

National Economic Trends



The Coincident Indicators and Real GDP

When analysts want a monthly measure of economic output, they often use the Index of Industrial Production prepared by the Federal Reserve Board of Governors. The composite Index of Coincident Indicators, published by the Conference Board, is an alternative which provides a broader measure of economic activity. The composite index was constructed to approximate movements in general economic activity with particular emphasis on matching turning points in the business cycle. The chart, which shows four-quarter changes in real GDP plotted with 12-month changes in the coincident indicators, suggests that the coincident indicators track real GDP quite well.

Although industrial production also rises and falls with cyclical changes in the economy, it reflects the more variable nature of the manufacturing sector. Both industrial production and the coincident indicators are quite noisy at monthly intervals. Although averaging over 12 months makes the coincident indicators look much like real GDP, in the last two years the monthly changes have ranged from -5 percent to 10 percent at an annual rate.

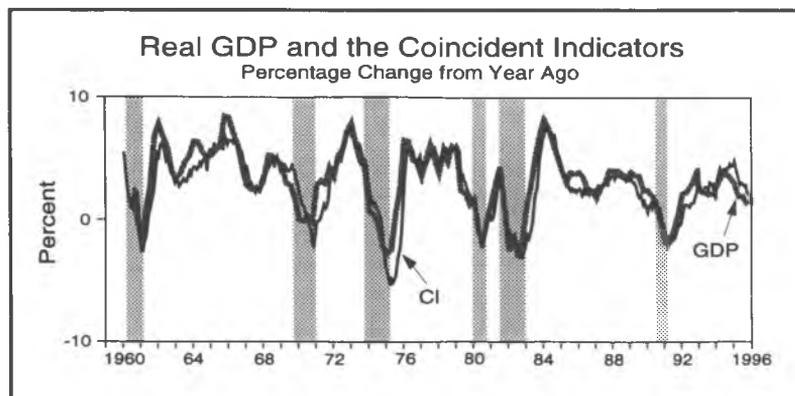
The coincident indicators include four components whose weights sum to one: the index of industrial production (0.155), the number of employees on nonagricultural payrolls (0.434), personal income less transfer payments in constant dollars (0.276) and manufacturing and trade sales in constant dollars (0.135). Information from the manufacturing sector is heavily weighted in the index. In 1993, manufacturing output was just under 19 percent of total output yet it is represented in all the components and is the major

part of two components, industrial production and manufacturing and trade sales.

Industrial production is an index of activity in manufacturing, mining and utilities. Manufacturing is 85 percent of the index. Manufacturing workers accounted for about 15 percent of nonagricultural payrolls in March. Manufacturing wages and salaries make up 13 percent of the personal income component. In February, manufacturer's shipments alone accounted for 43 percent of the total manufacturing and sales component.

The weight of the manufacturing sector in both industrial production and the coincident indicators is important for capturing cyclical movements in the economy. Although output from the manufacturing sector represents only about 1/5 of total U.S. output, it contributes heavily to cyclical fluctuations. One advantage of using the coincident indicators as a measure of real GDP is that, as an index of general economic activity, it matches both the size and timing of fluctuations in real GDP. Industrial production, on the other hand, closely matches the timing of cyclical movements, but exaggerates the size of fluctuations in the overall economy.

—William T. Gavin



Views expressed do not necessarily reflect official positions of the Federal Reserve System