The Virginia Tech – U.S. Forest Service April 2020
Housing Commentary: Section II

Delton Alderman
Forest Products Marketing Unit
Forest Products Laboratory
U.S. Forest Service
Madison, WI
304.431.2734
dalderman@fs.fed.us

Urs Buehlmann
Department of Sustainable Biomaterials
College of Natural Resources & Environment
Virginia Tech
Blacksburg, VA
540.231.9759
buehlmann@gmail.com
The GDPNow model estimate for real GDP growth (seasonally adjusted annual rate) in the second quarter of 2020 is **-48.5 percent** on June 9, up from -53.8 percent on June 4. After last Friday’s employment release from the U.S. Bureau of Labor Statistics and this morning’s wholesale trade release from the U.S. Census Bureau, increases in the nowcasts of second-quarter real personal consumption expenditure growth and real gross private domestic investment growth were partly offset by decreases in the nowcasts of real government spending growth and real net exports.” – Pat Higgins, Economist, Federal Reserve Bank of Atlanta
We compute these topic-specific expectations indexes by averaging across firms’ expectations about their own sales growth rate over the next four quarters, employment growth rate over the next twelve months, and capital investment rates four quarters ahead. Each index captures both the direction and magnitude of how firms expect sales growth, employment growth, or investment to turn out in the future. Each index is standardized to have a mean of 100 from January 2015 to December 2018. A 10-point movement in an index represents a 1 standard deviation change.

Source: Atlanta Fed/Chicago Booth/Stanford Survey of Business Uncertainty
We compute these topic-specific uncertainty indexes by averaging across firms' uncertainty about their own sales growth rates over the next four quarters, employment growth rates over the next twelve months, and capital investment rates four quarters ahead. Higher levels of our uncertainty indexes occur when firms express uncertainty about where they expect sales growth, employment growth, or investment to go in the future. For example, our sales growth uncertainty index rises when the gap between firms' "lowest" and "highest" sales growth scenarios widens, or when they assign a higher probability to their "lowest" and "highest" case scenarios. The uncertainty index is standardized to have a mean of 100 from January 2015 to December 2019. A 10-point movement in an index represents a 1 standard deviation change in the series.

Source: Atlanta Fed/Chicago Booth/Stanford Survey of Business Uncertainty
The Business Expectations Index reflects firms' expectations about the growth of their own sales, employment, and capital expenditures over the next 12 months. The index can respond to news about the overall economy, changes in business sentiment, policy developments, stock market moves, interest rate changes, and changes in the outlook of firms in the sample.

The Business Uncertainty Index reflects firms' uncertainty about the growth of their own sales, employment, and capital expenditures over the next 12 months. It can respond to the same forces that move the Business Expectations Index.

The Business Uncertainty Index captures uncertainty about the outlook for sample firms, while the Business Expectations Index captures the expected direction and magnitude of change. Each index is standardized to have mean and variance of 100 during the period from January 2015 to December 2018.

Source: Atlanta Fed/Chicago Booth/Stanford Survey of Business Uncertainty

Index Suggests Midwest Growth Fell Substantially in April

“The Midwest Economy Index (MEI) fell to –7.98 in April from –1.04 in March. Contributions to the April MEI from all four broad sectors of nonfarm business activity and all five Seventh Federal Reserve District states decreased from March. The relative MEI moved down to –3.03 in April from +1.98 in March. Contributions to the April relative MEI from all four sectors and all five states decreased from March.

The manufacturing sector’s contribution to the MEI moved down to –0.90 in April from –0.31 in March. The pace of manufacturing activity decreased in all five states. Manufacturing’s contribution to the relative MEI edged down to –0.15 in April from –0.12 in March.

The construction and mining sector contributed –1.93 to the MEI in April, down from a neutral value in March. The pace of construction and mining activity was slower in all five states. Construction and mining’s contribution to the relative MEI moved down to –0.03 in April from +0.17 in March.

The service sector’s contribution to the MEI fell to –3.23 in April from –0.11 in March. The pace of service sector activity was down in all five states. The service sector’s contribution to the relative MEI decreased to –2.25 in April from +1.30 in March.

Consumer spending indicators contributed –1.93 to the MEI in April, down from –0.61 in March. Consumer spending indicators were, on balance, down in all five states. Consumer spending’s contribution to the relative MEI declined to –0.60 in April from +0.63 in March.” – Michael Adleman, Media Relations, The Federal Reserve Bank of Chicago
Index suggests economic growth fell substantially in April

“Led by declines in production- and employment-related indicators, the Chicago Fed National Activity Index (CFNAI) fell to –16.74 in April from –4.97 in March. All four broad categories of indicators used to construct the index made negative contributions in April, and all four categories decreased from March. The index’s three-month moving average, CFNAI-MA3, decreased to –7.22 in April from –1.69 in March. Following a period of economic expansion, an increasing likelihood of a recession has historically been associated with a CFNAI-MA3 value below –0.70.”

– Michael Adleman, Media Relations, The Federal Reserve Bank of Chicago
Index suggests economic growth fell substantially in April

“The CFNAI Diffusion Index, which is also a three-month moving average, moved down to –0.55 in April from –0.32 in March. Six of the 85 individual indicators made positive contributions to the CFNAI in April, while 79 made negative contributions. Sixteen indicators improved from March to April, while 69 indicators deteriorated. Of the indicators that improved, 12 made negative contributions.

Production-related indicators contributed –5.63 to the CFNAI in April, down from –2.31 in March. Industrial production declined 11.2 percent in April after decreasing 4.5 percent in March. The contribution of the sales, orders, and inventories category to the CFNAI decreased to –1.24 in April from –0.81 in March.

Employment-related indicators contributed –9.06 to the CFNAI in April, down from –1.06 in March. Nonfarm payrolls fell by 20,537,000 in April after decreasing by 881,000 in March, and the unemployment rate increased to 14.7 percent in April from 4.4 percent in the previous month. The contribution of the personal consumption and housing category to the CFNAI ticked down to –0.81 in April from –0.80 in March.

The CFNAI was constructed using data available as of May 21, 2020. At that time, April data for 51 of the 85 indicators had been published. For all missing data, estimates were used in constructing the index. The March monthly index value was revised to –4.97 from an initial estimate of –4.19, and the February monthly index value was revised to +0.05 from last month’s estimate of +0.06. …” – Michael Adleman, Media Relations, The Federal Reserve Bank of Chicago
Survey Suggests Growth Picked Up in May

“The Chicago Fed Survey of Business Conditions (CFSBC) Activity Index increased to −32 in May from −72 in April, suggesting that economic growth remained well below trend. The CFSBC Manufacturing Activity Index moved up to −21 in May from −95 in April, and the CFSBC Nonmanufacturing Activity Index increased to −37 in May from −61 in the previous month.

• Respondents’ outlooks for the U.S. economy for the next 12 months improved, turning optimistic on balance. A majority of respondents expected an increase in economic activity over the next three months, and 59 percent expected activity to return to where it was before the pandemic by the end of 2021.

• The pace of current hiring increased, as did respondents’ expectations for the pace of hiring over the next 12 months. But both hiring indexes remained negative.

• 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, as did the nonlabor cost pressures index. Yet both cost pressures indexes remained negative.” – Michael Adleman, Media Relations, The Federal Reserve Bank of Chicago
The Federal Reserve Bank of Chicago: Survey of Business Conditions 2/2

Activity Indexes: Overall and by Sector

Source: https://www.chicagofed.org/publications/cfsbc/index/; 6/10/20
Contraction Continues in Texas Manufacturing Sector,
Though Severity Eases

“Texas factory activity declined again in May, though at a slower pace than in April, according to business executives responding to the Texas Manufacturing Outlook Survey. The production index, a key measure of state manufacturing conditions, remained negative but improved from -55.6 to -28.0, suggesting the contraction in output has eased somewhat since last month.

Other measures of manufacturing activity pointed to a less-severe decline in May. The new orders index advanced 38 points to -30.6, its highest reading in three months, with more than 20 percent of manufacturers noting an increase in orders. Similarly, the growth rate of orders index pushed up more than 30 points to -30.8. The capacity utilization and shipments indexes also remained negative at -26.0 and -25.7, respectively, but were up from March and April.

Labor market measures indicated further employment declines and shorter workweeks this month. The employment index remained negative but rose from -22.0 to -11.5. Eight percent of firms noted net hiring, while 19 percent noted net layoffs. The hours worked index rose 18 points to -22.8, with the still-negative reading signaling reduced workweek length.

Prices and wages showed mixed movements in May. The raw materials prices index returned to positive territory after two negative readings, coming in at 2.5. The finished goods prices index, however, remained negative but moved up from -25.0 to -19.4. The wages and benefits index came in at zero — signaling no change in compensation costs this month — after dipping into negative territory in April for the first time since the Great Recession.

Perceptions of broader business conditions remained negative but were somewhat less pessimistic in May. The general business activity index moved up from -74.0 to -49.2. Similarly, the company outlook index moved up nearly 30 points to -34.6, though only 12 percent of manufacturers noted improved outlooks. The index measuring uncertainty regarding companies’ outlooks retreated notably to 28.3, though the positive reading still indicates increased uncertainty.” – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas
Contraction Continues in Texas Manufacturing Sector, Though Severity Eases

“Expectations regarding future business conditions were mixed in May. The index of future general business activity remained negative but rose 24 points to -19.0. Most indexes for future manufacturing activity returned to positive territory, rebounding notably in May.” – Emily Kerr, Business Economist, The Federal Reserve Bank of Dallas

Source: https://www.dallasfed.org/research/surveys; 5/26/20
The Federal Reserve Bank of Dallas 3/6

Texas Service Sector Outlook Survey
Texas Service Sector Activity Declines But at Slower Pace

“The freefall decline that characterized Texas service sector activity in March and April showed signs of abating in May, according to business executives responding to the Texas Service Sector Outlook Survey. The revenue index, a key measure of state service sector conditions, rebounded sharply from -65.3 in April to -28.1 in May. While nearly half of respondents continued to note declines in revenue compared with last month, the rising share of firms noting increased revenue — up about 13 percentage points to 21.4 percent in May — suggests a significant slowing in the rate of deterioration.

Labor market indicators reflected declines in employment and further shortening of workweeks but at a much-reduced rate compared with April. The employment index rose about 24 points to -10.4, indicating a continued net decline in jobs. The hours worked index surged over 33 points to -9.4, with just over a quarter of respondents now noting cuts in employee hours compared with over half of firms in April.

While perceptions of broader business conditions remained pessimistic in May, the scale of observed weakness abated significantly. The general business activity index regained over 42 points for a level of -41.7, while the company outlook index similarly surged about 40 points to -30.2. Meanwhile, the outlook uncertainty index declined, although at 26.2, it is still well above historical norms.

Wages continued to see declines, while price pressures were mixed in May. The wages and benefits index rose from -23.8 to -7.2, suggesting continued net declines in employee earnings, albeit at a slower pace. The selling prices index added 11 points but remained in negative territory at -19.7. Conversely, the input prices index returned to positive territory, rising over 10 points to 9.9 and suggesting net inflation in firms’ input costs.” – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

Texas Service Sector Activity Declines But at Slower Pace

“Respondents’ expectations regarding future business conditions were notably less pessimistic than in April. The future general business activity index increased over 23 points to a reading of -11.1, with nearly one-third of respondents expecting improvement six months from now compared with 43 percent expecting worsening conditions. The future company outlook index similarly improved 24 points to -5.9. Other indexes of future service sector activity, such as revenue and employment, rose back to positive territory for the first time since February and reflected expectations of improvement over the next six months.” – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

Texas Retail Decline Eases Notably

“The decline in state retail sales slowed considerably in May, according to business executives responding to the Texas Retail Outlook Survey. The sales index, a key measure of state retail activity, rebounded from -78.2 in April to -6.2 in May. While nearly 40 percent of respondents reported declining sales compared with April, over 30 percent reported increases — up sharply from last month’s 6.3 percent. Inventories continued to decline at a rapid pace, with the inventories index picking up four points but holding negative at -41.8.

Retail labor market indicators improved significantly, despite still suggesting a moderate contraction in May. The employment index added over 40 points to -7.2, with the share of retailers cutting jobs falling from over 50 percent in April to just 19 percent in May. The hours worked index rose over 48 points to -15.5, with over one-fifth of respondents increasing hours compared with 37 percent cutting hours.

Retailers’ perceptions of broader business conditions were significantly less pessimistic than April’s readings. The general business activity index surged 67 points to -17.9, while the company outlook index rebounded from an all-time low of -84.6 to -12.8. The outlook uncertainty index also fell sharply to 5.4, well below last year’s average of 13.5.

Retail wages continued to decline in May, while price pressures were mixed. The wages and benefits index increased over 13 points but remained deeply negative at -21.4. The selling prices index picked up from an all-time low of -38.5 in April to -9.1 in May, while input prices rose back into positive territory at 3.2.” – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas
Texas Retail Outlook Survey Sales Index

Index, seasonally adjusted

Texas Retail Decline Eases Notably

“Retailers’ perceptions of future conditions turned sharply optimistic in May after the extreme pessimism of April. The future general business activity index rose 47 points to 24.3, its best reading since January 2018. The future company outlook index rose 53 points to 29.9. Other indexes of future retail activity, such as sales and employment, turned positive and suggest an anticipation of healthier future activity relative to last month’s expectations.” – Amy Jordan, Assistant Economist, The Federal Reserve Bank of Dallas

U.S. Economic Indicators

The Federal Reserve Bank of Kansas City

Tenth District Manufacturing Activity Continued to Decline

Factory Activity Continued to Decline in May

“Tenth District manufacturing activity continued to decline, but not as sharply compared to last month’s record low (Chart 1). Expectations for future activity rose, but remained slightly negative. Month-over-month price indexes remained negative again in May. Moving forward, District firms expected prices for finished goods to decline and prices for raw materials to increase in the next six months.

The month-over-month composite index was -19 in May, up somewhat from the record low of -30 in April, and similar to -17 in March. The composite index is an average of the production, new orders, employment, supplier delivery time, and raw materials inventory indexes. The decrease in district manufacturing activity was driven by further drops at durable goods factories, especially primary metals, fabricated metals, and transportation plants. On the other hand, activity at non-durable goods plants remained more solid. All month-over-month indexes remained negative in May. Year-over-year factory indexes fell further in May, and the composite index declined from -30 to -35. The future composite index increased from April, but remained slightly negative at -2.”

– Chad Wilkerson, Vice President and Oklahoma City Branch Executive, Federal Reserve Bank of Kansas City

Source: https://www.kansascityfed.org; 5/28/20
Regional factory activity remained weak in May compared with a month ago and a year ago. Over 61% of firms reported losses in productivity as a result of the COVID-19 pandemic and 52% of survey contacts experienced ongoing supply chain disruptions.” – Chad Wilkerson, Vice President & Oklahoma City Branch Executive, Federal Reserve Bank of Kansas City
The Federal Reserve Bank of Kansas City

Tenth District Services Activity Decreased at a Slower Pace

*Tenth District services activity decreased at a slower pace in May after dropping very sharply in April, and expectations for future activity remained negative but improved somewhat.*

**Business activity Decreased at a Slower Pace in May**

“Tenth District services activity decreased at a slower pace in May after dropping very sharply in April, and expectations for future activity remained negative but improved somewhat (Chart 1). The input price index rebounded while the selling price index decreased again in May. Firms expected both input and selling prices to increase over the next six months.

The month-over-month services composite index was -21 in May, above the historic low of -58 in April and slightly below -16 in March. The composite index is a weighted average of the revenue/sales, employment, and inventory indexes. All month-over-month indexes continued to decrease in May except for the input price index. The monthly inventory index reached a new historic low, while most other indexes moderated slightly but remained in negative territory. The decline in the general revenue/sales index continued to be driven by the sharp decrease in travel, tourism, transportation, restaurants, and healthcare services (healthcare declines due to the decrease in elective procedures). Most year-over-year services indexes also remained negative in May, and the year-over-year composite index was little changed at -41. Expectations for future services activity continued to decrease slightly at -2, but improved somewhat from -28 in April.” – Chad Wilkerson, Vice President and Oklahoma City Branch Executive, The Federal Reserve Bank of Kansas City
Chart 1

U.S. Economic Indicators 7/17

Composite Index vs. a Month Ago


Composite Index

20-May
Composite Index: -21

Source: https://www.kansascityfed.org; 5/29/20
Empire State Manufacturing Survey
Activity Continues To Plummet

“Business activity continued to deteriorate significantly in New York State, according to firms responding to the May 2020 Empire State Manufacturing Survey. The headline general business conditions index climbed thirty points, but remained well below zero at -48.5. New orders and shipments continued to decline sharply, though not as steeply as in April. Delivery times were slightly shorter, and inventories were slightly lower. After plunging last month, employment levels and the average workweek fell further in May. Input prices were slightly higher, and selling prices continued to decline modestly. While current conditions remained extremely weak, firms grew more optimistic that conditions would be better six months from now.

Manufacturing firms in New York State reported that business activity continued to decline sharply in May. While the general business conditions index climbed thirty points from the record low set last month, it came in at -48.5, its second worst reading in the survey’s history. Fifteen percent reported that conditions were better in May than they were in April, while 63 percent reported that conditions had worsened. The new orders and shipments indexes also increased, but remained well below zero at -42.4 and -39.0, respectively, pointing to another month of significant declines in orders and shipments. Delivery times were slightly shorter than last month, and inventories were slightly lower.” – Richard Deitz and Jason Bram, The Federal Reserve Bank of New York

Source: https://www.newyorkfed.org/survey/empire/empiresurvey_overview; 5/15/20
Empire State Manufacturing Survey

Employment Declines Moderate After Hefty April Drop

“After plunging last month, the index for number of employees increased nearly 50 points to -6.1, suggesting that after declining sharply last month, employment levels fell somewhat further in May. The average workweek index also increased, but at -21.6, the index pointed to ongoing declines in hours worked. Price indexes were little changed from last month. At 4.1, the prices paid index indicated modest selling price increases, while the prices received index was -7.4, pointing to a second consecutive monthly decline in selling prices.

Conditions Expected To Improve

On the whole, firms expected business conditions to be better in six months. The index for future business conditions rose 22 points to 29.1. The indexes for future new orders and future shipments also posted significant increases. Indexes for future employment and the average workweek remained modestly positive. The capital expenditures and technology spending indexes both remained below zero, a sign that firms planned to reduce both kinds of spending.” – Richard Deitz and Jason Bram, The Federal Reserve Bank of New York

Source: https://www.newyorkfed.org/survey/empire/empiresurvey_overview; 5/15/20
Business Conditions Continue To Deteriorate

“Activity in the region’s service sector continued to decline sharply, according to firms responding to the Federal Reserve Bank of New York’s May 2020 Business Leaders Survey. At -75.8, the survey’s headline business activity index was little changed from last month’s record low. The business climate index was also little changed, at -92.9, indicating that for a second consecutive month, firms were nearly universal in regarding the business climate as worse than normal. Employment levels and wages continued to decline. Input price increases remained modest, while selling prices continued to fall. Capital spending declined significantly. Looking ahead, firms were generally pessimistic about the six-month outlook, though much less so than in April.

Employment Levels fall further

After tumbling 44 points last month, the employment index declined another fifteen points to -53.5, pointing to further employment cuts in May. The wages index remained below zero, sinking to -18.9, a sign that wages fell at a faster pace. The prices paid index edged up to 13.3, suggesting that while input price increases were somewhat steeper than last month, such increases remained modest. The prices received index fell seven points to -19.8, signaling an ongoing significant decline in selling prices. The capital spending index fell fifteen points to -47.7, suggesting a steep decline in capital spending.” – Jason Bram and Richard Deitz, The Federal Reserve Bank of New York
Firms Less Pessimistic Than Last Month

“Firms were less pessimistic about the six-month outlook than they were last month. The indexes for future business activity and future business climate both climbed substantially, but remained somewhat below zero. The indexes for future employment and future wages rose just above zero, suggesting that firms expect employment levels and wages to be slightly higher in six months. Selling prices and capital spending are expected to continue to decline in the months ahead.” – Jason Bram and Richard Deitz, The Federal Reserve Bank of New York

Source: https://www.newyorkfed.org/survey/business_leaders/bls_overview; 5/15/20
June 12, 2020: Highlights

- News from this week’s data releases decreased the nowcast for 2020:Q2 by 0.4 percentage point and decreased the nowcast for 2020:Q3 by 0.5 percentage point.
- A surprise from job openings data accounted for most of the decline in both quarters.” – The Federal Reserve Bank of New York

Source: https://www.newyorkfed.org/research/policy/nowcast; 6/12/20
Manufacturing firms reported continued weakness in regional manufacturing activity this month, according to results from the Manufacturing Business Outlook Survey. Despite remaining well below zero, the survey’s current indicators for general activity, new orders, shipments, and employment rose this month after reaching long-term low readings in April. The firms expect the current slump in manufacturing activity to last less than six months, as the broadest indicator of future activity strengthened further from last month’s reading; furthermore, the firms continue to expect overall growth in new orders, shipments, and employment over the next six months.

**Current Indicators Remain Negative but Climb from Long-Term Lows**

After reaching a 40-year low in April, the diffusion index for current general activity rose 13 points to -43.1, its third consecutive negative reading (see Chart). The percentage of firms reporting decreases this month (58 percent) far exceeded the percentage reporting increases (15 percent). The index for new orders rose 45 points out of an all-time low for the series last month, from -70.9 to -25.7. Over 25 percent of the firms reported an increase in new orders, up from none in April, while 51 percent reported decreases, down from 71 percent last month. The current shipments index increased 44 points out of an all-time low last month, from -74.1 to -30.3. Unfilled orders held steady at -13.7, while delivery times fell 11 points to -6.7, suggesting shorter delivery times.

The firms continued to report overall decreases in manufacturing employment this month, but the current employment index increased 31 points to -15.3. Nearly 9 percent of the firms reported higher employment, compared with none last month, while 24 percent reported decreases, down from 47 percent last month. The average workweek index increased 47 points to -7.1.” – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia
The Federal Reserve Bank of Philadelphia 1/7

Current and Future General Activity Indexes
January 2008 to May 2020

Diffusion Index

Future Activity

Current Activity

May 2020 49.7
May 2020 -43.1

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.

Firms Report Increases in Prices of Their Inputs

“The prices paid diffusion index increased 13 points to 3.2. The percentage of firms reporting increases in input prices (16 percent) was higher than the percentage reporting decreases (13 percent). The current prices received index rose 8 points to a reading of -3.1, its second consecutive negative reading.

Firms Expect Own Prices to Rise Slower Than Inflation

In this month’s special questions, the firms were asked to forecast the changes in the prices of their own products and for U.S. consumers over the next four quarters. Regarding their own prices, the firms’ median forecast was for an increase of 1.0 percent, lower than the 2.5 percent that was forecast when the same question was last asked in February. The firms’ actual price change over the past year was 0.0 percent, down from 2.0 percent in the prior quarter. The firms expect their employee compensation costs (wages plus benefits on a per employee basis) to rise 2.5 percent over the next four quarters, a decrease from 3.0 percent in the previous quarter. When asked about the rate of inflation for U.S. consumers over the next year, the firms’ median forecast was unchanged at 2.0 percent. The firms’ median forecast for the long-run (10-year average) inflation rate was 3.0 percent, an increase from 2.5 percent in the previous quarter.” – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

Most Future Indicators Remain Elevated

“Despite the current weakened conditions, the respondents remained optimistic about growth over the next six months. The diffusion index for future general activity rose 7 points to 49.7 (see Chart). Over 62 percent of the firms expect increases in activity over the next six months, while 13 percent expect declines. The future new orders index increased 18 points, while the future shipments index held steady this month. The future inventories index fell 15 points to a reading of -1.4. The firms’ expectations for employment over the next six months remained positive but fell 10 points this month: Nearly 35 percent of the firms expect higher employment, while 18 percent expect lower employment.

Summary

Responses to the May Manufacturing Business Outlook Survey suggest a continued weakening in manufacturing activity this month. The indicators for current activity, new orders, shipments, and employment increased from their long-term low readings in April but remained negative. The survey’s future indexes, however, remained elevated, suggesting that respondents expect growth in manufacturing activity to pick back up over a horizon of six months.” – Mike Trebing, Senior Economic Analyst, The Federal Reserve Bank of Philadelphia

May 2020 Nonmanufacturing Business Outlook Survey

Current Indicators Remain Negative

“Responses to the May Nonmanufacturing Business Outlook Survey suggest continued weakness in nonmanufacturing activity in the region. Despite remaining well below zero, the survey’s current indicators for general activity at the firm level, new orders, sales/revenues, and full-time employment all increased this month after reaching all-time low readings in April. The firms continued to report overall decreases in prices of both their inputs and their own goods and services for the second consecutive month. The survey’s index for firm-level future activity returned to positive territory and suggests optimism about growth over the next six months.

After reaching an all-time low in April, the indicator for firm-level general activity rose 41 points to -41.4, its third consecutive negative reading (see Chart). Although a smaller share of firms reported decreases this month compared with last month, the percentage of firms reporting decreases this month (57 percent) far exceeded the percentage reporting increases (16 percent). The new orders index remains negative but rose 35 points out of an all-time low for the series last month, from -67.2 to -32.4. Over 13 percent of the firms reported an increase in new orders, up from none in April, while 46 percent reported decreases, down from 68 percent last month. The sales/revenues index increased 37 points out of an all-time low last month, from -87.9 to -50.8. Over 11 percent of the firms reported an increase in sales/revenues, up from none in April, while 62 percent reported decreases, down from 88 percent last month. The index measuring firms’ perception of regional activity rose 28 points to -68.6.” – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia
Chart. Current and Future General Activity Indexes for Firms
March 2011 to May 2020

Diffusion Index

Current Activity

Future Activity

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.

May 2020 Nonmanufacturing Business Outlook Survey

Employment Indicators Suggest Continued Declines

“Responding firms continued to report overall decreases in both full- and part-time employment. The full-time employment index rose 24 points to -23.4 in May. The share of firms reporting decreases in full-time employment (31 percent) exceeded the share reporting increases (7 percent); the majority (59 percent) reported no change. The part-time employment index rose 22 points to -37.3, while the average workweek index increased 14 points to -36.9. The wages and benefits indicator rose 21 points to -14.9.

Firms Report Overall Price Decreases

The indexes for prices paid for inputs and prices received for the firms’ own products and services both remained in negative territory for the second consecutive month. The prices paid index fell 6 points to -6.2. Seventeen percent of the respondents reported decreases in input prices, while 11 percent reported increases. The prices received index edged up 4 points to -11.2 in May. Over 17 percent of the firms reported decreases in prices received, while 6 percent reported increases. A majority of the firms (53 percent) reported no change in their own prices.

Firms Regain Optimism About Their Own Future Growth

Readings from both future activity indexes increased from all-time lows last month. The diffusion index for future activity at the firm level rose 40 points to 15.4, its first positive reading since February (see Chart). Nearly 50 percent of the firms expect a rise in activity at their firms over the next six months, compared with 34 percent that expect a decline. The future regional activity index increased 36 points to -10.0 in May.” – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia

May 2020 Nonmanufacturing Business Outlook Survey

Firms Expect Own Prices to Rise Slower Than Inflation

“In this month’s special questions, the firms were asked to forecast the changes in the prices of their own products and services and for U.S. consumers over the next four quarters (see Special Questions). Regarding their own prices, the firms’ median forecast was for an increase of 1.0 percent, down from 2.0 percent when the question was last asked in February. Regarding the firms’ historical own price change over the previous year, the median response was 1.0 percent, up from the previous report of zero percent. When asked about the rate of inflation for U.S. consumers over the next year, the firms’ median forecast was unchanged at 2.0 percent. The firms expect their employee compensation costs (wages plus benefits per employee) to rise 2.0 percent over the next four quarters, lower than the 3.0 percent that was forecast when the same question was last asked in February. The firms’ forecast for the long-run (10-year) inflation rate remained at 3.0 percent.

Summary

Responses to this month’s Nonmanufacturing Business Outlook Survey suggest continued weakness in regional nonmanufacturing activity. The indicators for firm-level general activity, new orders, sales/revenues, and full-time employment increased from their all-time low readings in April but remained negative. However, respondents expect growth at the firm level over the next six months.” – Elif Sen, Research Department, The Federal Reserve Bank of Philadelphia
The Federal Reserve Bank of Philadelphia: GDPplus

GDPplus: An Alternative Measure of Real U.S. Output Growth

Last Updated: May 28, 2020

- 2020 Q1: -1.8%
- 2020 Q1: -5.2%
- 2019 Q4: -4.3%

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

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

Source: https://philadelphiafed.org/research-and-data/real-time-center/gdpplus/ 5/28/20
The Federal Reserve Bank of Richmond
Manufacturing Activity Remained Soft in May

“Fifth District manufacturing remained soft in May, according to the most recent survey from the Richmond Fed. The composite index rose from a record low of −53 in April to −27 in May, remaining at its lowest level since 2009. All three components — shipments, new orders and employment — were above their April readings but still in contractionary territory. The index for local business conditions was also negative, but contacts expected conditions to improve in the next six months.

Many survey participants reported decreases in employment and the average workweek in May. However, the indexes for wages and the availability of workers with the necessary skills were both close to 0. Respondents expected to see increases in both wages and available skills in the coming months.

On average, growth of prices paid by manufacturing firms slowed in May, while that of prices received accelerated. The average growth rate of prices received surpassed that of prices paid. Contacts expected the growth rates of both prices paid and prices received to increase in the near future.” – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond
U.S. Economic Indicators 10/17

Fifth District Survey of Manufacturing Activity
Diffusion Index, Seasonally Adjusted 3-MMA

Source: Federal Reserve Bank of Richmond
Service Sector Activity Was Weak in May

“Fifth District service sector activity was weak in May, according to the most recent survey by the Richmond Fed. The indexes for both revenues and demand were above their April readings but remained firmly negative at −48 and −40, respectively. Contacts also reported continued contraction in spending and deterioration in local business conditions. Survey respondents expected conditions and revenues to remain soft in the coming months.

Survey results suggested that most service sector firms reduced employment, wages, and the average workweek in May. However, firms reported that it was easier to find workers with the necessary skills. Participants expected employment to remain decline further but wages and the workweek to increase in the next six months.

The average growth rates of both prices paid and prices received by service sector contacts decreased in May, as growth of prices paid continued to outpace that of prices received. Firms expected price growth to slow further in the near future.” – Roisin McCord, Economic Analyst, The Federal Reserve Bank of Richmond
U.S. Economic Indicators 14/17

Fifth District Survey of Service Sector Activity
Diffusion Index, Seasonally Adjusted 3-MMA

Revenues
Demand
Employment
Wages
Local Business Conditions
Capital Expenditures

Source: Federal Reserve Bank of Richmond

Source: https://www.richmondfed.org/research/regional_economy/surveys_of_business_conditions/service_sector; 5/27/20
The economic effects of the COVID-19 pandemic have been massive. First quarter GDP contracted at a –5.0% annualized growth rate. April’s plummeting numbers for retail sales, industrial production, and housing starts suggest a much larger drop in GDP in the second quarter.

The onset of the pandemic disrupted financial markets in late February and March, both in the United States and abroad. Investors moved away from risky and illiquid assets, resulting in strains in many markets, including high-yield bonds, commercial paper, and investment-grade corporate bonds. Financing difficulties also affected the market for Treasury bonds, and interest rates fell dramatically in medium- and long-term Treasury markets. The reduction in demand for assets perceived to be risky was accompanied by a sharply increased demand for cash and other assets regarded as safe and liquid. Yields on overnight securities actually fell below zero on several occasions.

The Federal Reserve responded quickly and aggressively to these disruptions. Since early March, the Federal Open Market Committee (FOMC) has lowered the federal funds rate 150 basis points to its current level of between 0 and 0.25 percentage points. The Committee also gave guidance in its April 29 statement that it “expects to maintain this target range until it is confident that the economy has weathered recent events and is on track to achieve its maximum employment and price stability goals.” In addition, the FOMC statement announced that the Committee would continue to purchase Treasury securities and mortgage-backed securities “in the amounts needed to support smooth market functioning. …” – Mark Spiegel, Senior Policy Advisor, The Federal Reserve Bank of San Francisco
The relatively strong position of the U.S. banking system at the onset of the coronavirus pandemic should provide a source of strength to help weather the economic costs. Although the capital ratios of both systemic banks and the rest of the banking system as a group deteriorated somewhat during the first quarter of 2020, their positions were stronger than at the onset of the global financial crisis in the fourth quarter of 2008. This is partly attributable to regulatory measures introduced after the crisis. Their relatively stronger positions going into the crisis should mitigate the amplification of the pandemic shock through the financial sector, as compared to the financial distress during the global financial crisis.

The labor market has suffered a huge hit from business closures. Nonfarm payroll employment lost about 9 million jobs in March, and another 20 million in April. The unemployment rate has also increased, from 3.5% in February to 14.7% in April. Moreover, labor force participation fell from 63.4% in February to 60.2% in April, suggesting an increase in the number of workers who are effectively unemployed because they have become discouraged and stopped searching for employment.

Going forward, the pace of economic recovery will depend on the progression of the pandemic and, in particular, on the severity of a possible second wave of COVID-19. Given the substantive uncertainty concerning how the situation will develop, we offer two scenarios for the path of recovery.” – Mark Spiegel, Senior Policy Advisor, The Federal Reserve Bank of San Francisco
The Federal Reserve Bank of San Francisco

“The early recovery scenario assumes that most social distancing measures are phased out by the end of the year. The delayed recovery scenario assumes these measures will initially be phased out at the same speed as in the first scenario, but presumes that a second wave in infections will lead to the reinstatement of shelter-in-place restrictions later in the year. Both scenarios presume that a vaccine against the virus will become available by mid-2021.

Under the early recovery scenario, we expect the economy to rebound beginning in the third quarter of this year. Under the delayed recovery scenario, we expect positive, but lower, growth in the third quarter and negative output growth in the fourth quarter. As a result, U.S. output is much lower under the delayed recovery scenario in 2021, and the return of GDP output levels to trend is projected to take longer. Overall, we consider the economic risks associated with a second wave of the pandemic as tilted to the downside. We project the level of inflation to fall below the FOMC’s symmetric 2% policy target over the medium term in both scenarios.” – Mark Spiegel, Senior Policy Advisor, The Federal Reserve Bank of San Francisco
Sharp downturn in manufacturing conditions recorded in May

Canadian manufacturers signalled another sharp deterioration in overall business conditions during May, which survey respondents again almost exclusively attributed to the impact of the coronavirus disease 2019 (COVID-19) pandemic. Production volumes have now decreased for three months running. On each occasion the rate of contraction has been faster than at any other time since the start of the survey in October 2010. Manufacturers widely noted that output had been scaled back in response to a rapid drop in customer demand. Some firms also noted that adjustments to plant operations to ensure social distancing measures had restricted operating capacity. …

May data highlights that the Canadian manufacturing sector remains on a steep downward trajectory, despite the speed of decline moderating from April's survey record. A severe drop in demand from both domestic and export markets amid the COVID-19 pandemic resulted in sharp cutbacks to production volumes. While some survey respondents commented on a gradual reopening of manufacturing supply chains, business operations were still adversely impacted by longer lead times for critical inputs and low stocks among suppliers. At the same time, exchange rate depreciation against the US dollar also fed through to higher purchasing prices in May.

The latest survey pointed to widespread job cuts across the manufacturing sector. Around four times as many survey respondents reported a fall in employment as those indicating an increase in May, which was mostly attributed to concerns about the long-term impact of the COVID-19 pandemic on manufacturing workloads.” – Tim Moore, Economics Associate Director, IHS Markit

Source: https://www.markiteconomics.com/Public/Home/PressRelease/ffdafe535324be39868a3bd1c1ead99; 6/1/20
Caixin China General Manufacturing PMI™

Manufacturing output rises solidly as COVID-19 restrictions ease

“The headline seasonally adjusted Purchasing Managers’ Index™ (PMI™) – a composite indicator designed to provide a single-figure snapshot of operating conditions in the manufacturing economy – rose from 49.4 in April to 50.7 in May. The above 50.0 reading signalled a renewed improvement in overall operating conditions midway through the second quarter, albeit one that was only marginal. The easing of restrictions related to the coronavirus disease 2019 (COVID-19) pandemic led to a stronger rise in Chinese manufacturing output in May, with the rate of expansion the quickest for over nine years. However, demand conditions remained subdued, largely due to a notable fall in export orders. As a result, firms continued to trim their staff numbers and raised their buying activity only slightly. A lack of new work also led to the first reduction in backlogs of orders since February 2016. Encouragingly, supplier performance was broadly stable in May after travel restrictions and low supply levels hindered vendor performance in prior months.

The Caixin China General Manufacturing PMI rebounded to 50.7 in May after falling into contractionary territory the previous month, reaching its highest level since January. Supply was generally stronger than demand in the manufacturing sector, as production continued its expansion amid a broader economic rebound while demand had yet to recover. …” – Dr. Zhengsheng Zhong, Director of Macroeconomic Analysis, CEBM Group
Private Indicators: Global 3/9

Caixin China General Manufacturing PMI
sa, >50 = improvement since previous month

Source: Caixin, IHS Markit

Source: https://www.markiteconomics.com/Public/Home/PressRelease/976d7a2e5fa84d70be58464da10f7ff9; 6/1/20
Eurozone manufacturing sector continues to contract sharply

Latest data indicated that all market groups continued to record notable deteriorations in operating conditions, led by investment goods producers. There was a general improvement in PMI readings across the region in May, although all countries continued to experience further deteriorations in operating conditions. …

The manufacturing downturn looks to have bottomed-out in April, with production falling at a markedly slower rate in May. The improvement in part merely reflects the comparison against a shockingly steep fall in April, but more encouragingly was also linked to companies restarting work as virus lockdowns were eased. The further lifting of COVID-19 restrictions in coming months should provide a further boost to manufacturers. While we are still set to see unprecedented falls in industrial production and GDP in the second quarter, the survey brings hope that the goods producing sector may at least see some stabilisation – and even potentially a return to growth – in the third quarter.

Whether growth can achieve any serious momentum remains highly uncertain, however, as demand – both domestically and in export markets – looks set to remain subdued by social distancing measures, high unemployment and falling corporate profits for some time to come. Headcounts continue to be cut at a rate not seen since the height of the global financial crisis in 2009 as firms scale-back capacity in line with weak demand. Prices charged for goods are meanwhile also still falling at a pace not exceeded over the past decade as manufacturers offer discounts to help clear warehouses of unsold stock. The labour market and profits could therefore deteriorate further in coming months, holding any recovery in check.” – Chris Williamson, Chief Business Economist, Markit®
Eurozone PMI rises in May but still signals severe contraction

Nonetheless, by remaining well below the 50.0 no change mark, the index was again consistent with sharply falling activity across the region as restrictions related to the coronavirus disease 2019 (COVID-19) pandemic continued to have a severe impact on economic performance. …

The scale and breadth of the eurozone downturn was highlighted by the PMI data showing all countries enduring another month of sharply falling business activity. Eurozone GDP is consequently set to fall at an unprecedented rate in the second quarter, accompanied by the largest rise in unemployment seen in the history of the euro area. Encouragingly, while rates of decline of both business activity and employment remained shockingly steep for a third successive month in May, the downturn has already eased markedly in all countries surveyed. Optimism about the outlook has also returned in Italy and, to a lesser degree, France, while pessimism has moderated markedly in all other countries. Providing there is no resurgence of infection numbers, the planned lifting of lockdowns will inevitably help boost business activity and sentiment further in coming months.

However, the outlook is scarred by the prospect of demand remaining weak due to household spending being hit by high levels of unemployment and corporate spending being subdued as companies repair balance sheets. Consumer-facing services are likely to continue to take the hardest hit from those COVID-19 containment measures that may need to stay in place the longest, acting as a particular drag on the overall recovery. We therefore remain cautious with respect to the recovery. Our forecasters expect GDP to slump by almost 9% in 2020 and for a recovery to prepandemic levels of output to take several years.” – Chris Williamson, Chief Business Economist, Markit®

Source: https://www.markiteconomics.com/Public/Home/PressRelease/6577650d2ad8424ebbb2670f1d3541d7; 5/3/20
Manufacturing staff cuts deepen in May as downturns in output and new orders remain severe

Germany's manufacturing sector continued to be severely impacted by the coronavirus disease 2019 (COVID-19) pandemic in May, with the rates of decline in output and new orders remaining sharp following April's record falls. Notably, with firms operating well below full capacity and remaining pessimistic about the outlook for output, the rate of factory staff cuts accelerated to the quickest for 11 years. Amid reports of reduced productive capability and a sustained slump in demand, German manufacturers continued to report lower output in May. However, whilst remaining marked by historical standards, the rate of decline was discernibly slower than in April as more firms reported a pick-up in output. The same trend was seen in all three main industrial groupings covered by the survey – consumer, intermediate and investment goods. …

The PMI data for May show Germany's manufacturing sector still firmly in contraction territory. Though not as ugly as April's numbers, the latest data show that business continues to be severely disrupted by the COVID-19 crisis. Even though more factories have started to resume operations after the loosening of restrictions, weak underlying demand is still a limiting factor, as evidenced by the survey's measure of new orders rebounding far less than that of output in May. Manufacturing production was already down 7-8% from a peak in late-2017 even before the onset of the pandemic, and now that figure looks to be in the region of 25-30%. With production as far as it is below capacity and manufacturers not expecting a full recovery anytime soon, factory job losses have continued to accelerate, led by another round of staff cuts in the particularly ravaged investment goods sector.” – Phil Smith, Principal Economist, IHSMarkit®

Source: https://www.markiteconomics.com/Public/Home/PressRelease/efe3540af88f402baebad6cb8f366d72; 6/1/20
Marked downturn in global manufacturing continues in May, although rate of contraction eases since April

The global manufacturing downturn remained substantial during May, as the coronavirus disease 2019 (COVID-19) pandemic caused further disruption to industry and its supply chains. Although rates of contraction in output, new orders and employment all eased, they were still among the steepest registered during the 22-year survey history. Global manufacturing production fell for the fourth straight month in May. The downturn remained widespread, with substantial decreases across the consumer, intermediate and investment goods sub-industries. Of the 28 nations for which May data were available, all except China (where growth was the highest since January 2011) saw manufacturing output contract. That said, only two (Japan and Australia) saw their rates of decline accelerate over the month.

Despite easing since April, the rate of contraction in new order intakes was the second-fastest since the 2008/09 global financial crisis. The decline was more widespread by nation than for output, however, with all 28 nations seeing reductions. Disruption to international trade flows also remained. New export business decreased to the third greatest extent in the survey history, beaten only by the contractions in April 2020 (record drop) and December 2008. The ongoing marked downturn in global manufacturing activity led to sharp cutbacks in employment, purchasing and stock holdings during May. Supply chains also remained under severe stress, with average vendor lead times lengthening to one of the greatest extents in the survey history (albeit the weakest since February). …” – Olya Borichevska, Global Economic Research, J.P. Morgan

Source: https://www.markiteconomics.com/Public/Home/PressRelease/2d0ae6c49faf4739960eae3aa1d86668; 6/1/20
Global economic downturn eases from record rate, but conditions remain challenging due to COVID-19 pandemic

Although the headline index remains well below its stabilisation mark of 50.0, it nonetheless made giant strides towards it. The advances in the Composite Output Index (up 10.1 points), Manufacturing Output Index (rising by 6.7) and Services Business Activity Index (up 11.5) were all the largest month-on-month increases in the respective series histories. A similar picture was painted for each of the six subsectors covered by the survey, which all saw rates of output contraction ease from series records in the prior month. The steepest downturn was registered by the consumer services sector, whereas the least marked decline was at consumer goods producers.

Conditions in the services sector remained difficult, with the economic impact of the COVID-19 outbreak leading to further declines in new business, new export orders, backlogs of work and employment. That said, rates of contraction in each of these variables eased sharply from April's records. Businesses maintained a pessimistic outlook for the third straight month, although the degree of negativity also moderated. Downturns in business activity remained marked in the three sub-sectors covered by the survey, although rates of contraction eased over the month. The steepest decline was at consumer service providers and the slowest in financial services.” – Olya Borichevska, Global Economic Research, J.P. Morgan
Sharp downturn in UK manufacturing continues in May, but pace of contraction eases since April

The rapid downturn in the UK manufacturing sector continued during May, as the public lockdowns, company shutdowns and social distancing measures mandated to combat the spread of coronavirus disease 2019 (COVID19) caused further disruption. Output, new orders and employment contracted at some of the fastest rates during the 28-year survey history, albeit less sharply than the records set in April. 

Those who typically see the glass half empty will note that the UK manufacturing sector remained mired in its deepest downturn in recent memory. Output, new orders and employment fell sharply again in May as restrictions to combat the spread of COVID-19 caused further widespread disruptions to economic activity, demand and global supply chains. However, the glass-half-full perspective is one where the rate of contraction has eased considerably since April, meaning – absent a resurgence of infections – the worst of the production downturn may be behind us. Pressure on manufacturers should ease further as lockdown restrictions are loosened, customers return to work and global activity restarts.

However, changes to working practices, uncertainty about how long the COVID-19 restrictions may be in place for, weak demand and Brexit worries all suggest the UK is set for a drawn-out economic recovery. This will make the “new normal” one of the toughest recovery environments many manufacturers will ever have to face.” – Rob Dobson, Director, IHS Markit

Source: https://www.markiteconomics.com/Public/Home/PressRelease/a586ad660bc74f9ea79ee2c9fb824742; 6/1/20
ABC’s Construction Confidence Index

Nonresidential Construction Spending Falls in April

“National nonresidential construction spending decreased by 1.8% in April, according to an Associated Builders and Contractors analysis of data published today by the U.S. Census Bureau. On a seasonally adjusted annualized basis, spending totaled $801.8 billion for the month, a 0.9% increase from April 2019. Of the 16 subcategories, 13 were down on a monthly basis. Private nonresidential spending declined 1.3% in April, while public nonresidential construction spending was down 2.5% for the month.

Nonresidential construction has fared far better than most economic segments during the COVID-19 crisis, but the industry’s headline spending numbers fail to fully capture the damage inflicted on many key segments by the pandemic. For instance, spending in the lodging category was down more than 12% in April relative to a year ago and down 11% in the amusement and recreation category. Spending is also down meaningfully in a number of categories that are public-sector intensive, including education and highway/street.

In much of the nation, construction was deemed an essential industry, which helped to mitigate spending decreases. But in many places, including in New York, New Jersey, Boston, Pennsylvania and California, construction was deemed nonessential. That has rendered ongoing work and backlog — which stood at 7.8 months in April, according to ABC’s Construction Backlog Indicator — less of an effective shield against the early stages of the broader economic downturn than it is normally. The nonresidential construction spending data would have been far worse but for a massive increase in spending in the public safety category, which is up 35% year over year due to investments made to shore up capacity to deal with COVID-19,” said ABC Chief Economist Anirban Basu.” – Rachel O’Grady, Media Relations Director, ABC

As the nation slowly reopens, nonresidential contractors will face many challenges,” said Basu. State and local government finances have been compromised, jeopardizing infrastructure spending going forward. Many office suites and storefronts have been vacated, which will suppress demand for new construction going forward. Capital will also be scarcer, resulting in greater difficulty securing financing for projects. Moreover, if the past is prologue, many dislocated construction workers will find jobs in other industries, given construction’s tendency to be among the last economic segments to fully recover.”” – Rachel O’Grady, Media Relations Director, ABC
Construction Employment Sees Record Rebound in May

“The construction industry added 464,000 net new jobs in May, according to an Associated Builders and Contractors analysis of data released today by the U.S. Bureau of Labor Statistics. May represented the largest monthly increase in construction jobs since the government began tracking employment in 1939, a drastic improvement from April, which recorded the industry’s largest month-over-month job loss.

While nonresidential construction employment lost more than 570,000 jobs on net in April, a total of 237,000 net new jobs were added in May with job gains in all three nonresidential subsegments. May 2020 nonresidential employment was 286,000 jobs lower compared to May 2019.

The construction unemployment rate fell to 12.7% in May, up 9.5 percentage points from the same time last year, but down 3.9 percentage points from April 2020. Unemployment across all industries fell to 13.3% in May, down from 14.7% in April.

“One way to look at this stunning jobs report is to suggest that economists missed the mark by approximately 10.5 million jobs,” said ABC Chief Economist Anirban Basu. “Economists polled by Dow Jones had forecasted a decline exceeding 8 million jobs. Instead, the economy added a bit more than 2.5 million jobs. It’s also possible that economists missed the mark by two to four weeks, as the economy opened up faster than most economists expected and consumers have been far more willing to engage the economy than many thought possible given the ongoing personal and public health risks presented by COVID-19.”” – Rachel O’Grady, Media Relations Director, ABC
“For contractors, this is purely good news,” said Basu. “With the economy beginning its recovery sooner and more dramatically than anticipated, fewer projects are likely to be postponed or canceled. Combined with rising contractor confidence, as indicated by ABC’s Construction Confidence Index, this will also help accelerate the recovery of state and local government finances as tax collections surge, ultimately resulting in more monies available to finance infrastructure. That said, state and local government finances remain in tough shape, with many local government workers losing jobs in May.

“Make no mistake – these remain treacherous times,” said Basu. “Though economic recovery may have begun, there is still the possibility of a resurgence in infections as stores, restaurants and other businesses reopen. Moreover, while unemployment dipped to 13.3% in May, it remains elevated. Labor force participation has been rocked in recent months, and it may be the case that many dislocated workers, including construction workers, will remain out of the labor force for an indefinite period. There is also a presidential election later this year, which will create further uncertainty for economic decision makers, including among those who purchase construction services.”” – Rachel O’Grady, Media Relations Director, ABC

## Associated Builders and Contractors 2/2

<table>
<thead>
<tr>
<th>Construction Employment Statistics: May 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Employment</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Construction</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Construction</td>
</tr>
<tr>
<td>Nonresidential</td>
</tr>
<tr>
<td>Nonresidential Building</td>
</tr>
<tr>
<td>Nonresidential Specialty Trade Contractors</td>
</tr>
<tr>
<td>Heavy &amp; Civil Engineering</td>
</tr>
<tr>
<td>Residential</td>
</tr>
<tr>
<td>Residential Building</td>
</tr>
<tr>
<td>Residential Specialty Trade Contractors</td>
</tr>
</tbody>
</table>

| **Average Hourly Earnings**                  |
|                                             |
| **All Private Industries**                   |
|     | $29.75 | $30.04 | $27.87 | -$0.29 | $1.88 | 6.7% |
| **Construction**                             |
|     | $31.46 | $31.37 | $30.70 | $0.09 | $0.76 | 2.5% |

| **Average Weekly Hours**                     |
|                                             |
| **All Private Industries**                   |
|     | 34.7 | 34.2 | 34.4 | 0.5 | 0.3 | 0.9% |
| **Construction**                             |
|     | 38.9 | 37.9 | 39.1 | 1.0 | -0.2 | -0.5% |

Source: Bureau of Labor Statistics

“Following last month’s precipitous decline, billings at architecture firms sank even lower in April, as the COVID-19 pandemic continued to have a severe impact on firm business. The ABI score declined to 29.3, a new all-time low for the index (a score below 50 indicates decreasing billings), with more than half of responding firms reporting a further decline in their firm billings from March to April. Inquiries into new work also remained extremely low in April, although modestly fewer firms reported a decline in inquiries than in March. However, immediate prospects for new work remain bleak, as the value of new design contracts also remained extremely low.” – Katharine Keane, Senior Associate Editor, The American Institute of Architects

“With the dramatic deceleration that we have seen in the economy since mid-March, it’s not surprising that businesses and households are waiting for signs of stability before proceeding with new facilities. Once business activity resumes, demand for design services should pick up fairly quickly. Unfortunately, the precipitous drop in demand for design services will have lasting consequences for some firms.” – Kermit Baker, Chief Economist, The American Institute of Architects
Private Indicators
American Institute of Architects (AIA) 2/2

National
Architecture firm billings decline even further in April

Graphs represent data from April 2019–April 2020.

“Regionally, business conditions weakened even further at architecture firms in the Northeast in April, where many areas remained under construction stop orders for the entire month. Those restrictions are slowly being lifted, so firms in that region may see conditions that are not quite as weak in May. Firms located in the West continued to report somewhat less dramatic losses than firms in other regions in April, but overall, billings declined significantly across the country.” – Katharine Keane, Senior Associate Editor, The American Institute of Architects
Billings also weakened substantially at firms of all specializations in March, with firms with a commercial/industrial specialization reporting the largest decline, followed by firms with a multifamily residential specialization.” – Katharine Keane, Senior Associate Editor, The American Institute of Architects

**Source:** https://www.aia.org/pages/6296537-abi-april-2020-business-conditions-at-arch; 5/27/20
“Total construction starts declined 25% from March to April to a seasonally adjusted annual rate of $572.2 billion as COVID-19 and economic recession hit the construction sector. In April, nonresidential building starts fell 37% from March, while residential dropped 25%. The decline in nonbuilding construction starts was more tepid, falling just 5% due to strong activity in streets and bridges.

On a year-to-date basis through four months of 2020, total construction starts were 8% lower than the same period in 2019. Nonresidential building starts were off 14%, while nonbuilding starts were down 15%. Residential starts, meanwhile, were up 2% on a year-to-date basis. Looking at starts from a slightly different perspective, total construction starts were 1% higher in the 12 months ending in April 2020 than they were for the same period ending in April 2019. Residential building starts were 2% higher, while nonbuilding starts were up 5% for the 12 months ending in April 2020. Nonresidential building starts, however, were down 3%. The Dodge Index tumbled to 121 (2000=100) in April from the 161 posted in March. This is the lowest reading of the Dodge Index since May 2014.” – Nicole Sullivan, Public Relations & Social Media, AFFECT

“The April starts data is definitely sobering, but also very much expected. The near shuttering of the economy during April had a significant negative effect on the construction industry, leading to delays in both ongoing projects as well as those about to break ground. Even though parts of the country are beginning to reopen, and some areas that had paused construction are now restarting, it will be a very long road back to normalcy for the construction industry. Continued fear of a resurgence in the virus will lead to a continued reduction in economic activity over the coming months, affecting construction projects across the country. The economic and construction recoveries will remain sluggish until a vaccine or viable treatment becomes available.” – Richard Branch, Chief Economist, Dodge Data & Analytics
“Residential building” starts moved 25% lower in April to a seasonally adjusted annual rate of $245.4 billion. Over the month, single family starts dropped 21%, while multifamily starts lost 36%.

Through the first four months of 2020, residential construction starts were up 2% versus the same period of 2019. Single family starts were 8% higher, while multifamily starts were down 12% through four months. For the twelve months ending in April, total residential starts were 2% higher than a year earlier. Single family starts were up 4%, while multifamily building starts were down 2%.

Nonresidential building starts crashed 37% from March to April reaching a seasonally adjusted annual rate of $170.2 billion – the lowest monthly reading since early 2014. April’s decline was much sharper than any single month-to-month drop seen during the Great Recession. The severity of the decline was widespread. Commercial starts fell 47%, manufacturing starts dropped 56%, while institutional construction starts lost 26%. The largest nonresidential building project to start in April was the $950 million expansion of Portland International Airport. Also starting during the month were the $253 million Wildcreek High School/Procter Hug High School in Sparks NV and the $140 million Waddell & Reed headquarters tower in Kansas City MO.

As a result of the April data, nonresidential building starts were down 14% year-to-date. Commercial starts were down 18% year-to-date, while manufacturing starts were 34% lower and institutional starts dropped 6%. In the past twelve months, nonresidential building starts were down 3% from the previous twelve months. Commercial starts were down 1%, while institutional building starts were 3% lower, and manufacturing starts slid 5%.” – Richard Branch, Chief Economist, Dodge Data & Analytics
Private Indicators 3/23

**THE DODGE INDEX**
(2000=100, Seasonally Adjusted)

<table>
<thead>
<tr>
<th></th>
<th>April</th>
<th>March</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonresidential Building</td>
<td>121</td>
<td>161</td>
</tr>
</tbody>
</table>

**MONTHLY CONSTRUCTION STARTS**
(Millions of Dollars, Seasonally Adjusted Annual Rate)

<table>
<thead>
<tr>
<th></th>
<th>April 2020</th>
<th>March 2020</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonresidential Building</td>
<td>$170,190</td>
<td>$270,865</td>
<td>-37</td>
</tr>
<tr>
<td>Residential Building</td>
<td>245,431</td>
<td>326,548</td>
<td>-25</td>
</tr>
<tr>
<td>Nonbuilding Construction</td>
<td>156,804</td>
<td>164,738</td>
<td>-5</td>
</tr>
<tr>
<td>Total Construction</td>
<td>$572,225</td>
<td>$762,171</td>
<td>-25</td>
</tr>
</tbody>
</table>

**YEAR-TO-DATE CONSTRUCTION STARTS**
(Adjusted Totals, in Millions of Dollars)

<table>
<thead>
<tr>
<th></th>
<th>4 Mos. 2020</th>
<th>4 Mos. 2019</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonresidential Building</td>
<td>$74,709</td>
<td>$86,899</td>
<td>-14</td>
</tr>
<tr>
<td>Residential Building</td>
<td>103,173</td>
<td>100,887</td>
<td>2</td>
</tr>
<tr>
<td>Nonbuilding Construction</td>
<td>48,829</td>
<td>58,532</td>
<td>-15</td>
</tr>
<tr>
<td>Total Construction</td>
<td>$227,712</td>
<td>$246,418</td>
<td>-8</td>
</tr>
</tbody>
</table>

Source: Dodge Data & Analytics

Chicago Business Barometer™ – Tapered to 32.3 in May

Demand tumbled further into contraction in May after seeing the largest fall on record in April. New Orders dropped by 2.3 points to the lowest since July 1980. Similarly, Production ticked down 6.3% in May after falling sharply in the previous month. The index remained at a 40-year low as firms reported pandemic induced temporary shutdowns. Order Backlogs saw the biggest drop, down 28.0% to the lowest level since March 2009. This marks the ninth consecutive sub-50 reading. Inventories rose further in May, with firms noting a higher level than needed. The index gained 4.1 points to reach an eleven-month high.

Employment rebounded after April’s drop. However, anecdotal evidence was mixed with some firms stating they had to lay off staff or reduce salaries, while others were trying to find new hires. Supplier deliveries ticked down by 5.8% in May following a 46-year high in April. Prices paid at the factory gate increased to its highest level since March 2020. Companies noted higher prices for essential goods and transportation.

This month’s special question asked: “How long do you expect COVID-19 to impact your business plan(s)?” Opinions diverged, with the majority, at 27.1%, expecting Covid-19 to have an impact for 6-9 months, while 22.9% forecast 9-12months and 20.8% project 3-6 months. While 18.8% expect an impact on business plans for more than a year, only 10.4% see the impact last for less than 3 months.” – Les Commons, Senior Economist and Irene Prihoda, Economist, MNI Indicators

MNI Chicago

“The Chicago Business Barometer™, produced with MNI, fell to 32.3 in May, hitting the lowest level since March 1982, as business confidence cooled further amid the Covid-19 crisis. Among the main five indicators, Order Backlogs and Supplier Deliveries saw the largest declines, while Employment edged marginally higher.
Private Indicators 5/23

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

The Conference Board Leading Economic Index® (LEI) for the U.S. declined 4.4 percent in April to 98.8 (2016 = 100), following a 7.4 percent decline in March, and a 0.2 percent decline in February.

Widespread declines in leading indicators suggest no easy path to recovery

“In April, the US LEI continued on a downward trajectory, after posting the largest decline in its 60-year history in March. The erosion has been very widespread, except for stock prices and the interest rate spread which partially reflect the rapid and large response of the Federal Reserve to offset the pandemic’s impact and support financial conditions. The sharp declines in the LEI and CEI suggest that the US economy is now in recession territory.” – Ataman Ozyildirim, Senior Director of Economic Research, The Conference Board

The Conference Board Coincident Economic Index® (CEI) for the U.S. declined 8.9 percent in April to 96.6 (2016 = 100), following a 1.5 percent decline in March and a 0.3 percent increase in February.

The Conference Board Lagging Economic Index® (LAG) for the U.S. increased 4.1 percent in April to 115.3 (2016 = 100), following a 1.7 percent increase in March, and a 0.4 percent increase in February.

Source: https://www.conference-board.org/data/bcicountry.cfm; 5/21/20
Equipment Leasing and Finance Association:

Equipment Leasing and Finance Industry Confidence Improves in May, New Data Reveal COVID-19 Impact

“The Equipment Leasing & Finance Foundation (the Foundation) releases the May 2020 Monthly Confidence Index for the Equipment Finance Industry (MCI-EFI). Designed to collect leadership data, the index reports a qualitative assessment of both the prevailing business conditions and expectations for the future as reported by key executives from the $900 billion equipment finance sector. Overall, confidence in the equipment finance market improved with an index of 25.8, up from the historic low in April of 22.3.

The Foundation also releases highlights of its newly launched COVID-19 Impact Survey of the Equipment Finance Industry, a monthly survey of industry leaders designed to track the impact of the coronavirus pandemic on the equipment finance industry. From 101 survey responses collected from May 4-8, results show that 93% of equipment finance companies have offered payment deferrals. A large majority (88%) of companies have not furloughed or laid off employees. Comments from survey respondents follow MCI-EFI survey comments below, and additional survey results are available at https://www.leasefoundation.org/industry-resources/covid-impact-survey/.” – Anneliese DeDiemar, Author, Equipment Leasing & Finance Association

When asked about the outlook for the future…:

“While there is currently much uncertainty in the world, the U.S. equipment leasing and finance industry has a history of resiliency during times of crisis. We will get through this, and many companies will innovate and emerge stronger.” – Michael DiCecco, Alan Sikora, CLFP, CEO, First American Equipment Finance, an RBC / City National Company
Equipment Leasing and Finance Association:

Equipment Leasing and Finance Industry Confidence Improves in May, New Data Reveal COVID-19 Impact

“May 2020 Survey Results: The overall MCI-EFI is 25.8, an increase from 22.3 in April.

• When asked to assess their business conditions over the next four months, 3.3% of executives responding said they believe business conditions will improve over the next four months, down from 6.9% in April. 10% believe business conditions will remain the same over the next four months, an increase from none the previous month. 86.7% believe business conditions will worsen, a decrease from 93.1% in April.

• 6.7% of the survey respondents believe demand for leases and loans to fund capital expenditures (capex) will increase over the next four months, relatively unchanged from April. 6.7% believe demand will “remain the same” during the same four-month time period, an increase from 3.5% the previous month. 86.7% believe demand will decline, a decrease from 89.7% in April.

• None of the respondents expect more access to capital to fund equipment acquisitions over the next four months, unchanged from April. 73.3% of executives indicate they expect the “same” access to capital to fund business, an increase from 53.6% last month. 26.7% expect “less” access to capital, a decrease from 46.4% the previous month.

• When asked, 16.7% of the executives report they expect to hire more employees over the next four months, an increase from 6.9% in April. 60% expect no change in headcount over the next four months, a decrease from 69% last month. 23.3% expect to hire fewer employees, down from 24.1% the previous month.” – Anneliese DeDiemar, Author, Equipment Leasing & Finance Association
Equipment Leasing and Finance Association:

Equipment Leasing and Finance Industry Confidence Improves in May, New Data Reveal COVID-19 Impact

“May 2020 Survey Results: The overall MCI-EFI is 25.8, an increase from 22.3 in April.

• None of the leadership evaluate the current U.S. economy as “excellent,” unchanged from the previous month. 10% of the leadership evaluate the current U.S. economy as “fair,” up from none in April. 90% evaluate it as “poor,” down from 100% last month.

• 20% of the survey respondents believe that U.S. economic conditions will get “better” over the next six months, a decrease from 27.6% in April. 30% indicate they believe the U.S. economy will “stay the same” over the next six months, an increase from 6.9% last month. 50% believe economic conditions in the U.S. will worsen over the next six months, down from 65.5% the previous month.

• In May, 23.3% of respondents indicate they believe their company will increase spending on business development activities during the next six months, an increase from 17.2% last month. 33.3% believe there will be “no change” in business development spending, down from 48.3% in April. 43.3% believe there will be a decrease in spending, an increase from 34.5% last month.” – Anneliese DeDiemar, Author, Equipment Leasing & Finance Association
Equipment Leasing and Finance Association:

24-Month Monthly Confidence Index - Equipment Finance Industry (MCI-EFI)

Private Indicators 6/23

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

April New Business Volume Down 7 Percent Year-over-year and 8 Percent Month-to-Month; Up 10 Percent Year-to-date

“The Equipment Leasing and Finance Association’s (ELFA) Monthly Leasing and Finance Index (MLFI-25), which reports economic activity from 25 companies representing a cross section of the $900 billion equipment finance sector, showed their overall new business volume for April was $8.2 billion, down 7 percent year-over-year from new business volume in April 2019. Volume was down 8 percent month-to-month from $8.9 billion in March. Year-to-date, cumulative new business volume was up 10 percent compared to 2019.

Receivables over 30 days were 3.00 percent, up from 2.60 percent the previous month and up from 1.50 percent the same period in 2019. Charge-offs were 0.80 percent, up from 0.55 percent the previous month, and up from 0.32 percent in the year-earlier period.

Credit approvals totaled 71.7 percent, down from 74.2 percent in March. Total headcount for equipment finance companies was down 4.8 percent year-over-year.

Separately, the Equipment Leasing & Finance Foundation’s Monthly Confidence Index (MCI-EFI) in May increased to 25.8, up from the all-time low of 22.3 in April.” – Amy Vogt, Vice President, Communications and Marketing; Equipment Leasing & Finance Association

“Business performance shows deterioration from the effects of the coronavirus pandemic, with volume levels and portfolio quality metrics both falling in tandem. The expectation is that this pattern continues into the summer months as the nation’s economy dips into a recession. Time will only tell whether these conditions stabilize in the face of massive fiscal stimulus provided by the federal government.” – Ralph Petta, President and CEO, ELFA
Monthly Leasing and Finance Index: May 2020

“Not surprisingly, the April numbers reflect a continued softening of new business activity as well as an uptick in payment delinquency and charge-offs for our industry – and the U.S. economy as a whole. We are heading into an unprecedented economic environment impacting businesses of all types and sizes, and we can anticipate that trend will continue through much of 2020. As we move into the next phase as states reopen, it is critical that we be purposeful and flexible as we work with clients with an eye toward new learnings. We are a resilient industry, and will find unique ways to adapt to this new environment to best support our clients, our shareholders and our employees – whether it be internally through increased efficiencies as we go virtual, or recognizing and embracing emerging trends that might provide a glimpse at new key sectors or opportunities” – Thomas Rutherford, Division President, Crestmark Equipment Finance

May 2020 Manufacturing ISM® Report On Business®

PMI® at 43.1%

Production, New Orders, and Employment Contracting
Supplier Deliveries Slowing at Slower Rate; Backlog Contracting
Raw Materials Inventories Growing; Customers’ Inventories Too Low
Prices Decreasing; Exports and Imports Contracting

“Economic activity in the manufacturing sector contracted in May, and the overall economy returned to expansion after one month of contraction, say the nation's supply executives in the latest Manufacturing ISM® Report On Business®. The May PMI® registered 43.1 percent, up 1.6 percentage points from the April reading of 41.5 percent. This figure indicates expansion in the overall economy after April’s contraction, which ended a period of 131 consecutive months of growth.

The New Orders Index registered 31.8 percent, an increase of 4.7 percentage points from the April reading of 27.1 percent.
The Production Index registered 33.2 percent, up 5.7 percentage points compared to the April reading of 27.5 percent.
The Backlog of Orders Index registered 38.2 percent, an increase of 0.4 percentage point compared to the April reading of 37.8 percent.
The Employment Index registered 32.1 percent, an increase of 4.6 percentage points from the April reading of 27.5 percent.
The Supplier Deliveries Index registered 68 percent; though down 8 percentage points from the April figure of 76 percent, this high reading elevated the composite PMI®.” – Timothy R. Fiore, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee
May 2020 Manufacturing ISM® Report On Business®

“The Inventories Index registered 50.4 percent, 0.7 percentage point higher than the April reading of 49.7 percent.
The Prices Index registered 40.8 percent, up 5.5 percentage points compared to the April reading of 35.3 percent.
The New Export Orders Index registered 39.5 percent, an increase of 4.2 percentage points compared to the April reading of 35.3 percent.
The Imports Index registered 41.3 percent, a 1.4-percentage point decrease from the April reading of 42.7 percent.

“Three months into the manufacturing disruption caused by the coronavirus (COVID-19) pandemic, comments from the panel were cautious (two cautious comments for every one optimistic comment) regarding the near-term outlook. As was the case in April, the PMI® indicates a level of manufacturing-sector contraction not seen since April 2009; however, the trajectory improved.

**Demand** contracted heavily again, with the (1) New Orders contracting at a strong level, again pushed by New Export Orders contraction; both indexes contracted at slower rates, (2) Customers’ Inventories Index returning to a level considered a positive for future production, and (3) Backlog of Orders Index remaining in strong contraction territory, in spite of weak production during the period.

**Consumption** (measured by the Production and Employment indexes) contributed positively (a combined 10.3-percentage point increase) to the PMI® calculation, with many panelists classified as non-essential beginning to return to work in late May. **Inputs** – expressed as supplier deliveries, inventories and imports – strengthened again due to supplier delivery issues that were partially offset by continuing imports sluggishness. The delivery issues were the result of disruptions in domestic and global supply chains, driven primarily by supplier plant shutdowns. Inventory expanded due to issues with throughput and demand weakness. Inputs contributed negatively (a combined 7.3-percentage point decrease) to the PMI® calculation. (The Supplier Deliveries and Inventories indexes directly factor into the PMI®, the Imports Index does not.) Prices continued to contract (but at a slower rate in May), supporting a negative outlook.” – Timothy R. Fiore, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee
May 2020 Manufacturing ISM® Report On Business®

“The coronavirus pandemic impacted all manufacturing sectors for the third straight month. May appears to be a transition month, as many panelists and their suppliers returned to work late in the month. However, demand remains uncertain, likely impacting inventories, customer inventories, employment, imports and backlog of orders. Among the six biggest industry sectors, Food, Beverage & Tobacco Products remains the only industry in expansion. Transportation Equipment; Petroleum & Coal Products; and Fabricated Metal Products continue to contract at strong levels,” says Fiore.

Of the 18 manufacturing industries, the six that reported growth in May – in the following order – are: Nonmetallic Mineral Products; Furniture & Related Products; Apparel, Leather & Allied Products; Food, Beverage & Tobacco Products; Paper Products; and Wood Products. The 11 industries reporting contraction in May, in order, are: Printing & Related Support Activities; Primary Metals; Transportation Equipment; Petroleum & Coal Products; Fabricated Metal Products; Machinery; Miscellaneous Manufacturing; Electrical Equipment, Appliances & Components; Chemical Products; Computer & Electronic Products; and Plastics & Rubber Products.” – Timothy R. Fiore, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee
May 2020 Non-Manufacturing ISM® Report On Business®

NMI® at 45.4%

- Business Activity Index at 41.0%
- New Orders Index at 41.9%
- Employment Index at 31.8%
- Supplier Deliveries Index at 67.0%


The NMI® registered 45.4 percent, 3.6 percentage points higher than the April reading of 41.8 percent. This reading represents contraction in the non-manufacturing sector for the second consecutive month, following a 122-month period of expansion.

The Business Activity Index increased 15 percentage points from April’s figure, registering 41 percent.

The New Orders Index registered 41.9 percent; 9 percentage points higher than the reading of 32.9 percent in April.

The Employment Index increased to 31.8 percent; 1.8 percentage points higher than the April reading of 30 percent.” – Anthony Nieves, CPSM, C.P.M., A.P.P., CFPM, Chair of the Institute for Supply Management® (ISM®) Non-Manufacturing Business Survey Committee
May 2020 Non-Manufacturing ISM® Report On Business®

“The Supplier Deliveries Index registered at 67 percent, down 11.3 percentage points from April’s all-time-high reading of 78.3 percent, which elevated the composite NMI®. The Supplier Deliveries Index is one of four equally weighted subindexes that directly factor into the NMI®, along with Business Activity, New Orders and Employment. Supplier Deliveries is the only ISM® Report On Business® index that is inversed; a reading of above 50 percent indicates slower deliveries, which is typical as the economy improves and customer demand increases. The higher readings for supplier deliveries the past three months are primarily a product of supply problems related to the coronavirus (COVID-19) pandemic.

The Prices Index figure of 55.6 percent is 0.5 percentage point higher than the April reading of 55.1 percent, indicating that prices increased in May. According to the NMI®, four non-manufacturing industries reported growth. The non-manufacturing composite index indicated contraction for a second consecutive time. The sector’s previous period of contraction was for two months in 2009: November (with an NMI® of 49.5 percent) and December (49.7 percent). Respondents remain concerned about the ongoing impact of the coronavirus. Additionally, many of the respondents’ respective companies are hoping and/or planning for a resumption of business.

Industry Performance

The four non-manufacturing industries reporting growth in May are: Agriculture, Forestry, Fishing & Hunting; Finance & Insurance; Public Administration; and Information. The 14 industries reporting a decrease in May — listed in order — are: Mining; Arts, Entertainment & Recreation; Other Services; Construction; Educational Services; Professional, Scientific & Technical Services; Utilities; Wholesale Trade; Accommodation & Food Services; Management of Companies & Support Services; Real Estate, Rental & Leasing; Transportation & Warehousing; Health Care & Social Assistance; and Retail Trade.” – Anthony Nieves, CPSM, C.P.M., A.P.P., CFPM, Chair of the Institute for Supply Management® (ISM®) Non-Manufacturing Business Survey Committee
Markit U.S. Manufacturing PMI™

Ongoing COVID-19 impact drags output down further in May

“The seasonally adjusted IHS Markit final U.S. Manufacturing Purchasing Managers’ Index™ (PMI™) posted 39.8 in May, up from 36.1 at the start of the second quarter. Although slightly higher than April's recent low, the latest figure signalled the second-steepest deterioration in manufacturing operating conditions since April 2009.

May data signalled a slightly softer, but nonetheless severe, contraction in U.S. manufacturing output. The decrease in output was largely driven by a further weakening of client demand and lower new order inflows from both domestic and foreign customers amid the coronavirus disease 2019 (COVID19) outbreak. A marked decline in total sales and negative sentiment towards the outlook for output over the coming year drove employment down, as firms reduced workforce numbers substantially. At the same time, lower input buying and weaker overall demand conditions put pressure on suppliers to lower their prices. Consequently, input costs fell again, in turn helping manufacturers to cut their output charges at a record pace as firms sought to remain competitive.

The impact of ongoing emergency public health measures following the escalation of the COVID-19 outbreak led to a further severe decline in production across the U.S. goods producing sector in May. The fall in output was attributed to lower sales, temporary shutdowns and difficulties operating at full capacity amid new safety regulations. With the exception of April's recent nadir, the rate of contraction was the fastest since February 2009. Concurrently, new business fell for the third month running. The cancellation and postponement of orders weighed on inflows of new work, according to panel members, with some firms also highlighting a negative impact on client renewals. New export orders also fell at a marked pace in May, as ongoing global lockdowns reduced customer purchasing activity. The rate of decline in foreign sales was the second-fastest on record. …” – Chris Williamson, Chief Economist, Markit®
Manufacturing remained in a deep downturn in May, as measures taken to contain the spread of COVID-19 continued to cause production losses, disrupt supply chains and hit demand. Job losses meanwhile continued to run at one of the highest rates in over a decade, and pricing power has collapsed. With increasing numbers of companies restarting production, we should see some improvements in the output trend in coming months, and it was reassuring to see signs of the downturn already starting to ease in May, suggesting April was the eye of the storm as far as the production collapse is concerned. There remains a high risk that any recovery will be frustratingly slow as ongoing social distancing measures, high unemployment, job insecurity and damaged balance sheets constrain consumer and business spending. The recovery will of course also fade quickly if virus infections start to rise again. For now, however, we focus on the good news that we may be past the worst in terms of the economic decline.” – Chris Williamson, Chief Economist, Markit®
IHS Markit U.S. Services PMI™

Business activity slumps further amid COVID-19 pandemic, but speed of downturn eases

“The seasonally adjusted final IHS Markit US Services Business Activity Index registered 37.5 in May, up from April's record low of 26.7 and slightly higher than the ‘flash’ figure of 36.9. The rate of reduction in activity softened notably amid some reports of businesses returning to work, but was nonetheless the second-sharpest since data collection began in October 2009. The decrease in service sector output was widely linked to emergency public health measures introduced to stem the spread. Stay-at-home measures and social distancing presented challenges to business reopening, especially those who focus on customer-facing services.

U.S. service providers indicated a further significant, albeit softer, contraction in business activity in May, as the impact of the coronavirus disease 2019 (COVID-19) continued to dampen client demand. At the same time, new order inflows declined at a slower rate than in April, despite domestic and foreign demand remaining subdued. Consequently, companies cut jobs at a considerable pace, and one that was only slightly slower than April's recent record. The reduction in employment partially stemmed from pessimism among firms towards the outlook for activity over the next year, as extreme levels of business uncertainty weighed on confidence. In an effort to boost sales, firms reduced their selling prices further. The drop in output charges was aided by lower cost burdens.

The overall decline in output was also reportedly linked to weak client demand. A number of firms stated that new order inflows remained sluggish as some clients were yet to reopen following temporary shutdowns. With the exception of April's recent low, the latest data indicated the steepest reduction in new orders since the series began. Some firms suggested domestic demand was slowly picking up following a loosening of restrictions, however, new business from abroad also decreased at a historically substantial pace. Alongside ongoing global lockdown conditions, firms suggested that travel restrictions had limited foreign demand.” – Chris Williamson, Chief Economist, Markit®
IHS Markit U.S. Services PMI™

“The PMI numbers indicate that the US economy remained in a steep downturn in May. Encouragingly, the rate of contraction has eased considerably since the height of the lockdown in April as some firms get back to work and economic activity starts to resume. While views about prospects for the year ahead remained negative on balance, the degree of pessimism has also moderated considerably since April, to hint that sentiment is improving as increasing numbers of companies see the worst of the lockdown being behind them.

A substantial part of the service sector nevertheless continued to be devastated by social distancing measures, and looks set to remain so for some months to come, limiting scope for a v-shaped recovery. The ongoing steep fall in employment remains a particular concern, pointing to a weakened consumer sector but also underscoring heightened risk aversion as companies seek to cut costs in the face of collapsing sales and an uncertain outlook.” – Chris Williamson, Chief Economist, Markit®
“There is a temptation to look at the May Credit Managers’ Index (CMI) data and start cheering wildly, but it would probably be a good idea to show some restraint – at least for the time being. NACM Economist Chris Kuehl, Ph.D., reports that after a catastrophic month in April, there are signs of a recovery showing up in May. As usual, there are plenty of caveats, but it is important to remember the CMI is very often a harbinger of things to come due to the nature of credit management. The focus of a credit manager is always on the future – trying to gauge the likelihood of getting paid 30, 60, 90, 120 days from now. The data this month would suggest that many are seeing a better future ahead. It may be possible to assert that April will be the bottom of this crisis and conditions should improve from this point. Over the last few months, the majority of the damage has been seen in the favorable factors as the lockdown recession took its toll. It was impossible for the majority of the business community to function at any level under these conditions, but now there appears to be a slow and halting movement to allow the recovery of the economy. This appears to be resonating with the data in this month’s CMI.

The combined score for the CMI is still thoroughly mired in contraction territory (below 50) with a reading of 44.1. In April, it sat at 40.6. The index of favorable factors at 32, had plunged to levels not seen since the recession of 2008. The favorable factors data this month shows a gain to 39.5. That is still very, very low and no reason to celebrate, but it is heading in the right direction. The index of unfavorable factors gained a little as well – moving from 46.3 to 47.2. Kuehl notes that obviously, this remains in contraction, but it is significant that the negatives have not worsened and may, in fact, be improving.” – Andrew Michaels, Editorial Associate, NACM
Private Indicators 15/23

National Association of Credit Management – Credit Managers’ Index

“Last month, the subcategories told a very bleak story. These numbers were as low as they have been in the history of the CMI. The improvement this month still leaves the data below 50, but there was considerable concern these numbers would get even worse before starting to rebound. The sales numbers fell like a rock the last couple of months – from 64 in February to 39.5 in March and a crushing 20 in April. This month’s gain is significant but still leaves the index near historical lows with a reading of 28.6. The new credit applications number rose to 43.3 from 31.1. “It is a very good sign and shows that companies are starting to prepare for the rebound that was promised this summer,” said Kuehl. The dollar collections data also left the 30s behind with a reading of 43.2 as opposed to the 35.5 notched the month prior. The amount of credit extended stayed roughly the same as it had in April as it moved from 41.6 to 42.8. It is not a huge move, but it is a move in the preferred direction.

The unfavorable factors have not been as miserable as the favorables as there has not been enough time for these issues to start kicking in. Kuehl said that this was the month when there was an expectation of more angst in these numbers, but so far, the data is holding more or less steady. The rejections of credit applications fell just slightly from a reading of 52.7 to 51.9, but the important consideration is that it remains out of contraction territory. There was an improvement in accounts placed for collection from 47.4 to 49.1. This has been one of the crucial markers as far as the index is concerned. “Collections will start as creditors are unable to meet their obligations,” he said, “but thus far, there has not been time for these issues to develop given that the crisis is roughly two months old.” The disputes category improved a little as it climbed from 50.8 to 51.5. There has also been a slight rebound in the dollar amount beyond terms reading. “As business was locked down, the majority became very guarded as far as cash flow,” he said. This led to a huge surge in slow pays and a reading of 27.6. The latest number is still deep in contraction territory at 32.4, but it is an improvement, nonetheless. The dollar amount of customer deductions climbed out of contraction territory (49.4 to 50.9). The filings for bankruptcies numbers started to fall, however, and that is a concern. The number in April was 50.2 and now it is sitting at 47.3. This is the first time the bankruptcy numbers have been below 50 in several years. He added, “this is a sign that already weak companies are succumbing to the lockdown recession.”” – Andrew Michaels, Editorial Associate, NACM
### Private Indicators 16/23

National Association of Credit Management

<table>
<thead>
<tr>
<th>Combined Manufacturing and Service Sectors (seasonally adjusted)</th>
<th>May '19</th>
<th>Jun '19</th>
<th>Jul '19</th>
<th>Aug '19</th>
<th>Sep '19</th>
<th>Oct '19</th>
<th>Nov '19</th>
<th>Dec '19</th>
<th>Jan '20</th>
<th>Feb '20</th>
<th>Mar '20</th>
<th>Apr '20</th>
<th>May '20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>65.9</td>
<td>60.4</td>
<td>58.4</td>
<td>64.4</td>
<td>58.7</td>
<td>57.9</td>
<td>61.6</td>
<td>58.8</td>
<td>63.0</td>
<td>64.0</td>
<td>39.5</td>
<td>20.0</td>
<td>28.6</td>
</tr>
<tr>
<td>New credit applications</td>
<td>64.2</td>
<td>62.4</td>
<td>60.8</td>
<td>60.9</td>
<td>59.7</td>
<td>59.0</td>
<td>61.2</td>
<td>59.4</td>
<td>61.1</td>
<td>62.2</td>
<td>44.0</td>
<td>31.1</td>
<td>43.3</td>
</tr>
<tr>
<td>Dollar collections</td>
<td>59.8</td>
<td>60.3</td>
<td>56.6</td>
<td>60.0</td>
<td>58.5</td>
<td>62.1</td>
<td>59.2</td>
<td>57.9</td>
<td>61.7</td>
<td>58.8</td>
<td>49.3</td>
<td>35.5</td>
<td>43.2</td>
</tr>
<tr>
<td>Amount of credit extended</td>
<td>65.4</td>
<td>62.5</td>
<td>58.7</td>
<td>61.7</td>
<td>59.7</td>
<td>61.6</td>
<td>64.3</td>
<td>61.1</td>
<td>62.9</td>
<td>63.6</td>
<td>53.2</td>
<td>41.6</td>
<td>42.8</td>
</tr>
<tr>
<td>Index of favorable factors</td>
<td>63.8</td>
<td>61.4</td>
<td>58.6</td>
<td>61.8</td>
<td>59.1</td>
<td>60.1</td>
<td>61.6</td>
<td>59.3</td>
<td>62.2</td>
<td>62.2</td>
<td>46.5</td>
<td>32.0</td>
<td>39.5</td>
</tr>
<tr>
<td>Rejections of credit applications</td>
<td>51.8</td>
<td>52.4</td>
<td>52.6</td>
<td>52.1</td>
<td>51.4</td>
<td>52.1</td>
<td>51.3</td>
<td>52.0</td>
<td>52.0</td>
<td>53.8</td>
<td>53.5</td>
<td>52.7</td>
<td>51.9</td>
</tr>
<tr>
<td>Accounts placed for collection</td>
<td>47.0</td>
<td>50.0</td>
<td>46.2</td>
<td>48.6</td>
<td>48.4</td>
<td>49.1</td>
<td>49.8</td>
<td>50.3</td>
<td>50.6</td>
<td>50.6</td>
<td>50.6</td>
<td>47.4</td>
<td>49.1</td>
</tr>
<tr>
<td>Disputes</td>
<td>48.6</td>
<td>48.6</td>
<td>50.5</td>
<td>49.4</td>
<td>50.0</td>
<td>48.1</td>
<td>50.3</td>
<td>50.8</td>
<td>52.4</td>
<td>50.3</td>
<td>52.1</td>
<td>50.8</td>
<td>51.5</td>
</tr>
<tr>
<td>Dollar amount beyond terms</td>
<td>51.3</td>
<td>49.8</td>
<td>46.1</td>
<td>53.6</td>
<td>50.2</td>
<td>52.0</td>
<td>52.6</td>
<td>51.0</td>
<td>54.2</td>
<td>53.5</td>
<td>43.9</td>
<td>27.6</td>
<td>32.4</td>
</tr>
<tr>
<td>Dollar amount of customer deductions</td>
<td>49.3</td>
<td>50.0</td>
<td>51.2</td>
<td>50.0</td>
<td>52.1</td>
<td>50.9</td>
<td>51.4</td>
<td>51.3</td>
<td>52.2</td>
<td>51.5</td>
<td>50.4</td>
<td>49.4</td>
<td>50.9</td>
</tr>
<tr>
<td>Filings for bankruptcies</td>
<td>53.3</td>
<td>53.5</td>
<td>53.2</td>
<td>51.6</td>
<td>52.1</td>
<td>53.4</td>
<td>53.5</td>
<td>53.4</td>
<td>54.4</td>
<td>53.3</td>
<td>53.2</td>
<td>50.2</td>
<td>47.3</td>
</tr>
<tr>
<td>Index of unfavorable factors</td>
<td>50.2</td>
<td>50.7</td>
<td>50.0</td>
<td>50.9</td>
<td>50.7</td>
<td>50.9</td>
<td>51.5</td>
<td>51.5</td>
<td>52.6</td>
<td>52.2</td>
<td>50.6</td>
<td>46.3</td>
<td>47.2</td>
</tr>
<tr>
<td>NACM Combined CMI</td>
<td>55.7</td>
<td>55.0</td>
<td>53.4</td>
<td>55.2</td>
<td>54.1</td>
<td>54.6</td>
<td>55.5</td>
<td>54.6</td>
<td>56.4</td>
<td>56.2</td>
<td>49.0</td>
<td>40.6</td>
<td>44.1</td>
</tr>
</tbody>
</table>

---

Source: https://nacm.org/cmi.html; 5/29/20
National Federation of Independent Business (NFIB)
May 2020 Report
Small Business Optimism Index Rebounds from April, Earnings Trends Decline

“The Small Business Optimism Index increased 3.5 points in May to 94.4, a strong improvement from April’s 90.9 reading. Eight of the 10 Index components improved in May and two declined. The NFIB Uncertainty Index increased seven points to 82. Reports of expected business conditions in the next six months increased 5 points to a net 34%, following a 24-point increase in April. Owners are optimistic about future business conditions and expect the recession to be short-lived.

Real sales expectations in the next three months increased 18 points to a net negative 24%. Expectations about future sales are beginning to rebound after April’s lowest reading in survey history of a net negative 42%.

Fifty-two percent reported capital outlays in the last six months. Of those making expenditures, 35% reported spending on new equipment (down one point), 20% acquired vehicles (down one point), and 15% improved or expanded facilities (up two points). Five percent acquired new buildings or land for expansion and 10% spent money for new fixtures and furniture.

Twenty percent of owners are planning capital outlays in the next few months. Any extensive damage from recent protests will produce significant expenditures that were unexpected for some small business owners.

A seasonally adjusted net eight percent plan to create new jobs in May. The creation is driven in part by the forgiveness portion requirements of the Paycheck Protection Program and owners planning to re-hire workers as the economy is reopened.” – Holly Wade, NFIB

The NFIB Uncertainty Index increased to 82 in May
“A net negative 19% of all owners (seasonally adjusted) reported higher nominal sales in the past three months, down eight points from April. Retail sales have declined significantly in the past three months. Consumer income was up significantly due to government programs assistance, but consumers, for the most part, could not get out to spend it unless they spent it online. The change in spending behavior produced a record-high savings rate of 33%. As the economy opens, this money will be spent.” – Holly Wade, NFIB

NFIB Small Business Optimism Index

“As states begin to reopen, small businesses continue to navigate the economic landscape rocked by COVID-19 and new government policies. It’s still uncertain when consumers will feel comfortable returning to small businesses and begin spending again, but owners are taking the necessary precautions to reopen safely.” – Bill Dunkelberg, Chief Economist, NFIB

“Other key findings from the survey include:

• Earnings trends declined six points to a net negative 26%. Among owners reporting weaker profits, 46% blamed weak sales, 12% blamed usual seasonal changes, 9% cited price changes, 4% cited labor costs, and 4% cited material costs.
• Five percent of owners reported thinking it’s a good time to expand, up two points from April.
• The net negative percent of owners expecting higher real sales volumes improved 18 points to a net negative 24% of owners.
• A net 14% (seasonally adjusted) reported raising compensation (down 2 points) and a net 10% plan to do so in the coming months (up 3 points).

As reported in last week’s monthly jobs report, the small business labor market weakened further in the February-April period, with May survey respondents reporting reducing employment by 0.17 workers per firm in the prior three months. Most of the workers that were displaced (about 80%) expect to be rehired according to the Bureau of Labor Statistics. However, generous unemployment benefits are making it harder for some firms to re-call workers and fill open positions.” – Holly Wade, NFIB
## NFIB Small Business Optimism Index

### Small Business Optimism

**Abrupt Turn in Small Business Optimism Ends 39-Month Historic Run**

<table>
<thead>
<tr>
<th>Index Component</th>
<th>Net %</th>
<th>Change From Apr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plans to Increase Employment</td>
<td>8%</td>
<td>▲ 7</td>
</tr>
<tr>
<td>Plans to Make Capital Outlays</td>
<td>20%</td>
<td>▲ 2</td>
</tr>
<tr>
<td>Plans to Increase Inventories</td>
<td>2%</td>
<td>▲ 6</td>
</tr>
<tr>
<td>Expect Economy to Improve</td>
<td>34%</td>
<td>▲ 5</td>
</tr>
<tr>
<td>Expect Real Sales Higher</td>
<td>-24%</td>
<td>▲ 18</td>
</tr>
<tr>
<td>Current Inventory</td>
<td>-5%</td>
<td>▲ 2</td>
</tr>
<tr>
<td>Current Job Openings</td>
<td>23%</td>
<td>▼ -1</td>
</tr>
<tr>
<td>Expected Credit Conditions</td>
<td>-4%</td>
<td>▲ 2</td>
</tr>
<tr>
<td>Now a Good Time to Expand</td>
<td>5%</td>
<td>▲ 2</td>
</tr>
<tr>
<td>Earnings Trends</td>
<td>-26%</td>
<td>▼ -6</td>
</tr>
</tbody>
</table>

The latest Paychex | IHS Markit Small Business Employment Watch shows that employment growth improved slightly in May, up 0.25 percent, as stay-at-home orders eased in most states. Amid the economic impacts of the COVID-19 pandemic, the jobs index has fallen 3.95 percent year-over-year, most of which (3.52 percent) occurred in the past quarter. The transition back to work also resulted in a 5.33 percent one-month annualized increase in weekly hours worked after a sharp drop in April.

“May’s results hint that the small business job market quickly hit its bottom with the extraordinary job loss in April,” said James Diffley, chief regional economist at IHS Markit.

“While there are still many unknowns with the pace of recovery, the slight increase in employment numbers last month indicates that employers are starting to bring back employees who were furloughed or temporarily laid off during pandemic-related business closures,” said Martin Mucci, Paychex president and CEO. “Funds received from the Paycheck Protection Program have been helpful in supporting some businesses to retain employees and an extension of the SBA’s loan forgiveness timeline and different parameters would be a positive next step in flexibility to support business survival and recovery.”” – Lisa Fleming, Kate Smith, and Tess Flynn, Paychex, Inc.
The Paychex | IHS Markit
Small Business Employment Watch

“The report also includes regional, state, metro, and industry level analysis, showing:

• All regions in the U.S. experienced improvement in May. However, the increase in the Northeast was marginal, up 0.01 percent.

• With Florida’s stay-at-home order lifted on May 4, the state’s jobs index is more than one point higher than any other state.

• Of the 20 metros analyzed, 14 showed improvement in May, only six slowed further.

• Up 1.22 percent to 97.73, Construction reported significant recovery in May and becomes the new top-ranked industry index.” – Lisa Fleming, Kate Smith, and Tess Flynn, Paychex, Inc.
Private Indicators 23/23

The Paychex | IHS Markit
Small Business Employment Watch

<table>
<thead>
<tr>
<th>Month</th>
<th>Index</th>
<th>12-Month Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>94.86</td>
<td>-3.95%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Hourly Earnings</th>
<th>12-Month Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>$27.91</td>
<td>3.12%</td>
</tr>
</tbody>
</table>

Source: https://www.paychex.com/employment-watch; 6/2/20
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 202.720.2600 (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. 20250-9410 or call 800.795.3272 (voice) or 202.720.6382 (TDD). The USDA is an equal opportunity provider and employer.