

2002 Annual Benchmark Revisions to the U.S. Composite Indexes

Effective with the January 22, 2002 release of the U.S. Leading Economic Index for December 2001, The Conference Board has completed its annual benchmark revisions to the composite indexes. Benchmark revisions, which constitute a kind of maintenance, typically have minor effects on the composite indexes, since the list of underlying components is not changed. The benchmark revisions brought the composite indexes up-to-date with revisions made to the history of component data in the past year. As a result of the Board's benchmark revisions, however, the month-to-month changes in the indexes will no longer be comparable to those published last year.

During the course of the year, monthly updates to the leading, coincident, and lagging indexes included only revisions to component data over the past six months. This methodology was adopted to avoid many minor and usually unnecessary revisions to the history of the indexes throughout the year. In the annual benchmark revisions, histories of the composite indexes are recalculated using the most up-to-date version of the component data available.

Volatility Adjustment Factors Are Updated at Benchmark Revisions

As part of this process, the standardization factors—which adjust the component contributions to equalize their volatility—were also recalculated, based on the most up-to-date data for the component series. The standardization factors were

calculated as the inverse of the standard deviations of each component's contributions, using the period from 1959 to 2000. Last year's standardization factors were based on the period from 1959 to 1999. The changes in the standardization factors are very small, as expected. Table 1 lists the standardization factors that were used in 2001, and the factors for 2002.

Many U.S. Statistics Were Converted to NAICS in 2001

Although the components of the index remain unchanged at this time, it is worth noting that the U.S. Department of Commerce Census Bureau and the Bureau of Economic Analysis abandoned the Standard Industrial Classification (SIC) in favor of the new North American Industry Classification System (NAICS). This had a significant impact on several components of the composite indexes, and led to a rare mid-year benchmark revision during 2001. In August 2001, The Conference Board began using several components based on the new NAICS in the composite indexes. Thus, as an exception to common practice, the Board had to do a benchmark revision in the middle of the year to incorporate changes due to the conversion to NAICS.

Specifically, new orders for consumer goods and materials, and new orders for nondefense capital goods in the leading index; manufacturing and trade sales in the coincident index; and the ratio of manufacturing trade inventories to sales in the lagging index, now report data based on the new NAICS back to 1997. Conference Board research indi-

cates that the new data are close substitutes to the new orders and sales series based on the old classification system. Data prior to 1997 are still calculated based on the SIC.

Cyclical Performance of the Composite Indexes

In addition to the conversion to NAICS, another noteworthy revision last year came from the Federal Reserve, when money supply was comprehensively revised in December 2001. This revision contributed to the slight change in the level of the leading index, but the month-to-month growth rates remained essentially the same. Thus, the cyclical pattern of the leading index remains unchanged.

The accompanying charts show the effect of the benchmark revisions on the indexes. The cyclical performance of the composite indexes is generally not affected by benchmark revisions; this year is no exception. The peak and trough dates of the leading, coincident, and lagging indexes, and the coincident-to-lagging ratio after the benchmark process this year remain the same as their respective peak and trough dates prior to the benchmark revision. 

Table 1: U.S. Composite Indexes: Components and Standardization Factors

Leading Index	Factors 2002	Factors 2001
1. Average weekly hours, manufacturing	.1812	.1836
2. Average weekly initial claims for unemployment insurance	.0241	.0243
3. Manufacturers' new orders, consumer goods and materials	.0456	.0490
4. Vendor performance, slower deliveries diffusion index	.0277	.0275
5. Manufacturers' new orders, nondefense capital goods	.0131	.0129
6. Building permits, new private housing units	.0191	.0187
7. Stock prices, 500 common stocks	.0310	.0308
8. Money supply, M2	.3069	.3033
9. Interest rate spread, 10-year Treasury bonds less federal funds	.3330	.3317
10. Index of consumer expectations	.0185	.0182

Coincident Index	Factors 2002	Factors 2001
1. Employees on nonagricultural payrolls	.4805	.4492
2. Personal income less transfer payments	.2814	.2626
3. Industrial production	.1292	.1204
4. Manufacturing and trade sales	.1090	.1677

Lagging Index	Factors 2002	Factors 2001
1. Average duration of unemployment	.0367	.0329
2. Inventories to sales ratio, manufacturing and trade	.1225	.2023
3. Labor cost per unit of output, manufacturing	.0611	.0545
4. Average prime rate	.2454	.2169
5. Commercial and industrial loans	.1265	.1318
6. Consumer installment credit to personal income ratio	.2209	.1961
7. Consumer price index for services	.1869	.1655

