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COMPOSITE INDEXES OF LEADING, COINCIDENT, AND LAGGING  
INDICATORS: MAY 1981

The composite index of leading indicators decreased 1.8 percent in May to a level of 135.2 (1967=100), according to preliminary data released today by the Bureau of Economic Analysis, U.S. Department of Commerce. On the basis of more complete data, the April index level was revised to 137.7, which is 0.4 percent above the revised March level of 137.2. Change in sensitive crude materials prices was the major contributor to the April revision.

Nine of ten indicators available for May contributed to the decline in the index: layoff rate, new orders in 1972 dollars, vendor performance (i.e., companies receiving slower deliveries from vendors), contracts and orders for plant and equipment in 1972 dollars, building permits, change in sensitive crude materials prices--Producer Price Index (the weighted 4-month moving average of the monthly changes had a negative effect on the index even though sensitive crude materials prices increased at an increasing rate in May), stock prices, change in total liquid assets, and money supply in 1972 dollars. Change in sensitive crude materials prices contributed the greatest decline.

One of ten increased: average workweek.

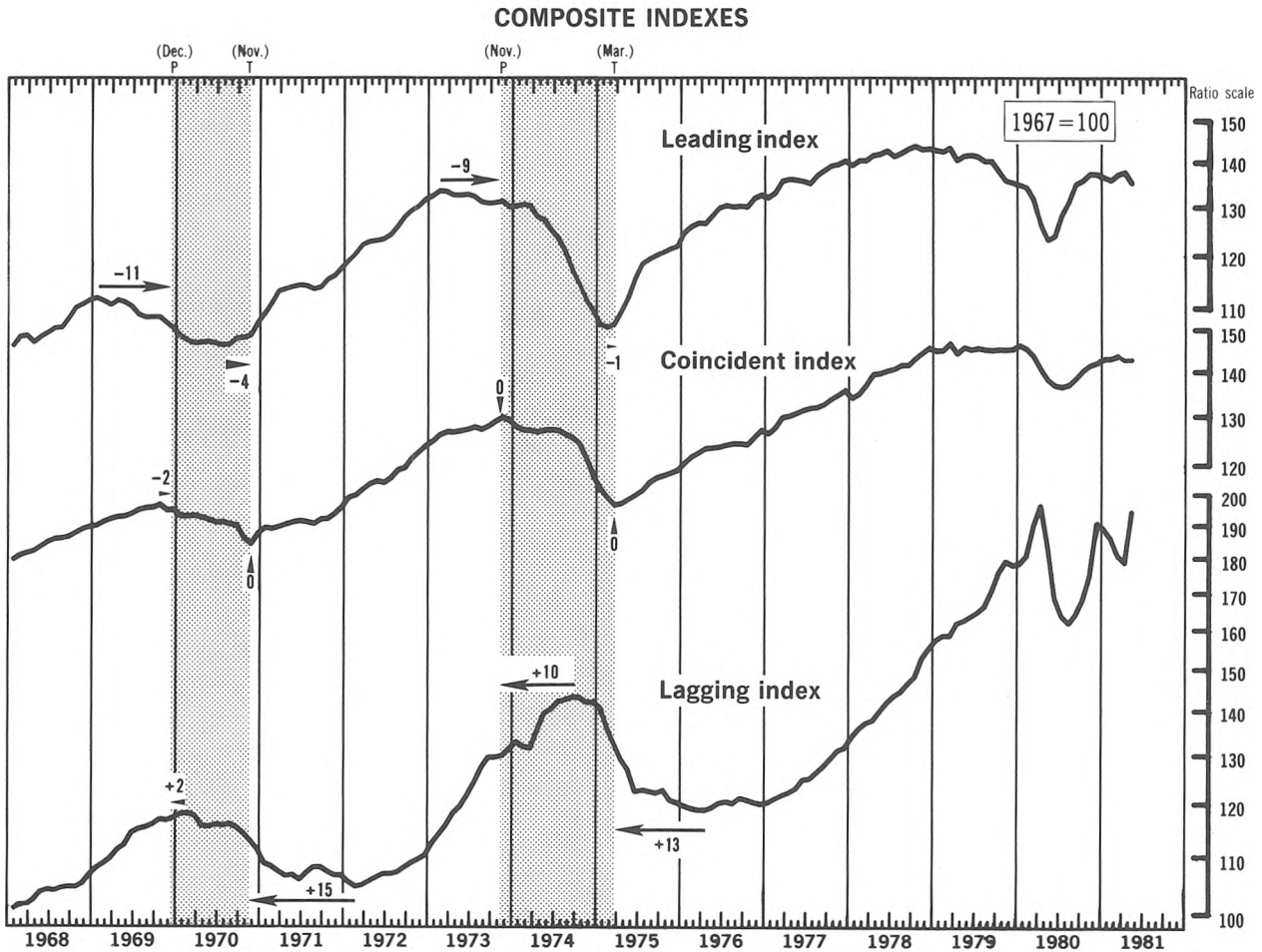
The composite index of coincident indicators, which is a monthly approximation of aggregate economic activity, increased 0.1 percent in May to a level of 142.7 (1967=100). On the basis of more complete data, the April index level was revised to 142.6, which is 0.7 percent below the revised March level of 143.6.

The composite index of lagging indicators increased 8.7 percent in May to a level of 194.2 (1967=100). On the basis of more complete data, the April index level was revised to 178.6, which is 1.2 percent below the revised March level of 180.7.

The leading index is designed to predict monthly movements in aggregate economic activity, which is approximated by the coincident index. The lagging index is expected to move, after a time lag, in the same direction as the coincident index and thus to confirm the movements in the coincident index. These concepts are explained more fully in the *Handbook of Cyclical Indicators*, a supplement to *Business Conditions Digest (BCD)*, available from the Superintendent of Documents at the price of \$4.00.

More data on the composite indexes, as well as other important measures of economic activity, appear in *BCD*. It is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Annual subscription: \$55.00.

Next release date: July 29 for the June composite indexes.



NOTE: P (peak) indicates the end of general business expansion and the beginning of recession; T (trough) indicates the end of general business recession and the beginning of expansion. Thus, the shaded areas represent recessions. The numbers on the chart indicate the length of leads (-) and lags (+), in months, from business cycle turning dates.



Table 2. Net Contributions of the Individual Components to the Leading, Coincident, and Lagging Indexes

Indicator	Basic data				Net contribution to index			Direction of change
	Feb.	Mar.	Apr.	May	Feb. to Mar.	Mar. to Apr.	Apr. to May	Apr. to May
LEADING INDICATORS								
Average workweek, production workers, manufacturing (hours).....	39.8	40.0	40.1	p40.2	0.17	0.09	0.10	+
*Layoff rate, manufacturing (percent).....	1.4	1.4	r1.2	p1.4	0.00	0.22	-0.24	-
New orders, mfg., consumer goods and materials (billions of 1972 dollars)...	34.38	34.07	r34.16	p33.14	-0.05	0.01	-0.19	-
Vendor performance, companies receiving slower deliveries from vendors (pct.)..	50	52	56	52	0.07	0.15	-0.17	-
Net business formation (index: 1967=100)..	r117.1	e117.6	NA	NA	0.06	NA	NA	
Contracts and orders, plant & equipment (billions of 1972 dollars).....	12.34	14.24	r13.28	p13.13	0.33	-0.17	-0.03	-
Building permits (index: 1967=100).....	94.1	93.1	r95.8	94.3	-0.03	0.09	-0.06	-
#Change in inventories on hand and on order (ann. rate, billions of 1972 \$)..	r-8.26	r-4.72	p-0.28	NA	0.22	0.30	NA	
#Change in sensitive crude materials prices, PPI (percent).....	r2.94	r3.36	r2.84	1.78	0.18	-0.24	-0.53	-
Stock prices, 500 common stocks (index: 1941-43=10).....	128.40	133.19	134.43	131.73	0.22	0.06	-0.15	-
#Change in total liquid assets (percent)..	r1.09	r0.95	e0.78	e0.66	-0.45	-0.59	-0.46	-
Money supply (M2) (billions of 1972 \$)...	805.0	r810.5	r815.7	p813.1	0.26	0.27	-0.15	-
Percent change in Leading index.....	....	....	....	....	1.03	0.36	-1.82	
COINCIDENT INDICATORS								
Employees on nonagricultural payrolls (thousands).....	91,652	r91,705	r91,490	p91,474	0.05	-0.18	-0.02	-
Personal income less transfer payments (annual rate, billions of 1972 \$).....	r1,062.0	r1,063.5	r1,064.5	p1,066.6	0.07	0.05	0.13	+
Industrial production, total (index: 1967=100).....	151.5	152.2	r152.3	p152.8	0.13	0.02	0.12	+
Manufacturing and trade sales (millions of 1972 dollars).....	156,969	r159,358	p156,431	NA	0.33	-0.40	NA	
Percent change in Coincident index....	....	....	....	....	0.42	-0.70	0.07	
LAGGING INDICATORS								
*Average duration of unemployment (weeks).....	14.4	14.0	13.7	13.2	0.17	0.13	0.35	+
Manufacturing and trade inventories, total, (billions of 1972 dollars).....	r262.86	r262.64	p263.03	NA	-0.04	0.07	NA	
Labor cost per unit of output, manufacturing (index: 1967=100).....	r204.4	r204.6	r205.9	p206.9	0.03	0.20	0.23	+
Average prime rate charged by banks (percent).....	19.43	18.05	17.15	19.61	-2.68	-1.75	7.17	+
Commercial and industrial loans outstanding (millions of dollars).....	r173,136	r171,216	r173,773	p177,775	-0.25	0.33	0.75	+
Ratio, consumer installment credit to personal income (percent).....	r13.34	r13.35	p13.37	NA	0.03	0.07	NA	
Percent change in Lagging index.....	....	....	....	....	-2.85	-1.16	8.73	

\* Series is inverted in calculating the composite index: a decrease in this series is considered an upward movement.

# Smoothed by a weighted 4-month moving average (with weights 1,2,2,1) placed at the terminal month of the span.

NA, not available. p, preliminary. r, revised. e, estimated.

NOTE: The net contribution of an individual component is that component's share in the composite movement of the group. The percent change in the index equals (except for rounding differences) the sum of the net contributions of the individual components plus the trend adjustment factor of 0.099 for the leading index, -0.164 for the coincident index, and -0.170 for the lagging index.