FOR IMMEDIATE RELEASE
May 28, 2020

Tenth District Manufacturing Activity Continued to Decline
Federal Reserve Bank of Kansas City Releases May Manufacturing Survey

KANSAS CITY, Mo. – The Federal Reserve Bank of Kansas City released the May Manufacturing Survey today. According to Chad Wilkerson, vice president and economist at the Federal Reserve Bank of Kansas City, the survey revealed that Tenth District manufacturing activity continued to decline, but not as sharply compared to last month’s record low. Expectations for future activity rose in May, but remained slightly negative.

“Regional factory activity remained weak in May compared with a month ago and a year ago,” said Wilkerson. “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.”

Historical data, results from past surveys and release dates for future surveys can be found at www.kansascityfed.org/research/indicatorsdata/mfg.

The Federal Reserve Bank of Kansas City serves the Tenth Federal Reserve District, encompassing the western third of Missouri; all of Kansas, Colorado, Nebraska, Oklahoma and Wyoming; and the northern half of New Mexico. As part of the nation’s central bank, the Bank participates in setting national monetary policy, supervising and regulating numerous commercial banks and bank holding companies, and providing financial services to depository institutions. More information is available online at www.kansascityfed.org.

###
TENTH DISTRICT MANUFACTURING SUMMARY

Tenth District manufacturing activity continued to decline, but not as sharply compared to last month’s record low (Chart 1, Tables 1 & 2). 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.

Factory Activity Continued to Decline in May

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 (Tables 1 & 2). 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.

Special Questions

This month contacts were asked special questions about their expectations for when business activity will return to pre-COVID-19 levels and about current economic conditions as a result of COVID-19. Around 32 percent of factory contacts expect business activity to return to levels similar to activity before COVID-19 within 6-12 months once restrictions are lifted, while 23 percent indicated it would take more than a year for business activity levels to resume normalcy (Chart 2). However, 20 percent of manufacturing contacts, including some machinery and chemical plants, reported that business activity is currently at or above pre-pandemic levels. If current revenues were to continue, 72 percent of firms indicated their firms could survive for more than a year, while 28 percent reported their firm could survive only a fraction of that time if current revenue levels persisted. Over 61 percent of firms reported losses in productivity as a result of the COVID-19 pandemic and 52 percent of survey contacts experienced ongoing supply chain disruptions (Chart 3). Additionally, 25 percent of firms reported labor shortages due to the COVID-19 pandemic.
Selected Manufacturing Comments

“We are very fortunate to be diversified and in an essential business category. Our people are proud to be working and we are proud to be taking care of customers. Looking forward to seeing a return to something that looks more normal.”

“It would be helpful to have a better federal plan for testing, contact tracing, quarantine, and possible shut-down to help keep the economy running and to prevent a worse [outcome].”

“The work is starting to return. We were hardest hit early when the lockdowns were put in place, nearly half of open industrial orders were cancelled or put on hold.”

“We need more government support. Once we get beyond July, will banks be able to lend, and adjust terms/covenants to give additional breathing room? If not, we expect more trouble is ahead.”

“COVID has certainly hit our business but we are optimistic that it will still turn around before the end of the year. This will be a challenging summer for us… looking forward to the country opening up again.”

“Given the record high unemployment we are seeing very little in the way of good candidates, even though we are recruiting and advertising for openings. We need to get people back to work.”

“Keeping the economy open for business while balancing the health and safety of citizens is critical.”

“Many of our customers have been able to pivot their product delivery which has sustained our business during the downturn. Certainly not where we would like it to be, but survivable at this point.”

“PPP funds have allowed us to keep head count at current levels even though incoming work has dropped to minimal levels.”

“Low oil prices is a major problem.”

“Uncoordinated reopening schedules will delay our distribution outlets from being fully functional.”
### Table 1. Summary of Tenth District Manufacturing Conditions, May 2020

<table>
<thead>
<tr>
<th>Plant Level Indicators</th>
<th>May vs. April (percent)*</th>
<th>May vs. Year Ago (percent)*</th>
<th>Expected in Six Months (percent)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Change</td>
<td>Change</td>
<td>Diff Index*</td>
</tr>
<tr>
<td>Composite Index</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>25</td>
<td>33</td>
<td>42</td>
</tr>
<tr>
<td>Volume of shipments</td>
<td>25</td>
<td>32</td>
<td>43</td>
</tr>
<tr>
<td>Volume of new orders</td>
<td>27</td>
<td>27</td>
<td>46</td>
</tr>
<tr>
<td>Backlog of orders</td>
<td>18</td>
<td>39</td>
<td>43</td>
</tr>
<tr>
<td>Number of employees</td>
<td>12</td>
<td>64</td>
<td>24</td>
</tr>
<tr>
<td>Average employee workweek</td>
<td>11</td>
<td>60</td>
<td>29</td>
</tr>
<tr>
<td>Prices received for finished product</td>
<td>8</td>
<td>75</td>
<td>17</td>
</tr>
<tr>
<td>Prices paid for raw materials</td>
<td>15</td>
<td>66</td>
<td>19</td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>13</td>
<td>40</td>
<td>47</td>
</tr>
<tr>
<td>New orders for exports</td>
<td>5</td>
<td>67</td>
<td>28</td>
</tr>
<tr>
<td>Supplier delivery time</td>
<td>14</td>
<td>68</td>
<td>18</td>
</tr>
<tr>
<td>Inventories: Materials</td>
<td>15</td>
<td>47</td>
<td>38</td>
</tr>
<tr>
<td>Inventories: Finished goods</td>
<td>22</td>
<td>48</td>
<td>30</td>
</tr>
</tbody>
</table>

*Percentage may not add to 100 due to rounding.

^Diffusion Index. The diffusion index is calculated as the percentage of total respondents reporting increases minus the percentage reporting declines.

**Seasonally Adjusted Diffusion Index. The month vs. month and expected-in-six-months diffusion indexes are seasonally adjusted using Census X-13.

Note: The May survey was open for a six-day period from May 20-26, 2020 and included 107 responses from plants in Colorado, Kansas, Nebraska, Oklahoma, Wyoming, northern New Mexico, and western Missouri.
Chart 2. Special Question: What are your timeline expectations for business activity to return to pre-COVID-19 levels? How long could your firm survive if current revenues were to continue?

Chart 3. Special Question: Is your firm experiencing any of the following as a result of the COVID-19 pandemic (please check all that apply)?
### Table 2
**Historical Manufacturing Survey Indexes**

#### Versus a Month Ago
**Composite Index**
- May'19: 3 0 -2 -5 -1 -2 -2 -5 -1 5 -17 -30 -19
- Jun'19: 1 -2 -5 -1 9 7 -2 -3 -4 8 -18 -62 -25
- Jul'19: 0 -5 -1 -5 6 1 4 -3 -4 9 -23 -57 -22
- Aug'19: 2 3 -2 -13 -2 -9 -4 -13 -2 8 -38 -64 -25
- Sep'19: -7 -7 -12 -16 -12 -8 -14 -20 -16 -41 -54 -32
- Oct'19: 3 3 -5 -6 -10 -5 -7 -7 4 -4 -32 -34 -13
- Nov'19: 2 2 -3 6 8 3 -3 -4 -3 -2 -15 -51 -20
- Dec'19: 15 5 3 0 2 4 3 -2 -3 9 -6 -14 -9
- Jan'20: 13 10 15 1 4 1 10 13 28 14 -13 -16 -6
- Feb'20: n/a n/a n/a n/a n/a n/a n/a n/a n/a n/a n/a n/a n/a
- Mar'20: n/a n/a n/a n/a n/a n/a n/a n/a n/a n/a n/a n/a n/a
- Apr'20: 23 4 11 -1 -1 -1 -6 -4 -7 5 -14 -30 -35
- May'20: 28 7 -8 -1 -6 -3 -6 -5 -11 -5 -19 -63 -58
- Versus a Year Ago
- Composite Index: 23 4 11 -1 -1 -1 -6 -4 -7 5 -14 -30 -35
- Production: 21 -3 5 3 6 -6 13 -7 -10 4 -25 -61 -60
- Volume of shipments: 16 -12 1 -16 -1 -10 0 -14 -20 6 -31 -54 -55
- Volume of new orders: 17 -8 -7 -12 -16 -6 -5 -17 -24 -16 -33 -49 -46
- Backlog of orders: 26 20 14 8 7 7 10 7 1 12 -14 -32 -31
- Number of employees: 11 7 -3 -3 -8 -1 -1 -9 -9 -3 -8 -27 -28
- Average employee workweek: 21 18 3 2 2 6 5 0 11 5 16 -6
- Prices received for finished product: 53 52 56 41 33 36 29 27 22 28 13 3 -2
- Prices paid for raw materials: 60 46 56 33 26 26 25 36 26 31 14 0 4
- New orders for exports: 4 4 4 -4 6 -8 -1 1 -1 -9 -3 -8 -27 -28
- Supplier delivery time: 11 7 -3 -3 -8 -1 -1 -9 -9 -3 -8 -27 -28
- Inventories: Materials: 25 17 12 4 -8 0 9 -10 -6 0 -9 -15 -23

#### Expected in Six Months
**Composite Index**
- May'19: 12 10 9 11 6 4 16 9 14 16 -19 -6 -2
- Jun'19: 19 20 20 20 7 5 27 14 23 21 -36 -8 -2
- Jul'19: 21 20 15 18 7 5 27 11 25 24 -37 -8 -1
- Aug'19: 14 16 15 11 13 11 28 16 9 21 -35 -8 7
- Sep'19: -2 8 -4 3 -10 -13 1 -4 4 -2 -38 -6 -5
- Oct'19: 21 12 8 9 14 6 7 9 20 20 -19 -10 -4
- Nov'19: 1 2 -3 3 -1 3 12 -4 0 8 -20 -3 -3
- Dec'19: 34 30 20 22 18 18 17 13 20 28 -10 2 -5
- Jan'20: 48 36 37 36 31 25 31 36 35 37 -48 17
- Feb'20: 24 12 15 13 9 6 17 8 8 7 -41 -30 -19
- Mar'20: 4 4 -4 6 -2 2 5 3 -6 6 -17 -9 -7
- Apr'20: 6 2 4 5 2 3 14 6 8 15 8 8 -7
- May'20: -1 2 -2 10 -6 -4 5 0 8 5 -11 -9 -3
- Versus a Year Ago
- Composite Index: 12 10 9 11 6 4 16 9 14 16 -19 -6 -2
- Production: 19 20 20 20 7 5 27 14 23 21 -36 -8 -2
- Volume of shipments: 21 20 15 18 7 5 27 11 25 24 -37 -8 -1
- Volume of new orders: 14 16 15 11 13 11 28 16 9 21 -35 -8 7
- Backlog of orders: -2 8 -4 3 -10 -13 1 -4 4 -2 -38 -6 -5
- Number of employees: 21 12 8 9 14 6 7 9 20 20 -19 -10 -4
- Average employee workweek: 1 2 -3 3 -1 3 12 -4 0 8 -20 -3 -3
- Prices received for finished product: 34 30 20 22 18 18 17 13 20 28 -10 2 -5
- Prices paid for raw materials: 48 36 37 36 31 25 31 36 35 37 -48 17
- Capital expenditures: 24 12 15 13 9 6 17 8 8 7 -41 -30 -19
- New orders for exports: 4 4 -4 6 -2 2 5 3 -6 6 -17 -9 -7
- Supplier delivery time: 6 2 4 5 2 3 14 6 8 15 8 8 -7
- Inventories: Materials: -1 2 -2 10 -6 -4 5 0 8 5 -11 -9 -3
- Inventories: Finished goods: -1 2 -2 10 -6 -4 5 0 8 5 -11 -9 -3