

## Yield Curve Inversions and Cyclical Peaks

All National Bureau of Economic Research (NBER) business cycle peaks since 1960 have been preceded by a flattening or inversion of the Treasury yield curve, leading some observers to express concern that the recent flattening of the yield curve might presage a near-term business cycle peak. However, the historical record, shown in the table, suggests that the relationship between yield curve inversions (negative slope) and subsequent economic downturns is tenuous.

In the table, the yield curve's slope is measured by the spread between Treasury constant-maturity yields at 10-year and 3-month maturities, a measure that past studies have labeled as the most reliable for predicting changes in economic activity. In the left panel, each row corresponds to a yield curve inversion, the slope having been positive during the previous month; in the right panel, each row corresponds to an NBER business cycle peak. Yield curve inversions tend to predict approximately twice as many recessions as actually occur. The durations and maximum yield spreads also vary sharply. Half of the inversions lasted 3 months or less; only three lasted 1 year or more. Half of the inversions also had maximum spreads of less than 28 basis points, with only three greater than 150 basis points. Finally, the number of

elapsed months from the onset of inversion to the cycle peak also is varied. Six episodes lasted 9 months or less; six lasted 1 year or more. Clearly, although a business cycle peak eventually followed each inversion, the timing has been imprecise.

In the right-hand panel, the first three NBER cycle peaks were not preceded by inversions (these may be unreliable because the long-term Treasury bond market was thin); only six peaks remain. The next two peaks, 1969 and 1973, are the "classic" cases in which the inversion began approximately 6 months prior to the peak and continued until after the peak. The next cycle peaks, in 1980 and 1981, occurred during the Federal Reserve's aggressive disinflationary policy and perhaps are difficult to generalize. Finally, although an inversion occurred prior to the past two peaks, in 1990 and 2001, the yield curve regained its positive slope prior to the cycle peak as the Federal Open Market Committee aggressively lowered short-term rates.

In short, the variability of inversion episodes suggests caution when interpreting changes in the yield curve as leading indicators of business cycle peaks.

—Richard G. Anderson

A longer version of this essay is available on the author's web page at [research.stlouisfed.org](http://research.stlouisfed.org).

Yield Curve Inversions and Cycle Peaks

Beginning month	Duration (months)	Max spread	Next peak	Month to peak*
Jan 1966	1	-.10	Dec 1969	47
Sep 1966	6	-.49	Dec 1969	39
Dec 1968	3	-.28	Dec 1969	12
Apr 1969	1	-.17	Dec 1969	8
Jun 1969	9	-.51	Dec 1969	6
Jun 1973	16	-1.6	Nov 1973	5
Nov 1974	1	-.04	Jan 1980	62
Nov 1978	18	-3.3	Jan 1980	14
Oct 1980	12	-3.5	Jul 1981	9
Jun 1989	2	-.16	Jul 1990	13
Nov 1989	2	-.08	Jul 1990	8
Jul 2000	7	-.70	Mar 2001	8

NOTE: \* Number of months between initial inversion and cycle peak.

NBER Business Cycle Peaks\*

Peak	Previous inversion*	Duration (months)	Max spread	Lead (months)*
Jul 1953	—			
Aug 1957	—			
Apr 1960	—			
Dec 1969	Jun 1969	9	-.51	6
Nov 1973	Jun 1973	16	-1.6	5
Jan 1980	Nov 1978	18	-3.3	14
Jul 1981	Oct 1980	12	-3.5	9
Jul 1990	Nov 1989	2	-.16	8
Mar 2001	Jul 2000	7	-.70	8