The Virginia Tech–USDA Forest Service Housing Commentary: Section II
April 2021

Delton Alderman

Statistics, Economics, and
Life Cycle Analysis Research Unit

Forest Products Laboratory

USDA Forest Service

Madison, WI

304.431.2734

Delton.R.Alderman@usda.gov

Urs Buehlmann

Department of Sustainable Biomaterials

College of Natural Resources & Environment

Virginia Tech

Blacksburg, VA

540.231.9759

buehlmann@gmail.com

2020 Virginia Polytechnic Institute and State University CNRE-NP

Table of Contents

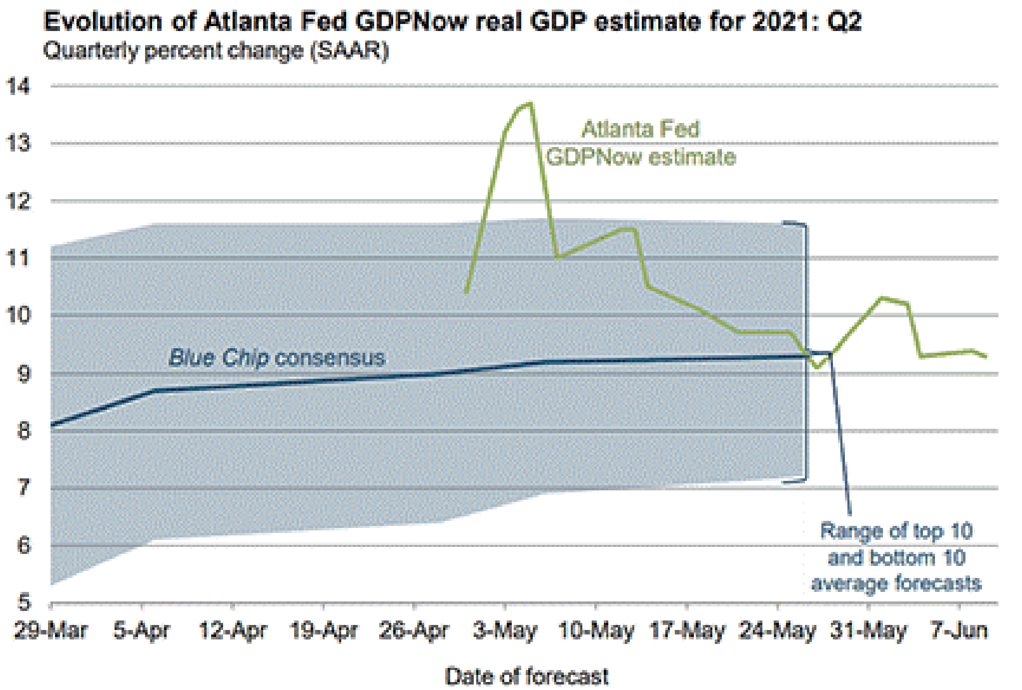
Return to TOC

U.S. Economic Indicators

FEDERAL RESERVE BANK of ATLANTA | GDPNow™

GDPNow is not an official forecast of the Atlanta Fed. Rather, it is best viewed as a running estimate of real GDP growth based on available economic data for the current measured quarter. There are no subjective adjustments made to GDPNow—the estimate is based solely on the mathematical results of the model.

In particular, **it does not capture the impact of COVID-19 and social mobility** beyond their impact on GDP source data and relevant economic reports that have already been released. It does not anticipate their impact on forthcoming economic reports beyond the standard internal dynamics of the model.



Sources: *Blue Chip Economic Indicators* and *Blue Chip Financial Forecasts*
Note: The top (bottom) 10 average forecast is an average of the highest (lowest) 10 forecasts in the *Blue Chip* survey.

Atlanta Fed GDPNow™

Latest estimate: 9.3 percent — June 9, 2021

"The GDPNow model estimate for real GDP growth (seasonally adjusted annual rate) in the second quarter of 2021 is **9.3 percent** on June 9, down from 9.4 percent on June 8. After this morning's wholesale trade release from the U.S. Census Bureau, the nowcast of second-quarter real gross private domestic investment growth decreased from 18.7 percent to 18.1 percent." – Pat Higgins, Economist, Federal Reserve Bank of Atlanta

Source: https://www.frbatlanta.org/cqer/research/gdpnow.aspx; 6/9/21

Return to TOC

The Federal Reserve Bank of Chicago: Midwest Economy Index (MEI)

Index Points to Little Change in Midwest Growth Through April

"The Midwest Economy Index (MEI), which approximates quarterly growth at a monthly frequency, ticked down to +0.61 in April from +0.62 in March. Contributions to the April MEI from two of the four broad sectors of nonfarm business activity and two of the five Seventh Federal Reserve District states decreased from March. The relative MEI decreased to +0.81 in April from +1.59 in March. Contributions to the April relative MEI from all four sectors and all five states decreased from March.

The manufacturing sector's contribution to the MEI moved up to +0.39 in April from +0.33 in March. The pace of manufacturing activity increased in Illinois, Indiana, and Wisconsin, but decreased in Iowa and was unchanged in Michigan. Manufacturing's contribution to the relative MEI decreased to +0.75 in April from +0.87 in March.

The construction and mining sector contributed –0.04 to the MEI in April, down slightly from a neutral value in March. The pace of construction and mining activity was slower in Indiana, Iowa, and Michigan, but unchanged in Illinois and Wisconsin. Construction and mining's contribution to the relative MEI decreased to –0.14 in April from +0.01 in March.

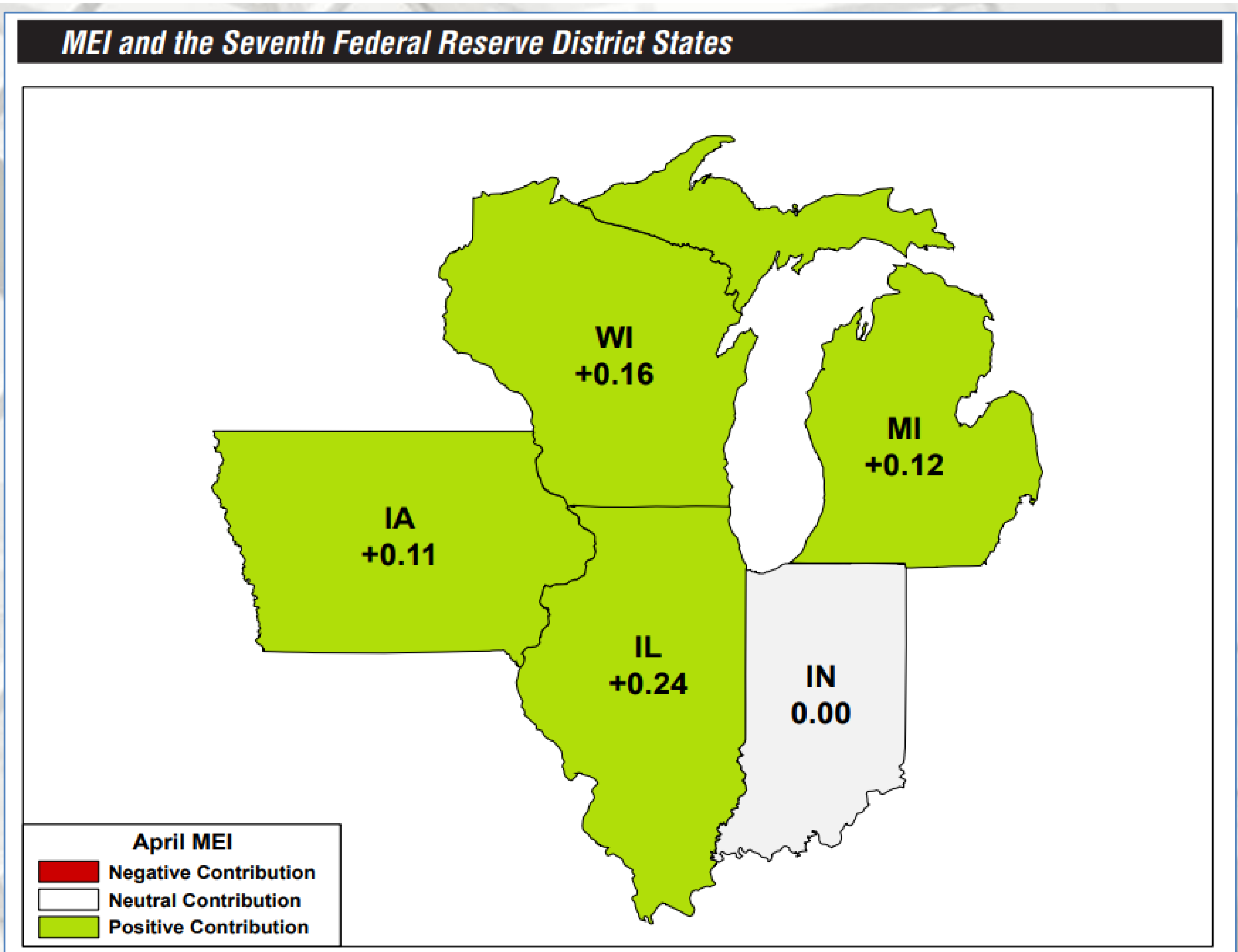
The service sector's contribution to the MEI edged up to +0.18 in April from +0.14 in March. The pace of service sector activity was up in Illinois, Iowa, and Michigan, but down in Indiana and Wisconsin. The service sector's contribution to the relative MEI fell to +0.03 in April from +0.41 in March.

The contribution from consumer spending indicators to the MEI moved down to +0.09 in April from +0.14 in March. Consumer spending indicators were, on balance, down in Indiana, Iowa, Michigan, and Wisconsin, but up in Illinois. Consumer spending's contribution to the relative MEI decreased to +0.18 in April from +0.30 in March." – Michael Adleman, Media Relations, The Federal Reserve Bank of Chicago

Source: https://www.chicagofed.org/publications/mei/index; 5/28/21

Return to TOC

The Federal Reserve Bank of Chicago: Midwest Economy Index (MEI)



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

Source: https://www.chicagofed.org/publications/mei/index; 5/28/21

Return to TOC

The Federal Reserve Bank of Chicago: National Activity Index (CFNAI)

Index Suggests Economic Growth Moderated in April

"The Chicago Fed National Activity Index (CFNAI) declined to +0.24 in April from +1.71 in March. Three of the four broad categories of indicators used to construct the index made positive contributions in April, but three categories deteriorated from March. The index's three-month moving average, CFNAI-MA3, decreased to +0.07 in April from +0.35 in March.

The CFNAI Diffusion Index, which is also a three-month moving average, moved down to +0.22 in April from +0.32 in March. Forty-seven of the 85 individual indicators made positive contributions to the CFNAI in April, while 38 made negative contributions. Twenty-four indicators improved from March to April, while 60 indicators deteriorated and one was unchanged. Of the indicators that improved, ten made negative contributions.

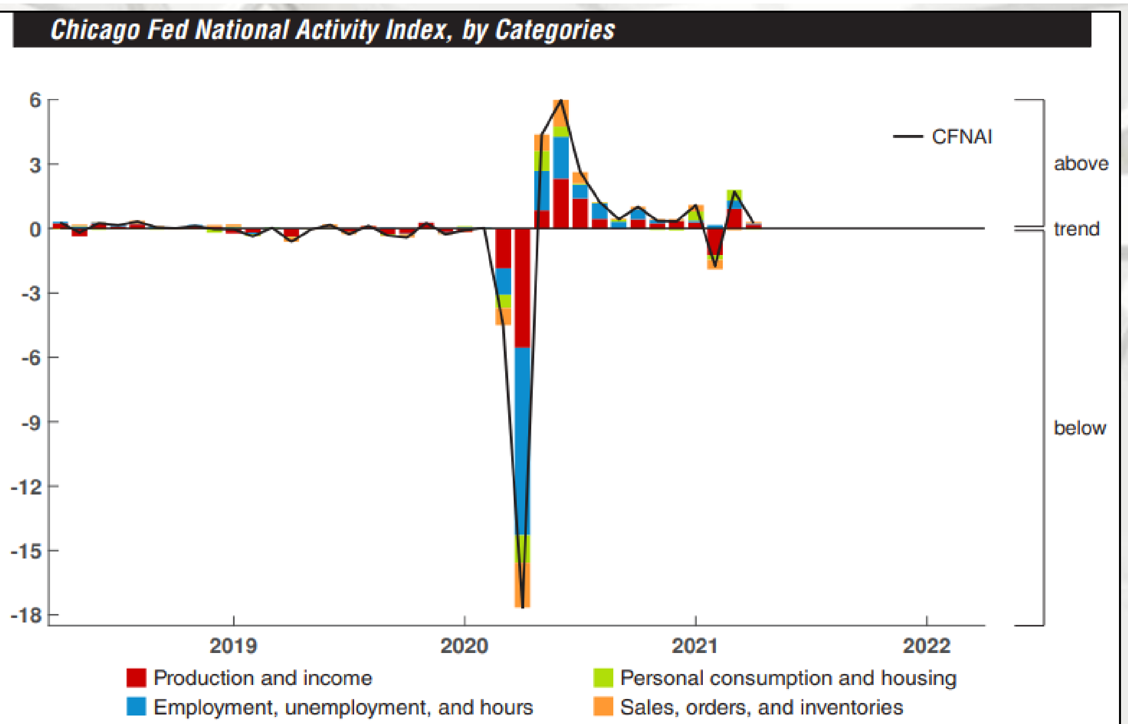
Production-related indicators contributed +0.18 to the CFNAI in April, down from +0.92 in March. Industrial production moved up 0.7 percent in April after increasing 2.4 percent in March, and manufacturing production increased 0.4 percent in April after rising 3.1 percent in the previous month. The contribution of the sales, orders, and inventories category to the CFNAI moved up to +0.07 in April from –0.09 in March.

The personal consumption and housing category contributed –0.06 to the CFNAI in April, down from +0.50 in March. The indicators in this category broadly deteriorated from March. The contribution of the employment, unemployment, and hours category to the CFNAI decreased to +0.05 in April from +0.38 in March. Nonfarm payrolls increased by 266,000 in April after rising by 770,000 in March, and the unemployment rate increased by 0.1 percentage points in April after decreasing by 0.2 percentage points in the previous month." – Michael Adleman, Media Relations, The Federal Reserve Bank of Chicago

Source: https://www.chicagofed.org/publications/cfnai/index; 5/24/21

Return to TOC

The Federal Reserve Bank of Chicago: National Activity Index (CFNAI)



CFNAI, CFNAI-MA3, and CFNAI Diffusion for the Latest Six Months and Year-Ago Month

	Apr '21	Mar '21	Feb '21	Jan '21	Dec '20	Nov '20	Apr '20
CFNAI							
Current	+0.24	+1.71	−1.75	+1.09	+0.34	+0.35	−17.66
Previous	N/A	+1.71	−1.20	+1.10	+0.32	+0.36	−17.69
CFNAI-MA3							
Current	+0.07	+0.35	−0.11	+0.59	+0.57	+0.60	−7.38
Previous	N/A	+0.54	+0.07	+0.59	+0.56	+0.60	−7.38
CFNAI Diffusion							
Current	+0.22	+0.32	+0.17	+0.37	+0.47	+0.51	−0.62
Previous	N/A	+0.40	+0.22	+0.37	+0.47	+0.52	−0.61

Current and Previous values reflect index values as of the May 24, 2021, release and April 22, 2021, release, respectively.
N/A indicates not applicable.

Source: https://www.chicagofed.org/publications/cfnai/index; 5/24/21

Return to TOC

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

Survey Suggests Growth Moderated in May

"The *Chicago Fed Survey of Business Conditions* (CFSBC) Activity Index decreased to +14 in May from +41 in April, suggesting that economic growth was above trend. The CFSBC Manufacturing Activity Index fell to +15 in May from +66 in April, and the CFSBC Nonmanufacturing Activity Index moved down to +16 in May from +28 in the previous month.

- Respondents' outlooks for the U.S. economy for the next 12 months improved, and remained optimistic on balance. Eighty-eight percent of respondents expected an increase in economic activity over the next 12 months, and 40 percent expected activity to return to its pre-pandemic level by the end of 2021.

- The pace of current hiring increased, as did respondents' expectations for the pace of hiring over the next 12 months. The hiring index moved into positive territory, and the hiring expectations index remained positive.

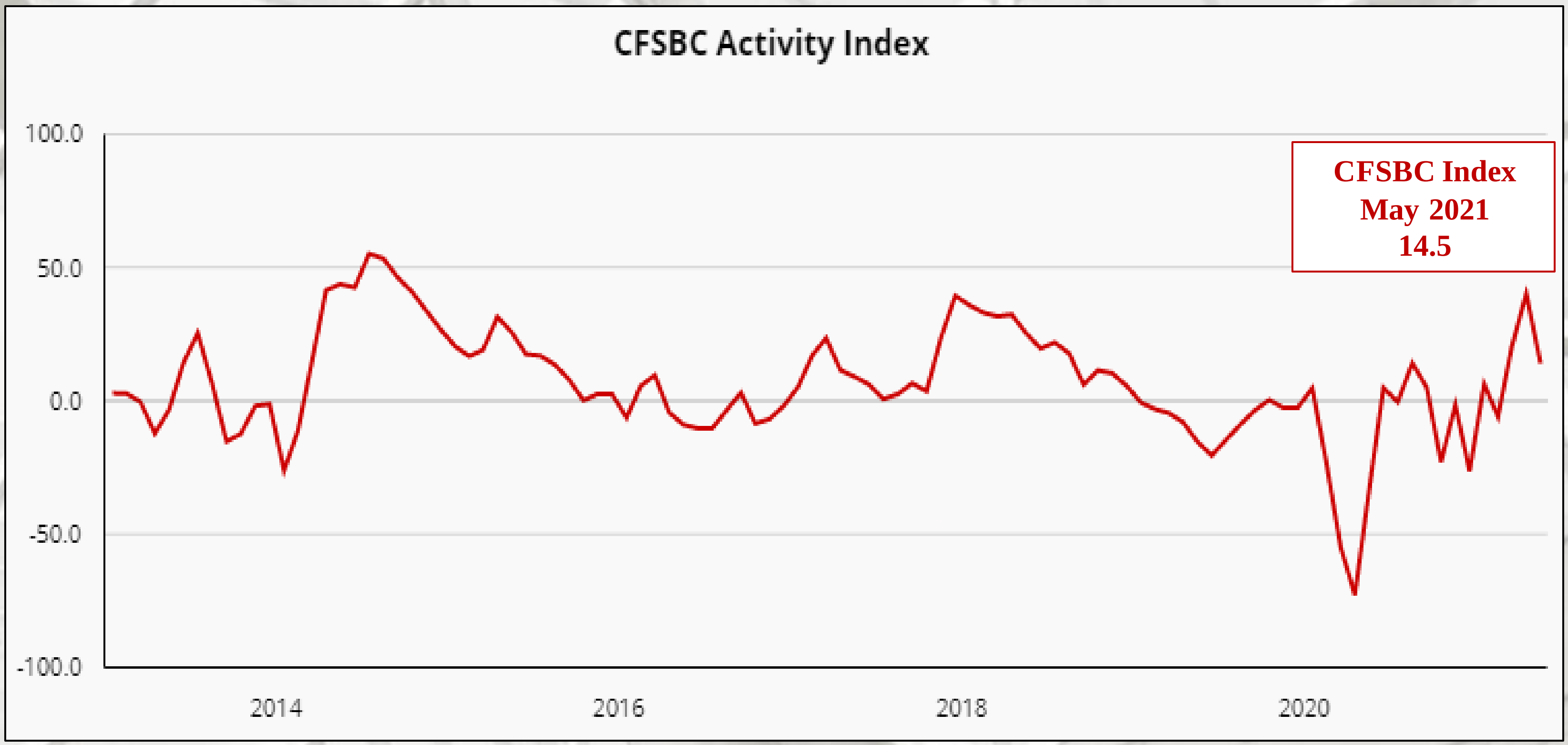
- Respondents' expectations for the pace of capital spending over the next 12 months increased, and the capital spending expectations index remained positive.

- The labor cost pressures index decreased, but the nonlabor cost pressures index increased. Both cost pressures indexes remained positive." – Thomas Walstrum, Senior Business Economist, The Federal Reserve Bank of Chicago

Source: https://www.chicagofed.org/publications/cfsbc/index; 6/10/21

Return to TOC

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



Source: https://www.chicagofed.org/publications/cfsbc/index; 6/10/21

Return to TOC

The Federal Reserve Bank of Dallas

Texas Manufacturing Expansion Carries On

"Texas factory activity expanded but at a slower pace in May, according to business executives responding to the Texas Manufacturing Outlook Survey. The production index, a key measure of state manufacturing conditions, fell 18 points to 15.7, a reading still well above average and indicative of healthy output growth. Other measures of manufacturing activity also pointed to slower but still-solid growth this month.

The new orders index came in at 20.8, down from 38.5 in April but more than triple the series average of 6.3. Similarly, the growth rate of orders index came in at 19.5, down from 32.3 but still elevated. The capacity utilization index remained high, though it slipped from 34.6 to 23.2, and the shipments index fell from 32.6 to 18.3.

Perceptions of broader business conditions improved markedly in May, though uncertainty picked up. The general business activity index came in at 34.9, just a couple points down from its April reading and markedly higher than its series average of 2.6. The company outlook index fell seven points to 22.0, a reading well above the series average. The outlook uncertainty index moved up from zero to 14.7, indicating that uncertainty is back on the rise.

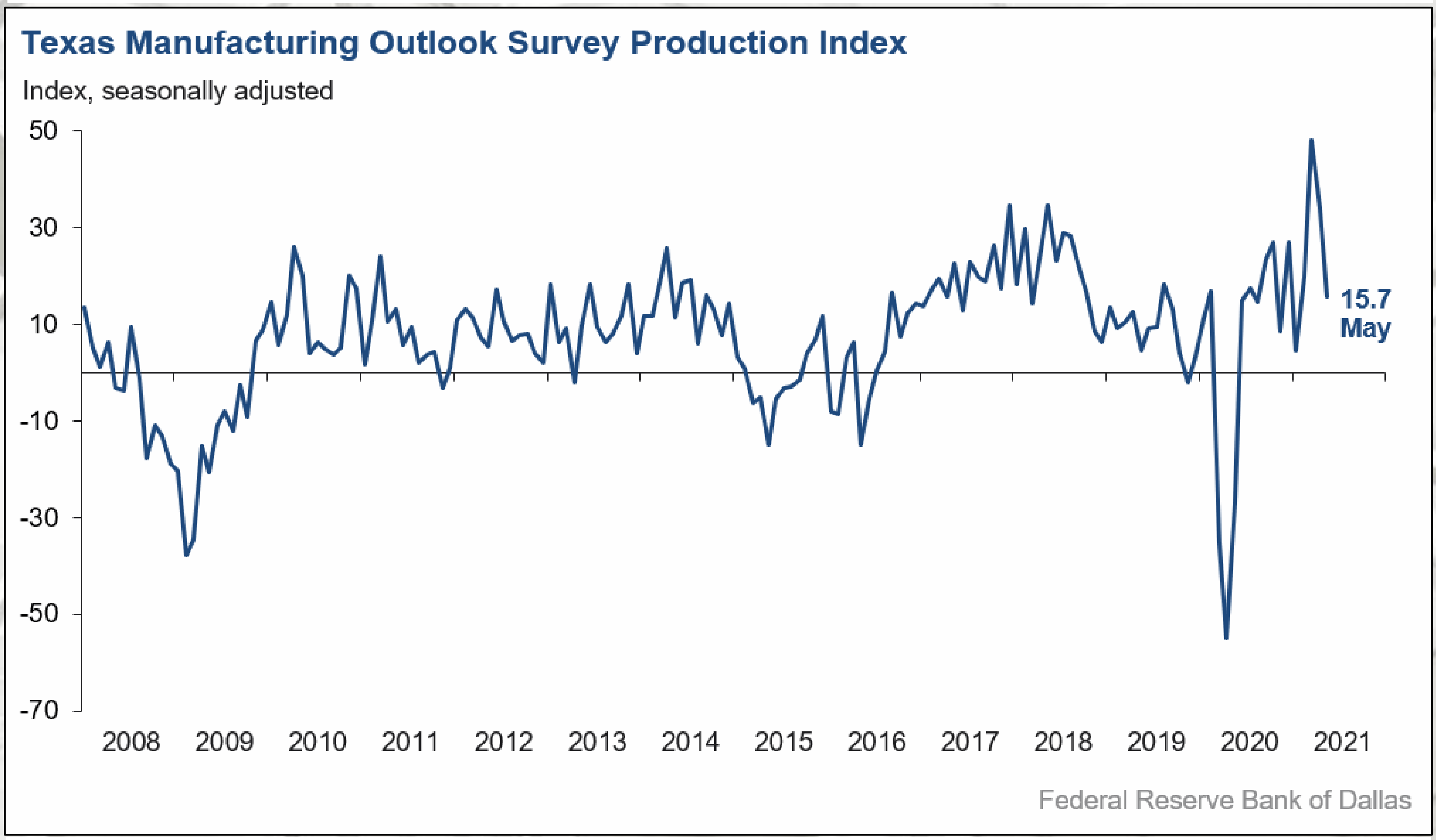
Labor market measures indicate robust but slower growth in employment and steady growth in work hours. The employment index came in at 22.7, down from 31.3 but still highly elevated. Twenty-nine percent of firms noted net hiring, while 6 percent noted net layoffs. The hours worked index held fairly steady at 22.7.

Input prices and wage pressures accelerated further in May. The raw materials prices index rose another nine points to 79.9, reaching an all-time high. The finished goods prices index remained near its all-time high reached last month, coming in at 38.4. The wages and benefits index pushed to a new high of 39.0." – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas

Source: https://www.dallasfed.org/research/surveys; 6/1/21

Return to TOC

The Federal Reserve Bank of Dallas



Texas Manufacturing Expansion Moderates

"Expectations regarding future manufacturing activity remained highly positive in May. The future production index held steady at 47.6, and the future general business activity index slipped five points to 31.4. Other measures of future manufacturing activity showed mixed movements, but all remained solidly in positive territory." – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas

Source: https://www.dallasfed.org/research/surveys; 6/1/21

Return to TOC

The Federal Reserve Bank of Dallas

Texas Service Sector Outlook Survey

Texas Service Sector Growth Remains Robust

"Activity in the Texas service sector continued to increase in May, though at a slightly reduced pace, according to business executives responding to the Texas Service Sector Outlook Survey. The revenue index, a key measure of state service sector conditions, slipped from 26.1 in April to 23.9 in May.

Labor market indicators suggest continued, though somewhat slower, growth in employment and hours worked in May. The employment index fell from 16.8 to 13.0, while the part-time employment index held roughly steady at 5.9. The hours worked index shed about two points to fall to 11.7 in May.

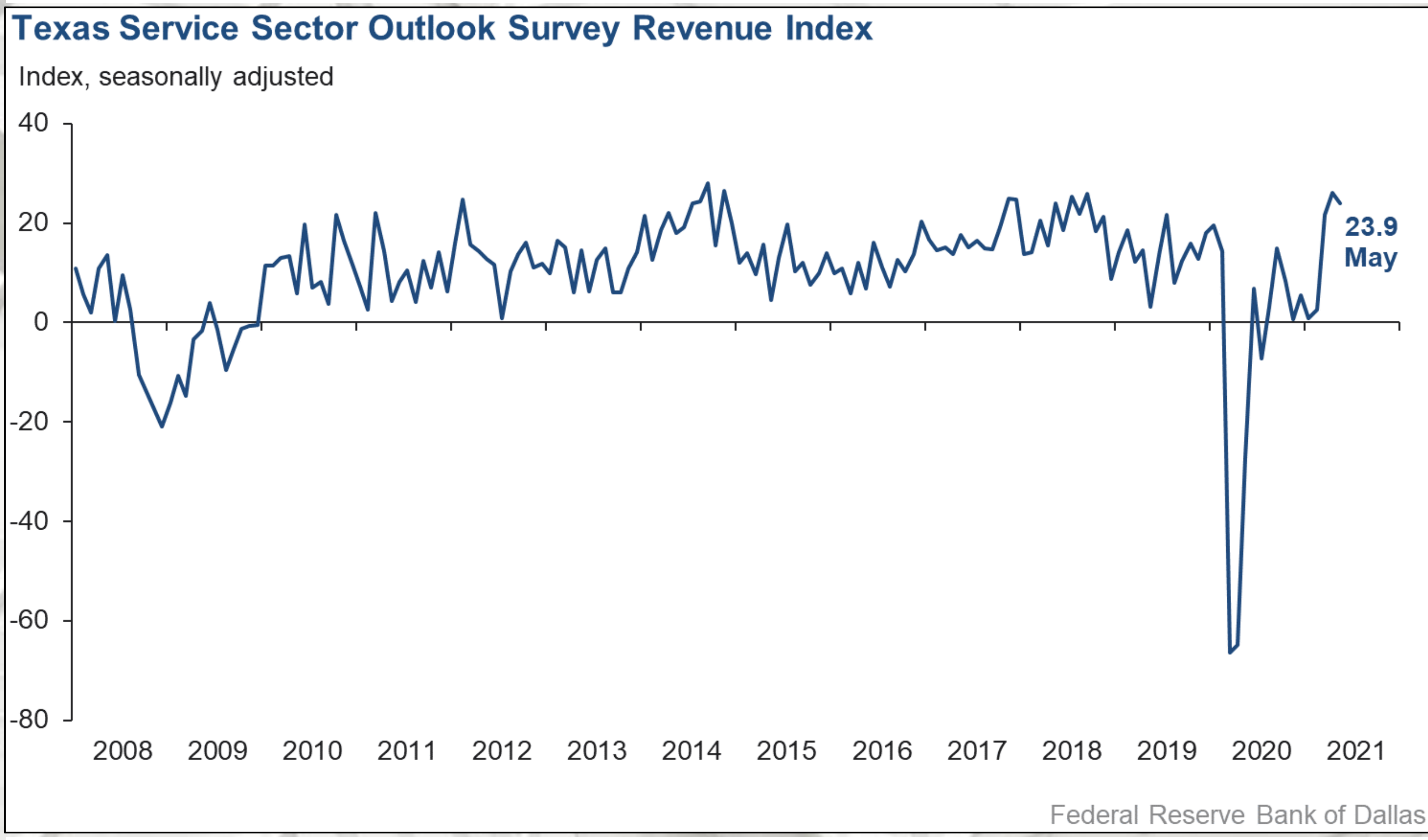
Perceptions of broader business conditions further improved compared with April. The general business activity index reached a new high of 40.0, with nearly half of all respondents reporting an increase in business activity in May. The company outlook index fell three points to 26.0, though it remains at a historically elevated level, while the capital expenditures index rose over six points to 17.2 – its best reading since 2018. The outlook uncertainty index rose from -10.4 to -5.1, though its negative reading suggests a further net decrease in uncertainty.

Price and wage pressures continued to accelerate in May. The wages and benefits index increased from 21.5 to 26.9 – an all-time high for the survey. The selling prices index similarly increased to an all-time high, rising from 18.6 to 23.5, while the input prices index surged over nine points to a 13-year high of 43.8." – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

Source: https://www.dallasfed.org/research/surveys/tssos/2021/2105.aspx; 6/2/21

Return to TOC

The Federal Reserve Bank of Dallas



Texas Service Sector Outlook Survey

“Respondents’ expectations regarding future business activity reflected further optimism this month. The future general business activity index increased to a new record of 48.2, while the future revenue index held steady at 58.3. Strong positive readings in other future service sector activity indexes such as employment and capital expenditures point to robust growth over the next six months.” – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

Source: https://www.dallasfed.org/research/surveys/tssos/2021/2105.aspx; 6/2/21

Return to TOC

The Federal Reserve Bank of Dallas

Texas Retail Sales Decline in May

"Retail sales activity fell in May, according to business executives responding to the Texas Retail Outlook Survey. The sales index, a key measure of state retail activity, declined from 9.7 in April to -6.7, its first negative reading since February. Inventories continued to decline, with the inventories index remaining negative, though increasing slightly from -14.8 to -11.0.

Retail labor market indicators were mixed in May, with continued growth in employment but little change in average workweek length. The employment index fell two points to 8.9, with the part-time employment index flat at 3.3. The hours worked index fell from 5.7 to 0.2, suggesting no net change in average hours worked.

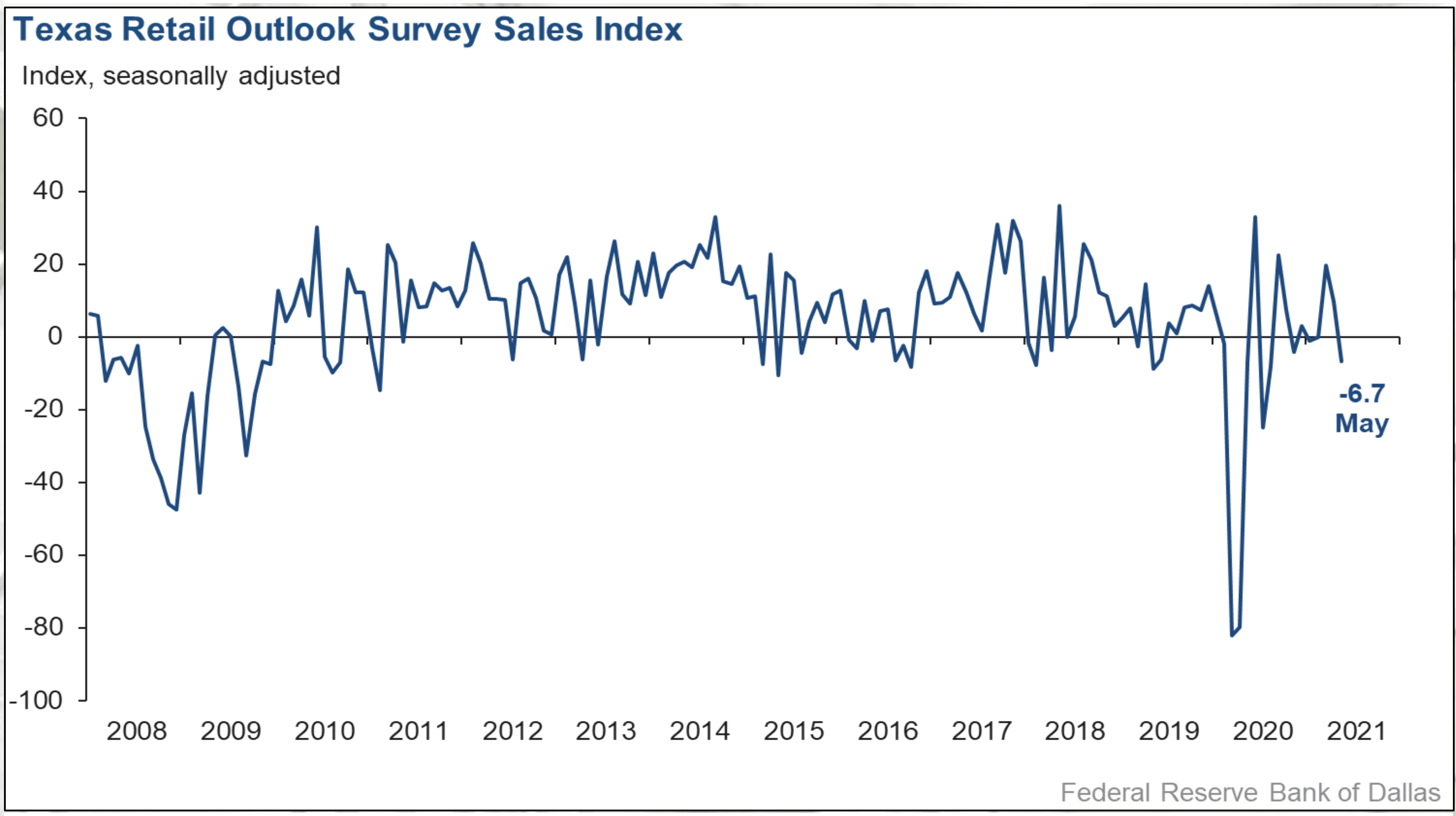
Retailers' perceptions of broader business conditions remained optimistic, though there was some softening in expectations compared with April. The general business activity index was roughly unchanged at 26.7, while the company outlook index declined over five points to 12.4. The outlook uncertainty index plunged from 4.1 to -18.8, suggesting a sharp decline in retailer uncertainty.

Retailers saw further acceleration of price pressures and elevated wage pressures in May. The selling prices index rose nearly six points to 46.2, and for the first time in the survey's history, a majority of respondents reported increasing prices compared with the previous month. The input prices index increased four points to 52.6, while the wages and benefits index slipped slightly to 15.4." – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

Source: https://www.dallasfed.org/research/surveys/tssos/2021/2105.aspx; 6/2/21

Return to TOC

The Federal Reserve Bank of Dallas



Texas Retail Sales Decline in May

"Retailers continued to be optimistic in May regarding future activity. The future general business activity index declined six points to 36.0, while the future sales index gained nearly 11 points to reach an eight-year high of 57.7. Other indexes of future retail activity such as employment increased or remained elevated, pointing to expectations of robust retail activity through the rest of the year." – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

Source: https://www.dallasfed.org/research/surveys/tsos/2021/2105.aspx; 6/2/21

Return to TOC

U.S. Economic Indicators

The Federal Reserve Bank of Kansas City

Tenth District Manufacturing Activity Continued to Expand at Strong Pace

Tenth District manufacturing activity continued to expand at a strong pace, and expectations for future activity remained solid.

Factory Activity Continued to Expand at a Strong Pace

"Tenth District manufacturing activity continued to expand at a strong pace, and expectations for future activity remained solid (Chart 1). The index of prices paid for raw materials compared to a month ago posted a new survey record high for the second straight month, and prices received for finished goods also surpassed historical levels. Price indexes vs. a year ago also posted record highs, with 98% of firms reporting higher materials prices compared to a year ago. Moving forward, district firms expected materials prices and finished goods prices to continue to increase over the next six months.

The month-over-month composite index was 26 in May, modestly lower than 31 in April, but even with the composite index of 26 from March. The composite index is an average of the production, new orders, employment, supplier delivery time, and raw materials inventory indexes. The growth in district manufacturing activity was driven higher by increased activity at durable goods plants, especially for primary and fabricated metals, machinery, furniture, and transportation equipment manufacturing." – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, Federal Reserve Bank of Kansas City

Source: https://www.kansascityfed.org; 5/27/21

Return to TOC

U.S. Economic Indicators

The Federal Reserve Bank of Kansas City

Factory Activity Continued to Expand at a Strong Pace

"The month-over-month index for new orders expanded at a faster pace in May. Other month-over-month indexes remained highly positive, indicating expansion, but slowed slightly from record levels in April. Inventories for materials and finished goods also remained positive. Year-over-year factory indexes rose further in May, and the year-over-year composite index climbed from 35 to 43. The future composite index remained solid at 33, similar to previous months but with an increase in expectations for production, shipments, and new orders.

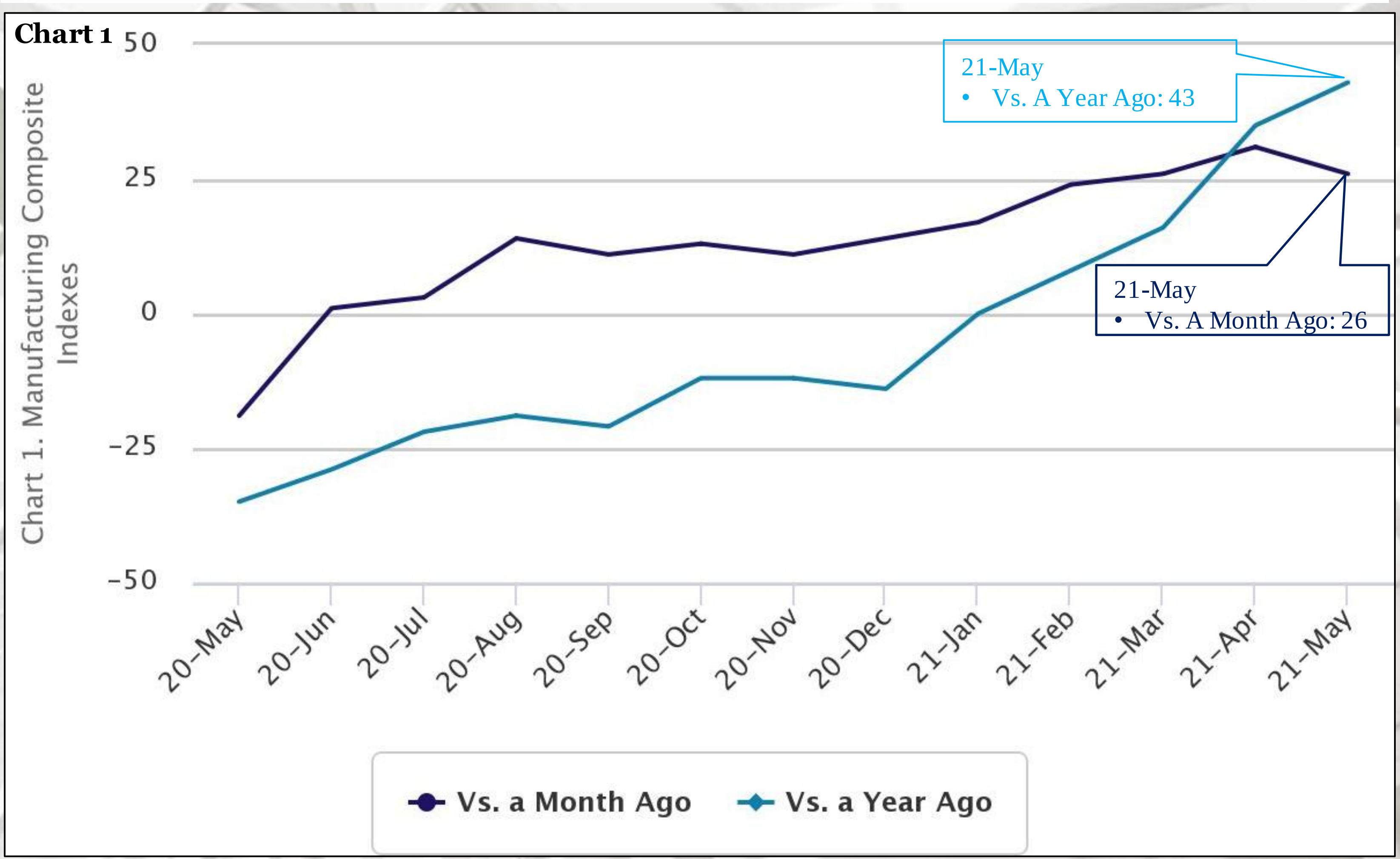
Special questions

This month contacts were asked special questions about the impacts of rising material prices and lack of availability/delivery time in addition to questions about firms' expectations for wages. Around 84% of firms indicated rising material prices and delivery time delays have negatively affected their firm. When asked how long firms expected rising materials prices and lack of availability/delivery time to persist, 27% reported 3-6 months, 52% reported 6-12 months, and 17% indicated more than a year. Less than 5% of firms anticipated these issues would be resolved within the next 3 months. Regarding wages for the remainder of 2021, 10% of firms indicated they expected to raise wages up to 2%, over a third of firms expected to raise wages 2-4%, and 20% of firms expected to raise wages 4-6%. Around 13% of firms expected wage increases of 6% or more, and 10% of firms planned to hold wages steady. Over 84% of firms indicated hiring plans have been restrained because they "cannot find workers with required skills."" – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, Federal Reserve Bank of Kansas City

Source: https://www.kansascityfed.org; 5/27/21

Return to TOC

The Federal Reserve Bank of Kansas City



Source: https://www.kansascityfed.org; 5/27/21

Return to TOC

U.S. Economic Indicators

The Federal Reserve Bank of Kansas City

Tenth District Services Activity Continued to Expand at High Levels

Tenth District services activity continued to expand at high levels, and expectations for future activity increased.

Business Activity Continued to Expand

"Tenth District services activity continued to expand at high levels, and expectations for future activity increased (Chart 1). Indexes for input prices and selling prices set survey record highs again in May, with more firms indicating price increases from a month ago and a year ago (highest postings since survey inception in 2014). Additionally, firms expected further increases to input and selling price over the next six months.

The month-over-month services composite index was 18 in May, slightly lower than 20 in April and 22 in March. The composite index is a weighted average of the revenue/sales, employment, and inventory indexes. Month-over-month indexes were mostly positive in May, indicating expansion. The general revenue and sales index rose, driven by more wholesale, retail, and restaurant activity while auto activity declined slightly. The capital expenditures index increased again in May to the highest rate since late 2019. On the other hand, the inventory index vs. a month ago edged lower. Year-over-year indexes expanded further, now compared to the depths of the pandemic last year, and the year-over-year composite index climbed from 22 to 28. Expectations for future services activity increased to the highest level since late 2019, and the future composite index rose from 26 to 29." – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, The Federal Reserve Bank of Kansas City

Source: https://www.kansascityfed.org; 5/28/21

U.S. Economic Indicators

Source: https://www.kansascityfed.org; 5/28/21

Return to TOC

The Federal Reserve Bank of New York

Empire State Manufacturing Survey

Activity Remains Vigorous

“Business activity continued to grow at a solid clip in New York State, according to firms responding to the May 2021 *Empire State Manufacturing Survey*. The headline general business conditions index was little changed at 24.3. New orders and shipments continued to expand strongly, and unfilled orders increased. Delivery times lengthened significantly, and inventories moved somewhat higher. Employment levels grew modestly, and the average workweek increased. Both input prices and selling prices rose at a record-setting pace. Looking ahead, firms remained optimistic that conditions would improve over the next six months, and expected significant increases in employment and prices.

As occurred last month, manufacturing activity grew at a sturdy pace in New York State in May. The general business conditions index edged down two points to 24.3. Thirty-seven percent of respondents reported that conditions had improved over the month, while 13 percent reported that conditions had worsened. The new orders index moved up two points to 28.9, a multi-year high, and the shipments index climbed five points to 29.7, pointing to another month of strong gains in orders and shipments. Unfilled orders increased. The delivery times index moved down five points, but at 23.6, it held near its record high from last month, pointing to significantly longer delivery times. Inventories moved somewhat higher.” – Richard Deitz and Jason Bram, The Federal Reserve Bank of New York

Source: https://www.newyorkfed.org/survey/empire/empiresurvey_overview; 5/17/21

Return to TOC

The Federal Reserve Bank of New York

Empire State Manufacturing Survey

Price Indexes Hit New Records

“The index for number of employees held steady at 13.6, while the average workweek index climbed six points to 18.7, indicating ongoing gains in employment and hours worked. Both price indexes reached record highs: the prices paid index rose nine points to 83.5, and the prices received index rose two points to 37.1.

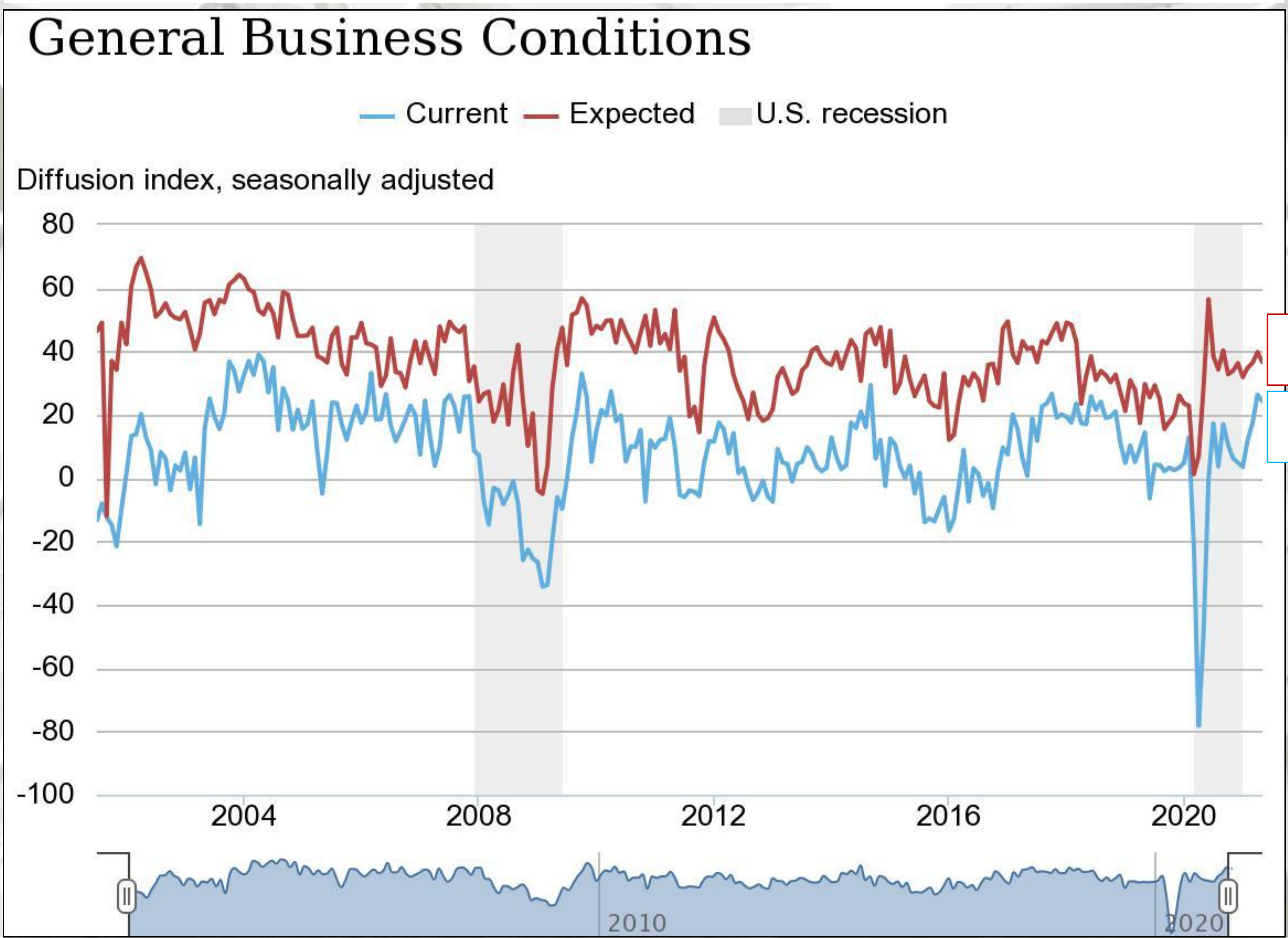
Further Price Increases and Strong Employment Growth Expected

The index for future business conditions rose three points to 39.8, suggesting that firms remained optimistic about future conditions. The indexes for future new orders and shipments both came in above 40. The indexes for future prices paid and future prices received continued to April upward. The index for future employment climbed to a record high, with close to half of firms expecting to increase employment in the months ahead. The capital expenditures index rose to 31.5, and the technology spending index came in at 21.9.”
– Richard Deitz and Jason Bram, The Federal Reserve Bank of New York

Source: https://www.newyorkfed.org/survey/empire/empiresurvey_overview; 5/17/21

Return to TOC

The Federal Reserve Bank of New York



May 2021
36.6

May 2021
24.3

Source: https://www.newyorkfed.org/survey/empire/empiresurvey_overview; 5/17/21

Return to TOC

The Federal Reserve Bank of New York

Business Leaders Survey (Services)

Activity Continues To Grow Strongly

“Business activity grew at a record-setting pace in the region’s service sector, according to firms responding to the Federal Reserve Bank of New York’s May 2021 *Business Leaders Survey*. The survey’s headline business activity index increased nine points to 38.8. The business climate index rose seventeen points, though it remained negative at -8.5, indicating that on net firms viewed the business climate as somewhat worse than normal. Employment levels increased modestly, and wage increases picked up. Input price increases accelerated, and selling prices increased modestly. Capital spending held steady, and firms expect to increase capital spending over the next six months. Looking ahead, firms expressed widespread optimism that conditions would improve, with the future business activity and future employment indexes reaching record highs.

Business activity in the region’s service sector increased at a solid pace for a second consecutive month in May. The headline business activity index rose nine points to 38.8, a record high. Just over half of respondents reported that conditions improved over the month, while 12 percent said that conditions worsened. After rising twenty-five points last month, the business climate index advanced another seventeen points but held somewhat below zero at -8.5. About one-third of respondents viewed the business climate as better than normal, and 41 percent said the business climate was worse than normal.” – Jason Bram and Richard Deitz, The Federal Reserve Bank of New York

Source: https://www.newyorkfed.org/survey/business_leaders/bls_overview; 5/18/21

Return to TOC

The Federal Reserve Bank of New York

Business Leaders Survey (Services)

Employment and Wages Push Higher

"The employment index rose eight points to 15.2, pointing to a modest increase in employment levels. The wages index climbed five points to 37.3, signaling a small pickup in wage growth. Input price increases remained significant, with the prices paid index rising eight points to 62.7. The prices received index held steady at 18.8, signaling modest selling price increases. The capital spending index edged down to -2.1, suggesting that capital spending was little changed.

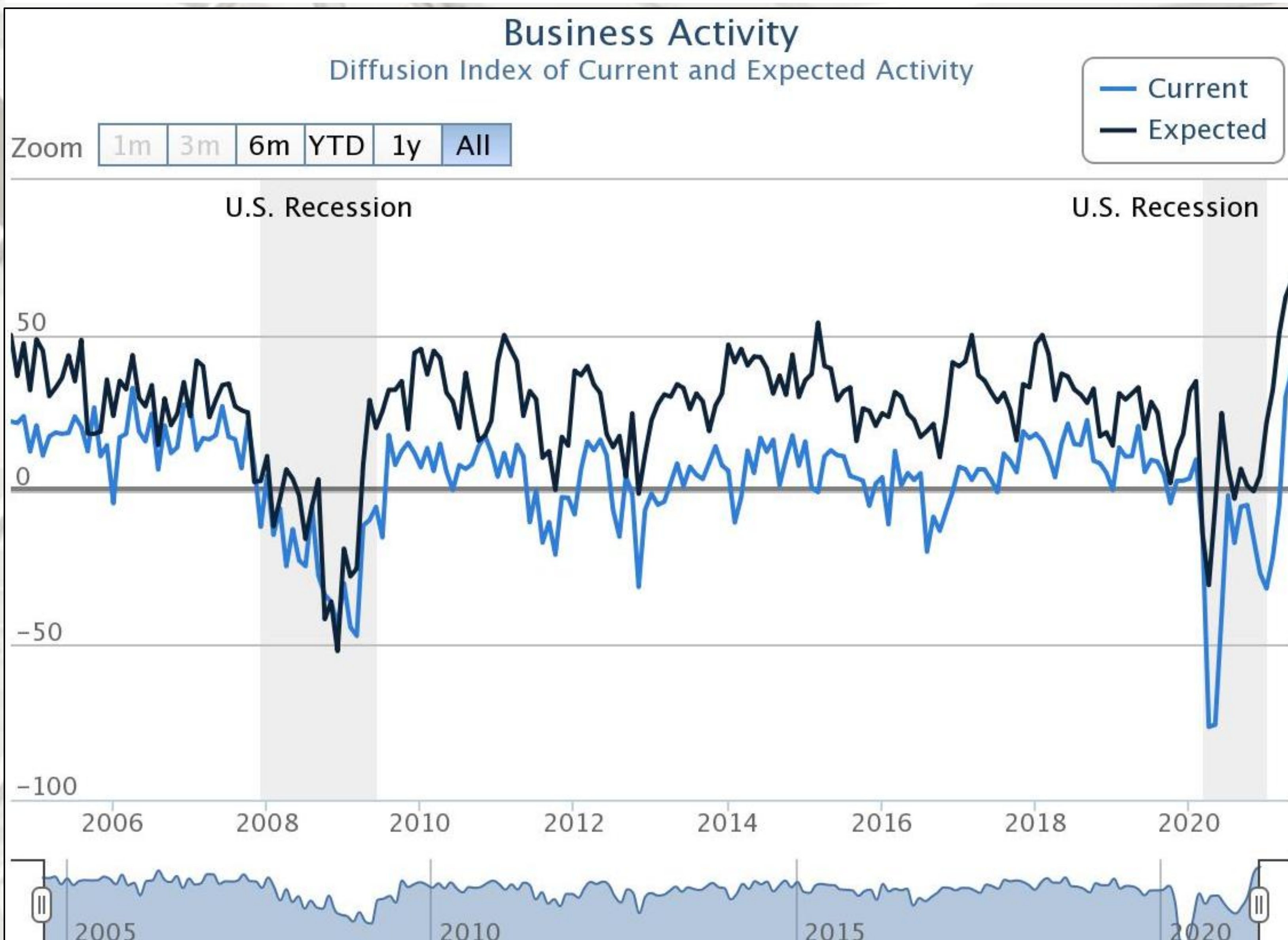
Widespread Optimism About Future Conditions

The index for future business activity reached a record high of 67.8, pointing to widespread optimism about future conditions, and the future business climate index fell just slightly from last month's record high. The index for future employment rose to 51.8, also a record high. Wages and prices are expected to continue to rise, and firms expect to increase capital spending in the months ahead." – Jason Bram and Richard Deitz, The Federal Reserve Bank of New York

Source: https://www.newyorkfed.org/survey/business_leaders/bls_overview; 5/18/21

Return to TOC

The Federal Reserve Bank of New York



May 2021
67.8

May 2021
38.8

Source: https://www.newyorkfed.org/survey/business_leaders/bls_overview; 5/18/21

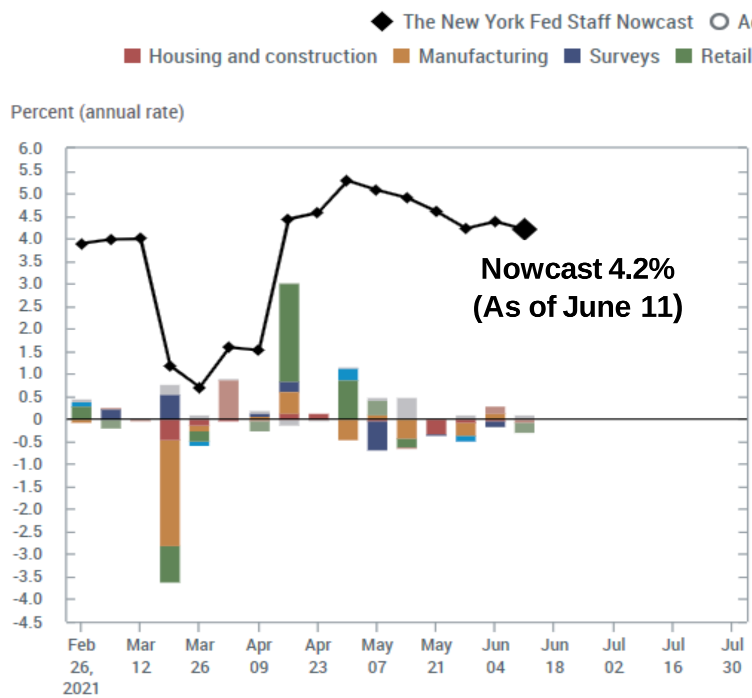
Return to TOC

U.S. Economic Indicators

The Federal Reserve Bank of New York Nowcast

2021:Q3 | 2021:Q2 | 2021:Q1 | 2020:Q4

Last Release 11:15am EST Jun 11, 2021



Data Flow (Jun 11, 2021)

Model Update	Release Date	Data Series	Actual	Impact	Nowcast GDP Growth
Jun 11					4.20
	8:30AM Jun 10	CPI-U: All items less food and energy	0.74	0.02	
	8:30AM Jun 10	CPI-U: All items	0.64	0.01	
	10:00AM Jun 08	JOLTS: Total job openings	998.00	-0.05	
	8:50AM Jun 08	Imports: Goods and services	-1.37	-0.19	
	8:50AM Jun 08	Exports: Goods and services	1.15	-0.03	
		Data revisions		0.07	
Jun 04					4.37

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.

June 11, 2020: Highlights

- "The New York Fed Staff Nowcast stands at 4.2% for 2021:Q2 and 5.3% for 2021:Q3.
- News from this week's data releases decreased the nowcast for 2021:Q2 by 0.2 percentage point and decreased the nowcast for 2021:Q3 by 0.1 percentage point.
- Negative surprises from international trade data accounted for most of the decrease in both quarters."
  – The Federal Reserve Bank of New York

Source: https://www.newyorkfed.org/research/policy/nowcast; 6/11/21

Return to TOC

U.S. Economic Indicators

The Federal Reserve Bank of Philadelphia

May 2021 Manufacturing Business Outlook Survey

"Manufacturing activity in the region continued to improve this month, according to firms responding to the April *Manufacturing Business Outlook Survey*. The survey's current indicators for general activity, new orders, and shipments declined from April's readings but remained elevated. Additionally, employment increases were less widespread this month, while both price indexes reached long-term highs. Most future indexes moderated this month but continue to indicate that the firms expect growth over the next six months.

Current Activity Indicators Remain Positive

The diffusion index for current activity decreased 19 points to 31.5 in May, after reaching long-term high readings in March and April (see Chart). Over 43 percent of the firms reported increases in current activity this month (down from 59 percent last month), while 12 percent reported decreases (up from 8 percent). The index for new orders decreased 4 points to a reading of 32.5. The current shipments index fell 4 points to 21.0 in May. Over 42 percent of the firms reported increases in shipments this month, while 21 percent reported decreases.

On balance, the firms reported increases in manufacturing employment, but increases were less widespread, as the current employment index decreased 12 points to 19.3. Almost 26 percent of the firms reported higher employment, 6 percent reported lower employment, and 65 percent reported no change. The average workweek index rose 6 points to 35.5." – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

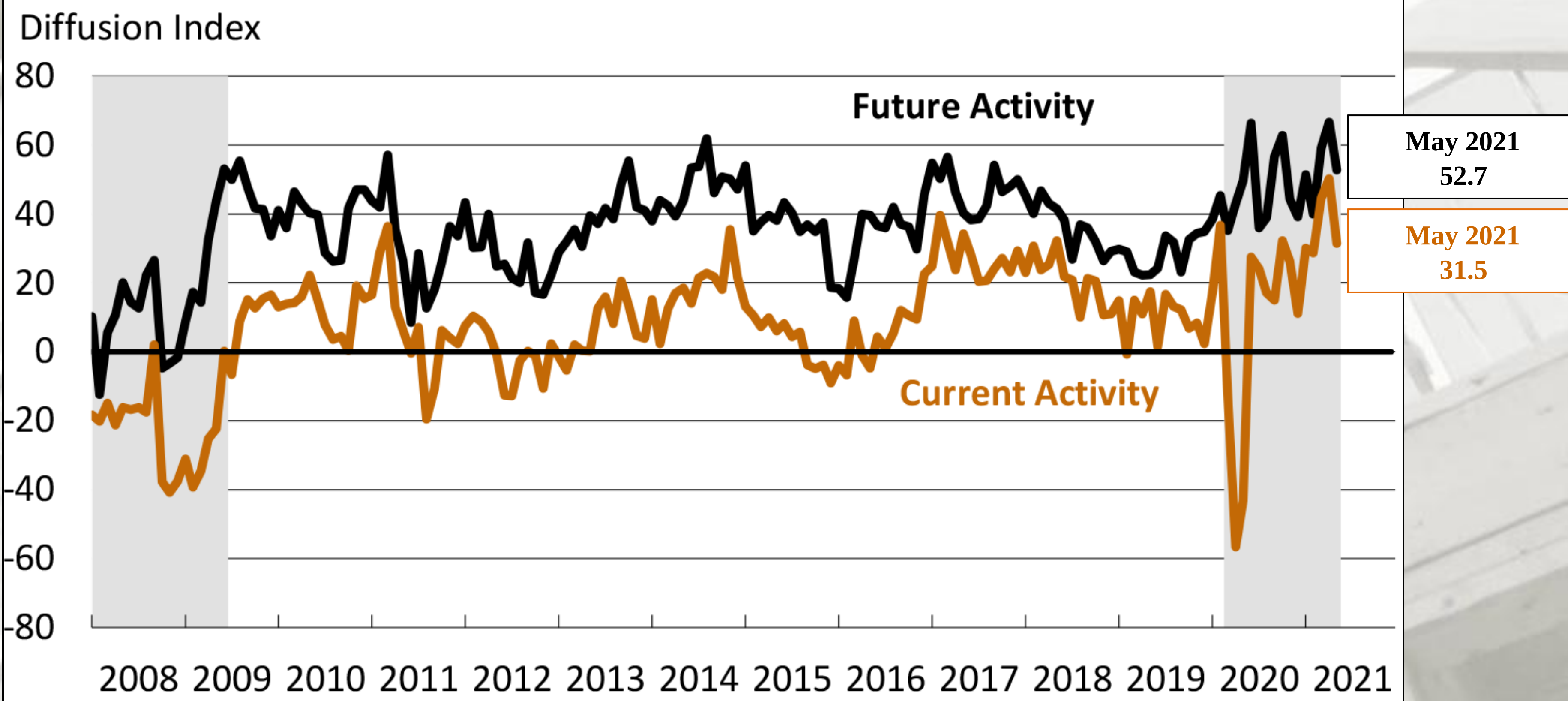
Source: https://www.philadelphiafed.org/surveys-and-data/regional-economic-analysis/mbos-2021-05; 5/20/21

Return to TOC

The Federal Reserve Bank of Philadelphia

Chart. Current and Future General Activity Indexes

January 2008 to May 2021



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/surveys-and-data/regional-economic-analysis/mbos-2021-05; 5/20/21

Return to TOC

The Federal Reserve Bank of Philadelphia

Price Indicators Reach 40-Year Highs

"Price increases were more widespread this month for the firms' inputs and own goods. The prices paid diffusion index increased 8 points to 76.8, its highest reading since March 1980. Nearly 77 percent of the firms reported increases in input prices, while none reported decreases. The current prices received index increased 7 points to 41.0, its highest reading since May 1981. Nearly 43 percent of the firms reported increases in prices of their own manufactured goods, up from 36 percent in April; most firms (55 percent) reported stable output prices.

Firms Expect Own Prices to Rise Faster Than Inflation

In this month's special questions, the firms were asked to forecast the changes in the prices of their own products and for U.S. consumers over the next four quarters. Regarding their own prices, the firms' median forecast was for an increase of 5.0 percent, an increase from 3.0 percent when the question was last asked in February. The firms' actual price change over the past year was 2.3 percent. The firms expect their employee compensation costs (wages plus benefits on a per employee basis) to rise 4.0 percent over the next four quarters, an increase from 3.0 percent in the previous quarter. When asked about the rate of inflation for U.S. consumers over the next year, the firms' median forecast was 4.0 percent, an increase from 3.0 percent in the previous quarter. The firms' median forecast for the long-run (10-year average) inflation rate was 3.0 percent, the same as in February." – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

Source: https://www.philadelphiafed.org/surveys-and-data/regional-economic-analysis/mbos-2021-05; 5/20/21

Return to TOC

The Federal Reserve Bank of Philadelphia

Firms Remain Optimistic About Growth

“The respondents continue to expect growth over the next six months, although most of the survey’s future indexes declined. The diffusion index for future general activity decreased 14 points to 52.7 in May after reaching a 20-year high last month. Nearly 57 percent of the firms expect growth over the next six months, down from 71 percent last month. The future new orders index fell 9 points to 50.3, and the future shipments index decreased 6 points to 57.4 this month. The future employment index fell 4 points to 52.1. Nearly 55 percent of the firms expect to increase employment in their manufacturing plants over the next six months, compared with only 3 percent that anticipate employment declines.

Summary

Responses to the May *Manufacturing Business Outlook Survey* suggest continued expansion for the region’s manufacturing sector. The indicators for current activity, new orders, and shipments decreased from last month but remained elevated. The survey’s future indexes also moderated this month but continue to suggest expected growth over the next six months.” – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

Source: https://www.philadelphiafed.org/surveys-and-data/regional-economic-analysis/mbos-2021-05; 5/20/21

Return to TOC

The Federal Reserve Bank of Philadelphia

May 2021 Nonmanufacturing Business Outlook Survey

“Responses to the May *Nonmanufacturing Business Outlook Survey* suggest expansion in nonmanufacturing activity in the region. The index for general activity at the firm level held mostly steady, and the index for new orders increased; however, the sales/revenues index edged down. Additionally, the survey’s index for full-time employment rose notably to a reading much higher than that reported since the pandemic began. The firms continue to report increases in prices of their inputs and outputs, with the index measuring the former reaching an all-time high. The respondents indicated improved optimism about the next six months, as both future activity indexes increased.

Current Indexes Remain Positive

The diffusion index for current general activity at the firm level held mostly steady at 22.1 (see Chart). More than 47 percent of the firms reported increases in activity, while 25 percent reported decreases. The sales/revenues index decreased from 16.5 in April to 13.8 this month, while the new orders index rose 9 points to 16.5. The share of firms reporting increases in new orders (35 percent) exceeded the share reporting decreases (18 percent). The current regional activity index was little changed at 36.9 in May.” – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

Source: https://www.philadelphiafed.org/surveys-and-data/regional-economic-analysis/nonmanufacturing-business-outlook-survey; 5/20/21

Return to TOC

The Federal Reserve Bank of Philadelphia

May 2021 Nonmanufacturing Business Outlook Survey

Full-Time Employment Index Reaches Pre-Pandemic Levels

"The firms reported, on balance, increases in full- and part-time employment. The full-time employment index rose 17 points to a reading of 24.0, its highest reading since March 2019. Over 32 percent of the firms reported increases in full-time employment (up from 18 percent last month), while 8 percent reported decreases (down from 11 percent). The part-time employment index increased 2 points to 9.4. Most firms reported steady part-time employment (57 percent), while 22 percent of the firms reported increases and 13 percent reported decreases. The average workweek index edged up 1 point to 11.9.

Prices Paid Index Reaches All-Time High

Price indicator readings suggest overall increases in prices for inputs and the firms' own goods and services. The prices paid index rose 16 points to 49.1 in May, its highest reading since this survey began in March 2011. Half of the respondents reported increases in their input prices, 31 percent reported no change, and 1 percent reported decreases. Regarding prices for the firms' own goods and services, the prices received index increased 2 points to 16.6 this month." – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

Source: https://www.philadelphiafed.org/surveys-and-data/regional-economic-analysis/nonmanufacturing-business-outlook-survey; 5/20/21

Return to TOC

The Federal Reserve Bank of Philadelphia

May 2021 Nonmanufacturing Business Outlook Survey

Firms Forecast Own Prices to Rise Slower Than Inflation

"In this month's special questions, the firms were asked to forecast the changes in the prices of their own products and services and for U.S. consumers over the next four quarters (see Special Questions). Regarding their own prices, the firms' median forecast was for an increase of 3.0 percent, the same as when the question was last asked in February. Regarding the firms' own price change over the previous year, the median response was 1.6 percent, up from 1.0 percent in February. The firms expect their employee compensation costs (wages plus benefits per employee) to rise 3.0 percent over the next four quarters, unchanged from last quarter. When asked about the rate of inflation for U.S. consumers over the next year, the firms' median forecast was 4.0 percent, up from 2.5 percent in February. The firms' forecast for the long-run (10-year) inflation rate was unchanged at 4.0 percent.

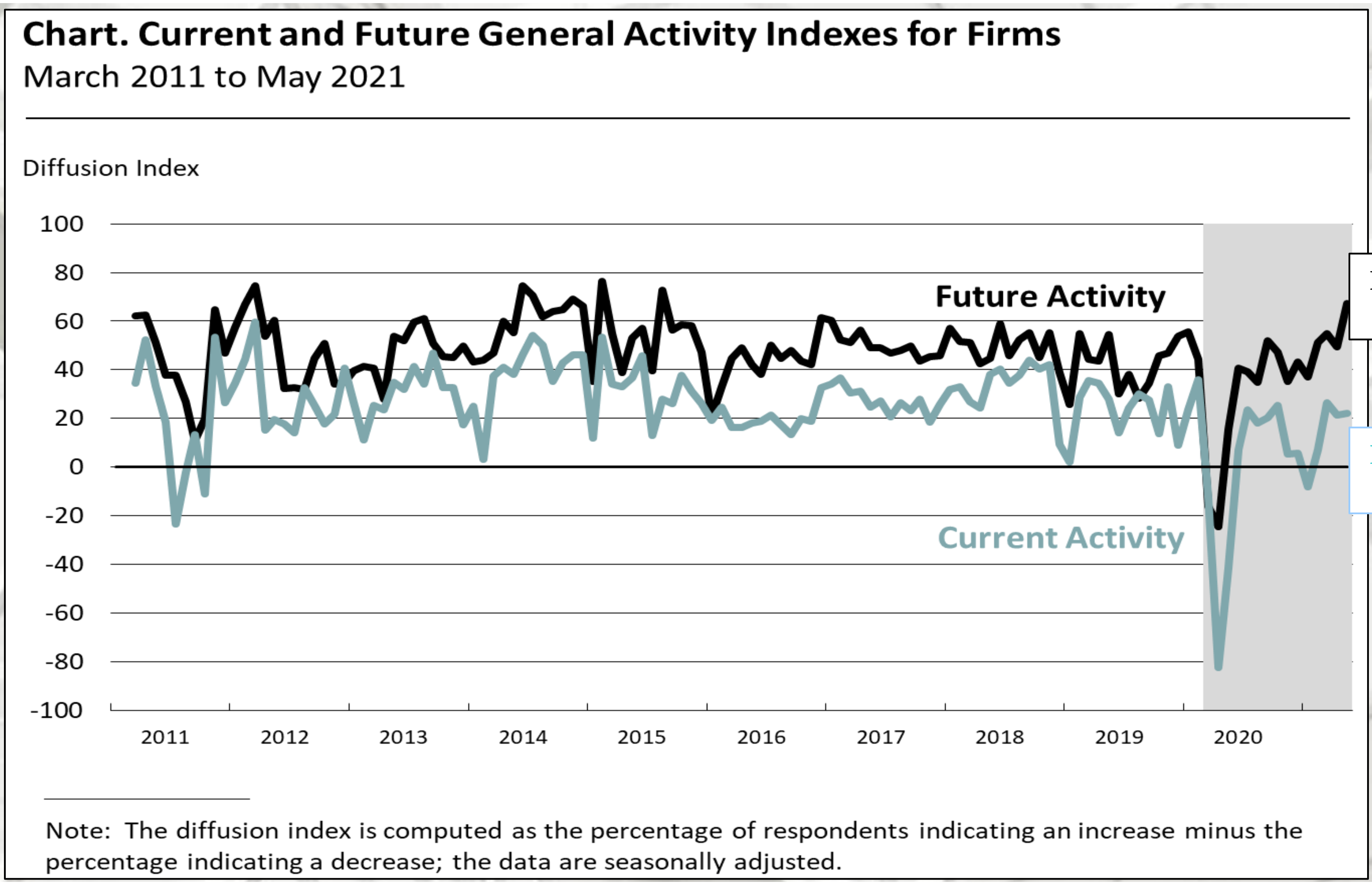
Future Indicators Strengthen

Both future activity indexes suggest more widespread optimism about nonmanufacturing activity over the next six months. The diffusion index for future activity at the firm level rose from a reading of 49.3 in April to 67.1 this month (see Chart). Nearly 77 percent of the respondents (up from 66 percent last month) expect an increase in activity at their firms over the next six months, compared with 10 percent that expect decreases (down from 16 percent). The future regional activity index increased 14 points to 66.6 in May." – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

Source: https://www.philadelphiafed.org/surveys-and-data/regional-economic-analysis/nonmanufacturing-business-outlook-survey; 5/20/21

Return to TOC

The Federal Reserve Bank of Philadelphia



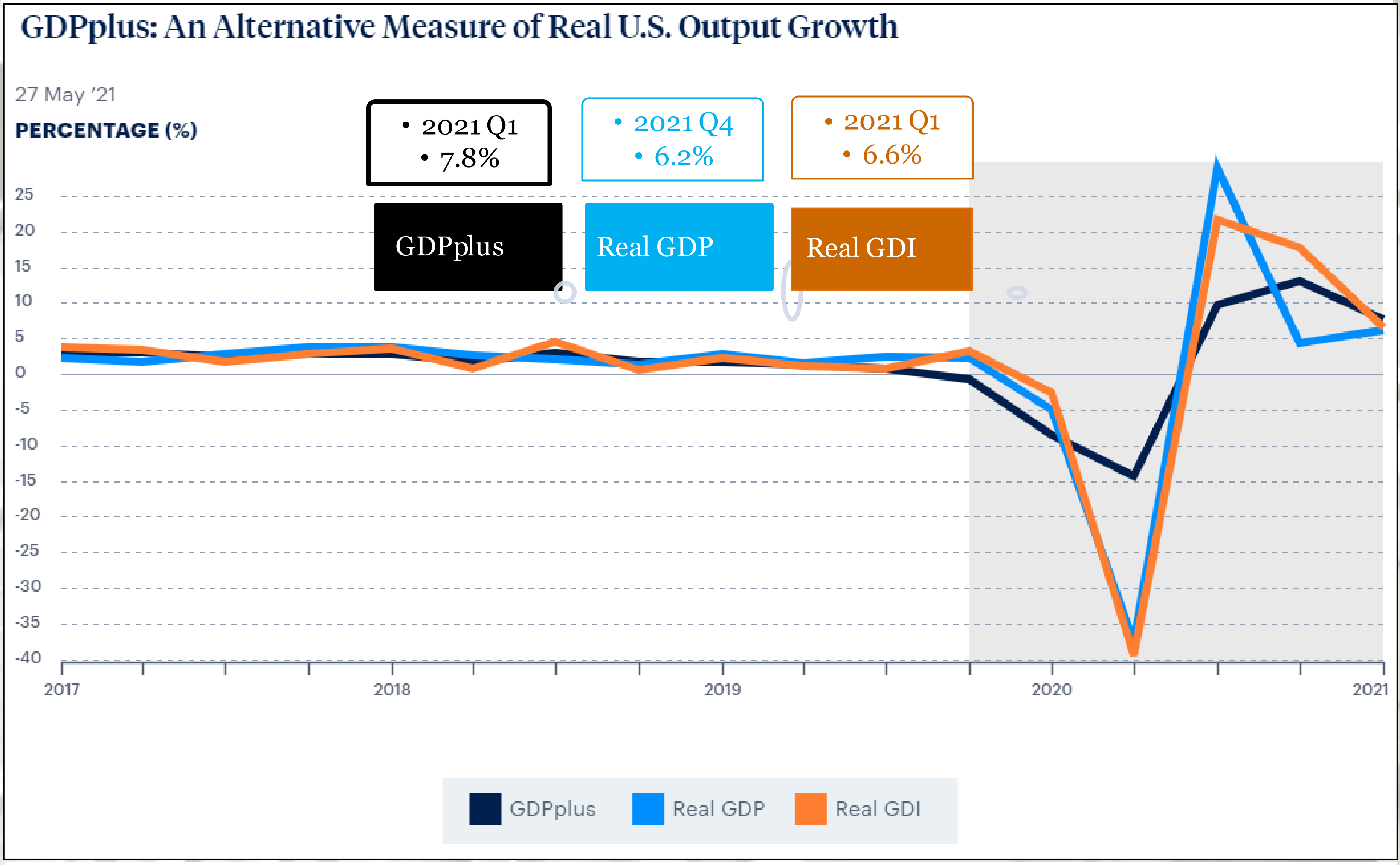
Summary

"Responses to this month's *Nonmanufacturing Business Outlook Survey* indicated continued expansion in nonmanufacturing activity in the region. The indicators for firm-level general activity, sales/revenues, and new orders all remained positive. Additionally, the firms reported overall increases in employment, and the full-time employment index reached a two-year high. The future activity indexes suggest that respondents expect growth at their firms and in the region over the next six months." – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

Source: https://www.philadelphiafed.org/surveys-and-data/regional-economic-analysis/nonmanufacturing-business-outlook-survey; 5/20/21

Return to TOC

The Federal Reserve Bank of Philadelphia: GDPplus



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

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

Source: https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/gdpplus; 5/27/21

Return to TOC

U.S. Economic Indicators

The Federal Reserve Bank of Richmond

Manufacturing Activity Grew in April

"Fifth District manufacturing activity strengthened in May, according to the most recent survey from the Richmond Fed. The composite index inched up from 17 in April to 18 in May, as all three component indexes – shipments, new orders, and employment – reflected growth. A majority of firms reported lengthening vendor lead times, as this index reached a record high, along with the backlog of orders index. Meanwhile, the index for raw materials inventories reached a record low. Overall, manufacturers reported improved business conditions.

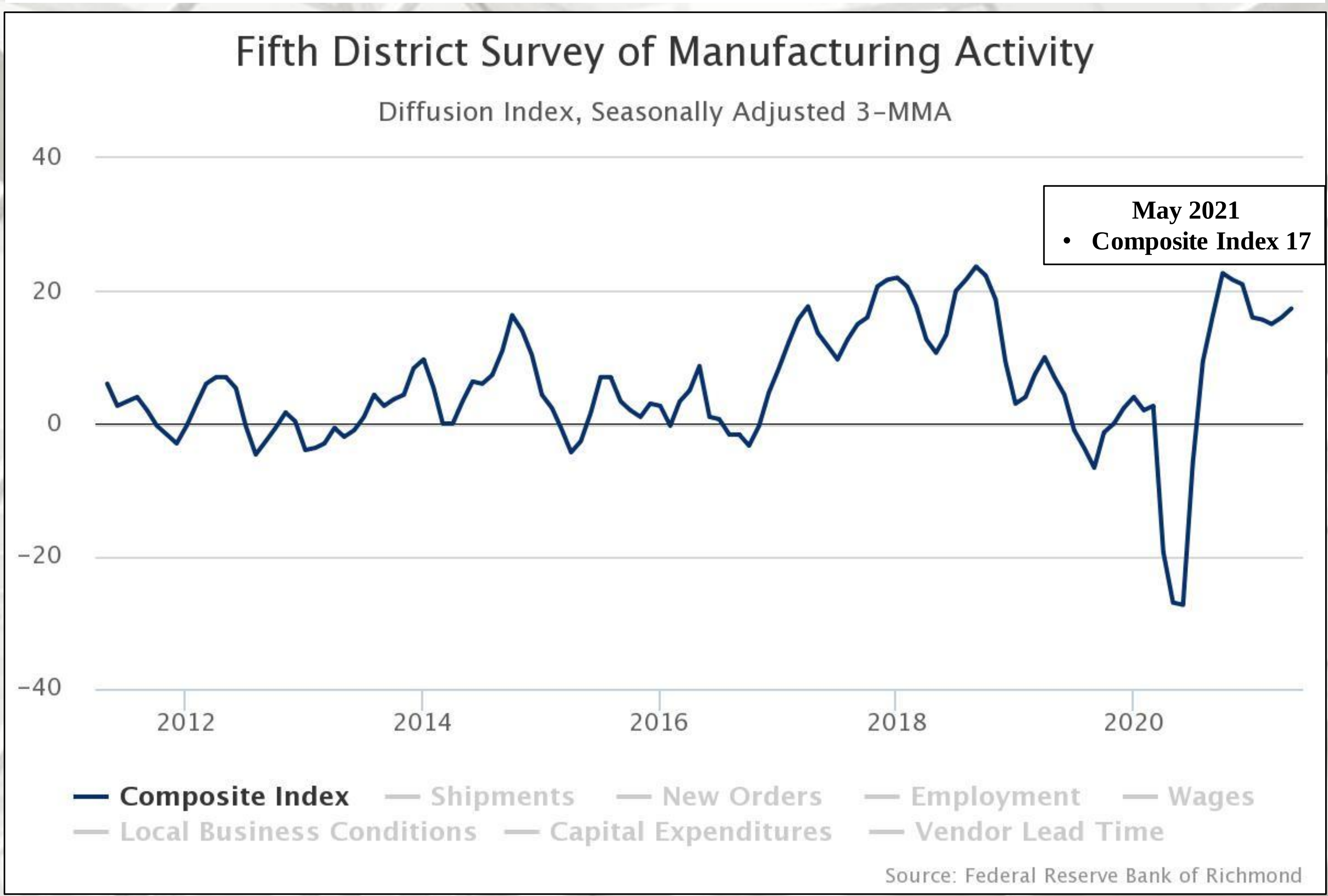
Survey results indicated that many firms increased employment and wages in May. However, they struggled to find workers with the necessary skills, as this index dropped to its lowest value on record. Survey respondents expected workers to remain difficult to find and employment and wages to increase further in the next six months.

The average growth rates of both prices paid and prices received by survey participants rose in May, as growth of prices paid continued to outpace that of prices received. Respondents expected price growth to slow somewhat in the next year." – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond

Source: https://www.richmondfed.org/research/regional_economy/surveys_of_business_conditions/manufacturing; 5/25/21

Return to TOC

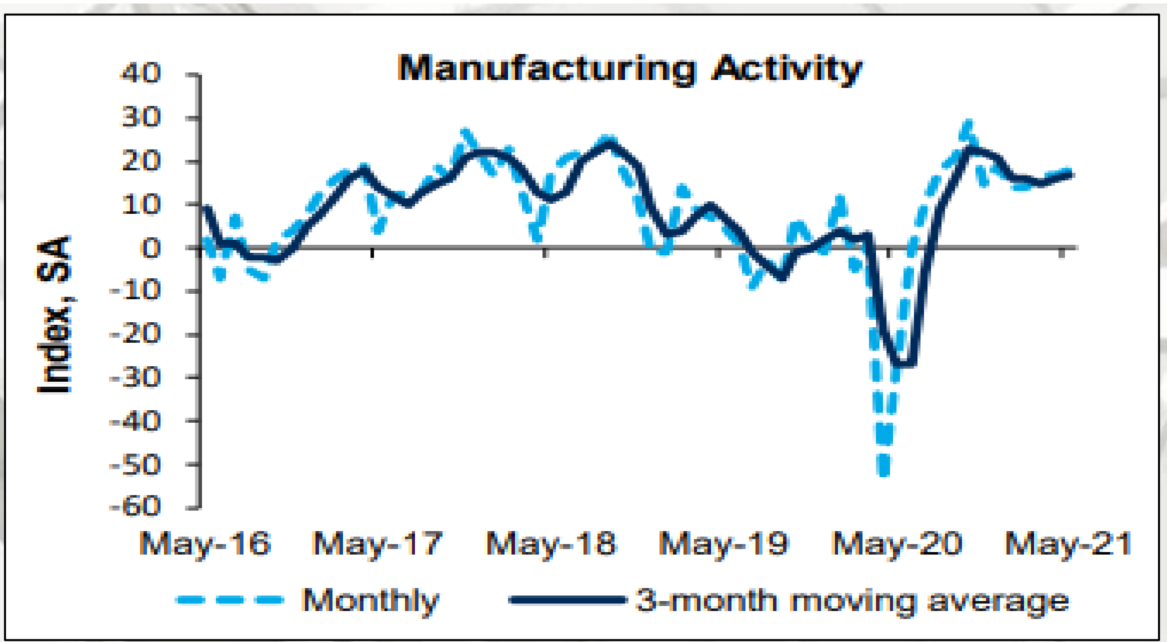
U.S. Economic Indicators

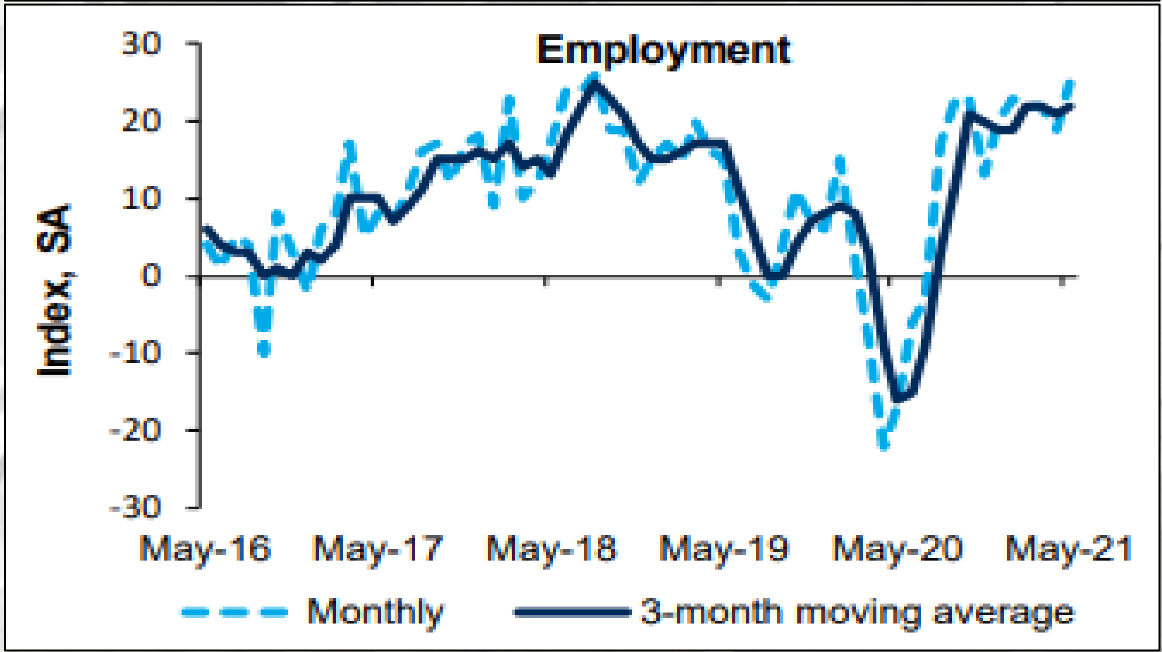


Source: https://www.richmondfed.org/research/regional_economy/surveys_of_business_conditions/manufacturing; 5/25/21

Return to TOC

U.S. Economic Indicators

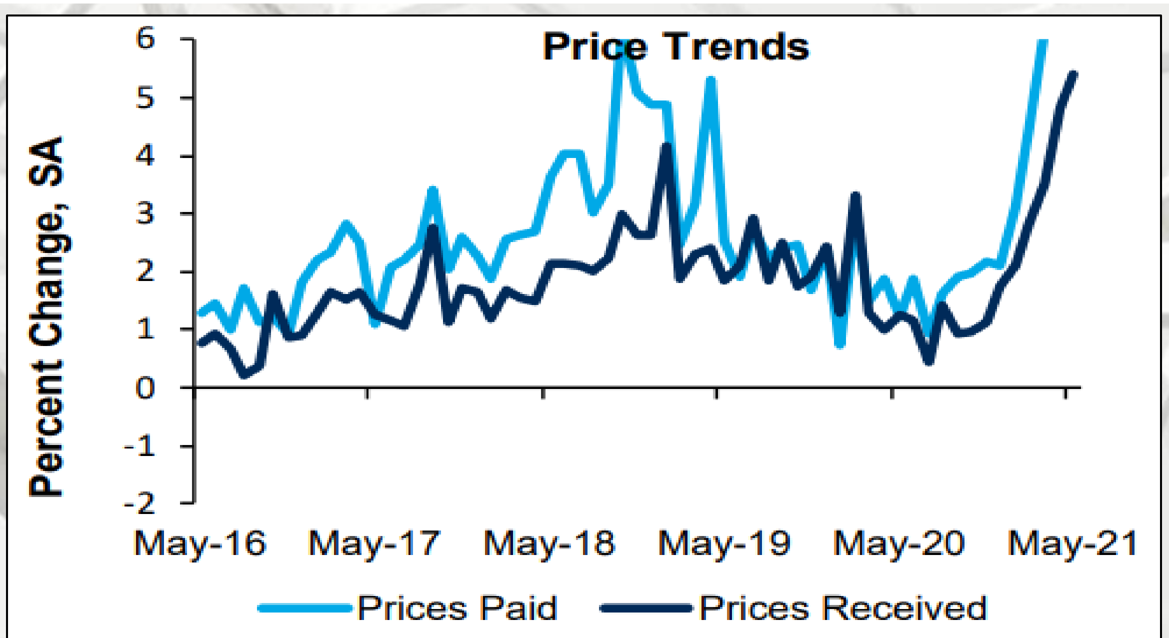


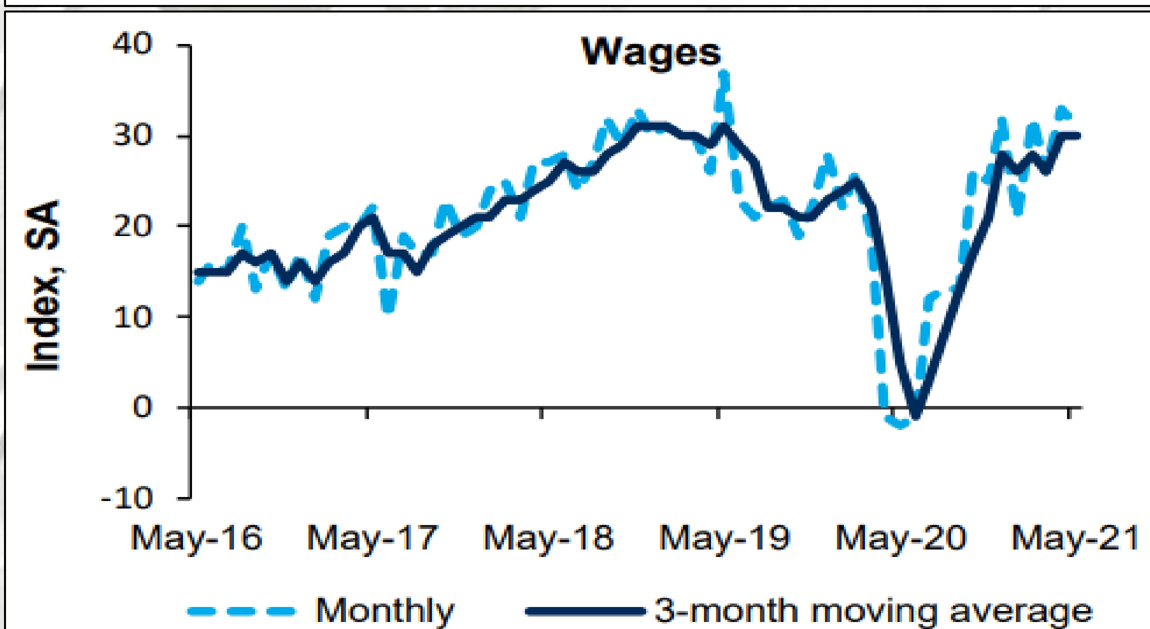


Source: https://www.richmondfed.org/research/regional_economy/surveys_of_business_conditions/manufacturing; 5/25/21

Return to TOC

U.S. Economic Indicators





Source: https://www.richmondfed.org/research/regional_economy/surveys_of_business_conditions/manufacturing; 5/25/21

Return to TOC

U.S. Economic Indicators

The Federal Reserve Bank of Richmond

Fifth District Survey of Service Sector Activity

Fifth District Service Sector Activity Improved in May

"Fifth District service sector activity improved in May, according to the most recent survey from the Federal Reserve Bank of Richmond. The indexes for revenues and demand rose from 22 and 32 in April to 29 and 43, respectively, in May. This was the highest reading on record for the demand index. Firms also reported improved local business conditions and increased spending. They were optimistic that growth would continue in the next six months.

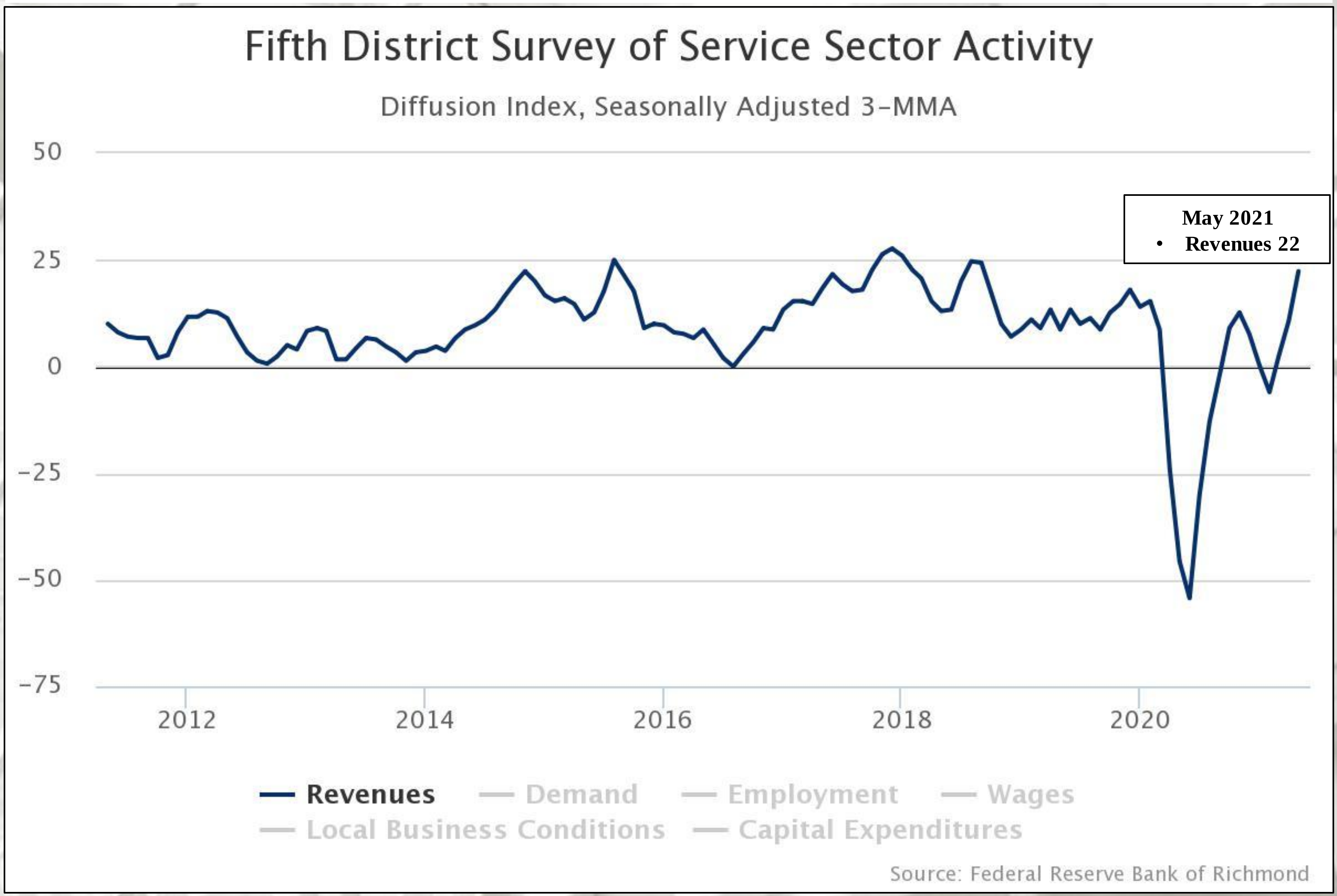
Many firms reported growth in employment and wages in May, but they struggled to find workers with the necessary skills. Survey participants expected these trends to continue in the coming months.

The average growth rates of both prices paid and prices received by survey respondents increased in May. Growth of prices paid outpaced that of prices received, but participants expected that gap to narrow in the near future." – Roisin McCord, Economic Analyst, The Federal Reserve Bank of Richmond

Source: https://www.richmondfed.org/research/regional_economy/surveys_of_business_conditions/service_sector; 5/25/21

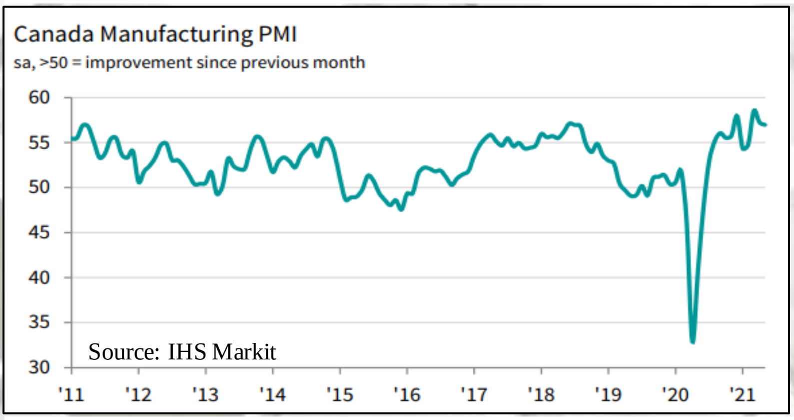
Return to TOC

U.S. Economic Indicators



Source: https://www.richmondfed.org/research/regional_economy/surveys_of_business_conditions/service_sector; 5/25/21

Private Indicators: Global



Markit Canada Manufacturing PMI™

"The headline seasonally adjusted IHS Markit Canada Manufacturing Purchasing Managers' Index® (PMI®) registered 57.0 in May, down fractionally from 57.2 in April, to signal the fifth-strongest growth in operating conditions in the survey to date.

Output growth sustained but inflationary pressures intensify in May

May data revealed another positive month for the Canadian manufacturing sector, helped by further expansions in output and new orders. Employment growth quickened to the sharpest in five months although there were further signs that sales volumes had outstripped production capacity, which resulted in another increase in backlogs. Supply chain disruption also weighed slightly on output growth, with the latest deterioration in vendor performance the third most marked in the series so far, which began in October 2010. Nevertheless, efforts to reduce future delays led to stockpiling in May. Turning to prices, transportation and raw material surcharges led to a record increase in output prices. …

May PMI data reveals another robust expansion across Canada's manufacturing sector with solid upticks in output and new orders registered. Policymakers will particularly welcome the stronger uplift in workforce numbers after the country saw the unemployment rate climb post-pandemic. Moreover, a sustained increase in backlogs suggests staffing in the manufacturing sector will continue to grow over the coming months. Meanwhile, vendor performance continued to deteriorate in May. Lead times lengthened at the third most marked rate in the near 11-year history of the survey, which has had knock on effects on prices and input availability. Raw material and transportation expenses soared, with firms rushing to adding to their stockpiles in a bid to offset future delays. A record increase in output prices suggests a large proportion of the burden was passed on to clients, but manufacturers will find the building inflationary pressures unsustainable" – Shreeya Patel, Economist, IHS Markit

Source: http://www.markiteconomics.com/Public/Home/PressRelease/57e045aaf4144f1abae69a27e61e6f92; 6/1/21

Return to TOC

Private Indicators: Global

Caixin China General Manufacturing PMI™

New work expands at quickest rate for five months

"The headline seasonally adjusted Purchasing Managers' Index ™ (PMI ™) – a composite indicator designed to provide a single-figure snapshot of operating conditions in the manufacturing economy – climbed from 51.9 in April to 52.0 in May, to signal a further improvement in operating conditions. Though mild, the upturn was the strongest recorded in the year to date.

China's manufacturing sector continued to expand in May, with firms reporting the strongest increase in new work for five months. As a result, production expanded further, though the rate of growth softened since April amid reports of material shortages and higher purchasing costs. Suppliers' delivery times lengthened solidly, which in turn drove a rapid increase in input prices. As part of efforts to contain costs, employment was broadly stable in May. At the same time, firms raised their factory gate prices at the quickest rate for over a decade. Latest data signalled a further increase in demand for Chinese manufactured goods, with total sales rising at the fastest rate for five months. The expansion was supported by greater demand both at home and overseas. Notably, new export order growth improved to a six-month high in May.

1. Both supply and demand expanded, and demand was slightly stronger than supply. The subindex of total new orders hit its highest point in 2021 and the gauge for new export orders was at its highest since November. Supply was relatively weak as raw material shortages and high prices hindered expansion. The output subindex was slightly lower than in the previous month.
2. The job market remained stable. While some enterprises added staff amid strong demand, some others were cautious about hiring due to concerns about rising costs. The two groups offset each other, which resulted in few changes in the overall level of employment. The employment subindex came in just marginally above 50, the line between expansion and contraction." – Dr. Wang Zhe, Senior Economist, Caixin Insight Group

Source: https://www.markiteconomics.com/Public/Home/PressRelease/719451c745434ac5ab032a10c1d92707; 6/1/21

Return to TOC

Private Indicators: Global

Caixin China General Manufacturing PMI™

“3. Inflationary pressure grew as prices surged. The gauge for input costs pushed deeper into expansionary territory and rose to the highest reading since December 2016. The pressure of upstream costs was transmitted downstream. The measure for output prices jumped above 60, hitting the joint-highest point since November 2010. The measure for export prices rose to the highest in three years amid rising transportation costs.

4. Inventories decreased and delivery times grew. As demand was stronger than supply last month, stocks of purchased and finished goods both continued shrinking and delivery times became substantially longer. The gauge for suppliers’ delivery times dropped deeper in contractionary range.

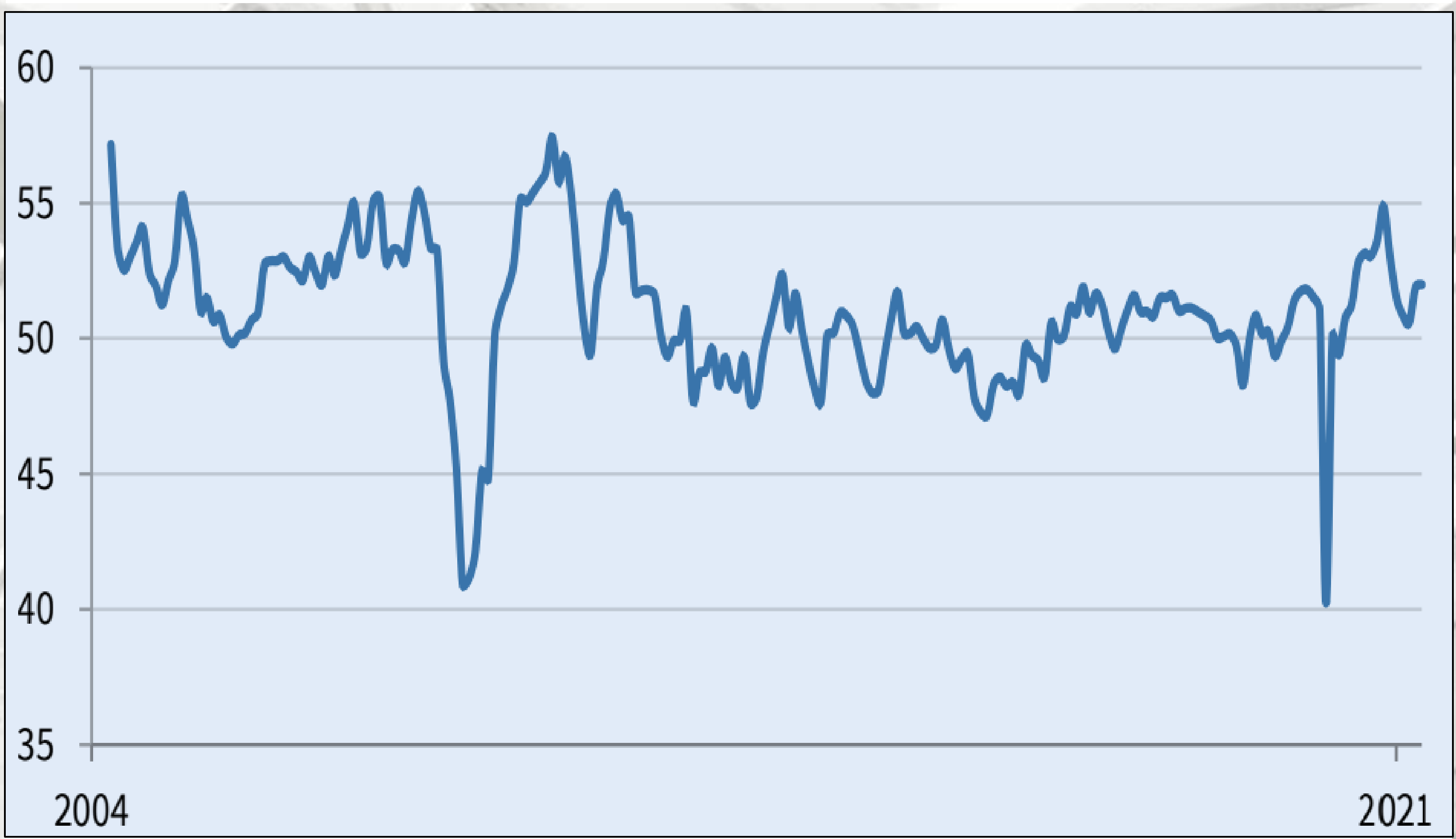
To sum up, manufacturing expanded in May as the post-epidemic economic recovery kept its momentum. Both domestic and overseas demand were strong and supply recovered steadily. The job market remained stable. Manufacturers stayed confident about the business outlook as the gauge for future output expectations was higher than the long-term average. Inflation was still a crucial concern as prices continued rising.

Policymakers mentioned rising commodity prices at the State Council executive meetings on May 12 and May 19 and issued instructions about stabilizing commodity supplies and prices. Inflationary pressure would limit the room for monetary policy maneuvers. The price transmission effect emerged as manufacturing output prices surged last month. Rapidly rising commodity prices began to disrupt the economy as some enterprises began to hoard goods, while some others suffered raw material shortages. Supply chains were also significantly affected” – Dr. Wang Zhe, Senior Economist, Caixin Insight Group

Source: https://www.markiteconomics.com/Public/Home/PressRelease/719451c745434ac5ab032a10c1d92707; 6/1/21

Return to TOC

Private Indicators: Global

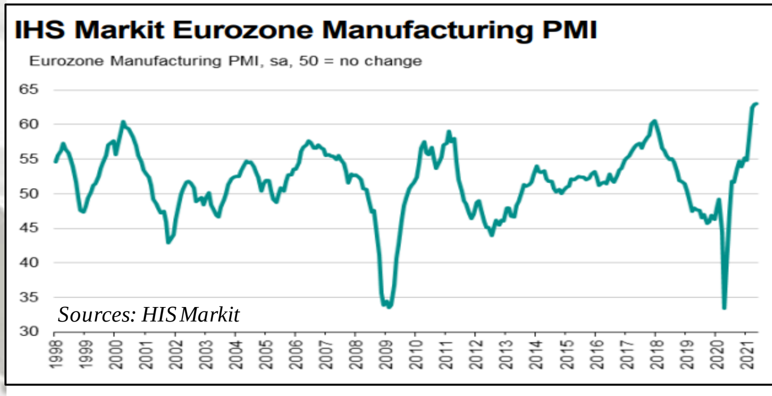


sa, > 50 = improvement since previous month
Sources: Caixin, IHS Markit

Source: https://www.markiteconomics.com/Public/Home/PressRelease/719451c745434ac5ab032a10c1d92707; 6/1/21

Return to TOC

Private Indicators: Global



Markit Eurozone Manufacturing PMI®

"The eurozone manufacturing economy experienced a new record improvement in operating conditions during May. The headline PMI® recorded 63.1, compared to 62.9 in April and its highest reading in the survey history (data for the eurozone have been available since June 1997). The headline index has now recorded readings above the 50.0 no-change mark that separates growth from contraction for 11 months in succession.

Eurozone manufacturing PMI hits fresh survey record high in April

All three market groups once again recorded strong improvements in operating conditions during May. Investment goods producers were again the best performing, registering rapid gains in both output and new orders. The intermediate goods and consumer goods categories both saw stronger growth, with respective PMI readings for May close to survey record highs. … Growth of manufacturing output was the slowest recorded by the survey for three months, though it nonetheless remained close to March's survey record with production again underpinned by rapid gains in new orders. May's survey indicated that sales rose at the third-strongest rate in the survey history (surpassed only by increases seen in the preceding two months). New order books were swollen by increased demand from across domestic and international markets: new export business* rose again at a historically sharp pace. …

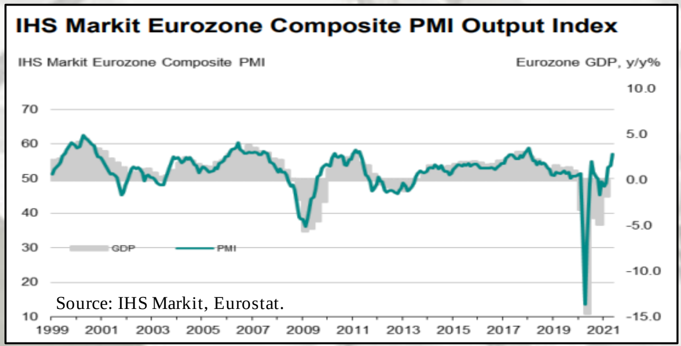
Eurozone manufacturing continues to grow at a rate unprecedented in almost 24 years of survey history, the PMI breaking new records for a third month in a row. Surging output growth adds to signs that the economy is rebounding strongly in the second quarter. However, May also saw record supply delays, which are constraining output growth and leaving firms unable to meet demand to a degree not previously witnessed by the survey.

High sales volumes are consequently depleting warehouse stocks and backlogs of uncompleted work have soared at a record pace. While these forward-looking indicators bode well for production and employment gains to persist into coming months as firms seek to catch up with demand, the flip-side is higher prices. The combination of strong demand and deteriorating supply is pushing up prices to a degree unparalleled over the past 24 years. The survey data therefore indicate that the economy looks set for strong growth over the summer but will likely also see a sharp rise in inflation. However, we expect price pressures to moderate as the disruptive effects of the pandemic ease further in coming months and global supply chains improve. We should also see demand shift from goods to services as economies continue to reopen, taking some pressure off prices but helping to sustain a solid pace of economic recovery" – Chris Williamson, Chief Business Economist, Markit®

Source: https://www.markiteconomics.com/Public/Home/PressRelease/42031fb929244ec0a64df832d27a5a31; 6/1/21

Return to TOC

Private Indicators: Global



Markit Eurozone Composite PMI®

"A resurgent services economy helped to drive private sector growth higher during May. After accounting for seasonal factors, the **IHS Markit Eurozone PMI® Composite Output Index** recorded 57.1, up from 53.8 in April. Not only did May mark a third successive month of expansion, but the best recorded since February 2018.

Services sector drives further acceleration in growth during May

The upturn in the index was driven in the main by a noticeable acceleration of growth in services activity. May's data indicated a second successive monthly rise in service sector output, and the best recorded for nearly three years. Nonetheless, despite seeing the slowest growth for three months, manufacturing output continued to a rise at a sharper rate than services activity. …

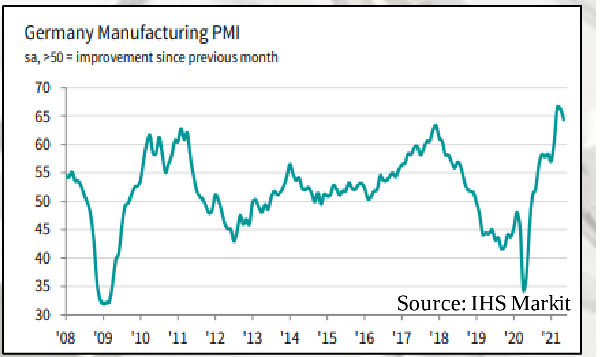
The eurozone's vast service sector sprang back into life in May, commencing a solid recovery that looks likely to be sustained throughout the summer. Businesses reported the strongest surge in demand since the start of 2018 as covid restrictions were eased and vaccine progress boosted confidence. After covid fighting measures were tightened to the harshest for a year in April, restrictions eased considerably in May on average. These measures are on course to moderate further at least until the autumn, assuming further significant covid waves are avoided. This should facilitate the further return to more normal business conditions as the summer proceeds. Business optimism for the year ahead has consequently hit the highest for over 17 years.

The service sector revival accompanies a booming manufacturing sector, meaning GDP should rise strongly in the second quarter. With a survey record build-up of work-in-hand to be followed by the further loosening of covid restrictions in the coming months, growth is likely to be even more impressive in the third quarter. A growing area of concern is capacity constraints, both in terms of supplier shortages and difficulties taking on new staff to meet the recent surge in demand. This is leading to a spike in price pressures, which should ease as supply conditions improve, but may remain an area of concern for some months, especially if labour shortages feed through to higher wages." – Chris Williamson, Chief Business Economist, Markit®

Source: https://www.markiteconomics.com/Public/Home/PressRelease/435685c859494511b9e6de2d825b1173; 5/3/21

Return to TOC

Private Indicators: Global



IHS Markit/BME Germany Manufacturing PMI®

"The headline IHS Markit/BME Germany Manufacturing PMI® – a weighted aggregate of measures of new orders, output, employment, suppliers' delivery times and stock of purchases – dipped for the second running in May, easing further from a record high at the end of the first quarter. Nevertheless, at 64.4 (from 66.2 in April), the index was still well above the 50.0 no-change threshold.

PMI slips further from March's record high as supply chain disruption continues to spread

Growth of Germany's manufacturing sector showed a further loss of momentum in May, constrained by worsening supply-chain disruption, latest PMI® survey data from IHS Markit showed. Reports of delays in the receipt of inputs reached a new record high, with bottlenecks in turn pushing up the rate of cost inflation well beyond anything seen before in the series history. Still, goods producers remained strongly optimistic about the outlook, and continued to up the rate of job creation in order to expand capacity and in anticipation of growth over the next 12 months. …

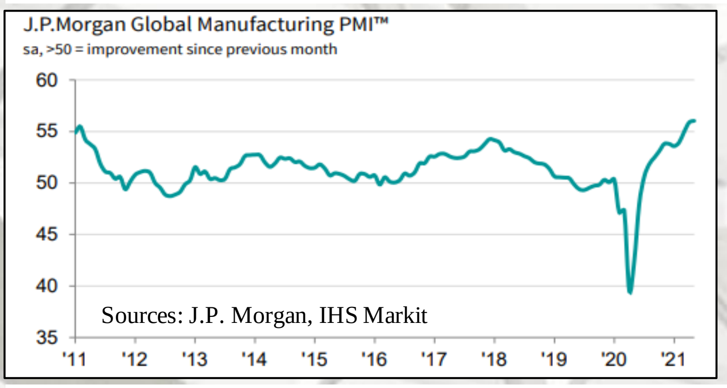
May's PMI survey indicates that, while still strong by historical standards, the pace of growth of Germany's manufacturing sector is being held back by supply constraints. The disruption from supply shortages has continued to spread, with now almost four-in-five manufacturers reporting increased lead times on inputs and a growing number also citing an impact on output and new orders due to forced downtime

The disruption to supply comes hand in hand with a further surge in cost pressures, with 90% of manufacturers – far more than ever before in the survey's 25-year history – reporting increased input prices in May. Strong demand fundamentals mean that manufacturers are able to pass on some of the burden of higher costs through unprecedented price increases of their own. Reassuringly, manufacturers continue to look past the current supply issues, with business expectations for activity over the year ahead sticking close to record highs and the pace of hiring continuing to accelerate as factories show an increased urgency to expand capacity. Although a symptom of the current supply issues, the successive record increases in backlogs of work bode well for output levels in the coming months as firms try to catch up."" – Phil Smith, Principal Economist, IHSMarkit®

Source: https://www.markiteconomics.com/Public/Home/PressRelease/1384312208c84021a8a344da0a8719ef; 6/1/21

Return to TOC

Private Indicators: Global



J.P. Morgan Global Manufacturing PMI™

"The J.P. Morgan Global Manufacturing PMI™ – a composite index produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – posted 56.0 in May, up from 55.9 in April, to register its highest level in over 11 years (April 2010). Solid improvements in business conditions were seen across the consumer, intermediate and investment goods sectors.

Strong upswing in global manufacturing sector led by solid expansions in the eurozone, UK and US

The global manufacturing sector expanded at a robust pace in May. Production rose at one of the fastest rates in a decade, as new order growth accelerated to an 11-year high. The outlook remained positive, with manufacturers forecasting further increases in output over the next 12 months. 24 out of the 30 nations for which May data were available registered better business conditions. Europe was a bright spot in the upturn, with the six top-ranked countries (the Netherlands, Austria, the UK, Germany, Ireland and Italy) located in that region. The US also saw a solid pace of expansion. Subdued growth was registered in Japan, China, Russia and India. The Philippines, Turkey, Thailand, Mexico, Colombia and Myanmar all saw contractions.

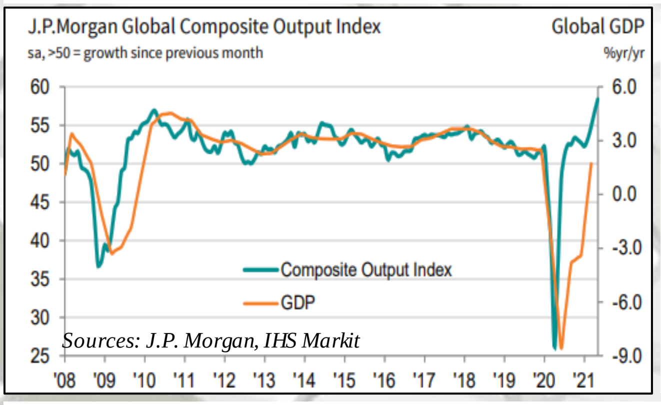
Manufacturing employment rose for the seventh consecutive month in May, with the rate of jobs growth remaining close to April's three-year high. The consumer, intermediate and investment goods industries all registered solid increases in workforce numbers. Job creation was led by the euro area, where staffing levels rose at a near-record pace. The UK saw a survey record increase (since 1992). The US, Japan and China were among the other nations to register increased employment, although the gain in China was only slight.

Pressure on capacity continued to build during May. Average vendor lead times lengthened to the greatest extent in the survey history, while backlogs of work at manufacturers rose at a near survey-record pace. This fed through to increased inflation, as highlighted by the steepest rise in input costs for over a decade and record inflation of selling prices. Delays in the receipt of goods ordered from suppliers combined with higher production needs encouraged manufacturers to raise purchasing levels in May. Buying activity expanded for the tenth month in a row and to the second-greatest extent on record. This led to a slight gain in pre-production stocks for a second successive month. In contrast, finished goods inventories fell further." – Olya Borichevska, Global Economist, Global Economic Research, J.P. Morgan

Source: https://www.markiteconomics.com/Public/Home/PressRelease/35b07d94ed3d46a0a003362f71a2e37a; 6/1/21

Return to TOC

Private Indicators: Global



J.P. Morgan Global Composite PMI™

"The J.P. Morgan Global Composite Output Index – which is produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – rose to 58.4 in May, a 181-month high, to remain above the 50.0 no-change mark for the eleventh successive month. The Asia region tended to underperform relative to its US and European counterparts. Growth in China eased, while Japan and India fell back into contraction.

Global economic growth hits 15-year high as rapid expansions in US and Europe offset subdued Asia region

May saw a further solid acceleration in the pace of expansion of global economic activity, as output and new orders rose at the quickest rates since April 2006. Growth of activity was led by survey-record increases in the US and the UK. The euro area was also a bright spot, with its rate of expansion the highest in over three years. The global service sector outperformed manufacturing for the second successive month in May. Service sector business activity rose at the quickest pace in over 15 years (since April 2006), while growth of manufacturing production eased slightly from April's decade-high. …

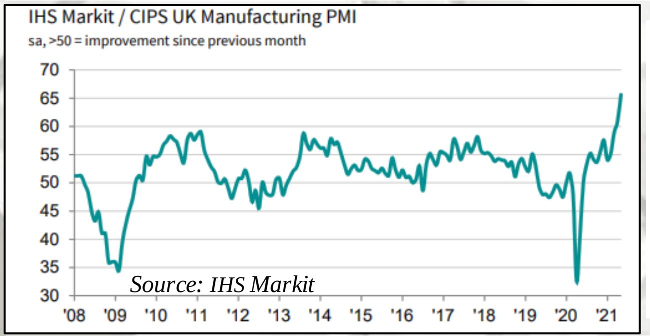
All six of the sub-sectors covered by the survey registered output growth in May, the first across the board concurrent expansions since November 2018. The strongest rate of increase was in the business services sector, following by financial services. Consumer-facing industries continued to underperform, with the weakest growth at consumer goods producers and consumer service providers. The level of incoming new business rose at the fastest pace in 15 years in May, with rates of expansion accelerating at manufacturers and service providers alike. Part of the latest increase reflected improved international trade flows. Overall new export business rose for the fourth consecutive month and to the greatest extent on record (the composite new export business series starts in September 2014). …

Business activity and new order intakes both expanded at the quickest rates during the past 15 years (since April 2006 and May 2006 respectively). There was also a further mild increase in new export business. Rising levels of demand underpinned further job creation and business optimism, but also led to increased backlogs of work. … " – Olya Borichevska, Global Economic Research, J.P. Morgan

Source: https://www.markiteconomics.com/Public/Home/PressRelease/842c441136dd495ca3b87fac76651706; 5/3/21

Return to TOC

Private Indicators: Global



IHS Markit/CIPS UK Manufacturing PMI®

"The seasonally adjusted IHS Markit/CIPS Purchasing Managers' Index® (PMI®) rose to 65.6 in May, up from 60.9 in April, above July 1994's previous record high of 61.0. The PMI has signalled improvement in each of the past 12 months.

UK Manufacturing PMI surges to record high in May

Conditions in the manufacturing sector improved at an unprecedented rate in May, as output growth strengthened and new orders rose at the quickest pace in the near three decade survey history. Looser pandemic restrictions and high levels of pent-up demand meant that the rapid revival in labour market conditions continued, with staffing levels also rising at a record pace.

Manufacturing production rose at one of the quickest rates in the series history, bettered only by those registered in August 2013 and July 1994. Underpinning the latest increase were record gains in new business, as domestic and overseas demand continued to revive. Companies linked new order growth to rising business confidence, the further re-opening of the UK economy and reduced issues relating to COVID-19. …

The UK PMI surged to an unprecedented high in May, as record growth of new orders and employment supported one of the steepest increases in production volumes in the near 30-year survey history. Growth is being boosted by the unlocking of economies from COVID restrictions and ongoing vaccination programs. This is being felt across the globe, as highlighted by a record rise in new export business during the latest survey month.

The corollaries of this strong upsurge in industrial activity are increased strain on supply chains and a build-up of price pressures. Supplies of inputs into manufacturers and finished goods on to clients are both being severely disrupted by raw material shortages, port issues, COVID restrictions, post-Brexit difficulties and market forces as demand outstrips supply. Suppliers' delivery times subsequently lengthened to one of the greatest extents on record, while input costs and selling prices both rose at unprecedented rates. With little sign of supply pressures receding, these price rises will become more visible to consumers." – Rob Dobson, Director, IHS Markit

Source: https://www.markiteconomics.com/Public/Home/PressRelease/e3ed72ef8d654d8ab865107b5b2349d4; 5/1/21

Return to TOC

Private Indicators
Associated Builders and Contractors

Nonresidential Construction Spending Decreases 0.5% in April

"National nonresidential construction spending declined 0.5% in April, according to an Associated Builders and Contractors analysis of data published today by the U.S. Census Bureau. On a seasonally adjusted annualized basis, nonresidential spending totaled $786.2 billion for the month.

Spending was down on a monthly basis in nine of 16 nonresidential subcategories. Both private and public nonresidential construction spending were down 0.5% for the month.

"The fact that nonresidential construction spending continues to decline is no surprise whatsoever," said ABC Chief Economist Anirban Basu. "Many factors are at work, including the historic lag between broader economic recovery and the onset of persistent recovery in nonresidential construction. In other words, nonresidential spending levels reflect what the broader economy looked like about a year ago. A year ago, the economy was in dire shape.

"There's more," said Basu. "Conventional wisdom holds that many of the projects postponed during the earlier stages of the pandemic are set to come back to life. It is for this reason that many contractors have reported rising backlog and growing confidence in the six-month outlook for revenues, staffing levels and profits, according to ABC's latest Construction Backlog Indicator and Construction Confidence Index. But just when it seemed safe to get back into the water, a new set of challenges has emerged. Among these are input shortages, rapidly rising materials prices and ongoing issues securing sufficiently skilled workers. What all this has done is to suppress the vigor of nonresidential construction's current recovery by inducing certain project owners to further delay their projects, hoping to ultimately receive more favorable bids." – Erika Walter, Director of Media Relations, ABC

Source: https://www.abc.org/News-Media/News-Releases/entryid/18785/nonresidential-construction-spending-decreases-0-5-in-april-says-abc; 6/1/21

Return to TOC

Associated Builders and Contractors

Nonresidential Spending Growth, Millions of Dollars, Seasonally Adjusted Annual Rate

	April 2021	March 2021	April 2020	1-Month % Change	12-Month % Change
Nonresidential	$786,198	$790,170	$818,044	-0.5%	-3.9%
Water supply	$18,272	$17,772	$17,874	2.8%	2.2%
Sewage and waste disposal	$26,833	$26,423	$26,185	1.6%	2.5%
Highway and street	$100,219	$99,483	$102,879	0.7%	-2.6%
Health care	$46,601	$46,276	$46,769	0.7%	-0.4%
Manufacturing	$72,327	$71,955	$71,930	0.5%	0.6%
Commercial	$82,013	$81,793	$83,850	0.3%	-2.2%
Office	$80,179	$80,156	$81,204	0.0%	-1.3%
Lodging	$22,914	$22,963	$29,352	-0.2%	-21.9%
Educational	$99,743	$100,309	$104,552	-0.6%	-4.6%
Conservation and development	$7,244	$7,304	$8,531	-0.8%	-15.1%
Communication	$21,847	$22,034	$22,921	-0.8%	-4.7%
Power	$114,108	$115,860	$121,872	-1.5%	-6.4%
Amusement and recreation	$23,988	$24,388	$27,352	-1.6%	-12.3%
Religious	$2,950	$3,016	$2,960	-2.2%	-0.3%
Transportation	$54,867	$56,193	$56,145	-2.4%	-2.3%
Public safety	$12,093	$14,247	$13,670	-15.1%	-11.5%
Private Nonresidential	$451,441	$453,656	$474,278	-0.5%	-4.8%
Public Nonresidential	$334,757	$336,514	$343,765	-0.5%	-2.6%

Source: U.S. Census Bureau

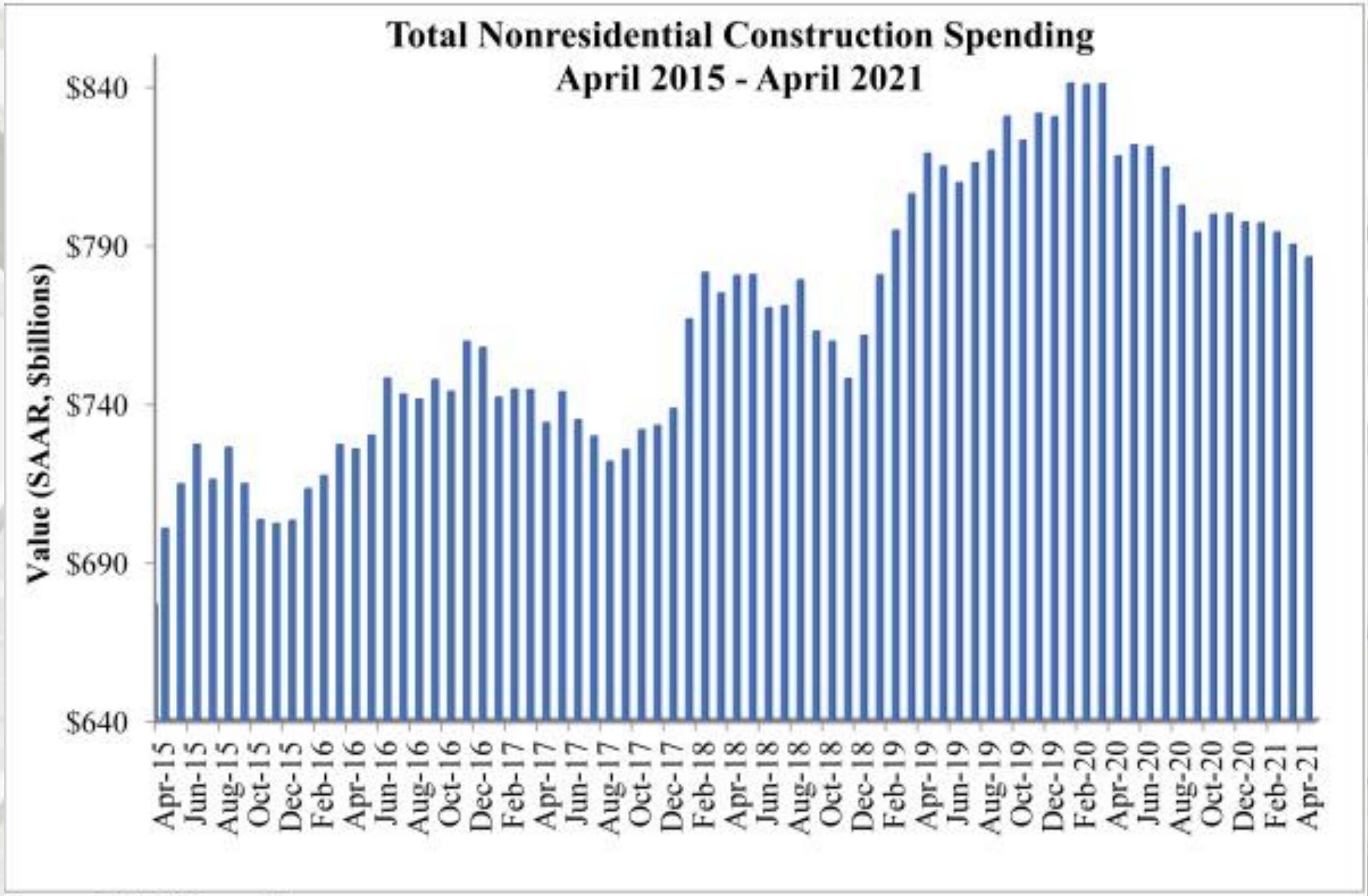
Investment in Nonresidential Structures Declines 4.8% in Q1

"""As if this were not enough, certain construction segments may have been permanently undermined by the pandemic," said Basu. "Among these are construction of new office buildings, shopping centers and hotels that cater to business travelers. The good news is that the longer-term outlook remains upbeat given the anticipated strength of the economic recovery to come, particularly if a sensible infrastructure package manages to make its way out of Washington, D.C.""" – Erika Walter, Director of Media Relations, ABC

Source: https://www.abc.org/News-Media/News-Releases/entryid/18785/nonresidential-construction-spending-decreases-0-5-in-april-says-abc; 6/1/21

Return to TOC

Associated Builders and Contractors



Source: U.S. Census Bureau

Source: https://www.abc.org/News-Media/News-Releases/entryid/18785/nonresidential-construction-spending-decreases-0-5-in-april-says-abc; 6/1/21

Return to TOC

Private Indicators
Associated Builders and Contractors

ABC's Construction Backlog Inches Up in April; Contractor Optimism Slips

"Associated Builders and Contractors reported that its Construction Backlog Indicator rose to 7.9 months in April, according to an ABC member survey conducted April 20-May 5, 0.1 months higher than in April 2021 and April 2020. ABC's Construction Confidence Index readings for sales and profit margins declined modestly in April, while confidence regarding staffing level expectations increased. Only 8.6% of respondents expected staffing to decrease. All three indices remain above the threshold of 50, indicating growth expectations over the next six months.

"There was little movement in contractor sentiment in April," said Basu. "Collectively, contractors continue to indicate that industry recovery will continue into the summer and beyond. The broader economy is poised to recover rapidly into 2022 as a potent combination of accumulated savings, stimulus, vaccinations and reopening drive consumer outlays and business spending higher. Available data indicate that while many segments, including the office market, continue to exhibit weak fundamentals, the worst is now past in terms of market deterioration.

"There are risks to the outlook, including inflation, rising interest rates and viral variants that may prove more resistant to available vaccines and treatments. Labor and materials shortages may also continue to challenge the industry. Indeed, materials prices have been racing higher recently. A recovering global economy and overwhelmed supply chains may further increase commodity prices during the months ahead, potentially suppressing contractor profit margins."" – Erika Walter, Director of Media Relations, ABC

Source: https://www.abc.org/News-Media/News-Releases/entryid/18751/abc-s-construction-backlog-inches-up-in-april-contractor-optimism-slips; 5/11/21

Return to TOC

Associated Builders and Contractors

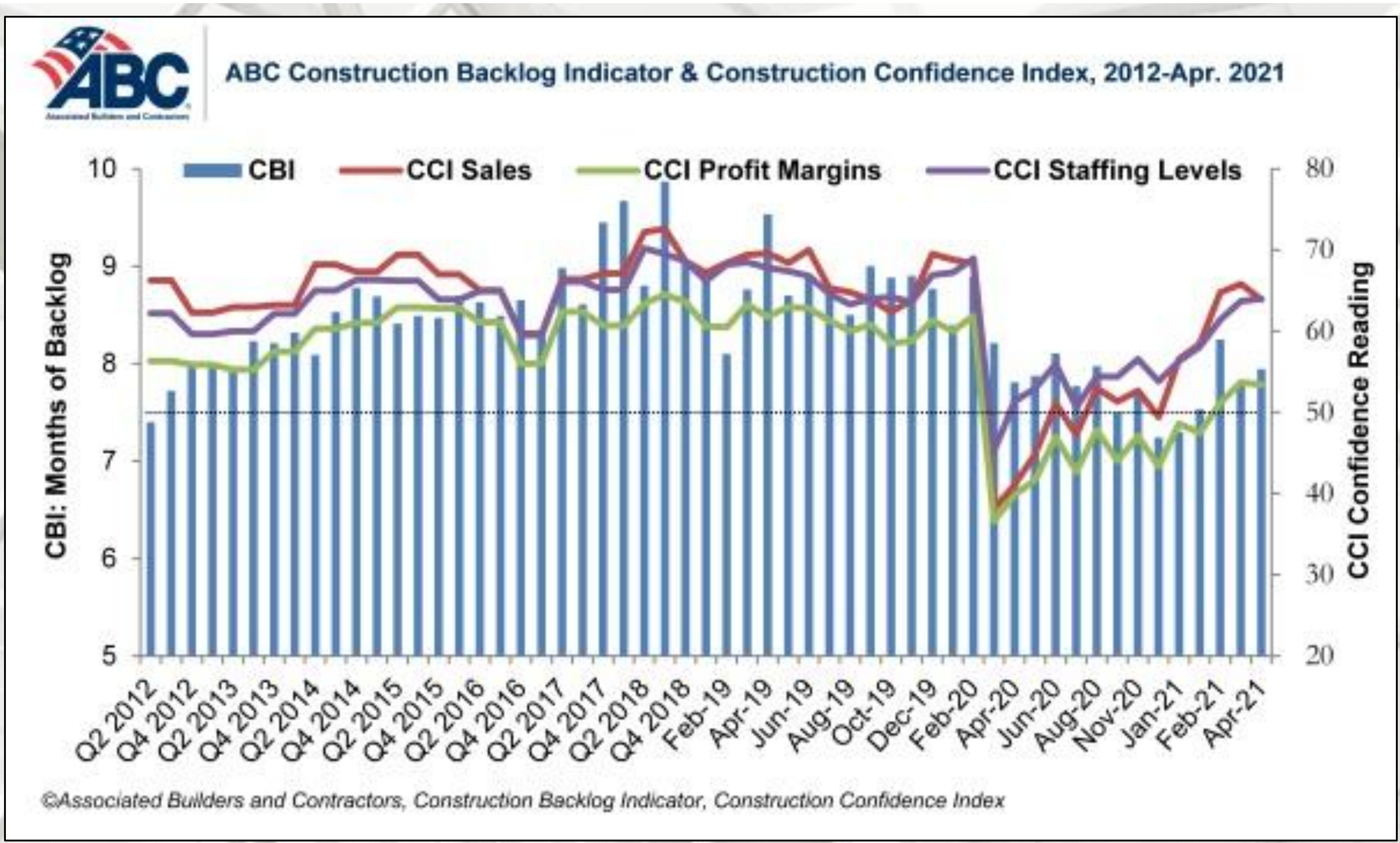
Construction Backlog Indicator

	Apr. 2021	Mar. 2021	Apr. 2020	1-Month Net Change	12-Month Net Change
Total	**7.9**	**7.8**	**7.8**	**0.1**	**0.1**
Industry					
Commercial & Institutional	8.0	7.7	7.9	0.3	0.1
Heavy Industrial	7.3	8.5	4.2	-1.2	3.1
Infrastructure	7.9	8.3	9.0	-0.4	-1.1
Region					
Middle States	6.9	7.3	7.0	-0.4	-0.1
Northeast	7.9	8.1	7.8	-0.2	0.1
South	8.2	8.3	8.7	-0.1	-0.5
West	8.8	7.4	8.0	1.4	0.8
Company Size					
<$30 Million	7.4	7.5	7.5	-0.1	-0.1
$30-$50 Million	8.5	7.9	7.8	0.6	0.7
$50-$100 Million	10.3	8.4	7.9	1.9	2.4
>$100 Million	10.9	10.4	11.1	0.5	-0.2

Source: https://www.abc.org/News-Media/News-Releases/entryid/18751/abc-s-construction-backlog-inches-up-in-april-contractor-optimism-slips; 5/11/21

Return to TOC

Associated Builders and Contractors



Source: https://www.abc.org/News-Media/News-Releases/entryid/18751/abc-s-construction-backlog-inches-up-in-april-contractor-optimism-slips; 5/11/21

Return to TOC

Associated Builders and Contractors

Construction Confidence Index

Response	April 2021	March 2021	April 2020
	CCI Reading		
Sales	63.9	65.8	41.1
Profit Margins	53.4	53.7	39.8
Staffing	64.0	63.7	51.4
	Sales Expectations		
Up Big	13.7%	13.8%	7.2%
Up Small	51.9%	55.2%	26.7%
No Change	14.7%	14.4%	10.8%
Down Small	16.0%	13.5%	33.6%
Down Big	3.8%	3.1%	21.7%
	Profit Margins Expectations		
Up Big	4.4%	4.3%	4.3%
Up Small	37.9%	36.8%	22.4%
No Change	29.0%	32.2%	19.9%
Down Small	24.2%	22.7%	35.0%
Down Big	4.4%	4.0%	18.4%
	Staffing Level Expectations		
Up Big	6.5%	7.1%	5.1%
Up Small	52.9%	49.7%	31.0%
No Change	32.1%	35.0%	36.1%
Down Small	7.2%	7.4%	19.9%
Down Big	1.4%	0.9%	7.9%

Source: https://www.abc.org/News-Media/News-Releases/entryid/18751/abc-s-construction-backlog-inches-up-in-april-contractor-optimism-slips; 5/11/21

Return to TOC

Private Indicators
American Institute of Architects (AIA)

Architecture Billings Index April 2021

Architecture firm billings continue to rebound at a brisk pace

Price and availability of construction materials and products is a moderate to serious problem for many firms

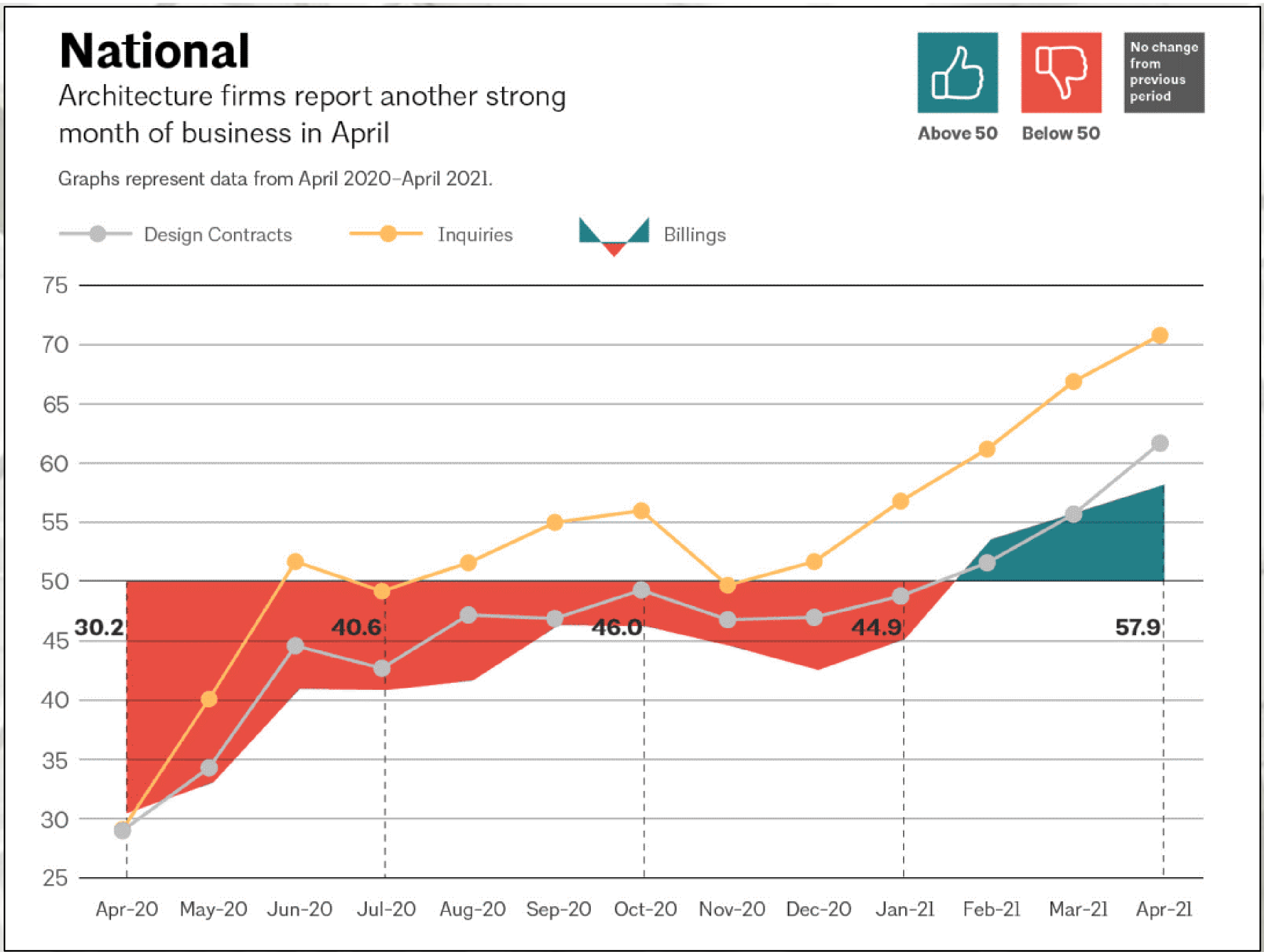
"Business conditions at architecture firms continued to rebound at a strong clip in April, with the AIA's Architecture Billings Index (ABI) score rising to 57.9 for the month (any score over 50 indicates billings growth). This is the highest ABI score since prior to the Great Recession, and indicates that a majority of architecture firms saw their billings increase this month. Interest in new projects remained extremely strong as well, with the Inquiries score rising to 70.8, and the value of new signed design contracts reaching 61.7, the highest score in that index since data collection started in late 2010. This means that not only are clients talking to architecture firms about starting new projects, but that they are also signing contracts to begin that work at a high rate." – Katharine Keane, Senior Associate Editor, The American Institute of Architects

"This recent acceleration in the demand for design services demonstrates that both consumers and businesses are feeling much more confident about the economic outlook. The pent-up demand for new and retrofitted facilities is keeping architecture firms in all regions and building sectors busy." Kermit Baker, Chief Economist, AIA

Source: https://www.aia.org/pages/6401805-abi-april-2021-architecture-firm-billings-; 5/24/21

Return to TOC

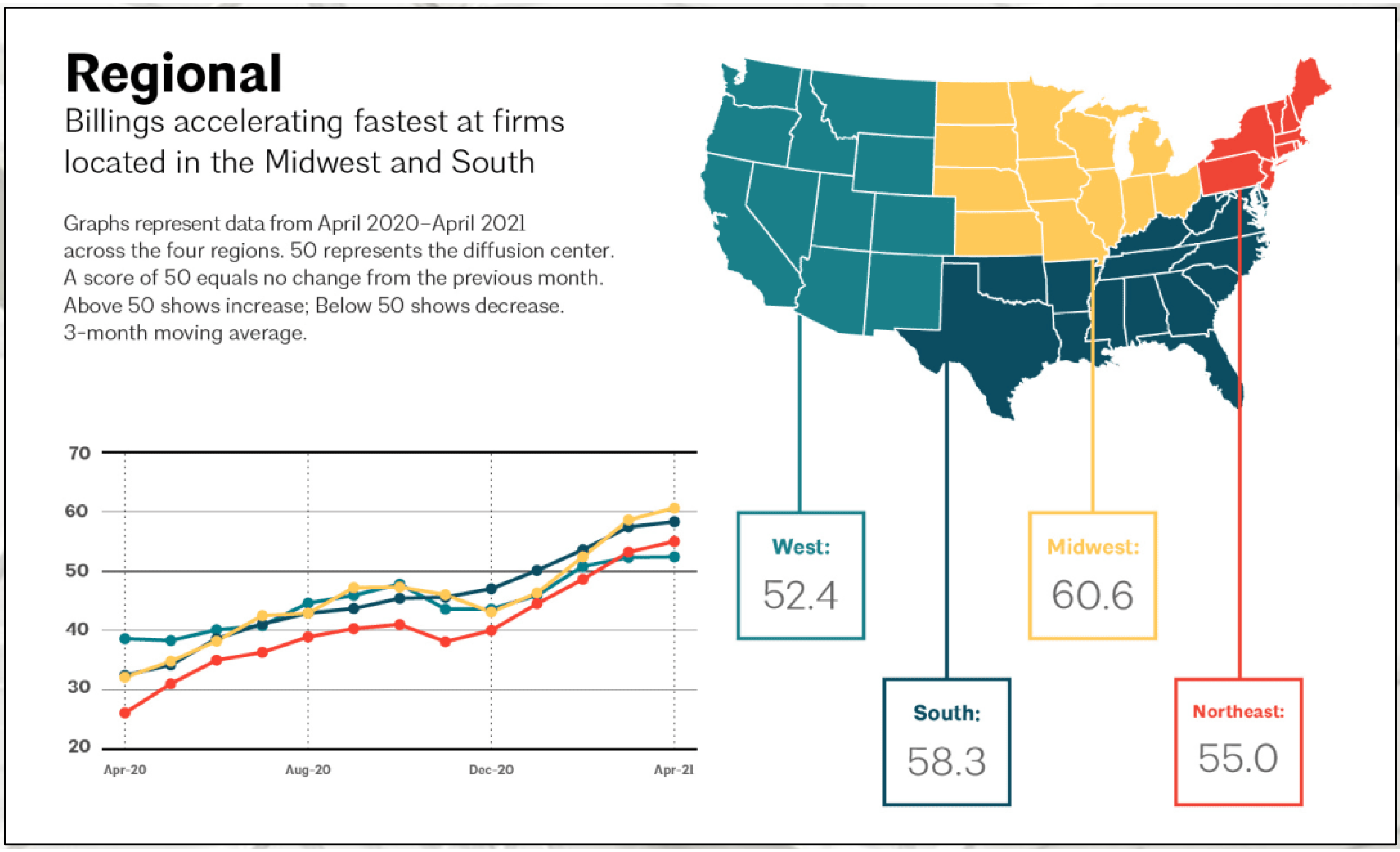
Private Indicators
American Institute of Architects (AIA)



Source: https://www.aia.org/pages/6401805-abi-april-2021-architecture-firm-billings-; 5/24/21

Return to TOC

Private Indicators: AIA



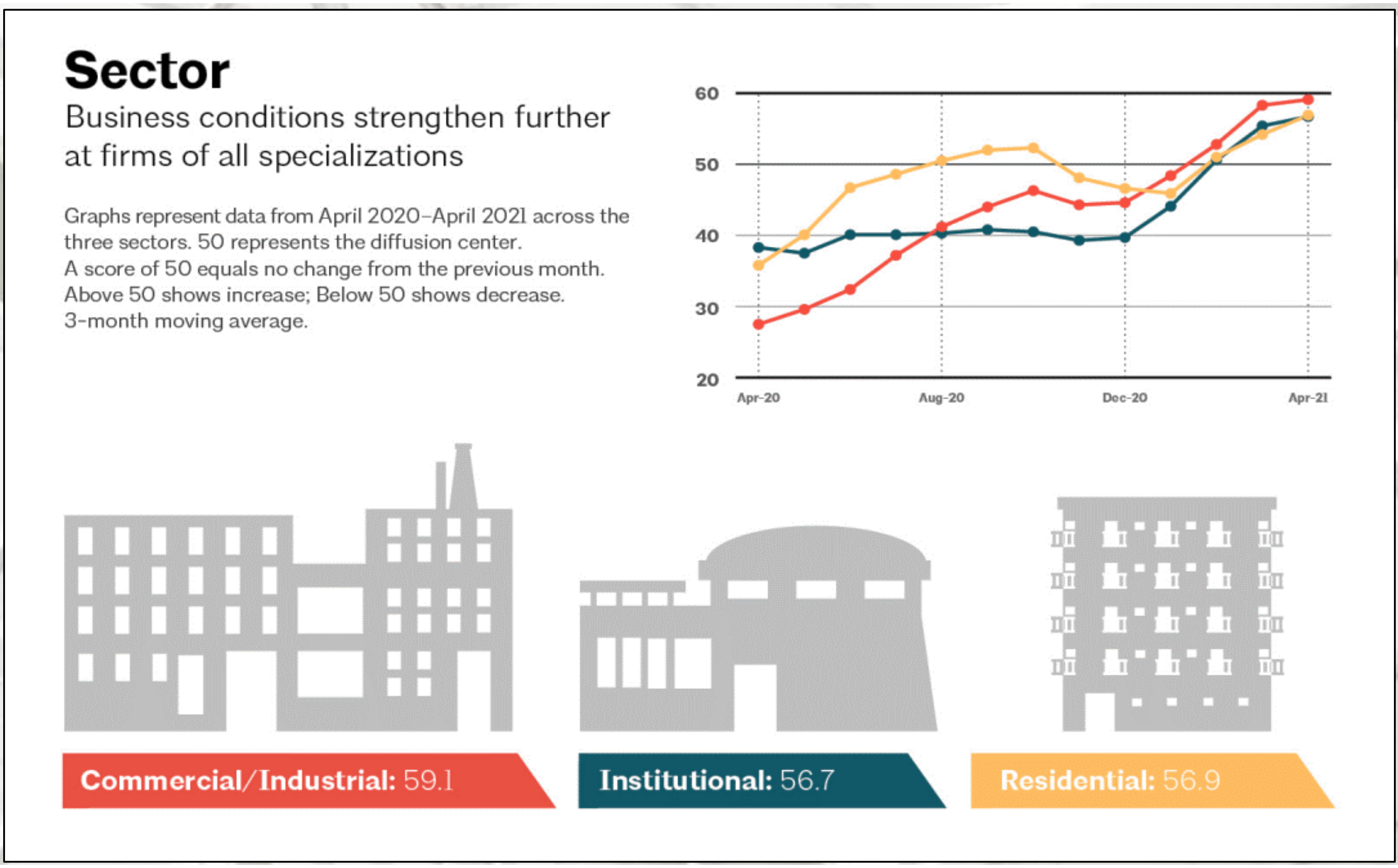
Region

"Architecture firms in all regions of the country also reported increasing billings for the second consecutive month in April, with firms located in the Midwest and South reporting the strongest growth. While growth remains somewhat more modest at firms located in the West, they are still seeing their strongest conditions in nearly three years." – Katharine Keane, Senior Associate Editor, The American Institute of Architects

Source: https://www.aia.org/pages/6401805-abi-april-2021-architecture-firm-billings-; 5/24/21

Return to TOC

Private Indicators: AIA



Sector

"In addition, firms of all specializations reported growth again this month, with firms with a commercial/industrial specialization seeing the largest increase in billings for the second month in a row. Business conditions also continued to rebound at firms with a multifamily residential specialization, after they saw a modest decline over the winter." – Katharine Keane, Senior Associate Editor, The American Institute of Architects

Source: https://www.aia.org/pages/6401805-abi-april-2021-architecture-firm-billings-; 5/24/21

Return to TOC

Private Indicators

Dodge Data & Analytics

Construction Starts Slip in April as Housing Cools

Gains in nonresidential unable to overcome a pullback in single family

"Total construction starts fell 2% in April to a seasonally adjusted annual rate of $853.5 billion, according to Dodge Data & Analytics. Single family construction posted a sizeable decline following months of strong activity, while nonresidential building and nonbuilding starts both gained.

"""The pullback in single family construction starts was inevitable after showing exceptional strength over the past year," said Richard Branch, Chief Economist for Dodge Data & Analytics. "Higher material prices, supply shortages, and a dearth of skilled construction labor were bound to catch up with housing and will ultimately limit the ability of this sector to show the same rate of expansion this year as it did last. Meanwhile, nonresidential starts are stabilizing and should continue to heal throughout 2021, however, this sector will also be challenged by similar issues facing the housing market that will cause its starts to be below pre-pandemic levels for months to come."" – Nicole Sullivan, Public Relations & Social Media, AFFECT

Source: https://www.construction.com/news/Construction-Starts-Slip-in-April-as-Housing-Cools; 5/18/21

Return to TOC

Private Indicators

Dodge Data & Analytics

- "**Residential building** fell 12% in April to a seasonally adjusted annual rate of $387.8 billion. Single family starts fell 18%, while multifamily starts rose 5%. On a year-to-date basis, total residential starts were 24% higher. Single family starts were up 31%, while multifamily starts were 6% higher.
- For the 12 months ending April 2021, total residential starts were 12% higher than the 12 months ending April 2020. Single family starts gained 20%, while multifamily starts were down 8% on a 12-month sum basis.
- **The largest multifamily structures to break ground in April** were the $232 million Travis Residential Tower 1 in Austin TX, the $173 million 241 W 28th St mixed-use project in New York NY, and the $165 million Union Square Tower in Somerville, MA.
- **Regionally**, April's starts rose in the Northeast and Midwest but fell in the West, South Central, and South Atlantic regions.
- **Nonresidential building starts** rose 16% in April to a seasonally adjusted annual rate of $276.3 billion. Institutional building starts rose 19%, driven by education, transportation, and recreation buildings, while commercial starts rose 12% due to gains in the office and warehouse categories. Manufacturing starts also increased in April, climbing 25%. On a year-to-date basis, nonresidential building starts were 17% lower than during the first four months of 2020. Commercial starts were down 20%, while institutional starts were down 18%. Through the first four months of 2021, manufacturing starts were up 13%.
- For the 12 months ending April 2021, nonresidential building starts were 26% lower than the 12 months ending April 2020. Commercial starts were down 27%, while institutional starts were 18% lower. Manufacturing starts were down 53% for the 12 months ending April 2021.
- **The largest nonresidential building projects to break ground in April** were a $1.2 billion conversion of a storage building to an office project in New York NY, the $530 million Mickey Leland International Terminal in Houston TX, and a $325 million Amazon office project in Bellevue WA." – Richard Branch, Chief Economist, Dodge Data & Analytics

Source: https://www.construction.com/news/Construction-Starts-Slip-in-April-as-Housing-Cools; 5/18/21

Return to TOC

Private Indicators

MONTHLY CONSTRUCTION STARTS

(Millions of Dollars, Seasonally Adjusted Annual Rate)

	Apr 2021	Mar 2021	% Change
Nonresidential Building	$276,289	$237,858	16
Residential Building	387,774	442,833	-12
Nonbuilding Construction	189,477	186,275	2
Total Construction	$853,539	$866,966	-2

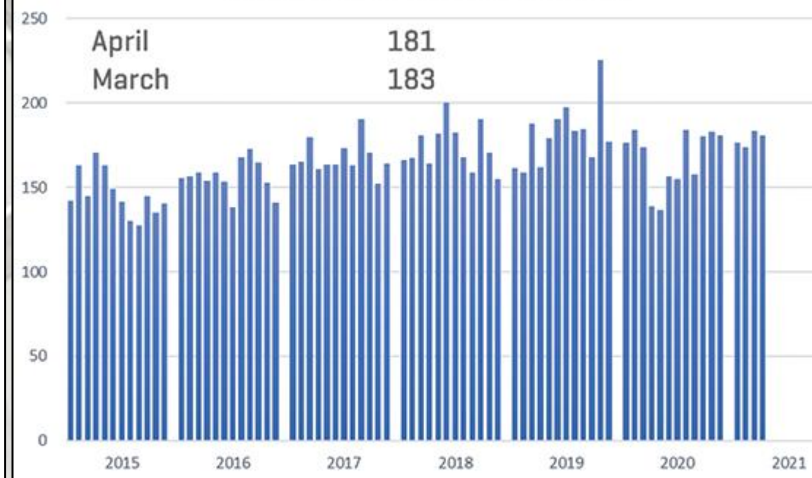
YEAR-TO-DATE CONSTRUCTION STARTS

Unadjusted Totals, in Millions of Dollars

	4 Mos. 2021	4 Mos. 2020	% Change
Nonresidential Building	$72,678	$87,953	-17
Residential Building	132,582	107,039	24
Nonbuilding Construction	58,224	55,065	6
Total Construction	$263,483	$250,056	5

THE DODGE INDEX

(2000=100, Seasonally Adjusted)



Source: Dodge Data & Analytics

Source: https://www.construction.com/news/Construction-Starts-Slip-in-April-as-Housing-Cools; 5/18/21

Return to TOC

Private Indicators

MNI Chicago

"The Chicago Business Barometer™, produced with MNI, jumped to 75.2 in May, the highest level since November 1973. Demand provided a boost to business activity, but supply chain constraints remain

Chicago Business Barometer™ Pushed On To 75.2 in May

Among the main five indicators, New Orders and Order Backlogs saw the largest gains, while Employment recorded the only decline. Demand remained strong in May with New Orders jumping to the highest level since December 1983. The index gained 7.7 points in May, while Production slowed 2.3 points. Anecdotal evidence signals strong consumer demand, partly due to the fear of raw material unavailability. Order Backlogs jumped 7.5 points, hitting a 70-year high. Firms noted logistical issues and personnel shortages which are driving backlogs. Inventories dropped to a 9-month low, the second successive reading below the 50-mark.

May saw Employment slip back into contraction territory, following two months of readings above 50. The indicator declined 6.5 points and firms indicated difficulties finding new staff. Supplier Deliveries rose 5.9 points to a 47-year high in May with supply chain constraints remaining a serious problem. Companies continuously noted delivery delays due to transportation issues and material shortages. Prices paid at the factory gate fell 3.1 points in May, down from April's 41-year high. However, several respondents said prices for commodities, such as steel, plastics, copper, or electronic components rose further.

This month's special question asked, "Considering the global shortage of computer chips, do you have contingency plans?" While the majority of 46.2% do not use the product, 28.2% have no plans in place. The second question asked about tensions due to the increase in global logistics and component shortages, with the majority is looking to mitigate the risks." – Les Commons, Senior Economist and Irene Prihoda, Economist, MNI Indicators

Source: https://www.ism-chicago.org/index.cfm; 5/28/21

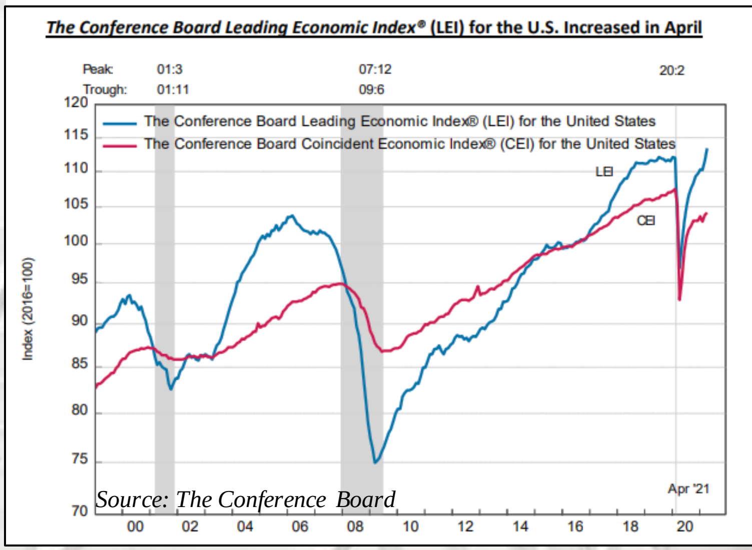
Return to TOC

Private Indicators

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

"**The Conference Board Leading Economic Index®** (LEI) for the U.S. increased 1.3 percent in April to 113.3 (2016 = 100), following a 1.3 percent increase in March and a 0.1 percent decline in February."

U.S. Composite Economic Indexes (2016 = 110)



"With April's large monthly gain to start the second quarter, the U.S. LEI has now recovered fully from its COVID-19 contraction – surpassing the index's previous peak, reached at the very onset of the global pandemic in January 2020. While employment and production have not recovered to their pre-pandemic levels yet, the U.S. LEI suggests the economy's upward trend should continue and growth may even accelerate in the near term. The Conference Board now forecasts real GDP could grow around 8 to 9 percent (annualized) in the second quarter, with year-over-year economic growth reaching 6.4 percent for 2021." – Ataman Ozyildirim, Senior Director of Economic Research, The Conference Board

"**The Conference Board Coincident Economic Index®** (CEI) for the U.S. increased by 0.3 percent in April to 104.1 (2016 = 100), following a 0.9 percent increase in March and a 0.7 percent decrease in February.

The Conference Board Lagging Economic Index® (LAG) for the U.S. increased by 1.8 percent in April to 104.7 (2016 = 100), following a 3.7 percent decrease in March and 2.5 percent increase in February."

Source: https://www.conference-board.org/data/bcicountry.cfm; 5/20/21

Return to TOC

Private Indicators

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

April New Business Volume Up 19 Percent Year-over-year, and 4 Percent Year-to-date

"The **Equipment Leasing and Finance Association's** (ELFA) **Monthly Leasing and Finance Index (MLFI-25)**, which reports economic activity from 25 companies representing a cross section of the $900 billion equipment finance sector, showed their overall new business volume for April was $9.8 billion, up 19 percent year-over-year from new business volume in April 2020. Volume was up 5 percent month-to-month from $9.3 billion in March. Year-to-date, cumulative new business volume was up 4 percent compared to 2020.

Receivables over 30 days were 1.8 percent, down from 1.9 percent the previous month and down from 3.0 percent in the same period in 2020. Charge-offs were 0.30 percent, down from 0.43 percent the previous month and down from 0.80 percent in the year-earlier period.

Credit approvals totaled 76.3 percent, down from 77.0 percent in March. Total headcount for equipment finance companies was down 15.4 percent year-over-year, a decrease due to significant downsizing at an MLFI reporting company.

Separately, the Equipment Leasing & Finance Foundation's Monthly Confidence Index (MCI-EFI) in May is 72.1, easing from April's all-time high of 76.1, but still at historic high levels." – Amy Vogt, Vice President, Communications and Marketing; Equipment Leasing & Finance Association

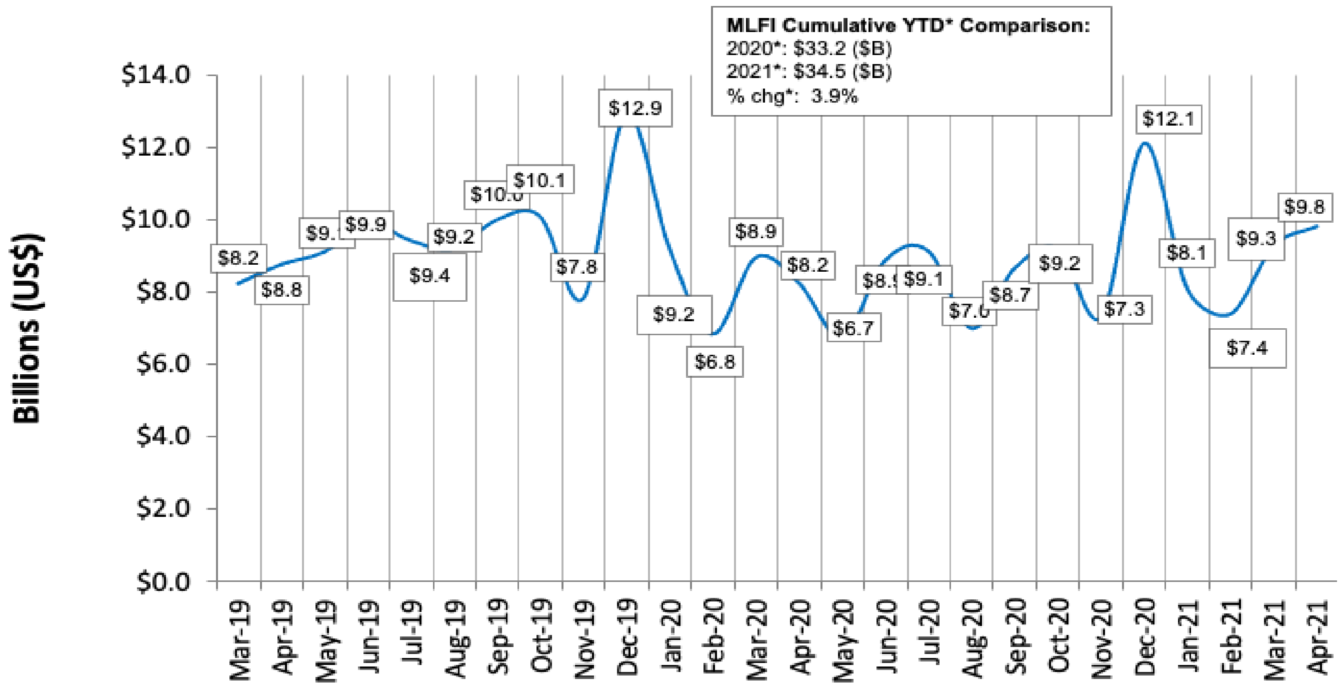
"Respondents showed robust April business activity, attesting to a strengthening economy. Despite soft labor market data for the month, an increasing number of businesses are opening up, as more Americans are receiving a vaccination, traveling and otherwise trying to return to some semblance of normalcy. Portfolio quality also shows resilience as lease and loan contract modifications requested by many customers appear to be in the rear-view mirror. The economy and business activity still have a ways to go to return to pre-pandemic levels, but what we see so far in terms of capital equipment investment is indeed encouraging as we head into the summer months." – Ralph Petta, President and CEO, ELFA

Source: https://www.elfaonline.org/news/press-room/press-releases/details/2021/05/26/equipment-leasing-and-finance-association-s-survey-of-economic-activity-monthly-leasing-and-finance-index; 5/25/21

Return to TOC

Private Indicators

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



* YTD NBV numbers will not match the numbers from the chart due to rounding

ELFA
Equipping Business for Success

MLFI

Monthly Leasing and Finance Index: April 2021

"2021 is trending to be a banner year for CEFI. The April MLFI results and those at CEFI's demonstrate major similarities; the only outlier being YOY headcount (where CEFI is 20 percent above). While we are actively seeking to hire additional team resources, the recruiting market is proving to be challenging" – Ricardo Rios, President and CEO, Commercial Equipment Finance, Inc.

Source: https://www.elfaonline.org/news/press-room/press-releases/details/2021/05/26/equipment-leasing-and-finance-association-s-survey-of-economic-activity-monthly-leasing-and-finance-index; 5/25/21

Return to TOC

Private Indicators

Markit U.S. Manufacturing PMI™

Production growth accelerates amid stronger client demand, but supply chain disruption remains marked

"May PMI™ data from IHS Markit indicated a substantial improvement in the health of the U.S. manufacturing sector, with the rate of overall growth accelerating to a fresh record high. The upturn was supported by stronger expansions in output and new orders, with the pace of the latter reaching the fastest on record. Nonetheless, constraints on production capacity were exacerbated further during the month, as severe supply-chain disruptions led to a marked accumulation of backlogs of work and one of the fastest rises in input prices since data collection began in May 2007.

Although firms were able to partially pass on higher cost burdens, supply shortages and the potential for future strain on capacity pushed output expectations down to their lowest for seven months.

The seasonally adjusted IHS Markit U.S. Manufacturing Purchasing Managers' Index™ (PMI™) posted 62.1 in May, up from 60.5 in April and from the earlier release 'flash' estimate of 61.5. The increase in business activity signalled among U.S. manufacturers was among the strongest in the 14-year series history.

Contributing to the uptick in the headline figure was a significant expansion of production during May. The increase in output was widely attributed to stronger client demand and a further marked rise in new order inflows. The accelerated pace of growth in production was the second-strongest since late-2014. That said, component shortages and supplier delays reportedly continued to limit operating capacity, and stymied the upturn. Although the extent to which lead times for inputs lengthened softened slightly, it was among the most marked on record." – Chris Williamson, Chief Economist, Markit®

Source: https://www.markiteconomics.com/Public/Home/PressRelease/fca84cfcbc154e05a2bd805b264290e5; 5/1/21

Return to TOC

Private Indicators

Markit U.S. Manufacturing PMI™

“New orders increased at the fastest pace on record in May, as both domestic and foreign client demand ticked higher. The upturn was often linked to the loosening of COVID-19 restrictions and successful vaccine rollouts, which led to stronger demand conditions. Similarly, new export order growth quickened, and was the sharpest since the first month of data collection in May 2007. As a result of the combination of strong demand and supply constraints, supplier prices were hiked once again, leading to the sharpest rise in cost burdens since July 2008. Greater demand for inputs across the sector, in addition with higher logistics fees, were commonly cited as factors driving the rise in input prices.

Firms sought to pass on higher cost burdens to their clients amid favourable demand conditions, with the rate of charge inflation quickening to a fresh series high. Meanwhile, backlogs of work rose at an unprecedented pace. Despite a further expansion in employment, firms noted that efforts to process work-in-hand were stymied by input shortages. As such, the rate of job creation slowed to the softest since December 2020. Others also stated that the slower rise in employment was linked to difficulties finding suitable candidates and struggles to fill available vacancies, exacerbating capacity constraints.

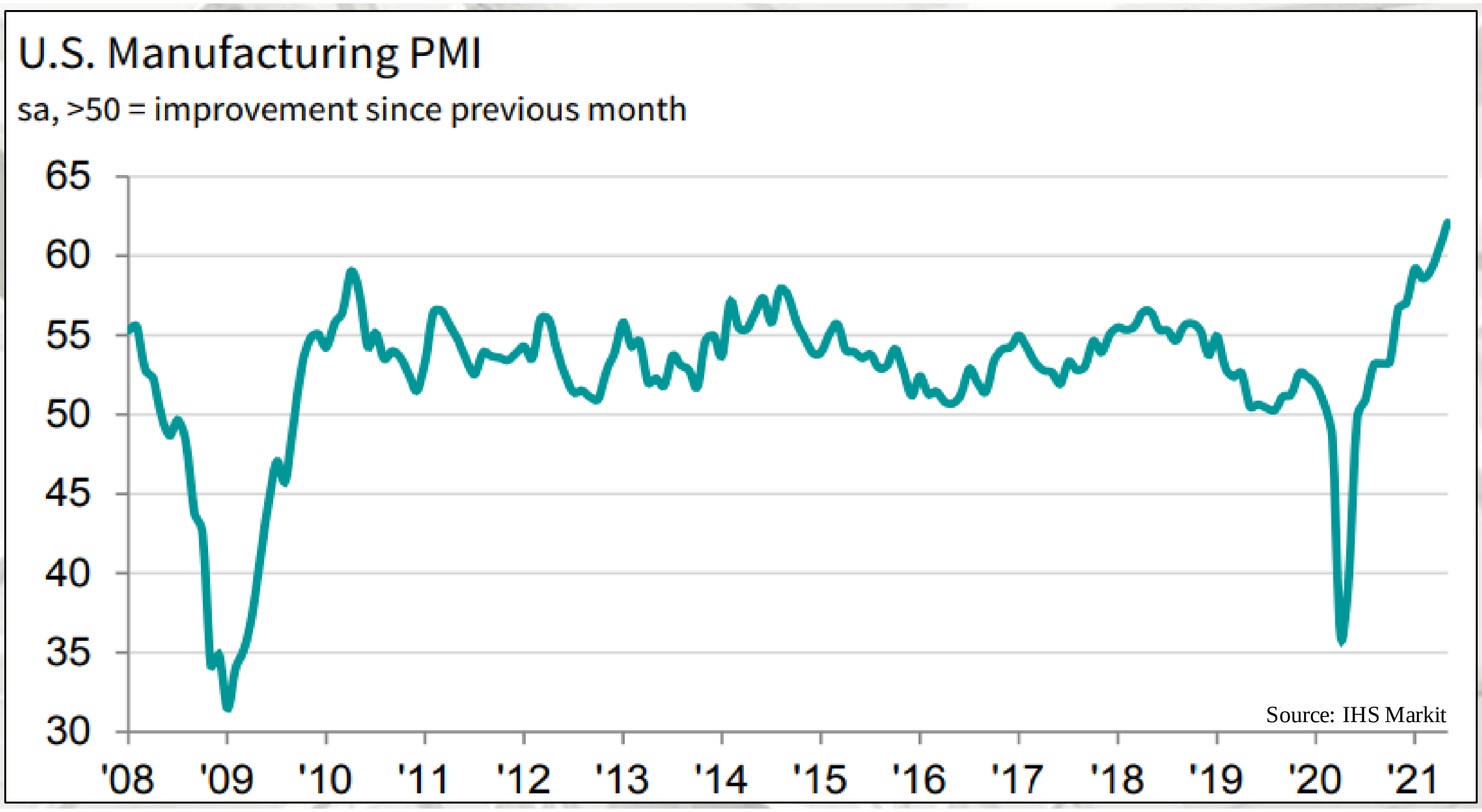
In an effort to protect against future supply shortages, firms increased their input buying activity markedly. Pre-production inventories were built at the fastest rate on record, but stocks of finished goods fell further as holdings were used to supplement production. Finally, supply issues weighed on business confidence in May. The degree of optimism remained upbeat on average, but dipped to a seven-month low amid concerns regarding future supply flows.

US manufacturers are enjoying a bumper second quarter, with the PMI hitting a new high for the second month running in May. Inflows of new orders are surging at a rate unsurpassed in 14 years of survey history, buoyed by reviving domestic demand and record export sales as economies reopen from COVID-19 restrictions. However, elevated levels of other survey indicators are less welcome: prices charged by manufacturers are also rising at an unprecedented rate, linked to soaring input costs and unparalleled capacity constraints.” – Chris Williamson, Chief Economist, Markit®

Source: https://www.markiteconomics.com/Public/Home/PressRelease/fca84cfcbc154e05a2bd805b264290e5; 5/1/21

Return to TOC

Private Indicators



Markit U.S. Manufacturing PMI™

"Not only is operating capacity being curbed by record supply chain delays so far in the second quarter, but firms have also been increasingly unable to hire sufficient staff. Hence backlogs of work are building up at an unprecedented rate, as firms struggle to meet demand. These backlogs of orders should support further production growth in the next few months, adding to signs of impressive economic expansion over the summer. But manufacturers' expectations further ahead have moderated, hinting that the growth rate is peaking, linked to worries about capacity limits being reached, rising prices hitting demand and a peaking of stimulus measures." – Chris Williamson, Chief Economist, Markit®

Source: https://www.markiteconomics.com/Public/Home/PressRelease/fca84cfcbc154e05a2bd805b264290e5; 5/1/21

Return to TOC

Private Indicators

IHS Markit U.S. Services PMI™

Business activity growth rate accelerates to record high in May

"May PMI™ data indicated the fastest rise in business activity since data collection for the series began in October 2009. The unprecedented expansion in output was supported by a marked increase in new business, in turn buoyed by the quickest rise in new export orders for nine months. Greater business requirements resulted in a further sharp rise in employment. That said, the pace of job creation softened as firms reported difficulties filling vacancies. Strain on capacity was also reflected in another monthly rise in backlogs of work.

At the same time, the rate of input cost inflation accelerated to a series high amid ongoing supplier price hikes. In an effort to pass on greater costs, service providers raised their charges at an unprecedented pace. The seasonally adjusted final IHS Markit US Services PMI Business Activity Index registered 70.4 in May, up from 64.7 in April and greater than the earlier released 'flash' estimate of 70.1.

The upturn in output was the fastest on record, with the rate of expansion accelerating for the fifth month running. The increase in business activity was often linked to stronger client demand and a sustained rise in new orders. Firms also noted that the continued reopening of the economy following COVID-19 restrictions allowed for a greater range of services to be made available for customers.

Driving the expansion in output was a quicker rise in new business across the service sector during May. The rate of growth was the fastest since data collection began in late-2009. The unprecedented increase in new orders was attributed to stronger business and consumer confidence, stemming from a successful vaccination programme and the reopening of the economy. Greater foreign demand was reflected in the quickest rise in new export orders for nine months." – Chris Williamson, Chief Economist, Markit®

Source: https://www.markiteconomics.com/Public/Home/PressRelease/1092ca7290b24f8880984fce9ba10698; 5/3/21

Return to TOC

Private Indicators

IHS Markit U.S. Services PMI™

"May data indicated a quicker rise in input costs across the service sector, as supplier price hikes intensified cost pressures. The rate of inflation accelerated for the seventh month running and was the sharpest on record. Consequently, service providers stepped up their efforts to pass on higher costs to clients, with the pace of charge inflation quickening to the steepest in the survey's history. Companies mentioned that greater costs were being progressively passed through to customers amid burgeoning demand.

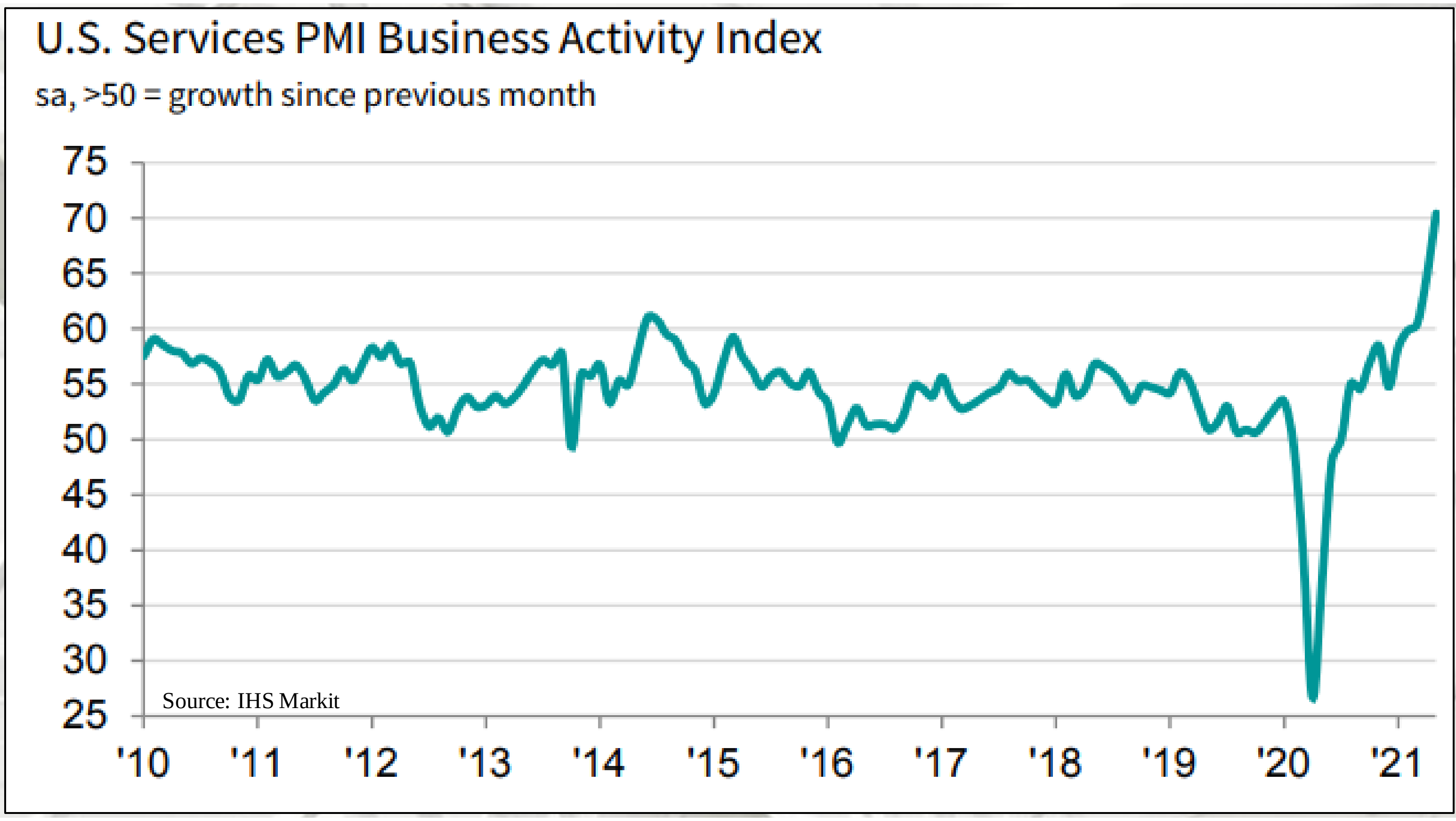
Meanwhile, greater business requirements owing to rapid sales growth led to a further rise in staffing numbers during May. The rate of job creation remained sharp and outpaced the long-run series average. That said, the pace of increase eased slightly since April amid reported challenges enticing workers back to employment and finding suitable candidates for available vacancies. Although the rate of backlog accumulation slowed in May, the rise in outstanding business was solid overall and among the steepest on record amid pressure on capacity. Output expectations among service providers regarding the outlook for activity over the coming year improved in May. The degree of confidence was marked overall, with optimism stemming from looser COVID-19 restrictions and stronger client demand. …

The US economic recovery shifted up a gear in May, with output of the combined manufacturing and service sectors surging past all prior peaks by an impressive margin. The strong correlation between the PMI and GDP means the economy looks set to enjoy rapid – potentially double-digit – growth in the second quarter." – Chris Williamson, Chief Economist, Markit®

Source: https://www.markiteconomics.com/Public/Home/PressRelease/d3878b2bf932488f9c9003dee977e13f; 5/5/21

Return to TOC

Private Indicators



IHS Markit U.S. Services PMI™

"Further robust expansions are indicated for the summer months, with an improving order book situation accompanied by elevated levels of business confidence and the further easing of virus restrictions both at home and abroad. But the survey's price gauges have also climbed to unsurpassed levels, which will add to inflation worries. These unprecedented output and price growth rates will inevitably lead to speculation about an earlier than previously expected tapering of Fed policy" – Chris Williamson, Chief Economist, Markit®

Source: https://www.markiteconomics.com/Public/Home/PressRelease/d3878b2bf932488f9c9003dee977e13f; 5/5/21

Return to TOC

Private Indicators

National Association of Credit Management – Credit Managers' Index

Report for May 2021: Combined Sectors

"As credit managers are well aware, their interests are often oriented toward the future. It is the nature of their tasks. As decisions are made regarding the extension of credit and credit terms, they are consumed about more than the present day. Rather, they look forward to what will happen in 90 days or longer. This is an important point to consider when looking at NACM's Credit Managers' Index. The index is an assessment of what is likely to happen from the perspective of credit managers. "When the numbers are as consistently good as they have been the last few months, that is a signal that economic conditions are expected to be positive in the next quarter or two," said NACM Economist Chris Kuehl, Ph.D.

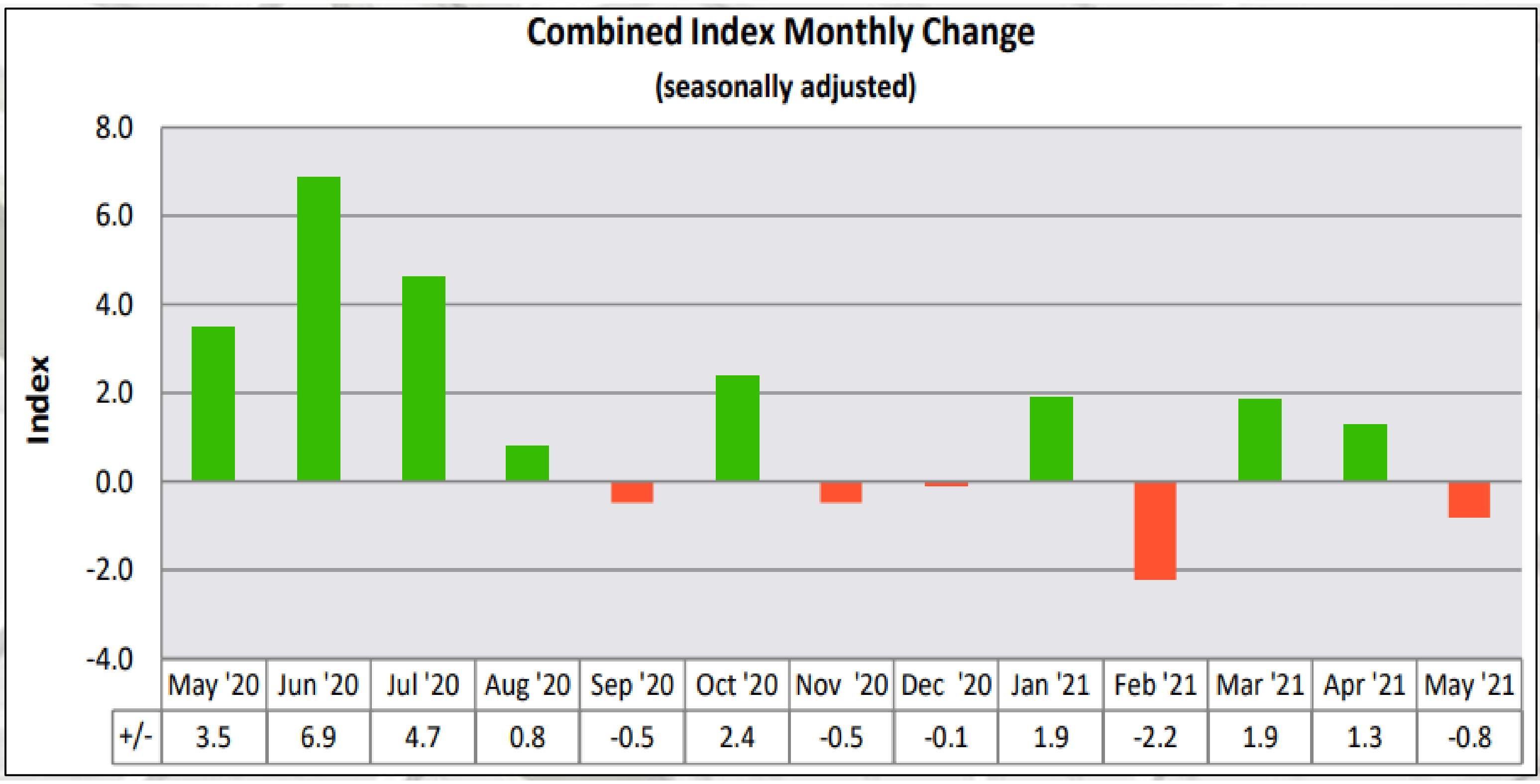
Month on month, the data changed very little from April to May. The numbers remain healthy and firmly in the expansion zone. The combined score for the manufacturing and service sectors slipped just 0.8 points – about where it was in January. The last time the combined numbers were in contraction territory was in May of 2020. The combined index of favorable factors also remained robust despite a slight fall from April's readings, and the combined index of unfavorable factors only dropped 0.4 points month on month.

Sales have been beyond robust for months now, Kuehl pointed out. "The memories of readings as low as 28.6 and 54.1 are fading as these readings remain above 70 for six of the last eight months." New credit applications remain high, while dollar collections slipped a little more than the other favorable categories. "This is hardly concerning given that the number remains above 60, but this is a category we watch aggressively, after all 'it isn't a sale until we are paid,'" Kuehl said. Amount of credit extended held. With a 5.4-point drop, accounts placed for collection had the biggest change. "However, that is a similar reading to what it has been the last few months," Kuehl said. Rejections of credit applications was one of four unfavorable categories to improve – albeit slightly. Disputes gained 2.4 points. "There has been a little less controversy over what position companies find themselves in," Kuehl explained." – Andrew Michaels, Editorial Associate, NACM

Source: https://nacm.org/cmi.html; 5/31/21

Return to TOC

Private Indicators



National Association of Credit Management – Credit Managers' Index

"With a 2.3-point drop, dollar amount beyond terms returned to where it has been in previous months. Dollar amount of customer deductions held close to last month's reading, and filings for bankruptcies had its best reading since January 2014. "It is well above the average for the last 12 months," Kuehl said. "The shake-out in most of the business community seems to have taken place, and those companies that were severely weakened by the pandemic have met their fate and left the survivors to seek market share."
– Andrew Michaels, Editorial Associate, NACM

Source: https://nacm.org/cmi.html; 5/31/21

Return to TOC

Private Indicators

Combined Manufacturing and Service Sectors (seasonally adjusted)	May '20	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20	Jan '21	Feb '21	Mar '21	Apr '21	May '21
Sales	28.6	54.1	64.3	65.8	65.5	74.2	66.5	70.2	75.9	69.9	73.9	74.7	73.2
New credit applications	43.3	57.9	62.4	63.4	63.6	65.2	63.9	64.4	67.8	65.5	63.9	65.9	64.6
Dollar collections	43.2	53.9	62.5	61.2	63.3	64.6	62.6	62.8	66.0	59.2	64.5	63.1	60.0
Amount of credit extended	42.8	55.2	57.3	61.3	60.8	68.0	64.8	65.3	69.2	66.8	68.4	69.0	69.0
Index of favorable factors	**39.5**	**55.3**	**61.6**	**62.9**	**63.3**	**68.0**	**64.4**	**65.7**	**69.7**	**65.3**	**67.7**	**68.2**	**66.7**
Rejections of credit applications	51.9	49.8	50.0	51.5	51.6	51.4	51.5	51.3	51.6	51.5	52.0	53.0	53.1
Accounts placed for collection	49.1	46.7	50.8	51.6	49.4	49.5	56.2	51.6	52.9	51.6	55.1	59.6	54.2
Disputes	51.5	49.6	50.7	51.8	48.7	51.0	50.6	51.2	50.9	51.0	50.6	51.3	53.7
Dollar amount beyond terms	32.4	44.4	57.3	58.2	54.6	58.0	58.1	57.0	58.9	52.0	57.0	59.4	57.1
Dollar amount of customer deductions	50.9	50.6	52.4	52.2	51.1	51.0	51.7	51.5	51.3	52.8	52.2	53.0	53.6
Filings for bankruptcies	47.3	47.7	48.8	47.7	51.3	50.7	53.0	52.5	52.3	54.5	55.7	57.1	59.3
Index of unfavorable factors	**47.2**	**48.1**	**51.7**	**52.2**	**51.1**	**51.9**	**53.5**	**52.5**	**53.0**	**52.2**	**53.8**	**55.6**	**55.2**
NACM Combined CMI	**44.1**	**51.0**	**55.6**	**56.5**	**56.0**	**58.4**	**57.9**	**57.8**	**59.7**	**57.5**	**59.3**	**60.6**	**59.8**

Source: https://nacm.org/cmi.html; 5/31/21

Return to TOC

Private Indicators

National Federation of Independent Business (NFIB) May 2021 Report

Nearly Half of Small Businesses Unable to Fill Job Openings

"Small business owners are struggling at record levels trying to get workers back in open positions. Owners are offering higher wages to try to remedy the labor shortage problem. Ultimately, higher labor costs are being passed on to customers in higher selling prices." – Bill Dunkelberg, Chief Economist, NFIB

"A record-high 48% of small business owners in May reported unfilled job openings (seasonally adjusted), according to NFIB's monthly jobs report. May is the fourth consecutive month of record-high readings for unfilled job openings and is 26 points higher than the 48-year historical reading of 22%.

Sixty-one percent of owners reporting hiring or trying to hire in May. Owners have plans to fill open positions with a seasonally adjusted net 27% planning to create new jobs in the next three months.

A net 34% of owners (seasonally adjusted) reported raising compensation, the highest level in the past 12 months. A net 22% of owners plan to raise compensation in the next three months, up two points from April." – Holly Wade, NFIB

Source: http://www.nfib.com/surveys/small-business-economic-trends; 6/8/21

Return to TOC

Private Indicators

National Federation of Independent Business (NFIB)
May 2021 Report

Nearly Half of Small Businesses Unable to Fill Job Openings

"Small business owners continue to report finding qualified employees remains a problem with 93% of owners hiring or trying to hire reported few or no "qualified" applications for the positions they were trying to fill in May. Thirty-two percent of owners reported few qualified applicants for their positions and 25% reported none.

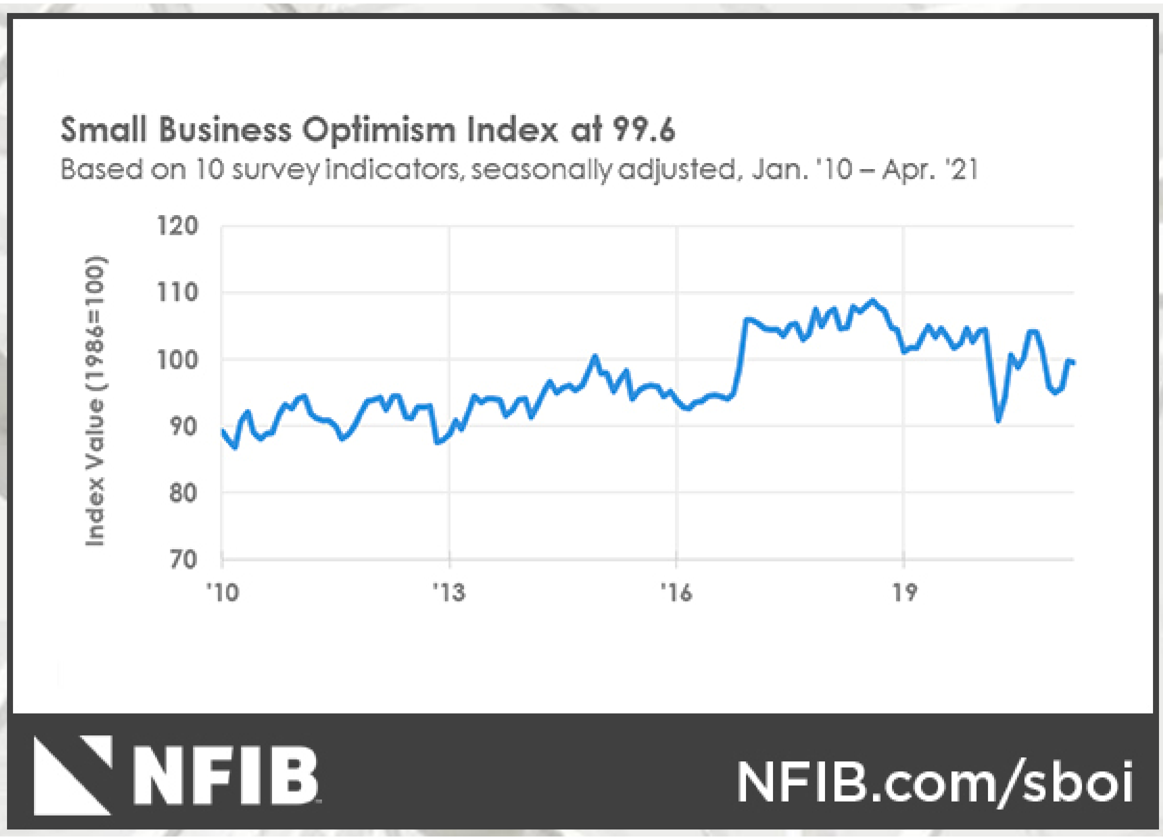
Eight percent of owners cited labor costs as their top business problem and 26% said that labor quality was their top business problem, the top business concern.

Forty percent of small business owners have job openings for skilled workers and 27% have openings for unskilled labor. In the construction industry, 51% of job openings are for skilled workers. Sixty-six percent of construction businesses reported few or no qualified applicants." – Holly Wade, NFIB

Source: http://www.nfib.com/surveys/small-business-economic-trends; 6/8/21

Return to TOC

Private Indicators



Optimism Index

"The Optimism Index fell a bit in May to 99.6, a decline of 0.2 points from April. After steadily increasing in each month of 2021, May saw a slight pause in the recovery of small business optimism. The economy is doing very well currently, and owners are scrambling to take advantage of it by hiring and investing. The first five Index components in the table are at historically high levels. However, the other five components which are forward-looking expectations, are flashing yellow, indicating owners have waning confidence that the economy will be better by year end. The NFIB Uncertainty Index decreased 1 point to 79." – Holly Wade, NFIB

Source: http://www.nfib.com/surveys/small-business-economic-trends; 6/8/21

Return to TOC

Private Indicators

Small Business Optimism

Index Component	Net %	Change From Apr.
Plans to Increase Employment	27%	▲ 6
Plans to Make Capital Outlays	27%	— 0
Plans to Increase Inventories	6%	▲ 1
Expect Economy to Improve	-26%	▼ -11
Expect Real Sales Higher	2%	▲ 1
Current Inventory	8%	▲ 1
Current Job Openings	48%	▲ 4
Expected Credit Conditions	-3%	— 0
Now a Good Time to Expand	13%	▼ -1
Earnings Trends	-11%	▼ -4

NFIB NFIB.com/sboi

Source: http://www.nfib.com/surveys/small-business-economic-trends; 6/8/21

Return to TOC

Private Indicators

Thomas Manufacturing Index (TMX)

"The Thomas Manufacturing Index, or "TMX", is an index that measures industrial activity in the United States and Canada. TMX leads the stock market when industrial activity is driven by long term investments or major shifts in the manufacturing sector.

Conversely, the index lags the market when there are sustained sharp upward or downward trends in stock prices. This is particularly the case when the market is in an investment regime where sourcing is highly impacted by the availability of capital. As a manufacturing sector fundamentals index, TMX sheds light on key dynamics that drive market performance.

Occasionally, some extraordinary events such as trade conflicts or the coronavirus outbreak result in major disruptions in the supply chain. In these particular cases, TMX was an early indicator as it temporarily diverged from the market." – Thomas Publishing Company

Source: https://business.thomasnet.com/tmx; 6/1/21

Return to TOC

Private Indicators

The Paychex | IHS Markit Small Business Employment Watch

Following April Surge, Small Business Job Growth Holds Pace in May

The rate of job growth in leisure and hospitality continued to increase but slowed in the construction industry

"The rate of job growth was largely unchanged in May, according to aggregated payroll data of approximately 350,000 clients provided by Paychex. The data released in the May report of the Paychex | IHS Markit Small Business Employment Watch shows the Small Business Jobs Index moderated slightly, slowing 0.07 percent month over month. Hourly and weekly earnings growth fell below three percent in May, driven by part-time workers with lower wages returning to the workforce." – Lisa Fleming, Kate Smith, and Tess Flynn, Paychex, Inc.

"The Small Business Jobs Index did not show significant growth – holding steady in May. Small businesses are struggling to return to normal operations and expand due to labor shortages." – James Diffley, Chief Regional Economis, IHS Markit

"In addition to the hiring challenges seen nationally, job growth declines in the construction industry impacted the positive momentum of the past few months. The high cost and low availability of materials drove job growth in construction down 1.78 percent in May. At the same time, with more people dining out and travel increasing across the U.S., job growth in the leisure and hospitality industry is rebounding significantly, and wages are too." – Martin Mucci, President and CEO, Paychex

Source: https://www.paychex.com/employment-watch; 6/1/21

Return to TOC

Private Indicators

The Paychex | IHS Markit
Small Business Employment Watch

"In further detail, the May report showed:

- The national index is up 4.58 percent during the past quarter, driven largely by the lower employment comparison level last year.
- Job growth in the construction industry slowed sizably in May, down 1.78 percent.
- Leisure and hospitality continued their comeback, gaining 1.94 percent in May and 12.40 percent during the past quarter.
- The South continues to lead all regions in small business job growth.
- Texas once again takes the top ranking for job growth among states.
- Tampa leads metros in small business job growth.." – Lisa Fleming, Kate Smith, and Tess Flynn, Paychex, Inc.

Source: https://www.paychex.com/employment-watch; 6/1/21

Return to TOC

Private Indicators

The Paychex | IHS Markit Small Business Employment Watch

May Jobs Index	May Wage Data
Index	Hourly Earnings
98.27	$29.17
12-Month Change	12-Month Growth
+3.59%	+2.72% (+$0.77)

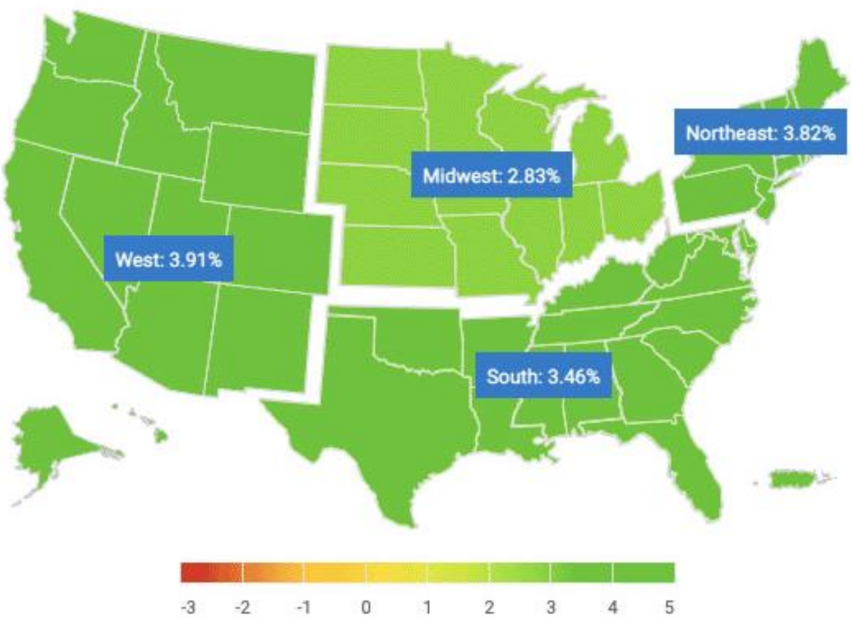
Source: Paychex | IHS Markit Small Business Employment Watch

Source: https://www.paychex.com/employment-watch; 6/1/21

Private Indicators

The Paychex | IHS Markit Regional Jobs Index

Regional Performance



Region	Index	Change
Midwest	97.97	2.83%
Northeast	97.70	3.82%
South	99.38	3.46%
West	98.04	3.91%

Change 12-Month

Source: Paychex | IHS Markit Small Business Employment Watch

Source: https://www.paychex.com/employment-watch; 6/1/21

Return to TOC

Demographics

Freddie Mac

Housing Supply: A Growing Deficit

"The main driver of the housing shortfall has been the long-term decline in the construction of single-family homes and that decline has been exacerbated by an even larger decrease in the supply of entry-level single-family homes, or starter homes."

"Our analysis estimates the housing shortage not only based on the actual number of households but also considers the latent demand and the number of vacant units. A well-functioning housing market requires some vacant properties for sale and for rent.

EXHIBIT 1

Updated target housing stock

		2018			2020		
	HVS, Millions	Actual	Target	Gap	Actual	Target	Gap
(1)	Households	121.2	122.5	1.3	125.8	126.2	0.4
(2)	Vacant Units	17.0	18.3	1.3	15.4	18.9	3.5
=(1)+(2)	Housing Stock	138.3	140.8	2.5	141.2	145.0	3.8

Source: U.S. Census Bureau Housing Vacancy Survey (HVS).
Note: Totals may add up due to rounding.

Exhibit 1 shows the updated target housing stock numbers. As of the fourth quarter of 2020, the U.S. had a housing supply deficit of 3.8 million units. These 3.8 million units are needed to not only meet the demand from the growing number of households but also to maintain a target vacancy rate of 13%. Between 2018 and 2020, the housing stock deficit increased by approximately 52% (See Appendix 1 for detailed calculations of the Housing Supply Deficit)." – Sam Khater, Chief Economist, Leonard Kiefer, Deputy Chief Economist, and Venkataramana Yanamandra, Quantitative Analytics Senior; Economic & Housing Research Group; Freddie Mac

Source: http://www.freddiemac.com/research/insight/20210507_housing_supply.page; 5/7/21

Return to TOC

Demographics

Freddie Mac

The evolution of the housing supply shortage

"For years, tight housing supply has been the sore spot for an otherwise healthy housing market.[1] Inventory of both new and existing homes for sale is currently at a historical low. There are various reasons why housing supply has not been able to keep up with the rising household demand. A few of the most often cited reasons for housing shortages are the lack of available construction labor (81% of the construction firms surveyed by Associated General Contractors of America in 2020 cited this issue[2]), land use regulations, zoning restrictions preventing supply from picking up in areas which have the most demand, NIMBYism (not in my back yard), lack of land developers and land to develop.

In recent years, increasing raw material costs have also been adding to builders' woes, especially during the pandemic when lumber prices increased more than 150%. But one of the most important reasons for this shortfall has been the severe underbuilding of entry-level homes[3,4], where most of the demand exists, especially now given the large cohort of Millennials entering the housing market. Given the significant impact of this factor, we discuss the entry-level shortage in some detail below.

However, the decade long average for construction of single-family homes masked a troubling trend. In the second half of the 1980s, the share of new entry-level supply decreased from 40% of our nation's new single-family housing units in 1982 to 24% by 1989, a large decline that continues to today.

In the 1990s, as inflation fears decreased, mortgage rates fell by over four percentage points to 8.1%. The decline in mortgage rates led to an increase in demand for new single-family construction from 966,000 units in 1990 to one million units by 1999, the highest rate since 1979. While new construction was at a 20-year high, entry-level single-family production averaged a mere 207,000 units per year during the 1990s, down from 314,000 during the 1980s and 418,000 in the latter half of the 1970s." – Sam Khater, Chief Economist, Leonard Kiefer, Deputy Chief Economist, and Venkataramana Yanamandra, Quantitative Analytics Senior; Economic & Housing Research Group; Freddie Mac

Source: http://www.freddiemac.com/research/insight/20210507_housing_supply.page; 5/7/21

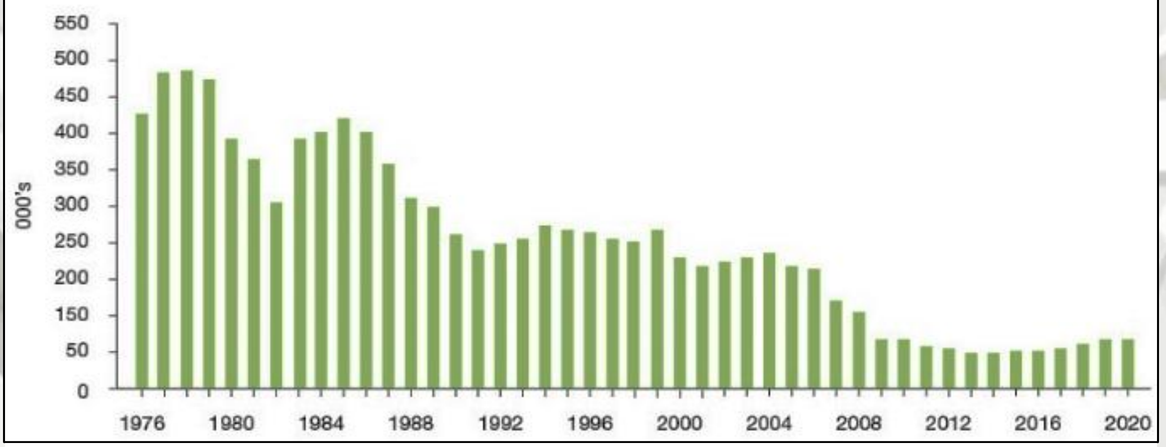
Return to TOC

Demographics

EXHIBIT 2

Number of new homes constructed below 1,400 square feet

Entry-Level home construction collapsed after the Great Recession and never recovered

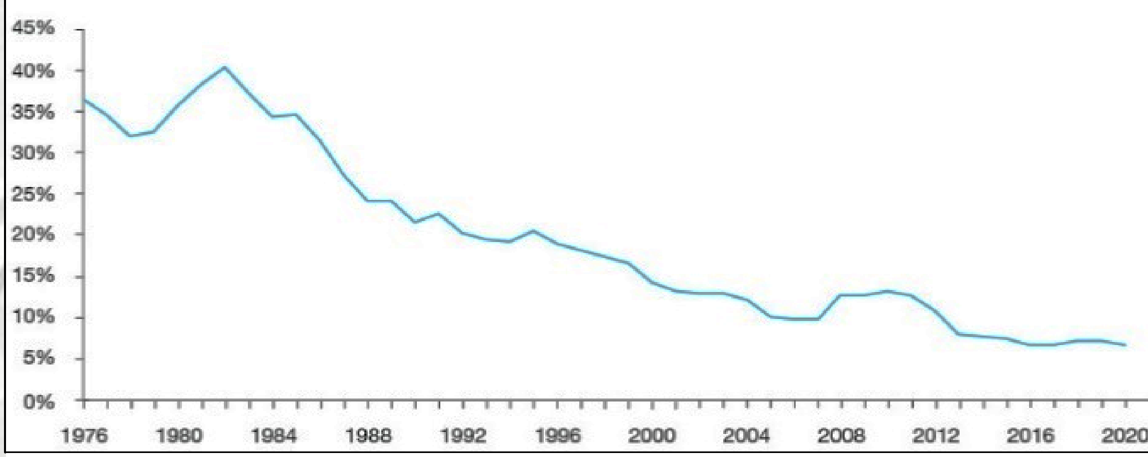


Source: U.S. Census Bureau

EXHIBIT 3

Percent of new homes below 1,400 square feet

Entry-Level home construction consistently declined as a share of new construction and is at near a 50-Year Low



Source: U.S. Census Bureau

Source: http://www.freddiemac.com/research/insight/20210507_housing_supply.page; 5/7/21

Return to TOC

Demographics

Freddie Mac

The evolution of the housing supply shortage

"The 2000s saw a substantial rise in new housing supply in reaction to new mortgage rate lows and new subprime and Alt-A products that led to record home purchase demand by the middle of the decade. As a result, new single-family housing supply rose to 1.7 million in 2006 – the highest construction level in sixty-years. Despite the record increase and level of new single-family housing supply, entry-level supply continued its downward trajectory. During the 2000s, new entry-level housing supply averaged 150,000 units per year, compared to 207,000 during the 1990s. Even at its cyclical peak during the 2000s, entry-level supply reached only 186,000 units in 2004, the same year that home ownership peaked during this period. This trend is indicative of the impact of entry-level housing supply on home ownership, which is well below the peaks of prior expansions.

During the 2010s, new entry-level housing supply decreased further to an average of 55,000 units per year, and in 2020, we estimate that there were only 65,000 new entry-level homes completed – less than one-fifth of the entry-level homes constructed per year in the late 1970s and early 1980s.

Future outlook: Shortage to continue on strong demand

The ongoing housing shortage is large and rising, in part due to the effects of the COVID-19 pandemic. Our estimates suggest that the shortage has increased 52% from 2.5 million in 2018 to 3.8 million in 2020. And given the low-mortgage interest rate environment, the high demand, and the need for more space, we expect this shortage to continue into the near future. In fact, the decline in entry-level supply is even more pronounced than the overall shortage. The share of entry-level homes in overall construction declined from 40% in the early 1980s to around 7% in 2019." – Sam Khater, Chief Economist, Leonard Kiefer, Deputy Chief Economist, and Venkataramana Yanamandra, Quantitative Analytics Senior; Economic & Housing Research Group; Freddie Mac

Source: http://www.freddiemac.com/research/insight/20210507_housing_supply.page; 5/7/21

Return to TOC

Demographics

Freddie Mac

Future outlook: Shortage to continue on strong demand

"The U.S. is currently experiencing an increase in housing demand that is well beyond what record low mortgage rates would typically yield as many people are spending more time at home. This high demand has driven the housing supply shortage even higher and has also caused home prices to rise over 12% from a year ago. We do not expect housing demand to decrease in the near-term, especially given the demographic tailwind. For example, Millennials at a population of 72 million, are now the largest demographic in the U.S., and they are at their peak first-time homebuying age – the age where home ownership soars the most. This can be seen in Exhibit 4a, which indicates the percentage point change in home ownership by age group. The exhibit indicates that the largest change in the home ownership rate is for those under 25 years of age to those between 25 to 29 years of age. This change is also reflected in the increase in the home ownership rate of the 25-34-year olds, which has been increasing since 2016 after recovering from the impact of the Great Recession of 2008-09 (Exhibit 4b). Given the large young adult cohorts entering the housing market, the demand for entry-level single-family homes should remain high for the rest of the decade.

The combination of low supply (especially entry-level) and high demand (especially entry-level) is causing entry-level prices to rapidly escalate well above overall prices, triggering affordability issues for buyers to come up with even larger down payments." – Sam Khater, Chief Economist, Leonard Kiefer, Deputy Chief Economist, and Venkataramana Yanamandra, Quantitative Analytics Senior; Economic & Housing Research Group; Freddie Mac

Footnotes

[1] See "The Major Challenge of Inadequate U.S. Housing Supply" (www.freddiemac.com/research/insight/20181205_major_challenge_to_u.s._housing_supply.page)

[2] See "How to Adapt to the Skilled Labor Shortage in Construction" (www.propelleraero.com/blog/how-to-adapt-to-the-skilled-labor-shortage-in-construction/)

[3] See two Freddie Mac Insights on the topic: "The Housing Supply Shortage: State of the States" (www.freddiemac.com/research/insight/20200227-the-housing-supply-shortage.page) and "The Major Challenge of U.S. Housing Supply."

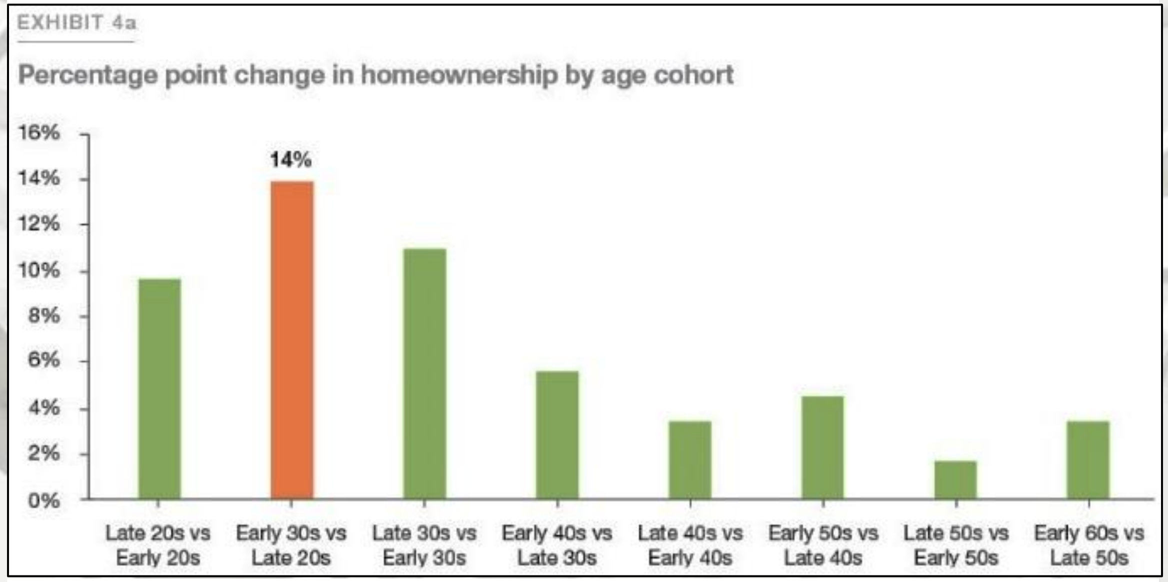
[4] We define entry-level homes as homes with 1,400 square feet or less. The median single-family home today has about 2,000 square feet (U.S. Census Bureau, www.census.gov/construction/chars/highlights.html)

Source: http://www.freddiemac.com/research/insight/20210507_housing_supply.page; 5/7/21

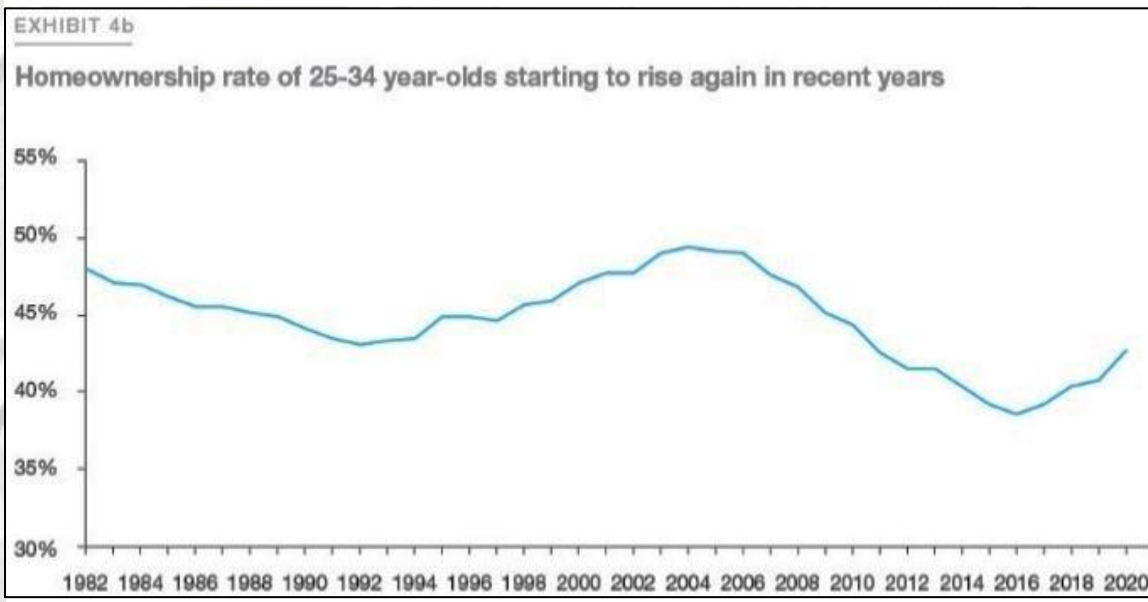
Return to TOC

Demographics

Freddie Mac



Source: HVS, U.S. Census Bureau



Source: HVS, U.S. Census Bureau

Source: http://www.freddiemac.com/research/insight/20210507_housing_supply.page; 5/7/21

Return to TOC

Economics

U.S. Census Bureau

NEW Business Formation Statistics

May 2021

Business Applications - At a Glance

		US	Northeast	Midwest	South	West
Total	MAY 2021	500,219	69,899	85,427	243,617	101,276
	MAY 2021 / APR 2021	+1.2%	+1.3%	-4.0%	+3.1%	+1.0%
High-Propensity	MAY 2021	167,706	24,949	28,037	76,593	38,127
	MAY 2021 / APR 2021	+0.6%	-1.8%	-1.9%	+2.3%	+0.8%
With Planned Wages	MAY 2021	57,000	7,610	10,132	25,777	13,481
	MAY 2021 / APR 2021	+0.9%	-0.4%	-3.1%	+2.8%	+1.2%
From Corporations	MAY 2021	52,499	10,327	6,473	20,111	15,588
	MAY 2021 / APR 2021	-0.8%	-5.9%	-2.5%	+2.3%	-0.5%

Details may not equal totals due to rounding. Regions defined by Census Bureau Geography Program. Statistical significance is not applicable or not measurable.
Data adjusted for seasonality. Green Percentage changes are greater than zero (+). Red Percentage changes are less than zero (-). Z = absolute value < 0.05.

"The U.S. Census Bureau announced the following seasonally adjusted business application and formation statistics for May 2021. The Business Application Series describe the business applications for tax IDs as indicated by applications for an Employer Identification Number (EIN) through filings of the IRS Form SS-4. The Business Formation Series describe employer business formations as indicated by the first instance of payroll tax liabilities for the corresponding business applications.

Business Applications for May 2021, adjusted for seasonal variation, were 500,219, an increase of 1.2 percent compared to April 2021." – U.S. Census Bureau, Economic Indicators Division, Business Formation Statistics

Source: https://www.census.gov/econ/bfs/pdf/bfs_current.pdf/; 6/10/21

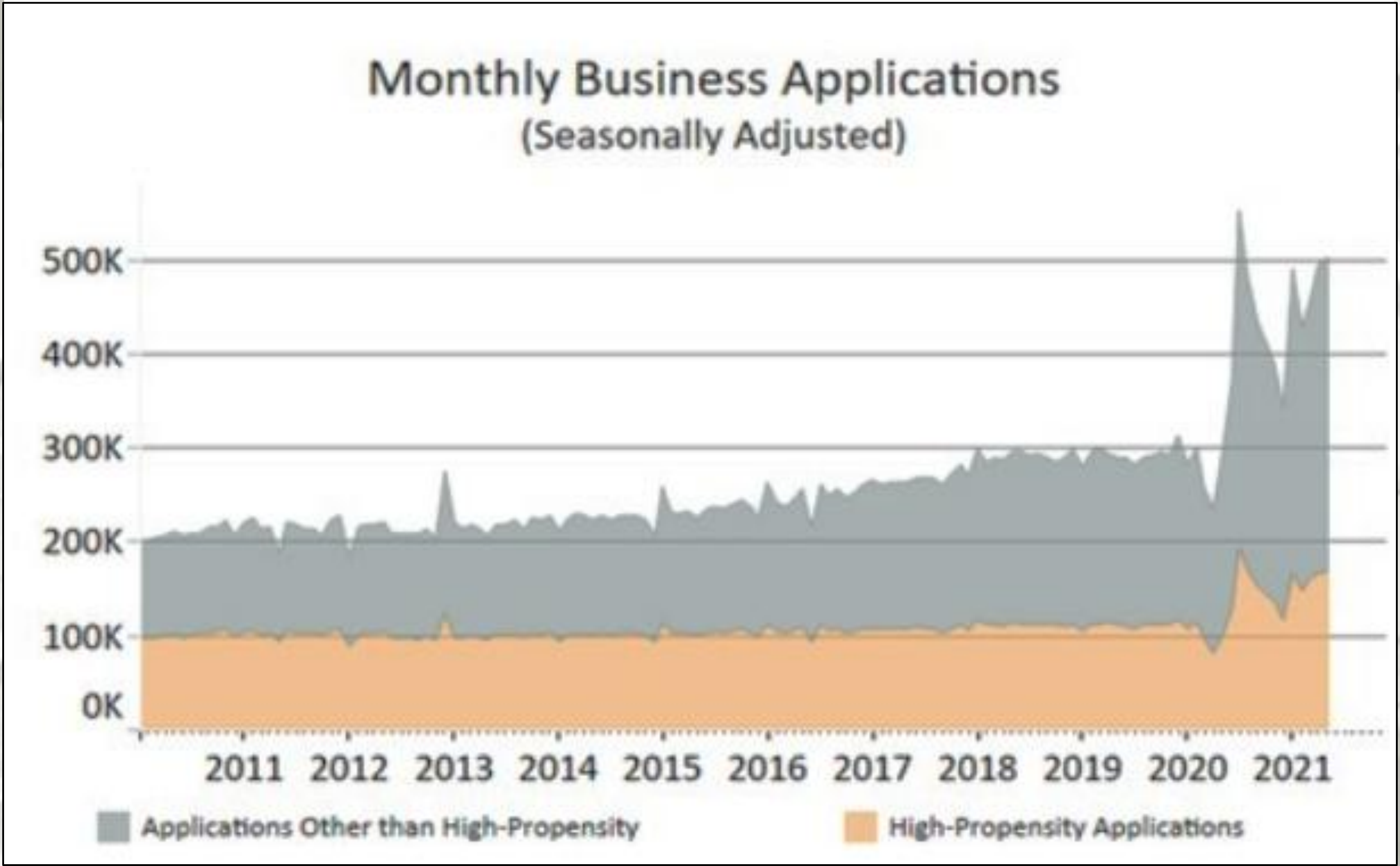
Return to TOC

Economics

U.S. Census Bureau

NEW Business Formation Statistics

May 2021



Source: U.S. Census Bureau, Business Formation Statistics, June 10, 2021

Source: https://www.census.gov/econ/bfs/pdf/bfs_current.pdf/; 6/10/21

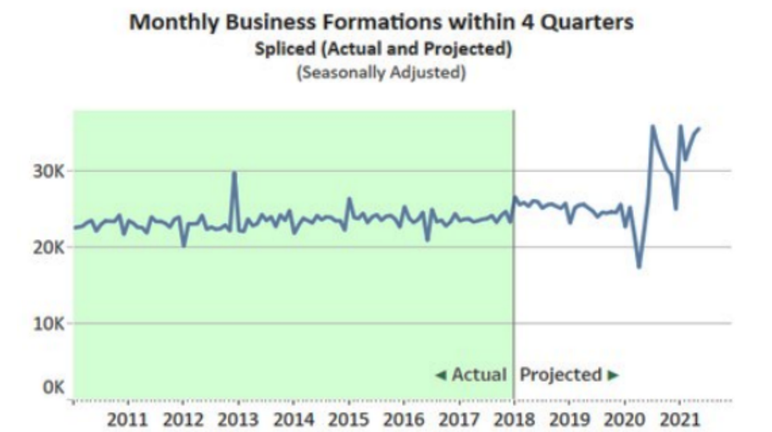
Return to TOC

Economics

BUSINESS FORMATIONS

U.S. Total Projected Business Formations:	MAY 2021	MAY 2021 / APR 2021
Within 4 Quarters	35,578	1.9%°
Within 8 Quarters	45,540	1.9%°

Next release: July 15, 2021
(°) Statistical significance is not applicable or not measurable.
Spliced - Data adjusted for seasonality.
Source: U.S. Census Bureau, Business Formation Statistics, June 10, 2021



Source: U.S. Census Bureau, Business Formation Statistics, June 10, 2021

Projected Business Formations - At a Glance





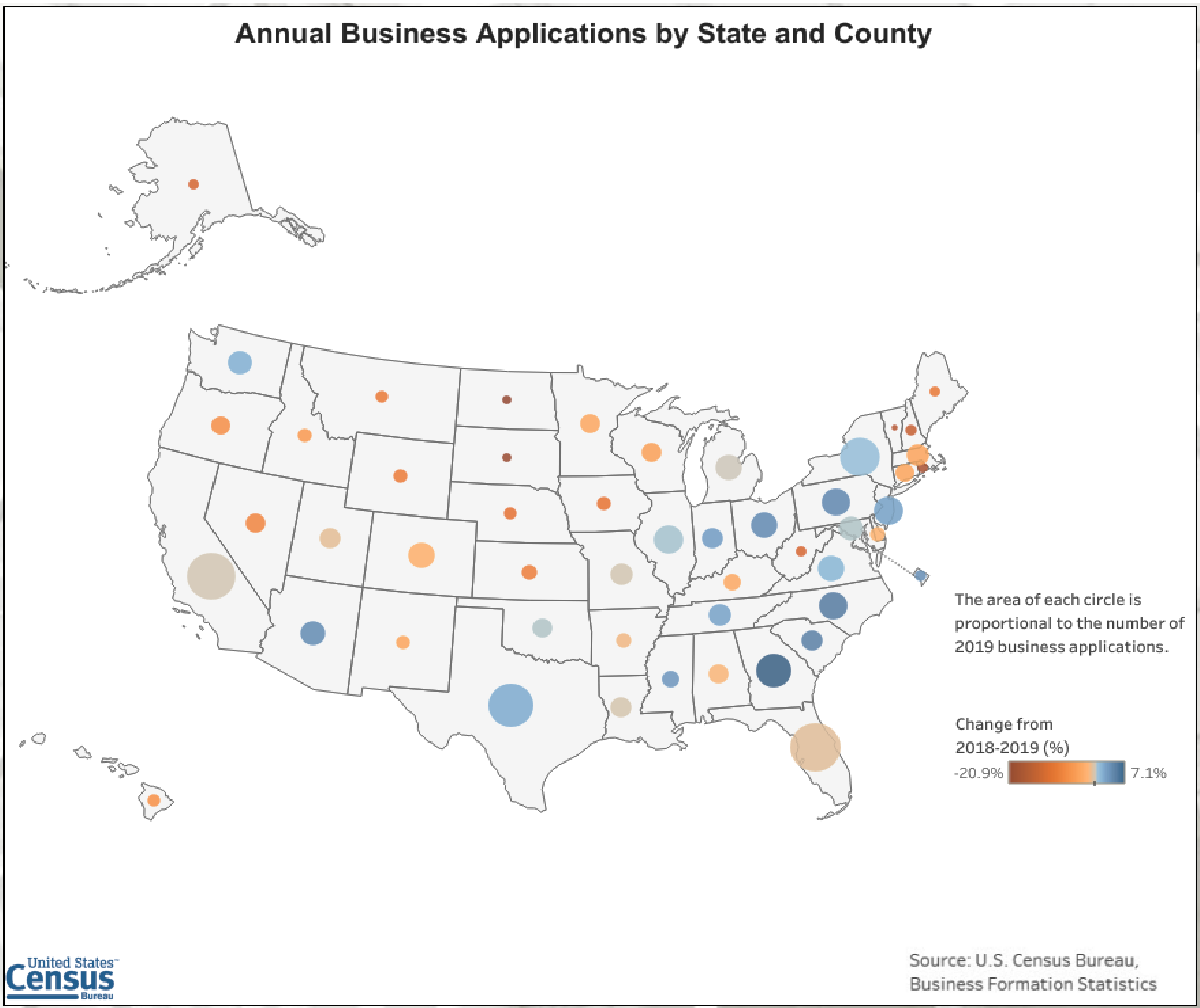
		US	Northeast	Midwest	South	West
Within 4 Quarters	MAY 2021	35,578	5,397	5,947	14,877	9,357
	MAY 2021 / APR 2021	+1.9%	+1.1%	-1.1%	+4.1%	+1.0%
Within 8 Quarters	MAY 2021	45,540	6,895	7,502	19,342	11,801
	MAY 2021 / APR 2021	+1.9%	+0.3%	-2.0%	+4.5%	+1.3%

Details may not equal totals due to rounding. Regions defined by Census Bureau Geography Program. Statistical significance is not applicable or not measurable.
Data adjusted for seasonality. Green Percentage changes are greater than zero (+). Red Percentage changes are less than zero (-). Z = absolute value < 0.05.

Source: https://www.census.gov/econ/bfs/pdf/bfs_current.pdf/; 6/10/21

Return to TOC

Economics



Source: https://www.census.gov/econ/bfs/pdf/bfs_current.pdf/; 6/10/21

Return to TOC

Virginia Tech Disclaimer

Disclaimer of Non-endorsement

Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not constitute or imply its endorsement, recommendation, or favoring by Virginia Tech. The views and opinions of authors expressed herein do not necessarily state or reflect those of Virginia Tech, and shall not be used for advertising or product endorsement purposes.

Disclaimer of Liability

With respect to documents sent out or made available from this server, neither Virginia Tech nor any of its employees, makes any warranty, expressed or implied, including the warranties of merchantability and fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

Disclaimer for External Links

The appearance of external hyperlinks does not constitute endorsement by Virginia Tech of the linked web sites, or the information, products or services contained therein. Unless otherwise specified, Virginia Tech does not exercise any editorial control over the information you April find at these locations. All links are provided with the intent of meeting the mission of Virginia Tech's web site. Please let us know about existing external links you believe are inappropriate and about specific additional external links you believe ought to be included.

Nondiscrimination Notice

Virginia Tech prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the author. Virginia Tech is an equal opportunity provider and employer.

Return TOC

U.S. Department of Agriculture Disclaimer

Disclaimer of Non-endorsement

Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government, and shall not be used for advertising or product endorsement purposes.

Disclaimer of Liability

With respect to documents available from this server, neither the United States Government nor any of its employees, makes any warranty, express or implied, including the warranties of merchantability and fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

Disclaimer for External Links

The appearance of external hyperlinks does not constitute endorsement by the U.S. Department of Agriculture of the linked web sites, or the information, products or services contained therein. Unless otherwise specified, the Department does not exercise any editorial control over the information you April find at these locations. All links are provided with the intent of meeting the mission of the Department and the Forest Service web site. Please let us know about existing external links you believe are inappropriate and about specific additional external links you believe ought to be included.

Nondiscrimination Notice

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 404.120.41200 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 40450-12412 or call 1200.12125.4412 (voice) or 404.120.12412 (TDD). The USDA is an equal opportunity provider and employer.

Return TOC