Are the Leading Indicators Signaling A Recession?

The recent behavior of the composite index of leading indicators has attracted a lot of attention. the index fell in June and July and was virtually unchanged in August before rising modestly in September.[1] Is the index signaling that the economy is about to enter a recession? An analysis of the record of the leading indicators suggests that it is not a very reliable guide to whether the economy is near a cyclical peak.

Assessing the performance of the leading indicators is somewhat difficult since there are no hard and fast rules about what qualifies as a clear signal that a turning point in the economy is near. Some analysts use a rule-of-thumb that two or more months of consecutive declines in the index herald a turning point. But this simple device does not say anything about how many months are likely to pass before the economy will enter a new phase of the business cycle.

One possible definition of a correct signal of a turning point is a two month or more decline in the index followed by a peak within six months of the first drop in the series. Using this definition, all seven post-war cyclical peaks were foreshadowed correctly by the

[1]The index actually fell 0 06 percent in August, movements of less than ± 0 1 percent are not treated as signaling any change in economic activity

Recent Reliability of the Index of Leading Indicators in Signaling Peaks in Economic Activity

Signal*	False or Correct	Date of Peak	Average Monthly Decline† (In percent)
May 1969-Jul 1969	false	‡	−0 74
Oct 1969-Apr 1970	correct	Dec 1969	−0 51
Jun 1971-Jul 1971	false	‡	−0 18
Jun 1973-Sep 1973	correct	Nov 1973	−0 49
Nov 1978-Dec 1978	false	‡	−0 24
Jun 1979-Aug 1979	false	‡	−0 71
Oct 1979-Nov 1979	correct	Jan 1980	−1 54
Dec 1980-Feb 1981	false	‡	−0 70
May 1981-Oct 1981	correct	Jul 1981	−0 40
Jun 1984 Aug 1984	§	§	−0 90

*A signal equals 2 months or more of consecutive declines in the index of leading indicators A signal is considered to be correct if a peak occurs within six months of the first decline in the index The dates of the peaks correspond to peaks as defined by the National Bureau of Economic Research

†For correct signals the average monthly decline covers all months up to and including the date of the peak

‡Not applicable

§Unknown

leading indicators But in the past 15 years, the index has also signaled other "recessions" about twice as many recessions as actually occurred (table) Its performance from 1950 to the beginning of 1969 was even worse with four false signals for every correct one [2] Thus the mere fact of a decline in the index provides little information about the likelihood of a recession

Lengthening the time period between the start of a correct signal and the peak to 12 months helps reduce the number of false signals But this modification presents other difficulties over a period as long as twelve months, policy changes or reversals of underlying trends can easily offset the factors that caused the indicators to peak in the first place Moreover, multiple peaks have actually occurred in the series during the twelve months preceding a turning point in economic activity, and these peaks are difficult to relate to the business cycle Thus the improved accuracy of the longer period is gained at the expense of more uncertainty about how much time will elapse before a peak in economic activity—the real object of interest—will occur

The size of the decline in the index, furthermore, does not help much in distinguishing between false and correct signals There have been a number of false signals where the average monthly decline in the index was considerably larger than those that occurred with correct signals The peak in December 1969, for example, was preceded by a correct three-month signal that had an average monthly decline of −0 51 percent The majority of false signals in the post-war era, in contrast, had even larger average declines

Could distinguishing between false and correct signals be aided by looking at how many of the twelve components that make up the composite index are declining? Since 1959, the number of components falling before cyclical peaks generally increases quite rapidly, and averages about two-thirds at the peak [3] Even so, there have been false signals that exhibit the same behavior So a high degree of congruence among the components does not guarantee that the signal is correct

In sum, the recent brief yet steep decline in the index has prompted speculation that a turning point in the economy is near But the index of leading indicators has falsely predicted recession many times, including some instances when there has been both a sustained decline in the index and a rise in the number of components that are falling Barring further declines in the series, there is little basis upon which to predict confidently that its recent weakness is presaging a recession

[2] If the definition of a signal is modified to be at least three months of consecutive declines in the series, the accuracy of the leading indicators is only marginally improved The longer period does reduce the number of incorrect signals But the index failed to foreshadow correctly the January 1980 turning point since the decline in the leading indicators before that peak was only two months long It should also be pointed out that some of the false signals, particularly in the 1950s and 1960s, may be due to the fact that the variables and weights currently employed in calculating the composite index differ from the ones used earlier

[3] Based upon a six-month moving average in the proportion of components that are declining each month

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