 score last month. As usual, the interesting information lies in the specific subcategories.

The bloom may have started to fade a bit, but the Credit Managers' Index (CMI) numbers continue to be reasonably strong. As has been pointed out over the last few months, the economy has been in a state of expectation, allowing more growth and expansion than might have been expected otherwise. The markets have certainly been frothy with anticipation, but now there seems to be some disappointment setting in." – Nicholas Stern, Senior Editor, NACM

"The index survey for April was taken prior to the ACA defeat in Congress and suggests there had been some reduction in enthusiasm even prior to the legislative setback to the Trump agenda. This is typical of a boom fed by expectations — patience wears thin as fast as it develops. The fact is, good numbers still dominate — they are just not quite as good as they had been." – Chris Kuehl, Ph.D., Economist, NACM

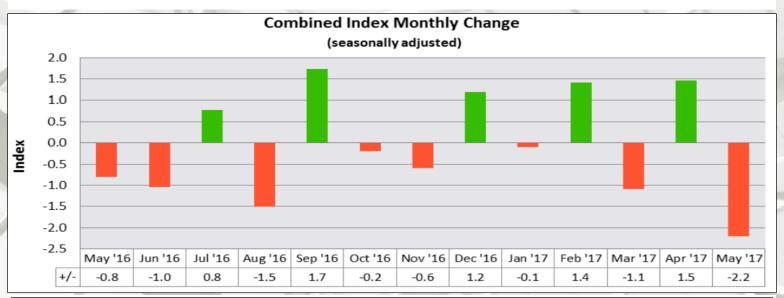
National Association of Credit Management – Credit Managers' Index

May Credit Managers' Index Could Note Cooling of Business Optimism

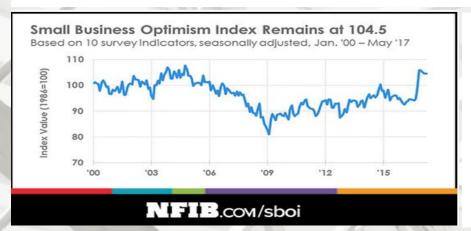
"Business exuberance has faded a bit in May, reigniting concerns surrounding commercial credit factors, such as a slip in dollar collections from March, according to preliminary data in the latest NACM Credit Manager's Index (CMI). May's CMI results showed a drop, leaving unclear how long business and consumer patience will hold out for rapid improvements in the business environment resulting from potential tax reform, infrastructure build and deregulation.

The data this month is not exactly bad, but it has fallen off the pace that was set last month. The combined reading for the index as a whole fell to 53.6 and that is the lowest it has been since November of last year. To be sure, a number of 53.6 is not a crisis but just a month ago it was at 55.8. The index for the favorable factors fell as well but stayed in the 60 range (by the narrowest of margins). It went from 63.6 to 60.0. The index for the unfavorable factors went down to below the 50 range and that is a bigger concern. Last month the reading was 50.6 and now it stands at 49.3, and that is as low as it has been since August of last year." – Nicholas Stern, Senior Editor, NACM

"The wild enthusiasm that was noted at the start of the year has faded as reality sets in. The big growth opportunities have not materialized as yet, but there remains some hope they will. The trouble that has been brewing has started to get palpably worse. The sense right now is that companies are less upbeat than they were earlier in the year. The big growth opportunities have not materialized as yet, but there remains some hope they will. The other measures of the economy have been showing some of this angst as well, as the Purchasing Managers' Index has been down from previous heights and the latest durable goods numbers were a little off their recent peak." — Chris Kuehl, Ph.D., Economist, NACM



Combined Manufacturing and Service Sectors (seasonally adjusted)	May '16	Jun '16	Jul '16	Aug '16	Sep '16	Oct '16	Nov '16	Dec '16	Jan '17	Feb '17	Mar '17	Apr '17	May '17
Sales	56.7	56.9	60.0	53.7	57.9	56.9	61.8	58.6	60.1	62.6	61.2	63.8	60.6
New credit applications	56.6	56.6	57.8	56.7	58.6	58.0	54.5	57.0	60.8	62.0	60.5	62.0	59.3
Dollar collections	57.4	57.1	59.5	55.5	59.5	57.0	63.5	59.5	58.2	63.0	56.4	61.2	56.7
Amount of credit extended	61.0	57.6	62.8	59.7	61.9	61.5	61.4	61.4	64.1	66.8	64.4	67.2	63.6
Index of favorable factors	57.9	57.0	60.0	56.4	59.5	58.4	60.3	59.1	60.8	63.6	60.6	63.6	60.0
Rejections of credit applications	51.9	51.2	50.7	51.6	51.3	51.8	48.9	51.3	50.6	51.4	51.6	52.1	52.4
Accounts placed for collection	50.5	48.8	48.2	47.7	47.9	48.1	45.8	49.7	49.4	48.2	49.8	49.0	48.5
Disputes	50.8	49.5	47.6	47.8	48.8	49.9	47.7	49.8	46.0	48.7	48.5	49.1	47.9
Dollar amount beyond terms	49.2	49.0	48.8	46.3	48.2	49.0	44.9	49.3	48.4	51.0	47.4	51.0	45.9
Dollar amount of customer deductions	50.7	49.6	49.0	48.1	50.4	49.5	47.9	49.8	48.7	47.6	49.8	49.2	48.7
Filings for bankruptcies	53.0	51.1	50.7	52.8	52.7	53.8	53.0	55.0	53.9	53.2	53.8	53.5	52.7
Index of unfavorable factors	51.0	49.9	49.2	49.1	49.9	50.3	48.0	50.8	49.5	50.0	50.2	50.6	49.3
NACM Combined CMI	53.8	52.7	53.5	52.0	53.7	53.5	52.9	54.1	54.0	55.4	54.3	55.8	53.6



May 2017 Report: Small Business Optimism Index

"Small business confidence shot up to near record levels last November and is still flying high, according to the latest National Federation of Independent Business (NFIB) Index of Small Business Optimism."

Small Business Optimism Continues Remarkable Surge

'The Index for May matched its strong performance in April of 104.5. That means the Index has been at a historically high level for six straight months. Five of the Index components posted a gain, four declined, and one remained unchanged.

The tight labor market has been a persistent problem for small business owners for the past several months, and the problem appears to be getting worse. It's forcing small business owners to increase compensation, which we're seeing in this data, to attract new workers and keep the ones they have. But it also means a lot of small business owners are short-handed. They can't keep up with customer demand because the labor pool isn't producing enough qualified workers. It's a significant structural problem in the economy that policymakers will have to watch. Typically, in a strong economy, we see a lot more spending on capital. We're seeing increased hiring activity and some other positive signs, but the capital-outlays component is the missing ingredient for robust economic growth." – William Dunkelberg, Chief Economist, National Federation of Independent Business

"The remarkable surge in optimism that began last year right after the election shows no signs of slowing down. Small business owners are highly encouraged by the President's regulatory reform agenda, and they remain optimistic there will be tax reform and health-care reform. This is a policy-driven phenomenon." – Juanita Duggan, President and CEO, National Federation of Independent Business



The Paychex | IHS Small Business Jobs Index National Highlights

"Despite a strong start to 2017, at 100.34, three consecutive declines have brought the national index to its lowest level since late 2015. The pace of small business job growth is 0.25 percent slower than in May 2016. Falling to 100.34, the Small Business Jobs Index had its weakest three-month change since July 2009 (-0.44 percent)."

Regional Highlights

"All four regions are negative for the month, the quarter, and the year. At 101.14, the South remains the strongest region for small business growth. Even though its index is down slightly year-over-year, 0.07 percent, the South also has the best 12-month growth rate among regions." – James Diffley, Chief Regional Economist, IHS Markit

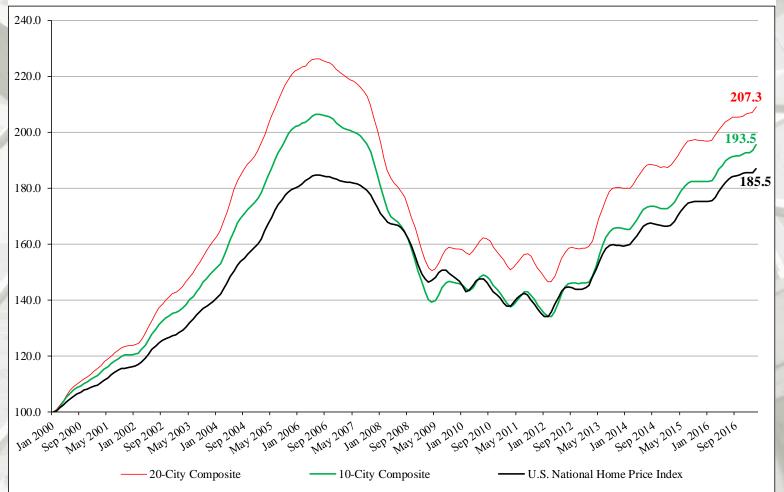
"The S&P CoreLogic Case-Shiller U.S. National Home Price NSA Index, covering all nine U.S. census divisions, reported a 5.8% annual gain in March, up from 5.7% last month and setting a 33-month high. The 10-City Composite and the 20-City Composite indices came in at 5.2% and 5.9% annual increases, respectively, unchanged from last month."

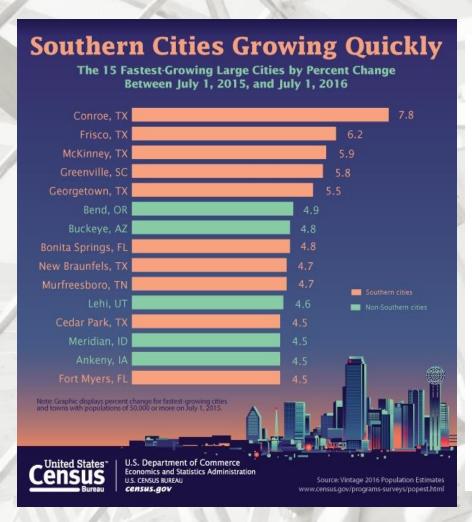
Seattle, Portland, Dallas and Denver Lead Gains In S&P Corelogic Case-Shiller Home Price Indices

"Home prices continue rising with the S&P Corelogic Case-Shiller National Index up 5.8% in the year ended March, the fastest pace in almost three years. While there is some regional variation, prices are rising across the U.S. Half of the 20 cities tracked by the S&P Corelogic Case-Shiller indices rose more than 6% from March 2016 to March 2017. The smallest gain of 4.1%, in New York, was roughly double the rate of inflation.

Sales of both new and existing homes, housing starts and the National Association of Home Builders' sentiment index are all trending higher. Over the last year, analysts suggested that one factor pushing prices higher was the unusually low inventory of homes for sale. People are staying in their homes longer rather than selling and trading up. If mortgage rates, currently near 4%, rise further, this could deter more people from selling and keep pressure on inventories and prices. While prices cannot rise indefinitely, there is no way to tell when rising prices and mortgage rates will force a slowdown in housing." – David Blitzer, Managing Director and Chairman of the Index Committee, S&P Dow Jones

S&P/Case-Shiller Home Price Indices





The South Is Home to 10 of the 15 Fastest-Growing Large Cities

"Ten of the 15 fastest-growing large cities were located across the South in 2016, with four of the top five in Texas,

...

Overall, cities in the South continue to grow at a faster rate than any other U.S region. Since the 2010 Census, the population in large southern cities grew by an average of 9.4 percent. In comparison, cities in the West grew 7.3 percent, while cities in the Northeast and Midwest had much lower growth rates at 1.8 percent and 3.0 percent respectively." – Amel Toukabri,, Demographer, US Census Bureau-Population Division

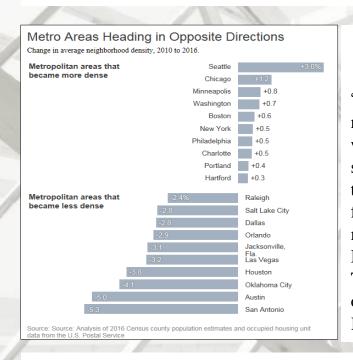
Seattle Climbs but Austin Sprawls: The Myth of the Return to Cities

"Be skeptical when you hear about the return to glory of the American city — that idealized vision of rising skyscrapers and bustling, dense downtowns. Contrary to perception, the nation is continuing to become more suburban, and at an accelerating pace. The prevailing pattern is growing out, not up, although with notable exceptions.

Rural areas are lagging metropolitan areas in numerous measures, but *within* metro areas the suburbs are growing faster in both population and jobs. On the other hand, as anyone who has tried to rent an apartment or buy a condo in a big city knows, housing prices are climbing faster in urban neighborhoods than in the suburbs. And urban neighborhoods are <u>younger and richer</u> than they used to be, with more educated residents and fewer school-age children. <u>Higher-wage jobs</u> are increasingly in city centers, with urban retail catering to these well-paid workers and residents.

This combination of faster population growth in outlying areas and bigger price increases in cities points to limited housing supply as a curb on urban growth, pushing people out to the suburbs. It's a reminder that where people live reflects not only what they want — but also what's available and what it costs.

However, these broad national trends hide divergent local ones. A few large metro areas did, in fact, become more urban between 2010 and 2016. Of the 51 metro areas with more than one million people, average neighborhood density rose in 10 and fell in 41, according to census population data and U.S. Postal Service counts of occupied housing units. That is, four-fifths of large metro areas have become more suburban since 2010, while only one-fifth have become more urban." – Jed Kolko, Chief Economist, Indeed.com



Seattle Climbs but Austin Sprawls: The Myth of the Return to Cities

"Seattle urbanized the most: Faster growth in the city's neighborhoods meant that average neighborhood density was 3 percent higher in 2016 than in 2010. Among the sprawling majority, San Antonio and Austin spread out the most: In both cities, average neighborhood density fell by 5 percent between 2010 and 2016. All of the metro areas where density fell the most were in the Sun Belt, including Las Vegas, Houston, Dallas and Orlando. These sprawling metro areas are also showing faster overall growth than the urbanizing metro areas." – Jed Kolko, Chief Economist, Indeed.com

There's a clear pattern in which metro areas are becoming more urban: Dense metros are getting denser. Meanwhile, sprawling metro areas are spreading out further. It's another example of a polarized America, of places becoming more unlike each other: not only with respect to income inequality and politics, but also with growth patterns.

There's a clear pattern in which metro areas are becoming more urban: Dense metros are getting denser. Meanwhile, sprawling metro areas are spreading out further. It's another example of a polarized America, of places becoming more unlike each other: Not only with respect to income inequality and politics, but also with growth patterns." – Jed Kolko, Chief Economist, Indeed.com

Seattle Climbs but Austin Sprawls: The Myth of the Return to Cities

"All of the largest East Coast and Midwest metro areas became more dense, including New York, Washington, Boston, Philadelphia and Chicago (though less so than Seattle). These places, five of the seven densest, were already relatively tightly packed to begin with. The other two densest metro areas, San Francisco and Los Angeles, suburbanized only slightly.

By contrast, none of the places where sprawl increased most between 2010 and 2016 — Austin, San Antonio, Houston and Oklahoma City — had been especially urban even in 2010.

The metro areas that are becoming more dense include two, New York and Washington, that are home to the media outlets where much of the writing about cities appears. Furthermore, metro areas that are urbanizing have more than their fair share of urban planners, including Seattle, Minneapolis, Washington and Boston. Those who write about, advocate for and choose to live in cities really do see more urbanization around them. But their cities are the exceptions. Most large metro areas, including the fastest-growing ones, as well as America over all, are increasingly suburban." – Jed Kolko, Chief Economist, Indeed.com

Urban Geography, Vacant Lots, and The Stunted Recovery of New Home Construction

- "Even as home prices reach new highs and markets are starved for inventory, the rise in the number of new homes built in the U.S. is sluggish. Home builders blame a shortage of labor and, crucially, a limited supply of lots.
- The geography within metros is telling. Home price appreciation in U.S. cities has been substantially greater towards the metropolitan interior, drawing homebuilders to areas in which vacant lots are scarcer, and heightening the perception that lots are in short supply.
- In less costly metros, new housing is reverting to pre-recession growth trends, rebounding primarily at the outer fringe where vacant land is plentiful.
- In expensive coastal cities, slow outward expansion and gradual development within the footprint have depleted the supply of vacant lots. As a result, new housing remains depressed wherever density is taboo from the interior suburbs right up to metropolitan fringe but it has rebounded near the center, where dense construction is allowed.

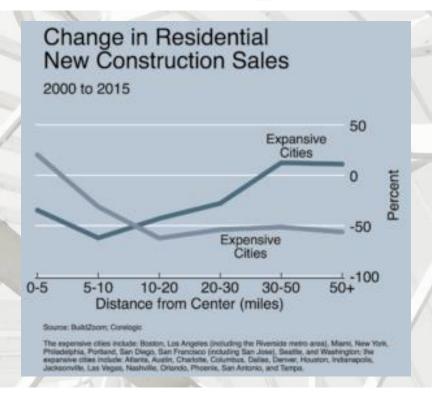
Ten years after the housing bust, home prices are rising to new highs and some parts of the country face a crisis of housing affordability yet, by historical standards, new home construction remains remarkably low. Indeed, the rapid appreciation is often blamed on a shortage of inventory for sale, whose most obvious remedy is new construction." – Issi Romem, Author, BuildZoom

Urban Geography, Vacant Lots, and The Stunted Recovery of New Home Construction

Expensive vs Expansive Cities

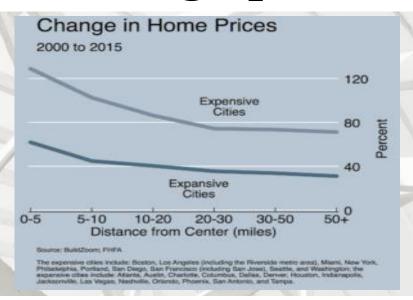
"How well does Austin represent the rest of metropolitan America? To answer that, we must distinguish between several types of American cities (by "cities" I mean metropolitan areas). From World War II until the 1970s, U.S. cities provided ample new housing at affordable prices the same way Austin still does, by continually pushing the suburban fringe farther out, and then gradually filling in the gaps. Since the 1970s, though, American cities have diverged into three groups which, in an earlier study, I labeled as either expensive, expansive – with an a – or as legacy cities. Both expensive and expansive cities are prosperous and generate great demand for housing from both current residents and potential new ones. But whereas expansive cities like Atlanta, Houston, and Phoenix have maintained the previous paradigm and continue to provide ample new housing at affordable prices, expensive cities like San Francisco, Seattle, and New York have strayed from it and dramatically curbed their rate of outward expansion.

Having failed to fully accommodate the demand for housing, the expensive cities have seen home values rise an order of magnitude, and population growth slow to a mere fraction of what their economies could otherwise support. In contrast to both expensive and expansive cities, legacy cities are those whose economic power has faded and therefore have far less need for increasing the amount of housing." – Issi Romem, Author, BuildZoom



Urban Geography, Vacant Lots, and The Stunted Recovery of New Home Construction

"New housing in Austin has been more buoyant than in the other expansive cities, especially in the center, but the geographic pattern that expansive cities present is essentially similar to Austin's. As of 2015, residential new construction sales were farthest below the 2000 benchmark in expansive cities' interior suburbs, slightly less so near the center, and were largely above the 2000 benchmark near the metropolitan fringe." – Issi Romem, Author, BuildZoom



The Steepening of the Housing Price Gradient

"In contrast to residential new construction sales, home price appreciation in the expansive cities is greatest in the center and gradually declines with distance, in what amounts to a steepening of the housing price gradient. On average, appreciation has been greater in the interior suburbs than at the fringe.

Homebuilders would love nothing more than to build homes where prices are high and rising, suggesting robust demand. The steepening of the housing price gradient suggests that they should now be drawn more powerfully to the interior and, as a result, be more likely to seek land there and to confront – successfully or not – the difficulty of obtaining lots, whose scarcity is more acute in the metropolitan interior. By redirecting homebuilders' attention towards the interior, the steepening of the housing price gradient has amplified their perception of a shortage of lots. It's not that vacant land has grown scarcer, but that homebuilders are focusing on the places where it is hardest to find." – Issi Romem, Author, BuildZoom

The Steepening of the Housing Price Gradient

"Why have residential new construction sales performed better in the center than in the interior suburbs? First, because the urban revival in the U.S. appears to be strictly a city center phenomenon. City by city data indicate that the changes in per capita income, educational attainment, racial composition and concentration of young adults which characterize the urban revival occur almost exclusively within 5 miles or less of the city center. Thus, the increased demand for an urban lifestyle appears to be confined almost exclusively to this range, and can help explain the exceptionally intense appreciation of home prices near the center, even in comparison to the innermost suburbs.

Second, whereas dense development in the heart of American cities is normal, go any farther out and it becomes taboo (with few exceptions, e.g. near transit centers). As a result, even though vacant lots are scarcest in the center, local land use rules typically allow denser construction in the center than in the interior suburbs.

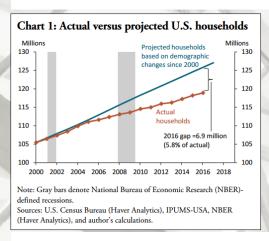
Finally, the shortage of construction labor and the consequent increase in the cost of construction may affect the interior suburbs more than elsewhere. Homebuilders will only build if they anticipate a profit, and it may be the case that profit margins are lower in the interior suburbs than in both the center and at the metropolitan fringe – in the center because density is allowed, and at the metropolitan fringe because land there is substantially cheaper and the construction of entire subdivisions invokes economies of scale." – Issi Romem, Author, BuildZoom

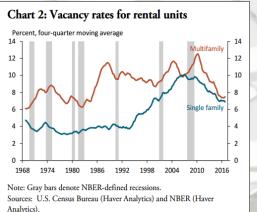
The Large Unmet Demand for Housing

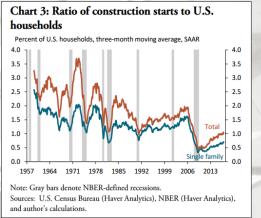
Over the past few years, new home construction has fallen considerably short of rising demand for housing, putting downward pressure on apartment vacancies and existing homes for sale and preventing young adults from forming new households. Increasing rents and sales prices will spur construction growth over the medium term. But the level of home construction is likely to remain low by historical benchmarks, significantly constraining household formation.

"Household formation weakened during the Great Recession, as many adults, especially younger ones, chose to live with family members or housemates to pare expenses. Although employment, consumption, and household savings have strengthened over the past few years, household formation has remained weak. The limited supply of housing available for rent or sale may be the main culprit.

Weak household formation has caused the number of U.S. households to fall increasingly below its trend. The blue line in Chart 1 shows the projected number of U.S. households constructed by keeping the composition of households by age and sex the same as it was in 2000 while adjusting for the evolving composition of the U.S. population (Rappaport 2013). Constructing the number in this way assumes, for example, that the shares of women 25–29 who live on their own, with a single female housemate, or with a single male housemate remain constant at their 2000 values. The orange line shows that the actual number of U.S. households fell below the projected number in 2006, when subprime foreclosures accelerated. The actual number fell further below projection during the recession and even further during the recovery and expansion. By the end of 2016, the actual number of households was 6.9 million below the number projected by holding household composition the same as in 2000." – Jordan Rappaport, Senior Economist, The Federal Reserve Bank of Kansas City







The Large Unmet Demand for Housing

"Of course, the true trend number of households may not equal the projection, which is based only on the changing demographics of the U.S. population. Long-run changes in household composition, including the increasing share of adults age 25–49 living with their parents since 1980, suggest that the trend path is below the projected path (Rappaport 2015). But the gradual pace of such long-run changes prior to the 2007–09 recession suggests they are unlikely to account for more than half of the shortfall between actual and projected households, leaving the actual number of households at the end of 2016 at least 3.5 million below its trend level.

A low supply of housing may explain the gap. The Census Bureau defines a household as an occupied housing unit; household formation thus depends on the availability of apartments and houses to move into. Potential renters have faced the lowest vacancy rates on existing apartments and houses in many years (Chart 2). And while construction of new apartments has boomed over the past few years, it has centered disproportionately on luxury units too expensive for most young adults. Meanwhile, construction of new houses as a share of U.S. households is near its lowest level since at least 1957, the earliest date for which data are available (Chart 3)." — Jordan Rappaport, Senior Economist, The Federal Reserve Bank of Kansas City

The Large Unmet Demand for Housing

"A related consequence of this supply shortfall is that spending on housing services—in other words, the estimated rent of all occupied homes—has been one of the slowest growing components of personal consumption over the past few years. Its average growth rate during 2015 and 2016 was 1.5 percent, approximately half the growth rate of consumption of all other goods and services.

. . .

Unsurprisingly, the combination of both limited supply and a large unmet demand for housing is putting strong upward pressure on rents and sales prices. Multifamily rents increased at more than a 4 percent annual rate throughout 2015 and 2016, and increases in single-family rents gradually accelerated from just under a 3 percent rate during the first half of 2015 to a 3.5 percent rate in January 2017 (Chart 5).

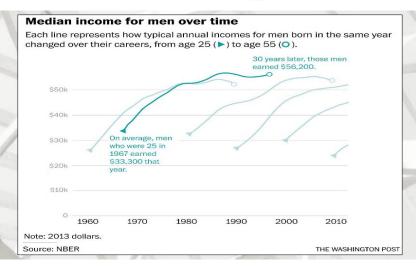
The annual growth rate of single-family home prices increased from about 5 percent during the first half of 2016 to just over 7 percent in December. The heightened pace of price increases has pushed up the national level of home prices to within 5 percent of its 2006 peak, raising concerns of possible overvaluation (Chart 6). In contrast to 2006, however, the current level of home prices appears to be supported by fundamentals rather than speculative demand. In particular, the low rate of current construction suggests demand for single-family homes is unlikely to be met anytime soon. Moreover, the current price-to-rent ratio is only moderately above its 1999–2001 average. Indeed, taking current interest rates into account, house prices may be undervalued, leaving a buffer to absorb downward pressure on sales prices if interest rates continue to rise." – Jordan Rappaport, Senior Economist, The Federal Reserve Bank of Kansas City

The Large Unmet Demand for Housing

"The large unmet demand for housing is likely to spur growth in home construction during the remainder of 2017 and into 2018. But it is not clear how strong this growth will be, as construction has not responded vigorously to increasing prices thus far. Single-family construction decreased significantly during the first half of 2016 despite strong growth in house prices. **One** reason is that builders in many metropolitan areas are facing a shortage of qualified construction workers. **In addition**, smaller builders, which account for the majority of single-family development in some mid-sized metropolitan areas, are having trouble financing land purchases and construction.

A **third** explanation is the limited availability of undeveloped land in desired locations. From before World War II through the housing boom of the early 2000s, single-family construction largely occurred in new subdivisions near the periphery of metropolitan areas. Over time, this suburban construction migrated further away from the centers of metropolitan areas. In many metros, this outward movement may have reached its geographic limit. Moreover, young professionals' apparent shift in preferences toward living near urban cores is causing firms to relocate jobs from suburban to central locations. In consequence, meeting demand for single-family housing may require the construction of an increasing share of new homes throughout the interior of metropolitan areas, where limited undeveloped land and zoning restrictions favor smaller-scale projects.

Consistent with this land-availability explanation, Rappaport (2017) finds that both single-family and multifamily construction were weaker in metropolitan areas with higher population density throughout their interior portions." – Jordan Rappaport, Senior Economist, The Federal Reserve Bank of Kansas City



Wages have stagnated in the US. Here's why.

"America is getting richer every year. The American worker is not.

Far from it: On average, workers born in 1942 earned as much or more over their careers than workers born in any year since, according to new research — and workers on the job today shouldn't expect to catch up with their predecessors in their remaining years of employment.

Stagnant or falling earnings have put a squeeze on working- and middle-class households. The trend has also widened the gap between the rich and everyone else as, overall, the economy has continued to grow overall but the bulk of those gains have ended up in the pockets of the affluent.

These are some of the conclusions from a new working paper by a group of economists investigating the reasons for the decline of the American middle class. While economists have been concerned about recent data on earnings, the new paper suggests that ordinary Americans have been dealing with serious economic problems for much longer than may be widely recognized." – Max Ehrenfreund, Writer, Wonkblog; World Bank

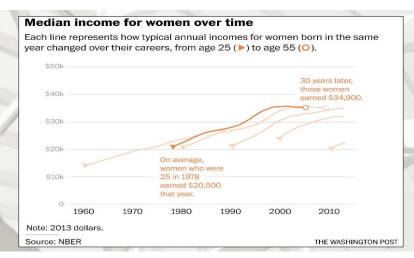
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The new paper includes some "astonishing numbers," said Gary Burtless, an economist at the nonpartisan Brookings Institution who was not involved in the research. "The stagnation of living standards began so much earlier than people think," he said.

In the study, the economists — from the University of Minnesota, the University of Chicago, Princeton University and the federal government — examined career earnings for workers born in every year since 1932. They did not include those who didn't work or only rarely worked, instead concentrating on those who spent at least 15 years in the labor force. Using wage and salary data from the federal Social Security Administration, they calculated the career earnings of the median worker born in each year.

For instance, the typical 27-year- old man's annual earnings in 2013 were 31 percent less than those of a typical 27-year-old man in 1969. The data suggest that today's young men are unlikely to make up for that decline by earning more in the future." – Max Ehrenfreund, Writer, Wonkblog; World Bank



Wages have stagnated in the US. Here's why.

"Women have done much better than men. More women have entered the labor force and taken on more prestigious and remunerative careers. Still, women are making less than men over their working years, and women's rising earnings have not made up for the decline in men's incomes for the population as a who

Recently, women's progress has stalled, in part due to the financial crisis. The typical female worker who was 27 in 2013 made no more than the typical woman of that age did in 1980.

As more women entered the labor force, median household incomes rose even as incomes of individual workers of a given age stagnated, with families using extra workers to bring home more money. But that climb ended in 1999, and since then, median household incomes have fallen, according to the census. "Overall, this is a pretty bleak picture," said Fatih Guvenen, an economist at the University of Minnesota and one of the authors of the new paper." — Max Ehrenfreund, Writer, Wonkblog; World Bank

Wages have stagnated in the US. Here's why.

"In particular, the results show that more unequal incomes are not just a result of a widening gap between younger and older workers. Even among older workers, typical incomes have been falling while the wealthiest have been enjoying more and more of the economy's gains. Poorer workers — who tend to be younger — will earn more as they get older, but they are not likely to earn enough to make up the difference.

"This idea that we're having this progression of increasing incomes over time — I think that might be true for the upper regions of the income distribution but not for the median," said Nathaniel Hendren, a Harvard University economist who was not involved in the study.

Among workers of a given age, some will climb the ladder quickly. Medical students and interns, for example, might begin their careers with incomes near poverty and then get rich in middle age. Incomes might even decline for other workers, such as professional athletes, musicians or technology entrepreneurs who never manage to build on an initial success.

Those cases are unusual, however. The new research shows that in the past, a good guide to forecasting typical career earnings among Americans of a given age has been their average income they were 25. The implication, Guvenen argues, is that economists should search for explanations for households' current financial woes in the youth and childhood of today's workers." – Max Ehrenfreund, Writer, Wonkblog; World Bank

Wages have stagnated in the US. Here's why.

"We are maybe looking at the wrong place for the solution to stagnation in wages and rising inequalities," Guvenen said. "To understand higher inequality, we should turn and take a closer look at youth."

It remains to be seen whether the situation will improve in the future for younger workers today, but their prospects seem dim. Young workers' incomes are still declining today, suggesting that their trajectories over the rest of their careers will be lower as well.

"Things just keep looking worse," Hendren said." – Max Ehrenfreund, Writer, Wonkblog; World Bank

National Bureau of Economic Research
Lifetime Incomes in the United States over Six Decades

NBER Working Paper No. 23371

Fatih Guvenen, Dept. of Economics, U. of Minnesota; Greg Kaplan, Dept. of Economics, U. of Chicago; Jae Song, Social Security Administration, Office of Disability Adjudication and Review; and Justin Weidner, Dept. of Economics, Princeton U.

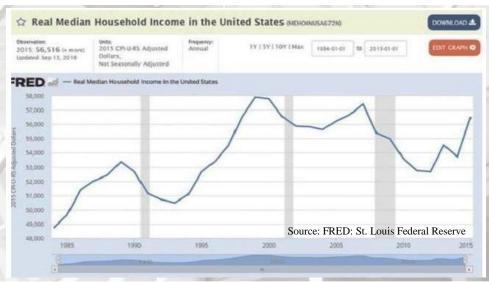
http://www.nber.org/papers/w23371

Brace Yourself For The Coming Economic Transformation

- "Federal Reserve data shows people are earning less than they did 17 years ago.
- If people's incomes haven't grown beyond what they were 30 years ago, they struggle just to make ends meet and to maintain the lifestyle they had.
- We will have to think more deeply and creatively than ever about how to prepare for the changes the transformation coming to our lives.

If the average person in the US feels as though they are going nowhere fast, there is a real reason for it. Federal Reserve data shows people are earning less than they did 17 years ago. But the real story is even worse than that.

The chart below shows that median income in the US is actually down over the last 17 years and is only 3% higher now than it was 30 years ago. Those are inflation-adjusted numbers." – John Mauldin, Mauldin Economics



Brace Yourself For The Coming Economic Transformation

"But the reality is that, for the average person, inflation has been much higher than the average of 2% per year over that time. This is because the things that the average person actually buys-like housing and education and health care and all the other necessities of life-are rising at a much faster rate than 2%.

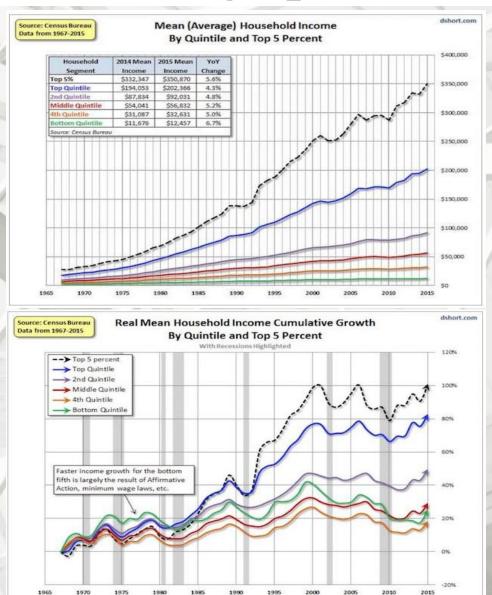
So this chart reflects the fact that life has gotten much more difficult for average Americans. If people's incomes haven't grown beyond what they were 30 years ago, they struggle just to make ends meet and to maintain the lifestyle they had.

Growth Is An Illusion For More Than Half Of Americans

The Census Bureau updates its income figures about once a year, and the last real update we had was last fall (taking us through 2015).

Doug Short did an analysis of those numbers. He breaks the country into quintiles, calculates the average household income for each quintile, and then also shows the top 5%. Notice that the average income for the top 5% is \$350,000.

The next chart shows what that growth looks like in percentage terms. We find that the bottom quintile saw their income grow by only 25% over the last 49 years. That's less than 0.5% per year. Interestingly, the fourth quintile grew even less than the bottom one, at around 19%, mainly because of government programs that supported those in the lowest 20%." — John Mauldin, Mauldin Economics



People Worry About Sliding Down The Class Scale

Not only are people making less, more people are worried about staying where they are financially (or not sliding down) than are trying to figure out how to get up to the next level.

The possibility that we might slide down the class scale is the source of much angst. Upper-income people worry they will decline to mere upper-middle-class status, while the middle class doesn't want to join the ranks of the lower class.

It's not so much that those upper-income people are worried about being middle class. It's that they have created expenses and lifestyles around a certain level of income. If that income falls, they will have to change the lifestyle they have become used to.

That is remarkably difficult for many of us to do. Our sense of self-esteem and emotional well-being are, it seems, tied to our lifestyle.

Whether your worries are groundless or real, those fears are greater if you know you're at the lower end of your peer group. The wealthiest 0.001% don't have to worry – they'll be fine in just about any scenario. But people in the 85th-95th percentiles are in danger of taking a fall in the next big market and economic upheaval.

And of course, the lower middle in the 25th-50th percentiles are very vulnerable to downward mobility.

...." – John Mauldin, Mauldin Economics

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