The monthly CFNAI index, a weighted average of 85 indicators of national economic activity, is constructed to have an average value of zero and a standard deviation of one. A zero value for the index indicates that the national economy is expanding at its historical trend rate of growth; negative values are associated with below-trend growth, while positive values indicate above-trend growth. Month-to-month movements in the CFNAI can be volatile, so a three-month moving average version, the CFNAI-MA3, provides a more consistent picture of national economic growth. The 85 economic indicators that comprise the CFNAI are drawn from five broad categories of data: 1) production and income; 2) employment, unemployment, and hours; 3) personal consumption and housing; 4) manufacturing and trade sales; and 5) inventories and orders.

The next CFNAI will be released:
December 5, 2001
10:00 am Eastern Time
9:00 am Central Time

FEDERAL RESERVE BANK
OF CHICAGO

# Chicago Fed National Activity Index

U.S. Economy Weak in September

The Chicago Fed National Activity Index (CFNAI) was virtually unchanged at −1.28 in September compared with an upward revised value of −1.30 in August. The September index reflects sharp declines in consumer spending and disposable income that were offset by somewhat less weakness in manufacturing employment. The three-month moving average index, CFNAI-MA3, was −0.95 in September, up from −1.02 in August. September marked the fifteenth consecutive month that the CFNAI-MA3 was below zero, an indication of how long the national economy has been growing below trend. Index values below zero signal reduced inflationary pressures over the coming year.

While the September index depicts a national economy that was quite weak, the CFNAI-MA3 was not contracting at a typical recessionary rate. The index appears consistent with the advance data for real gross domestic product (GDP), which showed a decline of 0.4 percent (annual rate) in the third quarter.

As many recent statistical releases have noted, it is difficult to assess the extent to which September data reflect economic disruptions resulting from the September 11 terrorist attacks. The weakness in consumer spending and personal income reflects these events as well as other factors. These series contributed negatively to the index for the first time in almost a year and the magnitude of the negative contribution was the largest in over six years. In other respects, the September data followed a different pattern than in previous months. Employment losses

Chicago Fed National Activity Index, Three-Month Moving Average (CFNAI-MA3)
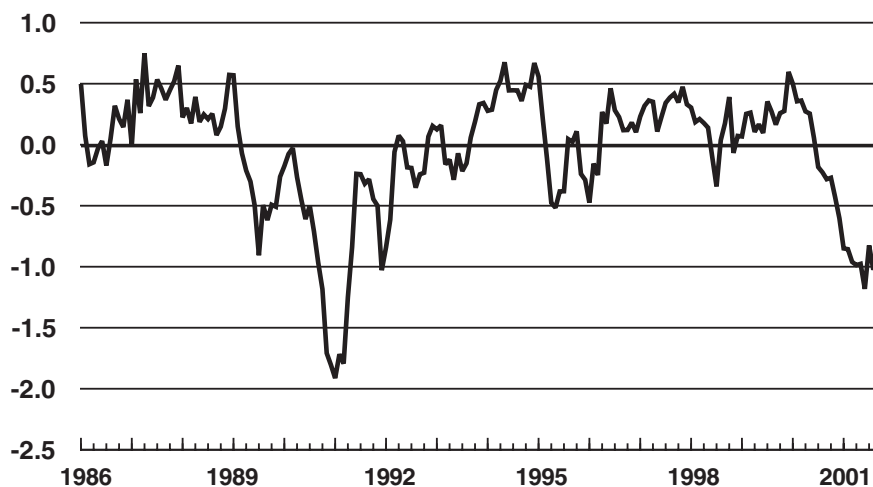
CFNAI and CFNAI-MA3 for the latest six months and year-ago month

	Sep '01	Aug '01	Jul '01	Jun '01	May '01	Apr '01	Sep '00
CFNAI							
Current	−1.28	−1.30	−0.26	−1.51	−0.70	−1.33	−0.06
Previous	N/A	−1.37	−0.25	−1.51	−0.74	−1.31	−0.07
CFNAI-MA3							
Current	−0.95	−1.02	−0.83	−1.18	−0.98	−0.99	−0.28
Previous	N/A	−1.05	−0.83	−1.19	−0.99	−1.00	−0.30

Current and Previous values reflect index values as of the November 5, 2001, release and October 3, 2001, release, respectively. N/A indicates not applicable.

in the manufacturing sector were smaller than in August, and this provided some lift for the index relative to August. On the downside, though, weakness in employment spread further to the service sectors; industrial production fell by 1 percent, and the purchasing managers composite index also depicted a contracting manufacturing sector in September.

Overall, 68 of the 85 individual indicators displayed below-average growth in September; and while 35 series improved relative to August, 24 of these still indicated below-average growth. The index is constructed using data available as of November 1. At that time, September data for 62 of 85 indicators had been published. For all missing data series, estimates were used in constructing the index.

The negative September reading is continuing evidence that national economic growth was substantially below trend. The CFNAI-MA3 has been at or below –0.70 since January 2001. The early warning signs of recession are when the CFNAI-MA3 enters the range from –0.70 to –1.00. In each of the five recessions during the CFNAI-MA3 sample period (1967–2001), the reading fell below –1.50 as the period of economic contraction

persisted. The September CFNAI-MA3 reading of –0.95 continues to be above those previous recessionary levels.

Revisions to the 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 revised July and August CFNAI values are negligibly higher than previously reported.

Interpreting the CFNAI-MA3

| If CFNAI-MA3 < –0.70 following a period of economic expansion…	Increasing likelihood that a recession has begun.
If CFNAI-MA3 > +0.20 following a period of economic contraction…	Significant likelihood that a recession has ended.
If CFNAI-MA3 > +0.70 more than two years into an economic expansion…	Increasing likelihood that a period of sustained accelerating inflation has begun.
If CFNAI-MA3 > +1.00 more than two years into an economic expansion…	Substantial likelihood that a period of sustained accelerating inflation has begun.

CFNAI-MA3 and Inflation Cycles
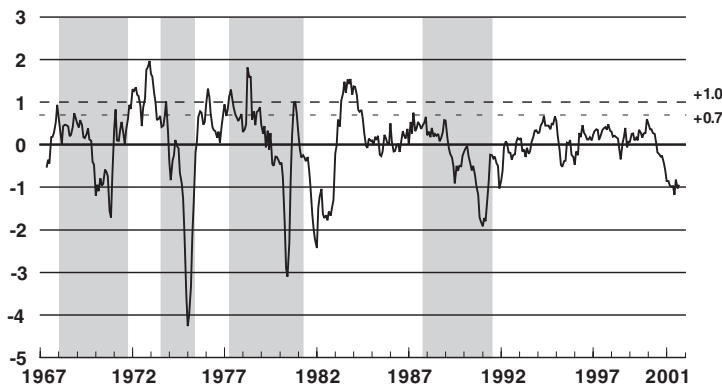
(Shading represents periods of substantial inflation increases)

CFNAI-MA3 and Business Cycles
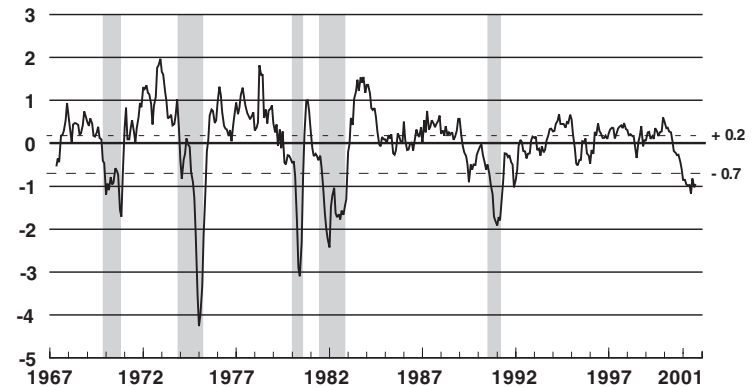
(Shading indicates official NBER periods of recession)

CFNAI, Monthly Index
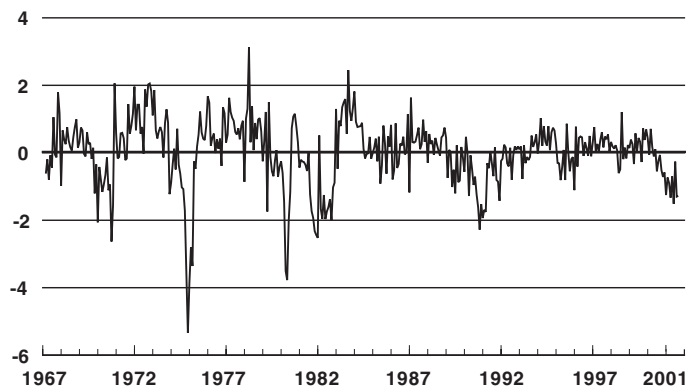
2001 CFNAI Release Dates

Date of Release	Monthly Data for:
December 5, 2001	October 2001
December 20, 2001	November 2001

CFNAI historical data and background information are available on the Federal Reserve Bank of Chicago's website at http://www.chicagofed.org.