The Virginia Tech – U.S. Forest Service March 2019 Housing Commentary: Section II

VIRGINIA TECH.

Urs Buehlmann

Department of Sustainable Biomaterials College of Natural Resources & Environment

Virginia Tech Blacksburg, VA 540.231.9759 buehlmann@gmail.com



Virginia Cooperative Extension

Forest Products Marketing Unit

Forest Products Laboratory



U.S. Forest Service

Madison, WI 304.431.2734

dalderman@fs.fed.us

2018

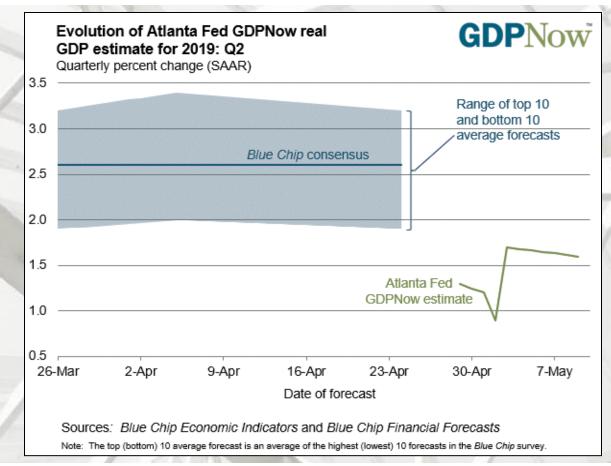
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Atlanta Fed GDPNow[™] Latest forecast: 1.9 percent — May 9, 2019

"The GDPNow model estimate for real GDP growth (seasonally adjusted annual rate) in the second quarter of 2019 is **1.6 percent** on May 9, down from 1.7 percent on May 3. After this morning's Producer Price Index release from the U.S. Bureau of Labor Statistics, and this morning's wholesale trade report from the U.S. Census Bureau, the nowcast of the contribution of inventory investment to second-quarter real GDP growth decreased from -1.02 percentage points to -1.12 percentage points." – Pat Higgins, Economist, Federal Reserve Bank of Atlanta

The Federal Reserve Bank of Chicago: Midwest Economy Index

Index Points to Slower Midwest Economic Growth in March

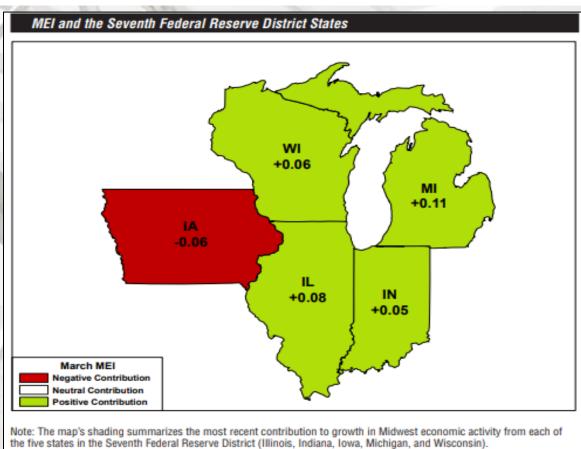
"The Midwest Economy Index (MEI) moved down to +0.22 in March from +0.29 in February. Contributions to the March MEI from three of the four broad sectors of nonfarm business activity and three of the five Seventh Federal Reserve District states decreased from February. The relative MEI edged down to +0.57 in March from +0.60 in February. Contributions to the March relative MEI from three of the four sectors and two of the five states decreased from February

The manufacturing sector's contribution to the MEI ticked down to +0.15 in March from +0.16 in February. The pace of manufacturing activity decreased in Illinois, but was unchanged in Indiana, Iowa, Michigan, and Wisconsin. Manufacturing's contribution to the relative MEI edged down to +0.25 in March from +0.27 in February.

The construction and mining sector contributed -0.02 to the MEI in March, down from +0.01 in February. The pace of construction and mining activity was slower in Illinois and Indiana, but unchanged in Iowa, Michigan, and Wisconsin. The contribution from construction and mining to the relative MEI ticked down to +0.07 in March from +0.08 in February.

The service sector contributed +0.09 to the MEI in March, down from +0.15 in February. The pace of service sector activity was down in Illinois, Iowa, and Wisconsin, but up in Indiana and Michigan. The service sector's contribution to the relative MEI edged down to +0.21 in March from +0.24 in February." – Michael Adleman, Media Relations, The Federal Reserve Bank of Chicago

The Federal Reserve Bank of Chicago: Midwest Economy Index

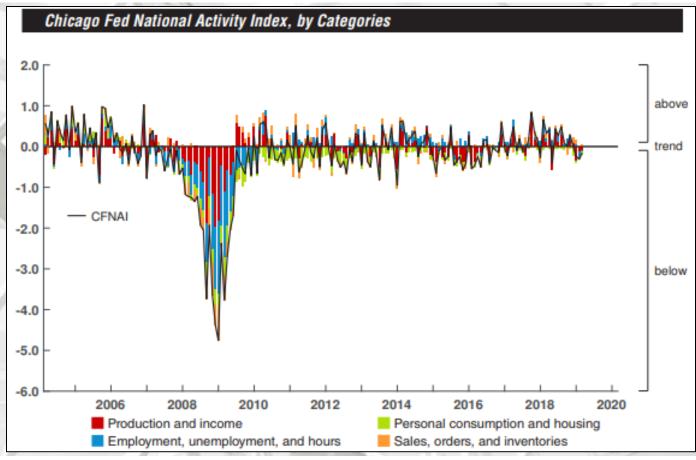


Index points to slower Midwest economic growth in March

"Consumer spending indicators made a neutral contribution to the MEI in March, up slightly from -0.01 in February. Consumer spending indicators were, on balance, up in Michigan, but steady in Illinois, Indiana, Iowa, and Wisconsin. Consumer spending's contribution to the relative MEI edged up to +0.04 in March from +0.01 in February." – Michael Adleman, Media Relations, The Federal Reserve Bank of Chicago

Source: https://www.chicagofed.org/~/media/publications/mei/2019/mei-march2019-pdf.pdf; 4/30/19

The Federal Reserve Bank of Chicago: National Activity Index



Index Points to a Pickup in Economic Growth in March

"Led by improvements in employment-related indicators, the Chicago Fed National Activity Index (CFNAI) rose to -0.15 in March from -0.31 in February. Three of the four broad categories of indicators that make up the index increased from February, but three of the four categories made negative contributions to the index in March. The index's three-month moving average, CFNAI-MA3, moved down to -0.24 in March from -0.18 in February." – Michael Adleman, Media Relations, The Federal Reserve Bank of Chicago

The Federal Reserve Bank of Chicago: National Activity Index

Index Points to a Pickup in Economic Growth in March

"The CFNAI Diffusion Index, which is also a three-month moving average, decreased to – 0.18 in March from –0.08 in February. Thirty-seven of the 85 individual indicators made positive contributions to the CFNAI in March, while 47 made negative contributions and one made a neutral contribution. Forty-eight indicators improved from February to March, while 37 indicators deteriorated. Of the indicators that improved, 23 made negative contributions.

The contribution from production-related indicators to the CFNAI ticked up to -0.10 in March from -0.12 in February. Manufacturing industrial production decreased 0.01 percent in March after falling 0.3 percent in February. The sales, orders, and inventories category made a contribution of +0.05 to the CFNAI in March, up slightly from +0.01 in February.

Employment-related indicators contributed -0.03 to the CFNAI in March, up from -0.15 in February. Total nonfarm payrolls rose by 196,000 in March after increasing by 33,000 in the previous month. The contribution of the personal consumption and housing category to the CFNAI ticked down to -0.07 in March from -0.06 in February" – Michael Adleman, Media Relations, The Federal Reserve Bank of Chicago

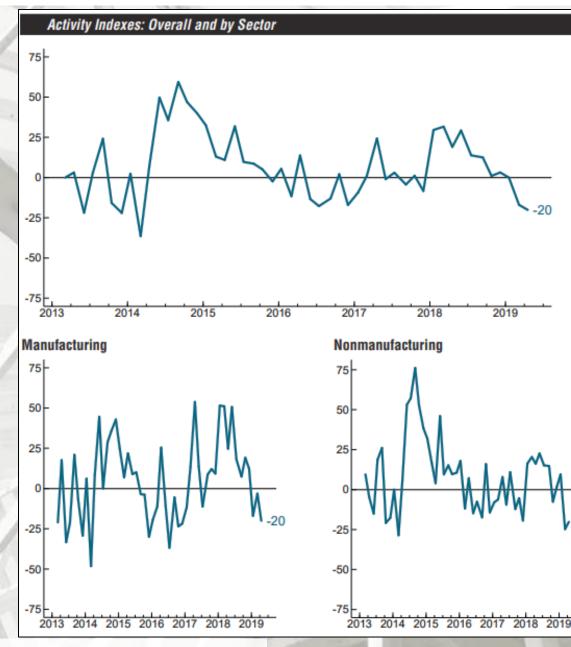
The Federal Reserve Bank of Chicago: Survey of Business Conditions (CFSBC)

Survey Shows Steady Growth in Late February and March

"The Chicago Fed Survey of Business Conditions (CFSBC) Activity Index edged down to -20 from -17, suggesting that growth in economic activity remained at a modest pace in late February and March. The CFSBC Manufacturing Activity Index fell to -20 from -3, while the CFSBC Nonmanufacturing Activity Index increased to -20 from -25.

- Respondents' outlooks for the U.S. economy for the next six to 12 months improved, turning optimistic on balance. Respondents with optimistic outlooks highlighted growing demand for their firms' products, good economic data, and strong labor markets. Respondents with pessimistic outlooks highlighted elevated policy uncertainty under the current U.S. presidential administration, particularly in regard to trade policy; bad economic data; and slower demand for their firms' products.
- The pace of current hiring increased, while respondents' expectations for the pace of hiring over the next six to 12 months decreased slightly. Both hiring indexes remained negative.
- The pace of current capital spending increased, as did respondents' expectations for the pace of capital spending over the next six to 12 months. Both capital spending indexes remained negative.
- The wage cost pressures index ticked up, but the nonwage cost pressures index was unchanged. Both cost pressures indexes remained negative." – Michael Adleman, Media Relations, The Federal Reserve Bank of Chicago

The Federal Reserve Bank of Chicago: Survey of Business Conditions (CFSBC)



Source: https://www.chicagofed.org/publications/cfsbc/index; 4/17/19

Growth in Texas Manufacturing Activity Picks Up Slightly

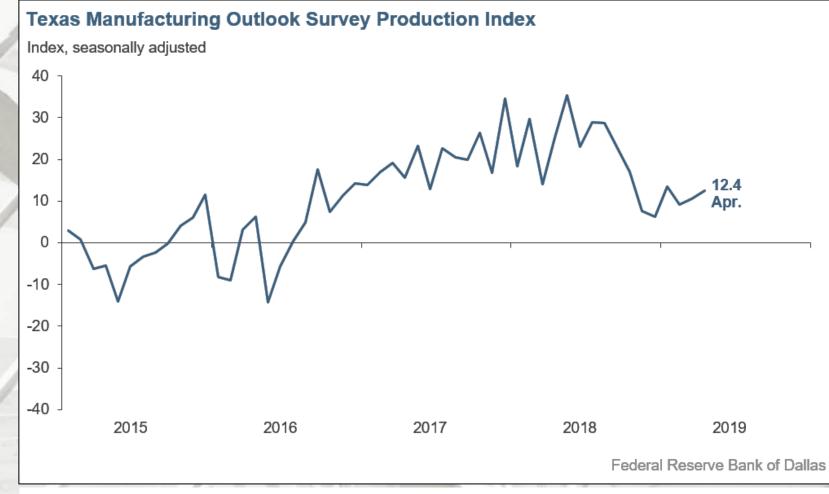
"Texas factory activity continued to expand in April, according to business executives responding to the *Texas Manufacturing Outlook Survey*. The production index, a key measure of state manufacturing conditions, ticked up two points to 12.4, indicating output growth accelerated slightly from March.

Other measures of manufacturing activity also suggested slightly faster expansion in April. The survey's demand indicators bounced back after dipping last month: The new orders index rose eight points to 9.8, and the growth rate of orders index rose from -2.0 to 5.2. The capacity utilization index pushed to a seven-month high of 15.6, while the shipments index held fairly steady at 6.3.

Perceptions of broader business conditions continued to improve in April. The general business activity index remained positive for a third month in a row but fell five points to 2.0. Meanwhile, the company outlook index climbed two points to 6.3.

Labor market measures suggested weaker employment growth but slightly stronger growth in workweek length in April. The employment index fell eight points to 4.6, its lowest reading since the end of 2016. Nineteen percent of firms noted net hiring, while the share reporting net layoffs rose to 15 percent from 10 percent last month. The hours worked index came in at 8.1, up slightly from March.

Upward pressure on input costs abated somewhat in April, while pressure on selling prices and wages was about the same as it was last month. The raw materials prices index dropped 11 points to 7.9, its lowest reading in three years. The finished goods prices index held steady at 6.0, and the wages and benefits index inched down to 28.2, a still-elevated level." – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas



Texas Manufacturing Expansion Continues to Grow

"Expectations regarding future business conditions remained positive in April, although the indexes showed mixed movements. The index of future general business activity remained at its March reading of 18.4, while the index of future company outlook edged up from 18.4 to 20.9. Most other indexes for future manufacturing activity declined this month but stayed in positive territory." – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas

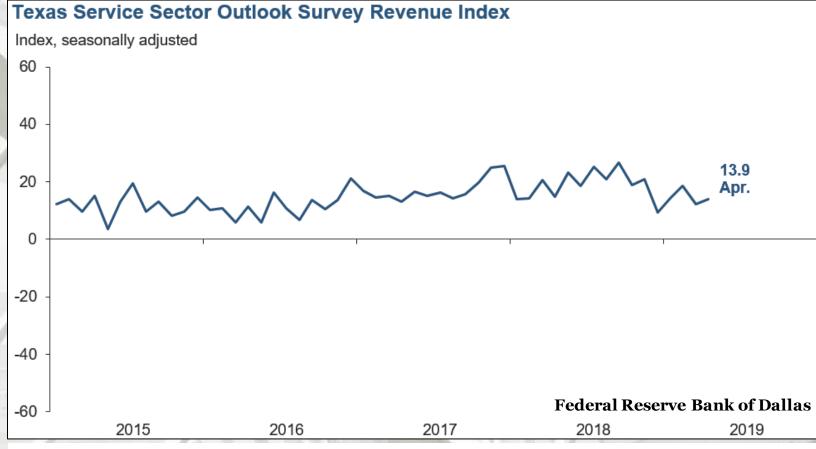
Texas Service Sector Activity Accelerates Slightly

"Texas service sector activity accelerated slightly in April, according to business executives responding to the Texas Service Sector Outlook Survey. The revenue index, a key measure of state service sector conditions, increased from 12.3 in March to 13.9 in April.

Labor market indicators reflected steady employment growth and slightly longer workweeks this month. The employment index held flat at 11.6, while the hours worked index slipped over three points but remained positive at 2.4 in April.

Perceptions of broader business conditions rebounded, although measures of uncertainty remained elevated this month. The general business activity index surged over 10 points to 5.7 in April, while the company outlook index similarly rebounded into positive territory, rising six points to 5.5. The outlook uncertainty index ticked up from 11.6 to 12.8.

Price and wage pressures eased modestly this month. The wages and benefits index dropped from 22.8 in March to 20.3 in April, while the selling prices index dipped slightly to 10.4, and the input prices index fell over four points to 25.7." – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas



Texas Service Sector Activity Accelerates Slightly

"Respondents' expectations regarding future business conditions were more optimistic overall compared with March. The future general business activity index rose eight points to 12.3, while the future company outlook index picked up from 13.0 in March to 19.4 in April — a six-month high. Other indexes of future service sector activity, such as revenue and employment, edged down but remained elevated, reflecting solid expectations of further growth over the next six months." – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

Source: https://www.dallasfed.org/research/surveys/tssos/2019/1904.aspx; 4/30/19

Retail Sales Rebound

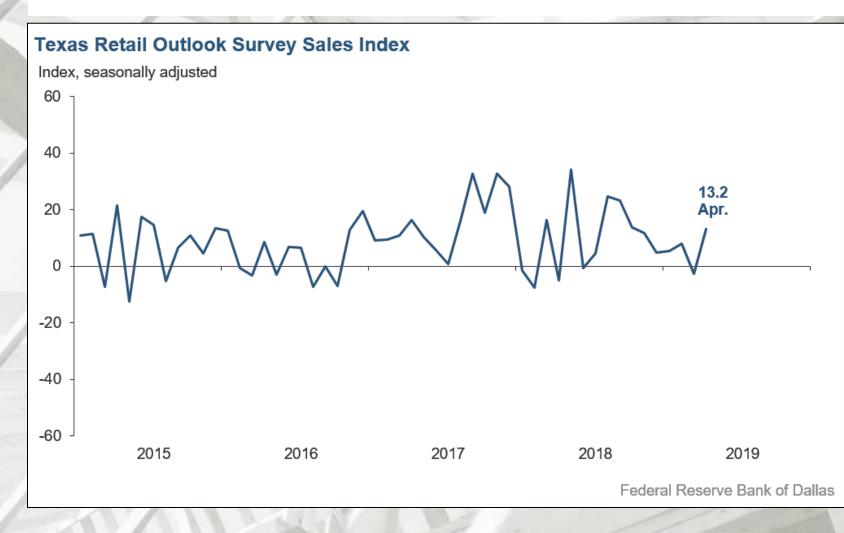
"Retail sales accelerated strongly in April, according to business executives responding to the Texas Retail Outlook Survey. The sales index surged from -2.7 in March to 13.2 in April, its highest value since last October. Inventories declined, as the inventories index plummeted over 21 points to -5.5.

Retail labor market indicators were mixed, pointing to a pickup in employment but a slightly shorter workweek length. The employment index rose nine points to 8.5, while the hours worked index moved up slightly but remained negative at -2.2.

Retailers' perceptions of broader business conditions continued to worsen in April, but pessimism eased. The general business activity index increased eight points but remained negative at -10.7. Similarly, the company outlook index rose from -10.4 in March to -5.2 in April, the fifth consecutive month of net weakening in firms' outlooks.

Retail price pressures were mixed, while wage pressures eased slightly this month. The selling prices index increased from 7.2 to 10.9, while the input prices index fell over eight points to 10.9. The wages and benefits index softened from 21.6 in March to 18.3 in April, though this is still elevated compared with historical norms.

Retailers' perception of future business conditions improved this month. The future general business activity index rebounded from -6.6 in March to 2.5 in April, while the future company outlook index rose nearly 10 points to a six-month high of 9.2. Other indexes of future retail sector activity, such as sales and employment, dropped but remained in firmly positive territory, reflecting overall optimism over the next six months." – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas



Source: https://www.dallasfed.org/research/surveys/tssos/2019/1904.aspx; 4/30/19

The Federal Reserve Bank of Kansas City Tenth District manufacturing activity grew more modestly

"Tenth District manufacturing activity grew more modestly in April, and expectations for future activity eased slightly but remained mostly solid (Chart 1). Price indexes showed little change, with some slight upticks in month-over-month selling prices and future raw materials prices.

The month-over-month composite index was 5 in April, down slightly from 10 in March but higher than 1 in February (Table 1). The composite index is an average of the production, new orders, employment, supplier delivery time, and raw materials inventory indexes. Growth eased slightly in factory production of both durable and nondurable goods, particularly food, machinery, electronic, and chemical products. Most month-over-month indexes slowed in April but remained positive, with production, shipments, order backlog, and employment all decreasing. In contrast, the new orders index edged higher from 4 to 10. Most year-over-year factory indexes fell in April, and the composite index eased from 27 to 22. The future composite index also moved lower from 22 to 11, as most future factory activity indexes eased somewhat." – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, The Federal Reserve Bank of Kansas City

Source: https://www.kansascityfed.org/~/media/files/publicat/research/indicatorsdata/mfg/2019/2019apr25mfg.pdf; 4/25/19

The Federal Reserve Bank of Kansas City

Table 1. Summary of Tenth District Manufacturing Conditions, April 2019

	- · · ·												
April vs. March (percent)*					April vs. Year Ago (percent)*				Expected in Six Months (percent)*				
	No		Diff	SA		No		Diff		No		Diff	SA
Increase	Change	Decrease	Index ^A	Index*^	Increase	Change	Decrease	Index ^A	Increase	Change	Decrease	Index ^A	Index*^
			7	5				22				12	11
41	37	22	19	12	51	21	28	24	43	29	28	15	14
38	40	22	16	9	49	19	33	16	42	29	29	13	14
36	44	20	16	10	52	19	29	23	42	34	25	17	12
26	45	29	-3	-5	38	32	29	9	29	46	24	5	4
19	64	17	1	2	46	35	19	28	33	53	14	18	19
23	65	11	12	14	26	54	20	6	17	61	22	-5	-5
19	75	6	12	10	68	23	9	59	47	43	10	36	35
29	63	9	20	15	81	14	5	76	56	35	9	47	48
					44	32	24	19	38	47	16	22	23
12	83	5	6	8	12	78	11	1	13	76	11	3	4
10	84	6	4	6	28	62	10	18	18	76	6	12	8
24	49	27	-3	-4	42	35	23	18	29	41	30	-1	3
23	54	23	0	2	42	41	18	24	24	47	29	-6	-3
	41 38 36 26 19 23 19 29 12 10 24	No Increase Change 41 37 38 40 36 44 26 45 19 64 23 65 19 75 29 63 12 83 10 84 24 49	No Increase Change Decrease 41 37 22 38 40 22 36 44 20 26 45 29 19 64 17 23 65 11 19 75 6 29 63 9 12 83 5 10 84 6 24 49 27	No Diff Increase Change Decrease Index* 7 41 37 22 19 38 40 22 16 36 44 20 16 26 45 29 -3 19 64 17 1 23 65 11 12 19 75 6 12 29 63 9 20 12 83 5 6 10 84 6 4 24 49 27 -3	No Diff SA Increase Change Decrease Index* Index* 7 5 41 37 22 19 12 38 40 22 16 9 36 44 20 16 10 26 45 29 -3 -5 19 64 17 1 2 23 65 11 12 14 19 75 6 12 10 29 63 9 20 15 12 83 5 6 8 10 84 6 4 6 24 49 27 -3 -4	(percent)* No Diff SA Increase Change Decrease Index* Index** Increase 7 5 7 5 5 1 37 22 19 12 51 38 40 22 16 9 49 36 44 20 16 10 52 26 45 29 -3 -5 38 19 64 17 1 2 46 23 65 11 12 14 26 19 75 6 12 10 68 29 63 9 20 15 81 12 83 5 6 8 12 10 84 6 4 6 28 24 49 27 -3 -4 42	No Diff SA No Increase Change Decrease Index* Index** Increase Change 7 5 7 5 1 21 38 40 22 19 12 51 21 38 40 22 16 9 49 19 36 44 20 16 10 52 19 26 45 29 -3 -5 38 32 19 64 17 1 2 46 35 23 65 11 12 14 26 54 19 75 6 12 10 68 23 29 63 9 20 15 81 14 44 32 12 78 10 84 6 8 12 78 10 84 6 4 6 28 62	No Diff SA No Increase Change Decrease Index* Index** Increase Change Decrease 7 5 7 5 Change Decrease Index** Increase Change Decrease 41 37 22 19 12 51 21 28 38 40 22 16 9 49 19 33 36 44 20 16 10 52 19 29 26 45 29 -3 -5 38 32 29 19 64 17 1 2 46 35 19 23 65 11 12 14 26 54 20 19 75 6 12 10 68 23 9 29 63 9 20 15 81 14 5	No Diff SA No Diff Increase Change Decrease Index ^A Increase Change Decrease Index ^A 7 5 22 41 37 22 19 12 51 21 28 24 38 40 22 16 9 49 19 33 16 36 44 20 16 10 52 19 29 23 26 45 29 -3 -5 38 32 29 9 19 64 17 1 2 46 35 19 28 23 65 11 12 14 26 54 20 6 19 75 6 12 10 68 23 9 59 29 63 9 20 15 81 14 5 76 19 <	No Diff SA No Diff Increase Change Decrease Index*A Index*A Increase Change Decrease Increase Change Decrease Change Decrease Change Decrease Change Decrease Change Decrease Index*A Increase Change Decrease Decrease	No Diff SA No Diff No Increase Change Decrease Index*A Index*A Increase Change Decrease Index*A Increase Change Diff Change Decrease Index*A Increase Change Decrease Index*A Increase Index*A Increase Change Decrease Index*A Increase Decrease	No Diff SA No Diff No Increase Change Decresse Index* Increase Change Decresse Change Decresse Index* Increase Change Decresse Change Decresse Index* Increase Change Decresse Change Decresse Index* Increase Change Decresse Index* Index*	No Diff SA No Diff No Diff Increase Change Decresse Index* Increase Change Decresse Index* In

*Percentage may not add to 100 due to rounding.

^ADiffusion Index. The diffusion index is calculated as the percentage of total respondents reporting increases minus the percentage reporting declines. *ASeasonally Adjusted Diffusion Index. The month vs. month and expected-in-six-months diffusion indexes are seasonally adjusted using Census X-12.

Note: The April survey was open for a five-day period from April 17-22, 2019 and included 81 responses from plants in Colorado, Kansas, Nebraska, Oklahoma, Wyoming, northern New Mexico, and western Missouri.

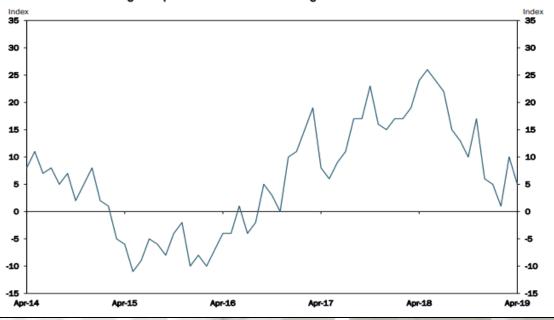


Chart 1. Manufacturing Composite Index vs. a Month Ago

Source: https://www.kansascityfed.org/~/media/files/publicat/research/indicatorsdata/mfg/2019/2019apr25mfg.pdf; 4/25/19

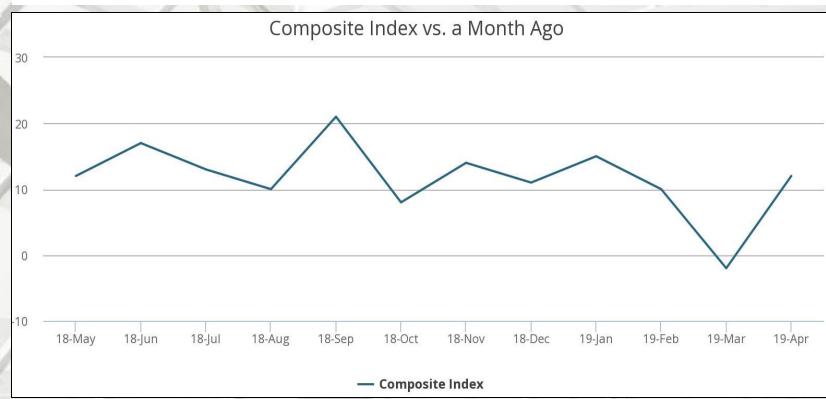
The Federal Reserve Bank of Kansas City Business Increased Moderately in April

"Tenth District services activity increased moderately in April after dropping in March, with solid expectations for future growth. The input price index inched up while the selling price index declined, and business contacts expect prices to continue to expand.

Tenth District services activity increased moderately in April after dropping in March, with solid expectations for future growth (Chart 1). The input price index inched up while the selling price index declined, and business contacts expect prices to continue to expand.

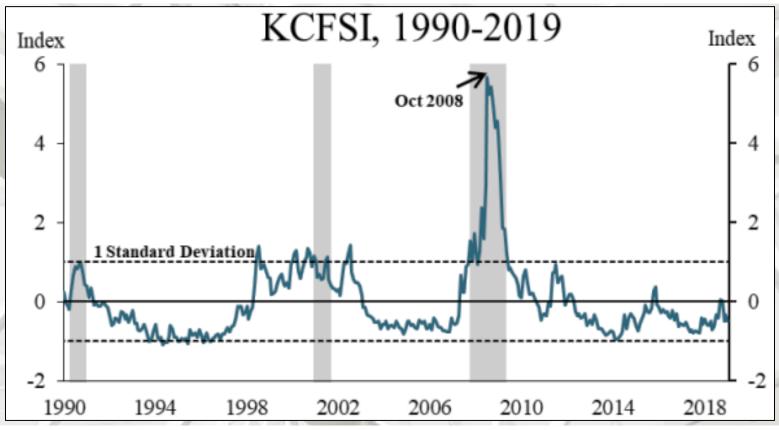
The month-over-month services composite index was 12 in April, rebounding from -2 in March, and higher than 10 in February. The composite index is a weighted average of the revenue/sales, employment, and inventory indexes. Most month-over-month indexes rose, and several indexes jumped back up into positive territory. In fact, the month-over-month access to credit index edged above zero for the first time in six months. The general revenue/sales index increased considerably in April, driven by expansion across most industries, but especially retail and transportation activity.

The year-over-year services indexes also expanded in April, but at a slightly slower pace. Compared with a year ago, the services composite index eased down from 21 to 17, and the input price index fell to 24, the lowest reading since 2016. Expectations for future services activity edged lower but remained positive, with the future composite index dipping from 23 to 16." – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, The Federal Reserve Bank of Kansas City



Special Questions

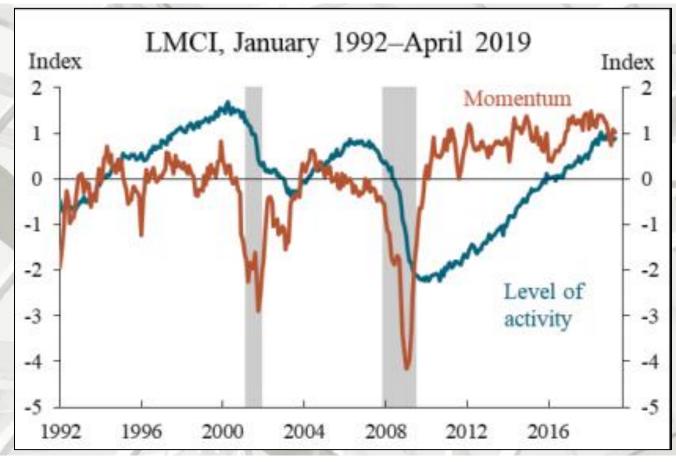
"This month contacts were asked special questions about the impact of flooding and extreme weather on their business, as well as the effect of interest rate changes on their expectations for capital spending. About 29 percent of business contacts indicated flooding and extreme weather had negatively affected their business activity in recent months. Most firms also indicated their capital spending plans have not been affected by the recent movements in interest rates. As a result of recent interest rate changes, only 7 percent of firms noted increased capital expenditures and less than 10 percent reported decreased expenditures." – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, The Federal Reserve Bank of Kansas City



The Federal Reserve Bank of Kansas City The KCFSI suggests financial stress remains subdued in April.

"The Kansas City Financial Stress Index (KCFSI) decreased from -0.32 in March to -0.48 in April, remaining below its historical average. ... Yield spreads collectively reduced 0.04 from the KCFSI in April. The behavior of asset prices, particularly the decreased volatility of bank stock prices, reduced 0.12 from the KCFSI in April." – Bill Medley, The Federal Reserve Bank of Kansas City

Source: https://www.kansascityfed.org/research/indicatorsdata/kcfsi/articles/2019/financial-stress-decreased-05; 5/8/19



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

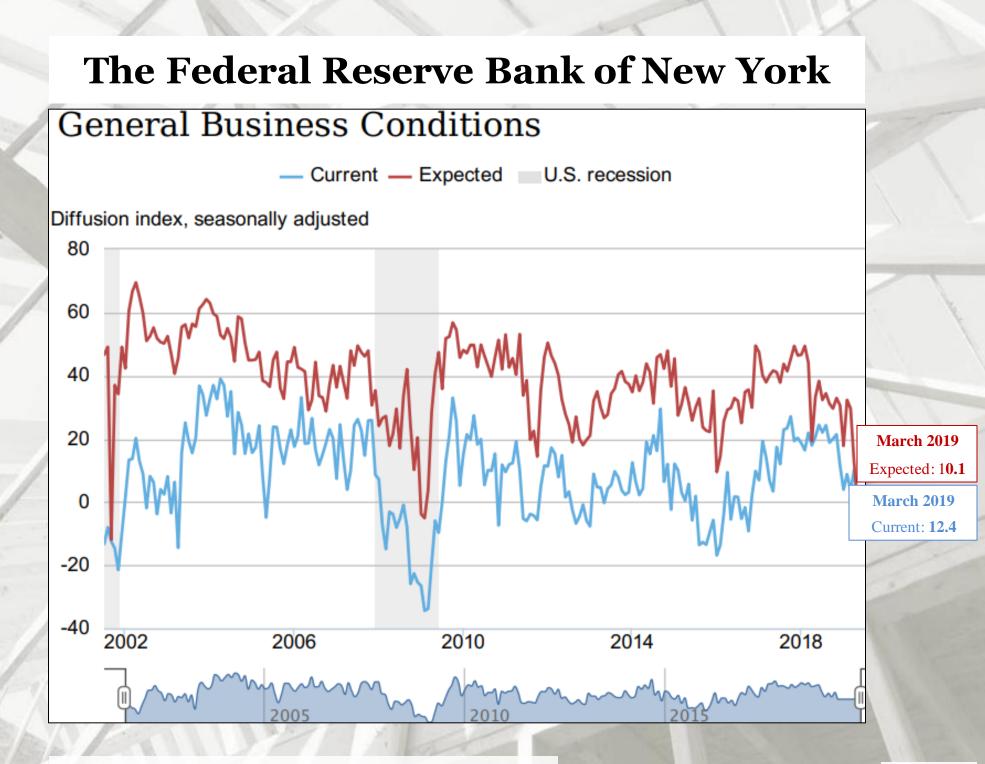
"The Kansas City Fed Labor Market Conditions Indicators (LMCI) suggest the level of activity increased modestly and momentum remained high in April. The level of activity indicator increased in April from 0.84 to 0.90, while the momentum indicator was little changed at 1.01." – Bill Medley, The Federal Reserve Bank of Kansas City

Source: https://www.kansascityfed.org/research/indicatorsdata/lmci/articles/2019/labor-market-conditions-activity-increased-5; 5/8/19

Empire State Manufacturing Survey Modest Growth

"Business activity grew modestly in New York State, according to firms responding to the April 2019 *Empire State Manufacturing Survey*. The headline general business conditions index rose six points to 10.1, indicating that growth picked up somewhat but remained fairly subdued. New orders rose slightly, and shipments continued to grow modestly. Delivery times and inventories both increased. Labor market indicators pointed to ongoing employment gains and a small increase in hours worked. The prices paid and prices received indexes moved lower, pointing to a slowing in both input price increases and selling price increases. Indexes assessing the six-month outlook suggested that firms were much less optimistic about future business conditions than last month.

Manufacturing firms in New York State reported that business activity expanded modestly. The general business conditions index increased six points to 10.1, indicating growth picked up somewhat but remained fairly subdued. Thirty-three percent of respondents reported that conditions had improved over the month, while 23 percent reported that conditions had worsened. The new orders index rose five points to 7.5, indicating orders picked up slightly. The shipments index edged up a point to 8.6, pointing to continued modest growth in shipments. Unfilled orders were little changed, while delivery times and inventories both increased." – Richard Deitz and Jason Bram, The Federal Reserve Bank of New York



Empire State Manufacturing Survey Price Increases Slow

"The prices paid index fell seven points to 27.3 and the prices received index declined four points to 14.0, indicating that both input price increases and selling price increases slowed. The index for number of employees edged down two points to 11.9, pointing to ongoing employment gains. After dipping into negative territory last month, the average workweek index rose eight points to 4.3, suggesting hours worked increased slightly.

Optimism Wanes

Optimism about the six-month outlook was much lower than last month. The index for future business conditions dropped seventeen points to 12.4 — its lowest level in more than three years. The indexes for future new orders and shipments were also well below last month's levels. Nonetheless, firms continued to expect solid increases in employment and hours worked in the months ahead. The capital expenditures index edged down to 25.2, and the technology spending index was unchanged at 20.3." – Richard Deitz and Jason Bram, The Federal Reserve Bank of New York

Business Leaders Survey (Services) Ongoing Modest Growth

"Activity in the region's service sector continued to grow modestly, according to firms responding to the Federal Reserve Bank of New York's April 2019 *Business Leaders Survey*. The survey's headline business activity index was little changed at 10.9. The business climate index hovered around zero again this month, edging up three points to 1.8, indicating that firms generally regarded the business climate as close to normal. Employment levels increased only slightly, while wage growth slowed but remained widespread. The pace of both input price increases and selling price increases slowed noticeably this month. Firms remained fairly optimistic about the six-month outlook.

Business activity in the region's service sector expanded modestly in April. The headline business activity index was little changed at 10.9. Thirty-three percent of respondents reported that conditions improved over the month, while 22 percent said that conditions worsened. The business climate index hovered around zero for a fourth consecutive month, signaling that, on balance, firms viewed the business climate as close to normal." – Jason Bram and Richard Deitz, The Federal Reserve Bank of New York

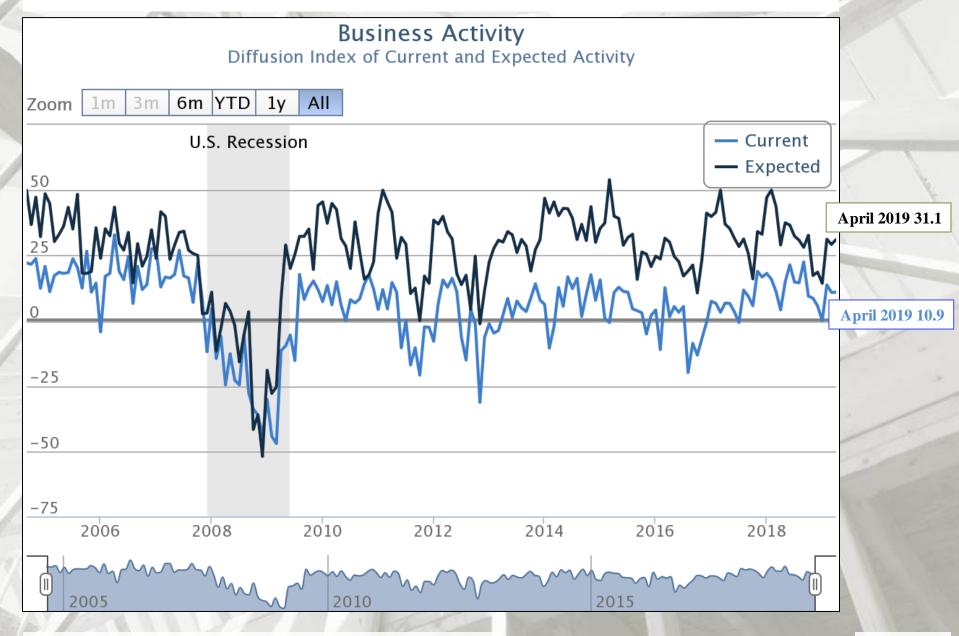
Business Leaders Survey (Services)

Price Increases Slow Noticeably

The prices paid index fell nine points to 48.2 and the prices received index declined eight points to 19.4, indicating that both input prices and selling prices increased at a slower pace than last month. The employment index decreased nine points to 4.8, signaling that employment levels increased only slightly. After reaching its highest level in a decade, the wages index fell eleven points to 43.4, suggesting wage growth slowed but remained widespread. The capital spending index edged down three points to 11.9, suggesting that capital spending slowed somewhat but continued to increase at a solid clip.

Firms Remain Fairly Optimistic

Indexes assessing the six-month outlook indicated that firms remained fairly optimistic about future conditions. The index for future business activity edged up two points to 31.1, and the index for future business climate came in at 3.6. The indexes for future employment and wages were both positive and little changed from last month, while the index for planned capital spending fell six points to 21.3." – Jason Bram and Richard Deitz, The Federal Reserve Bank of New York



Source: https://www.newyorkfed.org/survey/business_leaders/bls_overview; 4/16/19

The Federal Reserve Bank of New York Nowcast

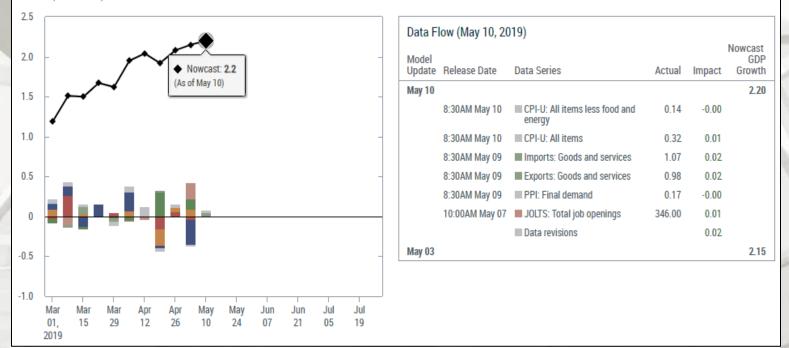
2019:Q2 | 2019:Q1 | 2018:Q4 | 2018:Q3

Last Release 11:15am EST May 10, 2019



Housing and construction Manufacturing Surveys Retail and consumption Income Labor International trade Others

Percent (annual rate)



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

Source: Authors' calculations, based on data accessed through Haver Analytics.

May 10, 2019: Highlights

- "The New York Fed Staff Nowcast stands at 2.2% for 2019:Q2.
- News from the JOLTS, CPI, PPI, and international trade releases left the nowcast for 2019:Q1 broadly unchanged." The Federal Reserve Bank of New York

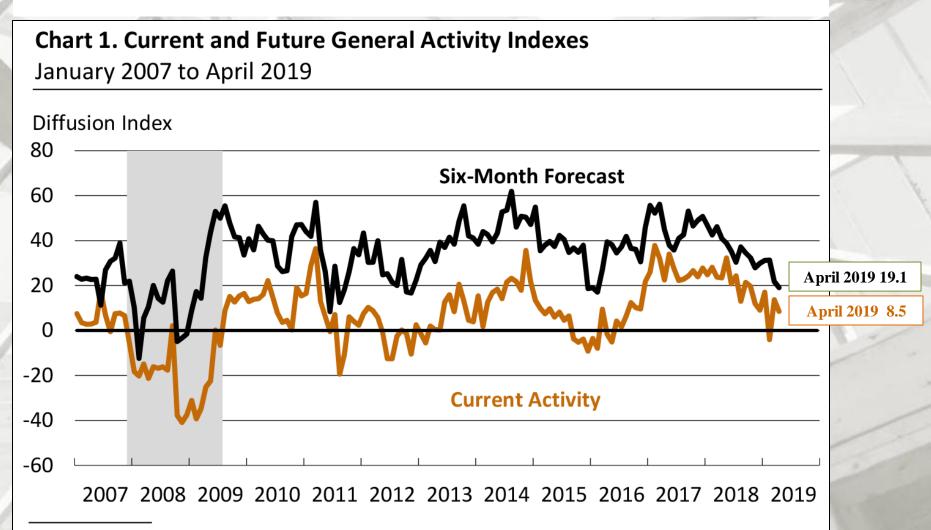
Source: https://www.newyorkfed.org/research/policy/nowcast; 5/10/19

The Federal Reserve Bank of Philadelphia April 2019 Manufacturing Business Outlook Survey Current Indicators Positive but Mixed

"Regional manufacturing activity continued to grow in April, according to results from this month's *Manufacturing Business Outlook Survey*. Although the survey's indicators for general activity and shipments fell from their readings last month, the indicators for new orders, employment, and the workweek improved. The survey's indexes for future activity and employment continued to moderate, but the surveyed firms remained generally optimistic about growth over the next six months.

The index for current manufacturing activity in the region decreased from a reading of 13.7 in March to 8.5 this month. The survey's other broad indicators were positive, but their movements were mixed (see Chart 1). The new orders index increased 14 points to 15.7 this month. Over 39 percent of the firms reported an increase in new orders, up from 26 percent last month. The current shipments index decreased 2 points from its reading in March, with 21 percent of the firms reporting decreases compared with 14 percent last month. Delivery times shortened this month, according to the respondents: The delivery times index fell 14 points to its first negative reading in 30 months. The current inventory index also fell, by 15 points to a reading of 2.6." – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

Source: https://www.philadelphiafed.org/research-and-data/regional-economy/business-outlook-survey/2019/bos0419?; 4/18/19



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.

Source: https://www.philadelphiafed.org/research-and-data/regional-economy/business-outlook-survey/2019/bos0419?; 4/18/19

March 2019 Manufacturing Business Outlook Survey

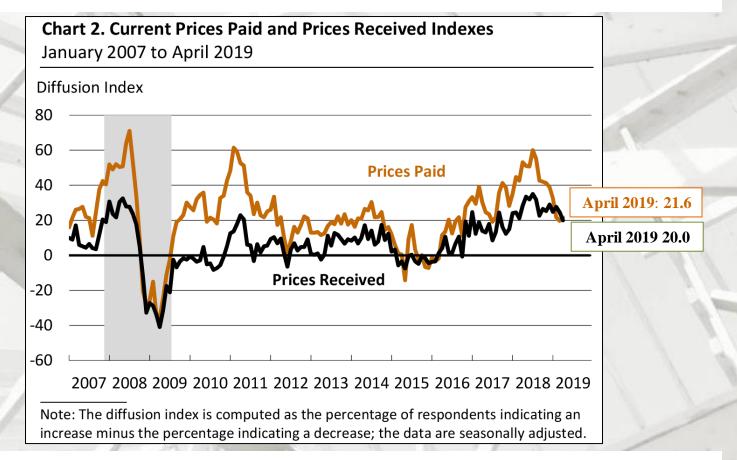
Price Received Diffusion Index Continues to Recede

"With respect to prices received for firms' own manufactured goods, the prices received index decreased 5 points to 20.0, its lowest reading since December 2017. Nearly 23 percent of the firms reported higher prices, down from 26 percent last month. The prices paid index increased 2 points to 21.6, its first increase in 9 months (see Chart 2). Over 26 percent of the firms reported higher input prices this month, while 5 percent reported lower input prices.

Most Firms Are Less Optimistic About Future Activity and Employment

The firms continued to add to their payrolls this month. The current employment index increased from a reading of 9.6 in March to 14.7 this month. Nearly 27 percent of the responding firms reported increases in employment, while 12 percent of the firms reported decreases. The current workweek index remained positive and edged up 1 point to 11.2.

The diffusion index for future general activity declined nearly 3 points to 19.1, its lowest reading since February 2016 (see Chart 1). Over 39 percent of the firms expect increases in activity over the next six months, while 20 percent expect declines. The future new orders and shipments indexes, however, increased slightly, by 4 points and 3 points, respectively. The indicators for future prices paid and prices received fell notably this month, by 21 points and 7 points, respectively. The largest percentage of firms continues to expect steady prices over the next six months. The firms were less optimistic about future hiring over the next six months. The firms were less optimistic about future hiring over the next six months: The future capital spending index, however, rebounded 11 points to a reading of 30.9." – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia



Summary

"The firms' responses indicated continued growth in the region's manufacturing sector this month. The survey's broadest measures of economic growth remain positive, but the directions of movement were mixed. The indexes for new orders and employment improved, while the indexes for activity and shipments decreased somewhat. Price pressures remain generally muted, with the prices received index at its lowest reading in 16 months. The survey's future indexes indicate that respondents continue to expect growth over the next six months, but the readings for future activity and employment continued to trend lower." – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

April 2019 Nonmanufacturing Business Outlook Survey

"Responses to the April Nonmanufacturing Business Outlook Survey suggest nonmanufacturing activity continued to expand in the region. The indexes for general activity at the firm level and new orders were in line with their readings from last month, and the sales/revenues index declined. The fulltime employment index retreated from last month's reading but remained positive. The firms continued to report overall increases in prices of both their inputs and their own goods and services. The respondents' expectations for future growth at their firms and in the region changed little from last month and remain positive.

Current Indicators Hold Mostly Steady

The diffusion index for current general activity at the firm level inched up 1 point to 39.2 in April (see Chart 1). Slightly more than half of the respondents reported increases in activity, compared with 11 percent that reported decreases. The new orders index was also little changed from last month's reading and edged up to 25.4. After a sharp increase last month, the sales/revenues index fell 5 points to 37.2. Nearly half of the responding firms reported increases in sales/revenues, while 12 percent reported decreases. The regional activity index inched down 1 point to 21.0.

Employment Indicators Remain Positive

The firms continued to report overall increases in full-time employment, but the full-time employment indicator fell from its elevated reading last month. The full-time employment index fell 15 points to 18.3 in April. The share of firms reporting increases (28 percent) exceeded the share of firms reporting decreases (9 percent); nearly 61 percent of the firms reported no change to employment levels. The part-time employment index rose 6 points to 24.3, while the wages and benefits indicator decreased 6 points to 38.2. The average workweek index decreased 5 points to 24.5." – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

March 2019 Nonmanufacturing Business Outlook Survey

Firms Continue to Report Overall Price Increases

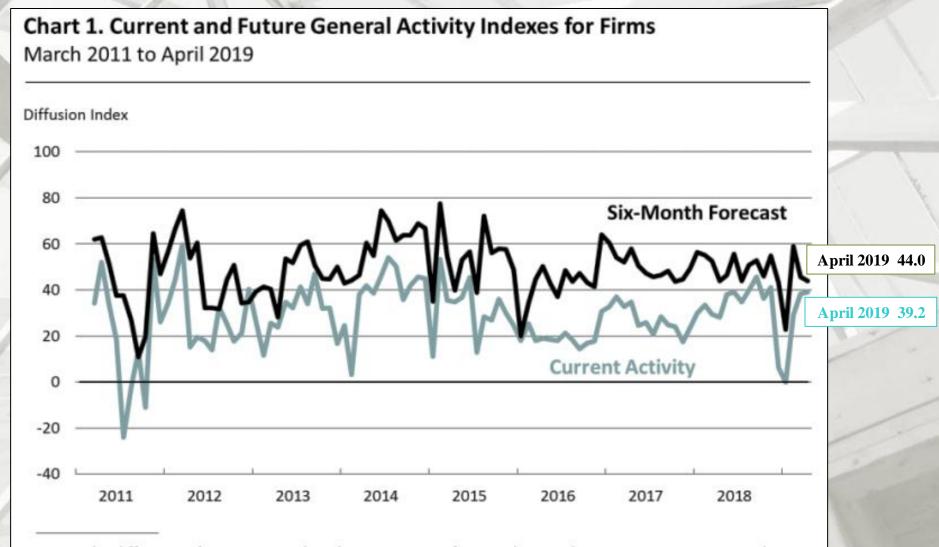
"Both price indicator readings suggest overall increases in prices for inputs and for the firms' own goods and services. The prices paid index edged down 1 point to 27.1. Although the majority of respondents (71 percent) reported stable input prices, 27 percent of the respondents reported increases, while none reported decreases. Regarding prices for firms' own goods and services, the prices received index increased for the second consecutive month, rising 5 points to 16.4. More than 23 percent of the firms reported increases in prices received, while 7 percent reported decreases. Most of the firms (68 percent) reported no change in their own prices.

Firms Anticipate Growth to Continue

Both future activity indexes suggest that firms anticipate continued growth over the next six months, similar to last month. The diffusion index for future activity at the firm level decreased slightly from 45.8 in March to 44.0 in April (see Chart 1). Fifty-three percent of the responding firms expect activity to increase, while only 9 percent expect activity to decrease. Thirty-seven percent of the firms expect no change over the next six months. The future regional activity index increased slightly to 29.5.

Summary

Responses to this month's *Nonmanufacturing Business Outlook Survey* suggest that expansion of nonmanufacturing activity continued in the region. The indicators for firmlevel general activity and new orders changed little from last month, and the sales/revenues index declined slightly. Although the full-time employment index fell, it remained positive. Respondents remain optimistic about growth over the next six months in their own firms and in the region." – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

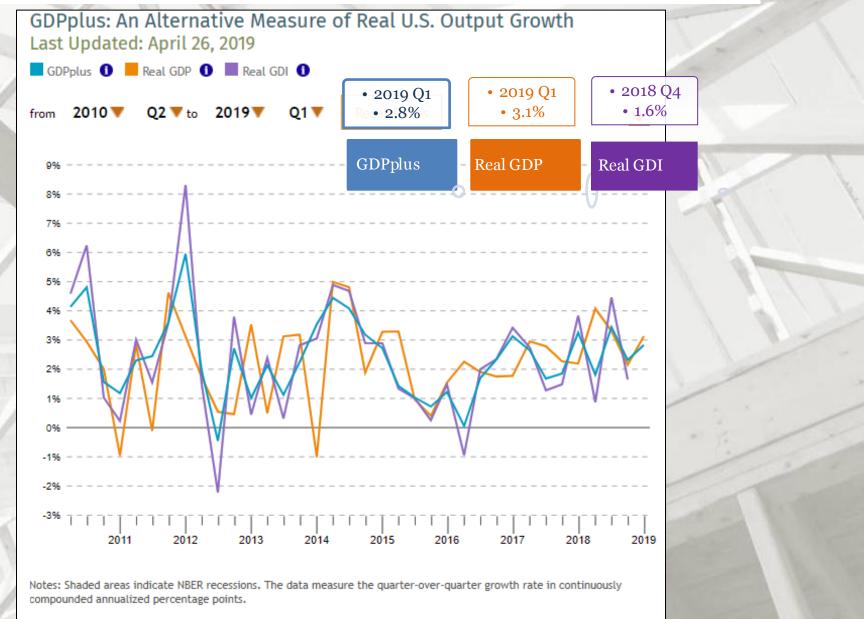


Note: The diffusion index is computed as the percentage of respondents indicating an increase minus the percentage indicating a decrease; the data are seasonally adjusted.

Source: https://www.philadelphiafed.org/-/media/research-and-data/regional-economy/nonmanufacturing-business-outlook-survey/2019/nbos0419.pdf; 4/23/19

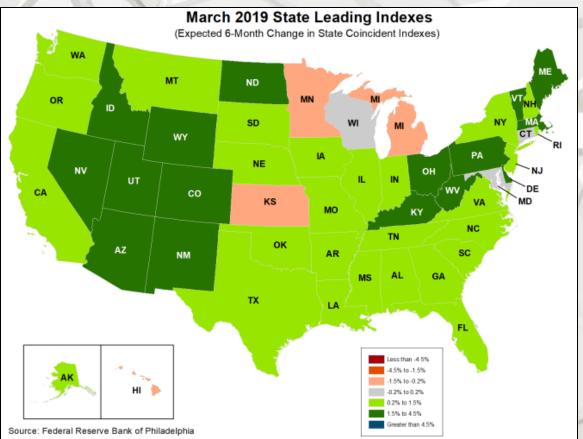
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The Federal Reserve Bank of Philadelphia: GDPplus



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

The Federal Reserve Bank of Philadelphia



"The Federal Reserve Bank of Philadelphia has released the leading indexes for the 50 states for March 2019. The indexes are a six-month forecast of the state coincident indexes (also released by the Bank). Forty-five state coincident indexes are projected to grow over the next six months, and five are expected to decrease. For comparison purposes, the Philadelphia Fed has also developed a similar leading index for its U.S. coincident index, which is projected to grow 1.1 percent over the next six months." – Daniel Mazone, Research Department, The Federal Reserve Bank of Philadelphia

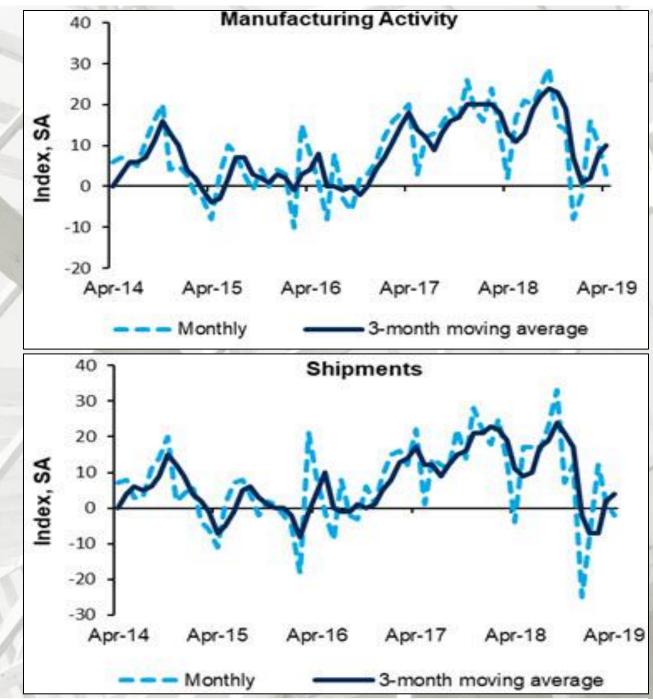
Source:; https://www.philadelphiafed.org/-/media/research- and-data/regional- economy/index es/leading/2019/LeadingIndex es0319.pdf; 5/3/19

The Federal Reserve Bank of Richmond Fifth District Manufacturing Activity Moderated in April

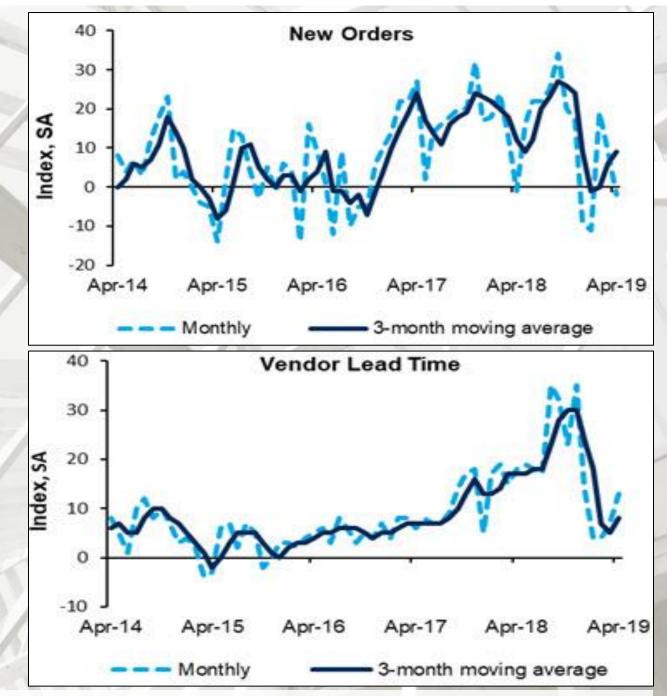
"Fifth District manufacturing activity moderated in April, according to the latest survey from the Richmond Fed. The composite index fell from 10 in March to 3 in April, weighed down by slightly negative readings in the indexes for both shipments and new orders but buoyed by a positive reading for the third component index, employment. Firms were optimistic, expecting conditions to improve in the next six months.

Survey results suggested continued positive growth in both employment and wages, although these indexes dropped slightly in April. However, firms reported a decline in the average workweek as they continued to struggle to find workers with the necessary skills. Firms expected this difficulty to continue in the coming months.

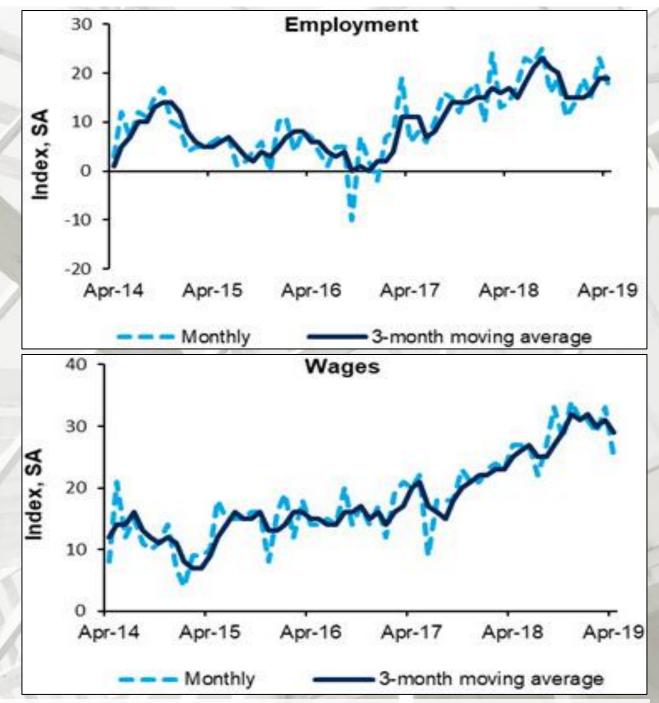
The growth rate of prices paid by respondents rose in April, while that of prices received fell, widening the gap between the two, as growth in prices paid continued to outpace growth in prices received. Firms expected growth of both prices paid and prices received to decrease in the near future." – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond



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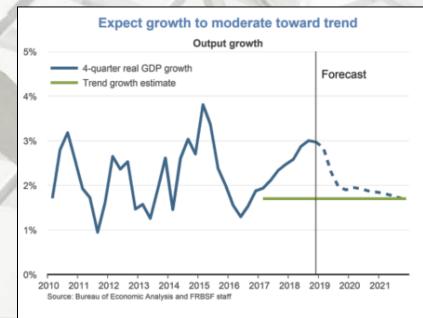
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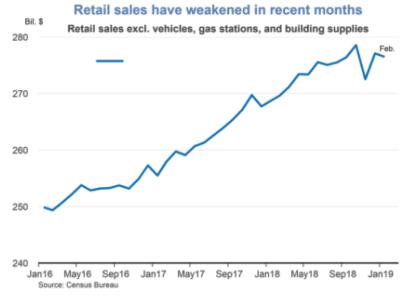
The Federal Reserve Bank of San Francisco

- "The economy continues to grow, albeit at a slower pace than last year. Given the positive momentum, the economy is set to establish a new record this summer for the longest expansion in the post–World War II era. The expansion that started in June 2009 will then be more than 120 months, surpassing the previous record established between 1991 and 2001.
- Still, the data since the start of the year have been somewhat uneven, sending mixed signals about growth. Retail sales, an important indicator of consumer spending, appear to have slowed somewhat since November. Although January sales rebounded from December's steep decline, sales in February remained soft. These data suggest that consumer spending is likely to be weak in the first quarter.
- In contrast, job gains rebounded strongly in March, with employers adding 196,000 new jobs compared with only 33,000 jobs the month before. The six-month moving average shows that employment gains remained above 200,000 jobs in March. The unemployment rate stayed at 3.8%, much lower than our estimate of its long-run natural rate of 4.5%. However, average hourly earnings growth eased off a bit in March, to 3.2%. That said, steady wage increases and continued job gains should help support consumer spending going forward." Sylvain Leduc, Executive Vice President and Director of Research, The Federal Reserve Bank of San Francisco

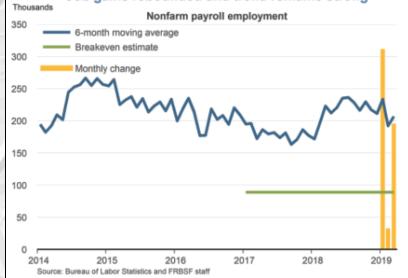
The Federal Reserve Bank of San Francisco

- "Overall, we continue to expect growth to moderate to a more sustainable pace over the next two years. Past increases in interest rates and the fading boost from fiscal policy should partly contribute to this moderation. In addition, continued uncertainty surrounding trade policy is contributing to weaker growth abroad, as indicated by continued declines in Purchasing Managers' Indexes for manufacturing in other countries, which in turn has weakened U.S. growth through lower growth in exports.
- Inflation remains muted. In January, the headline personal consumption expenditures (PCE) price index rose 1.4% from a year earlier, while core PCE inflation, which removes the volatile food and energy components, declined a tad to 1.8%. Partly due to the absence of inflationary pressures and continuing concerns about global economic and financial developments, the Federal Open Market Committee (FOMC) reiterated in March that it "will be patient as it determines what future adjustments to the target range for the federal funds rate may be appropriate" to support its mandated goals of price stability and maximum employment.
- Given continued economic growth, strong employment gains, and inflation close to target, the Federal Reserve announced in November 2018 that now is a good time to review its monetary policy strategy, tools, and communications. This review is also timely given that r-star, the long-run level of the policy rate consistent with full employment and inflation at target, has declined substantially over time. In particular, the Summary of Economic Projections shows a steady fall in r-star since 2012, in line with a fall in trend GDP growth. As a result, the federal funds rate, the FOMC's primary monetary policy tool, is likely to hit the effective lower bound more often in the future, limiting its ability to stimulate the economy when conditions are weak." – Sylvain Leduc, Executive Vice President and Director of Research, The Federal Reserve Bank of San Francisco

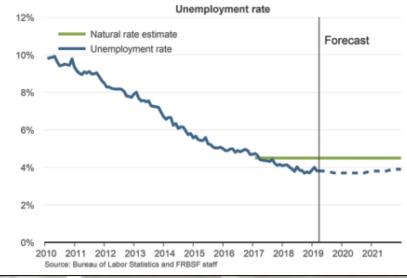


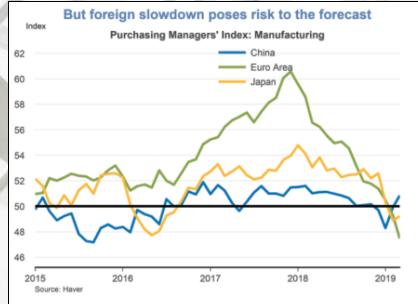


Job gains rebounded and trend remains strong



Labor market beyond full employment

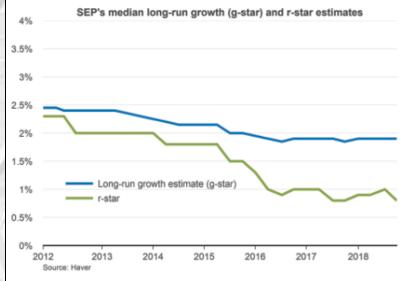




Inflation reaching the target Personal consumption expenditures (PCE) price inflation Core Headline Longer-run target Second Secon

Source: Bureau of Economic Analysis and FRBSF staff

Steady decline in r-star and g-star



U.S. Economic Indicators The Federal Reserve Bank of Dallas Mexico Economic Update

Mexico's Output Growth Slows, Outlook Worsens

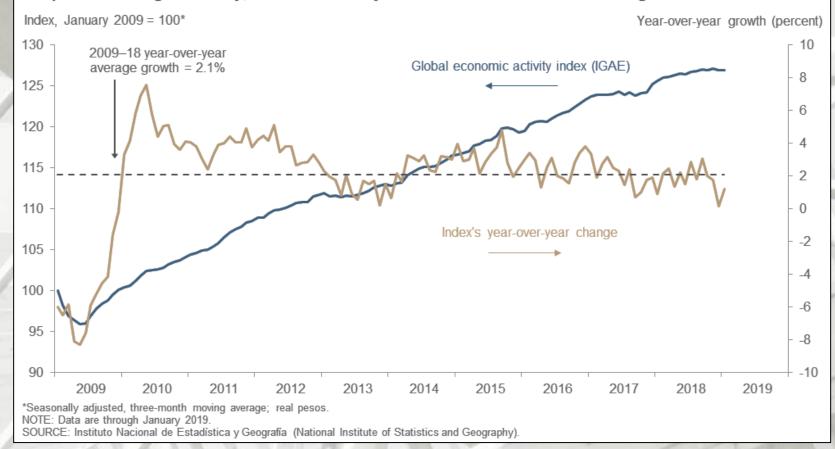
"Mexico's economy grew an annualized 1.0 percent in fourth quarter 2018 after expanding a revised 2.4 percent in the third quarter. Growth in both quarters was revised down from earlier estimates. For the year as a whole, gross domestic product (GDP) grew 1.7 percent (fourth quarter/fourth quarter). The consensus growth forecast for 2019, compiled by Banco de México, declined to 1.6 percent in February from 1.8 percent in January.

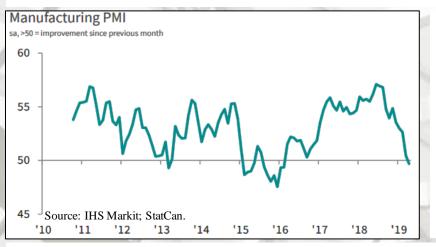
More recent data are mixed. The monthly economic activity index and retail sales grew, but exports fell and employment growth slowed. The peso held steady against the dollar while inflation fell.

Economic Activity Inches Up in January, Year-Over-Year Growth Weak

Mexico's global economic activity index, the monthly proxy for GDP, rose 0.2 percent in January month over month after falling 0.4 percent in December. However, the measure's three-month moving average remains flat (Chart 1). Service-related activities (including trade and transportation) grew 0.3 percent in January. Goods-producing industries (including manufacturing, construction and utilities) increased 0.6 percent, and agricultural output rose 0.3 percent." – Jesus Cañas, Senior Business Economist, and Benjamin Meier, Research Assistant; Research Department; The Federal Reserve Bank of Dallas

Chart 1 Despite Advancing in January, Economic Activity Index Annual Growth Below Average





Markit Canada Manufacturing PMI™

"The headline seasonally adjusted **IHS Markit Canada Manufacturing Purchasing Managers' Index® (PMI®)** dropped from 50.5 in March to 49.7 in April, to signal a slight deterioration in overall business conditions. Moreover, the latest PMI reading was the lowest since February 2016.

Manufacturing conditions deteriorate for the first time since February 2016

April data revealed a downturn in business conditions across the Canadian manufacturing sector for the first time in more than three years. The weaker performance mainly reflected modest reductions in output, new orders and employment during the latest survey period. Manufacturers responded to softer customer demand by cutting back their input buying and streamlining their inventories in April. On a more positive note, input cost inflation remained much softer than the peaks seen last summer, despite pressure from rising transportation costs. Manufacturing production declined for the first time in two-and-a-half years, although the rate of contraction was only modest. Reports from survey respondents suggested that the fall in output reflected a realignment of production schedules with softer client demand.

April data illustrates another loss of momentum for the manufacturing sector, following the sharp slowdown in growth seen during the first quarter of 2019. The latest survey indicates that overall business conditions deteriorated to the greatest extent in over three years as manufacturers cut back production and staff hiring in response to weaker sales. Canadian manufacturers reported subdued demand conditions in both domestic and external markets during April, which was often linked to a slowdown in global trade volumes and more cautious spending among clients. Worsening export order books were recorded in all regions except Alberta & British Columbia during April, with manufacturers in Ontario experiencing the greatest reduction." – Christian Buhagiar, President and CEO, SCMA

Caixin China General Manufacturing PMI™

"The headline seasonally adjusted Purchasing Managers' IndexTM (PMITM) – a composite indicator designed to provide a single-figure snapshot of operating conditions in the manufacturing economy – posted down from 50.8 in March to 50.2 in April, to signal the second successive monthly improvement in business conditions. Although the rate of improvement was only slight, it nonetheless contrasted with the subdued trend seen at the turn of the year.

Manufacturing production rises slightly in April

Latest PMI data showed that the overall health of China's manufacturing sector improved for the second month running in April, albeit at a softer pace. Output and total new work both rose slightly, though companies reported a marginal fall in new work from overseas. Buying activity meanwhile stabilised, but relatively subdued demand conditions led firms to remain reluctant to expand their inventories in April. Prices data indicated that overall inflationary pressures softened at the start of the second quarter. Input costs and output charges both rose only marginally, with some linking lower selling prices to recent sales tax reforms. Encouragingly, business confidence regarding the one-year outlook for production improved to an 11-month high.

Latest data showed that manufacturing output in China rose again in April. Though marginal, the upturn extended the current expansionary sequence to three months. New orders followed a similar trend, and rose at a softer pace than seen in March. Data indicated that subdued sales largely stemmed from weaker foreign demand, as new export business fell for the second time in the past three months. Companies signalled limited pressure on operating capacities at the start of the second quarter, as highlighted by the slowest increase in backlogs of work for three years. At the same time, efforts to contain costs and the non-replacement of voluntary leavers led to a slight fall in manufacturing workforce numbers....

Buying activity broadly stabilised following a three-month sequence of reduction. As a result, stocks of purchases were also broadly unchanged compared to the previous month. However, muted overall demand conditions meant manufacturing firms remained cautious regarding their inventories of finished items, which fell for the fourth month running. "– Dr. Zhengsheng Zhong, Director of Macroeconomic Analysis, CEBM Group

Caixin China General Manufacturing PMI™

"The Caixin China General Manufacturing Purchasing Managers' Index eased to 50.2 in April, down from a recent high of 50.8 in the previous month, indicating a slowing expansion in the manufacturing sector.

- 1) The subindex for new orders fell slightly despite remaining in expansionary territory. The gauge for new export orders returned to contractionary territory, suggesting cooling overseas demand.
- 2) The output subindex dropped. The employment subindex returned to negative territory after hitting a 74-month high in March. According to data from the National Bureau of Statistics, the surveyed urban unemployment rate remained at a relatively high level despite edging down in March, suggesting that pressure on the job market remained.
- 3) While the subindex for stocks of purchased items returned to contractionary territory, the measure for stocks of finished goods fell more markedly. The gauge for future output edged up, pointing to manufacturers' desire to produce and stable product demand. The subindex for suppliers' delivery times rose further despite staying in negative territory, implying improvement in manufacturers' capital turnover.
- 4) Both gauges for output charges and input costs edged down. There were only small changes in upward pressure on industrial product prices. We predict that April's producer price index is likely to remain basically unchanged from the previous month.

In general, China's economy showed good resilience in April, yet it stabilized on a weak foundation and is not coming to an upward turning point. The Politburo meeting signalled that in the first quarter of this year China had adjusted its countercyclical policy marginally. As pressure on the economy remains in the second quarter, we expect that there will be minor adjustments to the policy but not a turnaround." – Dr. Zhengsheng Zhong, Director of Macroeconomic Analysis, CEBM Group



Markit Eurozone Manufacturing PMI®

"The eurozone's manufacturing sector remained firmly in contraction territory during April. After accounting for seasonal factors, the IHS Markit Eurozone Manufacturing PMI[®] recorded a level of 47.9, up only marginally on March's near six-year low of 47.5 (and little changed on the earlier flash PMI reading). The PMI has now posted below the 50.0 no-change mark for three months in succession.

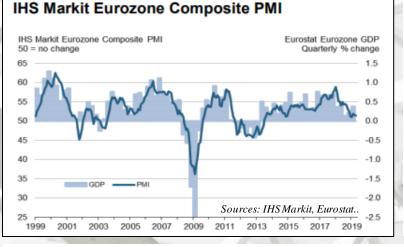
Manufacturing sector continues to contract during April

In line with recent trends, the capital and intermediate goods sectors remained the principal areas of weakness in April. Both sectors remained firmly inside contraction territory, despite registering slight improvements in their respective PMI numbers. In contrast, the consumer goods sub-category continued to expand, with growth here rising to a modest level. The manufacturing sector remained deep in decline at the start of the second quarter. Although the PMI rose for the first time in nine months, the April reading was the second-lowest seen over the past six years, signalling a deterioration of overall business conditions for a third successive month. The survey's output index is indicative of factory production falling at a quarterly rate of approximately 1%, setting the scene for the goods producing sector to act as a major drag on the economy in the second quarter.

The downturn remains the fiercest in Germany, with Italy and Austria also in decline and France stagnating. Spain's expansion remains only modest. Some encouragement can be gained from the PMIs having risen in all four largest euro member states in April, and forward-looking indicators such as future expectations, new order inflows and the orders-to-inventory ratio having all come off their lows. But it remains too early to call a turning point, especially as future sentiment remains around its lowest level since the end of 2012, hinting that the manufacturing downturn will persist in the coming months.

The surveys continue to see widespread concerns over weak global demand as well as reports of businesses struggling amid rising trade protectionism, Brexit and the subdued auto sector. The steepest fall in backlogs of work since late 2012 meanwhile suggests firms will increasingly look for cost-cutting opportunities and exercise increased caution with respect to hiring."–Chris Williamson, Chief Business Economist, Markit[®]

Source: https://www.markiteconomics.com/Public/Home/PressRelease/a4c26f8d7ba44a21ab350938d4eab0a3; 5/2/19



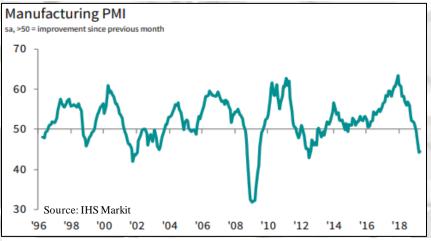
Markit Eurozone Composite PMI® "The **IHS Markit Eurozone PMI® Composite Output Index** recorded 51.5 in April, compared to 51.6 in the previous month. The latest index reading was the lowest for three months, though a little firmer than the flash reading of 51.3. Moreover, despite its modest level in April, by remaining above the 50.0 no-change mark, the index signalled that growth of the private sector economy has now been recorded continuously for nearly six years.

Subdued growth of euro area continues in April

There remained notable differences in performance between the manufacturing and services sectors. Whereas manufacturing production fell for a third successive month, service sector growth was sustained at a solid, albeit slower, rate. The net increase in activity was again linked to higher levels of incoming new work, which rose modestly but at the best rate since last November. Manufacturing new orders continued to fall markedly, in contrast to a solid uptick in services.

The final eurozone PMI for April came in slightly higher than the flash estimate, though still indicated that the economy lost a little momentum at the start of the second quarter and that growth remains worryingly lacklustre. The survey is indicative of the economy growing at a quarterly rate of approximately 0.2%, but manufacturing remained mired in its steepest downturn since 2013 and service sector growth slipped lower. ...

Weak demand remains the key to the lack of inflationary pressures. Although inflows of new orders for goods and services picked up further from the low-point reached back in January, the increase was among the smallest seen since late 2014. Worryingly, growth of output continues to run ahead of that of new orders, meaning even the modest current growth of business activity is only being sustained by firms eating into orders placed in prior months. Demand clearly needs to improve further to generate faster economic growth and give firms greater pricing power."–Chris Williamson, Chief Business Economist, Markit[®]



IHS Markit/BME Germany Manufacturing PMI®

"The headline IHS Markit/BME Germany Manufacturing PMI – a single-figure snap shot of the performance of the manufacturing economy – registered 44.4 in April, up marginally from March's 80-month low of 44.1.

Manufacturing PMI ticks up in April but remains firmly in contraction territory

Latest PMI[®] data from IHS Markit and BME revealed a further marked contraction of Germany's manufacturing sector at the start of the second quarter, albeit with the rates of decline in output and new orders easing slightly since March. Capacity pressures meanwhile continued to dissipate, resulting in another modest decrease in employment and the most marked improvement in supplier delivery times since May 2009. The disinflationary effects of the downturn were seen in a further easing of factory gate price inflation to a 29-month low.

The slight uptick in the headline PMI at the start of the second quarter was due in part to a slower fall in output. However, the rate of contraction was still marked overall and the second-quickest seen in over six-and-a-half years. The main area of weakness on the production front was the investment goods sector, which showed an accelerated decline. Behind the decrease in output in April was a seventh straight monthly reduction in new orders. Despite easing slightly since March, the rate of decline remained sharp and quicker than at any other point over the past ten years. This was also the case for new export orders. Where firms reported a decrease in inflows of new work, this was often linked to a slowdown in the automotive industry. ...

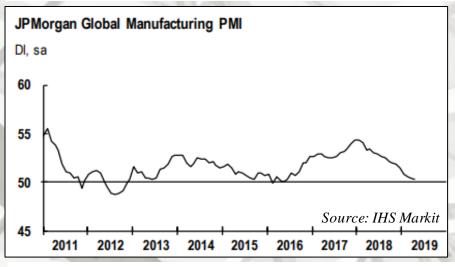
Finally, April's survey showed manufacturers growing gloomier about the outlook for output over the next 12 months. The degree of pessimism was the greatest seen since November 2012."– Phil Smith, Principal Economist, IHSMarkit[®]

Manufacturing PMI ticks up in April but remains firmly in contraction territory

"April saw the manufacturing PMI tick up for the first time in nine months thanks to slower falls in output and new orders, but we perhaps won't have a clear picture of whether the sector's downturn has bottomed out until the May flash results are published later this month.

The struggles in the car industry continue to ripple through the German manufacturing sector. From electronics and chemicals, to basic metals and machinery, firms in almost all sectors are reportedly feeling the effects of the automotive slowdown.

While some firms have started trimming staffing numbers through the non-renewal of temporary contracts, there is the potential for more aggressive cuts in months to come unless demand revives. The survey's two best measures of capacity pressures – the backlogs of work and supplier delivery times indices – are both at levels not seen since the global financial crisis, suggesting many firms remain overstaffed given the current level of demand." – Phil Smith, Principal Economist, IHSMarkit[®]



J.P. Morgan Global Manufacturing PMI™

"The J.P. Morgan Global Manufacturing PMI^{TM} – a composite index1 produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – posted 50.3 in April, down from 50.5 in March, to register its lowest reading since June 2016.

Global manufacturing growth remains lacklustre as International trade flows contract again

The performance of the global manufacturing sector remained lacklustre in April. Rates of expansion in output, new orders and employment were only marginal, and well below their long-run trends, while new export business fell further.

The weakness in the global manufacturing sector was most evident in the intermediate and investment goods sectors, both of which saw production and new orders contract during April. The consumer goods industry fared better, with growth of both output and new business accelerating during the latest survey month. Consumer goods was also the only category to see new export work increase, albeit only moderately.

The global manufacturing sector remained subdued at the start of the second quarter, with the PMI barely above the 50.0 mark and rates of expansion in output and new orders still lackluster and well below long-run trend levels. In particular, the capital goods sector PMI underscores that business capex remains stalled. International trade flows remain a significant drag on the manufacturing sector. New export business has now decreased for eighth successive months."– David Hensley, Global Economist, J.P. Morgan



J.P. Morgan Global Services PMI™

"The upturn in global service sector activity slowed in April. At 52.7, down from 53.7 in March, the J.P. Morgan Global Services Business Activity Index – a composite index produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – dipped to a three-month low and stayed below its long-run average of 54.2. The headline index has signalled expansion throughout the past 117 months

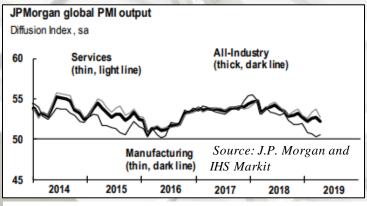
Global services activity and new order growth slow in April

Rates of output expansion eased across the three subindustries covered by the survey, registering a 31-, two-and three-month lows at business, consumer and financial service providers respectively. All three categories also saw growth of new business weaken. Germany (seven-month high), Ireland (three-month low) and China (15-month high) saw the fastest rates of expansion in business activity during April. The US and Spain also registered above-global-average growth. Brazil was the only nation to signal a contraction, although the pace of decline was only marginal

April saw new work rise at the slowest pace in three months, despite a modest increase in new export orders. The pace of job creation ticked higher, but remained among the weakest over the past two years. Staffing levels were raised across the business, consumer and financial services sectors. Subdued new order growth combined with higher employment meant backlogs of work were broadly unchanged. Employment increased in the US, Russia, the euro area, China and India, with rates of expansion improving in the latter three. In contrast, the UK, Australia and Brazil all reported job cuts during the latest survey month.

Price inflationary pressures moderated in April, with rates of increase in input costs and output charges the weakest for one-and-a-half years. Business optimism declined to a 34-month low, mainly due to weaker confidence at financial service providers. Sentiment improved in both the consumer and business service sectors."–David Hensley, Global Economist, J.P. Morgan

Source: https://www.markiteconomics.com/Public/Home/PressRelease/c07b901427354ed996a44621829d86c0; 5/6/19



J.P. Morgan Global Composite PMI[™]

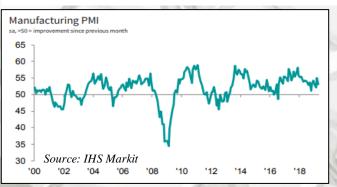
"The rate of global economic expansion eased to a threemonth low in April. The J.P. Morgan Global Composite Output Index – which is produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – posted 52.1, down from March's 52.7, to remain above the neutral 50.0 mark for 79 consecutive months.

Global economic growth slows at start of second quarter

The global service sector continued to outperform its manufacturing counterpart in April. This was despite output growth easing to a three-month low, with decelerations signalled across the business, consumer and financial services sub-industries. Conditions in manufacturing remained lacklustre, with production still rising at a near-stagnant pace. The consumer goods sub-sector was a bright spot, seeing growth accelerate to a three-month high. In contrast, output contracted in both the intermediate and investment goods industries....

Global composite new business rose at a slower pace in April. Consumer goods was the only category to see a stronger expansion, while contractions were signalled in the intermediate and investment goods sectors. Upturns continued at consumer, business and financial service providers, albeit at slower rates than in March. Subdued international trade flows weighed on global economic growth in April, with all-industry new export business falling for the fifth straight month. A further drop in manufacturing new export orders was only partially offset by a modest increase at service providers. Germany saw a marked decrease in foreign demand, China a modest decline, and the US mild growth.

April saw an expansion in global employment. Although the rate of increase steadied, it remained among the weakest registered over the past two years. Job creation at manufacturers slowed closer to stagnation, but edged higher at service providers. Business optimism dipped to a near three-year low in April, with confidence easing at manufacturers and service providers alike. Price inflationary pressures slowed, with rates of increase in output charges and input costs both moderating. Inflation of both price measures remained (on average) stronger in developed nations compared to emerging markets. "– David Hensley, Global Economist, J.P. Morgan



Markit/CIPS UK Manufacturing PMI™

"The headline seasonally adjusted IHS Markit/CIPS Purchasing Managers' Index[®] (PMI[®]) fell to 53.1 in April, down from March's 13-month high of 55. Alongside weaker growth in production, new orders and stocks of purchases, the lower PMI level also reflected job losses in the sector.

UK manufacturing upturn slows as new export business falls and pace of stockpiling eases

April saw the recent growth fillip at UK manufacturers show signs of petering out, as rates of expansion in output and new orders slowed and new export business decreased at the second-fastest pace in fourand-a-half years. Brexit stock-building continued, albeit to a lesser extent than in the prior survey month.

The upturn in the UK manufacturing sector eased at the start of the second quarter. Growth of output and new orders slowed, leading to job cuts for the third time in the past four months. The trend in new export business was especially weak, as high stock holdings at clients and slower global economic growth led to reduced demand from key markets such as the European Union, the USA and China. There were also reports of overseas clients acting now to re-route their supply chains away from the UK in advance of Brexit. A central theme at UK manufacturers during recent months has been stockpiling activity in advance of Brexit, and this process continued into April. Rates of increase in both inventories of inputs and finished products remained historically rapid, despite cooling from the record highs seen in March. Companies noted that the delay to the scheduled Brexit date meant they had to ensure levels of key inputs remained sufficiently large to cover as broad a range of outcomes as possible in coming months.

The stock build has clearly still helped support production growth, with a number of companies attributing increased output in April to Brexit-related stock-building. Manufacturers' outlook remained relatively upbeat, however, with over 50% forecasting their output will be higher in 12 months' time. Companies plan to use new product launches, new technologies and improved marketing strategies to drive growth forward in the coming months. However, Brexit uncertainty continues to weigh on plans, as some firms remain concerned about future growth prospects and the likely impact on output and demand from the unwinding of inventory positions later in the year." – Rob Dobson, Director & Senior Economist, IHS Markit

Source: https://www.markiteconomics.com/Public/Home/PressRelease/42eb2c51416f42f2a9008c3ca11a9555; 5/1/19

Private Indicators Associated Builders and Contractors

Construction Contractors Confidence Strong in February, Says ABC

"Construction industry leaders remained confident regarding nonresidential construction prospects in February 2019, according to the latest Construction Confidence Index released by Associated Builders and Contractors.

All three principal components measured by the survey – sales, profit margins, and staffing levels – remain well above the diffusion index threshold of 50, signaling ongoing expansion in construction activity. Only 3.4% of contractors expect to reduce staffing levels over the next six months, and more than 70% of survey respondents expect their sales to increase through the initial half of 2019. Still, 31.4% of contractors expect profit margins to remain unchanged, likely due in large measure to rising worker compensation costs.

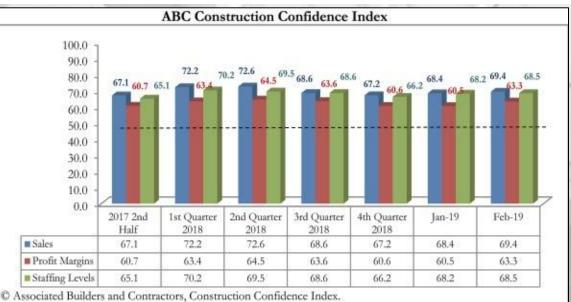
- The CCI for sales expectations increased from 68.4 to 69.4 in February.
- The CCI for profit margin expectations increased from 60.6 to 63.3.
- The CCI for staffing levels increased from 68.2 to 68.5." Rachel O'Grady, Media Relations Director, ABC

"Confidence seems to be making a comeback in America. There was a time when consumer, small business and investor confidence was falling. For now, that dynamic has evaporated, with job growth continuing and U.S. equity prices heading higher of late. Contractors understand the performance of the broader economy today helps shape the construction environment of tomorrow. Accordingly, with strong economic data like the Construction Backlog Indicator – which stood at 8.9 months in February 2019 – and nonresidential construction spending, which increased 4.8% year over year, contractor confidence remains elevated." – Anirban Basu, Chief Economist, ABC

Private Indicators Associated Builders and Contractors

Construction Contractors Confidence Strong in February

"That said, contractors continue to wrestle with ever-larger skilled workforce shortfalls, which are making it more difficult to deliver construction services on time and on budget. This helps explain why the CCI reading for profit margins remains meaningfully lower than the corresponding reading for sales expectations. Despite expanding compensation costs, contractors expect to significantly increase staffing levels going forward, an indication that many busy contractors expect to get busier. The fact that the profit margin reading remains above 50 also suggests that contractors enjoy a degree of pricing power and are able to pass at least some of their higher costs along to customers. Slower growth in construction materials prices relative to last year represents another likely factor shaping survey results." – Anirban Basu, Chief Economist, ABC



Source: https://www.abc.org/News-Media/News-Releases/entryid/16167/construction-contractors-confidence-strong-in-february-says-abc; 4/18/19

Private Indicators American Institute of Architects (AIA)

Architecture Billings Index March 2019 ABI: Billings decline amidst concern about potential slowdown

"Billings at architecture firms declined for the first time in over two years in March with the AIA's ABI score falling to 47.8 (a score below 50 indicates decreasing firm billings). While this score may raise concerns about the start of a period of weaker business conditions, it is important to note that it does follow on the heels of a particularly tough late winter period for much of the country, with record-setting cold, storms, and floods. In addition, many indicators of future work at firms remain positive, with both inquiries into new work and the value of new design contracts continuing to grow, although the pace of growth of design contracts has slowed in recent months. Backlogs of work at architecture firms also rose to a new high of 6.5 months in March, up from 6.3 months one year ago." – Katharine Keane, Associate Editor, The American Institute of Architects

"Though billings haven't contracted in a while, it is important to note that it does follow on the heels of a particularly tough late winter period for much of the country. Many indicators of future work at firms still remain positive, although the pace of growth of design contracts has slowed in recent months." – Kermit Baker, Chief Economist, Hon. The American Institute of Architects

Private Indicators American Institute of Architects (AIA)



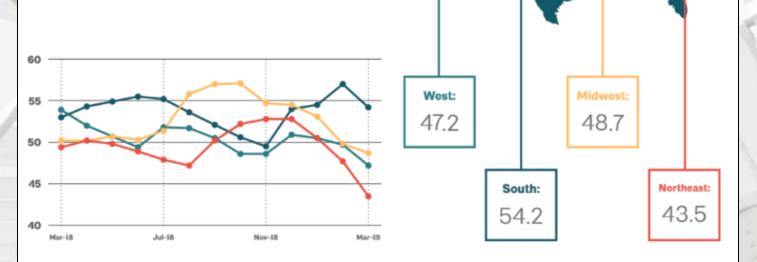
Source: https://www.aia.org/pages/6137577-abi-march-2019-billings-decline-amidst-con; 4/27/19

Private Indicators: AIA

Regional

Business conditions soften in all regions of the country except the South

Graphs represent data from March 2018–March 2019 across the four regions. 50 represents the diffusion center. A score of 50 equals no change from the previous month. Above 50 shows increase; Below 50 shows decrease. 3-month moving average.



Region

Billings soften across the country, recession watch continues

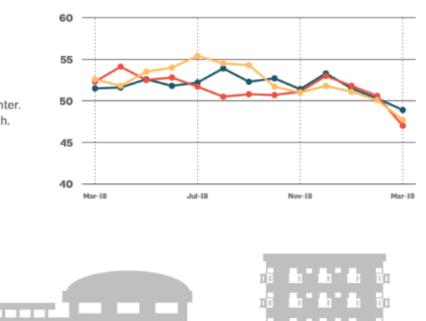
"However, softer billings were pervasive across much of the country in March. Only firms in the South region saw billings growth, with firms located in the Northeast reporting particularly weak billings. In addition, firms located in the Midwest reported their second consecutive month of declining billings, the first time that has occurred in two years." – Katharine Keane, Associate Editor, The American Institute of Architects

Private Indicators: AIA

Sector

Firms of all specializations report weaker billings

Graphs represent data from March 2018–March 2019 across the three sectors. 50 represents the diffusion center. A score of 50 equals no change from the previous month. Above 50 shows increase; Below 50 shows decrease. 3-month moving average.





Sector

"Billings also softened at firms of all specializations in March, most notably at firms with commercial/industrial and residential specializations, while the decline was smaller at firms with an institutional specialization." – Katharine Keane, Associate Editor, The American Institute of Architects

Dodge Data & Analytics March Construction Starts Surge 16 Percent Sharp Gains Reported for Nonbuilding Construction and Nonresidential Building

"New construction starts in March advanced 16% from the previous month to a seasonally adjusted annual rate of \$809.2 billion, according to Dodge Data & Analytics. The substantial gain followed a lackluster performance during the first two months of 2019, as total construction starts in March were able to climb back to a level slightly above the average monthly pace during 2018. The nonbuilding construction sector, comprised of public works and electric utilities/gas plants, jumped 40% in March from a weak February, lifted by the start of a \$4.3 billion liquefied natural gas (LNG) export terminal in Cameron LA. Nonresidential building increased 24% in March, aided by groundbreaking for several large projects. These included the \$1.6 billion Toyota-Mazda automotive manufacturing facility in Huntsville AL, a \$1.1 billion hotel and theater redevelopment in New York NY, and the \$850 million renovation of the KeyArena in Seattle WA. In contrast, residential building slipped 3% in March, as multifamily housing retreated for the second consecutive month. During the first three months of 2019, total construction starts on an unadjusted basis, total construction starts for the twelve months ending March 2019 essentially matched the corresponding amount for the twelve months ending March 2018..

The March data produced a reading of 171 for the Dodge Index (2000=100), up from 148 in February, and 1% higher than the full year 2018 average for the Dodge Index at 170. At the same time, the Dodge Index during the first quarter of 2019 dropped 6% from the fourth quarter of 2018, as it was pulled down by the sluggish volume of construction starts during January and February." – Nicole Sullivan, AFFECT Public Relations & Social Media

Source: https://www.construction.com/news/march-construction-starts-surge-16-percent-apr-2019; 4/18/19

Dodge Data & Analytics

"The month-to-month pattern for construction starts is often affected by the presence or absence of very large projects, and March certainly benefitted from groundbreaking for a number of very large projects. It remains true that the construction expansion is decelerating, but the March upturn indicates that the loss of momentum won't be as pronounced as suggested by the subdued activity in January and February. It's still expected that the overall dollar amount for construction starts for 2019 will be able to stay close to what was reported for 2018. On the plus side, the passage of federal appropriations for fiscal year 2019 in mid-February seems to be helping the public works sector. The electric utility and gas plant category has shown surprising strength during early 2019, following the steep declines over the previous three years. The commercial building segment is supported by market fundamentals that have yet to erode, while the institutional building segment continues to move at a good clip. The areas of concern in the near term relate to residential building, with single family housing not able to strengthen due to affordability constraints while multifamily housing seems to be pulling back from its strong 2018 pace.

The 10% decline for total construction starts on an unadjusted basis during this year's January-March period was due to decreased activity for all three main sectors compared to last year. Residential building fell 15% year-to-date, with single family housing down 12% and multifamily housing down 23%. Nonbuilding construction dropped 6% year-to-date, as a 23% slide for public works was partially offset by a 161% hike for electric utilities/gas plants. Nonresidential building retreated 5% year-to-date, with respective declines of 30% and 10% for manufacturing plants and institutional building while commercial building was able to register a 6% gain. By major region, total construction starts for the first three months of 2019 showed this performance versus last year – the Midwest, down 24%; the South Atlantic and the West, each down 12%; the Northeast, down 6%; and the South Central, up 2%."–Robert A. Murray, Chief Economist, Dodge Data & Analytics

Source: https://www.construction.com/news/march-construction-starts-surge-16-percent-apr-2019; 4/18/19

Dodge Data & Analytics

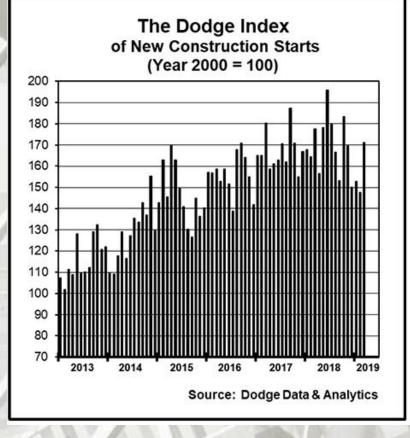
"**Residential building** in March dropped 3% to \$291.2 billion (annual rate), retreating for the second month in a row. Multifamily housing fell 12% in March, with the level of activity coming in 20% below the average monthly pace reported during 2018. There was one very large project entered as a March construction start – the \$511 million multifamily portion of the \$950 million Grand Avenue mixed-use high-rise complex in Los Angeles CA. There were five additional multifamily projects valued at \$100 million or more that were entered as March construction starts, including the \$165 million One Boerum Place condominium high-rise in Brooklyn NY and the \$145 million multifamily portion of a \$300 million mixed-use high-rise complex in West Palm Beach FL. The top five metropolitan areas ranked by the dollar amount of multifamily starts in March were – New York NY, Los Angeles CA, Miami FL, Washington DC, and Minneapolis-St. Paul MN.

Single family housing in March edged up 1% from the previous month, although its March level of activity was still 7% below the average monthly pace reported during 2018. By geography, single family housing showed this pattern for March relative to February – the Northeast, up 5%; the West, up 4%; the South Central, up 3%; the South Atlantic, down 1%; and the Midwest, down 2%." – Robert A. Murray, Chief Economist, Dodge Data & Analytics

Dodge Data & Analytics

"Additional perspective comes from looking at twelve-month moving totals, in this case the twelve months ending March 2019 versus the twelve months ending March 2018. On this basis, total construction starts for the most recent twelve months held steady with the amount of the previous period. By major sector, nonresidential building increased 2%, with manufacturing building up 9%, commercial building up 7%, and institutional building down 3%. Residential building grew 1%, with single family housing up 1% while multifamily housing was unchanged. Nonbuilding construction dropped 4%, with public works down 5% and electric utilities/gas plants down 1%." – Robert A. Murray, Chief Economist, Dodge Data & Analytics

March 2019 Construction Starts



March 2019 Construction Starts

Monthly Summary of Construction Starts Prepared by Dodge Data & Analytics

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

	March 2019	February 2019	% Change
Nonresidential Building	\$303,263	\$245,551	+24
Residential Building	291,234	298,758	-3
Nonbuilding Construction	214,654	153,437	+40
Total Construction	\$809,151	\$697,746	+16

The Dodge Index Year 2000=100, Seasonally Adjusted March 2019......171 February 2019.....148

Year-to-Date Construction Starts Unadjusted Totals, in Millions of Dollars <u>3 Mos. 2019</u> <u>3 Mos. 2018</u> % Change

Nonresidential Building	\$56,837	\$59,852	-5
Residential Building	67,174	79,147	-15
Nonbuilding Construction	40,508	43,292	6
Total Construction	\$164,519	\$182,291	-10

Source: https://www.construction.com/news/march-construction-starts-surge-16-percent-apr-2019; 4/18/19



MNI Chicago Production Lowest Since May 2016

"The MNI Chicago Business Barometer fell 6.1 points to 52.6 in April, down from 58.7 in March to the lowest level since January 2017. The weakness in the Barometer observed in Q1 continued into Q2, with the April fall led by four of the five Barometer components. Only Order Backlogs increased on the previous month's reading.

Chicago Business Barometer Dropped in April to 52.6

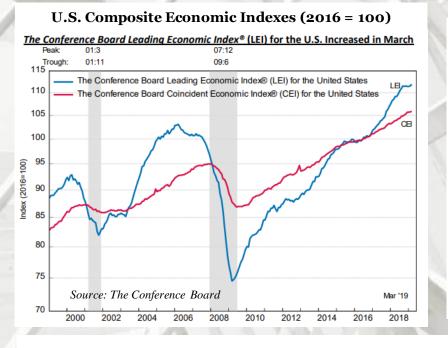
New Orders eased for the second consecutive month, dipping below both three- and 12-month averages. Amid weaker orders seen recently, Production pulled back significantly from March, to a level not seen since May 2016. Order Backlogs picked-up, moving above the 50-neutral level after a brief dip into contraction territory in March. There were reports of increased lead times at both domestic and offshore points, putting pressure on backlogs. Companies continued to run down their inventories, but less so than last month. The indicator remained just a touch below the 50-mark for the third time in the last nine months. The pullback in demand and production was matched by reduced demand for labor. The Employment Indicator softened to the lowest level since October 2017, also now hovering below both the three- and 12-month averages. Supplier delivery times shortened to the lowest reading since April 2017 after remaining broadly steadfast over the last two years. Factory gate prices saw the biggest monthly fall since December 2008, taking the indicator to the lowest level since March 2016. There was anecdotal evidence of steel leading the fall in prices.

This was a disappointing start to the second quarter, with more firms cutting back on both production and employment against a backdrop of softer domestic demand and the global slowdown. Most Barometer components have dived below their respective 12-month averages, pointing towards greater business uncertainty among firms." – Shaily Mittal, Senior Economist, MNI Indicators

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

Despite Gain, US Economic Growth Likely to Moderate by Year End

The Conference Board Leading Economic Index[®] (LEI) for the U.S. increased 0.4 percent in March to 111.9 (2016 = 100), following 0.1 percent increase in February, and no change in January.

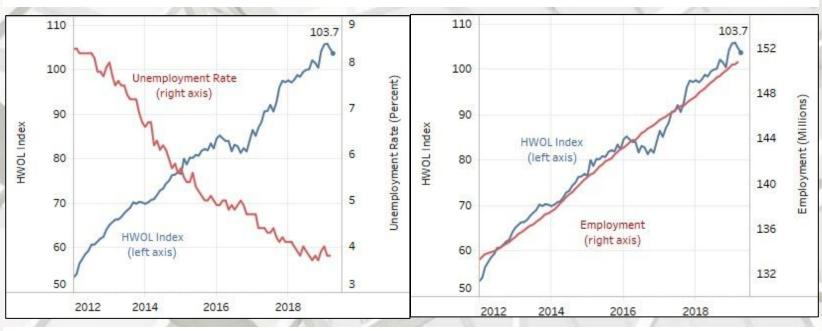


"The US LEI picked up in March with labor markets, consumers' outlook, and financial conditions making the largest contributions. Despite the relatively large gain in March, the trend in the US LEI continues to moderate, suggesting that growth in the US economy is likely to decelerate toward its long term potential of about 2 percent by year end." – Ataman Ozyildirim, Director of Economic Research, The Conference Board

"**The Conference Board Coincident Economic Index**® (**CEI**) for the U.S. increased 0.1 percent in March to 105.8 (2016 = 100), following a 0.1 percent increase in February, and no change in January.

The Conference Board Lagging Economic Index[®] (LAG) for the U.S. increased 0.1 percent in March to 107.0 (2016 = 100), following no change in February, and a 0.6 percent increase in January." – The Conference Board

Source: https://www.conference-board.org/data/bcicountry.cfm; 4/18/19



The Conference Board Help Wanted OnLine® (HWOL) Online Labor Demand Declined in April

- "In April, most states and MSAs experienced a decrease in the number of online job ads
- Majority of occupations showed losses over the month.

The Index now stands at 103.7 (July 2018=100), down from 104.8 in March. The Index declined 1.0 percent from the prior month, but is up 4.9 percent from a year ago.

In the Midwest, Illinois declined 0.9 percent, and Ohio fell 1.9 percent. In the Northeast, both New York and Pennsylvania declined 0.7 percent. In the South, Texas declined 0.7 percent and Florida fell 0.4 percent. In the West, California declined 1.4 percent and Washington dropped 0.3 percent.

The Professional occupational category saw gains in Legal (0.5 percent), and losses in Architecture and Engineering (-3.5 percent). The Services/Production occupational category saw gains in Protective Services (5.2 percent) and losses in Transportation (-3.5 percent), Healthcare Support (-2.8 percent) and Construction (-2.8 percent)." – Gad Levanon, Chief Economist, North America, at The Conference Board

Source: https://www.conference-board.org/data/helpwantedonline.cfm; 5/8/19

Sou

Equipment Leasing and Finance Association: Industry Confidence Eases in April

"The Equipment Leasing & Finance Foundation (the Foundation) releases the April 2019 Monthly Confidence Index for the Equipment Finance Industry (MCI-EFI). Designed to collect leadership data, the index reports a qualitative assessment of both the prevailing business conditions and expectations for the future as reported by key executives from the \$1 trillion equipment finance sector. Overall, confidence in the equipment finance market decreased in April after two consecutive months' increases to 58.3, down from the March index of 60.4." – Anneliese DeDiemar, Author, Equipment Leasing & Finance Association

"Low unemployment continues to fuel consumer strength, and seems to be propelling the market forward. I am concerned about the deficit and potential inflation, and their impact on interest rates." – Quentin Cote, CLFP, President, Mintaka Financial, LLC

"I'm optimistic because the economy is still doing well, the Fed has taken a long pause on interest rates and unemployment is at its lowest ever. Regulatory and tax reforms have had a positive impact on businesses and the U.S. economy." – Dave B. Fate, President and CEO, Stonebriar Commercial Finance

"Origination volume has continued to grow for Wintrust Specialty Finance and credit and portfolio quality remain high. Widening political divide is cause for concern both in perceptions that lead to confidence levels as well as potential regulatory changes." – David Normandin, CLFP, President and CEO, Wintrust Specialty Finance

Equipment Leasing and Finance Association Confidence Eases in April

April 2019 Survey Results:

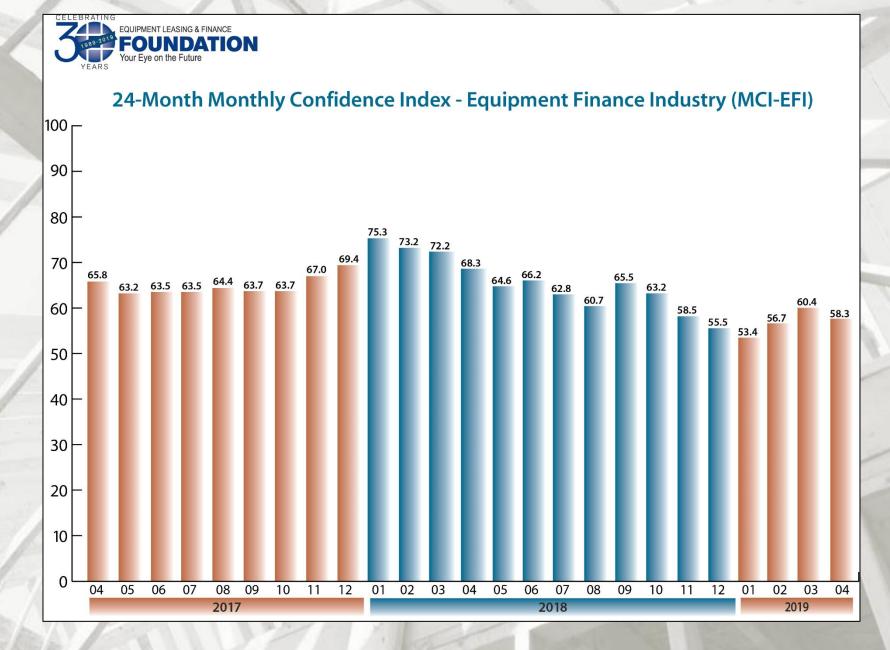
"The overall MCI-EFI is 58.3, a decrease from 60.4 in March.

- When asked to assess their business conditions over the next four months, 13.3% of executives responding said they believe business conditions will improve over the next four months, down from 20% in March. 76.7% of respondents believe business conditions will remain the same over the next four months, an increase from 70% the previous month. 10% believe business conditions will worsen, unchanged from the previous month.
- 13.3% of survey respondents believe demand for leases and loans to fund capital expenditures (capex) will increase over the next four months, a decrease from 23.3% in March. 83.3% believe demand will "remain the same" during the same four-month time period, an increase from 70% the previous month. 3.3% believe demand will decline, down from 6.7% who believed so in March.
- 6.7% of the respondents expect more access to capital to fund equipment acquisitions over the next four months, down from 13.3% in March. 93.3% of executives indicate they expect the "same" access to capital to fund business, an increase from 86.7% last month. None expect "less" access to capital, unchanged from last month." Anneliese DeDiemar, Author, Equipment Leasing & Finance Association

Equipment Leasing and Finance Association

April 2019 Survey Results:

- "When asked, 46.7% of the executives report they expect to hire more employees over the next four months, unchanged from March. 40% expect no change in headcount over the next four months, a decrease from 46.7% last month. 13.3% expect to hire fewer employees, up from 6.7% last month.
- 40% of the leadership evaluate the current U.S. economy as "excellent," up from 36.7% in March. 60% of the leadership evaluate the current U.S. economy as "fair," a decrease from 63.3% the previous month. None evaluate it as "poor," unchanged from March.
- 6.7% of the survey respondents believe that U.S. economic conditions will get "better" over the next six months, unchanged from March. 73.3% of survey respondents indicate they believe the U.S. economy will "stay the same" over the next six months, a decrease from 80% the previous month. 20% believe economic conditions in the U.S. will worsen over the next six months, an increase from 13.3% in March.
- In April, 36.7% of respondents indicate they believe their company will increase spending on business development activities during the next six months, an increase from 33.3% last month. 63.3% believe there will be "no change" in business development spending, a decrease from 66.7% in March. None believe there will be a decrease in spending, unchanged from last month." Anneliese DeDiemar, Author, Equipment Leasing & Finance Association



Source: https://www.elfaonline.org/news/press-room/press-releases/details/2019/04/18/equipment-leasing-and-finance-industry-confidence-eases-in-april; 4/18/19 Return to TOC

Equipment Leasing and Finance Association's Survey of Economic Activity: Monthly Leasing and Finance Index

March New Business Volume Down 10 Percent Year-over-year, Up 39 Percent Month-over-month and Down 10 Percent Year-to-date

"The Equipment Leasing and Finance Association's (ELFA) Monthly Leasing and Finance Index (MLFI-25), which reports economic activity from 25 companies representing a cross section of the \$1 trillion equipment finance sector, showed their overall new business volume for March was \$8.2 billion, down 10 percent year-over-year from new business volume in March 2018. Volume was up 39 percent month-to-month from \$5.9 billion in February. Year to date, cumulative new business volume was down 10 percent compared to 2018.

Receivables over 30 days were 1.90 percent, up from 1.80 the previous month and up from 1.70 percent the same period in 2018. Charge-offs were 0.37 percent, up from 0.35 percent the previous month, and down from 0.51 percent in the year-earlier period.

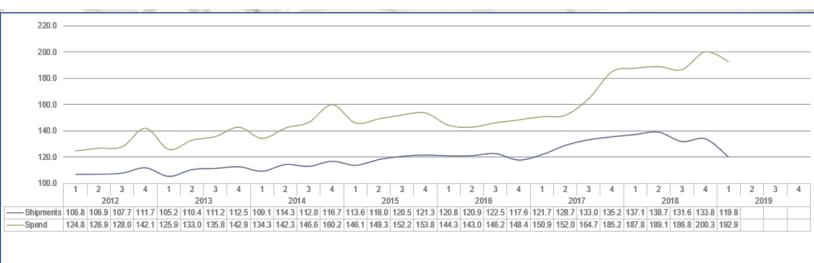
Credit approvals totaled 75.3 percent, down from 76.0 percent from February. Total headcount for equipment finance companies was up 0.4 percent year-over-year.

Separately, the Equipment Leasing & Finance Foundation's Monthly Confidence Index (MCI-EFI) in April is 58.3, down from the March index of 60.4." – Amy Vogt, Vice President, Communications and Marketing; Equipment Leasing & Finance Association

Equipment Leasing and Finance Association Monthly Leasing & Finance Index: April 2019

"First quarter new business volume got off to a slow start, relative to Q1 last year. This was not unexpected given analysts' expectations that equipment and software capex in 2019 could not realistically expect to keep pace with last year's strong showing. The overall U.S. economy continues to perform reasonably well: unemployment is low; interest rates are favorable, with the Fed deciding to hold off on additional increases for a while; and the broader equity markets are stable. Credit markets appear healthy. Headwinds to this benign scenario include a softening in global economies and continued international trade frictions, particularly with China and Europe." – Ralph Petta, CEO, Equipment Leasing & Finance Association

"Following a year of growth in 2018, the equipment finance industry experienced two consecutive months of year-over-year declines. Time will tell whether this decrease is simply a hangover from December stock market volatility or an early sign of weakness in the U.S. economy. The U.S. equipment finance industry is massive and strong — no single company commands significant market share. As a result, not all companies are experiencing declines. First American Equipment Finance continues to grow, and we remain optimistic about the remainder of 2019." – Alan Sikora, CEO, First American Equipment Finance



Shipments		Spend					
Index Value	119.8	Index Value	192.9				
Quarterly % Change	-10.5% 🔻	Quarterly % Change	-3.7% 🔻				
Yearly % Change	-12.6% 🔻	Yearly % Change	2.7% 🔺				

Q1 2019 U.S. Bank: Freight Payment Index

Winter weather and performance in key sectors drove freight activity in Q1

"The latest U.S. Bank Freight Payment Index shows shipments softened and that spend was mixed across the U.S. during the first quarter. The index suggests that capacity remains constrained due to market conditions in construction, retail and manufacturing, as well as severe weather that impacted trucking operations. However, there is good reason to expect recovery as weather effects subside and economic activity is anticipated to pick up in the months ahead." – Bob Costello, Chief Economist and Senior Vice President for the American Trucking Associations (ATA).

Source: http://www.cvent.com/api/email/dispatch/v1/email/view/p2-95nvx177n82r5p-65vbzy5w-avv-tnxn;Q1 2019

April 2019 Manufacturing ISM® *Report On Business*® April 2019 PMI® at 52.8%

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

Prices Unchanged; Exports and Imports Contracting

"Economic activity in the **manufacturing sector** expanded in April, and the **overall economy** grew for the 120th consecutive month, say the nation's supply executives in the latest **Manufacturing ISM®** *Report On Business®*. The April PMI® registered 52.8 percent, a decrease of 2.5 percentage points from the March reading of 55.3 percent.

The New Orders Index registered 51.7 percent, a decrease of 5.7 percentage points from the March reading of 57.4 percent.

The Production Index registered 52.3 percent, a 3.5-percentage point decrease compared to the March reading of 55.8 percent.

The Employment Index registered 52.4 percent, a decrease of 5.1 percentage points from the March reading of 57.5 percent.

The Supplier Deliveries Index registered 54.6 percent, a 0.4-percentage point increase from the March reading of 54.2 percent.

The Inventories Index registered 52.9 percent, an increase of 1.1 percentage points from the March reading of 51.8 percent. The Prices Index registered 50 percent, a 4.3-percentage point decrease from the March reading of 54.3 percent." – Timothy R. Fiore, CPSM, CPSD, Chair of the ISM[®] Manufacturing Business Survey Committee

March 2019 Manufacturing ISM® Report On Business®

April 2019 PMI® at 52.8%

"Comments from the panel reflect continued expanding business strength, but at the softest levels since the fourth quarter of 2016. **Demand** expansion continued, with the New Orders Index softening to the low 50s, the Customers' Inventories Index remaining at a 'too low' status, and the Backlog of Orders Index improving its prior month performance. **Consumption** (production and employment) continued to expand, but at lower levels, resulting in a combined decrease of 8.6 points. **Inputs** — expressed as supplier deliveries, inventories and imports — were higher this month, primarily due to inventory growth exceeding consumption, resulting in a combined 1.5-percentage point improvement in the Supplier Deliveries and Inventories Indexes. Imports contracted during the period. Overall, inputs reflect a more stable business environment, confirmed by the Prices Index at zero price growth, or unchanged.

Exports orders contracted for the first time since February 2016. The PMI[®] trade elements are in contraction territory. The PMI[®] has been inching down since November 2018. The manufacturing sector is expanding, but at recent historic lows.

Of the 18 manufacturing industries, 13 reported growth in April, in the following order: Textile Mills; Electrical Equipment, Appliances & Components; Miscellaneous Manufacturing; Printing & Related Support Activities; Chemical Products; Nonmetallic Mineral Products; Plastics & Rubber Products; Machinery; Furniture & Related Products; Food, Beverage & Tobacco Products; Computer & Electronic Products; Paper Products; and Fabricated Metal Products. The five industries reporting contraction in April are: Apparel, Leather & Allied Products; Primary Metals; Wood Products; Petroleum & Coal Products; and Transportation Equipment." – Timothy R. Fiore, CPSM, CPSD, Chair of the ISM[®] Manufacturing Business Survey Committee

April 2019 Non-Manufacturing ISM® Report On Business®

April PMI® at 56.1%

Business Activity Index at 59.5%; New Orders Index at 58.1%; Employment Index at 53.7%

"Economic activity in the **non-manufacturing sector** grew in April for the 111th consecutive month, say the nation's purchasing and supply executives in the latest **Non-Manufacturing ISM**[®] **Report On Business**[®].

The NMI[®] registered 55.5 percent, which is 0.6 percentage point lower than the March reading of 56.1 percent. This represents continued growth in the non-manufacturing sector, at a slightly slower rate.

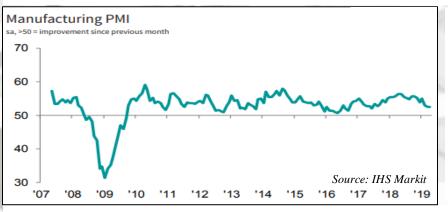
The Non-Manufacturing Business Activity Index increased to 59.5 percent, 2.1 percentage points higher than the March reading of 57.4 percent, reflecting growth for the 117th consecutive month, at a faster rate in April.

The New Orders Index registered 58.1 percent; 0.9 percentage point lower than the reading of 59 percent in March.

The Employment Index decreased 2.2 percentage points in April to 53.7 percent from the March reading of 55.9 percent.

The Prices Index decreased 3 percentage points from the March reading of 58.7 percent to 55.7 percent, indicating that prices increased in April for the 23rd consecutive month.

According to the NMI[®], 15 non-manufacturing industries reported growth. The non-manufacturing sector has experienced an uptick in business activity, but in general, there has been a leveling off. Respondents are still mostly optimistic about overall business conditions, but concerns remain about employment resources." – Anthony Nieves, CPSM, C.P.M., A.P.P., CFPM, Chair of the Institute for Supply Management[®] (ISM[®]) Non-Manufacturing Business Survey Committee



Markit U.S. Manufacturing PMI[™]

"The seasonally adjusted IHS Markit final U.S. Manufacturing Purchasing Managers' IndexTM (PMITM) posted 52.6, up slightly from March's recent low of 52.4. This signalled that the latest improvement in the health of the U.S. manufacturing sector was the second-slowest since June 2017.

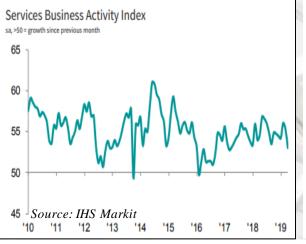
Solid rise in new orders drives further improvement in operating conditions

U.S. manufacturing firms registered a moderate improvement in operating conditions in April. Expansions in output and new orders picked up from March's recent lows, with new business growth the fastest for three months. Despite a further rise in backlogs of work, the rate of job creation was the slowest since June 2017 and only moderate overall, in part reflecting skill shortages. Expectations towards the coming year were relatively subdued and down to the lowest seen so far this year. Meanwhile, inflationary pressures continued to soften for a sixth month running.

Although the PMI ticked higher in April, the survey remains consistent with manufacturing acting as a drag on the economy at the start of the second quarter, albeit with the rate of contraction easing. Historical comparisons indicate that the survey's output gauge needs to rise above 53.5 to signal growth of factory production. As such, the data add to signs that the economy looks set to slow after the stronger than expected start to the year. Employment growth also disappointed as hiring slipped to the lowest for nearly two years, albeit in part due to firms reporting difficulties finding staff amid the current tight labour market.

There was better news on the order book front, however, with inflows of new business rising and firms signalling an improved export performance. Unfortunately, on balance, manufacturers seem sceptical that the rise in demand will persist, with future expectations of output growth slumping lower in April. Both input cost and factory gate price inflation rates meanwhile eased further, down to the lowest for over one and a half years, hinting that consumer price inflation rates will have continued to cool in April." – Chris Williamson, Chief Economist, Markit[®]

Source: https://www.markiteconomics.com/Public/Home/PressRelease/5ee0f9d3951b4934a3184f60a086c474; 5/1/19



Markit U.S. Services PMI[™]

"The seasonally adjusted final IHS Markit U.S. Services Business Activity Index registered 53.0 in April, down from 55.3 in March. The latest expansion was broadly in line with the earlier released 'flash' figure of 52.9, and signalled the slowest increase in output since March 2017. The upturn was below the long-run series average and indicated a less robust start to the second quarter of 2019. Some firms noted that client demand was subdued, and a number of survey respondents stated that increased competition and uncertainty had dented sales growth.

Slowest business activity growth since March 2017

April data signalled a slower increase in business activity across the U.S. service sector. Output rose at the softest pace since March 2017 as new business growth also eased to a two-year low. Despite a further increase in backlogs of work, firms reined in their hiring, with the rate of job creation slowing to a two-year low. Uncertainty and increased competition meanwhile pushed business expectations to the lowest for almost three years, while rates of input price and output charge inflation eased to 26- and 18-month lows, respectively. Similarly, new business increased at a slower rate in April. The upturn was the softest for two years, amid reports of less robust demand conditions. Nevertheless, some firms stated that new client acquisitions had driven sales higher. The pace of new export sales growth was broadly in line with that seen in March and marginal overall.

Service providers also reported a lower degree of confidence in future output growth in April. Although the respective index posted well above the 50.0 neutral mark, the level of optimism dipped to its lowest level since mid-2016. A number of survey respondents stated that greater uncertainty and more intense competition had dampened expectations towards the year ahead.

Meanwhile, the slowdown in new business resulted in a softer increase in employment in April. Where a rise was reported, panellists linked this to the replacement of leavers following long-held vacancies and a further increase in new business. The rate of job creation was only moderate and the slowest for two years. Despite a slower rise in workforce numbers, service sector firms continued to register a rise in outstanding business in April. The increase was the fourth in as many months and broadly in line with the series trend."–Chris Williamson, Chief Business Economist, Markit[®]

Source: https://www.markiteconomics.com/Public/Home/PressRelease/d708415c566e4cc9adaacc3fde7fb1e9; 5/3/19



Markit U.S. Composite PMITM

"The US Composite PMI Output Index is a weighted average of the US Manufacturing PMI Output Index and the US Services Business Activity Index. The Composite PMI Output Index registered 53.0 in April, down from 54.6 in March and the lowest since March 2017. Although the output expansion quickened across the manufacturing sector, production growth remained relatively subdued. A less robust service sector performance also weighed on growth.

Output expansion slowest since March 2017

Composite PMI indices are weighted averages of comparable manufacturing and services PMI indices. Weights reflect the relative size of the manufacturing and service sectors according to official GDP data.

Similarly, a slowdown in service sector new business growth counteracted a slight pick up in manufacturing client demand, as the overall upturn in new orders eased to a 24-month low. Meanwhile, new export sales rose at a marginal rate in April.

The final PMI surveys for April indicate a marked slowing of the US economy at the start of the second quarter, suggesting the robust start to the year has lost some momentum. Businesses reported the weakest output and sales growth for two years, indicative of GDP growth slowing to 1.9% in April. "While the first quarter saw factory weakness being offset by a robust service sector, both manufacturing and services have now shifted into a lower gear.

An additional concern is that business optimism about the year ahead has slumped to its lowest since mid-2016, reflecting widespread reports from companies that weaker economic growth will likely further dampen business activity in coming months. "Jobs growth has subsequently slipped to a two-year low as firms took a more cautious approach to hiring and expanding capacity in the face of the weaker sales growth and a gloomier outlook. Price pressures have fallen alongside the slower rate of economic growth signalled by the surveys, as firms struggled to raise prices amid intense competition." "– Chris Williamson, Chief Business Economist, Markit[®]

Source: https://www.markiteconomics.com/Public/Home/PressRelease/d708415c566e4cc9adaacc3fde7fb1e9; 5/3/19

National Association of Credit Management – Credit Managers' Index

Service Sector Brings April Credit Managers' Index Up, Manufacturing Slumps

"In March, the consumer sector was the one that let the economy down, but this month that same consumer is playing a more heroic role. The data in April's Credit Managers' Index (CMI) showed a slowdown in the manufacturing sector after a robust month in March. The combined score for April's CMI is 54, an improvement over the 53.6 notched the month prior. Over the last several months, there has not been a great deal of variability in the combined score. The high point was reached in May of 2018, when it hit 56.6. It was also at or above 56 three times in the last 12 months. The low point was this January when it hit 53.4, followed by last year's readings of 53.7 in April and 53.6 in March. The range has been fairly narrow. The combined index for favorable factors jumped back into the 60s with a reading of 60.1 — about where it had been in February. The combined score for the unfavorable factors moved out of the contraction zone (a score below 50) by the narrowest of margins with a reading of 50 after last month's 49.9.

As is usually the case, there was quite a bit of interesting data in the subsectors. The sales data jumped back into the 60s with a reading of 61 after stumbling a little to 58.2 the month before. New credit applications also improved with a move from 57.8 to 59.7, but this category had been in the 60s for most of the last few years, although it started to fall into the 50s in December. The dollar collections data also improved, but not quite enough to break into the 60s. It is at 59.1 after reading 56.6 in March. The amount of credit extended stayed in the 60s, but fell a little from 63.5 to 60.6." – Andrew Michaels, Editorial Associate, NACM

National Association of Credit Management – Credit Managers' Index

"April's service sector is demonstrating all the growth, while the manufacturing sector slumped. This matches pretty well with other data that has been coming in from the data analysts. The latest retail numbers were unexpectedly strong with growth at 1.6% when expectations were for growth of maybe 1%. Last month, there was a fall in the data despite the fact that consumer confidence numbers have been essentially solid — if not particularly impressive. At this stage it is not clear what is causing the shifts in these sectors (manufacturing and service) and it is certainly too early to identify any kind of a trend." – Dr. Chris Kuehl, Economist, NACM

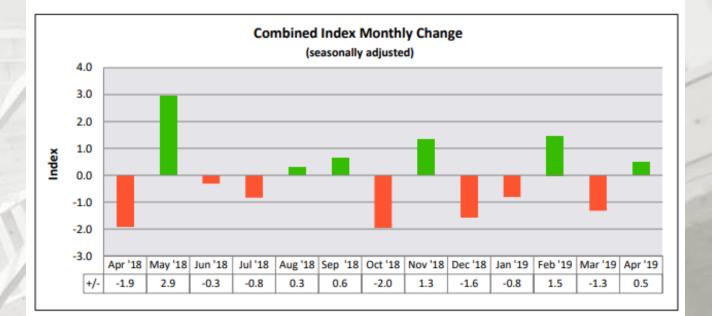
It is not that conditions have dramatically changed, but some of the enthusiasm has faded. This has been reflected in some of the other manufacturing data released of late — the Fed's industrial index fell and there was some decline in the latest Purchasing Managers' Index (mostly in the New Orders Data). There is not a lot of consensus about what has been pushing manufacturing up and down of late, but the dominant view is that uncertainty in the trade sector has played a big role. There have been on again and off again tariff threats, while manufacturers have been struggling to keep track of the changes that have swept through various trade talks. One minute there is no hope for a pact with China and the next minute it seems imminent. Then five minutes later there is an impasse that can't be overcome. This has also been an issue with Europe and with the reconfigured NAFTA (USMCA)." – Dr. Chris Kuehl, Economist, NACM

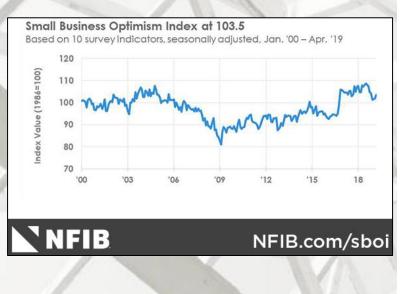
National Association of Credit Management – Credit Managers' Index

"The biggest gains were seen in gas stations as the price of fuel has gone up, but there were gains in terms of clothing sales, furniture and car parts. About the only area where gains were missing were in sporting goods — even luxury goods got a boost. All that activity showed up in the CMI data as well. The majority of the service sector growth came from retail. The combined score for the favorable factors also jumped and ended up at 61.3 after languishing at 57.7 the month before. In the last year, there have only been two months when the combined score was not in the 60s. The combined score for the unfavorables was 49.8 — still stuck in the contraction zone. It is, however, even closer to the 50 line than it was the month before when it was 49.1.

Will retail continue to push economic expansion? There are as many reasons to think it might as there are reasons to think it will start to fade. The good news is that unemployment numbers are still encouraging and there have been some recent pay hikes. The tax cut enthusiasm of last year has faded, but so has fear of rapid inflation and a subsequent slide into recession. On the negative side, there are signs that housing and automotive are stalling as far as economic drivers, while the trade war has started to affect the consumer." – Dr. Chris Kuehl, Economist, NACM

Combined Manufacturing and Service Sectors (seasonally adjusted)	Apr '18	May '18	Jun '18	Jul '18	Aug '18	Sep '18	Oct '18	Nov '18	Dec '18	Jan '19	Feb '19	Mar '19	Apr '19
Sales	65.8	69.6	69.6	63.9	65.0	68.8	62.7	64.5	59.0	59.7	62.6	58.2	61.0
New credit applications	62.2	63.8	60.5	61.2	62.5	61.9	61.7	62.2	57.5	58.2	58.9	57.8	59.7
Dollar collections	46.7	62.5	63.2	61.0	62.6	62.8	57.5	60.9	59.3	59.0	59.1	56.6	59.1
Amount of credit extended	66.1	66.8	66.2	66.1	66.9	67.1	64.5	65.3	61.9	61.2	62.3	63.5	60.6
Index of favorable factors	60.2	65.7	64.9	63.1	64.3	65.2	61.6	63.2	59.4	59.5	60.7	59.0	60.1
Rejections of credit applications	51.0	51.3	51.2	52.5	52.2	51.8	51.4	51.4	51.4	51.8	52.1	51.2	52.0
Accounts placed for collection	48.7	49.0	51.3	49.9	49.0	50.2	48.8	48.2	49.7	48.2	49.0	46.4	48.5
Disputes	48.0	48.1	48.3	47.7	46.4	47.6	48.9	50.1	49.6	47.1	48.5	49.5	48.5
Dollar amount beyond terms	46.4	49.4	49.2	47.4	48.5	49.9	47.7	52.3	49.3	47.4	51.3	50.0	47.6
Dollar amount of customer deductions	48.4	49.7	48.1	47.9	48.7	48.6	49.5	49.6	49.7	48.0	50.0	48.8	49.7
Filings for bankruptcies	53.8	56.4	55.7	57.4	55.9	55.6	52.1	53.6	55.0	53.8	54.9	53.7	53.9
Index of unfavorable factors	49.4	50.6	50.6	50.5	50.1	50.6	49.7	50.9	50.8	49.4	51.0	49.9	50.0
NACM Combined CMI	53.7	56.6	56.3	55.5	55.8	56.4	54.5	55.8	54.2	53.4	54.9	53.6	54.0





April 2019 Report:

"Optimism among small business owners continued its steady climb in April, with the NFIB Small Business Optimism Index increasing 1.7 points to 103.5. Sales improved in April, the inventory soft spot seen in last month's report rebounded, and profit trends posted a very solid advance. Job creation plans gained, hiring remained strong, and expectations for sales, business conditions, and credit conditions all improved.

Small Business Optimism Marches On in April

A net nine percent of all owners (seasonally adjusted) reported higher nominal sales in the past three months, a four-point improvement, and the net percent of owners expecting higher real sales volumes rose one point to a net 20 percent of owners. The net percent of owners reporting inventory increases fell three points to a net two percent (seasonally adjusted). This is consistent with the significant build up in the first quarter that added nearly one point to GDP growth, and owners slowed additions to wait and see how much customers reduced the excess stock. The net percent of owners viewing current inventory stocks as "too low" improved two points to a net negative four percent as fewer owners viewed stocks as excessive. The net percent of owners planning to expand inventory holdings rose from a negative one percent to two percent, a three-point gain, indicating that strong sales gains resolved the excessive Q1 inventory build and owners are ready to place new orders and build inventory." – Holly Wade, NFIB

Source: http://www.nfib.com/surveys/small-business-economic-trends/; 5/14/19

Small Business Optimism Marches On in April

"America's small and independent businesses are rebounding from the first quarter 'shut down, slow down' and don't appear to be looking back. April's Index is further evidence that when certainty and stability increase, so do optimism and action. The continued economic boom is thanks, in a major way, to strong growth in the small business half of the economy." – Juanita D. Duggan, , President and CEO, NFIB

"The 'real' economy is doing very well versus what we see in financial market volatility. Many jobs were created, and GDP produced with no substantive inflation pressure. The pace of economic growth has accelerated, and consumers and small businesses are an important part of the improvement in sales." – Bill Dunkelberg, Chief Economist, NFIB

"The frequency of reports of positive profit trends improved five points to a net negative three percent reporting quarter on quarter profit improvements, a very solid gain. Twenty-seven percent plan capital outlays in the next few months, unchanged. While investment spending has been solid for the past two years, more will be needed to make up for the years of weak investment spending starting in 2008. From the start of the recovery in Q3 2009 through 2016, the average percent reporting capital outlays was 54 percent and was as low as 44 percent (September, November, December 2009 and August 2010). After 2016, the average has been 60 percent, with a high of 66 percent reached in February 2018. Recent productivity numbers suggest that the revival in small business investment has started to pay off with gains in worker productivity." – Holly Wade, NFIB

Small Business Optimism Marches On in April

"As reported in the <u>April NFIB Jobs Report</u>, 24 percent of owners cited the difficulty of finding qualified workers as their Single Most Important Business Problem, one point below the record high. Fifty-seven percent reported hiring or trying to hire (down three points), but 86 percent of those hiring or trying to hire reported few or no qualified applicants for the positions they were trying to fill. Thirty-eight percent of all owners reported job openings they could not fill in the current period, down one point from the record high. Overall, reports of rising compensation are holding at historically high levels, with reports of higher worker compensation rising one point to a net 34 percent of all firms. Plans to raise compensation were unchanged at a net 20 percent.

Owners expecting better business conditions increased two points to a net 13 percent and those expecting easier credit conditions increased three points. Four percent of owners reported that all their borrowing needs were not satisfied, up one point and historically very low. Two percent reported that financing was their top business problem (up one point) compared to 24 percent citing the availability of qualified labor, 16 percent citing taxes, and 15 percent citing regulations and red tape." – Holly Wade, NFIB

Morgan Stanley Research Is U.S. Housing Headed for a Major Renovation?

Why population shifts among Boomers, Millennials and Gen Z could drive a surplus of single-family homes and a shortage of rentals — both of which could spell opportunity for rental REITs and iBuying platforms.

"U.S. population shifts from three outsized generations — Baby Boomers, Millennials and Gen Z — are set to remake the U.S. housing landscape in coming years. This generational baton-pass in slow motion will play out across the country — but in very different ways.

"Although Gens Y + Z could fuel a nearly 7% increase in demand for housing, that growth is no match for the estimated 43% increase in supply, as aging Baby Boomers sell their homes."

In some markets, it will create a surplus of single-family homes as aging Boomers return housing stock to market. In others, the growth of the two younger generations means regional markets will experience the most intense demand for rentals in decades.

In the medium-term, however, the shift could mean new opportunities for single-family rental real estate investment trusts (REITs) as well as a rise of iBuying platforms — Internet platforms that acquire, fix and resell homes quickly — and aim to become a new model for faster, more efficient real estate transactions.

In a recent report from Morgan Stanley Research, a collaborative effort between the firm's economists, analysts and strategists finds that these changes, taken together, could have major implications for U.S. housing in the next two decades." – Morgan Stanley Research

Source: http://www.morganstanley.com/ideas/millennial-gen-z-economy; 1/25/19

Morgan Stanley Research

A Home of their Own

"This year, America's 73 million Millennials (a.k.a. Gen Y) will surpass Baby Boomers as the nation's largest generation, but the next cohort isn't far behind. In 2034, Gen Z — which we define as Americans born between 1997 and 2012 — will actually overtake Millennials in population.

A recent Morgan Stanley report found that the merging of these two generations will give rise to a "youth boom" that will boost consumption nationwide and help drive demand for housing, particularly rentals.

"Net aggregate demand for rentals could surge 22% above long-term averages over the next 10 years," says Richard Hill, head of Morgan Stanley's U.S. REIT Equity and Commercial Real Estate Debt Research.

While demand for rentals is poised to rise, net aggregate demand for ownership of singlefamily homes could fall to 54% below its long-term average, as aging boomers sell primary and vacation homes. This divergence could open doors for REITs focused on single-family rentals, helped by the rise of iBuying platforms that streamline real-estate transactions." – Morgan Stanley Research

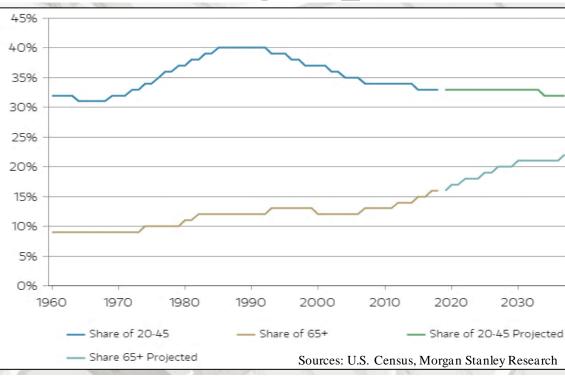
Morgan Stanley Research Not Their Parents Housing Market

"Historically, as people age through their 20s and 30s, they are at the peak age for household creation and demand for shelter. To use one statistic as an example, the 22 million people who are currently between the ages of 20 and 24 will add 3.6 million new households over the next five years, assuming headship rates follow historical trends.

Indeed, the sheer size of the two younger generations will create robust demand for housing — both rentership and ownership — in the short term.

But according to James Egan, Co-head of U.S. Securitized Products Research and member of the firm's Housing Strategy team, over the next two decades a more nuanced picture emerges. Although Millennials and Generation Z will drive housing demand, much of that demand will be in rentals since those under 40 are more likely to rent.

Meanwhile, supply from the aging Baby Boomer population will begin returning to market. "We actually expect supply to increase, not just from new homes being built, but from the existing stock of housing being returned to the market by aging Boomers." – Morgan Stanley Research



Morgan Stanley Research A Lurking Shadow Inventory

"To be sure, Baby Boomers — some of whom own multiple homes — are holding onto their houses longer than they did in the past, creating a shadow inventory that often gets overlooked.

"Because Boomers have held onto their homes longer, fewer homes have come on the market over the past several years, exacerbating the shortage of inventory," says Egan. "On the flip side, it means that Boomers have a lot more housing to potentially put on the market, as they age into their late 70s and 80s.

Putting the two trends together, although Gens Y + Z could fuel a nearly 7% increase in demand for housing, that growth is no match for the estimated 43% increase in supply, as aging Baby Boomers divest themselves of their homes." – Morgan Stanley Research

Source: http://www.morganstanley.com/ideas/millennial-gen-z-economy; 1/25/19

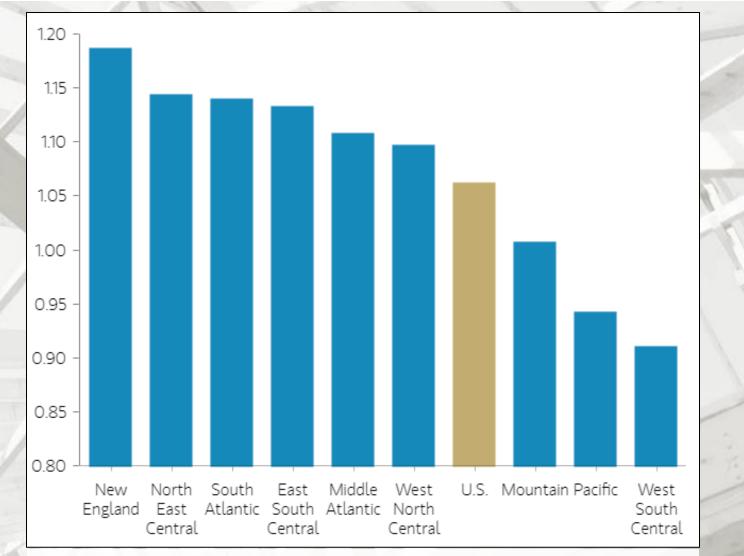
Morgan Stanley Research Growing Divide Between Cities

"These trends could be magnified on the local level, as migration trends create an even greater disparity in price appreciation between hot and tepid markets.

One way to gauge future demand? A closer look at markets where Boomers outnumber Millennials. New England and the Rust Belt, for example, have far more Boomers than Millennials, while the trend reverses in the West and Southwest.

Boomers Outnumber Millennials in New England and Rust Belt, but Vice-Versa in West and Southwest The analysts also looked at supply and demand dynamics for home ownership at the metro level. After factoring for regions that are seeing net in-migration of Boomers to retirement destinations, they identified cities best-positioned for rising home prices over the next decade. Demand for home ownership Austin, Texas, for example, is likely to be significantly higher than the national average. Contrast that with Barnstable Town, MA, which may see a greater decline in ownership than the national average.

Nationally, renter demand will remain robust over the next 10 years, with Gen Y and Z migration patterns as the biggest factor." – Morgan Stanley Research



Sources: U.S. Census Bureau, Morgan Stanley Research.

Note: For the purposes of metropolitan statistical area (MSA) levels, chart uses current populations of 25-39 year-olds.

Morgan Stanley Research iBuying Bridges the Gap

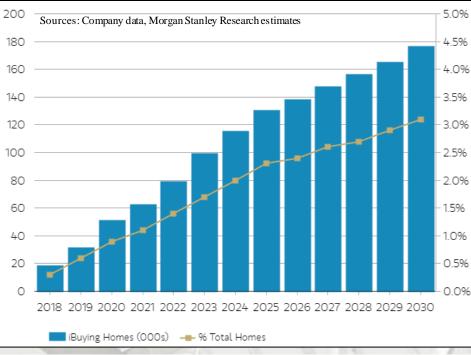
"The increase of single-family home supply and the rise of iBuying platforms may mark the most significant shift, driven by generational change. To date, single-family rentals — which account for about 40% of all U.S. rental units — have traditionally been the domain of "mom and pop" investors.

That could be set to change. Institutional ownership has picked up from virtually nothing a decade ago to an estimated 2% of single-family rental units. As more Boomers list their homes, however, single-family REITs could scoop up inventory. "If they buy just 15% of the roughly 12 million homes we project to be sold over the next 10 years, they'll grow from 300,000 homes to nearly two million," says Hill.

Historically, institutional buyers haven't been able to manage portfolios comprising millions of properties. But now, so-called iBuying companies could streamline the process.

Morgan Stanley Estimates the iBuying Market Could Reach ~3% Total Transaction Penetration by 2030, the Equivalent of ~175k Homes.

iBuyers use web-based detailed questionnaires and home-value algorithms to make offers on homes, sometimes within 48 hours. The iBuyer then assumes ownership, makes the necessary repairs, and preps the home for resale. The report notes that this new model for real-estate transactions could account for 3% of U.S. existing home sales by 2030." – Morgan Stanley Research



Morgan Stanley Research iBuying Bridges the Gap

"3% might seem small in percentage terms," says Brian Nowak, Head of U.S. Internet Research, "But given the large size of the residential market, which is around six million transactions a year and \$1.8 trillion in transaction value, it means iBuyers would purchase roughly 175,000 homes in 2030."

Although the iBuying model will face hurdles to adoption, such as high importance of referrals, local knowledge and transaction complexity, if the platforms can change consumer behavior and show they remove real-estate friction, they could further alter the future of U.S. housing. " – Morgan Stanley Research

Source: http://www.morganstanley.com/ideas/millennial-gen-z-economy; 1/25/19

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