### The Virginia Tech–USDA Forest Service Housing Commentary: Section II March 2022

# VIRGINIA TECH.

### **Delton Alderman**

Acting Program Manager Forest Products Business Unit Forest Products Laboratory USDA Forest Service



Madison, WI 608.259.6076



delton.r.alderman@usda.gov

# Virginia Cooperative Extension

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

2021 Virginia Polytechnic Institute and State University

VCE-ANR

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

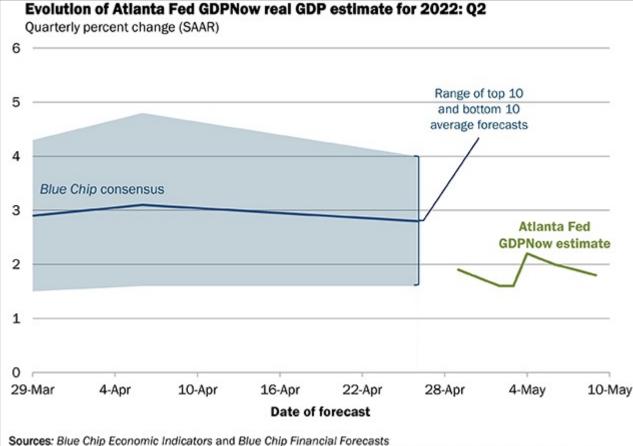
Slide 38: Private Indicators

Slide 88: <u>Demographics</u>

Slide 95: <u>Economics</u>

Slide 111: Virginia Tech Disclaimer

Slide 112: USDA Disclaimer



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: 1.8 percent – May 9, 2022

"The GDPNow model estimate for real GDP growth (seasonally adjusted annual rate) in the second quarter of 2022 is **1.8 percent** on May 9, down from 2.2 percent on May 4. After recent releases from the US Bureau of Labor Statistics and the US Census Bureau, the nowcast of second-quarter real gross private domestic investment growth decreased from -1.3 percent to -2.8 percent." – Pat Higgins, Economist, Federal Reserve Bank of Atlanta

Source: https://www.frbatlanta.org/cqer/research/gdpnow.aspx; 5/9/22

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

#### Index Points to a Slight Decrease in Economic Growth in March

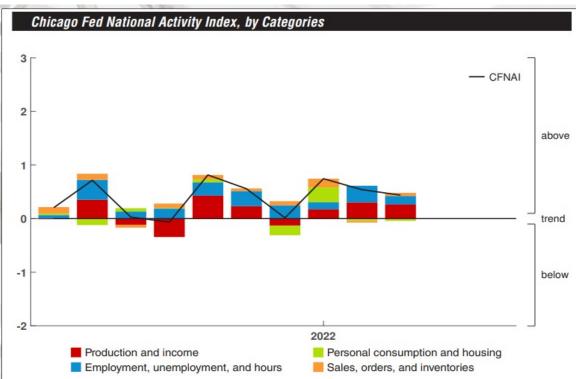
"The Chicago Fed National Activity Index (CFNAI) moved down to +0.44 in March from +0.54 in February. Three of the four broad categories of indicators used to construct the index made positive contributions in March, but two categories deteriorated from February. The index's three-month moving average, CFNAI-MA3, increased to +0.57 in March from +0.43 in February.

The CFNAI Diffusion Index, which is also a three-month moving average, moved up to +0.45 in March from +0.31 in February. Fifty-nine of the 85 individual indicators made positive contributions to the CFNAI in March, while 26 made negative contributions. Thirty-eight indicators improved from February to March, while 47 indicators deteriorated. Of the indicators that improved, six made negative contributions.

Production-related indicators contributed +0.27 to the CFNAI in March, down slightly from +0.30 in February. Manufacturing industrial production moved up 0.9 percent in March after increasing 1.2 percent in February. The contribution of the sales, orders, and inventories category to the CFNAI moved up to +0.06 in March from -0.03 in the previous month.

Employment-related indicators contributed +0.16 to the CFNAI in March, down from +0.31 in February. Nonfarm payrolls increased by 431,000 in March after rising by 750,000 in February. The contribution of the personal consumption and housing category to the CFNAI was unchanged at -0.04 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 '22	Feb '22	Jan '22	Dec '21	Nov '21	Oct '21	Mar '21
+0.44	+0.54	+0.75	+0.01	+0.56	+0.81	+2.31
N/A	+0.51	+0.59	-0.04	+0.56	+0.81	+2.31
+0.57	+0.43	+0.44	+0.46	+0.44	+0.26	+0.65
N/A	+0.35	+0.37	+0.44	+0.43	+0.26	+0.65
+0.45	+0.31	+0.33	+0.45	+0.45	+0.29	+0.42
N/A	+0.32	+0.29	+0.44	+0.46	+0.30	+0.42
	+0.44 N/A +0.57 N/A +0.45	+0.44 +0.54 N/A +0.51 +0.57 +0.43 N/A +0.35 +0.45 +0.31	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Current and Previous values reflect index values as of the April 25, 2022, release and March 21, 2022, release, respectively. N/A indicates not applicable.

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

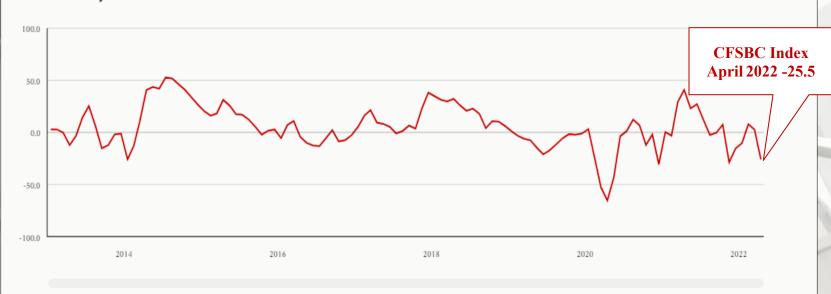
#### **Survey Suggests Growth Slowed in April**

"The *Chicago Fed Survey of Business Conditions* (CFSBC) Activity Index decreased to -26 in April from +3 in March, suggesting that economic growth was well below trend. The CFSEC Manufacturing Activity Index decreased to -21 in April from +9 in March, and the CFSEC Nonmanufacturing Activity Index decreased to -29 in April from -2 in the previous month.

- Respondents' outlooks for the U.S. economy for the next 12 months deteriorated, and remained pessimistic on balance. Twenty-six percent of respondents expected an increase in economic activity over the next 12 months.
- 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 turned 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)

**CFSEC Activity Index** 



#### Texas Manufacturing Outlook Survey Texas Manufacturing Expansion Continues, Though Outlooks Weaken Slightly

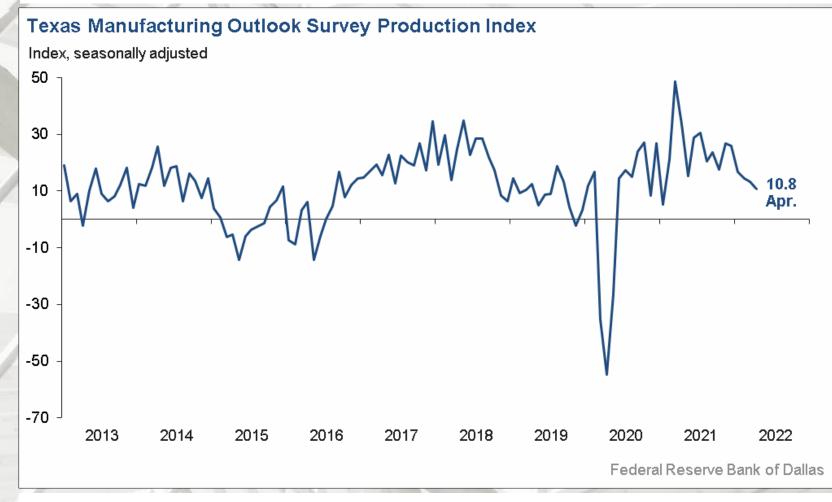
"Texas factory activity expanded at a moderate pace in April, according to business executives responding to the Texas Manufacturing Outlook Survey. The production index, a key measure of state manufacturing conditions, ticked down two points to 10.8, a reading in line with the index's average.

Other measures of manufacturing activity continued to signal solid expansion. The new orders index inched up to 12.1, while the growth rate of orders index held steady at 13.0. The capacity utilization index was unchanged at 14.3, and the shipments index pushed up five points to 11.8.

Perceptions of broader business conditions were a bit mixed in April. The general business activity index retreated eight points to a still-positive reading of 1.1 this month. The company outlook index slipped to -5.5, its lowest reading in two years. The outlook uncertainty index pushed up from 20.5 to 29.8.

Labor market measures indicated robust employment growth and longer workweeks. The employment index held at its highly elevated reading of 24.6. Thirty-four percent of firms noted net hiring, while 10 percent noted net layoffs. The hours worked index edged down to 11.3.

Prices and wages continued to increase strongly in April, though the indexes eased off their historical highs. The raw materials prices index fell 13 points to 61.5 – its lowest reading in more than a year, though still well above its average of 27.7. The finished goods prices index moved down from 47.8 to 43.5. The wages and benefits index came in at 50.9, down slightly from its high last month of 55.2 but still markedly elevated from its average reading of 20.1." – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas



"Expectations regarding future manufacturing activity generally eased but remained positive. The future production index fell from 40.1 to 34.7, and the future general business activity index retreated six points to 1.8. Other measures of future manufacturing activity such as capital expenditures and employment showed mixed movements but remained solidly in positive territory." – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas

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

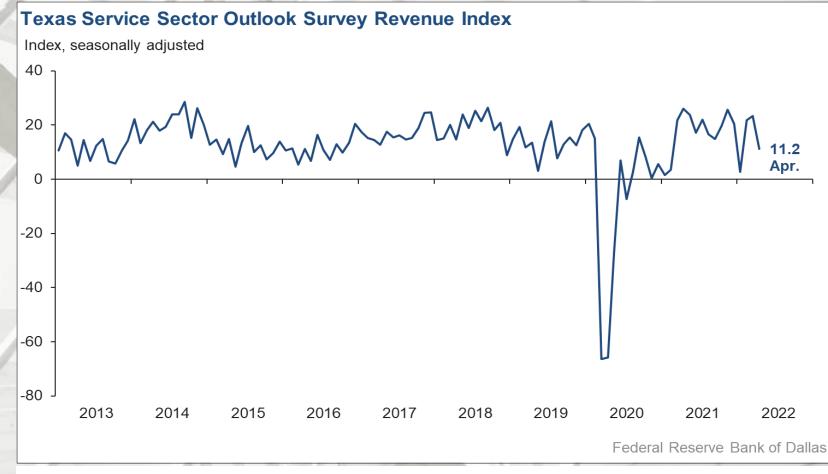
#### **Texas Service Activity Moderates in April**

"Activity in the Texas service sector decelerated in April, according to business executives responding to the Texas Service Sector Outlook Survey. The revenue index, a key measure of state service sector conditions, declined from 23.4 in March to 11.2 in April, as 30 percent of respondents reported increases in monthly revenues compared with 19.0 percent reporting declines.

Labor market indicators point to steady growth in hiring and hours worked relative to March. The employment index was unchanged at 14.5, although the part-time employment index weakened from 7.0 to 2.9. The hours worked index was flat at 9.5.

Perceptions of broader business conditions were positive, though muted compared with earlier in the year. The general business activity index slipped from 10.6 to 8.2, while the company outlook index held steady at 2.4. Uncertainty remained elevated, with the outlook uncertainty index falling just slightly from 22.5 to 19.2.

April saw continued upward pressure on wages and prices, though growth in wages and input prices eased slightly. The wages and benefits index fell from 36.5 to 33.0 – still near a record high. The selling prices index was unchanged at 33.7, with 37 percent of respondents noting monthly price increases, while the input prices index declined five points to 54.2." – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas



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

"Respondents' expectations regarding future business activity remained positive but moderated significantly compared with March. The future general business activity index plunged from 15.4 to 6.5 – its lowest reading since mid-2020 – while the future revenue index declined nine points to 47.0. Other future service sector activity indexes such as employment and capital expenditures weakened, suggesting somewhat lower expectations for growth over the next six months." – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

Source: https://www.dallasfed.org/research/surveys; 4/26/22

### The Federal Reserve Bank of Kansas City Growth in Tenth District Manufacturing Activity Eased Slightly

The pace of regional factory growth eased somewhat but remained strong. Firms continued to report issues with higher input prices, increased supply chain disruptions, and labor shortages. However, firms were optimistic about future activity and reported little impact from higher interest rates.

#### **Factory Activity Pace of Growth Eased Somewhat**

"Growth in Tenth District manufacturing activity eased slightly, and expectations for future activity remained solid (Chart 1). The monthly index of raw materials prices inched upward in April and increased slightly compared to a year ago. Finished goods price indexes increased somewhat from a month ago but remained moderately higher than last year. Expectations for future raw materials and finished goods prices decreased further.

The month-over-month composite index was 25 in April, down from 37 in March and 29 in February. The composite index is an average of the production, new orders, employment, supplier delivery time, and raw materials inventory indexes. Increased activity was driven by growth in computer and electronic products, primary metals, and furniture manufacturing. On the other hand, the pace of growth for transportation equipment, electrical equipment, appliances, and food manufacturing declined. Month-over-month indexes remained positive, but the pace of growth eased somewhat compared to March." – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, Federal Reserve Bank of Kansas City

### The Federal Reserve Bank of Kansas City

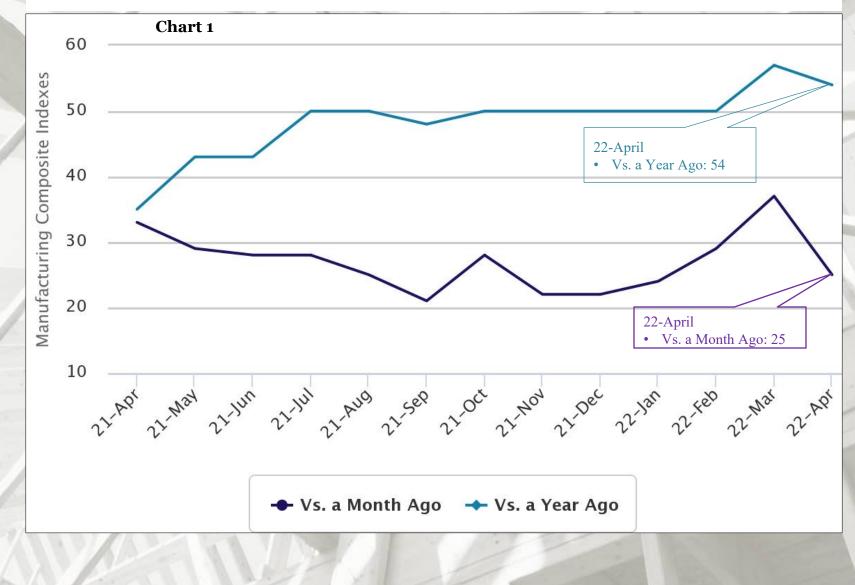
#### **Factory Activity Pace of Growth Eased Somewhat**

"Indexes for production, shipments, new orders, backlog of orders, supplier delivery time, and finished goods inventories all decreased but remained positive. However, the employment index increased somewhat. Year-over-year index growth eased slightly, with a composite index of 54 in April. Shipments, capital expenditures, and employment indexes increased further from a year ago while supplier delivery time, order backlog, and finished goods inventory indexes eased slightly. The future composite index was 34 in April, a slight decrease from 41 in March. Indexes for future production, shipments, new orders, and employment all inched lower, while the future capital expenditures index was unchanged.

#### **Special Questions**

This month contacts were asked special questions on the change in number of job openings since the beginning of the year and the impact of COVID-induced lockdowns in China. In April, 48% of firms reported a slight increase in the number of job openings compared to the beginning of the year, and 19% reported a significant increase. As a result of the COVID-induced lockdown in China, 70% of firms reported higher supply chain disruptions and 57% reported higher input prices. A significant share of firms reported no change in demand, capital spending, hiring, and inventories. However, 17% of firms reported facing lower inventories due to the COVID-induced lockdown in China." – 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 Growth in Tenth District Services Activity Fell Slightly

The pace of regional services activity fell slightly in April but remained expansionary. Firms continued to report increased supply chain disruptions, higher input costs, and labor shortages. However, firms were optimistic on the future outlook of sales, employment, and capital spending.

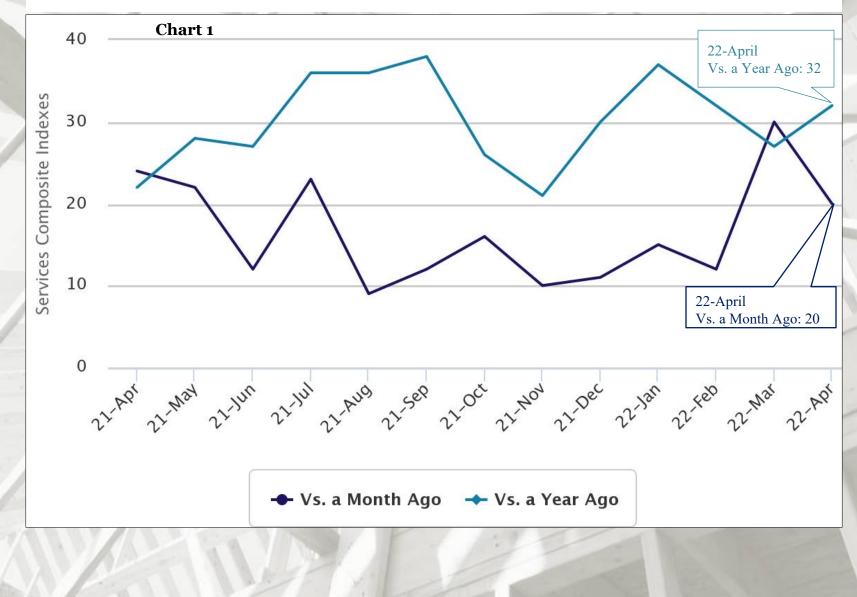
#### **Business Activity Fell Slightly**

"Growth in Tenth District services activity fell slightly, while expectations for future activity remained solid (Chart 1). Compared to the previous month, indexes for input and selling prices decreased somewhat but remained at high levels. Most firms continued to expect selling prices to rise over the next six months while expectations for input prices eased modestly in April.

The month-over-month services composite index was 20 in April, lower than 30 in March and higher than 12 in February. The composite index is a weighted average of the revenue/sales, employment, and inventory indexes. Positive revenue and sales were driven by more transportation, food and beverage stores, and health care services. However, growth eased for wholesale trade, professional/high-tech services, hotels, and restaurants. Additionally, real estate and auto activity declined.

Month-over-month indexes pace of growth slowed in April for sales, hours worked, and wages and benefits indexes. The credit conditions index jumped back into positive territory, and inventory indexes inched higher. The year-over-year composite index increased slightly from 27 to 32, as the sales, hours worked, wages and benefits, and inventory indexes continued to expand compared to a year ago. Expectations for services activity remained solid in April with the future composite index basically unchanged from last month, driven by higher indexes for future inventories, capital expenditures, and employment." – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, The Federal Reserve Bank of Kansas City

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



### May Empire State Manufacturing Survey Activity Declines

After growing strongly last month, business activity declined in New York State, according to firms responding to the May 2022 *Empire State Manufacturing Survey*. The headline general business conditions index dropped thirty-six points to -11.6. New orders declined, and shipments fell at the fastest pace since early in the pandemic. Delivery times continued to lengthen, and inventories expanded. Labor market indicators pointed to a modest increase in employment and the average workweek. Both the prices paid and prices received indexes moved lower, but were still elevated. Looking ahead, optimism about the six-month outlook remained subdued.

After growing significantly last month, manufacturing activity declined in New York State, according to the May survey. The general business conditions index retreated thirty-six points to -11.6, its second negative reading in the past three months. Twenty percent of respondents reported that conditions had improved over the month, while thirty-two percent reported that conditions had worsened. The new orders index fell thirty-four points to -8.8, and the shipments index plunged fifty points to -15.4, marking a sharp reversal for the two measures, both of which increased last month. The unfilled orders index fell to 2.6. The delivery times index held steady at 20.2, pointing to continued lengthening in delivery times, and inventories increased." – Richard Deitz and Jason Bram, The Federal Reserve Bank of New York

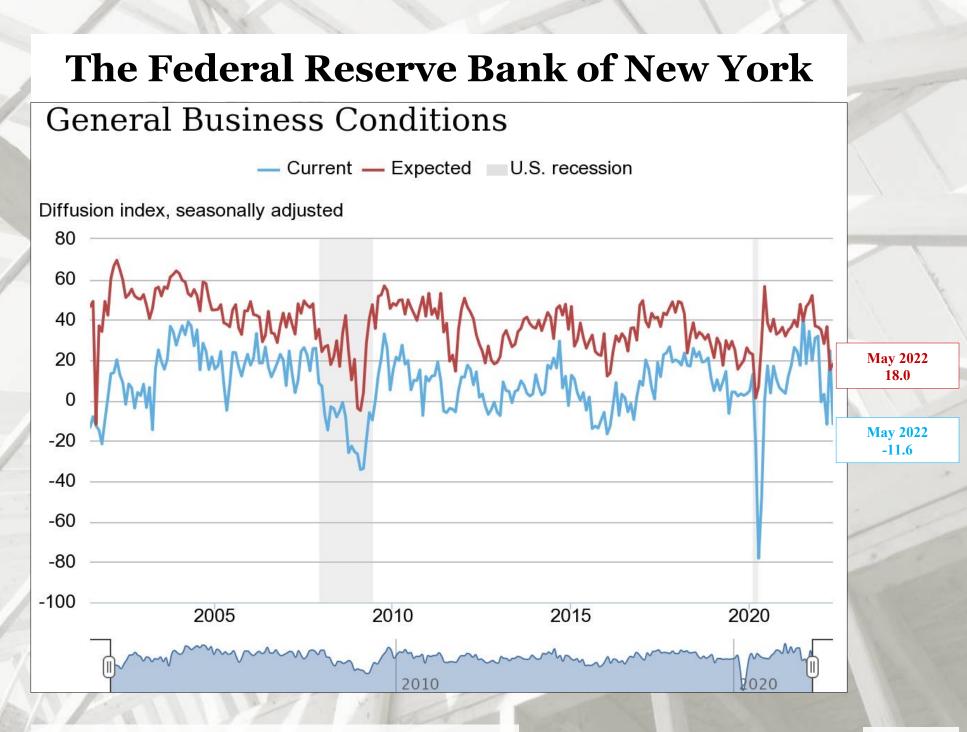
### **Empire State Manufacturing Survey**

#### A Modest Increase In Employment

"The index for number of employees increased seven points to 14.0, and the average workweek index held steady at 11.9, indicating a modest increase in employment levels and the average workweek. After reaching a record high last month, the prices paid index fell thirteen points to a still elevated 73.7, and the prices received index edged down to 45.6, signaling ongoing substantial increases in both input prices and selling prices, though at a slower pace than last month.

#### **Optimism Remains Subdued**

As in April, firms expressed less optimism about the six-month outlook than they did earlier this year. The index for future business conditions was little changed at 18.0. Increases in prices and employment are expected to continue in the months ahead. The capital expenditures index fell to its lowest level in several months." – Richard Deitz and Jason Bram, The Federal Reserve Bank of New York



Source: https://www.newyorkfed.org/survey/empire/empiresurvey\_overview; 5/16/21

### April Business Leaders Survey (Services) Activity Expands Strongly

"Business activity grew solidly in the region's service sector, according to firms responding to the Federal Reserve Bank of New York's April 2022 *Business Leaders Survey*. The survey's headline business activity index rose six points to 24.2. The business climate index moved up nine points but remained negative at -14.4, indicating that firms generally viewed the business climate as worse than normal for this time of year. Employment levels continued to grow, and wage increases remained substantial. The prices paid index and the prices received index held at near record-high levels. Firms were fairly optimistic about future conditions, though optimism remained below levels seen earlier this year.

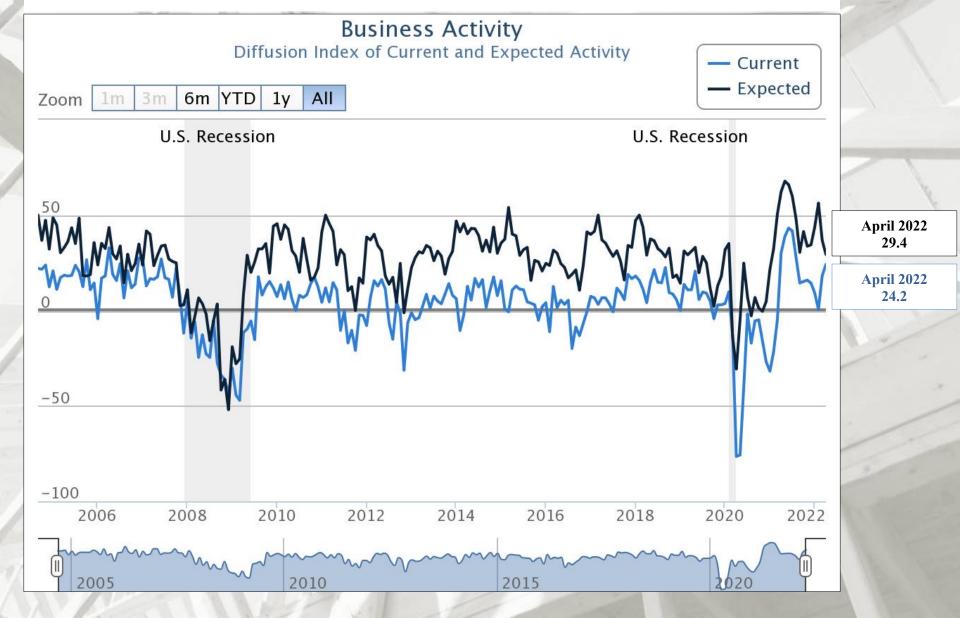
Business activity in the region's service sector expanded significantly for a second consecutive month, according to the April survey. The headline business activity index rose six points to 24.2. Forty-two percent of respondents reported that conditions improved over the month and 18 percent said that conditions worsened. The business climate index increased nine points to -14.4, indicating that on net, firms continued to view the business climate as worse than normal, though to a lesser extent than last month." – Jason Bram and Richard Deitz, The Federal Reserve Bank of New York

### April Business Leaders Survey (Services) Strong Increases In Employment And Wages

"The employment index climbed six points to 19.9, pointing to a modest increase in employment levels. The wages index moved up slightly to 55.0, signaling another month of strong wage growth. Input and selling price increases remained near record levels. The prices paid index held steady at 86.4, and the prices received index was just slightly lower than last month's record high, at 43.4. The capital spending index dipped to 8.6.

#### **Optimism Declines**

While firms generally expected conditions to improve over the next six months, optimism waned for a second consecutive month. The index for future business activity fell seven points to 29.4. Strong gains in employment, wages, and prices are expected in the months ahead, and capital spending plans remained solid." – Jason Bram and Richard Deitz, The Federal Reserve Bank of New York



Source: https://www.newyorkfed.org/survey/business\_leaders/bls\_overview; 4/18/22

### April 2022 Manufacturing Business Outlook Survey

"Manufacturing activity continued to expand in the region, according to the firms responding to the April *Manufacturing Business Outlook Survey*. The survey's indicators for general activity, shipments, and new orders declined from last month's readings but remained positive. The employment index and both price indexes edged higher and remain elevated. The future indicators for general activity and new orders fell sharply, but overall the firms continued to expect growth over the next six months.

#### **Current Indicators Remain Positive**

The diffusion index for current general activity decreased 10 points to 17.6 in April, mostly offsetting its increase from last month. More than 34 percent of the firms reported increases in current activity this month, while 17 percent reported decreases. The index for new orders declined 8 points to 17.8, and the current shipments index fell 11 points to 19.1.

On balance, the firms continued to report increases in employment. The employment index – which reached an all-time high last month – inched up higher, to 41.4. Although a majority of responding firms (56 percent) reported steady employment levels, the share reporting increases (42 percent) far exceeded the share reporting decreases (1 percent). The average workweek index ticked down from 21.4 to 20.8." – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

Source: https://www.philadelphiafed.org/surveys-and-data/regional-economic-analysis/mbos-2022-04; 4/21/22

### April 2022 Manufacturing Business Outlook Survey Firms Expect Highest Cost Increases for Raw Materials

"In this month's <u>special questions</u>, the firms were asked about changes in wages and compensation over the past three months as well as their updated expectations for changes in various input and labor costs for the coming year. Eighty percent of the firms indicated wages and compensation costs had increased over the past three months, 20 percent reported no change, and none reported decreases. The majority of firms have reported adjusting their 2022 budgets for wages and compensation since the beginning of the year, with 65 percent noting they are planning to increase wages and compensation by more than originally planned and 33 percent noting they are planning to increase wages and compensation sooner than originally planned.

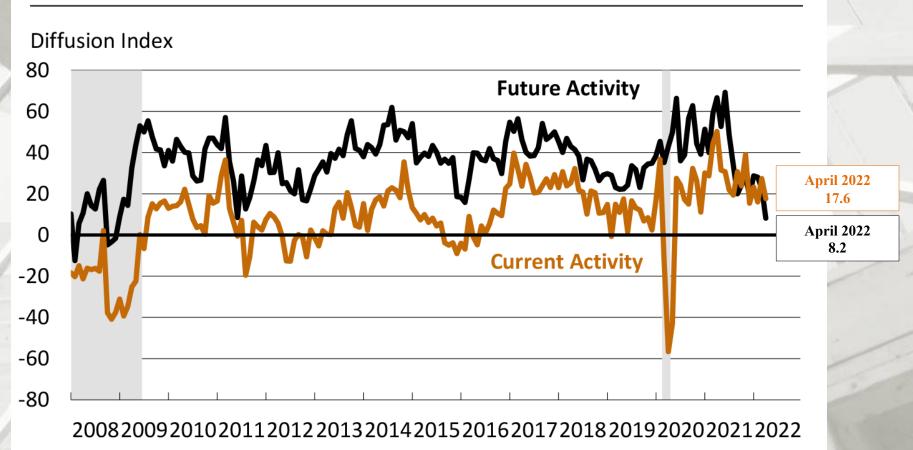
The firms still expect higher costs across all categories of expenses in 2022: Responses indicate a median expected increase of 10 to 12.5 percent for raw materials and of 7.5 to 10 percent for energy and for intermediate goods, higher than when this question was asked back in January. The median expected change for total compensation (wages plus benefits) was unchanged at 5 to 7.5 percent.

#### **Price Increases Remain Widespread**

The indicators for prices paid and prices received continued to suggest widespread price increases and inched higher this month. The prices paid index rose 4 points to 84.6, its highest reading since June 1979. More than 85 percent of the firms reported increases in input prices, while 1 percent reported decreases; 11 percent of the firms reported no change. The current prices received index edged up from 54.4 to 55.0. Almost 57 percent of the firms reported increases in prices received for their own goods this month, 2 percent reported decreases, and 36 percent reported no change." – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

Source: https://www.philadelphiafed.org/surveys-and-data/regional-economic-analysis/mbos-2022-04; 4/21/22

Chart 1. Current and Future General Activity Indexes January 2008 to April 2022



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

Source: https://www.philadelphiafed.org/surveys-and-data/regional-economic-analysis/mbos-2022-04; 4/21/22

#### April 2022 Manufacturing Business Outlook Survey

#### **Future Indicators Decline but Remain Positive**

"The diffusion index for future general activity decreased 15 points to 8.2, its lowest reading since December 2008 (see Chart 1). More than 37 percent of the firms expect increases in future activity (down from 41 percent last month) compared with 29 percent that expect decreases (up from 18 percent). The future new orders index fell 18 points to 3.7, while the future shipments index edged down 1 point to 29.9. The future employment index ticked down 2 points but remains elevated. Nearly 55 percent of the firms expect steady employment levels over the next six months, 40 percent of the firms expect to increase employment, and 1 percent expect employment declines.

#### Summary

Responses to the March *Manufacturing Business Outlook Survey* suggest continued expansion in regional manufacturing conditions this month. The indicators for current activity, new orders, and shipments all decreased but remained positive. The firms continued to indicate overall increases in employment and widespread increases in prices. The indicators for future general activity and new orders fell notably, but the respondents continue to expect growth overall over the next six months." – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

### April 2022 Nonmanufacturing Business Outlook Survey

"Responses to the April *Nonmanufacturing Business Outlook Survey* suggest continued expansion in nonmanufacturing activity in the region. The indexes for general activity at the firm level, sales/revenues, and new orders all declined but remained positive. Prices for the firms' inputs and own goods sustained 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 reading of 38.1 in March to 27.5 this month (see Chart 1). Nearly 46 percent of the responding firms reported no change in general activity (up from 28 percent last month), while 40 percent of the firms reported increases (down from 51 percent) and 12 percent reported decreases (little changed from last month). The index for sales/revenues fell from a reading of 33.0 to 22.0 this month, and the new orders index fell 17 points to 13.6. Almost 26 percent of the firms reported increases in new orders (down from 41 percent last month), 37 percent reported no change (up from 25 percent), and 12 percent reported decreases (up slightly from 10 percent). The regional activity index fell 3 points to 29.3.

#### **Most Firms Report Steady Employment**

The full-time employment index fell 8 points to 14.9 in April. Nearly 65 percent of the firms reported steady full-time employment levels, while the share of firms reporting increases this month (22 percent) exceeded the share reporting decreases (7 percent). The part-time employment index decreased 5 points to 11.9, and the average workweek index edged down 2 points to 17.9." – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

### April 2022 Nonmanufacturing Business Outlook Survey Respondents Continue to Report Overall Price Increases

"The prices paid index rose 3 points to 68.7, a reading in line with its historical high set back in February. Nearly 69 percent of the respondents reported increases in their input prices, while none reported decreases. More than 21 percent of the respondents reported stable input prices. Regarding prices for the firms' own goods and services, the prices received index decreased from a reading of 36.2 in March to 34.6 in April. The share of firms reporting increases in prices received (35 percent) exceeded the share reporting decreases (1 percent). Half of the firms reported steady prices for their own goods and services.

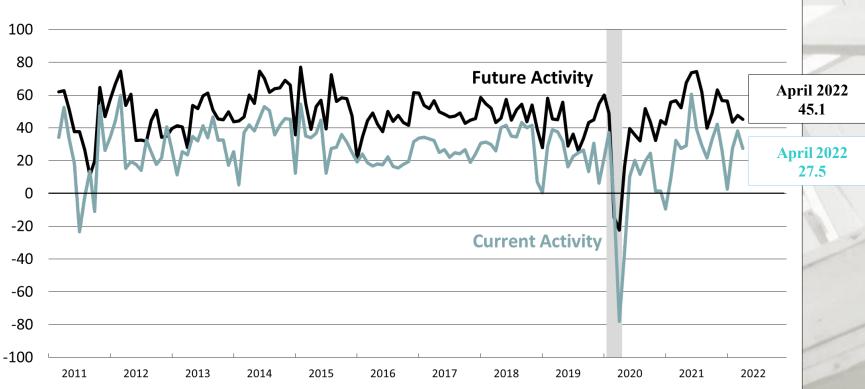
#### Firms Expect Largest Cost Increases in Energy, Raw Materials

In this month's <u>special questions</u>, the firms were asked about changes in wages and compensation over the past three months as well as their expected changes to various input and labor costs for 2022. Nearly 70 percent of the firms indicated wages and compensation costs had increased over the past three months, 30 percent reported no change, and none reported decreases. Most firms reported adjusting their 2022 budgets for wages and compensation since the beginning of the year, with 44 percent indicating they are planning to increase wages and compensation by more than originally planned and 29 percent of the firms indicating they are planning to increase wages and compensation sooner than originally planned.

The firms still expect higher costs across all categories of expenses in 2022: Responses indicate a median expected increase of 5 to 7.5 percent for energy and for other raw materials, higher than when this question was asked back in January. The median expected changes for wages, health benefits, and total compensation (wages plus benefits) were unchanged at 4 to 5 percent." – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

Chart 1. Current and Future General Activity Indexes for Firms March 2011 to April 2022

**Diffusion Index** 



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.

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

Source: https://www.philadelphiafed.org/surveys-and-data/regional-economic-analysis/nbos-2022-4; 4/26/22

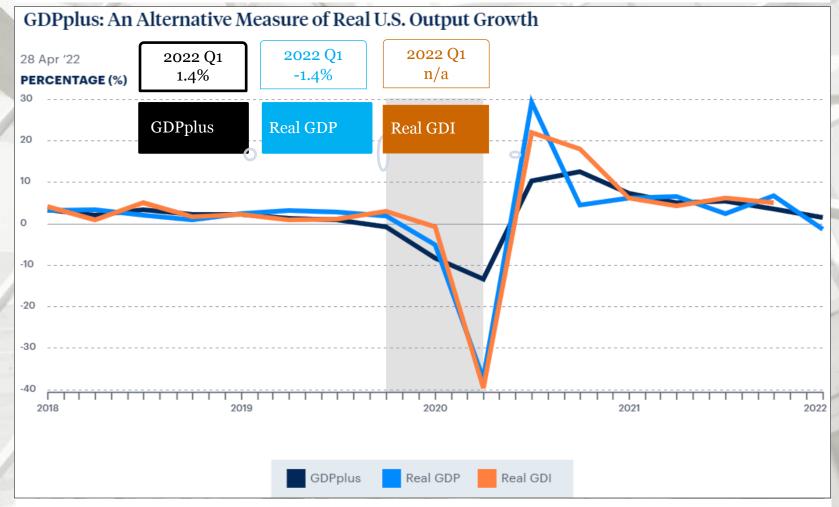
### April 2022 Nonmanufacturing Business Outlook Survey Firms Continue to Anticipate Growth

"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 edged down from a reading of 47.7 in March to 45.1 this month (see Chart 1). Nearly 59 percent of the respondents expect an increase in activity at their firms over the next six months, compared with 14 percent that expect decreases and 24 percent that expect no change. The future regional activity index decreased 4 points to 34.4.

#### **Summary**

Responses to this month's *Nonmanufacturing Business Outlook Survey* suggest continued expansion in nonmanufacturing activity in the region. The indicators for firm-level general activity, new orders, and sales/revenues all declined but remain positive. Additionally, the firms continue to report overall increases in prices and employment. The respondents continue to expect growth over the next six months." – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

# 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.

### The Federal Reserve Bank of Richmond Fifth District Manufacturing Expansion Continues in April

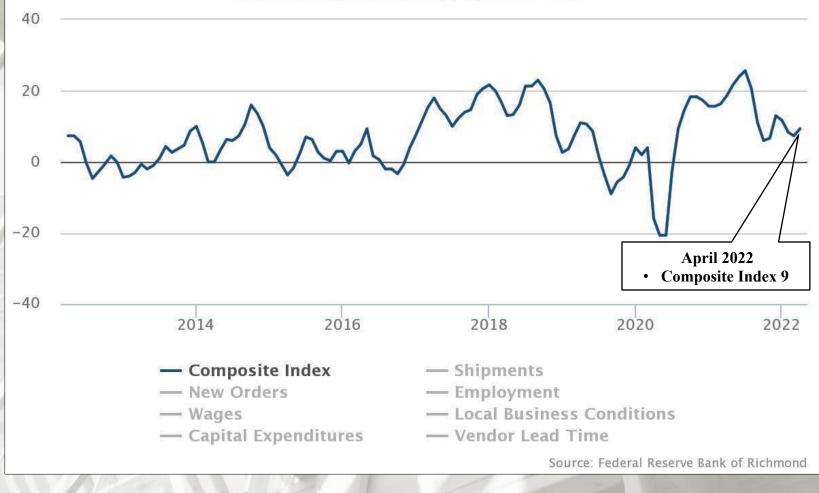
"Fifth District manufacturing activity continued its expansion in April, according to the most recent survey from the Federal Reserve Bank of Richmond. The composite manufacturing index stood at 14 in April compared to 13 in March. Shipments increased to 17 from 9, while the volume of new orders moved down slightly to 6 from 10. Despite expansionary activity, firms remained pessimistic about current business conditions. Additionally, survey participants expect business conditions to deteriorate in the next six months, which is the third time in the history of the survey that this expectations index has been negative — the other two times were at the beginning of the COVID-19 pandemic.

Order backlogs continued to increase in April, while vendor lead times remained high. Firms expect vendor lead times to continue increasing in the next six months. The index for finished goods and raw materials inventories remained low, and firms expected that to persist for the foreseeable future. Manufacturers continued to report growth in employment while experiencing challenges finding workers with the necessary skills. Our wage index increased to 41 in April from 37, and firms don't expect the increase in wages to let up.

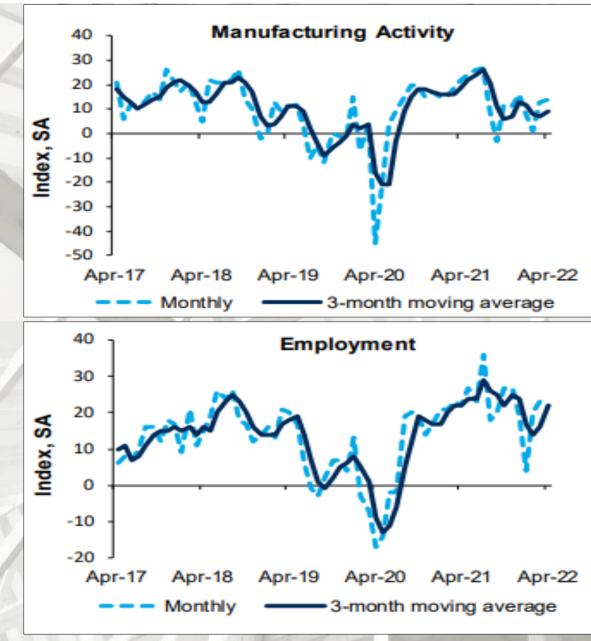
The average growth rate of prices paid increased slightly in April while the growth rate of prices received from customers edged down slightly. Firms expect growth rates for both prices paid and prices received to decrease somewhat in the next 12 months." – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond

Fifth District Survey of Manufacturing Activity

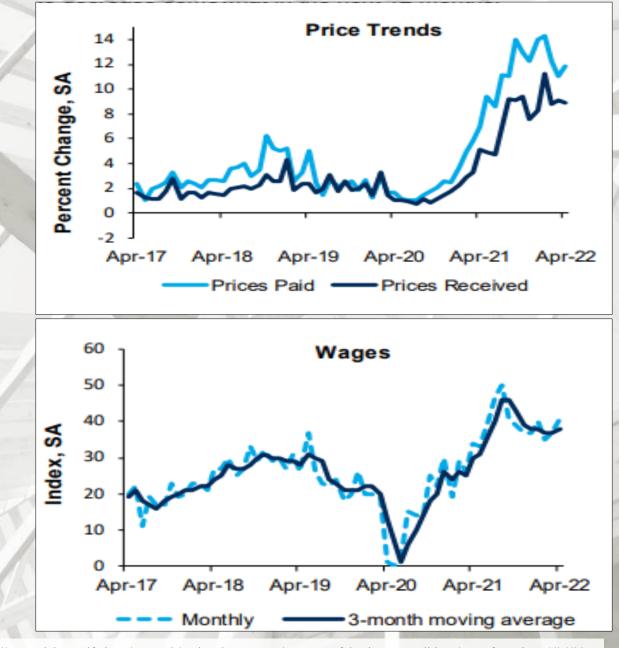
Diffusion Index, Seasonally Adjusted 3-MMA



Source: https://www.richmondfed.org/research/regional\_economy/surveys\_of\_business\_conditions/manufacturing; 4/26/22



**Return to TOC** 



Source: https://www.richmondfed.org/research/regional\_economy/surveys\_of\_business\_conditions/manufacturing; 4/26/22

**Return to TOC** 

### The Federal Reserve Bank of Richmond Fifth District Survey of Service Sector Activity Fifth District Service Sector Activity Improves in April

"Fifth District service sector activity continued its expansion in April, according to the most recent survey by the Federal Reserve Bank of Richmond. The revenues and demand indexes both moved up slightly in April to 13 and 24, respectively. Firms also expect revenues and demand to continue increasing in the next six months. Firms reported increases in business spending, as all three expenditure indexes remained firmly in growth territory.

Despite reports of growing revenues and demand, reports about local business conditions were only slightly positive. The local business conditions index came in at 4 in April following a reading of -3 in March. Optimism about business conditions in the next six months softened as the diffusion index dropped to 2 in April from 14 in March and 35 in February. The employment index was little changed from its March reading and remained positive at 9 in April. Firms continued to report trouble finding workers with the skills needed, and don't expect this to improve in the next six months. The wage index pointed to continue growth at 44, up from 38 in March. Firms expect to continue increasing wages in the next six months as the index for expected wages came in at 62 in April.

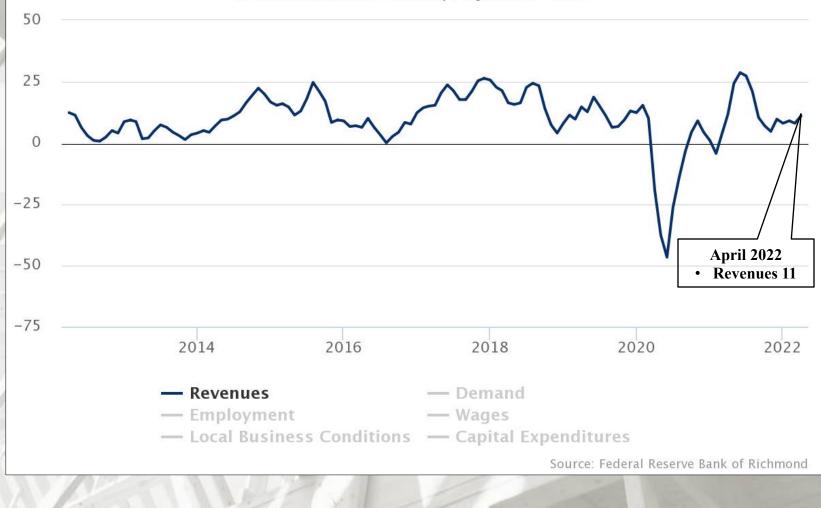
The average growth rate of prices paid and prices received by survey participants both increased in April. Firms' expectations for price growth in the next 12 months also rose from March to April." – Roisin McCord, Economic Analyst, The Federal Reserve Bank of Richmond

Source: https://www.richmondfed.org/research/regional\_economy/surveys\_of\_business\_conditions/service\_sector; 4/26/22

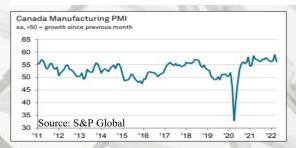
# **U.S. Economic Indicators**

### Fifth District Survey of Service Sector Activity

Diffusion Index, Seasonally Adjusted 3-MMA



Source: https://www.richmondfed.org/research/regional\_economy/surveys\_of\_business\_conditions/service\_sector; 4/26/22



#### S&P Global Canada Manufacturing PMI®

"The seasonally adjusted S&P Global Canada Manufacturing Purchasing Managers' Index<sup>®</sup> (PMI<sup>®</sup>) registered at 56.2 in April, down from March's survey-record high of 58.9. The latest reading continued to indicate robust operating conditions and extended the current period of growth to 22-months, but dipped to a joint 14-month low.

#### Solid growth in manufacturing production sustained in April

April data signalled another robust expansion in operating conditions in the Canadian manufacturing sector, despite a slight moderation since March. Looser COVID-19 restrictions and a general improvement in demand conditions led to strong inflows of new work. Subsequently, output and purchases rose sharply. Meanwhile, strong capacity pressures continued to emerge which firms responded to by raising their staffing levels at an accelerated pace. As for prices, firms continued to face steep cost pressures with higher charges for transportation, material and fuel reported. Geopolitical tensions were also blamed for elevated rates of inflation, feeding through to sentiment which moderated from March's five month high.

Central to the improvement was a solid uptick in new orders. Firms often mentioned securing new clients in the domestic market. Sales to international clients also increased with exports rising for the second successive month. With strong demand conditions persisting, firms raised their production levels at the start of the quarter. Output rose sharply, though at a softer pace than that seen in March. Consumer goods firms raised their output levels at the strongest rate followed by those in the investment and intermediate goods sectors, respectively.

The start of the second quarter of 2022 yielded another favourable month of trading for Canadian manufacturers. Demand conditions were supportive and continued to underpin a solid improvement in operating conditions. As has been the case over the last year or so, consumer demand remains strong despite elevated rates of inflation. However, capacity constraints have persisted and firms look to be struggling with labour shortages. Recent geopolitical developments have also exacerbated costs, particularly for fuel and raw materials. At the same time, anecdotal evidence often mentioned shortages of trucks which could further impact production in the future. Nevertheless, Canada's manufacturing sector has performed strongly despite supply bottlenecks, COVID-19 and increasing uncertainty. Firms remain prepared and continue to foresee output growth over the coming months" – Shreeya Patel, Economist, S&P Global

Source: https://www.markiteconomics.com/Public/Home/PressRelease/4b30d358ec3944308191e680aadd4488; 5/2/22

### S&P Global Caixin China General Manufacturing PMI<sup>™</sup> Output and new orders fall at faster rates 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 – declined from 48.1 in March to 46.0 in April. The figure pointed to a second successive monthly deterioration in overall business conditions faced by Chinese manufacturers, and one that was the quickest since February 2020.

A further tightening of COVID-19 restrictions in China led to notably quicker falls in both output and new business at the start of the second quarter. Increased supply chain disruption meanwhile drove the second-fastest deterioration in average vendor performance on record. Softer demand conditions resulted in more marked falls in both purchasing activity and stocks of purchases. Inflationary pressures persisted, with the rate of input cost inflation exceeding that seen for selling prices, as efforts to stimulate sales restricted firms' pricing power.

Business confidence towards the 12-month outlook for output remained relatively subdued, as firms expressed concerns over how long it will take to fully contain the COVID-19 virus and its impact on supply chains and client demand.

Dampening the headline index was a stronger reduction in output at the start of the second quarter. Production fell at the second-steepest since the survey began in early-2004 (beaten only by February 2020). The drop was frequently linked to the tightening of COVID-19 restrictions and subsequent impact on business operations, supply chains and demand.

Total new business likewise fell at the second-sharpest rate on record, as efforts to prevent the spread of COVID-19, including lockdowns, weighed on client demand. Some companies also noted that clients had cancelled orders due to difficulties in producing and shipping items. Logistical challenges also weighed on foreign demand, with new export orders falling at the quickest rate since May 2020. ... " – Dr. Wang Zhe, Senior Economist, Caixin Insight Group

Source: https://www.markiteconomics.com/Public/Home/PressRelease/0d31b1f69c074e08b4652225830aa4fc; 4/30/22

### S&P Global Caixin China General Manufacturing PMI™

"In April, the Caixin China General Manufacturing PMI fell 2.1 points from the previous month to 46, the lowest reading since February 2020, as the latest outbreaks of Covid-19 took a toll on the economy.

Manufacturing supply and demand continued to contract in April. Continuous regional Covid outbreaks disrupted production and logistics in manufacturing, and impacted demand. In April, the subindexes for output and total new orders each came in at their lowest since February 2020. The impact on logistics also spilled over into external demand, with the reading for new export orders hitting its lowest level since May 2020.

Employment declined slightly. Some companies indicated that demand was weak due to Covid outbreaks, and some said the main problem was the difficulty of getting workers back on the job. Employment has declined in eight of the last nine months, including April.

Inflationary pressure remained high. In terms of costs, the measure for input costs slipped, but remained well above 50. Surveyed enterprises said that logistics were hampered by the dual factors of China's Covid-19 outbreaks and the Russia-Ukraine war, causing raw material prices to rise. In contrast, the gauge for output prices, though still in the expansionary range, hit a new low in 2022 as business activities were restricted. Therefore, it was difficult for companies to pass on higher costs to their customers.

Covid control measures have done a number on logistics. The latest round of outbreaks and the corresponding control measures have caused the subindex for suppliers' delivery times to drop significantly (as the times were prolonged) – hitting a low not seen since February 2020. Affected by the outbreaks, manufacturers significantly cut purchases, so stocks of purchased items fell significantly, and backlogs of work increased." – Dr. Wang Zhe, Senior Economist, Caixin Insight Group

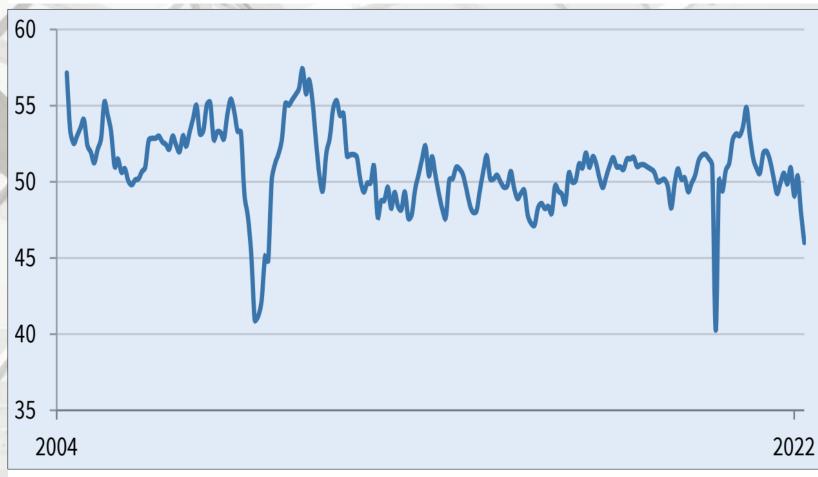
### S&P Global Caixin China General Manufacturing PMI™

"Entrepreneurs remained optimistic. The gauge for business confidence more or less held steady with the previous month's reading – though still lower than the long-term average. They believed that the Covid-19 outbreaks will eventually be brought under control, but some respondents worried that the control measures would last too long.

Overall, in April, local Covid outbreaks continued, and activity in the manufacturing sector weakened. Supply shrank, demand was under pressure, external demand deteriorated, supply chains were disrupted, delivery times were prolonged, backlogs of work grew, workers found it difficult to return to their jobs, inflationary pressures lingered, and market confidence remained below the long-term average.

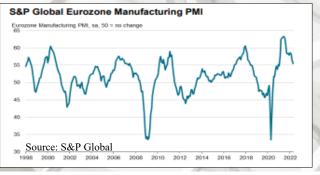
Since April, the Covid-19 situation in regions like Shanghai remained severe, and the impact on business production and people's lives continued, especially in logistics. Currently, the most important job of policymakers is to optimize the flow of personnel and goods and focus on stabilizing supply chains, while resolutely adhering to the established policy of "dynamic zero Covid".

In addition, for enterprises in industries that are greatly affected by the outbreaks, the government should boost support to stabilize market expectations. During the recent round of outbreaks, many company employees, gig workers and low-income groups have watched their incomes shrink and their lives grow more difficult. That's something policymakers shouldn't ignore." – Dr. Wang Zhe, Senior Economist, Caixin Insight Group



sa, > 50 = improvement since previous month Sources: Caixin, S&P Global

Source: https://www.markiteconomics.com/Public/Home/PressRelease/31a0f0a997904b1c851fbd07d4a0d00b; 4/1/22



#### S&P Global Eurozone Manufacturing PMI®

"The S&P Global Eurozone Manufacturing PMI® fell to a 15month low of 55.5 in April, from 56.5 in March. While still above the 50.0 no-change mark and therefore indicative of improving operating conditions within the goods-producing sector, it marked a sustained loss of growth momentum as the headline PMI fell for the third month running.

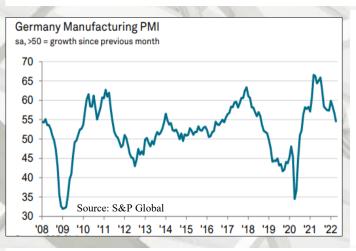
**Manufacturing growth weakens further amid record output price inflation** Eurozone manufacturers lost further growth momentum at the start of the second quarter as output increased only marginally and at the weakest rate over the current 22-month sequence of growth. The slower expansion was accompanied by a subdued increase in new orders and sustained supply-side pressures as COVID restrictions in China and the ongoing war in Ukraine caused disruptions. Meanwhile, amid supply-chain challenges, input price inflation accelerated to a five-month high amid soaring fuel and energy costs. Manufacturers responded with the fastest increase in selling prices on record during April. ...

Manufacturing output came to a near standstill across the eurozone in April, with production merely edging higher at the slowest rate since June 2020. Companies not only reported that ongoing problems with component shortages were aggravated by the Ukraine war and new lockdowns in China, but that rising prices and growing uncertainty about the economic outlook were also hitting demand. New order growth has likewise slowed sharply so far this year. Germany is leading the slowdown, where production is back in decline for the first time in almost two years, and only modest growth is being seen in France, Italy and Spain.

Production trends look set to worsen. Future output expectations remain very subdued by historical standards, and the slowdown in new order growth is indicative of factory output across the eurozone falling in the coming months given existing inventory levels. Sharp price rises will meanwhile put further downward pressure on demand. A renewed surge in costs, widely blamed on soaring energy prices and further upward pressure on prices paid for many other inputs amid shortages, led to the steepest rise in producers' selling prices recorded in at least 20 years of comparable survey history.

In short, the eurozone manufacturing sector looks set for a difficult period of falling production and surging prices." – Chris Williamson, Chief Business Economist, S&P Global

Source: https://www.markiteconomics.com/Public/Home/PressRelease/168fc7fe0a8340708e1700df2198e748; 5/2/22



#### S&P Global/BME Germany Manufacturing PMI®

"April saw the headline the seasonally adjusted S&P Global/BME Germany Manufacturing PMI<sup>®</sup> – a weighted aggregate of measures of new orders, output, employment, suppliers' delivery times and stock of purchases – drop from 56.9 in March to a 20-month low of 54.6. The latest figure was above the 50.0 no-change threshold thanks to growth in both employment and stocks of purchases, as well as a further marked lengthening of supplier delivery times.

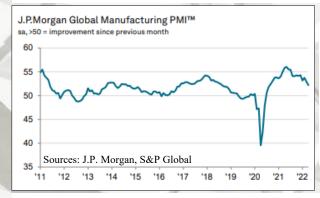
#### Manufacturing production falls in April as factory gate price inflation accelerates to new record high

German manufacturers began the second quarter on a weaker footing, with the war in Ukraine and COVID-19 lockdowns in China taking a toll on both demand and supply chains. Output levels at factories decreased in April as good producers faced a drop in new orders and worsening delays on inputs. Adding to the situation, cost pressures moved closer to last year's record highs, leading to an unprecedented increase in factory gate charges. Manufacturers were pessimistic about the year-ahead for output, and slightly more so than in the previous month. ...

Germany's manufacturers are facing an unwanted combination of soaring price pressures and falling activity, as the war in Ukraine and COVID lockdowns in China disrupt supply chains and hit demand. The survey's output index is now in contraction territory for the first time since the initial COVID shutdowns in the first half of 2020, with a similar situation for new orders hinting that this not just a supply problem but also evidence of slowing demand for goods.

While factory employment continues to rise, and at a robust pace, it would seem that it's only a matter of time before the weakened trends in output and new orders start to feed through to hiring activity, especially given manufacturers' gloomy assessment of the outlook. It's early days yet, but it's already looking like manufacturing will be a drag on the economy in the second quarter, and the prospect of more lockdowns in China and any escalation of the energy crisis would only serve to increase this risk." – Phil Smith, Principal Economist, S&P Global

Source: https://www.markiteconomics.com/Public/Home/PressRelease/8eb30ec01d6442d3b7c3c4a2b5a28173; 5/2/22



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

"The J.P. Morgan Global Manufacturing PMI<sup>TM</sup> – a composite index produced by J.P. Morgan and S&P Global in association with ISM and IFPSM – fell to 52.2 in April, down from 52.9 in March, its lowest level since August 2020. The PMI nonetheless extended its sequence above the neutral 50.0 to 22 months.

# Global manufacturing output falls for first time in 22 months led by sharp downturn in China

The start of the second quarter saw a mild downturn in global manufacturing output, as tighter COVID restrictions in China weighted on production. Rising geopolitical tensions, supply chain disruptions and escalating inflationary pressures also weighed on new order intakes, as growth of new business eased to near-stagnation. ...

Although the level of incoming new business rose for the twenty-second successive month in April, the rate of expansion was only marginal and the weakest during that sequence. New order growth slowed in the consumer and investment goods industries, while intermediate goods producers saw a decline for the first time since mid-2020. ...

Inflationary pressures remained elevated in the global manufacturing sector in April. Average purchase prices rose to one of the greatest extents during the past 11 years, leading to the joint-steepest increase in output charges since the series began in October 2009 (equalling October 2021's record). Stretched global supply chains contributed to the price inflationary pressure, with vendor lead times again lengthening to a near-record degree.

The manufacturing output PMI fell sharply lower in April suggesting notable deterioration in global industry. However, the April PMI drop mainly reflected a 7.9-pt slump in China, as COVID restrictions in a number of cities tightened. Growth showed greater resilience outside of China though we still don't have all the details from Asia to assess the extent of spillover. It appears that prices are once again on the rise as both input and output price index rose." – Olya Borichevska, Global Economist, J.P. Morgan

Source: https://www.markiteconomics.com/Public/Home/PressRelease/598c238789d141128a9a938474313eab; 5/2/22



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

"The J.P. Morgan Global Composite Output Index – produced by J.P. Morgan and S&P Global in association with ISM and IFPSM – posted 51.0 in April, down from 52.7 in March. The outlook also became more subdued, with business optimism slipping to a 19-month low.

#### Global economic growth slips to 22-month low following steep downturn in China

The rate of global economic expansion eased to its weakest during the current 22-month sequence of increase in April, as slower growth of new orders and declining international trade flows stymied the upturn. Inflationary pressures built, as a near-record increase in input costs drove up output charges to the greatest extent in the survey history. Growth of service sector business activity eased to a three-month low, as slower upturns in the business and financial services sectors more than offset an acceleration at consumer service providers. Global manufacturing production fell for the first time since June 2020, reflecting decreases across the consumer, intermediate and investment goods industries (the first concurrent contraction since June 2020). ...

New export orders fell for the second month running and at a pace of contraction matching March's 20month record. Capacity constraints across several pockets of the global economy combined with ongoing supply and distribution issues meant current demand was still sufficient to cause backlogs of work. Outstanding business rose for the fourteenth month running. ... Price inflationary pressures continued to build in the global economy during April. Average output charges rose at a series-record high rate, as companies passed on a further near-record increase input costs to their clients. For both price measures, rates of increase remained substantially faster (on average) in developed nations compared to their emerging market counterparts.

April saw the PMI Output Index drop by almost 2pts to its lowest level for two years, signaling a sizeable drop in the growth momentum of the global economy. However, much of this was focused in China and outside of China the global all-Industry PMI showed a much smaller 0.4-pt drop. More broadly, a lockdown-driven downturn in mainland China, the war in Ukraine and disruption caused by stretched supply chains and rising inflationary pressure have all sapped much of the vigor from the upturn. On the prices front, output charges rose to a record high rate and input costs to one of the greatest degrees on record." – Olya Borichevska, Global Economic Research, J.P. Morgan

Source: https://www.markiteconomics.com/Public/Home/PressRelease/772fa2af717d4c629603f83ade20b9f6; 5/5/22

### Private Indicators Associated Builders and Contractors Nonresidential Construction Spending Down 1% in March; Recession Could Be Around the Corner

"National nonresidential construction spending was down 0.8% in March, according to an Associated Builders and Contractors analysis of data published today by the U.S. Census Bureau. On a seasonally adjusted annualized basis, nonresidential spending totaled \$839.2 billion for the month.

Spending was down on a monthly basis in 11 of 16 nonresidential subcategories. Private nonresidential spending was down 1.2%, while public nonresidential construction spending was down 0.3% in March. On a year-over-year basis, nonresidential construction spending is up 5.6%, led by 31.9% growth in construction related to manufacturing.

"March's construction spending numbers aren't adjusted for inflation and are actually worse than they look," said ABC Chief Economist Anirban Basu. "While overall construction spending rose 0.1% in March, largely because of the strength in multifamily residential construction, construction spending was down in real terms. Nonresidential construction performance declined because of weakness in segments like commercial (-1.9%) and amusement/recreation (-2.1%).

"Even though nonresidential construction spending levels are significantly short of what they were pre-pandemic, many contractors indicate that they are operating at capacity, according to <u>ABC's</u> <u>Construction Backlog Indicator</u>, said Basu. "This speaks to how challenging the economic environment is becoming, with contractors wrestling with workforce skills shortages and sky-high materials prices. The elevated cost of construction service delivery helps explain why more projects are not moving forward as project owners are forced to wait." – Erika Walter, Director of Media Relations, ABC

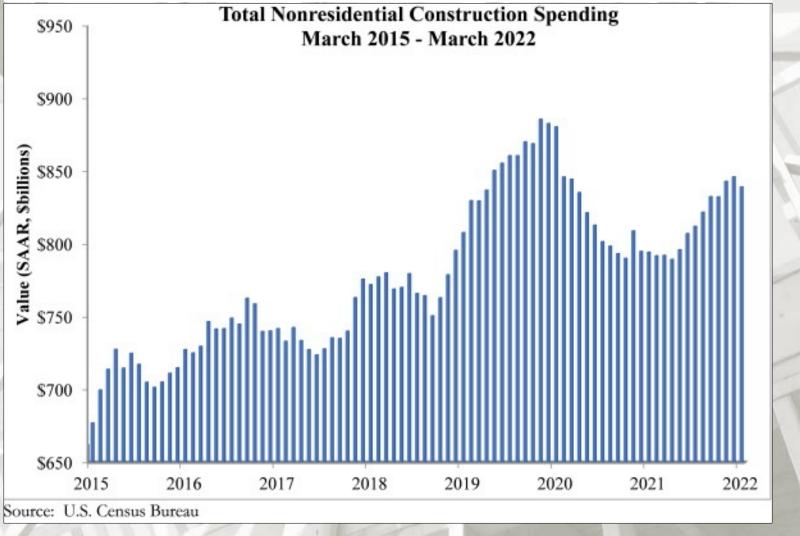
creating storing in	illions of Dollars, Seasonally Adjusted Ar March February March		March	1-Month	12-Month %
	2022	2022	2021	% Change	Change
Total Construction	\$1,730,469	\$1,728,565	\$1,548,555	0.1%	11.7%
Residential	\$891,280	\$882,414	\$754,139	1.0%	18.2%
Nonresidential	\$839,189	\$846,151	\$794,416	-0.8%	5.6%
Conservation and development	\$8,599	\$8,205	\$7,456	4.8%	15.3%
Public safety	\$10,602	\$10,438	\$13,834	1.6%	-23.4%
Sewage and waste disposal	\$29,145	\$28,918	\$26,398	0.8%	10.4%
Lodging	\$16,997	\$16,920	\$23,161	0.5%	-26.6%
Communication	\$21,791	\$21,759	\$22,103	0.1%	-1.4%
Office	\$84,579	\$84,723	\$80,700	-0.2%	4.8%
Transportation	\$56,383	\$56,564	\$56,535	-0.3%	-0.3%
Highway and street	\$103,908	\$104,355	\$96,300	-0.4%	7.9%
Educational	\$98,544	\$99,478	\$101,305	-0.9%	-2.79
Power	\$117,555	\$118,769	\$116,055	-1.0%	1.3%
Water supply	\$19,388	\$19,613	\$18,351	-1.1%	5.7%
Health care	\$50,369	\$50,982	\$46,733	-1.2%	7.8%
Manufacturing	\$94,491	\$96,057	\$71,615	-1.6%	31.9%
Commercial	\$98,307	\$100,177	\$85,722	-1.9%	14.7%
Amusement and recreation	\$25,769	\$26,328	\$25,080	-2.1%	2.7%
Religious	\$2,761	\$2,865	\$3,069	-3.6%	-10.0%
Private Nonresidential	\$497,609	\$503,649	\$458,674	-1.2%	8.5%
Public Nonresidential	\$341,580	\$342,501	\$335,743	-0.3%	1.7%

Nonresidential Construction Spending Down 1% in March

""Circumstances could become easier or more challenging for contractors during the months ahead," said Basu. "The Federal Reserve's stepped-up efforts to combat inflation will eventually translate into better pricing for key construction inputs. However, those same efforts will soften the economy. Many economists believe that a recession in America over the next 12 to 18 months has become virtually inevitable. Thus, even as delivering construction services becomes more affordable, demand for construction services, particularly private construction, may begin to fade."" – Erika Walter, Director of Media Relations, ABC

**Return to TOC** 

Nonresidential Construction Spending Down 1% in March; Recession Could Be Around the Corner



**Return to TOC** 

#### ABC Construction Backlog Up in April; Contractor Confidence Down

"Associated Builders and Contractors reported that its Construction Backlog Indicator increased to 8.8 months in April, according to an ABC member survey conducted from April 20 to May 4. The reading is up 0.9 months from April 2021.

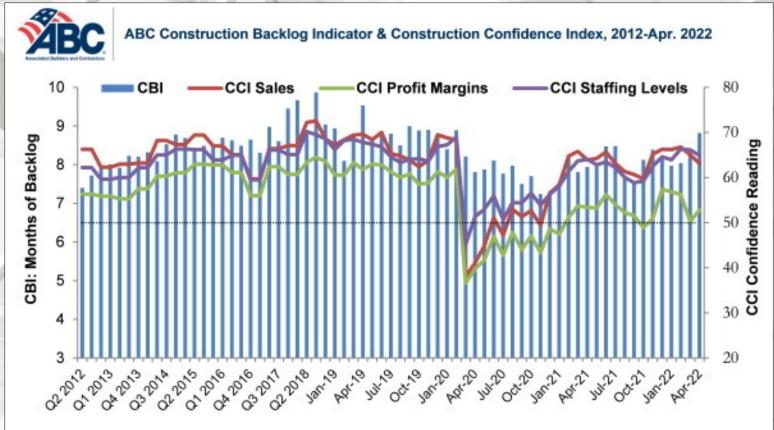
ABC's Construction Confidence Index readings for sales and staffing levels declined in April, while the reading for profit margins moved higher. All three indices remain above the threshold of 50, indicating expectations of growth over the next six months.

""The U.S. economy is facing many headwinds, but for now, the nation's nonresidential construction segment is handling them," said ABC Chief Economist Anirban Basu. "One might think that <u>skilled worker shortages</u>, <u>sky-high materials prices</u>, rising interest rates and financial market volatility would have affected industry momentum. Instead, backlog continues to rise, and contractors continue to expect sales, employment and profit margins to expand over the next six months. Demand for construction services remains strong.

"Nonresidential construction is generally a sector that lags behind the broader economy, meaning emerging economic weakness will not show up in nonresidential construction data for months to come," said Basu. "It is conceivable that the risk of recession is overstated, and that contractors will thrive during the years ahead because of significant infrastructure spending. Conversely, it is possible that the combination of higher interest rates, stubborn inflation, depressed confidence, geopolitical conflict and an economywide downturn will have fundamentally altered the industry's outlook a year from now. Only time will tell."" – Erika Walter, Director of Media Relations, ABC

Construction Confidence Index

Response	April 2022	March 2022	April 2021			
	CCI Reading					
Sales	63.1	65.0	63.9			
Profit Margins	52.8	50.2	53.4			
Staffing	64.9	66.1	64.0			
	Sales Expectations					
Up Big	8.1%	10.3%	13.7%			
Up Small	54.5%	55.7%	51.9%			
No Change	21.2%	19.7%	14.7%			
Down Small	14.1%	12.3%	16.0%			
Down Big	2.0%	2.0%	3.8%			
	Pi	rofit Margin Expectations				
Up Big	2.5%	2.5%	4.4%			
Up Small	41.4%	31.0%	37.9%			
No Change	25.3%	35.5%	29.0%			
Down Small	26.3%	27.1%	24.2%			
Down Big	4.5%	3.9%	4.4%			
	Staffing Level Expectations					
Up Big	6.6%	8.4%	6.5%			
Up Small	56.6%	56.2%	52.9%			
No Change	28.3%	27.6%	32.1%			
Down Small	7.1%	7.4%	7.2%			
Down Big	1.5%	0.5%	1.4%			



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

# Private Indicators American Institute of Architects (AIA) Architecture Billings Index March 2022 Business conditions at architecture firms strengthen further

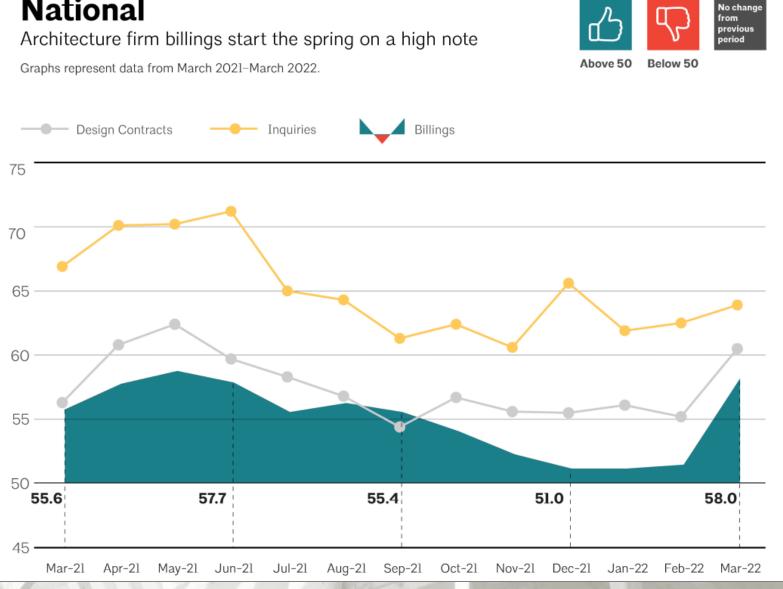
More than half of firm billings over the past year are from renovations, retrofits, rehabilitations, alterations, additions, and historic preservation work

"Architecture firm billings showed strong growth in March, following more modest increases over the previous three months. The Architecture Billings Index (ABI) score of 58.0 for the month is one of the highest scores seen since the economic recovery began just over a year ago. Despite ongoing concerns about rising inflation and the war in Ukraine, business conditions remained robust at most architecture firms. Indicators of future work strengthened this month as well, most notably with the value of new design contracts, which also saw strong growth. In addition, firms reported that at the end of the first quarter of 2022, their firm's backlogs stood at an average of 7.2 months. This was an increase of more a month from one year ago and a new all-time high since we began collecting data on backlogs in 2010. Looking at design contracts and backlogs together indicates that most firms have plenty of projects in the pipeline to keep them busy over the coming months, although finding enough employees to complete these projects remains challenging." – Katharine Keane, Senior Associate Editor, The American Institute of Architects

"The spike in firm billings in March may reflect a desire to beat the continued interest rate hikes expected in the coming months. However, since project backlogs at architecture firms have reached seven months, a new all-time high, it appears that firms are having a difficult time keeping up with this uptick in demand for design services." – Kermit Baker, Chief Economist, AIA

### **Private Indicators American Institute of Architects (AIA)**

### National



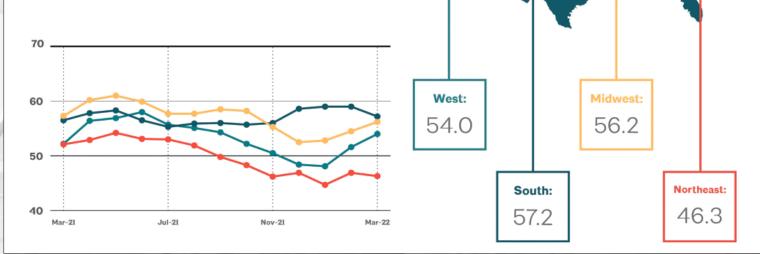
Source: https://www.aia.org/pages/6488059-abi-March-2022-architecture-firm-billin; 4/20/22

# **Private Indicators: AIA**

### Regional

Business conditions remain strong in all regions except the Northeast

Graphs represent data from March 2021–March 2022 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

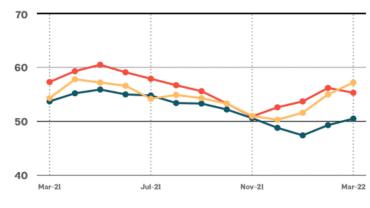
"However, there are still substantial disparities in business conditions at architecture firms in different regions of the country. Firms located in the Northeast continued to report softening billings in March, for the seventh consecutive month. On the other hand, business conditions continued to strengthen at firms located in the Midwest and West regions and remained at robust levels for firms located in the South." – Katharine Keane, Senior Associate Editor, The American Institute of Architects

# **Private Indicators: AIA**

### Sector

Billings begin to rebound at firms with an institutional specialization

Graphs represent data from March 2021–March 2022 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

"Strong growth also continued at firms with a multifamily residential specialization this month, with conditions nearly returning to the high levels seen last spring. Growth continued at a moderate pace at firms with a commercial/industrial specialization, while firms with an institutional specialization saw basically flat conditions, following modest declines in billings in the three previous months." – Katharine Keane, Senior Associate Editor, The American Institute of Architects

Source: https://www.aia.org/pages/6488059-abi-March-2022-architecture-firm-billin; 4/20/22

### Dodge Data & Analytics Total Construction Starts Decline in March

### Widespread pullback in construction activity following a strong February

"Total construction starts fell 12% in March to a seasonally adjusted annual rate of \$903.8 billion, according to <u>Dodge Construction Network</u>. Nonresidential building starts lost 29%, in part due to the start of three large manufacturing facilities in the prior month. When those three large projects are removed, nonresidential starts in March would have risen 10%. Residential starts also fell 3%, and nonbuilding starts lost 2%.

Year-to-date, total construction was 9% higher in the first three months of 2022 than in the same period of 2021. Nonresidential building starts rose 26%, residential starts gained 3%, while nonbuilding starts were 1% lower. For the 12 months ending March 2022, total construction starts were 15% above the 12 months ending March 2021. Nonresidential starts were 25% higher, residential starts gained 15% and nonbuilding starts were down 1%.

"The volatility caused by the ebb and flow of large projects masks an underlying trend of strengthening in construction starts," stated Richard Branch, chief economist for Dodge Construction Network. "Nonresidential construction has benefited from the growing confidence that the worst of the pandemic is in the rear-view window. The pipeline of projects waiting to start continues to fill, suggesting this trend will continue. However, higher prices and a shortage of skilled labor will slow the progress of those projects through the design and bidding stages, resulting in moderate growth in starts activity."" – Nicole Sullivan, Public Relations & Social Media, AFFECT

### **Dodge Data & Analytics**

**"Residential building starts** fell 3% in March to a seasonally adjusted annual rate of \$435 billion. Single family starts fell 5%, but multifamily starts rose 4%. For the 12 months ending March 2022, residential starts improved 15% from the 12 months ending March 2021. Single family starts were 11% higher, while multifamily starts were 29% stronger on a 12-month rolling sum basis.

**The largest multifamily structures to break ground in March** were the \$212 million 550 10<sup>th</sup> Ave. mixed-use building in New York, NY, the \$200 million Kauanoe O Koloa condominiums in Koloa, HI, and the \$140 million 7 Platt St. mixed-use building in New York, NY.

**Regionally**, total construction starts in March rose in the South Atlantic, but fell in all other regions.

**Nonresidential building starts** 29% in March to a seasonally adjusted annual rate of \$274.8 billion. The decline in March followed a large gain in manufacturing activity in February, which saw three large plants break ground. In March, commercial starts rose 8% due to gains in office, hotel and warehouse starts. Institutional starts increased 9% in March as starts in all sectors moved higher.

For the 12 months ending March 2022, nonresidential building starts were 25% higher than in the 12 months ending March 2021. Commercial starts were up 21%, institutional starts rose 12% and manufacturing starts advanced 162% on a 12-month rolling sum basis.

**The largest nonresidential building projects to break ground in March** were the \$505 million second phase of the Switch SuperNap data center in Sparks, NV, the \$460 million second phase of the Park 303 office building in Glendale, AZ, and upgrades to the \$410 million Exxon Mobil refinery in Baton Rouge, LA." – Richard Branch, Chief Economist, Dodge Data & Analytics

#### MONTHLY CONSTRUCTION STARTS

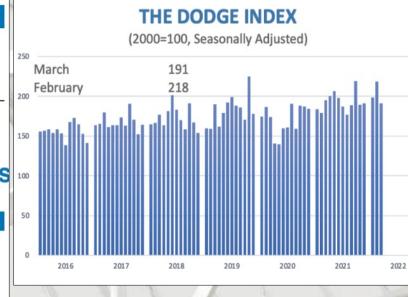
(Millions of Dollars, Seasonally Adjusted Annual Rate)

Mar 2022	Feb 2022	% Change
\$274,836	\$388,192	-29
434,468	446,222	-3
194,512	197,942	-2
\$903,816	\$1,032,356	-12
	\$274,836 434,468 194,512	\$274,836     \$388,192       434,468     446,222       194,512     197,942

#### YEAR-TO-DATE CONSTRUCTION STARTS

Unadjusted Totals, in Millions of Dollars

	3 Mos. 2022	3 Mos. 2021	% Change
Nonresidential Building	\$73,437	\$58,068	26
Residential Building	105,475	102,056	3
Nonbuilding Construction	45,077	45,522	-1
Total Construction	\$223,989	\$205,647	9



#### Source: Dodge Data & Analytics

Chicago Business Barometer™



### **MNI Chicago**

"The Chicago Business Barometer<sup>TM</sup>, produced with MNI, recovered to 62.9 in March, after last month's dip to 56.3. Inventories reached levels not seen since 1973. This month we again asked firms whether they are seeing any easing up in the supply chain blockages. Just over half of respondents said no, followed by close to 36% seeing some easing. 5% of firm saw definite easing, whilst close to 8% were not affected.

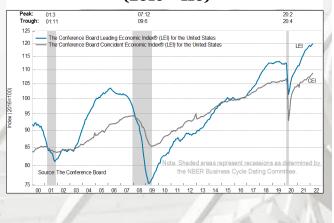
### Chicago Business Barometer<sup>™</sup> – Rebounds to 62.9 in March

- All main indicators increased, with Inventories and New Orders seeing the largest boost. Only prices paid declined in March.
- Production improved to 60.0, still below the 12-month average of 62.8, but a substantial 4.6-point recovery over last month. Firms cited modest improvements in material shortages and logistic issues, allowing a production boost.
- Employment increased 4.6 points to 48.1, following February's dip to the lowest since October 2020. Firms saw employment levels improve, although hiring skilled workers remained challenging.
- New Orders picked up to 61.9, up 8.9 points from the February fall, yet still 3.4 points weaker than January.
- Supplier Deliveries rose 3.0 points through March to 78.3, with more firms seeing deliveries slow.
- Order Backlogs inched up 2.5 points to a five-month high of 64.3 as backlogs remained persistently high due to key material and chip shortages.
- Inventories hit a near 50-year high in March, jumping 11.4 points to 68.7, 16.7 points above the
- 12-month average. Firms stocked up due to ongoing supply chain disruptions, with exports
- seeing longer delivery times. Some port congestion improvements were noted.
- Prices Paid slipped 0.8 points to a still elevated 12-month low of 85.7 in March.
- Increased lead times and capital costs sent the capital equipment subindex to a record high." Les Commons, Senior Economist and Lucy Hager, Economist, MNI Indicators

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

"The Conference Board Leading Economic Index<sup>®</sup> (LEI) for the U.S. increased by 0.3 percent in March to 119.8 (2016 = 100), following a 0.6 percent decrease in February. The LEI increased by 1.9 percent in the six-month period from September 2021 to March 2022."

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



"The US LEI rose again in March despite headwinds from the war in Ukraine. This broad-based improvement signals economic growth is likely to continue through 2022 despite volatile stock prices and weakening business and consumer expectations. The Conference Board projects 3.0 percent year-over-year US GDP growth in 2022, which is slower than the 5.6 percent pace of 2021, but still well above pre-covid trend. This rate also reflects a 0.5 ppt downgrade incorporated in our base case to include the effects of the war in Ukraine compared to before the war (3.5 percent). However, downside risks to the growth outlook remain, associated with intensification of supply chain disruptions and inflation linked to lingering pandemic shutdowns and the war, as well as with tightening monetary policy and persistent labor shortages." -Ataman Ozyildirim, Senior Director of Economic Research, The Conference Board

"The Conference Board Coincident Economic Index<sup>®</sup> (CEI) for the U.S. increased by 0.4 percent in March to 108.7 (2016 = 100), following a 0.4 percent increase in February. The CEI increased by 2.2 percent in the six-month period from September 2021 to March 2022.

**The Conference Board Lagging Economic Index**<sup>®</sup> (LAG) for the U.S. increased by 0.6 percent in March to 110.9 (2016 = 100), following a 0.2 percent increase in February. The LAG increased by 2.0 percent in the six-month period from September 2021 to March 2022."

Source: https://www.conference-board.org/data/bcicountry.cfm; 4/21/22

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

#### March New Business Volume Up 14 Percent Year-over-year, 49 Percent Month-to-month, 5 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 \$10.6 billion, up 14 percent year-over-year from new business volume in March 2021. Volume was up 49 percent month-to-month from \$7.1 billion in February. Year-to-date, cumulative new business volume was up 5 percent compared to 2021.

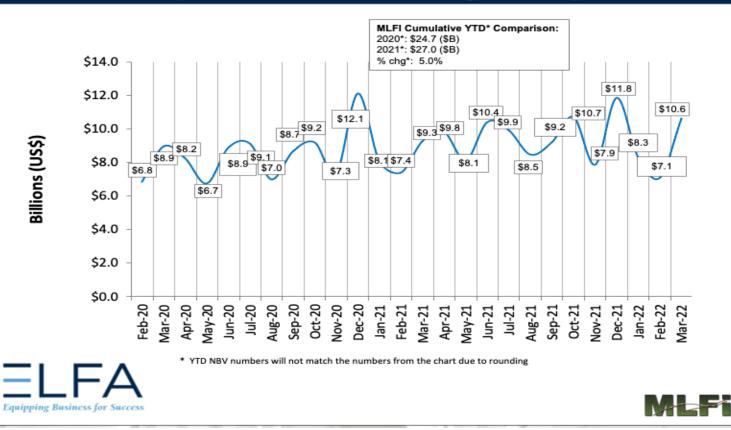
Receivables over 30 days were 1.5 percent, down from 1.7 percent the previous month and down from 1.9 percent in the same period in 2021. Charge-offs were 0.10 percent, up from 0.09 percent the previous month and down from 0.43 percent in the year-earlier period.

Credit approvals totaled 78.3 percent, up from 78.2 percent in February. Total headcount for equipment finance companies was flat year-over-year.

Separately, the Equipment Leasing & Finance Foundation's Monthly Confidence Index (MCI-EFI) in April is 56.1, a decrease from 58.2 in March." – Amy Vogt, Vice President, Communications and Marketing, ELFA

"MLFI-25 participants end the first quarter of the year very favorably: new business volume continues to surge and portfolios are performing extremely well. This, while inflationary pressures, the war in Ukraine and supply chain disruptions continue unabated. With the Fed increasing short-term borrowing rates now and into the foreseeable future, business owners – both large and small – are choosing to lease and finance their critical equipment needs." – Ralph Petta, President and CEO, ELFA

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



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

"Strong performance in the ELFA survey – for both month-over-month and year-over-year results – highlights the continued strength of the economy and the appetite of the business community for equipment financing to drive their growth. These positive results come even as ongoing supply chain issues delay some deliveries. Overall, the results are very encouraging for the balance of 2022, as end-customers show their determination to compete by investing in the latest equipment to power their businesses forward." – Mike Jones, President, CIT Business Capital, First Citizens Bank

**Return to TOC** 

#### S&P Global U.S. Manufacturing PMI<sup>™</sup> April PMI rises to seven-month high amid stronger demand, despite sharper price increases

"The seasonally adjusted S&P Global US Manufacturing Purchasing Managers' Index<sup>™</sup> (PMI<sup>™</sup>) posted 59.2 in April, up from 58.8 in March but lower than the earlier released 'flash' estimate of 59.7. The rate of overall growth accelerated for the third month running and was the sharpest since last September.

Operating conditions improved markedly across the US manufacturing sector, according to April PMI<sup>TM</sup> data from S&P Global. The uptick in the headline figure was driven by a quicker expansion in output, a softer deterioration in vendor performance and a series-record rise in pre-production inventories. Although lead times lengthened further, severe material and capacity shortages at suppliers led to sharper increases in cost burdens and selling prices. Meanwhile, firms continued to hire additional staff to ease pressure on capacity, as backlogs of work rose at the slowest pace since February 2021.

At the same time, firms were strongly upbeat regarding the 12-month outlook for output, but concerns regarding inflation and geopolitical tensions pushed confidence to the lowest for six months.

Contributing to the stronger upturn in the health of the manufacturing sector was a faster rise in output during April. Growth in production was linked to greater new order inflows and the delivery of materials which allowed capacity to expand. The pace of expansion was steep overall and the sharpest since July 2021.

New orders increased at a marked pace at the start of the second quarter, and at a rate broadly in line with that seen in March. Companies reported stronger demand conditions, with some noting that new sales expanded despite substantial rises in prices.

Meanwhile, new export orders grew at the fastest rate for almost a year. The expansion in new sales from abroad was attributed to greater demand in key export markets and the acquisition of new customers" – Chris Williamson, Chief Business Economist, S&P Global

Source: https://www.markiteconomics.com/Public/Home/PressRelease/180bda82053d4983baf9a2e271e6d157; 5/2/22

### S&P Global U.S. Manufacturing PMI™

"On the price front, input costs rose substantially and at the sharpest rate in four months. Higher cost burdens were attributed to greater material and supplier prices, notably increased transportation, fuel and metals expenses. Firms continued to pass higher material and staff costs on to clients in April, as the rate of charge inflation accelerated. The increase in selling prices was the fastest since last October.

In line with a further upturn in new orders, firms raised their input buying at a sharp pace. Many companies stated that higher purchasing activity was linked to efforts to stockpile inputs amid price increases and material shortages. As a result, pre-production inventories expanded at the steepest rate on record. Stocks of finished goods continued to contract, however, the pace of decline eased to the slowest since February 2021.

At the same time, manufacturers recorded a solid rise in employment in April. Workforce numbers grew following greater production requirements and in response to staff leaving voluntarily. Some firms also stated that job creation was linked to the filling of long-held vacancies. Labor shortages continued to be mentioned as a weight on growth, however.

Although sharp, the rate of expansion in backlogs of work eased to the softest for 14 months.

Finally, business confidence remained upbeat. Strong optimism was attributed to hopes of reduced supply chain disruption and increased hiring. Concerns regarding inflation and geopolitical tensions led the level of positive sentiment to slip to a six-month low." – Chris Williamson, Chief Business Economist, Markit<sup>®</sup>

### S&P Global U.S. Manufacturing PMI™

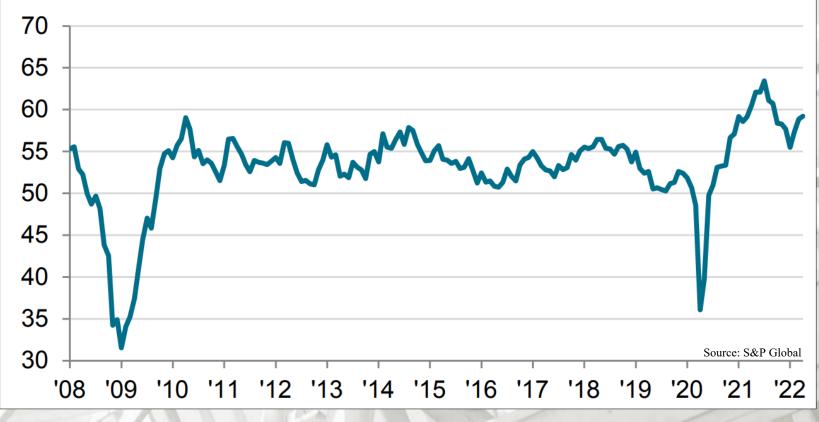
#### Comment

"After a slow start to the year, which saw production growth almost stall, the manufacturing sector is starting the second quarter on a much stronger footing. Demand from consumers and businesses is proving encouragingly robust despite severe inflationary pressures, which intensified further during April.

Both input cost and selling price inflation surged higher, the latter accelerating to a near-record rate, as firms faced rising energy prices, ongoing supplier-driven price hikes amid strained supply chains, and rising wage costs.

In short, while the survey data add to indications that the pace of economic growth will improve in the second quarter after a lacklustre first quarter, the less welcome news is that elevated inflationary pressures show no signs of relenting."." – Chris Williamson, Chief Business Economist, S&P Global

US Manufacturing PMI sa, >50 = growth since previous month



### S&P Global U.S. Services PMI<sup>™</sup> Sharp upturn in business activity, but inflationary pressures strengthen to record high

"US service providers recorded a steep expansion in business activity during April, according to the latest PMI<sup>™</sup> data. The rate of output growth eased to the slowest for three months, but was sharp overall. Similarly, higher selling prices weighed on client spending as the pace of new business expansion softened. Nonetheless, demand conditions remained strong and sparked the fastest rise in employment for a year as backlogs mounted at a near-record pace.

Meanwhile, input and labor shortages pushed up cost burdens to the greatest extent on record. In response, firms raised their output charges notably and at the sharpest pace since data collection began in October 2009. Concerns regarding inflation weighed on business confidence, which slipped to the lowest in six months.

The seasonally adjusted final S&P Global US Services PMI Business Activity Index registered 55.6 in April, down from 58.0 in March, but higher than the earlier released 'flash' estimate of 54.7. The latest upturn in business activity was sharp overall and quicker than the series average, despite easing to the slowest in three months. Where firms reported a rise in output, this was linked to strong demand conditions and a further increase in new orders. The loosening of COVID-19 restrictions boosted customer spending, according to panellists.

The rate of growth in new business also softened to a three-month low at the start of the second quarter, but was steep. Although higher selling prices dampened demand slightly, firms reported healthy sales volumes to new and existing clients" – Chris Williamson, Chief Economist, S&P Global

### S&P Global U.S. Services PMI™

"Alongside strong domestic demand, new export orders rose at the quickest rate since data collection for the respective seasonally adjusted series began in September 2014. The easing of restrictions in key export markets reportedly boosted footfall and customer activity.

At the same time, cost burdens rose substantially in April. Higher wage, transportation and material costs drove up input prices. Service providers mentioned greater food, energy and fuel costs in particular. The rate of input price inflation accelerated for the third successive month to the fastest in 11-and-a-half years of data collection.

Subsequently, services firms increased efforts to passthrough higher cost burdens on to clients through hikes in selling prices. The pace of charge inflation accelerated notably, and for the fourth month running, to the fastest on record.

Meanwhile, further upticks in new orders and business requirements resulted in another increase in employment at service providers. The rate of job creation quickened to the sharpest for a year and was sharp overall.

Backlogs of continued to rise, thereby extending the current sequence of expansion that began in July 2020. Although employment increased, some firms highlighted that ongoing labor shortages hampered progress with depleting incomplete business. Companies also stated that input delivery delays put pressure on capacity. The rate of growth in unfinished business was broadly in line with that seen in March and the second-fastest on record.

Services firms remained upbeat regarding the outlook for output over the coming year in April. Hopes of increased client demand and greater opportunities to fill vacancies spurred optimism. That said, the degree of business confidence slipped to a six-month low amid concerns regarding inflation." – Chris Williamson, Chief Economist, S&P Global

### S&P Global U.S. Services PMI™

#### Comment

"Alongside the acceleration in manufacturing growth recorded by the S&P Global PMI in April, the sustained solid performance of the service sector points to GDP growth returning in the second quarter.

Although the service sector lost some momentum in April, this merely reflects pay-back from the surge in spending seen at the end of the first quarter, when Omicron-related virus containment measures were eased.

It's clear that growth could be even stronger if activity was not still be constrained by supply chain bottlenecks and labor availability issues. Domestic demand remains buoyant among both households and businesses in spite of current inflationary pressures, and exports are being boosted by pent-up pandemic demand as global travel restrictions are eased. Exports of services grew in April at the fastest rate since data were first collected in 2014.

The consequence of demand running ahead of supply is higher prices, with average charges levied for services rising at a sharply increased and unprecedented rate in April following a record increase in firms' costs. Enjoying strong demand, firms were increasingly able to pass on higher energy, materials and staff costs to customers, indicating an economy that continues to run hot." – Chris Williamson, Chief Economist, S&P Global

S&P Global US Services Business Activity Index sa, >50 = growth since previous month



### National Association of Credit Management – Credit Managers' Index Report for April 2022: Combined Sectors

"The National Association of Credit Management's seasonally adjusted Credit Managers' Index (CMI) for April increased again, buoyed by improvements in unfavorable factors that overcame deterioration in favorable ones. The impact of the Russian incursion into Ukraine appears be negligible on US businesses thus far except for keeping the pressure on prices, especially commodities. Respondents indicated that supply chain issues are persisting, especially in the transportation, manufacturing and retail sectors, said NACM Economist Amy Crews Cutts, Ph.D., CBE<sup>®</sup>.

"The decision by the Open Market Committee of the Federal Reserve Board (FOMC) to raise its target range for the Federal Funds rate by 25 basis points is symbolically important but will have little effect on demand now. The FOMC has indicated that several further increases are planned over the course of the year, and in aggregate these could eventually slow consumer and business activity," Cutts said. "However, the yield on the constant maturity 10-year Treasury bond, often used as the benchmark rate for business and consumer loans, is up more than fivefold since hitting its historical low in August of 2020 and is up more than 1.25 percentage points since the start of the year. The financial markets should have a greater immediate impact on credit costs and demand, though I haven't seen this show up in the expenditures data yet."

"The CMI is indicating steady conditions overall despite the supply and logistical problems that continue to plague businesses as well as the uncertainty of the war in Ukraine. While the other factors have me thinking recession sooner than later, the CMI indicates the risk is more balanced."" – Andrew Michaels, Editorial Associate, NACM

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

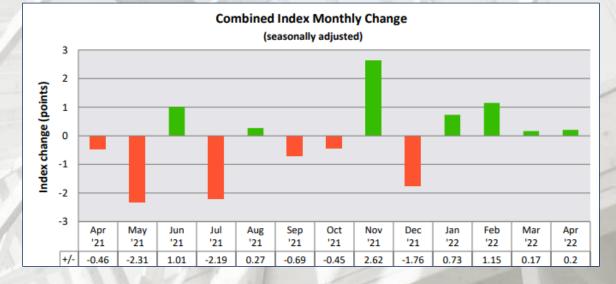
#### **Report for April 2022: Combined Sectors**

"The combined April CMI rose by 0.2 points to an index value of 59.1. The gain is led by the rise in the index for unfavorable factors from 51.2 to 51.9. Three unfavorable factors indicated strongly improving conditions, with the dollar amount beyond terms rising 3.0 points, the dollar amount of customer deductions rising 1.5 points and disputes gaining 1.1 points. Disputes are the only factor in contraction territory with a value of 49.1. Three unfavorable factors declined during the month: accounts placed for collection lost 0.9 points, rejections of credit applications fell 0.6 points and filings for bankruptcy slid one-tenth a point.

The index of favorable factors lost 0.6 points in the month, moving from 70.5 to 69.9. The amount of credit extended was the only favorable factor to improve, gaining 2.9 points, but this was more than offset by the declines of 2.4 point in sales, 1.7 points in new credit applications and 1.1 points in dollar collections.

"If businesses can get the goods made, transportation logistics are another nightmare. Like the small butterfly wing thought to cause a hurricane, seemingly small missteps in the delivery chain are wreaking havoc," Cutts said. "In some cases that means ruined product while in others it means disgruntled recipients who demand concessions from the transporter or the manufacturer. Higher gasoline prices are also hitting hard and will make profits more elusive in early 2022 for this segment and many others."" – Andrew Michaels, Editorial Associate, NACM

Combined Manufacturing and Service Sectors (seasonally adjusted)	Apr '21	May '21	Jun '21	Jul '21	Aug '21	Sep '21	Oct '21	Nov '21	Dec '21	Jan '22	Feb '22	Mar '22	Apr '22
Sales	76.7	74.3	69.9	75.4	66.0	67.8	67.4	67.4	75.1	71.2	71.3	77.1	74.7
New credit applications	67.5	65.8	65.1	66.2	63.0	63.5	62.1	62.9	67.6	60.6	64.0	68.8	67.1
Dollar collections	65.2	65.4	61.2	64.4	61.5	60.4	61.3	59.2	63.5	62.5	63.2	67.0	65.9
Amount of credit extended	71.1	70.2	68.8	68.4	68.6	67.2	67.6	67.7	71.7	67.2	68.7	69.2	72.1
Index of favorable factors	70.1	68.9	66.2	68.6	64.8	64.7	64.6	64.3	69.5	65.4	66.8	70.5	69.9
Rejections of credit applications	53.0	53.1	52.1	52.0	52.2	52.1	52.3	53.2	51.7	51.5	52.3	51.9	51.3
Accounts placed for collection	54.1	54.1	52.8	51.5	51.4	51.4	52.1	52.0	52.1	51.1	52.7	51.5	50.6
Disputes	51.3	53.5	50.1	49.1	49.6	51.2	48.3	48.6	48.2	48.4	48.6	48.0	49.1
Dollar amount beyond terms	60.9	56.7	51.8	56.9	51.4	50.6	49.5	47.1	53.3	53.5	50.9	51.2	54.2
Dollar amount of customer deductions	52.9	53.6	52.4	51.8	49.9	51.9	49.4	48.2	49.3	49.5	49.9	49.0	50.5
Filings for bankruptcies	57.5	58.9	58.5	56.9	57.3	57.1	56.4	55.9	55.7	55.2	56.4	55.8	55.7
Index of unfavorable factors	55.0	55.0	52.9	53.0	51.9	52.4	51.3	50.8	51.7	51.5	51.8	51.2	51.9
NACM Combined CMI	61.0	60.6	58.3	59.3	57.1	57.3	56.6	56.2	58.8	57.1	57.8	58.9	59.1



### National Federation of Independent Business (NFIB) March 2022 Report

#### Small Business Expectations for Better Business Conditions at Record, 48-year Low

"The NFIB Small Business Optimism Index was unchanged in April, remaining at 93.2 and the fourth consecutive month below the 48-year average of 98. Small business owners expecting better business conditions over the next six months decreased one point to a net negative 50%, the lowest level recorded in the 48-year-old survey.

Inflation continues to be a problem for small businesses with 32% of small business owners reporting it's their single most important problem in operating their business, the highest reading since the fourth quarter of 1980." – Holly Wade, NFIB

"Small business owners are struggling to deal with inflation pressures. The labor supply is not responding strongly to small businesses' high wage offers and the impact of inflation has significantly disrupted business operations." – Bill Dunkelberg, Chief Economist, NFIB

"Key findings include:

- Forty-seven percent of owners reported job openings that could not be filled, unchanged from March.
- The net percent of owners raising average selling prices decreased two points to a net 70% (seasonally adjusted), two points below last month's highest reading.
- The net percent of owners who expect real sales to be higher increased six points from March to a net negative 12%." Holly Wade, NFIB

### National Federation of Independent Business (NFIB) April 2022 Report

"As reported in <u>NFIB's monthly jobs report</u>, small businesses continue to struggle to find workers to fill open positions with 47% (seasonally adjusted) of all owners reported job openings they could not fill in the current period. Of those hiring or trying to hire, 93% of owners reported few or no qualified applicants for the positions they were trying to fill.

Fifty-four percent of owners reported capital outlays in the last six months, down two points from March. Of those owners making expenditures, 40% reported spending on new equipment, 24% acquired vehicles, and 14% improved or expanded facilities. Eight percent acquired new buildings or land for expansion and 11% spent money for new fixtures and furniture. Twenty-seven percent of owners plan capital outlays in the next few months, up one point from March.

Seasonally adjusted, 3% of all owners reported higher nominal sales in the past three months, down one point from March and a poor reading. The net percent of owners expecting higher real sales volumes increased by six points to a net negative 12%.

The net percent of owners reporting inventory increases went up four points to a net 4%. Nineteen percent of owners reported increases in stocks while 15% reported reductions as solid sales reduced inventories at many firms.

Thirty-six percent of owners reported that supply chain disruptions have had a significant impact on their business. Another 34% report a moderate impact and 20% report a mild impact. Only 8% of owners reported no impact from recent supply chain disruptions." – Holly Wade, NFIB

### National Federation of Independent Business (NFIB) April 2022 Report

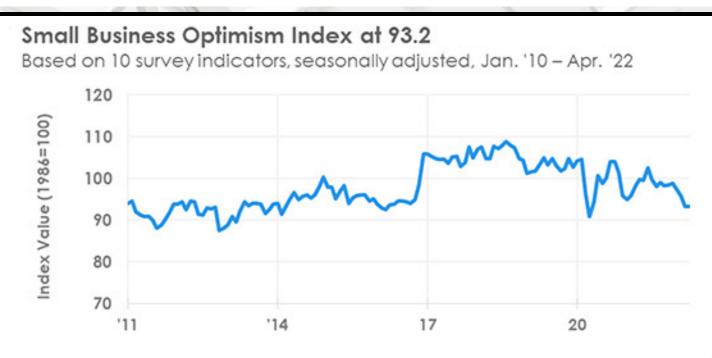
"The net percent of owners raising average selling prices decreased two points from March's record high reading to a net 70% (seasonally adjusted). Four percent reported lower average selling prices and 70% reported higher average prices. Price hikes were the most frequent in wholesale (85% higher, 0% lower), construction (81% higher, 3% lower), retail trades (76% higher, 4% lower), and manufacturing (70% higher, 3% lower). A net 46% of owners plan price hikes (seasonally adjusted).

A net 46% (seasonally adjusted) reported raising compensation, down three points from March. A net 27% of owners plan to raise compensation in the next three months. Eight percent of owners cited labor costs as their top business problem and 23% said labor quality was their top business problem.

The frequency of reports of positive profit trends was a net negative 17%. Among the owners reporting lower profits, 34% blamed the rise in the cost of materials, 22% blamed weaker sales, 14% cited the usual seasonal change, 11% cited labor costs, 9% cited lower prices, and 2% cited higher taxes or regulatory costs. For the owners reporting higher profits, 51% credited sales volumes, 13% cited usual seasonal change, and 19% cited higher prices.

Two percent of owners reported that all their borrowing needs were not satisfied. Twenty-six percent of owners reported all credit needs met and 61% said they were not interested in a loan.

Up three points from March, a net 6% of owners viewed current inventory stocks as "too low" in April. A net 1% of owners plan inventory investment in the coming months, down one point from March." – Holly Wade, NFIB



# NFIB

### NFIB.com/sboi

#### National Federation of Independent Business (NFIB) April 2022 Report

"... Owners are very pessimistic about sales and business conditions in the second half of the year. This dampens capital investment and, eventually, will feed into employment if sales actually slow as expected. Financial markets have already made significant adjustments to changes in Fed policies and the uncertainties of war and Covid shutdowns that continue in China. More is likely to come as assets, financial and real estate, are highly overpriced. Trying to "catch up" runs a growing risk of "overshoot," hopefully that won't happen." – Holly Wade, NFIB

Source: http://www.nfib.com/surveys/small-business-economic-trends; 5/12/22

### **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

### NFIB.com/sboi

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

#### Wage Gains Continue for Workers of U.S. Small Businesses; Job Growth Moderates Slightly in April

"Hourly earnings growth accelerated for the eleventh consecutive month for workers of U.S. small businesses, according to the latest Paychex | IHS Markit Small Business Employment Watch. National small business job growth also remained strong, despite a slight moderation of 0.14 percent. The national jobs index for April was 101.14, an increase of 2.85 percent from a year ago. Average hourly earnings stood at \$30.10, up 4.85 percent year-over-year." – Lisa Fleming, Kate Smith, and Tess Flynn, Paychex, Inc.

"April saw a modest slowing in job gains as the labor market remains very tight." – James Diffley, Chief Regional Economist, IHS Markit

"The state of small business employment remains strong, with wages increasing for 11 consecutive months and job growth near an eight-year high. Texas continues to set the pace among states and metro markets. Texas led all states in small business employment growth and achieved record high hourly earnings growth in April, driven by Dallas' eighth consecutive month as the top-performing metro in both categories." – Martin Mucci, President and CEO, Paychex

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

"In further detail, the April report showed:

- At 101.14, the national index remains near its historic peak set in January 2022.
- The South reclaimed the top spot for small business job growth by region, Texas was the highest-ranking state, and Dallas continued as the top metro for the eighth consecutive month.
- Nationally, hourly earnings growth improved to 4.85 percent, its eleventh consecutive increase.
- Annual weekly earnings growth grew to above four percent, the second consecutive increase.
- The West and South lead regions with hourly earnings growth above five percent.
- Ohio and North Carolina have the highest rates of hourly earnings growth, both above six percent.
- Leisure and hospitality leads the industry sectors in both small business job growth and hourly earnings growth by a significant margin." Lisa Fleming, Kate Smith, and Tess Flynn, Paychex, Inc.

The Paychex | IHS Markit Small Business Employment Watch

### **April Job Index**

Index 101.14 April Wage Data

Hourly Earnings \$30.10

12-Month Change

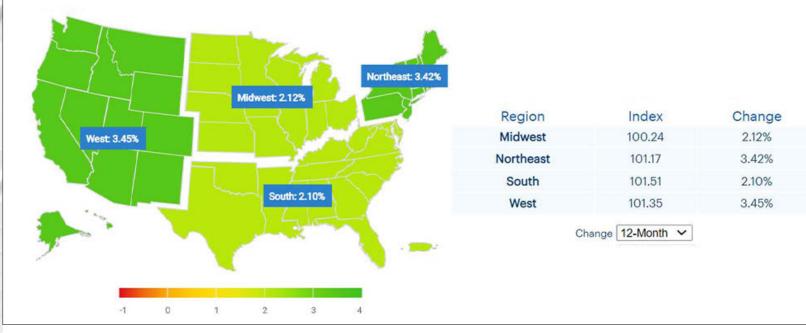
+2.85%

Source: Paychex | IHS Markit Small Business Employment Watch

<sup>12-Month Growth</sup> +4.85% (+\$1.39)

### The Paychex | IHS Markit Regional Jobs Index

**Regional Performance** 



Source: Paychex | IHS Markit Small Business Employment Watch

### **U.S. Bank**

### **U.S. Bank Freight Payment Index**<sup>™</sup>

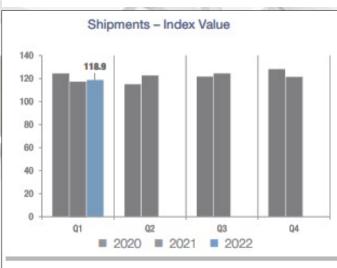
"As the national economy slowed during the first quarter of the year, the U.S. Bank National Shipments index dipped 2.2% versus the final quarter of 2021. Both the national economy, and the freight market, were affected by global issues including COVID-19 variant cases and spiking energy prices. The temporary closure of the Ambassador Bridge, a key trade route between the U.S. and Canada, had a significant ripple effect that impacted freight volumes in the first quarter, while consumer inflation also played a role as households spent more for necessities, reducing the total volumes of goods purchased.

Despite these recent challenges, the shipments index, which often slows during the first quarter due to seasonal patterns, remains at healthy levels with several economic forces keeping the demand for freight shipping high.

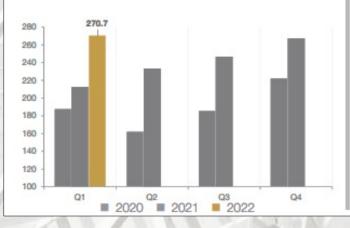
U.S. businesses added nearly 1.7 million workers to payrolls, according to the Department of Labor, factory output hit its highest level since 2008, according to the Federal Reserve, and retail sales were solid.

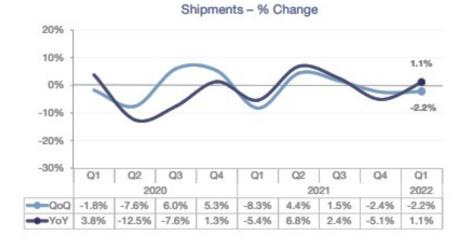
Even with the small decline in shipment volumes, the U.S. Bank National Spend index increased 1.2% versus the fourth quarter of 2021. Constrained capacity, due to an incredibly tight driver market and the difficulty for motor carriers to secure new and used trucks and trailers, contributed to the spending increase.

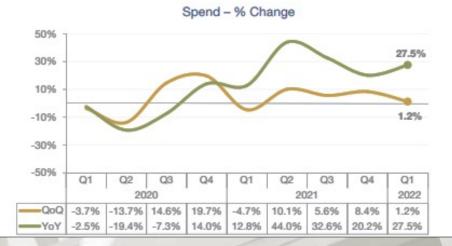
The major factor contributing to the increased spending in Q1; however, was the surge in fuel prices. According to the Energy Information Administration, diesel fuel rose to historic levels in March, and fuel surcharges, as a part of overall freight spend, also rose commensurately." – Bob Costello, Chief Economist and Senior Vice President, International Trade Policy and Cross-Border Operations, American Trucking Associations (ATA)











Source: https://freight.usbank.com/download/USB\_FreightIndex\_2022\_Q1\_Final.pdf; 4/20/22

## **Private Indicators** U.S. Bank

#### U.S. Bank Freight Payment Index™

#### National Shipments and Spending – Quarter over Quarter, Year over Year

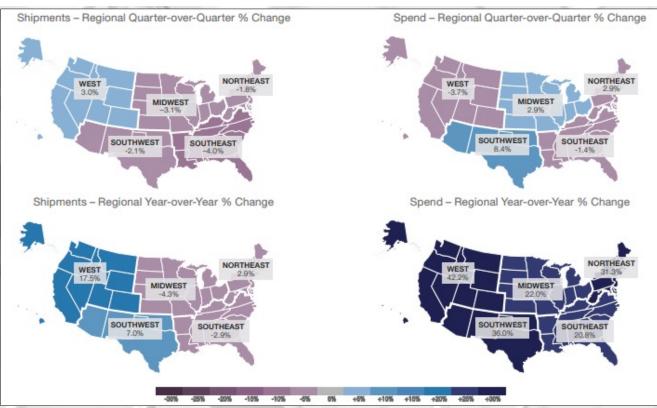
"Typically, the Q1 shipments index will contract from the final quarter of the previous year, primarily due to softer post-holiday freight volumes in January and February. March tends to see increased volume for freight, but it's rarely strong enough to make up for the lower volumes of the first two months.

One trend to watch is the continued growth in the U.S. Bank National Spend index. During the first quarter, this metric rose 1.2% from the previous quarter, which was the fourth straight quarter-over-quarter gain, although the smallest increase over that period. Compared with a year earlier, spending was up 27.5%.

While capacity constraints from a continued driver shortage and a particularly tough equipment market pressured spending in the first quarter, much higher diesel fuel prices added to the pressure. The national average price of diesel fuel ended 2021 at \$3.62 per gallon, which was up roughly \$1 from a year earlier, according to data from the Energy Information Administration. Diesel then climbed rapidly to \$4.06 and spiked to \$5.25 per gallon before ending the quarter at \$5.19.

This is significant because diesel is often the second highest expense for a fleet and is passed on to shippers as fuel surcharges.

Quarter-over-quarter shipments fell in four of five regions during the first three months of 2022. Only the West region saw a gain in overall shipment volumes from the final quarter in 2021. The largest decline was in the Southeast region, which has experienced decreasing volumes for a few quarters. The Midwest is a major auto production region, but the Southeast region also has a significant amount and slowing auto manufacturing affected freight volumes there." – Bob Costello, Chief Economist and Senior Vice President, International Trade Policy and Cross-Border Operations, American Trucking Associations (ATA)



#### U.S. Bank

#### National Shipments and Spending – Quarter over Quarter, Year over Year

"Both car-producing regions felt the impact from the closing of the Ambassador Bridge between the U.S. and Canada. Freight was unable to cross this key trade route, and as a result, many auto and auto-related plants, already hurt by the lack of semiconductors, reduced shifts or even closed temporarily on both sides of the border.

Regional spending indexes were more mixed during the first quarter, with quarter-over-quarter decreases in the Southeast and West. However, all regions saw significant spending gains from a year earlier. ..." – Bob Costello, Chief Economist and Senior Vice President, International Trade Policy and Cross-Border Operations, American Trucking Associations (ATA)

US Deaths by Selected Age Groups				2021 vs. 2019		
	2019 2020		2021	Change	% Change	
TOTAL*	2,854,838	3,383,729	3,458,697	603,859	21.2%	
<1	20,921	19,582	19,724	-1,197	-5.7%	
1 to 4	3,676	3,529	3,773	97	2.6%	
5 to 14	5,497	5,623	5,955	458	8.3%	
15 to 24	29,771	35,816	38,234	8,463	28.4%	
25 to 34	59,178	73,486	82,039	22,861	38.6%	
35 to 44	82,986	104,490	124,577	41,591	50.1%	
45 to 54	160,393	191,142	215,531	55,138	34.4%	
55 to 64	374,937	440,549	477,107	102,170	27.2%	
65 to 74	555,559	674,507	723,125	167,566	30.2%	
75 to 84	688,027	822,084	828,617	140,590	20.4%	
85+	873,746	1,012,805	939,942	66,196	7.6%	
Unknown	147	116	73			

### **Calculated Risk**

#### Lawler: More on Demographics

"Calculated Risk (CR) Note: This is from housing economist Tom Lawler. He argues that demographics are not as favorable for housing as many have argued (including myself). He also says that we shouldn't use the 2017 Vintage projections (too out of data, and too wrong).

#### **Deaths:**

The CDC recently released provisional US death data for 2021 by age group. The table shows deaths by age for the past three years. The data speak for themselves.

A 50% increase in deaths for the 35 to 44 age group. And almost 39% increase in deaths for the 25 to 34 age group.

CR Note: The data may "speak for themselves", but look at the percentage increase in deaths for the prime age population." – Bill McBride, Author, Calculated Risk

Census Vintage 2021 Estimates of the US Resident Population								
	7/1/2020 7/1/2021 Chan							
Total	331,501,080	331,893,745	392,665					
0-14	61,301,070	60,566,670	-734,400					
15-24	42,998,959	43,088,663	89,704					
25-34	45,682,850	45,495,105	-187,745					
35-44	42,903,410	43,403,854	500,444					
45-54	41,100,291	40,688,436	-411,855					
55-64	43,076,204	42,803,064	-273,140					
65-74	32,596,995	33,666,122	1,069,127					
75-84	15,821,149	16,206,075	384,926					
85+	6,020,152	5,975,756	-44,396					

### **Calculated Risk**

#### Census Vintage 2021 Population Estimates by Age

"Census recently released it "Vintage 2021" estimates of the US resident population by single year of age for April 1, 2020 (Decennial Census results), July 1, 2020, and July 1, 2021. The table shows the estimates for selected age groups for July 1 of the past two years.

The population changes by age from July 2020 to July 2021 would, if there had been no pandemic, no plunge in mortgage rates, and no "ultra" accommodative monetary and fiscal policy, not have suggested "strong" housing demand over that period. Stated another way, if pre-pandemic headship rates by age were applied to the latest population estimates, one would have expected a very modest increase in total US households last year (for which, unfortunately, there are no timely data available, and Census has not yet released Census 2020 household data by age.)" – Bill McBride, Author, Calculated Risk

### **Calculated Risk**

#### **Census Vintage 2021 Population Estimates by Age**

"Census previously released 2021 total population estimates showing that the US population grew at the slowest pace in over a century late last year, with the reasons for the slow growth reflecting historically low births, historically high deaths, and historically low net international migration.

It should be noted that Census has not yet released updated estimates of the US resident population for 2011 through 2019 that would reflect the results of Census 2020. These estimates will probably be higher than the currently available estimates, as Census 2020 showed a population that was about 1.8 million higher than the Vintage 2020 estimate for 4/1/2020.

It should also be noted that Census has not updated its long-term population projections to reflect both recent trends in key demographic drivers and the Census 2020 results, and the last population projections were released in 2017. Over the last four years births were significantly lower, deaths were significantly higher, and net international migration was significantly lower than the assumptions in the "Census 2017" projections. As such, those projections are of little or no value, and should not be used for any purposes.

The Vintage 2021 estimate of the US resident population for July 1, 2021 was a whopping 3.1 million lower than the Census 2017 projection. While over half of this "miss" reflected massively lower than projected births, there were also significantly higher than projected deaths (even before Covid) and significantly lower net international migration. (I can't do a full reconciliation because the Census 2017 starting point will almost certainly be higher than was assumed.)

Below is a table showing Census' Vintage 2021 estimates of the US resident population for July 1, 2021 compared to the Census 2017 projections by 5-year age groups." – Bill McBride, Author, Calculated Risk

US Resident Population, 7/1/2021						
Vintage 2021 2017	7 Projection Difference					
Total 331,893,745 3	334,998,398 -3,104,653					
0 to 4 18,827,338	20,601,023 -1,773,685					
5 to 9 20,291,548	20,194,669 96,879					
10 to 14 21,447,784	20,714,911 732,873					
15 to 19 21,564,666	21,050,427 514,239					
20 to 24 21,523,997	21,954,440 -430,443					
25 to 29 22,392,477	23,225,812 -833,335					
30 to 34 23,102,628	23,490,578 -387,950					
35 to 39 22,299,318	22,108,047 191,271					
40 to 44 21,104,536	20,898,390 206,146					
45 to 49 19,781,510	19,663,264 118,246					
50 to 54 20,906,926	20,660,758 246,168					
55 to 59 21,567,314	21,347,483 219,831					
60 to 64 21,235,750	21,246,174 -10,424					
65 to 69 18,394,320	18,477,006 -82,686					
70 to 74 15,271,802	15,476,044 -204,242					
75 to 79 9,904,769	10,354,532 -449,763					
80 to 84 6,301,306	6,725,990 -424,684					
85+ 5,975,756	6,808,850 -833,094					

#### **Calculated Risk**

#### **Census Vintage 2021 Population Estimates by Age**

"The age distribution of the adult population in the latest population estimates is also substantially different from that projected in Census 2017 for July 1 of last year, as the table suggests, with substantially fewer 20 to 34 year olds, somewhat higher 35-59 year olds, and significantly fewer 65+ year olds." – Bill McBride, Author, Calculated Risk

Census 2017 Assumptions (7/1-7/1, thousands)						
	Births	Deaths	Net Int'l Migration			
2022	4,137	2,811	1,017			
2023	4,146	2,844	1,021			
2024	4,152	2,878	1,025			
2025	4,156	2,915	1,030			
2026	4,160	2,954	1,042			
2027	4,162	2,996	1,048			
2028	4,163	3,040	1,054			
2029	4,163	3,086	1,059			
2030	4,162	3,134	1,064			

### **Calculated Risk**

#### **Census Vintage 2021 Population Estimates by Age**

"The gap between updated population estimates and the latest, extremely outdated population estimates will almost certainly widen significantly over the rest of this decade. Above are the Census 2017 assumptions for births, deaths, and net international migration for 2022 through 2030.

Obviously these assumptions are way too optimistic, especially over the next several years.

All of this, of course, is just a long-winded way of say that it is totally inappropriate to use the Census 2017 population projections for any analysis whatsoever. Hopefully Census will release a new set of population projections sometime soon, so just trying to get a handle on likely deaths over the next few years is a daunting challenge.

CR Note: I used the 2017 projections recently since those are the only ones available, although I added a caution. Hopefully Census will release better projections soon (and all the 2020 data!)" – Bill McBride, Author, Calculated Risk

Source: https://www.calculatedriskblog.com/2022/04/lawler-more-on-demographics.html; 4/26/22

### The Federal Reserve Bank of New York

#### **Housing Market Survey**

#### Home Price Expectations Diverge in the Short- and Medium-Term; Sharp Increases in Rent Expected Over the Next Year

"Key findings from the 2022 Survey are:

#### **Home Prices/Rents**

- Average home price change expectations at the one-year horizon rose sharply relative to last year. The mean one-year ahead expected change in home prices was 7.0%, over a percentage point above last year's reading of 5.7%, and the highest level since the inception of the survey in 2014.
- Households' home price change expectations for the five-year horizon were unchanged from last year. Households expect prices to rise by 2.2% per year on average for the next five years. Combined with the expectation of a 7.0% increase over the next twelve months, this suggests that households expect a pronounced slowdown in price growth after next year.
- Rent change expectations were higher than home price expectations over both horizons. On average, households expect rent increases of 11.5% over the next 12 months, compared to 6.6% in February 2021. Over the next five years, households expect annual rent increases of 5.2%, up from 4.4% a year ago.
- Taken together, these numbers suggest a spike in rents in the near term, followed by more moderate growth in subsequent years." Mariah Measey, Corporate Communications Associate, The Federal Reserve Bank of New York

### The Federal Reserve Bank of New York

### **Housing Market Survey**

#### Home Price Expectations Diverge in the Short- and Medium-Term; Sharp Increases in Rent Expected Over the Next Year

"Key findings from the 2022 Survey are:

#### **Housing Outlook**

- While attitudes toward housing as a financial investment remained strongly positive, they weakened slightly from the previous year, as 71.0% of all respondents characterized that buying property in their zip code as a "very good" or "somewhat good" investment. This is slightly below the series high of 73.6% in February 2021. The share of respondents reporting that housing is a "bad" or "somewhat bad" investment rose to 9.9% from 6.5% a year ago.
- The average expected probability of buying a home if the household were to move within the next three years fell sharply to 60.7%, down from 68.5% in 2021. This decline marks the first reduction in this series since the survey's inception in 2014. The average expectation of buying a home if the household moves is at its lowest level since 2015.
- Renters reported a sharp decline in their probability of owning a home in the future, from 51.6% in 2021 to 43.3% this year. The current reading is a series low and is well below 50% for the first time since 2014.

#### **Mortgage Rates**

• On average, households perceive that mortgage rates were unchanged relative to pre-pandemic levels at 5.9%, but expect them to rise in the future. Households now expect mortgage rates to rise sharply in the coming years, to 6.7% a year from now and 8.2% in three years' time." – Mariah Measey, Corporate Communications Associate, The Federal Reserve Bank of New York

### The Federal Reserve Bank of St. Louis

Demographics, COVID-19 Leave Construction with Tight Labor Supply

#### **KEY TAKEAWAYS**

- As housing demand surges, the construction sector faces labor shortages; its aging native labor force never fully recovered from the impact of the global financial crisis.
- Immigrants had helped offset the decline in native labor, but this foreign-born labor force appears to have dropped with the onset of the pandemic.
- Unlike material supplies, the labor supply reflects longer-term demographic issues. And the industry may not be able to improve productivity with labor-saving technology.

"The surging U.S. housing market is one of the most significant economic trends of the last few years. The effects of rising housing demand have been intensified by supply-side constraints, like a tight labor market and materials shortages.

Yet the COVID-19 pandemic doesn't fully explain these supply shocks. The sector's labor issues have roots in long-term demographic trends and the 2007-09 global financial crisis. Rising demand, shortages of lumber and other materials, and policy shifts brought about by the pandemic have only placed additional stress on what was already a limited labor force." – Nathan Jefferson, Devin Werner, and Elisabeth Harding; The Federal Reserve Bank of St. Louis

### The Federal Reserve Bank of St. Louis

Demographics, COVID-19 Leave Construction with Tight Labor Supply

#### Slow Labor Supply Recovery after the Financial Crisis

"Before the global financial crisis, housing starts grew from 798,000 housing units in January 1991 to a high of 2.27 million in January 2006. As a result of the crisis, housing starts fell to a low of 478,000 in April 2009.

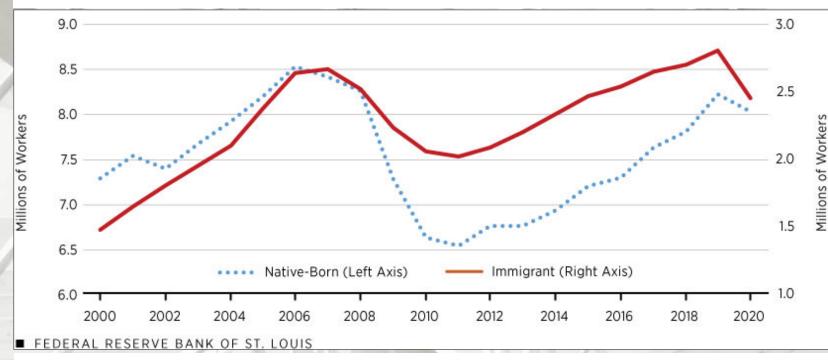
This drop started a decadelong downward shift in a wide spectrum of housing-related investment activity. As Charles Gascon documented in a 2019 article in the *Regional Economist*, residential investment fell from 6.7% of U.S. gross domestic product (GDP) at the peak of the housing bubble in late 2005 to 2.4% of U.S. GDP five years later. While it continued to increase throughout the 2010s, residential investment reached only 3.8% of GDP in the last full pre-pandemic year. From 1947 to 2007, only 1982 and 1991 – both years that experienced a recession – saw a lower level of residential investment as a share of GDP.

#### **Preexisting Labor Market Trends**

During the 2010s, sluggish real estate activity greatly affected the labor supply. Large numbers of American-born construction workers permanently left the labor force between 2006 and 2011. As the figure below shows, the number of employed native-born construction workers fell from a high of just over 8.5 million workers in 2006 to 6.5 million workers in 2011, and it took the remainder of the decade to rise to 8.2 million employed in 2019." – Nathan Jefferson, Devin Werner, and Elisabeth Harding; The Federal Reserve Bank of St. Louis

The Federal Reserve Bank of St. Louis

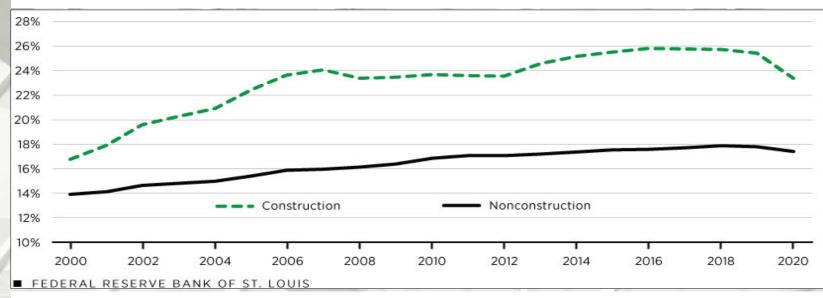
Demographics, COVID-19 Leave Construction with Tight Labor Supply



The dislocations were even more severe when considering the entire construction labor force (which encompasses both employed and unemployed workers). The number of native-born workers fell from a high of 9.3 million in 2006 to 7.6 million in 2013, only returning to 8.6 million by 2019. National Association of Home Builders economist Natalia Siniavskaia <u>attributes this to both demographic and macroeconomic trends</u>: The aging of the U.S. population has resulted in decreased labor force participation rates over time, and as younger populations tend to have higher rates of educational attainment, the share of native workers involved in construction occupations has fallen.<sup>1</sup>" – Nathan Jefferson, Devin Werner, and Elisabeth Harding; The Federal Reserve Bank of St. Louis

The Federal Reserve Bank of St. Louis

Demographics, COVID-19 Leave Construction with Tight Labor Supply



Meanwhile, the number of foreign-born workers in the construction industry continued to grow, despite a deep slump after the financial crisis. From 2000 to 2006, the number of immigrant workers employed in the sector grew from 1.5 million to 2.7 million. It fell to 2.0 million in 2011 but rose to above pre-crisis heights in 2018.

The next figure illustrates the significance of immigrants to the employed construction labor force; the proportion of such workers rose to 24.6% of the labor force in 2013 and remained above that level through 2019. However, the increasing share of foreign-born workers has not completely made up for the falling share of native-born workers in one key regard: Siniavskaia noted that foreign-born workers are less likely to work in highly skilled trades that require years of education, like electricians and inspectors. Such highly skilled trades, unsurprisingly, have experienced the most severe shortages within the sector." – Nathan Jefferson, Devin Werner, and Elisabeth Harding; The Federal Reserve Bank of St. Louis

### The Federal Reserve Bank of St. Louis Demographics, COVID-19 Leave Construction with Tight Labor Supply

#### **Pandemic Effects**

"In contrast to the slow recovery from the financial crisis, the policy response to the COVID-19 pandemic – such as relief payments and enhanced unemployment benefits – led to a rapid rebound in housing demand: Median sale prices are <u>up over 25%</u> since the first quarter of 2020, <u>housing inventories are</u> <u>down</u> and homes are selling <u>faster than usual for higher than initially listed</u>.

But the pandemic has exacerbated the construction sector's existing supply issues and has created new ones. The physical supply chain has found itself under newfound stress, as shipping delays and reduced production capacity have produced widespread materials shortages.<sup>2</sup> The pandemic's impact can be seen most clearly in the Bureau of Labor Statistics' producer price index, which reported sharp increases for final demand goods, less food and energy, in January 2022, with particularly high changes for construction machinery, appliances and electronic equipment.

The pandemic has also removed needed workers from the construction labor force. It is difficult to confidently estimate its effect because the pandemic also significantly disrupted data collection for the 2020 ACS, the survey we most rely on. Nonetheless, the available data (as well as anecdotal reports from business contacts) point to the pandemic continuing and exacerbating previously existing trends, with construction employment declining especially among immigrants. Indeed, all evidence points to a substantial decline in immigration to the U.S. in 2020 and 2021, with restrictions on international arrivals virtually stopping immigrant inflow.

As a result, the construction sector lost the immigrant population that helped to offset demographic aging and mass exits after the global financial crisis, just as housing activity started to surge to levels not seen since August 2006. Little wonder, then, that the construction labor market is so tight that firms have reported competitors visiting job sites to recruit high-skilled craftsmen.<sup>3</sup>" – Nathan Jefferson, Devin Werner, and Elisabeth Harding; The Federal Reserve Bank of St. Louis

### The Federal Reserve Bank of St. Louis Demographics, COVID-19 Leave Construction with Tight Labor Supply

#### **Looking Forward**

"There is no single, clean solution to the supply issues facing the construction industry. The optimistic case for the relief of material supply shortages is fairly straightforward: The end of pandemic disruptions should eliminate supply bottlenecks, allowing production and transportation of needed goods to return to normal levels. Yet this appears less likely than initially hoped for. Chinese exports have continued to see disruptions due to COVID-19 mitigation actions, and the conflict in Ukraine has introduced new uncertainty into global networks by raising global oil prices. Due to these issues, many firms do not expect meaningful alleviation until 2023 at the earliest.

The workforce supply issues, in contrast, reflect longer-term demographic issues. The technological solutions that have boosted productivity in other sectors may not be as available in construction, because the labor-intensive nature of the construction industry makes labor-saving tech more costly and difficult to implement. For example, while robotics has become more popular in food service and warehousing, it is still nascent technology in the construction sector and practical only at large scale. To this end, research on productivity growth in construction has found varying effects, with some aggregate evidence pointing to flat productivity, while <u>other analyses show positive growth</u>. Though policy changes can boost immigration and alleviate chronic shortages, the construction industry will still have to deal with the effects of an aging population and a shortage of skilled workers." – Nathan Jefferson, Devin Werner, and Elisabeth Harding; The Federal Reserve Bank of St. Louis

#### Endnotes

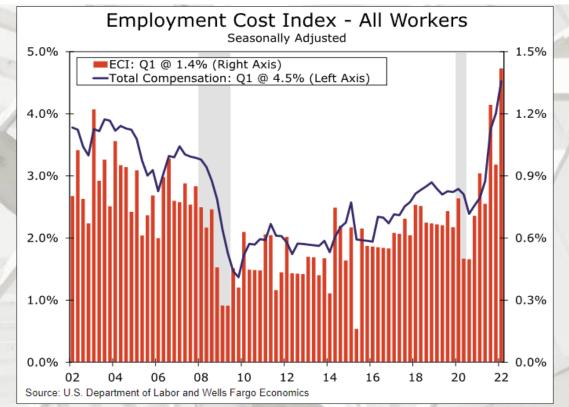
According to the fall 2021 Home Builders Institute's Construction Labor Market Report, the proportion of construction workers ages 55 and older rose to 20.3% in 2019, while the proportion from ages 25 to 54 (prime age) fell from 72.2% in 2015 to 69% in 2019.
A May 2021 National Association of Home Builders survey found that more than 90% of builders reported experiencing at least some shortages of appliances, framing lumber, plywood, and windows and doors.

3. See the January 2022 Beige Book.

Source: https://www.stlouisfed.org/publications/regional-economist/2022/apr/demographics-covid19-leave-construction-tight-labor-supply; 4/20/22 apr/demographics-covid19-leave-construction-tight-labor-supply; 4/20/22 apr/demographics-covid19-leave-covid19-leave-covid19-leave-covid19-leave-covid19-leave-covid19-leave-covid19-leave-covid19-leave-covid19-leave-covid19-leave-covid19-leave-c

### Wells Fargo Securities, LLC.

### **Race for Workers Shifts into Sixth Gear**



#### Summary

"In yet another sign the labor market continues to tighten rapidly, the Employment Cost Index rose a record 1.4% in Q1, vastly exceeding expectations. The pickup comes despite increasing availability of labor supply, signaling that cost pressures from the tight labor market will not be easily stomped out. The FOMC is likely to stay on an increasingly hawkish path as a result, given labor costs represent a more persistent threat to the inflation outlook." – Sarah House, Senior Economist and Karl Vesely, Economic Analyst; Wells Fargo Securities, LLC

Source: https://wellsfargo.bluematrix.com/links2/html/43e348eb-1575-4d13-a1db-212991f6d438; 4/29/22

### Wells Fargo Securities, LLC. Race for Workers Shifts into Sixth Gear

#### Wake Up Call For the Fed

"The battle for talent escalated in the first quarter, with the Employment Cost Index jumping 1.4% – the most in the series' 21-year history and above expectations for a 1.1% gain. The pickup comes despite the increasing availability of labor, signaling that inflationary pressures from the tight labor market will not be easily stomped out.

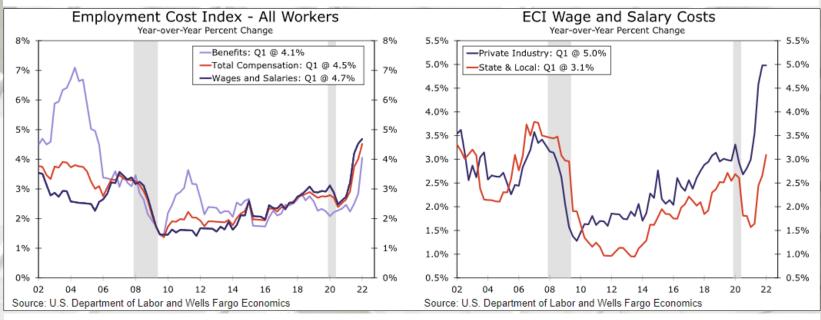
As a reminder, the ECI is the preferred measure of labor costs among Fed policymakers. Unlike the more timely average hourly earnings in the monthly nonfarm payroll report, the ECI controls for compositional shifts in the workforce, which have been unusually large over the past two years. It also includes benefits, which account for 31% of compensation, therefore giving a more complete picture of the costs employers are facing in today's competitive hiring environment. The surprisingly strong ECI print for Q3, released in October 2021, was the catalyst for the FOMC speeding up its tapering plans according to Chair Powell at the December FOMC meeting. The first quarter ECI print is likely to stir more unease among Fed officials and keep the FOMC on an increasingly hawkish path despite GDP growth contracting in the same quarter.

#### Strong Wage Growth, but Employers Stepping Up Benefits

Wages & salaries, the compensation observed most directly by workers, rose 1.2% over the quarter. That was softer than the 1.5% gain registered back in Q3, but marked a broad-based pickup from Q4. In other words, while employers are not raising wages at quite the frenzied pace of last summer, compensation pressures remain intense. Over the past year, wages and salaries rose 4.7% year-over-year for all civilian workers, headlined by an 8.9% gain in leisure & hospitality. As is typical, wage & salary growth in the public sector continued to trail behind the private sector on a quarterly basis, up 0.9% versus 1.3%, respectively." – Sarah House, Senior Economist and Karl Vesely, Economic Analyst; Wells Fargo Securities, LLC

### Wells Fargo Securities, LLC.

#### **Race for Workers Shifts into Sixth Gear**



"Employers are also sweetening the deal for workers by increasing benefits. Benefit costs jumped 1.8% in the first quarter, led by the largest quarterly increase for private benefits (1.9%) in 18 years. A detailed breakdown of how employers are stepping up benefits will not be available until the June 16 release of the Employer Costs for Employee Compensation (ECEC) report. However, the Q4 ECEC data showed employers are increasing spending on perks likely to resonate more immediately with workers, like paid leave and bonuses, faster than retirement, insurance and legally required benefits over the quarter. On a year-over-year basis, however, benefits growth increased 4.1%, continuing to trail wages & salaries growth." – Sarah House, Senior Economist and Karl Vesely, Economic Analyst; Wells Fargo Securities, LLC

### Wells Fargo Securities, LLC. Race for Workers Shifts into Sixth Gear

#### Some Sources of Inflation Are More Easily Influenced By Fed Policy Than Others

"Looking ahead, we expect to see slower growth in compensation costs on a sequential basis. The labor shortage no longer appears to be worsening. While the recent improvement in labor supply hasn't been enough to cool compensation growth yet, more tepid demand ahead is likely to cool future gains. The job openings rate has been little changed the past three months. Indeed's Hiring Lab shows postings have been declining since the start of the year, and small business hiring plans have rolled over since December.

But even a slower pace of compensation growth ahead may not be enough to alleviate the inflation pressures from the labor market given the elevated started point. At 4.5% year-over-year, compensation costs continue to run well above the levels consistent with the Fed's 2% inflation goal, even when factoring in productivity. While the Fed cannot produce key components that have limited the supply of goods and have contributed to soaring inflation, it can influence demand for labor. With compensation costs from an overheated labor market a more persistent source of inflation and more within the Fed's purview, today's report ups the chance for multiple 50 bps rate hikes at coming meetings, beginning with next week's FOMC meeting." – Sarah House, Senior Economist and Karl Vesely, Economic Analyst; Wells Fargo Securities, LLC

### **FreightWaves**<sup>©</sup>

#### Cass: 'The freight cycle has downshifted with a thud'

#### April shipments slide 3.5% from March, freight costs still at record level

"Freight markets cooled in April, according to <u>data provided by Cass Information Systems</u>. "The prospect of freight recession is now considerable," a Thursday report from the payments management provider read. Broad inflation, including higher diesel costs which impact the cost of everything shipped, interest rate hikes, and a transition in consumer buying habits to services from goods, drove the decline.

Freight shipments posted a modest dip in April, down 0.5% year-over-year, but a 3.5% decline from March (seasonally adjusted) is more likely to catch the eye of industry participants. The report cautioned that "more softness is on the horizon" as the comps get tougher in the coming months and supply chain bottlenecks ramp when China comes back online.

"After a nearly two-year cycle of surging freight volumes, the freight cycle has downshifted with a thud, ACT Research's Tim Denoyer commented. "It's possible the April data include some indirect impact from lockdowns in China, but with container ship backlogs still off North American ports, the direct effects on finished goods imports seem more likely in the June/July timeframe."

#### Freight costs not flinching, though

Cass' expenditures subindex inched higher from a March record, up 0.2% sequentially. However, the dataset's move was worse than normal seasonal patterns, down 2% seasonally adjusted. The decline in shipments weighed on the month-over-month change.

The sideways move in the month is little relief to shippers. Compared to a year ago, the expenditures index was 30.6% higher and 90% above the early days of the pandemic (April 2020). The index was up 38% last year and is forecast to climb 24% in 2022, assuming normal seasonal trends hold the rest of the year." – Todd Maiden, Finance Editor, FreightWaves

### **FreightWaves**<sup>©</sup>

### Cass: 'The freight cycle has downshifted with a thud'

April 2022	y/y	2-year	m/m	m/m (SA)
Shipments	-0.5%	27.0%	-2.6%	-3.5%
Expenditures	30.6%	89.6%	0.2%	-2.0%
TL Linehaul Index	14.1%	28.9%	2.3%	NM

Table: Cass Information Systems. SA (seasonally adjusted)

#### Freight costs not flinching, though

"Inferred rates (expenditures divided by shipments) stepped 31.3% higher year-over-year, up 1.5% seasonally adjusted from March. A fresh high was established in the dataset, but higher fuel surcharges are inflating the numbers.

The report highlighted the potential for "significant deceleration in the next six months."

"2022 has featured big improvement in driver availability and slowing of freight demand," Denoyer continued. "This is a deflationary combination, though it will take several months to filter from the spot market into contract rates." He noted risks to the call that capacity will loosen further include new COVID variants or a worsening in the chip shortage, which would further constrain Class 8 truck production.

In addition to higher fuel costs, excess miles and accessorial fees are propping up inferred rates. Freight that traditionally moves via intermodal has been forced onto a truck, given a bogged down rail complex. Incremental costs and extra miles associated with the modal shift are inflating the index.

Denoyer believes the true cost of moving freight is somewhere between the inferred rate dataset (+31%) and the truckload linehaul index, which was up 14.1% year-over-year. Up 2.3% from March, the linehaul index hit a new high in April."" – Todd Maiden, Finance Editor, FreightWaves

Source: https://www.freightwaves.com/news/cass-the-freight-cycle-has-downshifted-with-a-thud; 5/13/22

### **FreightWaves**<sup>©</sup>

#### Cass: 'The freight cycle has downshifted with a thud'

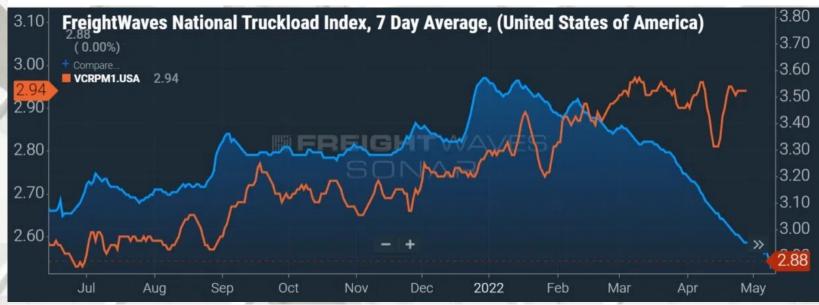


Chart: (SONAR: NTI.USA, VCRPM1.USA). The blue-shaded area is the National Truckload Index (NTI), which is based on an average of booked spot dry van loads from 250,000 lanes and 10,000 daily spot market transactions. The NTI is a seven-day moving average of spot rates including fuel. The orange line represents the seven-day per-mile average rate for dry van contract loads (reported on a 14-day lag). *To learn more about FreightWaves SONAR*, <u>click here</u>.

#### Freight costs not flinching, though

""Normal contract timing would suggest there's room for [the TL linehaul] index to continue to rise for a little longer after the peak in spot rates, but the clock is ticking," Denoyer said. "While this will be good news to some, including shippers and those anxious about broader inflation, it is a sign for fleets to batten the hatches. Far from stagflation, these dynamics strongly suggest freight rate deflation is on the horizon."" – Todd Maiden, Finance Editor, FreightWaves

### **U.S. Census Bureau NEW Business Formation Statistics**

#### **April 2022**



		1.000	1000	1000	1000	100
		US	Northeast	Midwest	South	West
Total	APR 2022	423,153	63,165	73,256	204,084	82,648
	APR 2022 / MAR 2022	+1.6%	-1.1%	+6.0%	+6.7%	-10.5%
High-Propensity	APR 2022	135,779	21,930	22,405	62,258	29,186
	APR 2022 / MAR 2022	+2.0%	-0.5%	+3.3%	+6.8%	-6.0%
With Planned Wages	APR 2022	47,171	6,619	8,896	21,295	10,361
	APR 2022 / MAR 2022	-1.1%	-1.9%	+5.0%	+3.1%	-12.4%
From Corporations	APR 2022	45,869	10,342	6,052	17,351	12,124
	APR 2022 / MAR 2022	+0.1%	-0.2%	+0.3%	+2.2%	-2.6%

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.

U.S. Census Bureau NEW Business Formation Statistics April 2022

#### **Business Applications**

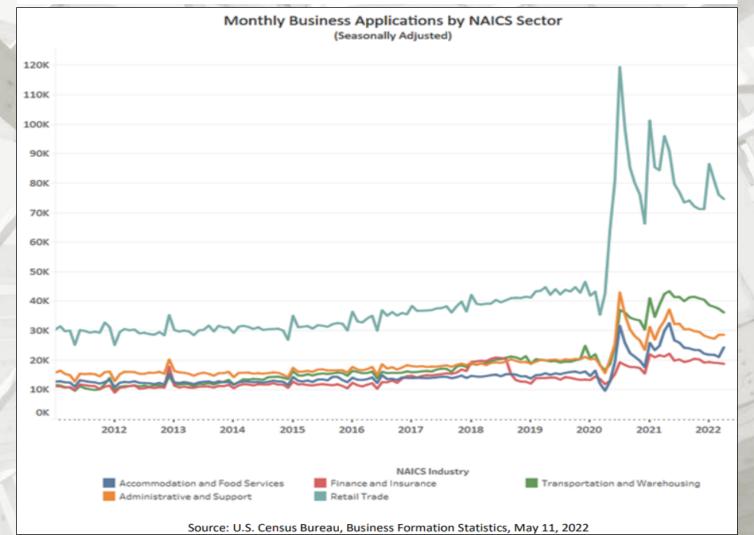
"Business Applications for April 2022, adjusted for seasonal variation, were 423,153, an increase of 1.6 percent compared to March 2022.

#### **Business Formations**

Projected Business Formations (within 4-quarters) for April 2022, adjusted for seasonal variation, were 29,849, an increase of 0.4 percent compared to March 2022. The projected business formations are forward looking, providing an estimate of the number of new business startups that will appear from the cohort of business applications in a given month. It does not provide an estimate of the total number of business startups that appeared within a specific month. In other words, the Census Bureau is projecting that 29,849 new business startups with payroll tax liabilities will form within 4-quarters of application from all the business applications filed during April 2022. The 0.4 percent increase indicates that for April 2022 there will be 0.4 percent more businesses projected to form within 4-quarters of application, compared to the analogous projections for March 2022." – Census Bureau, Economic Indicators Division, Business Formation Statistics

#### **NEW Business Formation Statistics**

#### April 2022



Source: https://www.census.gov/econ/bfs/pdf/bfs\_current.pdf/; 5/12/22

#### 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.