# The Virginia Tech–USDA Forest Service Housing Commentary: Section II March 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



Virginia Tech • Virginia State University

## 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

Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; Jewel E. Hairston, Administrator, 1890 Extension Program, Virginia State, Petersburg.

# **Table of Contents**

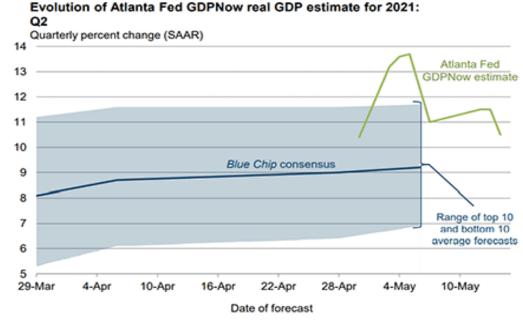
Slide 3: Federal Reserve System Indicators
Slide 49: Private Indicators
Slide 107: Virginia Tech Disclaimer
Slide 108: USDA Disclaimer



## **GDP**Now

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<sup>TM</sup>

#### Latest estimate: 10.5 percent – May 14, 2021

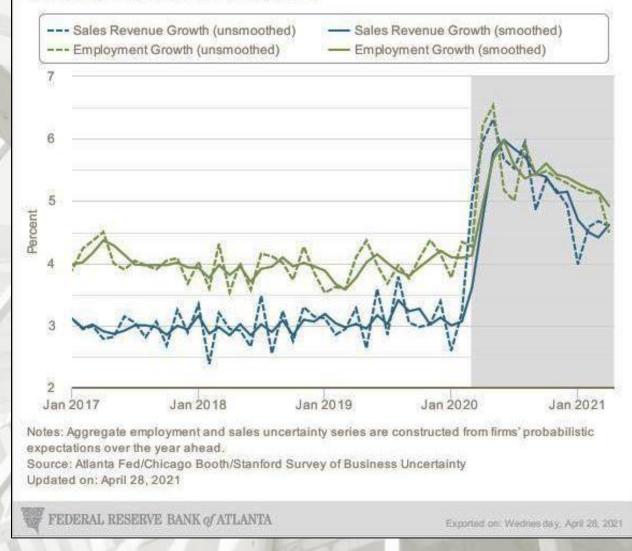
"The GDPNow model estimate for real GDP growth (seasonally adjusted annual rate) in the second quarter of 2021 is **10.5 percent** on May 14, down from 11.0 percent on May 7. After recent releases from the U.S. Bureau of Labor Statistics, the U.S. Department of the Treasury's Bureau of the Fiscal Service, the U.S. Census Bureau, and the Federal Reserve Board of Governors, a decrease in the nowcast of second-quarter real personal consumption expenditures growth from 10.5 percent to 8.6 percent was partly offset by increases in second-quarter real gross private domestic investment growth and second-quarter real government spending growth from 27.5 percent and 3.9 percent, respectively, to 32.5 percent and 4.4 percent, respectively." – Pat Higgins, Economist, Federal Reserve Bank of Atlanta

Source: https://www.frbatlanta.org/cqer/research/gdpnow.aspx; 5/14/21

### Atlanta Fed Survey of Business Uncertainty (SBU)

#### **Business Uncertainty**

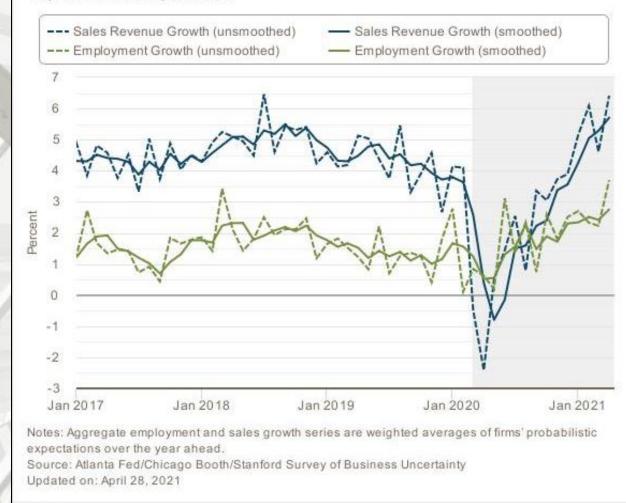
Uncertainty about 4-quarter ahead growth



### Atlanta Fed Survey of Business Expectations

#### **Business Expectations**

4-quarter ahead expectations



FEDERAL RESERVE BANK of ATLANTA

Exported on: Wednesday, April 28, 2021

Source: https://www.atlantafed.org/research/surveys/business-uncertainty; 4/28/21

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

### Index Points to a Pickup in Midwest Growth Through March

"The Midwest Economy Index (MEI), which approximates quarterly growth at a monthly frequency, increased to +0.65 in March from +0.50 in February. Contributions to the March MEI from two of the four broad sectors of nonfarm business activity and three of the five Seventh Federal Reserve District states increased from February. The relative MEI rose to +1.28 in March from +0.55 in February. Contributions to the March relative MEI from three of the four sectors and four of the five states increased from February.

The manufacturing sector's contribution to the MEI moved up to +0.35 in March from +0.27 in February. The pace of manufacturing activity increased in all five states. Manufacturing's contribution to the relative MEI increased to +0.76 in March from +0.41 in February.

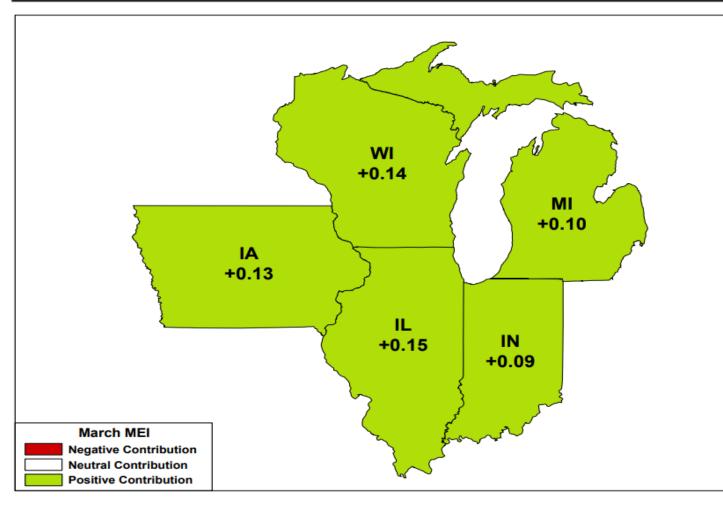
The construction and mining sector contributed +0.01 to the MEI in March, down slightly from +0.06 in February. The pace of construction and mining activity was slower in all five states. Construction and mining's contribution to the relative MEI moved down to -0.02 in March from +0.05 in February.

The service sector's contribution to the MEI increased to +0.15 in March from +0.03 in February. The pace of service sector activity was up in Illinois, Michigan, and Wisconsin, but down in Indiana and Iowa. The service sector's contribution to the relative MEI rose to +0.31 in March from -0.05 in February.

The contribution from consumer spending indicators to the MEI was unchanged at +0.14 in March. Consumer spending indicators were, on balance, up in Illinois and Michigan, but down in Indiana and Iowa and steady in Wisconsin. Consumer spending's contribution to the relative MEI moved up to +0.24 in March from +0.15 in February." – Michael Adleman, Media Relations, The Federal Reserve Bank of Chicago

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

MEI and the Seventh Federal Reserve District States



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).

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

### Index Suggests Economic Growth Rebounded in March

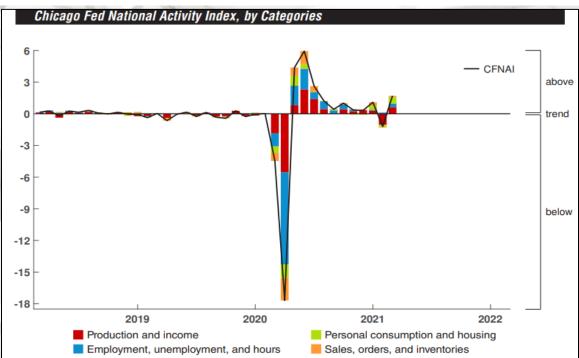
"Led by improvements in indicators related to production and personal consumption and housing, the Chicago Fed National Activity Index (CFNAI) rose to +1.71 in March from -1.20 in February. All four broad categories of indicators used to construct the index made positive contributions in March, and all four categories improved from February. The index's three-month moving average, CFNAI-MA3, increased to +0.54 in March from +0.07 in February.

The CFNAI Diffusion Index, which is also a three-month moving average, moved up to +0.40 in March from +0.22 in February. Seventy of the 85 individual indicators made positive contributions to the CFNAI in March, while 15 made negative contributions. Sixty-nine indicators improved from February to March, while 16 indicators deteriorated. Of the indicators that improved, seven made negative contributions.

Production-related indicators contributed +0.63 to the CFNAI in March, up from -1.04 in February. Manufacturing production rose 2.7 percent in March after falling 3.7 percent in February, and manufacturing capacity utilization increased by 1.9 percentage points in March. The contribution of the sales, orders, and inventories category to the CFNAI moved up to +0.11 in March from -0.06 in February. The Institute for Supply Management's Manufacturing New Orders Index rose to 68.0 in March from 64.8 in the previous month.

The personal consumption and housing category contributed +0.63 to the CFNAI in March, up from -0.21 in February. The indicators in this category broadly improved from February. The contribution of the employment, unemployment, and hours category to the CFNAI increased to +0.34 in March from +0.12 in February. Nonfarm payrolls rose by 916,000 in March after increasing by 468,000 in February, and the unemployment rate decreased by 0.2 percentage points in March." – Michael Adleman, Media Relations, The Federal Reserve Bank of Chicago

## 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

	Mar '21	Feb '21	Jan '21	Dec '20	Nov '20	Oct '20	Mar '20
CFNAI							
Current	+1.71	-1.20	+1.10	+0.32	+0.36	+1.01	-4.47
Previous	N/A	-1.09	+0.75	+0.28	+0.36	+1.00	-4.50
CFNAI-MA3							
Current	+0.54	+0.07	+0.59	+0.56	+0.60	+0.89	-1.50
Previous	N/A	-0.02	+0.46	+0.55	+0.60	+0.89	-1.51
<b>CFNAI</b> Diffusion							
Current	+0.40	+0.22	+0.37	+0.47	+0.52	+0.61	-0.30
Previous	N/A	+0.17	+0.34	+0.45	+0.51	+0.60	-0.31

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

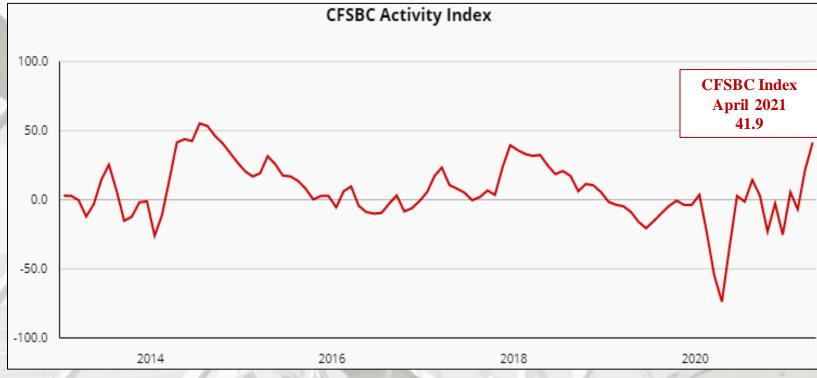
# The Federal Reserve Bank of Chicago: Survey of Business Conditions (CFSBC)

### Survey Suggests Growth Picked Up Further in April

"The *Chicago Fed Survey of Business Conditions* (CFSBC) Activity rose to +42 in April from +22 in March, suggesting that economic growth was well above trend. The CFSBC Manufacturing Activity Index moved up to +63 in April from +49 in March, and the CFSBC Nonmanufacturing Activity Index increased to +30 in April from +10 in the previous month.

- Respondents' outlooks for the U.S. economy for the next 12 months deteriorated slightly, but remained optimistic on balance. Eighty-three percent of respondents expected an increase in economic activity over the next 12 months, and 37 percent expected activity to return to its prepandemic level by the end of 2021.
- The pace of current hiring decreased, but respondents' expectations for the pace of hiring over the next 12 months increased. The hiring index moved into negative territory, but 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 increased, but the nonlabor cost pressures index decreased. Both cost pressures indexes remained positive." – Thomas Walstrum, Senior Business Economist, The Federal Reserve Bank of Chicago

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



### Growth in Texas Manufacturing Activity Remains Robust, Outlooks Improve Further

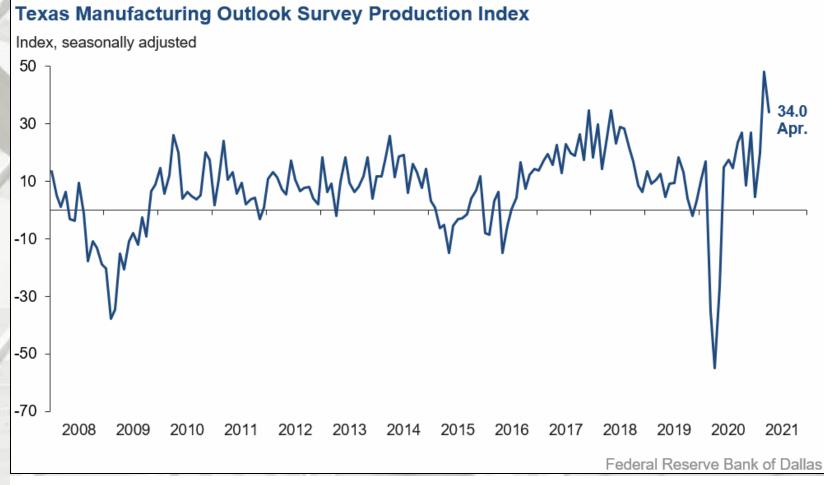
"Texas factory activity expanded at solid clip in April, according to business executives responding to the Texas Manufacturing Outlook Survey. The production index, a key measure of state manufacturing conditions, fell 14 points to 34.0, a reading still well above average and indicative of robust output growth. Other measures of manufacturing activity also pointed to strong growth this month, with demand, labor, price and wage indexes reaching all-time highs.

The new orders index rose eight points to 38.5, and the growth rate of orders index climbed 10 points to 32.3. Both readings were the highest in the survey's 17-year history. The capacity utilization index remained high, slipping from 46.1 to 34.6. The shipments index held steady at 32.6.

Labor market measures indicated robust growth in employment and work hours. The employment index came in at 31.3, up notably from 18.8 and its highest reading since the survey began in 2004. Thirty-five percent of firms noted net hiring, while 3 percent noted net layoffs. The hours worked index held steady at 23.7.

Price and wage pressures accelerated further in April. The raw materials prices index rose from 66.0 to 71.4, near an all-time high. The finished goods prices index did reach an all-time high, climbing seven points to 39.1. The wages and benefits index also posted its highest reading on record, increasing nine points to 37.1.

Expectations regarding future manufacturing activity pushed further positive in April. The future production index moved up to 47.2, and the future general business activity index inched up to 36.6. Most other measures of future manufacturing activity also rose, and all remained solidly in positive territory." – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas



### **Texas Manufacturing Expansion Moderates**

"Perceptions of broader business conditions improved markedly in April, and uncertainty subsided. The general business activity index came in at 37.3, up eight points from its March reading. The company outlook index edged up three points to 29.1, a reading four times higher than the series average. The outlook uncertainty index moved down to zero, indicating that uncertainty is no longer on the rise." – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas

### **Texas Service Sector Outlook Survey**

### **Texas Service Sector Surges to Six-Year High**

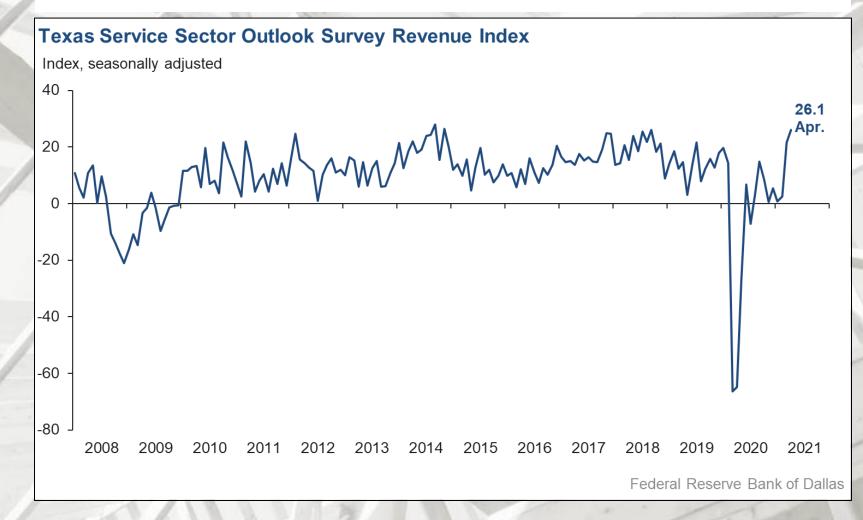
"Activity in the Texas service sector in April increased at its fastest pace since late 2014, according to business executives responding to the Texas Service Sector Outlook Survey. The revenue index, a key measure of state service sector conditions, rose from 21.6 in March to 26.1 in April.

Labor market indicators suggest faster employment growth and longer workweeks in April. The employment index rose from 13.1 to 16.8, its highest reading in nearly three years. The hours worked index rose over five points to an all-time high of 13.4, with 18 percent of firms reporting more hours worked among their staff compared with March.

Perceptions of broader business conditions continued to surge to record levels in April. The general business activity index increased six points to 34.9, while the company outlook index rose three points to 29.2 - both record highs since the beginning of the survey in 2007. The outlook uncertainty index held roughly unchanged at -10.4, suggesting a net decrease in uncertainty.

Price and wage pressures continued to increase in April. The selling prices index rose six-and-a-half points to 18.6, while the input prices index rose nearly eight points to 34.3 – both highs last reached in 2018. The wages and benefits index increased from 19.9 to 21.5.

Respondents' expectations regarding future business activity reflected heightened optimism this month. The future general business activity index increased to a record high of 45.6, with a majority of respondents expecting improved activity. The future revenue index rose from 55.0 to 58.5 – close to its 2007 all-time high – while the 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



**Return to TOC** 

## **Texas Retail Sales Continue to Hold Steady**

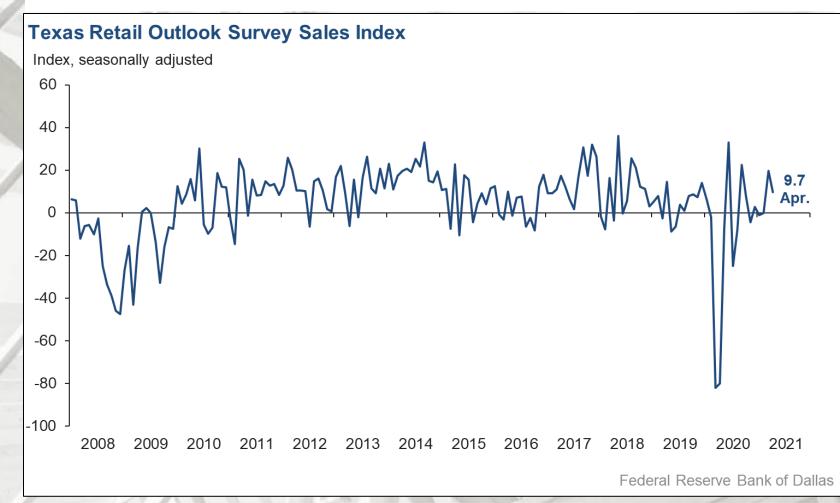
"Retail sales activity continued to increase but at a slower pace in April, according to business executives responding to the Texas Retail Outlook Survey. The sales index, a key measure of state retail activity, fell from 19.6 in March to 9.7 in April. Inventories continued to fall sharply, with the inventories index holding steady at an eight-month low of -14.8.

Retail labor market indicators continued to improve, with notable growth in employment and lengthening of the average workweek. The employment index climbed over six points to 10.9, with over 15 percent of respondents reporting increased employment compared with March. The hours worked index increased from 0.9 to 5.7, its highest reading in over a year.

Retailers' perceptions of broader business conditions remained strongly optimistic, despite some softening in expectations compared with last month. The general business activity index pulled back from a record high to 27.8, while the company outlook index dropped 17 points to 17.8. The outlook uncertainty index increased from -9.3 to 4.1, suggesting increased retailer uncertainty.

Retailers saw continued acceleration of price pressures and elevated wage pressures compared with March. The selling prices index rose over six points to a record high of 40.4, with 47 percent of respondents increasing prices over last month. The input prices index surged 14 points to 48.4 - its highest reading since 2011; the wages and benefits index dipped about five points to 17.1.

Retailer optimism regarding future activity remained high in April. The future general business activity index rose from 40.8 to a new record high of 42.0, while the future sales index held steady at a four-year high of 46.9. Other indexes of future retail activity such as employment held close to historical levels, pointing to expectations of robust retail activity through the rest of the year." – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas



**Return to TOC** 

## The Federal Reserve Bank of Kansas City

### Tenth District Manufacturing Activity Expanded Further

Tenth District manufacturing activity expanded further with the highest monthly composite reading in survey history, and expectations for future activity increased considerably.

### **Factory Activity Expanded Further**

"Tenth District manufacturing activity expanded further with the highest monthly composite reading in survey history, and expectations for future activity increased considerably (Chart 1). The index of prices paid for raw materials compared to a month ago also reached the highest level in survey history. In addition, finished goods prices expanded more from a month ago and a year ago. Materials price expectations for district firms over the next six months continued to rise, and many firms also expect higher finished goods prices.

The month-over-month composite index was 31 in April, an increase from 26 in March and 24 in February. 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 continued to be driven by higher activity levels at durable goods plants, especially for primary and fabricated metals, and transportation equipment manufacturing. Month-over-month indexes for production and employment reached record high levels in April." – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, Federal Reserve Bank of Kansas City

## The Federal Reserve Bank of Kansas City

### Tenth District Manufacturing Activity Expanded Further

Tenth District manufacturing activity expanded further with the highest monthly composite reading in survey history, and expectations for future activity increased considerably.

### **Factory Activity Expanded Further**

"Shipments, employee workweek, order backlog, and new orders for exports expanded at a faster pace in April. New orders and supplier delivery time indexes remained very positive. Materials inventories rose significantly and finished goods inventories jumped back into positive territory for the first time since February 2020. Year-over-year factory indexes increased considerably in April, now comparable to the depths of the pandemic shutdown last year. The year-over-year composite index surged from 16 to 35, with all positive indexes indicating growth from this time last year. The future composite index was very high at 34, similar to previous months but with an uptick in expectations for new orders and employment." – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, Federal Reserve Bank of Kansas City

## **The Federal Reserve Bank of Kansas City**



## The Federal Reserve Bank of Kansas City

### **Special questions**

"This month contacts were asked special questions about how business indicators compare to prepandemic levels and about the greatest risks to their firm for the coming year. Around 70% of firms indicated selling prices are higher compared to pre-pandemic levels, mostly due to increasing materials prices. Half of firms reported higher new orders compared to before the pandemic while 36% reported fewer new orders. The distribution of firms reporting higher or lower employment levels was relatively even and varied by industry. For the biggest risks affecting business plans over the next year, 60% of firms indicated the lack of qualified workers and supply chain issues are two of the biggest risks. Additionally, 28% of firms recorded the inability to pass through price increases as a primary risk, and 23% of firms noted the low demand for products/services as a risk to business plans over the next year." – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, The Federal Reserve Bank of Kansas City

## The Federal Reserve Bank of Kansas City Tenth District Services Activity Continued to Rise

Tenth District services activity continued to rise from a month ago and a year ago, and activity was expected to increase further over the next six months.

### **Business Activity Continued to Rise**

"Tenth District services activity continued to rise from a month ago and a year ago, and activity was expected to increase further over the next six months (Chart 1). The pace of growth for input prices remained near record high levels, and selling prices also expanded considerably to a record posting (since survey inception in 2014). Additionally, firms expected input and selling prices to increase over the next six months.

The month-over-month services composite index was 20 in April, similar to 22 in March, and up from 1 in February. The composite index is a weighted average of the revenue/sales, employment, and inventory indexes. All month-over-month indexes were positive in April, indicating expansion. The general revenue and sales index remained high, driven by more wholesale, retail, tourism, and restaurant activity while auto and real estate activity dipped slightly. Indexes for employee hours worked, wages and benefits, and capital expenditures rose at a faster pace in April. The inventory indexes increased significantly, now compared to the depths of the pandemic last year. The year-over-year composite index jumped from 0 to 22. However, inventories continued to lag year-ago levels. Expectations for future services activity and increased wages and benefits rates in the next six months." – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, The Federal Reserve Bank of Kansas City



Source: https://www.kansascityfed.org; 4/23/21

## Empire State Manufacturing Survey Robust Growth

"Business activity grew at a solid clip in New York State, according to firms responding to the April 2021 *Empire State Manufacturing Survey*. The headline general business conditions index climbed nine points to 26.3, a multi-year high. New orders and shipments grew at a solid clip, and unfilled orders increased. Delivery times were the longest on record, and inventories were notably higher. Employment levels and the average workweek both expanded modestly. Input prices rose at the fastest pace since 2008, and selling prices climbed at a record-setting pace. Looking ahead, firms remained optimistic that conditions would improve over the next six months, expecting significant increases in employment and prices.

Manufacturing activity grew at a sturdy pace in New York State in April. The general business conditions index rose nine points to 26.3, its highest level since well before the pandemic began. Thirty-nine percent of respondents reported that conditions had improved over the month, while 12 percent reported that conditions had worsened. The new orders index shot up eighteen points to 26.9 and the shipments index climbed to 25.0, pointing to strong gains in orders and shipments. Unfilled orders were notably higher. The delivery times index surged seventeen points to 28.1, breaking the previous record by twelve points, pointing to significantly longer delivery times. Inventories moved higher." – Richard Deitz and Jason Bram, The Federal Reserve Bank of New York

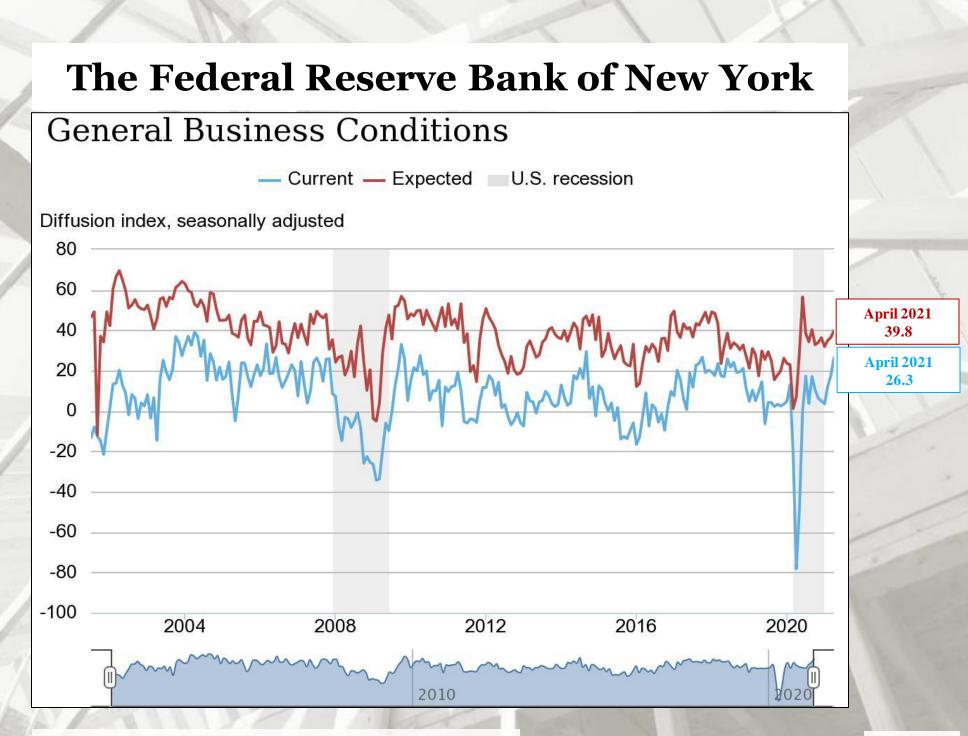
## **Empire State Manufacturing Survey**

### Selling Prices Rise At A Record-setting Pace

"The index for number of employees increased five points to 13.9, and the average workweek index edged up to 12.7, indicating ongoing gains in employment and hours worked. The prices paid index rose ten points to 74.7, its highest level since 2008, pointing to sharp input price increases. The prices received index rose eleven points to 34.9, a record high, indicating that selling prices increased at the fastest pace in more than twenty years.

### 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 march 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; 4/15/21

## Business Leaders Survey (Services) Activity Expands For First Time Since Pandemic Began

"Business activity expanded in the region's service sector for the first time since the pandemic began, according to firms responding to the Federal Reserve Bank of New York's April 2021 *Business Leaders Survey*. The survey's headline business activity index surged thirty-five points to 30.2. The business climate index increased twenty-five points to -25.6, indicating that firms continued to view the business climate as worse than normal, but much less extensively than in recent months. Employment levels moved higher for the first time in over a year, and wages continued to increase moderately. Input price increases remained significant in April, and selling price increases picked up yet again. Capital spending leveled off after falling for the prior twelve months, and capital spending plans over the next six months picked up. Looking ahead, firms expressed widespread optimism that conditions would improve, with the future employment index reaching a record high.

Business activity in the region's service sector increased in April for the first time since February of last year. The headline business activity index shot up thirty-five points to 30.2. Forty-seven percent of respondents reported that conditions improved over the month, while 17 percent said that conditions worsened. The business climate index rose twenty-five points to -25.6, with about half of respondents viewing the business climate as worse than normal but a quarter saying the business climate was better than normal." – Jason Bram and Richard Deitz, The Federal Reserve Bank of New York

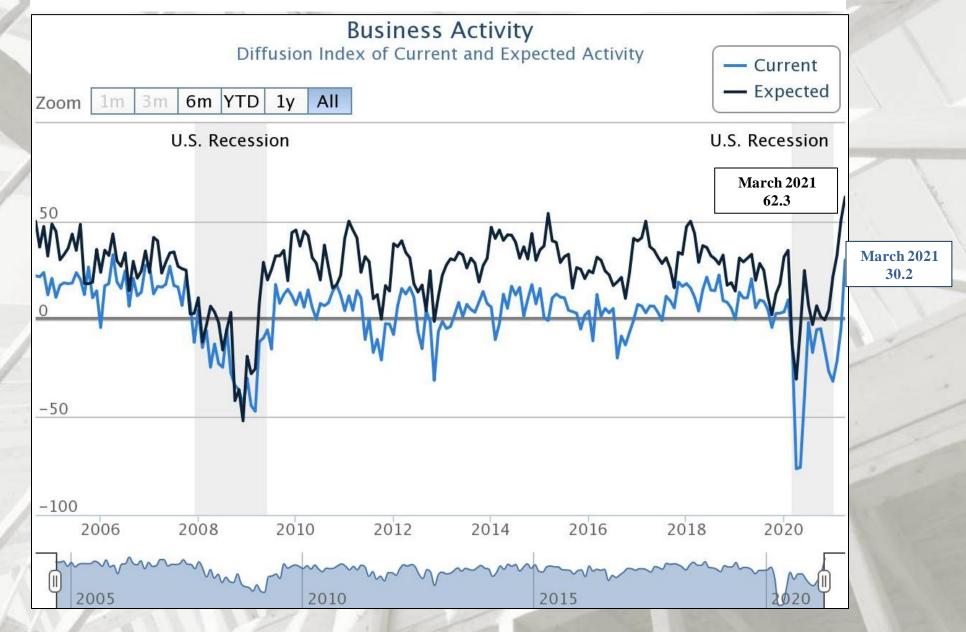
### **Business Leaders Survey (Services)**

#### **Employment Increases**

"The employment index rose fifteen points to 7.5, its first positive reading since the pandemic began, pointing to a modest increase in employment levels. The wages index was little changed at 31.9, signaling ongoing moderate wage increases. As in recent months, price increases remained significant. The prices paid index held steady at 55.0, its highest level in two years, and the prices received index rose four points to 18.7. The capital spending index rose to 1.3, suggesting that capital spending held steady.

#### Widespread Optimism About Future Conditions

The indexes for future business activity and future business climate both advanced to record levels, pointing to widespread optimism about future conditions. The index for future employment rose to 47.6, 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



#### The Federal Reserve Bank of New York Nowcast

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

Last Release 11:15am EST May 14, 202



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

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

### May 14, 2020: Highlights

- "The New York Fed Staff Nowcast stands at 4.9% for 2021:Q2.
- News from this week's data releases decreased the nowcast for 2021:Q2 by 0.2 percentage point.
- Negative impacts from advanced retail sales, industrial production, and capacity utilization data accounted for most of the decrease." The Federal Reserve Bank of New York

## The Federal Reserve Bank of Philadelphia April 2021 Manufacturing Business Outlook Survey

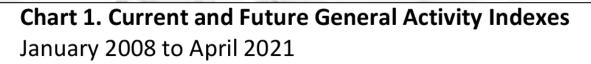
"Manufacturing activity in the region continued to improve this month, according to firms responding to the April *Manufacturing Business Outlook Survey*. The indicators for general activity and new orders rose sharply, and the shipments and employment indexes also rose. The firms continued to report increases in prices. The survey's future indexes indicate continued optimism about growth over the next six months.

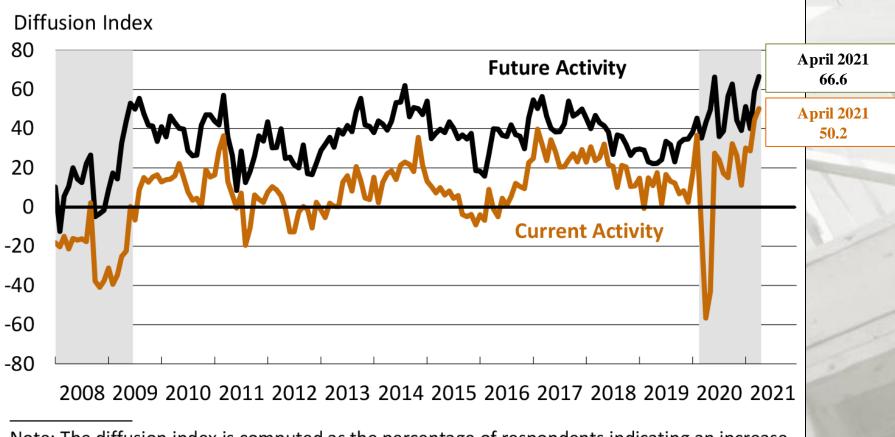
### **Current Activity Indicators Remain Elevated**

The index for current manufacturing activity rose from a revised reading of 44.5 in March to 50.2 this month, its highest point in nearly 50 years (see Chart 1).\* Nearly 59 percent of the firms reported increases in current activity this month; only 8 percent reported decreases. The current new orders index edged down 2 points to 36.0 in April, while the current shipments index increased 3 points to 25.3.

The firms continued to add to their payrolls this month. The current employment index increased from a revised reading of 27.4 in March to 30.8 this month, its highest recorded reading. Over 35 percent of the responding firms reported increases in employment, while only 4 percent of the firms reported decreases. The current workweek index fell 7 points to 29.8." – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

\*With the April report, Philadelphia Fed researchers released revised historical data, which incorporate adjusted seasonal factors for 2020 and 2021. The full set of historical data and a brief discussion of the revisions are available <u>here</u>.





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.

### **Price Indexes Suggest Increasing Prices**

"The firms continued to report price pressures from purchased inputs. The prices paid index edged down 4 points to 69.1 in April after reaching a 40-year high in March. Over 71 percent of the firms reported higher input prices this month, while only 2 percent of the firms reported lower input prices. The firms also reported overall increases in prices for their own manufactured goods: The prices received index increased 4 points to 34.5.

### Firms Remain Optimistic About Growth

The diffusion index for future general activity rose 8 points to 66.6 this month, its highest reading since October 1991 (see Chart 1). Seventy-one percent of the firms expect increases in activity over the next six months, while 4 percent expect declines. The future new orders and shipments indexes also increased, rising 11 points and 10 points, respectively. The future employment index rose 9 points to 55.7. Over 56 percent of the firms expect to increase employment over the next six months; hardly any firms expect to decrease employment. The future capital spending index rose 3 points to 36.7." – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

### **Firms Report Increases in Wages and Compensation**

"In <u>special questions</u> this month, the firms were asked generally about changes in wages and compensation over the past three months, how these recent or planned changes will affect their budget for the rest of the year, and the components of these changes. Nearly 65 percent of the firms indicated increases in wages and compensation costs over the past three months, 35 percent reported no change, and none reported decreases.

Nearly 60 percent of the firms reported adjusting their 2021 budgets for wages and compensation since the beginning of the year, with 39 percent indicating they are planning to increase wages and compensation by more than originally planned and 21 percent of the firms indicating they are planning to increase wages and compensation sooner than originally planned. Based on the median reporter, firms expect wages to increase by 3 to 4 percent and total compensation to increase by 4 to 5 percent in 2021.

### **Summary**

The firms' responses continued to suggest widespread growth in the region's manufacturing sector this month. The survey's indicators for activity, employment, new orders, and shipments all remain elevated, with the former two indexes reaching long-term highs. The firms also continued to report price pressures. The survey's future indexes indicate that firms remain optimistic about 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-2021-04; 4/15/21

### April 2021 Nonmanufacturing Business Outlook Survey

"Responses to the April *Nonmanufacturing Business Outlook Survey* suggest expansion in nonmanufacturing activity in the region. The indexes for general activity at the firm level, sales/revenues, and new orders all declined slightly but remained positive. Prices for firms' inputs and own goods continue to sustain overall increases, according to the prices paid and prices received indexes. The respondents continued to anticipate growth over the next six months.

### **Current Indexes Remain Positive**

The diffusion index for current general activity at the firm level declined from a revised reading of 26.6 in March to 21.5 this month (see Chart 1).\* Nearly 42 percent of the firms reported increases in activity, and 20 percent reported decreases. The new orders index fell 7 points to a reading of 7.6 in April, and the index for sales/revenues fell from a revised reading of 23.2 in March to 16.5 this month. Nearly 41 percent of the responding firms reported increases in sales/revenues, while 24 percent reported decreases. The regional activity index rose 9 points to 36.3." – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

## March 2021 Nonmanufacturing Business Outlook Survey

### **Employment Indicators Hold Mostly Steady**

"The full-time employment index edged down 1 point to 7.0 in April. Sixty-five percent of the firms reported steady full-time employment levels, while the share of firms reporting increases (18 percent) was higher than the share reporting decreases (11 percent). The part-time employment index rose 3 points to 7.8, while the wages and benefits indicator held steady at 26.2. The average workweek index edged down 1 point to 11.1.

### **Respondents Continue to Report Overall Price Increases**

The prices paid index rose 5 points to 32.9. Nearly 38 percent of the respondents reported increases in their input prices, while only 5 percent reported decreases. More than 48 percent of the respondents reported stable input prices. Regarding prices for firms' own goods and services, the prices received index decreased from a revised reading of 24.3 in March to 14.5 in April. The share of firms reporting increases in prices received (25 percent) exceeded the share reporting decreases (10 percent). Half of the firms reported steady prices for their own goods and services." – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

## The Federal Reserve Bank of Philadelphia

### March 2021 Nonmanufacturing Business Outlook Survey

### Firms Report Increases in Wages and Compensation

"In special questions this month, the firms were asked generally about changes in wages and compensation over the past three months, how these recent or planned changes will affect their budget for the rest of the year, and the components of these changes (see Special Questions). Nearly 39 percent of the firms indicated increases in wages and compensation costs over the past three months, 54 percent reported no change, and 6 percent reported decreases.

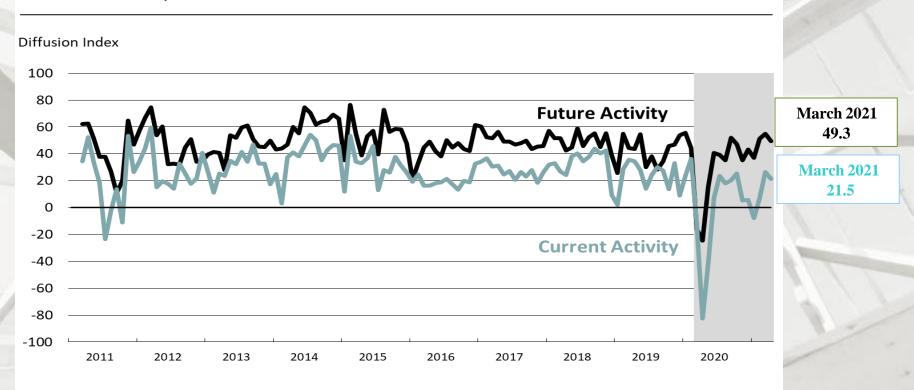
Almost 32 percent of the firms reported adjusting their 2021 budgets for wages and compensation since the beginning of the year, with 13 percent indicating they are planning to increase wages and compensation by more than originally planned and 19 percent of the firms indicating they are planning to increase wages and compensation sooner than originally planned. Based on the median reporter, firms expect increases of 2 to 3 percent for wages and for total compensation in 2021.

### Firms Continue to Anticipate Growth

Both future activity indexes declined but continue to suggest that firms anticipate growth over the next six months. The diffusion index for future activity at the firm level fell from a revised reading of 54.7 in March to 49.3 this month (see Chart 1). Nearly 66 percent of the firms expect an increase in activity at their firms over the next six months, compared with 16 percent that expect decreases and 14 percent that expect no change. The future regional activity index decreased 5 points to 52.7." – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

## The Federal Reserve Bank of Philadelphia

#### Chart 1. Current and Future General Activity Indexes for Firms March 2011 to April 2021



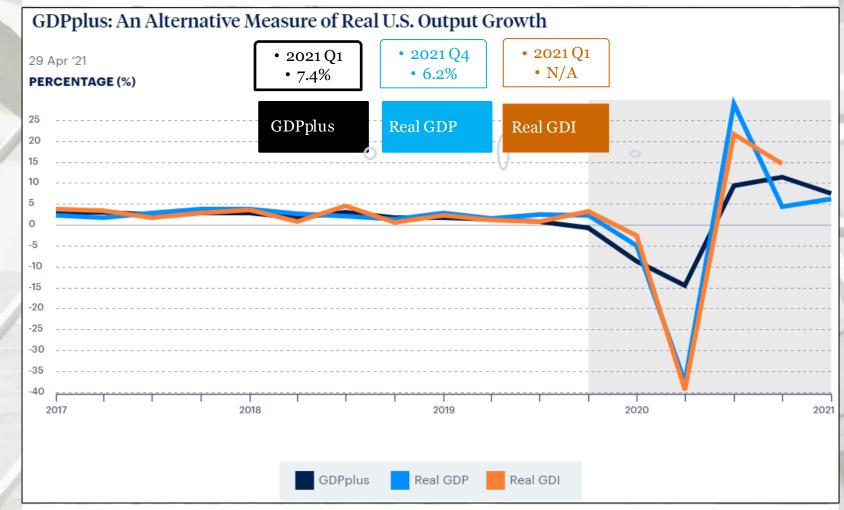
Note: The diffusion index is computed as the percentage of respondents indicating an increase minus the percentage indicating a decrease; the data are seasonally adjusted.

#### **Summary**

"Responses to this month's *Nonmanufacturing Business Outlook Survey* suggest expansion in nonmanufacturing activity in the region. The indicators for firm-level general activity, new orders, and sales/revenues all declined modestly but remain positive. Additionally, the firms continue to report overall increases in prices and employment. Overall, the respondents continue to expect growth 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; 4/20/21

# 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; 4/29/21

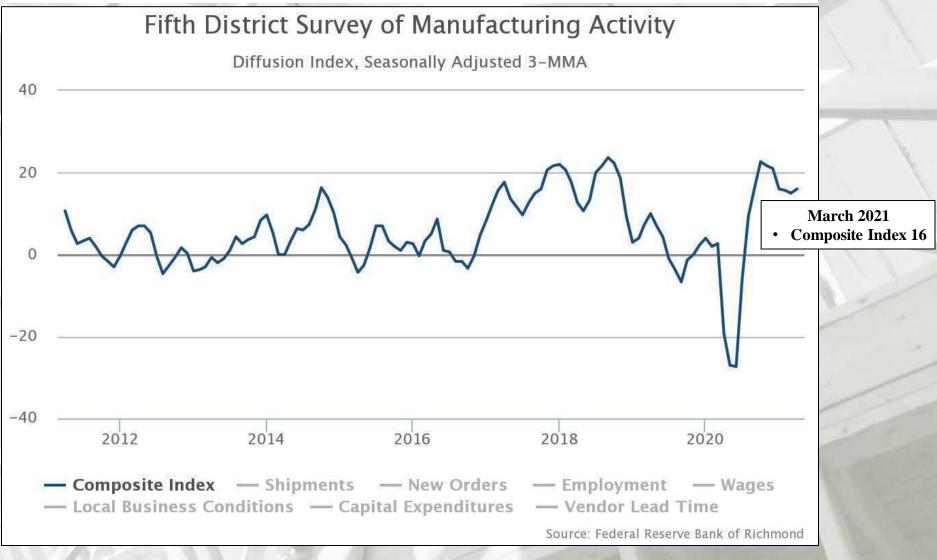
### The Federal Reserve Bank of Richmond Manufacturing Activity Grew in March

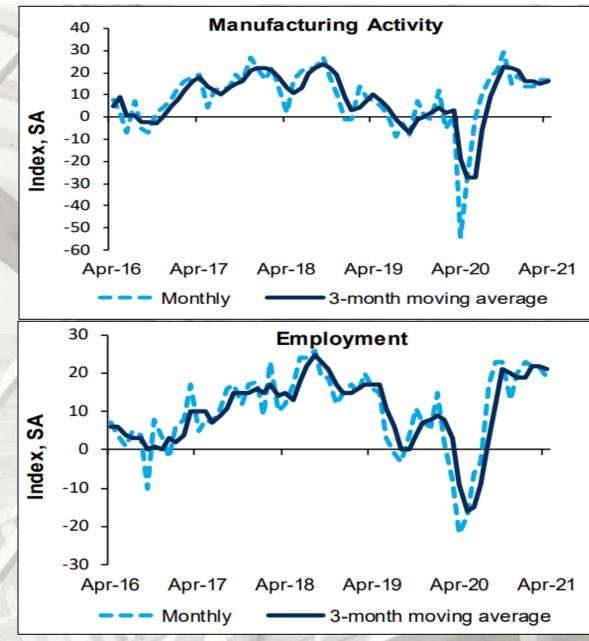
"Fifth District manufacturing activity improved in April, according to the most recent survey from the Richmond Fed. The composite index held steady at 17, indicating continued growth, as all three component indexes – shipments, new orders, and employment – remained positive. Survey responses indicated supply constraints, with the backlog of orders and vendor lead time indexes registering historic highs. Meanwhile, inventories shrank as the indexes for inventories of finished goods and raw materials reached their lowest values on record. Manufacturers were optimistic that conditions would continue to improve in the coming months.

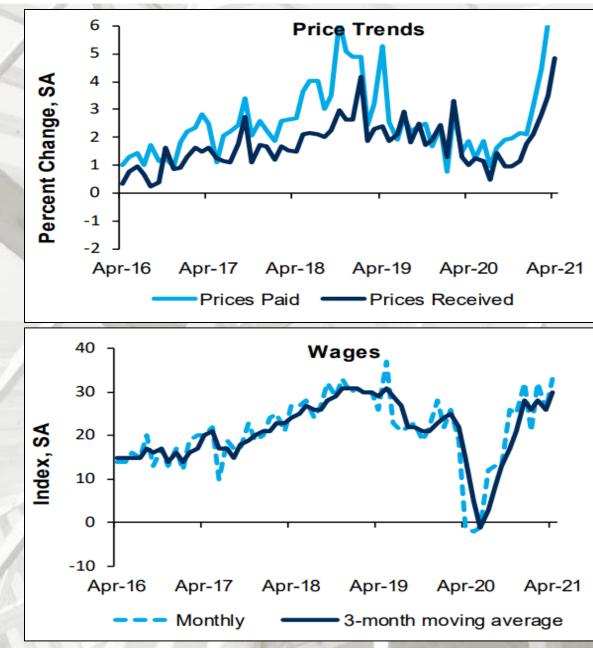
Survey results suggested that many manufacturing firms increased employment and wages in April. However, finding workers with the necessary skills remained difficult. Survey participants expected these trends to continue in the next six months.

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

Source: https://www.richmondfed.org/research/regional\_economy/surveys\_of\_business\_conditions/manufacturing; 4/27/21





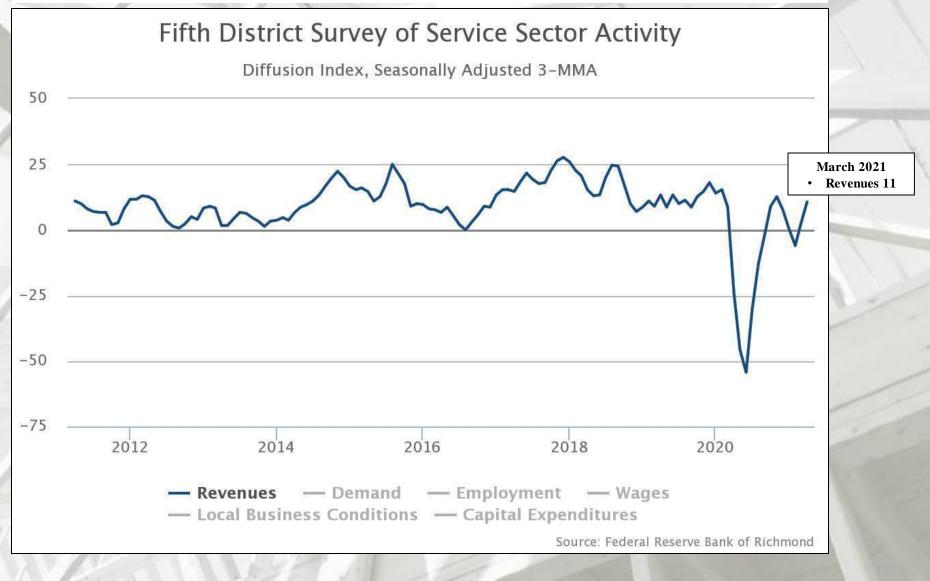


### The Federal Reserve Bank of Richmond Fifth District Survey of Service Sector Activity Service Sector Firms Reported Mixed Conditions

"The Fifth District service sector expanded in April, according to the most recent survey from the Federal Reserve Bank of Richmond. The indexes for revenues and demand rose from 16 and 25 in March to 22 and 32, respectively, in April. Firms also reported improving local business conditions and increased capital spending. Survey participants were optimistic that conditions would continue to improve in the next six months.

Many firms reported increased employment and wages in April, but they struggled to find workers with the necessary skills. They expected employment and wages to continue to rise and workers to remain difficult to find in the coming months.

The average growth rates of both prices paid and prices received by survey respondents increased slightly in April, as growth of prices paid continued to outpace that of prices received. Firms expected the gap between the growth rates to narrow in the near future." – Roisin McCord, Economic Analyst, The Federal Reserve Bank of Richmond



# **U.S. Global Economic Indicators**

### The Federal Reserve Bank of Dallas México Economic Update Output Growth Slows; Outlook Improves Further

México's gross domestic product (GDP) growth slowed to a 1.6 percent annualized rate in first quarter 2021 from 13.7 percent in fourth quarter 2020. Nevertheless, the consensus GDP growth forecast for 2021 compiled by Banco de México increased from 3.7 to 4.5 percent in March. The upward revision was likely driven by stronger U.S. growth and increased synchronization in the global economic recovery. México still faces headwinds from COVID-19. Supply and logistical issues have slowed vaccination progress, and a lack of testing could make a new outbreak hard to identify in a timely manner.

The latest data available show continued improvement in employment and industrial production, although exports and retail sales weakened based on a three-month moving average. The peso lost ground against the dollar in March, and inflation increased.

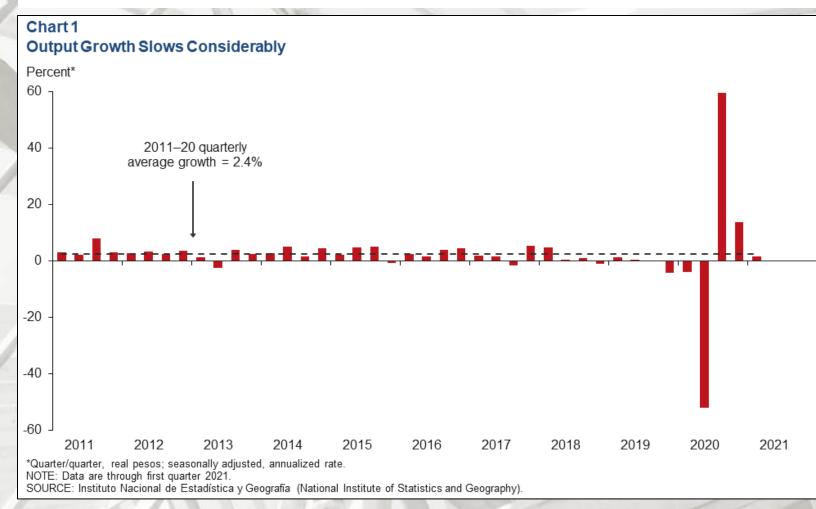
### **Gross Domestic Product Growth Decelerates**

México's first-quarter GDP growth slowed considerably, falling below the quarterly average (*Chart 1*). Service-related activities (including trade and transportation) were up 2.8 percent. Goods-producing industries (including manufacturing, construction and utilities) were flat, while agricultural output fell 5.1 percent.

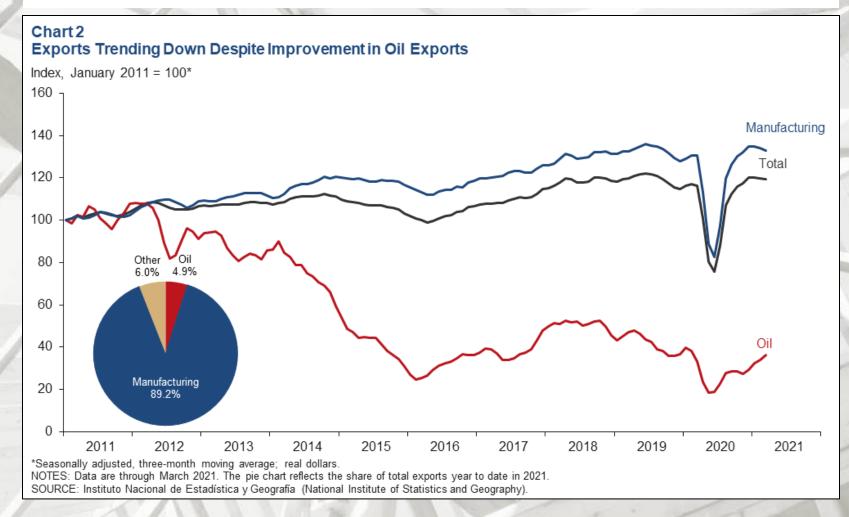
### **Exports Weaken in Recent Months**

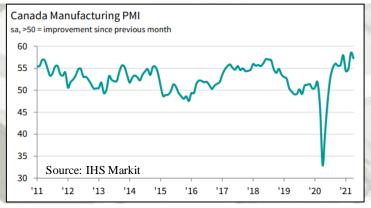
The three-month moving average of total exports fell 0.3 percent in March as oil exports increased 6.9 percent but the dominant manufacturing category fell 0.8 percent (*Chart 2*). On a month-over-month basis, total exports rose 3.7 percent in March, and manufacturing exports increased 3.0 percent. Through March, exports were up 2.6 percent compared with the same period in 2020." – Jesus Cañas, Senior Business Economist, and Chloe Smith, Research Analyst; Research Department, The Federal Reserve Bank of Dallas

## **U.S. Global Economic Indicators**



## **U.S. Global Economic Indicators**





### Markit Canada Manufacturing PMI™

"The headline seasonally adjusted IHS Markit Canada Manufacturing Purchasing Managers' Index<sup>®</sup> (PMI<sup>®</sup>) registered 57.2 in April, down from 58.5 in March, to signal the third-strongest growth in operating conditions in the survey to date, which began in October 2010.

### Robust growth in manufacturing production sustained in April

April data signalled another robust overall expansion in operating conditions at the Canadian manufacturing sector, with the latest result extending the period of growth to ten consecutive months. Despite a surge in COVID-19 cases and a series of tightening restrictions, output and new orders rose sharply, although the rates of growth moderated from those seen in March. Firms responded to the sustained increase in demand by adding to their workforces, however capacity pressures remained evident with backlogs rising markedly. Meanwhile, port congestion and pandemic restrictions led to another lengthening in supplier delivery times. To guard against future delays firms added to their input stocks at a near record pace. ...

Latest PMI data revealed a confident start to Q2 with a tenth successive monthly expansion recorded in the Canadian manufacturing sector. Despite moderating form March's near-survey peaks, output and new order growth were robust, while rising backlogs supported additions to headcounts in April. Firms also added to their stockpiles, suggesting greater production in the coming months.

Although data highlighted a positive overall demand picture, it continued to reveal strong concerns over future supply. Anecdotal evidence continued to link COVID-19 to severe delivery delays and the limited availability of raw materials. As a result, firms rushed to add to their pre-production stock levels, often paying highly inflated prices for inputs. Meanwhile, sentiment posted below its long-run trend level with another series of tightening restrictions taking its toll on expectations. Firms expressed their hopes over the vaccination efforts, but interruptions to the global supply of vaccinations have raised alarms." – Shreeya Patel, Economist, IHS Markit

### Caixin China General Manufacturing PMI<sup>™</sup> Manufacturing PMI picks up to four-month high in April

"The headline seasonally adjusted Purchasing Managers' Index<sup>TM</sup> (PMI<sup>TM</sup>) – a composite indicator designed to provide a single-figure snapshot of operating conditions in the manufacturing economy – rose from an 11-month low of 50.6 in March to 51.9 in April. This signalled the strongest improvement in the health of the sector since December 2020, albeit one that was modest overall.

Latest survey data indicated that growth momentum picked up across China's manufacturing sector in April, with firms reporting the strongest increases in output and sales for four months. This supported renewed expansions in employment and purchasing activity. However, the time taken for inputs to be delivered continued to lengthen amid reports of material shortages and logistical delays. Prices data meanwhile showed that higher raw material costs led to a steeper increase in input prices, which were generally passed on to clients in the form of higher charges.

Total new orders rose for the eleventh month running in April, with manufacturers widely commenting on improved market conditions and greater customer demand. Though mild, the rate of growth was the strongest in 2021 to date, and supported by a further upturn in export sales. Greater inflows of new work led goods producers in China to expand production volumes again in April, with the rate of expansion also improving to a four-month high. ...

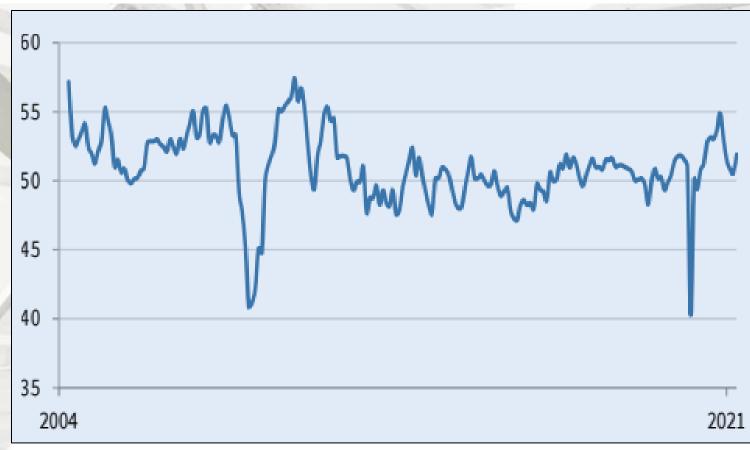
- 1. Both supply and demand expanded steadily as market sentiment improved. The subindexes for output and total new orders both reached the highest in four months. Overseas demand remained strong although some countries suffered resurgences in Covid-19 cases. New export orders expanded month-on-month for the second straight month and the pace of expansion picked up.
- 2. The job market improved as the subindex for employment stepped into positive territory after shrinking for four months in a row. Manufacturers added staff as the market sentiment improved. The subindex reached the second-highest level since January 2013." – Dr. Wang Zhe, Senior Economist, Caixin Insight Group

### **Caixin China General Manufacturing PMI™**

- 3. "Prices continued to rise and inflationary pressure heightened. The gauge for input costs climbed further into expansionary territory and hit the highest level since November 2017. Raw material prices kept pushing up manufacturers' costs. The prices of industrial metals especially steel and chemical raw materials continued to surge. Manufacturers' output prices also rose fast, with the prices of intermediate products experiencing a steep increase.
- 4. Logistics delivery times grew significantly. The subindex of suppliers' delivery times fell deeper into negative territory in April, mainly due to the shortage of raw materials. The gauge had been in contractionary range in 15 of the 16 months from January 2020 to April 2021, mainly due to the adverse impact of the pandemic on logistics.
- 5. Manufacturers were not in a hurry to replenish inventory. They bought more amid the high market demand, as the gauge for quantity of purchases saw a big jump. A lot of final product inventories were consumed as the gauge for stocks of finished goods fell further into contractionary territory. Meanwhile, companies lacked the willingness to replenish inventory as the subindex of stocks of purchases was basically stable.

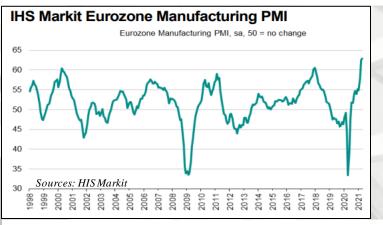
To sum up, manufacturing demand and supply expanded significantly in April. Overseas demand remained solid and the job market recovered. Manufacturing growth remained strong as the post-epidemic economic recovery kept its momentum. Manufacturers stayed confident about the economic recovery and keeping Covid-19 under control as the gauge for future output expectations was still higher than the long-term average. In the future, the focus will be on inflation as the price gauges have maintained an upward trend for several months.

Policymakers have expressed concerns about rising commodity prices on several occasions and urged adjusting raw material markets and easing businesses' cost pressure. In the coming months, rising raw material prices and imported inflation are expected to limit policy choices and become a major obstacle to the sustained economic recovery." – Dr. Wang Zhe, Senior Economist, Caixin Insight Group



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

Source: https://www.markiteconomics.com/Public/Home/PressRelease/5060907cf6194928863af561c9c0dd0e; 4/30/21



### Markit Eurozone Manufacturing PMI®

"The eurozone manufacturing economy registered another stellar performance in April, with operating conditions improving at a rate that surpassed March's survey record. This was signalled by the seasonally adjusted headline PMI® which improved to 62.9, up from 62.5 in March and its highest ever recorded level (survey data have been available since June 1997). It was also the tenth successive month that the index has posted above the 50.0 no-change mark.

### Eurozone manufacturing PMI hits fresh survey record high in April

Growth was again broad-based per market group, with both the investment and intermediate goods categories registering considerable gains. Moreover, the improvement seen in investment goods was the strongest ever recorded. Consumer goods meanwhile saw a marked improvement in operating conditions, though growth lagged the two other categories covered by the survey. ... Growth rates for both aggregate manufacturing output and new orders remained close to March's survey records as firms reported rising market confidence. New order books expanded sharply amid evidence that both manufacturers and clients are anticipating a sharp rise in activity over the coming months, as restrictions related to COVID-19 are relaxed. Moreover, growth came from both domestic and international sources: new export orders\* rose again at a considerable pace in April. ...

Eurozone manufacturing is booming, with a new PMI record set for a second month running in April. The past two months have seen output and order books both improve at rates unsurpassed since the survey began in 1997, with surging demand boosted by economies opening up from COVID-19 lockdowns and brightening prospects for the year ahead. However, supply constraints are also running at unprecedented levels, leading to a record build-up of uncompleted orders at factories.

The consequence of demand running ahead of supply is higher prices being charged by manufacturers, which are now also rising at the fastest rate ever recorded by the survey. The big uncertainty is how long these upward price pressures will persist for, and the extent to which these higher charges for goods and services will feed-though to consumers.

Encouragement comes from the sharp increase in employment and investment in machinery and equipment signalled by the survey, which suggests firms are scaling up capacity to meet resurgent demand. This should help bring supply and demand more into line, taking some pressure off prices. But this will inevitably take time." – Chris Williamson, Chief Business Economist, Markit<sup>®</sup>



#### Markit Eurozone Composite PMI®

"Growth of the eurozone private sector economy improved during April, with latest data indicating the fastest expansion since last July and the second best in over two-and-a-half years. This was highlighted by the **IHS Markit Eurozone PMI**<sup>®</sup> **Composite Output Index** recording 53.8, up from 53.2 in March.

### Eurozone private sector growth continues to strengthen in April

The index has now signalled growth for two consecutive months and latest data indicated concurrent activity gains in both manufacturing and service sectors. Goods producers continued to lead the way, with output rising at a rate little-changed on March's survey record. Service sector output returned to growth following seven months of continuous contraction, although the gain was only marginal overall. ... Supporting the increase in overall eurozone private sector activity was a second successive monthly rise in new orders, the strongest recorded for over two-and-a-half years. Higher sales were reported in both domestic and international markets with foreign business rising at a rate little-changed on March's series record level. ...

April's survey data provide encouraging evidence that the eurozone will pull out of its double-dip recession in the second quarter. A manufacturing boom, fueled by surging demand both in domestic and export markets as many economies emerge from lockdowns, is being accompanied by signs that the service sector has now also returned to growth. Barring any further wave of infections from new variants, Covid restrictions should ease further in the coming months, driving a strengthening of service sector business activity which should gain momentum as we go through the summer.

The intensity of the rebound will naturally depend on the extent to which Covid restrictions can be removed – and some measures relating to international travel are likely to remain in place for some time to come – but experience in other countries hints that the bounce in domestic activity could be strong as pent up demand and savings power a surge in spending. While the revival in the economy is bringing a rise in inflationary pressures, these so far seem largely confined to the manufacturing sector, with service sector costs – which form a major component of the core inflation measures tracked by the ECB – remaining only modest" – Chris Williamson, Chief Business Economist, Markit<sup>®</sup>

Source: https://www.markiteconomics.com/Public/Home/PressRelease/ef11dc721c7c4947a2b46f86948adf31; 5/5/21



#### IHS Markit/BME Germany Manufacturing PMI®

"The headline IHS Markit/BME Germany Manufacturing  $PMI^{\circledast}$  – a weighted aggregate of measures of new orders, output, employment, suppliers' delivery times and stock of purchases – remained in strong growth territory in April, at 66.2. This was down slightly from March's record high of 66.6 but still the second-highest reading since the start of data collection in 1996.

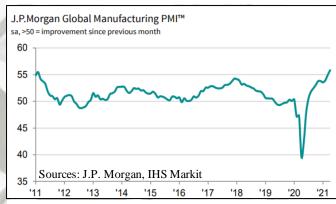
## Manufacturing sector continues to show strength despite severe supply disruption and rising costs

Germany's manufacturing sector continued to enjoy a historically strong rate of growth in April, latest PMI® survey data showed. Expansions in output and new orders eased but remained close to the record highs seen in March, while growing pressure on capacity and strong business confidence fuelled an acceleration in job creation. Severe supply-side disruption remained a hindrance to the sector's performance, however, weighing on output and contributing to rises in both input cost and output price inflation, the latter to a new record high.

The PMI continues to send positive signals for the health of the German manufacturing sector, with the headline index holding close to March's record high thanks in large part to sustained strong growth in new orders. A second consecutive record increase in backlogs of work underlines the strength of demand faced by German manufacturers, but it also highlights the fact that production continues to lag behind new orders. The data show that goods producers have redoubled efforts to expand capacity, with April seeing a notable acceleration in the rate of job creation to the fastest in more than two-and-a-half years, but supply issues remain a risk to the sector's growth prospects.

The reports of delays in the receipt of inputs over the past two months are without precedent, and the severe imbalance of supply and demand for raw materials, components and freight has pushed up the rate of input cost inflation to near-record levels. Supportive demand conditions mean we're increasingly seeing manufacturers raising factory gate charges, but prices can only be increased so far before we start to see some impact on demand. Despite showing some concerns for the current supply issues, manufacturers generally maintain a strongly positive outlook for the year ahead with expectations at a record high, hinting they believe the bottlenecks to be transitory and that conditions on both the demand and supply side will get better." – Phil Smith, Principal Economist, IHSMarkit®

Source: https://www.markiteconomics.com/Public/Home/PressRelease/b423c33618804e2c8b742a0c6ccf3837; 5/3/21



#### J.P. Morgan Global Manufacturing PMI<sup>™</sup>

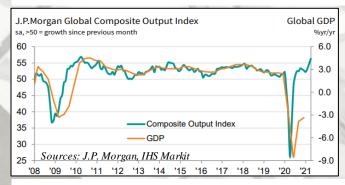
"The J.P. Morgan Global Manufacturing  $PMI^{TM} - a$  composite index produced by J.P. Morgan and IHS Markit in association with ISM and IFPSM – rose to 55.8 in April, its best reading since April 2010. Of the 24 nations for which national PMI data were available, 21 saw business conditions improve, compared to only three signalling contractions (Mexico, Myanmar and the Philippines).

## Global manufacturing upturn accelerates with firmer growth of production, demand and employment

The global manufacturing upturn strengthened at the start of the second quarter. Production rose at the quickest pace in over a decade, as inflows of new work improved to the greatest extent in nearly 11 years. Pressure on capacity remained elevated, however, with average supplier lead times increasing to a record degree and the rate of growth in work backlogs at manufacturers hitting a 17-year high.

Manufacturing production increased for the tenth successive month, led by solid expansions in the euro area (near survey record growth), Australia, the UK and the US. Expansions were also signalled in China and Japan. By sector, growth was registered across the consumer (two-month low), intermediate (four-month high) and investment (129-month high) goods industries. Underpinning the latest increase in output was a further substantial improvement in intakes of new work. Total new orders and new export business both rose at the quickest rates since May 2010. The outlook for the global manufacturing sector also strengthened, with optimism about future output levels remaining among the best signalled in the series history.

The latest PMI surveys show how the gradual unwinding of COVID-19 restrictions in many parts of the world is driving an accelerated upturn in manufacturing activity. Rates of expansion in output and new orders were the strongest in over a decade, supporting renewed job creation. Constraints are still being felt across global supply-chains, however, with raw material delivery times lengthening and the resulting shortages leading increased inflationary pressures. Input costs rose at the fastest pace in a decade, leading to a series-record increase in factory gate prices." – Olya Borichevska, Global Economist, Global Economic Research, J.P. Morgan



#### J.P. Morgan Global Composite PMI<sup>™</sup>

"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 a 132-month high 56.3 in April, up from 54.8 in March. The rate of increase in services activity outpaced that of manufacturing production for the first time since the current revival in global activity began last July

#### Global economic growth accelerates to 11-year high as new orders and international trade rise at stronger rates

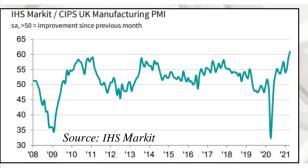
Growth of global economic activity and new orders accelerated to 11-year highs in April. The upturn in output was led by solid expansions in the US – survey-record increase – and the UK, while growth was weak in Japan. Brazil was the only nation to register lower activity. Five of the six sub-sectors covered saw expansions of output in April. The strongest performance was registered by financial services, followed by investment goods and then business services. Consumer and intermediate goods producers also saw solid growth of production volumes. The downturn in the consumer services sector extended to a fifteenth successive month.

The level of incoming new business rose for the tenth straight month in April. All six of the sub-industries covered by the survey saw expansions, up from five in March, including the consumer services industry following a five-month sequence of contraction. Investment goods overtook financial services at the top of the new order growth rankings.

The outlook for global economic activity remained positive at the start of the second quarter, with companies (on average) forecasting that output would rise over the coming year. Although the overall degree of optimism dipped slightly, it remained close to March's seven-year record high.

The April PMIs show that the rebound in global economic activity is gathering momentum, with rates of expansion in output and new orders hitting 11-year highs. International trade in goods and services is also showing signs of reviving, as lockdown restrictions ease across a number of key markets. Inflationary pressures are still on the ascent, however, with strong cost rises driving the rate of increase in selling prices to a record high." – Olya Borichevska, Global Economic Research, J.P. Morgan

Source: https://www.markiteconomics.com/Public/Home/PressRelease/1506adf866824fae9655b67ae70d3bd5; 5/5/21



### IHS Markit/CIPS UK Manufacturing PMI®

"The seasonally adjusted IHS Markit/CIPS Purchasing Managers' Index<sup>®</sup> (PMI<sup>®</sup>) rose to 60.9 in April, up from 58.9 in March and above the earlier flash estimate of 60.7. The latest reading is the highest since July 1994's record high (61.0).

#### Manufacturing PMI at near-record high in April but sector still beset by supply-chain disruptions

April saw a further acceleration in the rate of expansion of the UK manufacturing sector. Growth of output and new orders were both among the best seen over the past seven years, leading to a solid increase in employment. The sector remained beset by supply-chain delays and input shortages, however, which contributed to increased purchasing costs and record selling price inflation.

Underpinning the latest robust expansion of production was a similarly marked improvement in intakes of new business. Total new orders rose for the third straight month, largely due to a further revival of domestic market conditions. Stronger client confidence, the re-opening of parts of the economy and improving global market conditions all contributed to sales growth....

Further loosening of COVID-19 restrictions at home and abroad led to another marked growth spurt at UK factories. The headline PMI rose to a near 27-year high, as output and new orders expanded at increased rates. The outlook for the sector is also increasingly positive, with two-thirds of manufacturers expecting output to be higher in one year's time. Export growth remains relatively subdued, however, as small manufacturers struggle to export.

The sector also remains beset by supply-chain issues and rising inflationary pressures. Disruption following Brexit and COVID-19, especially at ports, caused a further near-record lengthening of supplier delivery times. The resulting input shortages kept producer price inflation among the highest over the past four years. Manufacturers have generally passed on these costs to customers, as highlighted by a survey-record rise in selling prices, but it is hoped that this inflationary backdrop will subside once supply and demand come back into line as covid-related logistic delays ease." – Rob Dobson, Director, IHS Markit

### **Private Indicators Associated Builders and Contractors**

### GDP and Construction: Investment in Nonresidential Structures Declines 4.8% in Q1

"The U.S. economy expanded at a 6.4% annualized rate during the first quarter of 2021; however, investment in nonresidential structures declined at a 4.8% rate for the quarter, according to analysis conducted by Associated Builders and Contractors of data released today by the Bureau of Economic Analysis.

Many factors were at work in the overall expansion, including sizeable injections of stimulus in recent months and ongoing vaccinations. Personal consumption expenditures, fixed investment and federal, state and local government spending all supported growth.

"ABC economists have suggested for months that commercial real estate and construction would be among the last segments of the economy to recover," said ABC Chief Economist Anirban Basu. "Today's gross domestic product report makes it clear that while the broader economy continues to recover quickly, commercial real estate and construction dynamics are not nearly as positive.

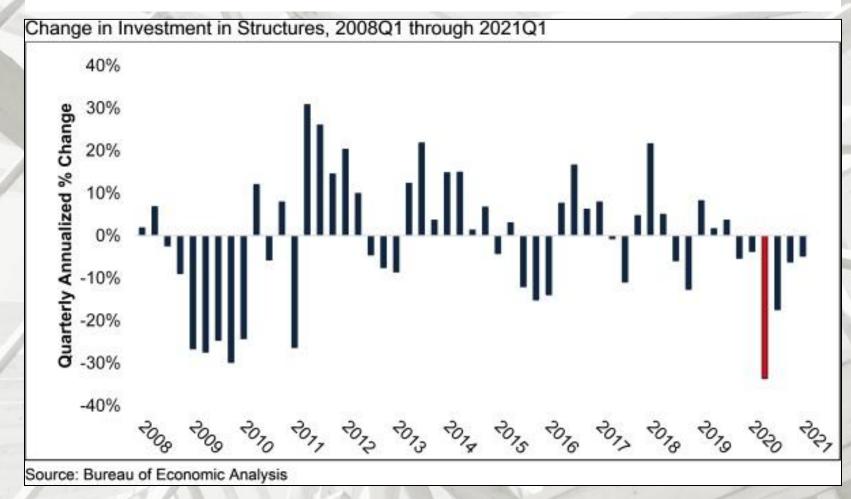
"The U.S. economy expanded rapidly during the first quarter of 2021, but investment in nonresidential structures actually subtracted from growth," said Basu. "The COVID-19 pandemic leaves in its wake low hotel occupancy rates, vacated offices and large blocks of abandoned retail space. Investment in nonresidential structures has now declined for six consecutive quarters, which means that the decline in this form of investment commenced prior to the COVID-19 pandemic." – Erika Walter, Director of Media Relations, ABC

	2018	2019	2020	2020			2021
				QII	QIII	QIV	QI
Gross Domestic Product	3.0%	2.2%	-3.5%	-31.4%	33.4%	4.3%	6.4%
Gross Private Domestic Investment	6.3%	1.7%	-5.2%	-46.6%	86.3%	27.8%	-5.0%
Fixed Investment	5.2%	1.9%	-1.8%	-29.2%	31.3%	18.6%	10.1%
Nonresidential	6.9%	2.9%	-4.0%	-27.2%	22.9%	13.1%	9.9%
Structures	3,7%	-0.6%	-11.0%	-33.6%	-17.4%	-6.2%	-4.8%
Equipment	8.0%	2.1%	-5.0%	-35.9%	68.2%	25.4%	16.7%
Intellectual Property Products	7.8%	6.4%	1.7%	-11.4%	8.4%	10.5%	10.1%
Residential	-0.6%	-1.7%	6.1%	-35.6%	63.0%	36.6%	10.8%

#### **Investment in Nonresidential Structures Declines 4.8% in Q1**

""The expectation for rapid economic growth into 2022 remains firmly in place," said Basu. "While many fret about input shortages, rising inflationary pressures, prospective tax increases and skyrocketing national debt, for now the sheer volume of federal spending will countervail all headwinds. Employment growth will be significant for months to come, which will help support commercial real estate fundamentals and eventually produce a rebound in commercial construction. <u>Recent upticks</u> in contractor confidence, according to ABC's Construction Confidence Index, support this notion.

"However, there may come a time over the new few years when America starts to see faltering stimulus, massive federal debt service, more inflation, higher interest rates and loftier tax rates," said Basu. "That set of circumstances would not support vigorous nonresidential construction spending in America."" – Erika Walter, Director of Media Relations, ABC



## **Private Indicators Associated Builders and Contractors**

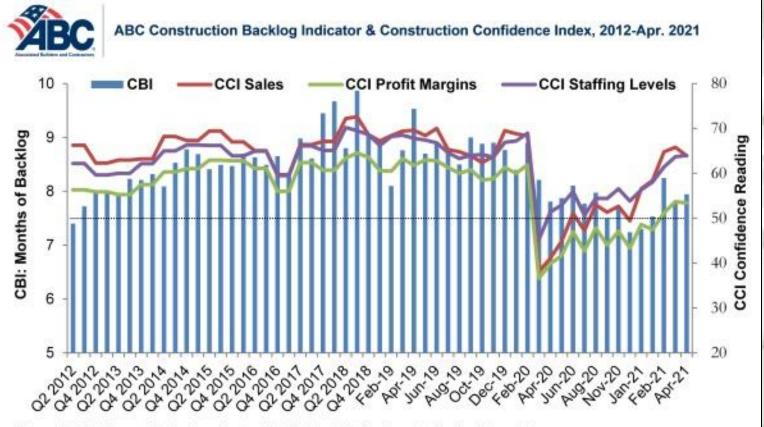
### ABC's Construction Backlog Inches Up in April; Contractor Optimism Slips

"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 March 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

Construction Backlog Indicato	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
	Co	ompany S	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



©Associated Builders and Contractors, Construction Backlog Indicator, Construction Confidence Index

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

#### 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%	
	Pro	fit Margins Expectati	ons	
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%	
	Sta	ffing Level Expectation	ons	
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

## Private Indicators American Institute of Architects (AIA)

### Architecture Billings Index March 2021 Recovery in architecture firm billings continues to accelerate

### Firms report just a modest decline in overall head count due to the pandemic

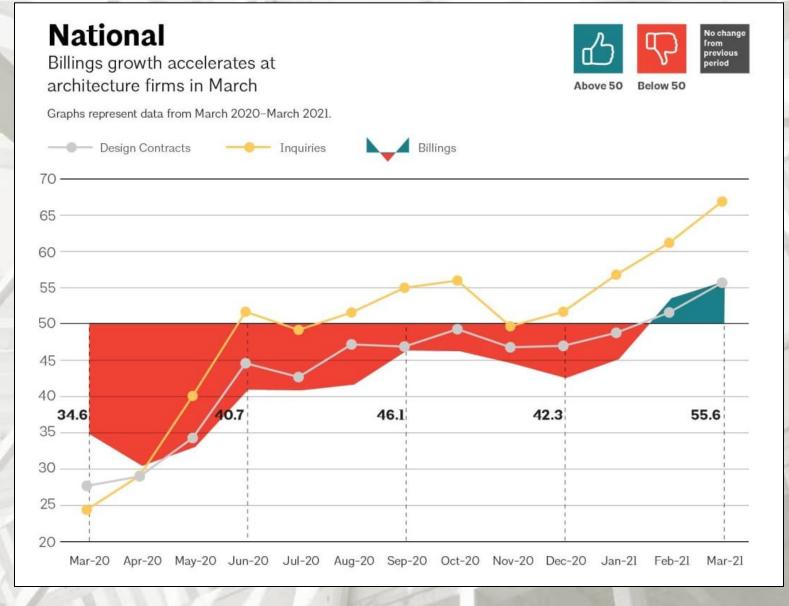
"AIA's monthly Architecture Billings Index strengthened again in March, coming in at 55.6, 2.3 points higher than February's ABI of 53.3. This marks the ABI's second positive month since it dipped below 50 in February 2020. The ABI is a leading economic indicator of construction activity in the U.S. and reflects a nine- to 12-month lead time between architecture billings and construction spending nationally, regionally, and by project type. A score above 50 represents an increase in billings from the previous month, while a score below 50 represents a contraction.

Business conditions at architecture firms continued their turnaround in March, with a strong ABI score of 55.6 for the month, as an even larger share of firms reported an increase in their billings than in February. In addition, inquiries into new work and the value of new design contracts both continued to rise, as an increasing number of clients are not only shopping projects around, but also signing contracts to begin new work. Backlogs at firms also rose dramatically from the fourth quarter of 2020 to the first quarter of 2021, growing by nearly an entire month from 5.3 to 6.1 months. This is nearly back to the pre-pandemic peak of 6.5 months and means that firms have a solid supply of work in the pipeline if the economy falters in the coming months." – Katharine Keane, Senior Associate Editor, The American Institute of Architects

"As business activity at architecture firms moves sharply toward recovery, it is very encouraging to simultaneously see such positive indicators of future project work increasing in the pipeline. The activity architecture firms are seeing is a positive bellwether not only for the construction outlook, but also for the larger economy. New project inquiries improved again in March, increasing 5.7 points to 66.8 compared to 61.2 in February. The design contracts score also strengthened, rising 4.1 points to 55.7 compared to March's score of 51.6. March also marked the first time in three years that all building sectors and regions posted positive scores." Kermit Baker, Chief Economist, AIA

Source: https://www.aia.org/pages/6393491-abi-march-2021-recovery-in-architecture-fi; 4/23/21

## Private Indicators American Institute of Architects (AIA)

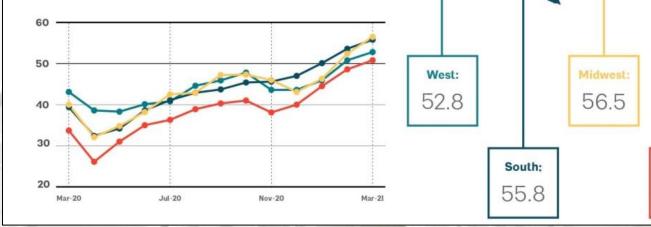


# **Private Indicators: AIA**

### Regional

Business conditions improve in all regions of the country, even the hard-hit Northeast

Graphs represent data from March 2020–March 2021 across the four regions. 50 represents the diffusion center. A score of 50 equals no change from the previous month. Above 50 shows increase; Below 50 shows decrease. 3-month moving average.



### Region

"Architecture firms in all regions of the country also reported improving business conditions in March, even those in the Northeast, which had seen weaker conditions even prior to the pandemic. Billings were strongest at firms located in the Midwest and South, with those in the Midwest reporting particularly strong growth following a soft winter, partially due to harsh weather conditions." – Katharine Keane, Senior Associate Editor, The American Institute of Architects

Northeast:

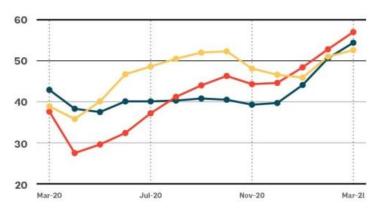
50.8

# **Private Indicators: AIA**

### Sector

Firms with a commercial/industrial specialization continue to see a strong rebound in billings

Graphs represent data from March 2020–March 2021 across the three sectors. 50 represents the diffusion center. A score of 50 equals no change from the previous month. Above 50 shows increase; Below 50 shows decrease. 3-month moving average.





### Sector

"In addition, firms of all specializations reported billings growth this month, with the highest rate of growth reported by firms with commercial/industrial and institutional specializations, the two sectors hardest hit by the pandemic. Some firms are even reporting that their leisure and hospitality projects are starting to come back to life, as more people are vaccinated and start going out and traveling again." – Katharine Keane, Senior Associate Editor, The American Institute of Architects

## **Private Indicators**

### Dodge Data & Analytics Construction Starts Increase in March, but Rising Material Prices Could Hamper Recovery

A strong pickup in nonresidential building overpowers weakness elsewhere

"Total construction starts rose 2% in March to a seasonally adjusted annual rate of \$825.3 billion, according to <u>Dodge Data & Analytics</u>. A solid gain in nonresidential building starts fueled the March gain, while growth in residential starts was minuscule and nonbuilding starts fell outright. The Dodge Index rose 2% in March, to 175 (2000=100) from February's 172..

""The March increase in construction starts is certainly welcome news following the past three months of decline," said Richard Branch, Chief Economist for Dodge Data & Analytics. "Construction will continue to improve as the year moves on. However, just as the pandemic is beginning to loosen its grip on the economy, logistical problems and the rapid escalation in material prices have stepped in as the primary risk to the construction sector. These issues may restrain opportunity in the coming months, causing the sector's recovery to lag that of the overall economy."" – Nicole Sullivan, Public Relations & Social Media, AFFECT

Source: https://www.construction.com/news/Construction-Starts-Increase-in-March-but-Rising-Material-Prices-Could-Hamper-Recovery; 4/16/21

## **Private Indicators**

### **Dodge Data & Analytics**

•"**Residential building** increased by less than one percent in March to a seasonally adjusted annual rate of \$403.3 billion. Multifamily starts rose by a brisk 33%, while single family starts slipped 9% lower.

- For the 12 months ending March 2021, total residential starts were 6% higher than the 12 months ending March 2020. Single family starts gained 14%, while multifamily starts were down 14% on a 12-month sum basis.
- The largest multifamily structures to break ground in March were the \$329 million 1629 Market Street mixed-use project in San Francisco CA, the \$287 million Schuylkill Yards West Tower in Philadelphia PA, and the \$242 million National Urban League mixed-use building in New York NY.

• Regionally, March's starts rose in the West, South Central, and Northeast regions, but fell in the Midwest and South Atlantic regions.

**Nonresidential building starts** rose 13% in March to a seasonally adjusted annual rate of \$235.3 billion. Institutional building starts rose 15% during the month fueled by gains in education, recreation, and public buildings. Commercial building starts increased 11% thanks to healthy gains across all commercial sectors. Manufacturing starts, meanwhile, lost 52% in March after strong levels during the previous two months.

For the 12 months ending March 2021, nonresidential building starts dropped 28% compared to the 12 months ending March 2020. Commercial starts declined 30%, institutional starts were down 20%, and manufacturing starts slid 56% in the 12 months ending March 2021.

**The largest nonresidential building projects to break ground in March** were a \$306 million Amazon, Inc. warehouse in Maspeth NY, the \$300 million Ball Corp. Aluminum Can factory in Pittson PA, and the \$288 million TCCD Northwest Campus Redevelopment in Arlington TX." – Richard Branch, Chief Economist, Dodge Data & Analytics

## **Private Indicators**

#### MONTHLY CONSTRUCTION STARTS

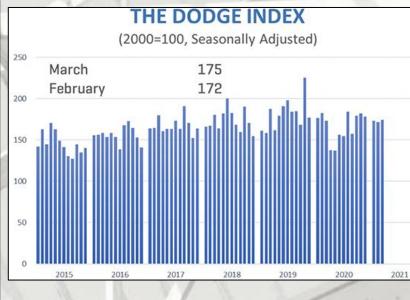
(Millions of Dollars, Seasonally Adjusted Annual Rate)

	Mar 2021	Feb 2021	% Change
Nonresidential Building	\$235,323	\$207,872	13
Residential Building	403,288	402,963	0
Nonbuilding Construction	186,680	201,654	-7
Total Construction	\$825,291	\$812,489	2

#### YEAR-TO-DATE CONSTRUCTION STARTS

Unadjusted Totals, in Millions of Dollars

3	Mos. 2021	3 Mos. 2020	% Change
Nonresidential Building	\$50,708	\$69,319	-27
Residential Building	95,176	84,486	13
Nonbuilding Construction	41,511	40,518	2
Total Construction	\$187,395	\$194,323	-4



Source: Dodge Data & Analytics



### **MNI Chicago**

"The Chicago Business Barometer<sup>TM</sup>, produced with MNI, rose to 72.1 in April, the highest level since December 1983. The index gained 5.7 points, boosted by an influx of new business.

#### Chicago Business Barometer<sup>™</sup> – Expanded to 72.1 in April

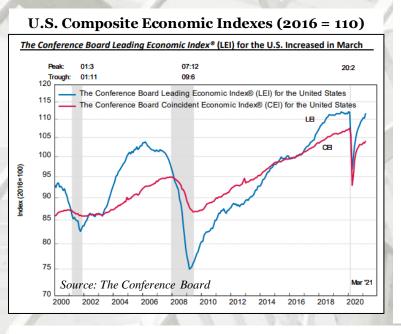
Among the main five indicators, Order Backlogs posted the largest increase, while Supplier Deliveries saw the biggest decline. Demand improved markedly in April with New Orders rising by 9.9 points to a near-7-year high. Production ticked up 0.9 points to the highest level since January 2018. Anecdotal evidence suggested an anticipated increase in business activity, partly because firms are overbuying due to raw material shortages.

Order Backlogs soared, up 16.2 points in April, hitting the highest level since December 1973. Firms are experiencing difficulties in getting certain components and raw materials. Inventories fell 8.7 points in April, dipping below the 50- mark for the first time since December 2020. Employment edged higher in April by 1.7 points, marking the highest level since August 2018 and the second successive reading in expansion territory. Supplier Deliveries eased 3.5 points in April, following a sharp increase in March. Nevertheless, the index remains elevated and firms continued to experience slow delivery times due to logistical constraints. Prices paid at the factory gate skyrocketed a further 11.1 points in April, surging to a 41-year high. Raw material shortages and transportation problems continue to weigh on companies cost burden.

This month's special question asked, "Do you plan to expand your workforce over the next three months?" The majority, at 54.8%, plans to expand their work force, either with permanent (16.7%) or temporary (14.3%) workers, or both (23.8%). Against that, 45.2% have no plans to expand their staff levels." – Les Commons, Senior Economist and Irene Prihoda, Economist, MNI Indicators

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

"**The Conference Board Leading Economic Index**<sup>®</sup> (LEI) for the U.S. increased 1.3 percent in March to 111.6 (2016 = 100), following a 0.1 percent decrease in February and a 0.5 percent increase in January."



"The U.S. LEI rose sharply in March, which more than offset February's slightly negative revised figure. The improvement in the U.S. LEI, with all ten components contributing positively, suggests economic momentum is increasing in the near term. The widespread gains among the leading indicators are supported by an accelerating vaccination campaign, gradual lifting of mobility restrictions, as well as current and expected fiscal stimulus. The recent trend in the U.S. LEI is consistent with the economy picking up in the coming months, and The Conference Board now projects yearover-year growth could reach 6.0 percent in 2021." – Ataman Ozyildirim, Senior Director of Economic Research, The Conference Board

"The Conference Board Coincident Economic Index<sup>®</sup> (CEI) for the U.S. increased 0.6 percent in March to 104.0 (2016 = 100), following a 0.1 percent decrease in February and a 0.5 percent increase in January.

**The Conference Board Lagging Economic Index**<sup>®</sup> (LAG) for the U.S. decreased 0.5 percent in March to 105.1 (2016=100), following a 1.6 percent increase in February and 2.7 percent decrease in January."

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

#### March New Business Volume Up 4 Percent Year-over-year, Up 26 Percent Month-to-month, Down 1 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 March was \$9.3 billion, up 4 percent year-over-year from new business volume in March 2020. Volume was up 26 percent month-to-month from \$7.4 billion in February. Year-to-date, cumulative new business volume was down 1 percent compared to 2020.

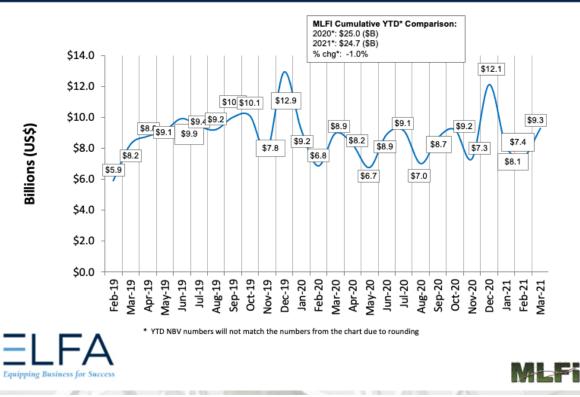
Receivables over 30 days were 1.9 percent, down from 2.1 percent the previous month and down from 2.6 percent in the same period in 2020. Charge-offs were 0.43 percent, down from 0.55 percent the previous month and down from 0.55 percent in the year-earlier period.

Credit approvals totaled 77 percent, up from 75.8 percent in February. Total headcount for equipment finance companies was down 15.2 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 April is an all-time high of 76.1, and an increase from the March index of 67.7." – Amy Vogt, Vice President, Communications and Marketing; Equipment Leasing & Finance Association

"The equipment finance industry appears poised to take advantage of an economic tailwind that is manifesting itself in an improving labor market, a continued low interest-rate environment, a strong corporate earnings season, and high business confidence that is creating demand for investment in commercial equipment. ELFA member organizations also report improving portfolio quality, which is reflective of their customers' ability to meet their payment obligations as the pandemic's grip on many businesses loosens." – Ralph Petta, President and CEO, ELFA

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



#### Monthly Leasing and Finance Index: March 2021

"Thus far in 2021, as we continue to work our way through the pandemic, market demand has remained high, both on applications and credit approvals. Our existing portfolios continue to remain stable, with few leases stretching payables along while the underlying financials remain strong.

Approval to funding continues to lag a bit as the supply chain stretches, especially when there are multiple and/or foreign vendors involved. Overall, continuing into second quarter, there seems to be continued growth and strength across all of our markets, which encompass small, middle, corporate and governmental." – Marci Slagle, President, BankFinancial Equipment Finance

### Markit U.S. Manufacturing PMI<sup>™</sup> Strongest improvement in operating conditions on record amid marked uptick in client demand

"The seasonally adjusted IHS Markit U.S. Manufacturing Purchasing Managers' Index<sup>TM</sup> (PMI<sup>TM</sup>) posted 60.5 in April, up from 59.1 in March and broadly in line with the earlier 'flash' estimate of 60.6. The PMI figure was the highest since data collection for the series began in May 2007 and signalled a marked expansion.

April PMI<sup>TM</sup> data from IHS Markit indicated a robust improvement in the health of the U.S. manufacturing sector, and the steepest since data collection began in May 2007. Overall growth was supported by quicker expansions in output and new orders, with the latter rising at the sharpest pace since April 2010. The headline index was also pushed higher by unprecedented supplier delivery delays (ordinarily a sign of improvement in operating conditions). Raw material shortages also led to the fastest rise in cost burdens since July 2008, with firms seeking to pass on supplier price hikes through marked upticks in output charges. Meanwhile, business confidence moderated, amid concerns regarding supply chain disruptions and strains on future production capacity.

Contributing to the greater headline figure was a sharp and faster upturn in production across the manufacturing sector. Output growth was commonly linked to a stronger rise in new orders, although some companies continued to highlight pressure on capacity following raw material shortages.

New orders increased markedly in April, with the rate of expansion accelerating to the fastest for 11 years. Firms noted that the upturn was due to stronger client demand, with some companies mentioning that customers were placing larger orders amid substantial supplier delivery delays. At the same time, new export orders expanded at the second-quickest rate on record as lockdown restrictions eased in key export markets." – Chris Williamson, Chief Economist, Markit<sup>®</sup>

Source: https://www.markiteconomics.com/Public/Home/PressRelease/81917888e2564d4bad0bb3b1c7ae992f; 5/3/21

### Markit U.S. Manufacturing PMI<sup>™</sup>

"Pressure on capacity meanwhile persisted, as backlogs of work rose at the second-steepest rate yet recorded by the survey. Subsequently, employment increased strongly and at the second-fastest pace since December 2017. April data signalled another marked monthly deterioration in vendor performance across the goods-producing sector, with lead times lengthening to the greatest extent on record. Alongside raw material shortages and pressure on supplier capacity, firms linked delays to ongoing disruption to transportation, including port congestion.

Input costs rose rapidly in April, with the rate of inflation quickening to the sharpest since July 2008. The increase was widely attributed to material shortages and greater transportation costs. Firms sought to pass on higher costs to clients through a further rise in output charges in April. The rate of charge inflation eased slightly from March, but was the second-fastest on record.

Firms expanded their buying activity at the steepest pace since August 2014. As well as reports of increased input buying due to greater production requirements, some firms also noted efforts to build stocks. Consequently, firms registered a modest expansion in pre-production inventories. Stocks of finished goods fell, however, as firms often reported that demand exceeded current production. Finally, business confidence moderated in April, with optimism slipping to a three-month low. Expectations were weighed down by concerns regarding supply chain disruptions.

US manufacturers reported the biggest boom in at least 14 years during April. Demand surged at a pace not seen for 11 years amid growing recovery hopes and fresh stimulus measures. Supply chain delays worsened, however, running at the highest yet recorded by the survey, choking production at many companies. Worst affected were consumer-facing firms, where a lack of inputs has caused production to fall below order book growth to a record extent in over the past two months as household spending leapt higher.

Suppliers have been able to command higher prices due to the strength of demand for inputs, pushing material costs higher at a rate not seen since 2008." – Chris Williamson, Chief Economist, Markit®

Source: https://www.markiteconomics.com/Public/Home/PressRelease/81917888e2564d4bad0bb3b1c7ae992f; 5/3/21

U.S. Manufacturing PMI

sa, >50 = improvement since previous month



#### Markit U.S. Manufacturing PMI<sup>™</sup>

"Attempts to expand capacity via hiring extra staff gained further momentum, though in some cases staff shortages were an additional constraint on production. However, with confidence in the outlook continuing to run at one of the highest levels seen over the past seven years, buoyed by vaccine roll-outs and stimulus, further investment in production capacity should be seen in coming months, helping alleviate some of the price pressures." – Chris Williamson, Chief Economist, Markit<sup>®</sup>

Source: https://www.markiteconomics.com/Public/Home/PressRelease/81917888e2564d4bad0bb3b1c7ae992f; 5/3/21

### IHS Markit U.S. Services PMI<sup>™</sup> Business activity expands at fastest pace on record amid marked uptick in client demand

"The seasonally adjusted final IHS Markit US Services PMI Business Activity Index registered 64.7 at the start of the second quarter, up from 60.4 in March and higher than the earlier released 'flash' figure of 63.1 to signal a marked increase in service sector business activity. The robust upturn in output was the sharpest since data collection began in late-2009. Many firms noted that the expansion was linked to stronger client demand and a rise in new sales. Some companies, however, stated that output has not yet recovered to pre-pandemic levels.

April PMI<sup>TM</sup> data indicated a marked and unprecedented expansion in business activity across the U.S. service sector. Supporting the upturn in output was the fastest increase in new business on record. Pressure on capacity remained evident, as backlogs of work accumulated at a faster pace and employment rose at the second-sharpest rate on record. Some concerns regarding the sustainability of new order inflows weighed slightly on business confidence, although optimism remained relatively strong. Meanwhile, input costs rose at the quickest rate since data collection began in October 2009 amid supplier price hikes. Firms partially passed on higher prices to their customers through the fastest rise in charges on record.

New business increased at the most marked pace on record in April, with the rate of expansion accelerating for the fourth month running. The upturn was commonly attributed to the relaxation of lockdown measures and further reopening of businesses, with client demand expanding. At the same time, foreign demand conditions improved further at the start of the second quarter. The rise in new export sales was solid overall, and the fastest since September 2020." – Chris Williamson, Chief Economist, Markit<sup>®</sup>

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

### IHS Markit U.S. Services PMI<sup>™</sup>

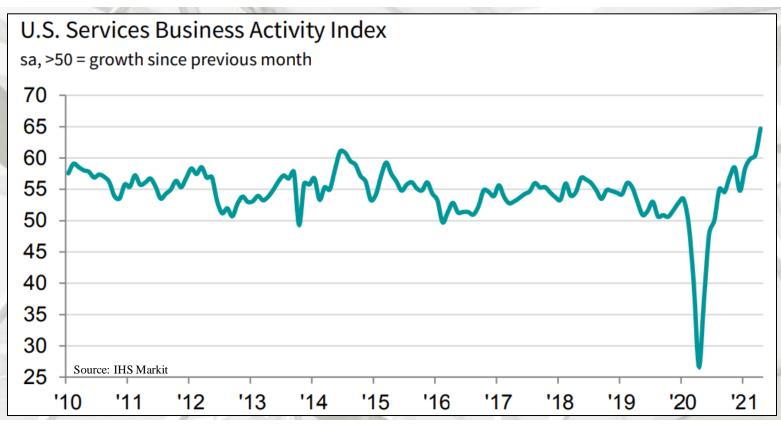
"In line with stronger new business growth, service providers expanded their workforce numbers at a sharp pace in April. With the exception of November 2020, the latest round of job creation was the fastest on record. Panellists also linked employment growth to increased pressure on capacity. Reflective of greater strain on business capacity, backlogs of work were accumulated at the strongest pace since September 2020. Alongside substantial supplier delivery delays, firms stated that outstanding business rose following efforts by companies to take on as much work as possible following extensive lockdown restrictions.

On the price front, input costs faced by service sector firms increased at an unprecedented rate in April. The substantial rise in cost burdens was often linked to hikes in supplier prices and greater transportation fees. Companies particularly noted higher costs of plastic, packaging, PPE and fuel. Subsequently, firms sought to pass on part of the hike in costs to clients through higher output charges. The rate of output price inflation accelerated for the fourth month running and was the steepest since data collection for the series began in October 2009.

Finally, service providers signalled upbeat expectations regarding the outlook for output over the coming 12 months. Although firms were confident following stronger client demand and easing lockdown restrictions, optimism moderated slightly amid concerns regarding the sustainability of demand.

Thanks to the cocktail of a successful vaccine roll-out, the reopening of the economy, ultraaccommodative monetary policy and injection of fresh fiscal stimulus, businesses are reporting the strongest surge in demand seen for at least a decade.

The upswing in demand has led to one of the strongest months of job creation yet recorded by the survey as business prepares for better times ahead." – Chris Williamson, Chief Economist, Markit<sup>®</sup>



### **IHS Markit U.S. Services PMI**<sup>™</sup>

"The biggest threat to the outlook remains new virus variants, which will inevitably mean international travel and associated business activity will stay under pressure for some time to come, but in the meantime the domestic economy is faring very well, especially consumer facing industries. Another concern is prices, with a record increase in service sector charges highlighting how inflationary pressures are by no means confined to the manufacturing sector. Indicators of price pressures and capacity constraints will need to be monitored closely to assess whether such price rises are transitory." – Chris Williamson, Chief Economist, Markit<sup>®</sup>

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

### National Association of Credit Management – Credit Managers' Index

### **Report for April 2021: Combined Sectors**

"Today's economic growth has been about as unexpected as last year's economic collapse. The pandemic-induced slump came with little to no warning. Just a few months ago, many analysts were cautiously suggesting that 2021 might see annual growth rates around 4.5%. Now, the Federal Reserve has projected that 6.5% is more likely for the year. Markets are up and so too is virtually every economic indicator one can name.

The NACM's Credit Managers' Index for April 2021 reached a high not seen for more than 15 years. The monthly combined index for manufacturing and service sectors broke through the 60-mark with a reading of 60.6 after hovering in the high 50s for several months. The last time the combined score surpassed 60 was March 2006 (60.2). However, April 2004 (62.2) still holds the record for the CMI's highest combined score.

"This recovery has been nearly as shocking," said NACM Economist Chris Kuehl, Ph.D. "The readings have been on a fairly steady climb since the early days of the pandemic last March and April. Movement in sub-categories have been equally impressive. There doesn't seem to be a problem with getting paid in many sectors these days. Not only are companies paying what they owe, they are doing it on time. This marks the sixth-straight month without readings falling into the 40s. That is nearly unprecedented as far as the CMI history is concerned."

The Index of Favorable Factors reached 68.2 – nearly as high as January's 69.7 reading. The index has held above 60 since June 2020, when it totaled 55.3 as it left three consecutive months of contraction. Month on month, three of the four subcategories registered gains. Sales (74.7) and amount of credit extended (69.0) fell just short of the highs noted in January (75.9 and 69.2, respectively), while new credit applications (65.9) bested February's score (65.5), but still lags behind January's (67.8). Dollar collections was the only subcategory to dip slightly (64.5 to 63.1)." – Andrew Michaels, Editorial Associate, NACM

Source: https://nacm.org/cmi.html; 4/30/21

#### National Association of Credit Management – Credit Managers' Index

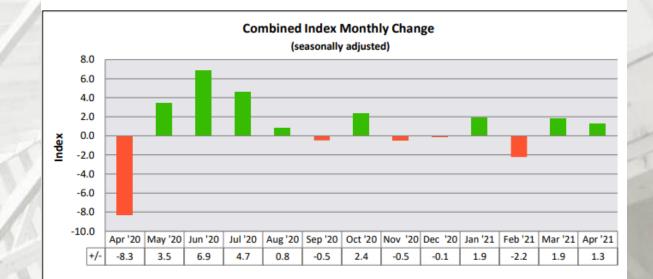
""For the most part, the past 12 months have been very positive for favorable categories," Kuehl noted. The Index of Unfavorable Factors reached 55.6 – its highest since July 2004 (56.7), and each of its six subcategories also gained month on month. Rejections of credit applications (52.0 to 53.0) hit its highest level since March 2018 (53.3). Accounts placed for collection (59.6) set a new high since the CMI's inception, while dollar amount beyond terms (57.0 to 59.4) and dollar amount of customer deductions (52.0 to 53.0) saw solid gains. Disputes (51.3) edged up 0.7 points, while filings for bankruptcies (57.1) went up 1.4 points.

"These are all impressive numbers and reflect the overall gains in the economy noted thus far this year," Kuehl said. "Today's economic growth has been about as unexpected as last year's collapse. Just last year, these readings tallied in the 30s and 40s."

The manufacturing sector escaped the worst of the pandemic-induced recession. Some areas even boasted of growth as consumers shifted their attention from services to buying things. There has been consistent demand for a host of consumer goods, such as vehicles, appliances and electronics – anything to keep people occupied during lockdown. Some manufacturing sectors, however, did not fare as well, particularly those sectors aimed at supporting service sector businesses. For example, airplane manufacturing was down. At 61.4, the combined score for the manufacturing sector was slightly higher month on month.

The service sector has been the hardest hit part of the economy. Traditionally, it accounts for more than 74% of total GDP. Although the service category is broad and includes everything from accounting, finance and law to food service and retail, CMI data reflect more heavily, but there is representation in several other fields as well." – Andrew Michaels, Editorial Associate, NACM

Combined Manufacturing and													
Service Sectors (seasonally adjusted)	Apr '20	May '20	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20	Jan '21	Feb '21	Mar '21	Apr '21
Sales	20.0	28.6	54.1	64.3	65.8	65.5	74.2	66.5	70.2	75.9	69.9	73.9	74.7
New credit applications	31.1	43.3	57.9	62.4	63.4	63.6	65.2	63.9	64.4	67.8	65.5	63.9	65.9
Dollar collections	35.5	43.2	53.9	62.5	61.2	63.3	64.6	62.6	62.8	66.0	59.2	64.5	63.1
Amount of credit extended	41.6	42.8	55.2	57.3	61.3	60.8	68.0	64.8	65.3	69.2	66.8	68.4	69.0
Index of favorable factors	32.0	39.5	55.3	61.6	62.9	63.3	68.0	64.4	65.7	69.7	65.3	67.7	68.2
Rejections of credit applications	52.7	51.9	49.8	50.0	51.5	51.6	51.4	51.5	51.3	51.6	51.5	52.0	53.0
Accounts placed for collection	47.4	49.1	46.7	50.8	51.6	49.4	49.5	56.2	51.6	52.9	51.6	55.1	59.6
Disputes	50.8	51.5	49.6	50.7	51.8	48.7	51.0	50.6	51.2	50.9	51.0	50.6	51.3
Dollar amount beyond terms	27.6	32.4	44.4	57.3	58.2	54.6	58.0	58.1	57.0	58.9	52.0	57.0	59.4
Dollar amount of customer deductions	49.4	50.9	50.6	52.4	52.2	51.1	51.0	51.7	51.5	51.3	52.8	52.2	53.0
Filings for bankruptcies	50.2	47.3	47.7	48.8	47.7	51.3	50.7	53.0	52.5	52.3	54.5	55.7	57.1
Index of unfavorable factors	46.3	47.2	48.1	51.7	52.2	51.1	51.9	53.5	52.5	53.0	52.2	53.8	55.6
NACM Combined CMI	40.6	44.1	51.0	55.6	56.5	56.0	58.4	57.9	57.8	59.7	57.5	59.3	60.6



### National Federation of Independent Business (NFIB) April 2021 Report

### Small Business Optimism Up in April but Job Openings Remain at Record Highs

"The <u>NFIB Small Business Optimism Index</u> rose 99.8 in April, an increase of 1.6 points from March. The Optimism Index has increased 4.8 points over the past three months since January but a record 44% of owners reported job openings they could not be filled." – Holly Wade, NFIB

"Small business owners are seeing a growth in sales but are stunted by not having enough workers. Finding qualified employees remains the biggest challenge for small businesses and is slowing economic growth. Owners are raising compensation, offering bonuses and benefits to attract the right employees." – Bill Dunkelberg, Chief Economist, NFIB

"Other key findings include:

- Eight of the 10 Index components improved and two declined.
- The NFIB Uncertainty Index decreased one point to 80.
- Earnings trends over the past three months improved eight points to a net negative 7%.
- Owners have plans to invest in their businesses as the percentage of those planning to make capital expenditures in the next three to six months increased seven points to 27%." Holly Wade, NFIB

### National Federation of Independent Business (NFIB) April 2021 Report

•"The percent of owners expecting better business conditions over the next six months fell seven points to a net negative 15%, surprisingly glum.

•As reported in <u>NFIB's monthly jobs report</u>, 42% of owners reported job openings that could not be filled, a record high reading. Owners continue to have difficulty finding qualified workers to fill jobs as they compete with increased unemployment benefits and the pandemic keeping some workers out of the labor force.

Forty-seven percent reported capital outlays in the last six months, down two points from March but 10 points above last year's low. Of those making expenditures, 42% reported spending on new equipment, 25% acquired new vehicles, and 15% improved or expanded facilities. Six percent acquired new buildings or land for expansion and 12% spent money for new fixtures and furniture. Twenty-seven percent plan capital outlays in the next few months. Hopefully supportive of improved productivity.

A net 3% of all owners (seasonally adjusted) reported higher nominal sales in the past three months, up nine points from March. The net percent of owners expecting higher real sales volumes improved one point to a net 1%.

The net percent of owners reporting inventory increases rose three points to a net 3%. A net 7% of owners view current inventory stocks as "too low" in April, up four points. A net 5% of owners plan inventory investment in the coming months, up one point from March." – Holly Wade, NFIB

### National Federation of Independent Business (NFIB) April 2021 Report

"The net percent of owners raising average selling prices increased 10 points to a net 36% (seasonally adjusted), the highest reading since April 1981 when it was 43%. The highest was 67% in October 1974 when inflation reached double digit rates. Price hikes were the most frequent in wholesale (62% higher, 3% lower) and retail (46% higher, 6% lower). Seasonally adjusted, a net 36% plan price hikes, the highest reading since July 2008.

A net 31% (seasonally adjusted) reported raising compensation. A net 20% plan to raise compensation in the next three months. Increased compensation is being passed on to customers through higher prices.

Eight percent cited labor costs as their top business problem and 24% said that labor quality was their top business problem, unchanged from March and the top overall concern.

The frequency of positive profit trends improved eight points to a net negative 7% reporting quarter on quarter profit improvement. Among owners reporting lower profits, 39% blamed weaker sales, 16% cited the usual seasonal change, 14% cited a higher cost of materials, 7% cited lower prices, 6% cited labor costs, and 4% cited higher taxes or regulatory costs. For those reporting higher profits, 62% credited sales volumes, 15% cited usual seasonal change, and 10% cited higher prices.

Two percent of owners reported that all of their borrowing needs were not satisfied, 26% reported all credit needs met, and 59% said they were not interested in a loan. A net 3% reported their last loan was harder to get than in previous attempts. One percent of owners reported that financing was their top business problem." – Holly Wade, NFIB



# **NFIB**

# NFIB.com/sboi

Source: http://www.nfib.com/surveys/small-business-economic-trends; 5/11/21

### **Small Business Optimism**

Index Component Plans to Increase Employment Plans to Make Capital Outlays Plans to Increase Inventories Expect Economy to Improve Expect Real Sales Higher Current Inventory Current Job Openings Expected Credit Conditions Now a Good Time to Expand Earnings Trends



# NFIB.com/sboi

NFIB



#### **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; 5/1/21

### The Paychex | IHS Markit Small Business Employment Watch

### Job Growth Rate in Small Businesses Increases Significantly in April

Employment gains occurred in all categories, with leisure and hospitality top among industries

"The Paychex | IHS Markit Small Business Employment Watch, compiled from aggregated payroll data of approximately 350,000 clients on the Paychex human capital management (HCM) suite, is out with the latest numbers. The Small Business Jobs Index increased 4.33 percent from March to 98.34 in April, a positive indicator of job growth returning to pre-pandemic levels. The increase is in part driven by the comparison period of one year ago (detailed below). Each region, state, and metro area analyzed in April 2021 saw employment gains. The South leads all regions at 99.42." – Lisa Fleming, Kate Smith, and Tess Flynn, Paychex, Inc.

"A return to full employment is not complete. However, the Small Business Jobs Index returned to its pre-pandemic peak, seen in February 2020. We're encouraged by the progress in job growth we see in the April numbers." – James Diffley, Chief Regional Economis, IHS Markit

"The country has been waiting for a significant increase in job growth since this time last year – and April delivered. Many businesses are finally able to resume regular operations with the onset of vaccine availability for all U.S. adults. The significant growth seen in the leisure and hospitality industry, over the last two months, will only accelerate with the upcoming financial relief available by the Restaurant Revitalization Fund grants made available this week by the SBA." – Martin Mucci, President and CEO, Paychex

### The Paychex | IHS Markit Small Business Employment Watch

"In further detail, the April report showed:

- Job growth improved in all four U.S. regions in March, as well as in all 20 states, and all 20 metros analyzed.
- The South continues to lead all regions in small business job growth.
- Texas took the top ranking for job growth among states.
- Leisure and hospitality saw the greatest improvement among industry sectors, but construction still has the highest index at 100.72.
- Leisure and hospitality and construction both also saw a significant gain in hourly earnings growth, 6.78 percent and 4.00 percent, respectively." Lisa Fleming, Kate Smith, and Tess Flynn, Paychex, Inc.

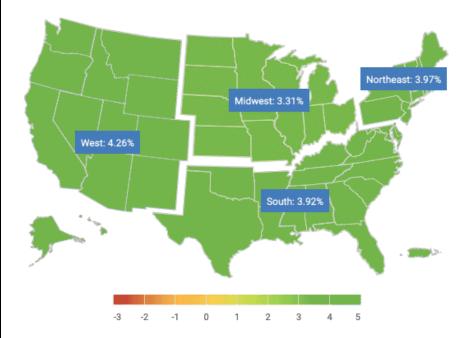
The Paychex | IHS Markit Small Business Employment Watch

April Jobs Index	April Wage Data				
Index	Hourly Earnings				
98.34	\$29.09				
12-Month Change	12-Month Growth				
+3.92%	+2.84% (+\$0.80)				

Source: Paychex | IHS Markit Small Business Employment Watch

### The Paychex | IHS Markit Regional Jobs Index

#### **Regional Performance**



Region	Index	Change		
Midwest	98.16	3.31%		
Northeast	97.82	3.97%		
South	99.42	3.92%		
West	97.97	4.26%		

Change 12-Month V

Source: Paychex | IHS Markit Small Business Employment Watch

### U.S. Bank Freight Payment Index Q1 Insights From U.S. Bank

"As is common in the beginning of the year, the freight market softened in Q1 2021. The drop was larger than normal due to severe winter storms, which led to reduced truck capacity. Input shortages, including microchips, also impacted the market. Yet spending stayed high, the truck market remained strong, and the outlook for spring and summer appears positive. Household spending is expected to be high due to the recent government stimulus and, for some families, savings that have built up throughout the pandemic.

The national truck freight market softened during the first quarter of 2021, as indicated by the U.S. Bank Shipment and Spend Indexes. This is not unusual as first quarter freight volumes are normally slower than the final quarter of the previous year. Severe weather across the country during February 2021 put additional stress on supply chains, resulting in factories being closed and people unable to work. Many supply chains were also impacted by input shortages during the quarter, with microchips being the most notable example.

Freight spending slipped compared to a gain in the fourth quarter. Despite the quarter-to-quarter drop in the spend index, the truck market remained very tight because the level of spending stayed high and increased from a year earlier." – Bob Costello, Chief Economist and Senior Vice President for the American Trucking Associations (ATA)

### U.S. Bank Freight Payment Index Q1 Insights From U.S. Bank

"Household spending power is strong heading into the spring and summer as much of the population received the government stimulus. Additionally, household savings are up significantly over the past year. Factory output is expected to increase, and home construction should remain strong, both leading to rising freight volumes on top of solid retail sales.

### National Shipments and Spend – Quarter-over-Quarter, Year-over-Year

The U.S. Bank Shipment Index contracted 8.3% during the first quarter, after it increased a combined 11.3% in the third and fourth quarters of 2020.<sup>1</sup> Severe winter weather impacts to construction, retail, factory output and energy production, combined with supply chain shortages, led to a larger drop than normal in the first quarter. Shipments are usually down in the first quarter, so a decline is not unusual, but this time the decline was more significant. For example, the U.S. Bank Shipment Index contracted during nine of the 11-years of historical first quarter data, or 82% of the time. Over those nine first quarter drops, the average decline was 4.2% compared to this quarter's drop of 8.3. On a year-over-year basis, the shipments index contracted 5.4%." – Bob Costello, Chief Economist and Senior Vice President for the American Trucking Associations (ATA)

### **U.S. Bank Freight Payment Index**

#### National Shipments and Spend – Quarter-over-Quarter, Year-over-Year

"The U.S. Bank National Spend Index fell 4.7% from the fourth quarter, more in line with historical trends, but only after rising a total of 37.2% during the two previous quarters.<sup>2</sup> Truck capacity remained constrained during the first quarter due to a host of factors, including a very tight driver market. Additionally, the winter storms during Q1 2021 affected shipments by creating a lack of truck capacity, as many trucks were caught in the weather. A lack of truck capacity created increased pricing, which raised the spend index relative to shipments. Finally, diesel fuel prices rose significantly during the first quarter, resulting in higher spending as fuel surcharges are included in the index calculations. According to the Energy Information Administration, the national average price of diesel increased 18% from the fourth quarter (2020) average price, and rose 1.1% from the first quarter of 2020.<sup>3</sup> Compared with the first quarter in 2020, the spend index was up 12.8%. ... " – Bob Costello, Chief Economist and Senior Vice President for the American Trucking Associations (ATA)

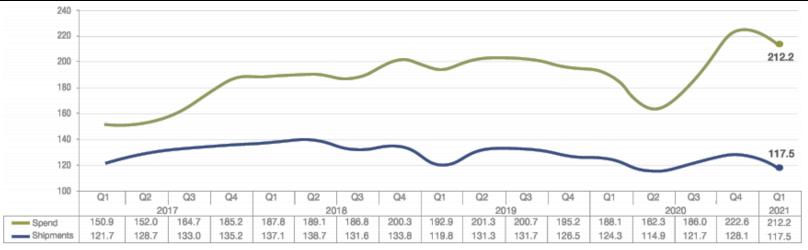
<sup>2</sup> Percent change calculated using the sum of Q3-4 2020 spend index values

<sup>3</sup> Gasoline and diesel FUEL update - U.S. Energy Information Administration (EIA). (n.d.). Retrieved April 2021, from https://www.eia.gov/petroleum/gasdiesel/ Bureau of Labor Statistics Data. (n.d.).

<sup>&</sup>lt;sup>1</sup> Percent change calculated using the sum of Q3-4 2020 shipment index values

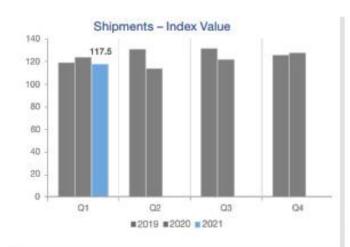
### **U.S. Bank Freight Payment Index**

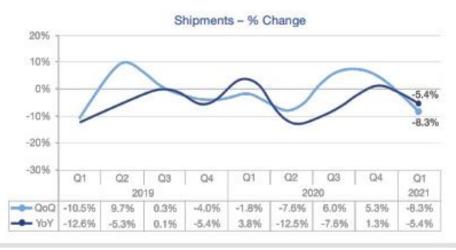
#### Q1 2021 National Freight Market Overview



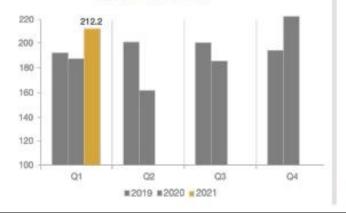
Shipments		Spend				
Index Value	117.5	Index Value	212.2			
Quarterly % Change	-8.3% 🔻	Quarterly % Change	-4.7% 🔻			
Yearly % Change	-5.4% 🔻	Yearly % Change	12.8% 🔺			

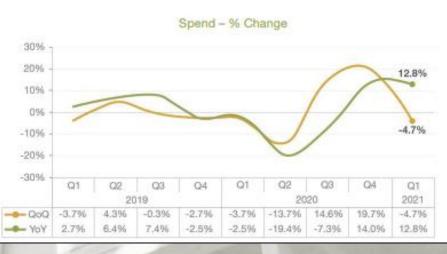
### **U.S. Bank Freight Payment Index**











# **Demographics**

### Urban Institute

### Forecasting State and National Trends in Household Formation and Homeownership

"Homeownership is a critical wealth-building tool, but not everyone has the same opportunities to become a homeowner. The gap in homeownership rates between white households and households of color persists, and the Black-white homeownership gap is wider today than it was in the 1960s.

We investigated the historical trajectory of <u>household formation and homeownership in the US</u> and in all 50 states and Washington, DC. We also forecasted changes in household formation and homeownership over the next two decades if current policies stay the same.

Click on the map to see detailed trends and forecasts for household formation and homeownership rates by age and race or ethnicity in each state and to see how these state-level projections compare with national forecasts. See the <u>full report</u> for in-depth national findings and for recommendations on how policies can create a more sustainable and equitable housing landscape.

#### National findings

- Household formation will be weak over the next two decades, with almost all net growth coming from households of color and senior households.
- The homeownership rate will continue to fall for every age group, and the overall US homeownership rate will fall from 65 percent in 2020 to 62 percent in 2040.
- Net growth in the number of homeowners from 2020 to 2040 will be entirely among people of color, especially Hispanic homeowners.
- The decline in the homeownership rate will be particularly pronounced for older Black households, and the number of older Black renters will double between 2020 and 2040.
- Renter growth will be more than twice the pace of homeowner growth from 2020 to 2040." Urban Institute

# Demographics

### Center for Retirement Research at Boston College How Many Kids Will 30-Somethings Have?

"U.S. fertility is already at record lows, and women in their 30s have had only 1.3 children on average – well short of their expectations for more than two children.

But they still have time left on their biological clock. So, will they catch up?

Several factors are working specifically against the college graduates in this cohort. Religiously observant people usually have more children, and the decline in religious affiliation is reducing their fertility. Their fertility is also being hurt by the falling marriage rate, which leaves fewer couples ready to raise a family. In addition, the women's careers often compete with having children.

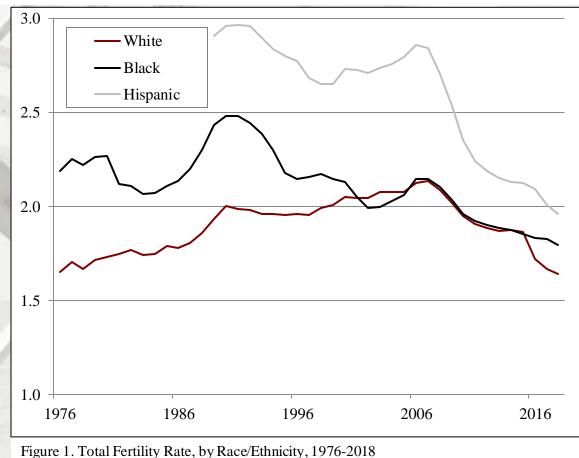
In a new <u>study</u>, Anqi Chen and Nilufer Gok at the Center for Retirement Research predicted that the final fertility rate for Millennials in their 30s – the rate at the end of their childbearing years – will average 1.96 children.

If this prediction proves accurate, it would get them somewhat closer to what they'd expected and close to the number of children required to replace two parents.

Predicting the final fertility rate for the Millennial women born in the early 1980s required going back in time to analyze the established patterns of a generation that is now past its childbearing years: women born in the second half of the baby boom wave. The researchers applied what they learned about these late boomers and, after adjusting for recent trends, estimated final fertility for today's 30-somethings." – Center for Retirement Research, Boston College

# **Demographics**

### **Center for Retirement Research at Boston College**



The 1.96 fertility rate sounds encouraging, but that number applies only to these Millennials. The longer-term prospects suggest fertility may be lower in the future.

Women who are in their 20s are already expecting to have fewer children than their 30-something counterparts did at the same age. And, the researchers said, the "economic instability due to the pandemic" could further suppress their fertility rate." – Center for Retirement Research, Boston College

Source: https://squaredawayblog.bc.edu/squared-away/how-many-kids-will-30-somethings-have/; 4/20/21

# **Economics**

### **U.S. Census Bureau**

### **NEW Business Formation Statistics**

### April 2021

Business Applications - A	t a Glance	US	Northeast	Midwest	South	West
Total	APR 2021	487,939	69,074	87,143	232,216	99,506
	APR 2021 / MAR 2021	+8.9%	+6.2%	+14.4%	+10.1%	+3.7%
High-Propensity	APR 2021	165,397	25,293	28,308	74,073	37,723
	APR 2021 / MAR 2021	+6.6%	+4.5%	+8.5%	+9.9%	+0.6%
With Planned Wages	APR 2021	56,324	7,617	10,468	24,963	13,276
	APR 2021 / MAR 2021	+4.1%	+3.1%	+8.8%	+5.3%	-0.7%
From Corporations	APR 2021	52,594	10,876	6,632	19,403	15,683
	APR 2021 / MAR 2021	+0.7%	+3.6%	+2.3%	+2.7%	-4.1%

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 April 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 April 2021, adjusted for seasonal variation, were 487,939, an increase of 8.9 percent compared to March 2021." – U.S. Census Bureau, Economic Indicators Division, Business Formation Statistics

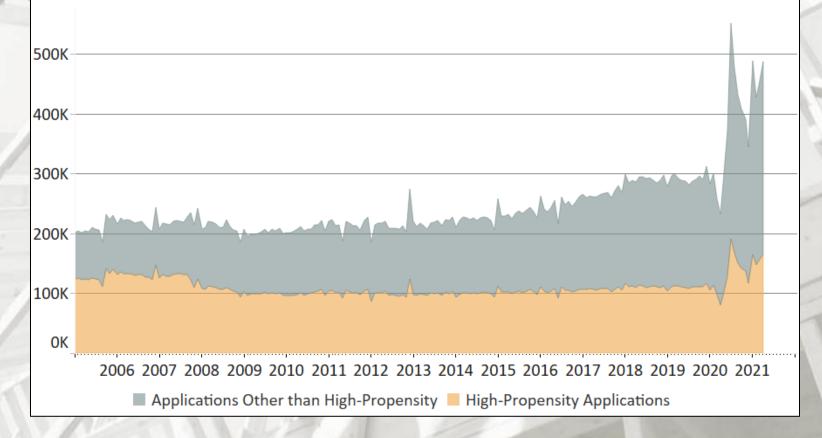
# **Economics**

### **U.S. Census Bureau**

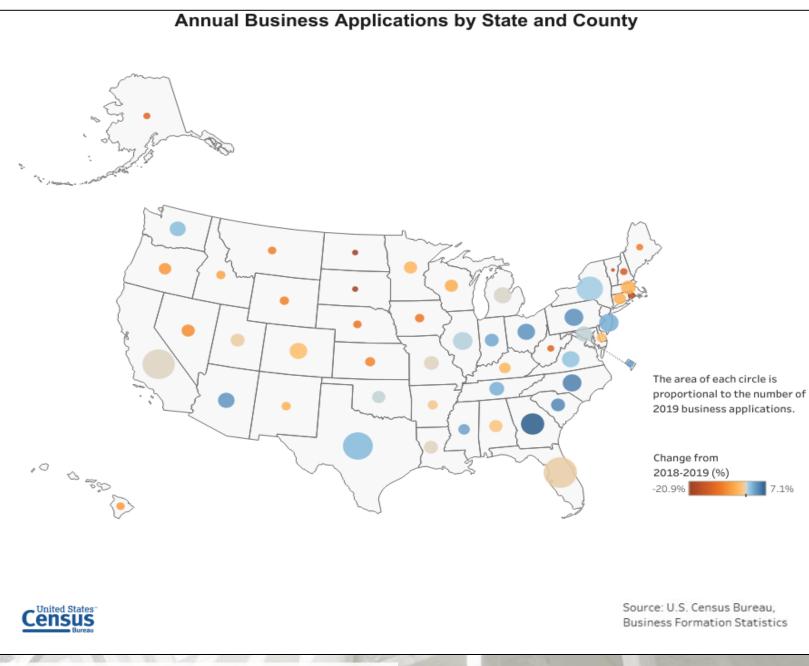
### **NEW Business Formation Statistics**

### April 2021

Monthly Business Applications (Seasonally Adjusted)



# **Economics**



#### 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 March 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.

#### **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 March 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.