

News Release

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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 $+0.70$ more than two years into an economic expansion. Similarly, a substantial 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:
May 22, 2017
8:30 am Eastern Time
7:30 am Central Time

FEDERAL RESERVE BANK
OF CHICAGO

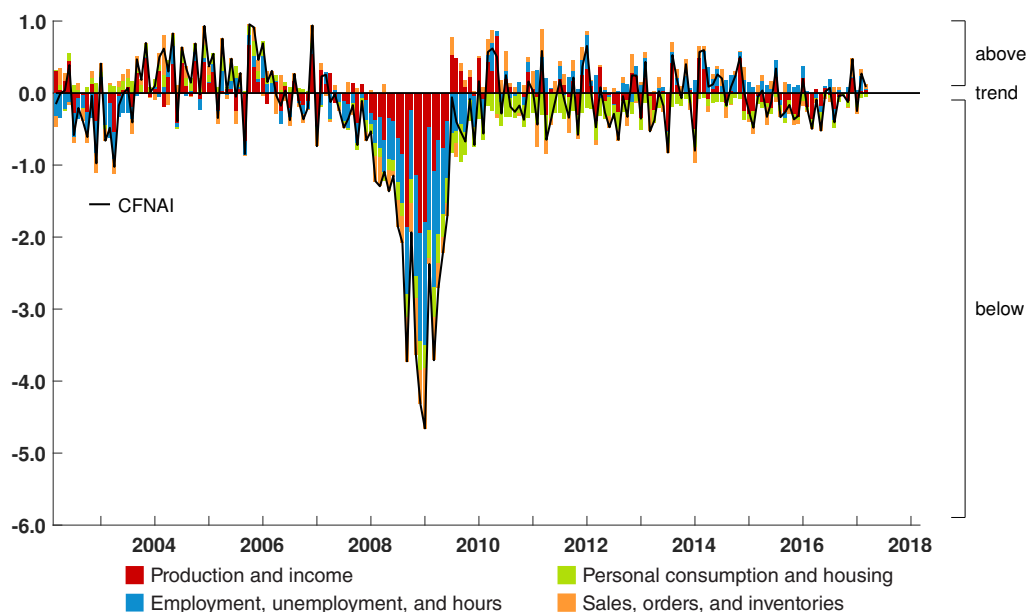
Chicago Fed National Activity Index

Index points to slower economic growth in March

Led by slower growth in employment-related indicators, the Chicago Fed National Activity Index (CFNAI) moved down to $+0.08$ in March from $+0.27$ in February. Two of the four broad categories of indicators that make up the index decreased from February, and one category made a negative contribution to the index in March. The index's three-month moving average, CFNAI-MA3, decreased to $+0.03$ in March from $+0.16$ in February, but remained positive for the fourth consecutive month.

The CFNAI Diffusion Index, which is also a three-month moving average, edged down to $+0.11$ in March from $+0.15$ in February. Forty-eight of the 85 individual indicators made positive contributions to the CFNAI in March, while 37 made negative contributions. Thirty-seven indicators improved from February to March, while 47 indicators deteriorated and one was unchanged. Of the indicators that improved, ten made negative contributions.

Chicago Fed National Activity Index, by Categories



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

	Mar '17	Feb '17	Jan '17	Dec '16	Nov '16	Oct '16	Mar '16
CFNAI							
Current	+0.08	+0.27	-0.25	+0.47	-0.13	-0.03	-0.50
Previous	N/A	+0.34	-0.02	+0.41	-0.18	+0.01	-0.60
CFNAI-MA3							
Current	+0.03	+0.16	+0.03	+0.11	-0.06	-0.16	-0.18
Previous	N/A	+0.25	+0.07	+0.08	-0.09	-0.17	-0.22
CFNAI Diffusion							
Current	+0.11	+0.15	+0.03	+0.06	+0.02	-0.15	-0.16
Previous	N/A	+0.17	+0.02	+0.08	+0.01	-0.14	-0.18

Current and Previous values reflect index values as of the April 24, 2017, release and March 20, 2017, release, respectively. N/A indicates not applicable.

Employment-related indicators contributed +0.02 to the CFNAI in March, down from +0.20 in February. Nonfarm payrolls increased by 98,000 in March after rising by 219,000 in February. In contrast, the civilian unemployment rate declined to 4.5 percent in March from 4.7 percent in February.

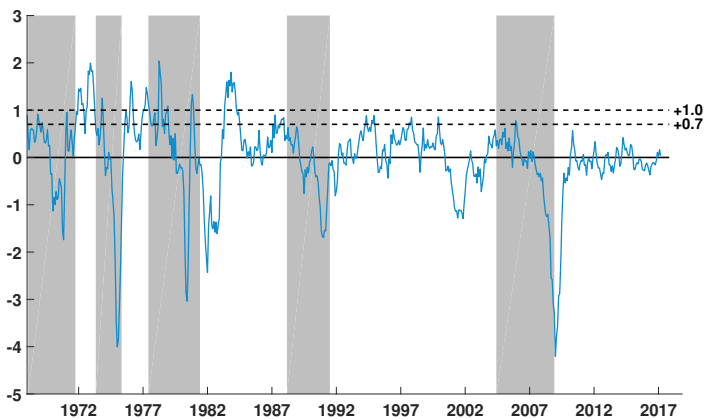
The contribution from production-related indicators to the CFNAI was unchanged at +0.04 in March. Total industrial production rose 0.5 percent in March after edging up 0.1 percent in February, but manufacturing production declined 0.4 percent in March after increasing 0.3 percent in the previous month.

The sales, orders, and inventories category also made a positive contribution to the CFNAI in March, though this contribution ticked down to +0.07 from +0.09 in February. The Institute for Supply Management's Manufacturing Purchasing Managers' New Orders Index edged down to 64.5 in March from 65.1 in February.

The contribution of the personal consumption and housing category to the CFNAI ticked up to -0.05 in March from -0.06 in February. Housing permits increased to 1,260,000 annualized units in March from 1,216,000 in February, while housing starts decreased to 1,215,000 annualized units in March from 1,303,000 in the previous month.

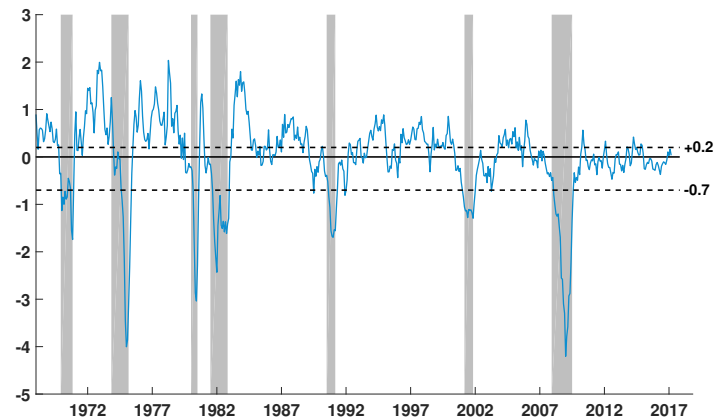
The CFNAI was constructed using data available as of April 20, 2017. At that time, March data for 51 of the 85 indicators had been published. For all missing data, estimates were used in constructing the index. The February monthly index value was revised to +0.27 from an initial estimate of +0.34, and the January monthly index value was revised to -0.25 from last month's estimate of -0.02. Revisions to the monthly index value 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 February and January monthly index values were primarily due to the former.

CFNAI-MA3 and Inflation Cycles



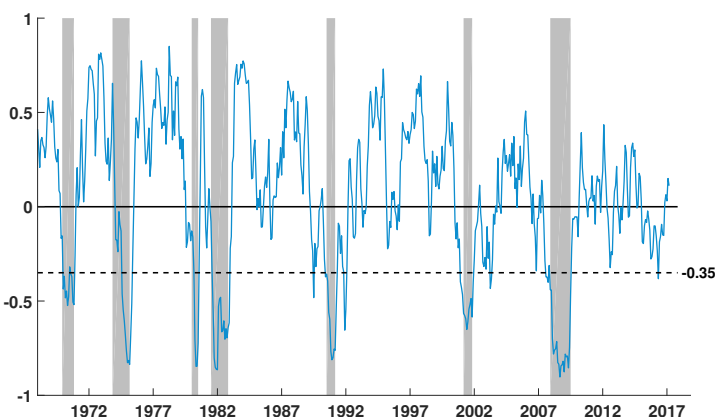
Notes: Shading represents periods of sustained increasing inflation. An increasing likelihood of a period of sustained increasing inflation has historically been associated with values of the CFNAI-MA3 above +0.70 more than two years into an economic expansion. Similarly, a substantial likelihood of 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.

CFNAI-MA3 and Business Cycles



Notes: Shading indicates official periods of recession as identified by the National Bureau of Economic Research. Following a period of economic expansion, an increasing likelihood of a recession has historically been associated with a CFNAI-MA3 value below -0.70. Conversely, following a period of economic contraction, an increasing likelihood of an expansion has historically been associated with a CFNAI-MA3 value above +0.20.

CFNAI Diffusion Index



Notes: Shading indicates official periods of recession as identified by the National Bureau of Economic Research. The CFNAI Diffusion Index represents the three-month moving average of the sum of the absolute values of the weights for the underlying indicators whose contribution to the CFNAI is positive in a given month less the sum of the absolute values of the weights for those indicators whose contribution is negative or neutral in a given month. Periods of economic expansion have historically been associated with values of the CFNAI Diffusion Index above -0.35.

CFNAI, Monthly Index

