What is the National Activity Index?
The index is a weighted average of 85 indicators of growth in national economic activity drawn from four broad categories of data: 1) production and income; 2) employment, unemployment, and hours; 3) personal consumption and housing; and 4) sales, orders, and inventories.

Why are there three index values?
Each month, we provide a monthly index (the CFNAI), its three-month moving average, and a diffusion index. Month-to-month movements can be volatile, so the monthly index’s three-month moving average, the CFNAI-MA3, provides a more consistent picture of national economic growth. The CFNAI Diffusion Index instead captures the degree to which a change in the monthly index is spread out among its 85 indicators, averaged over a three-month period.

What do the numbers mean?
A zero value for the monthly index has been associated with the national economy expanding at its historical trend (average) rate of growth; negative values with below-average growth (in standard deviation units); and positive values with above-average growth. Periods of economic expansion have historically been associated with values of the CFNAI-MA3 above –0.70 and the CFNAI Diffusion Index above –0.35. Conversely, periods of economic contraction have historically been associated with values of the CFNAI-MA3 below –0.70 and the CFNAI Diffusion Index below –0.35. An increasing likelihood of a period of sustained increasing inflation has historically been associated with values of the CFNAI-MA3 above +1.00 more than two years into an economic expansion.

The next CFNAI will be released:
February 24, 2020
8:30 am Eastern Time
7:30 am Central Time

Chicago Fed National Activity Index

Index points to slower economic growth in December

Led by declines in production-related indicators, the Chicago Fed National Activity Index (CFNAI) fell to –0.35 in December from +0.41 in November. Three of the four broad categories of indicators that make up the index decreased from November, and three of the four categories made negative contributions to the index in December. The index’s three-month moving average, CFNAI-MA3, moved up to –0.23 in December from –0.31 in November.

The CFNAI Diffusion Index, which is also a three-month moving average, edged down to –0.27 in December from –0.25 in November. Twenty-five of the 85 individual indicators made positive contributions to the CFNAI in December, while 60 made negative contributions. Twenty-seven indicators improved from November to December, while 56 indicators deteriorated and two were unchanged. Of the indicators that improved, ten made negative contributions.

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

<table>
<thead>
<tr>
<th></th>
<th>Dec ’19</th>
<th>Nov ’19</th>
<th>Oct ’19</th>
<th>Sep ’19</th>
<th>Aug ’19</th>
<th>Jul ’19</th>
<th>Dec ’18</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFNAI</td>
<td>–0.35</td>
<td>+0.41</td>
<td>–0.74</td>
<td>–0.60</td>
<td>+0.27</td>
<td>–0.42</td>
<td>–0.03</td>
</tr>
<tr>
<td>Previous</td>
<td>N/A</td>
<td>+0.56</td>
<td>–0.76</td>
<td>–0.54</td>
<td>+0.25</td>
<td>–0.42</td>
<td>–0.05</td>
</tr>
<tr>
<td>CFNAI-MA3</td>
<td>–0.23</td>
<td>–0.31</td>
<td>–0.36</td>
<td>–0.25</td>
<td>–0.01</td>
<td>–0.16</td>
<td>+0.07</td>
</tr>
<tr>
<td>Previous</td>
<td>N/A</td>
<td>–0.25</td>
<td>–0.35</td>
<td>–0.24</td>
<td>–0.02</td>
<td>–0.16</td>
<td>+0.08</td>
</tr>
<tr>
<td>CFNAI Diffusion</td>
<td>–0.27</td>
<td>–0.25</td>
<td>–0.26</td>
<td>–0.24</td>
<td>–0.09</td>
<td>–0.22</td>
<td>+0.13</td>
</tr>
<tr>
<td>Previous</td>
<td>N/A</td>
<td>–0.23</td>
<td>–0.24</td>
<td>–0.25</td>
<td>–0.10</td>
<td>–0.23</td>
<td>+0.14</td>
</tr>
</tbody>
</table>

Current and Previous values reflect index values as of the January 22, 2020, release and December 23, 2019, release, respectively. N/A indicates not applicable.
Production-related indicators contributed −0.26 to the CFNAI in December, down from +0.40 in November. Industrial production decreased 0.3 percent in December after increasing 0.8 percent in November. The contribution of the sales, orders, and inventories category to the CFNAI edged down to −0.05 in December from −0.02 in November. The Institute for Supply Management’s Manufacturing New Orders Index moved down to 46.8 in December from 47.2 in the previous month.

Employment-related indicators contributed −0.06 to the CFNAI in December, down from +0.04 in November. Nonfarm payrolls increased by 145,000 in December after rising by 256,000 in November. The contribution of the personal consumption and housing category to the CFNAI edged up to +0.03 in December from −0.01 in November. Housing starts increased to 1,608,000 annualized units in December from 1,375,000 in November.

The CFNAI was constructed using data available as of January 17, 2020. At that time, December data for 49 of the 85 indicators had been published. For all missing data, estimates were used in constructing the index. The November monthly index value was revised to +0.41 from an initial estimate of +0.56, and the October monthly index value was revised to −0.74 from last month’s estimate of −0.76. Revisions to the monthly index can be attributed to two main factors: revisions in previously published data and differences between the estimates of previously unavailable data and subsequently published data. The revisions to both the November and October monthly index values were primarily due to the former.