

UNITED STATES DEPARTMENT OF
COMMERCE
NEWS
WASHINGTON, D.C. 20230

BUREAU OF
ECONOMIC ANALYSIS

FOR WIRE TRANSMISSION 10:00 A.M. EDT, FRIDAY, JULY 29, 1983

Larry Moran (202)523-0777

BEA 83-38

COMPOSITE INDEXES OF LEADING, COINCIDENT, AND LAGGING
INDICATORS: JUNE 1983

The composite index of leading indicators increased 1.0 percent in June to a level of 155.9 (1967=100), according to preliminary data released today by the Commerce Department's Bureau of Economic Analysis.

On the basis of more complete data, the index increased 1.2 percent in May and increased 1.3 percent in April. A month ago, the bureau reported estimates that showed the index increased 1.2 percent in May and increased 1.4 percent in April. Change in inventories on hand and on order was the major contributor to the April revision.

Six of ten indicators available for June contributed to the increase in the index: average workweek, average weekly initial claims for state unemployment insurance, net business formation, building permits, stock prices, and money supply in 1972 dollars. Average weekly initial claims for state unemployment insurance contributed the greatest increase.

Three of ten decreased: manufacturers' new orders for consumer goods and materials in 1972 dollars, contracts and orders for plant and equipment in 1972 dollars, and change in sensitive materials prices (the weighted 4-month moving average of the monthly changes had a negative effect on the index even though sensitive prices increased at an increasing rate in June). Change in sensitive materials prices contributed the greatest decline.

One indicator was unchanged: vendor performance (i.e., companies receiving slower deliveries from vendors).

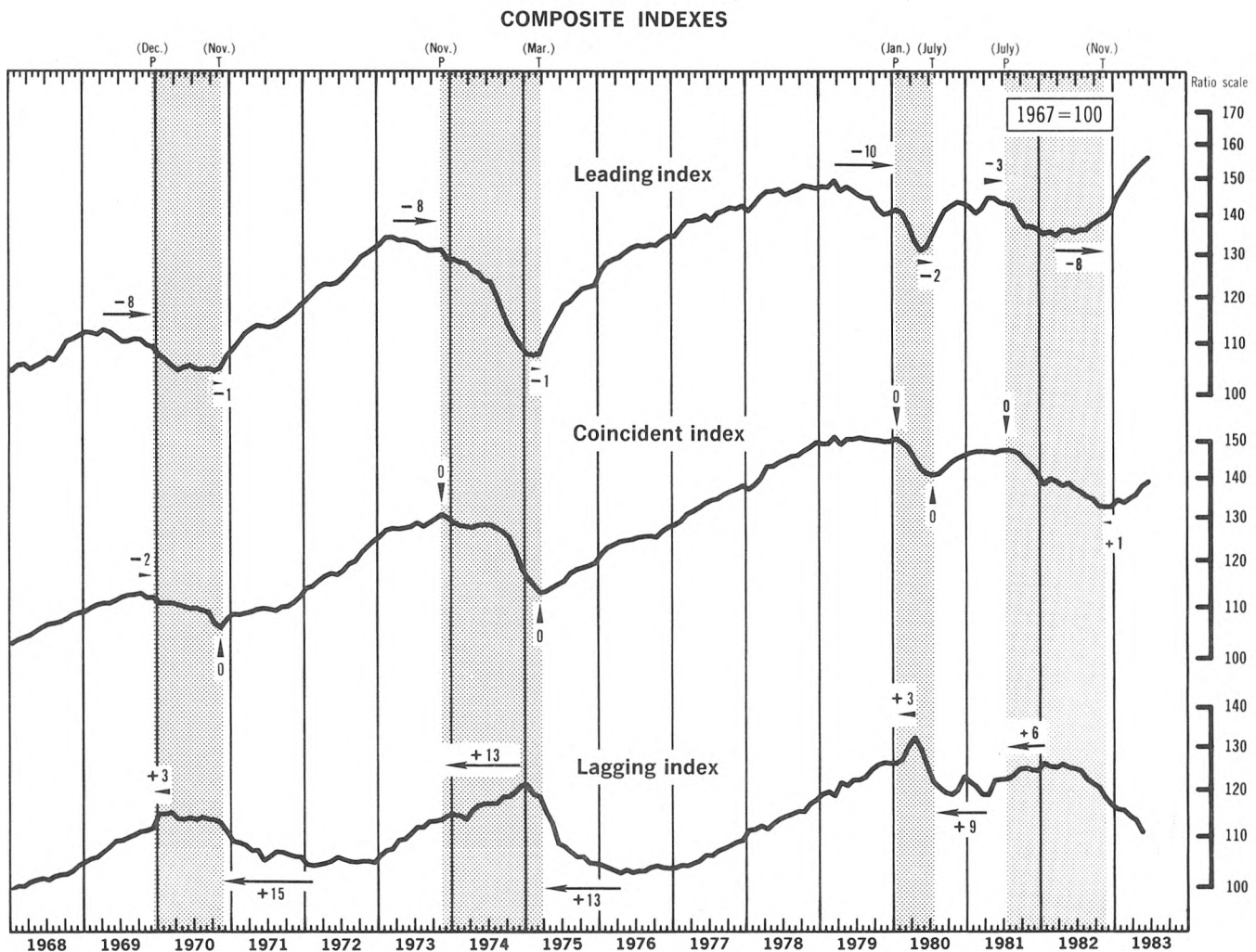
The composite index of coincident indicators, which is a monthly approximation of aggregate economic activity, increased 0.8 percent in June to a level of 139.1 (1967=100). On the basis of more complete data, the index increased 1.7 percent in May and increased 0.7 percent in April.

The composite index of lagging indicators was not computed for June because only half of its components were available. On the basis of more complete data, the index decreased 2.1 percent in May and decreased 0.8 percent in April.

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).

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: August 31 for the July 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 numbered arrows indicate the length of leads (-) and lags (+), in months, from business cycle turning dates.

Table 1. Composite Indexes of Leading, Coincident, and Lagging Indicators

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	IQ	IIQ	IIIQ	IVQ
Leading index (1967=100)																
1974	128.7	128.0	127.8	126.1	125.5	123.8	123.5	120.3	116.5	113.5	111.2	109.2	128.2	125.1	120.1	111.3
1975	107.7	107.6	107.8	111.0	113.4	115.8	118.2	119.0	120.6	122.0	122.4	122.8	107.7	113.4	119.3	122.4
1976	126.1	128.0	128.8	129.3	130.5	131.6	132.2	131.9	132.4	132.2	133.5	134.5	127.6	130.5	132.2	133.4
1977	134.5	136.5	138.4	138.5	138.9	139.8	138.5	140.5	141.1	141.9	141.6	142.4	136.5	139.1	140.0	142.0
1978	141.0	142.8	144.9	146.3	146.4	146.9	145.4	146.2	146.8	147.9	147.6	147.2	142.9	146.5	146.1	147.6
1979	147.7	147.5	149.3	146.4	147.6	146.5	145.2	144.5	144.5	141.7	140.1	140.5	148.2	146.8	144.7	140.8
1980	141.4	140.4	137.4	133.4	130.9	132.0	135.1	138.3	141.2	142.4	143.4	143.0	139.7	132.1	138.2	142.9
1981	142.1	140.4	141.7	144.6	144.5	143.2	142.9	142.4	139.3	136.9	137.0	136.2	141.4	144.1	141.5	136.7
1982	135.1	135.7	134.7	136.0	136.2	135.5	r136.2	r136.2	r137.6	r138.6	r139.4	r140.9	135.2	135.9	r136.7	r139.6
1983	r145.1	r147.6	150.5	r152.4	r154.3	p155.9							147.7	p154.2		
Leading index--percent change from preceding month (quarter)																
1974	0.0	-0.5	-0.2	-1.3	-0.5	-1.4	-0.2	-2.6	-3.2	-2.6	-2.0	-1.8	-1.6	-2.4	-4.0	-7.3
1975	-1.4	-0.1	0.2	3.0	2.2	2.1	2.1	0.7	1.3	1.2	0.3	0.3	-3.2	5.3	5.2	2.6
1976	2.7	1.5	0.6	0.4	0.9	0.8	0.5	-0.2	0.4	-0.2	1.0	0.7	4.2	2.3	1.3	0.9
1977	0.0	1.5	1.4	0.1	0.3	0.6	-0.9	1.4	0.4	0.6	-0.2	0.6	2.3	1.9	0.6	1.4
1978	-1.0	1.3	1.5	1.0	0.1	0.3	-1.0	0.6	0.4	0.7	-0.2	-0.3	0.6	2.5	-0.3	1.0
1979	0.3	-0.1	1.2	-1.9	0.8	-0.7	-0.9	-0.5	0.0	-1.9	-1.1	0.3	0.4	-0.9	-1.4	-2.7
1980	0.6	-0.7	-2.1	-2.9	-1.9	0.8	2.3	2.4	2.1	0.8	0.7	-0.3	-0.8	-5.4	4.6	3.4
1981	-0.6	-1.2	0.9	2.0	-0.1	-0.9	-0.2	-0.3	-2.2	-1.7	0.1	-0.6	-1.0	1.9	-1.8	-3.4
1982	-0.8	0.4	-0.7	1.0	0.1	-0.5	r0.5	r0.0	r1.0	r0.7	r0.6	r1.1	-1.1	0.5	r0.6	r2.1
1983	r3.0	r1.7	2.0	r1.3	1.2	p1.0							r5.8	p4.4		
Coincident index (1967=100)																
1974	128.7	128.0	127.8	127.6	128.2	128.3	128.2	127.3	126.5	125.2	122.2	118.4	128.2	128.0	127.3	121.9
1975	116.2	114.6	113.0	113.3	114.1	114.9	115.6	117.3	118.1	118.5	118.9	119.5	114.6	114.1	117.0	119.0
1976	121.4	122.9	123.6	124.3	124.6	124.8	125.3	125.5	125.6	125.3	126.8	127.8	122.6	124.6	125.5	126.6
1977	128.3	129.2	130.9	131.6	132.5	133.6	134.3	134.6	135.8	136.6	137.2	138.1	129.5	132.6	134.9	137.3
1978	137.1	138.3	140.0	143.0	143.1	144.2	145.0	145.9	146.1	147.4	148.4	149.7	138.5	143.4	145.7	148.5
1979	149.3	149.4	151.2	149.1	150.6	150.6	151.0	150.6	150.4	150.3	149.9	150.0	150.0	150.1	150.7	150.1
1980	150.7	149.6	148.1	145.1	142.4	141.1	140.8	141.2	142.7	144.2	145.3	146.1	149.5	142.9	141.6	145.2
1981	146.8	147.2	147.2	147.1	146.9	147.5	147.6	147.3	146.5	144.5	143.0	140.9	147.1	147.2	147.1	142.8
1982	138.4	139.9	139.2	138.0	138.8	137.3	136.4	r135.1	134.5	r132.7	r132.6	r132.6	139.2	138.0	r135.3	r132.6
1983	r134.3	r133.6	r134.7	r135.7	r138.0	p139.1							r134.2	p137.6		
Coincident index--percent change from preceding month (quarter)																
1974	-0.8	-0.5	-0.2	-0.2	0.5	0.1	-0.1	-0.7	-0.6	-1.0	-2.4	-3.1	-1.5	-0.2	-0.5	-4.2
1975	-1.9	-1.4	-1.4	0.3	0.7	0.7	0.6	1.5	0.7	0.3	0.3	0.5	-6.0	-0.4	2.5	1.7
1976	1.6	1.2	0.6	0.6	0.2	0.2	0.4	0.2	0.1	-0.2	1.2	0.8	3.0	1.6	0.7	0.9
1977	0.4	0.7	1.3	0.5	0.7	0.8	0.5	0.2	0.9	0.6	0.4	0.7	2.3	2.4	1.7	1.8
1978	-0.7	0.9	1.2	2.1	0.1	0.8	0.6	0.6	0.1	0.9	0.7	0.9	0.9	3.5	1.6	1.9
1979	-0.3	0.1	1.2	-1.4	1.0	0.0	0.3	-0.3	-0.1	-0.1	-0.3	0.1	1.0	0.1	0.4	-0.4
1980	0.5	-0.7	-1.0	-2.0	-1.9	-0.9	-0.2	0.3	1.1	1.1	0.8	0.6	-0.4	-4.4	-0.9	2.5
1981	0.5	0.3	0.0	-0.1	-0.1	0.4	0.1	-0.2	-0.5	-1.4	-1.0	-1.5	1.3	0.1	-0.1	-2.9
1982	-1.8	1.1	-0.5	-0.9	0.6	-1.1	-0.7	r-1.0	r-0.4	r-1.3	r-0.1	r0.0	-2.5	-0.9	r-2.0	r-2.0
1983	r1.3	r-0.5	0.8	r0.7	r1.7	p0.8							r1.2	p2.5		
Lagging index (1967=100)																
1974	114.6	114.4	113.6	115.6	116.7	117.1	117.1	117.2	118.6	118.7	119.7	121.1	114.2	116.5	117.6	119.8
1975	121.0	119.0	118.6	115.2	112.8	108.6	108.0	106.9	105.9	106.0	104.7	104.6	119.5	112.2	106.9	105.1
1976	104.3	103.8	103.3	102.8	103.4	102.9	103.2	103.2	103.9	104.2	103.8	103.7	103.8	103.0	103.4	103.9
1977	103.8	104.3	104.2	104.7	105.2	106.3	106.2	107.2	107.7	108.3	109.0	109.4	104.1	105.4	107.0	108.9
1978	111.4	111.6	112.3	111.6	112.8	113.7	114.3	114.8	115.4	115.3	117.1	118.0	111.8	112.7	114.8	116.8
1979	119.2	119.7	118.8	121.7	121.0	122.3	122.3	123.0	124.7	125.8	126.3	126.1	119.2	121.7	123.3	126.1
1980	126.2	127.1	130.2	132.3	129.6	125.5	121.8	120.5	119.4	119.0	120.1	123.0	127.8	129.1	120.6	120.7
1981	121.7	120.7	119.0	119.0	122.2	122.4	122.5	123.3	124.7	125.0	124.5	124.4	120.5	121.2	123.5	124.6
1982	126.1	125.3	125.1	125.9	125.1	124.8	r124.3	r122.4	r121.4	120.5	r118.3	r116.7	125.5	125.3	r122.7	r118.5
1983	r115.7	r115.5	r114.2	r113.3	r110.9								r115.1			
Lagging index--percent change from preceding month (quarter)																
1974	0.1	-0.2	-0.7	1.8	1.0	0.3	0.0	0.1	1.2	0.1	0.8	1.2	0.4	2.0	0.9	1.9
1975	-0.1	-1.7	-0.3	-2.9	-2.1	-3.7	-0.6	-1.0	-0.9	0.1	-1.2	-0.1	-0.3	-6.1	-4.7	-1.7
1976	-0.3	-0.5	-0.5	-0.5	0.6	-0.5	0.3	0.0	0.7	0.3	-0.4	-0.1	-1.2	-0.8	0.4	0.5
1977	0.1	0.5	-0.1	0.5	0.5	1.0	-0.1	0.9	0.5	0.6	0.6	0.4	0.2	1.2	1.5	1.8
1978	1.8	0.2	0.6	-0.6	1.1	0.8	0.5	0.4	0.5	-0.1	1.6	0.8	2.7	0.8	1.9	1.7
1979	1.0	0.4	-0.8	2.4	-0.6	1.1	0.0	0.6	1.4	0.9	0.4	-0.2	2.1	2.1	1.3	2.3
1980	0.1	0.7	2.4	1.6	-2.0	-3.2	-2.9	-1.1	-0.9	-0.3	0.9	2.4	1.3	1.0	-6.6	0.1
1981	-1.1	-0.8	-1.4	0.0	2.7	0.2	0.1	0.7	1.1	0.2	-0.4	-0.1	-0.2	0.6	1.9	0.9
1982	1.4	-0.6	-0.2	0.6	-0.6	-0.2	r0.4	-1.5	r-0.8	-0.7	r-1.8	-1.4	0.7	-0.2	r-2.1	r-3.4
1983	r-0.9	-0.2	-1.1	r-0.8	r-2.1								r-2.9			

p, preliminary. r, revised.

NOTE: Quarterly data are averages of monthly figures. Quarterly percent changes are computed from quarterly data. See table 2 for composition of the indexes.

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
	Mar.	Apr.	May	June	Mar. to Apr.	Apr. to May	May to June	May to June
LEADING INDICATORS								
Average workweek, production workers, manufacturing (hours).....	39.5	40.1	r39.9	p40.1	0.47	-0.16	0.19	+
*Average weekly initial claims, state unemployment insurance (thousands)....	479	470	453	406	0.05	0.10	0.36	+
New orders, mfg., consumer goods and materials (billions of 1972 dollars)...	31.84	32.16	r34.04	p33.26	0.05	0.28	-0.14	-
Vendor performance, companies receiving slower deliveries from vendors (pct.)..	50	52	52	52	0.08	0.00	0.00	0
Net business formation (index: 1967=100).	r112.6	r111.3	r115.0	p116.3	-0.16	0.46	0.19	+
Contracts and orders, plant & equipment (billions of 1972 dollars).....	r12.70	r13.87	r14.39	p13.82	0.19	0.08	-0.11	-
Building permits (index: 1967=100).....	118.5	124.1	132.1	142.2	0.14	0.19	0.26	+
#Change in inventories on hand and on order (ann. rate, billions of 1972 \$)..	r-7.76	r-5.70	p-1.50	NA	0.11	0.23	NA	
#Change in sensitive materials prices (percent).....	1.96	2.02	1.36	0.94	0.02	-0.26	-0.20	-
Stock prices, 500 common stocks (index: 1941-43=10).....	151.88	157.71	164.10	166.39	0.24	0.25	0.10	+
Money supply (M2) (billions of 1972 \$)...	883.4	r880.3	r884.6	p890.7	-0.11	0.16	0.26	+
Change in credit--business and consumer borrowing (annual rate, percent).....	-1.4	-0.6	r-5.1	NA	0.04	-0.24	NA	
Percent change in Leading index.....	....	....	....	....	1.26	1.25	1.04	
COINCIDENT INDICATORS								
Employees on nonagricultural payrolls (thousands).....	88,814	r89,101	r89,416	p89,760	0.27	0.29	0.41	+
Personal income less transfer payments (annual rate, billions of 1972 \$)....	r1,078.0	r1,078.1	r1,088.7	p1,092.1	0.00	0.49	0.20	+
Industrial production, total (index: 1967=100).....	r140.0	142.7	144.3	p145.9	0.53	0.31	0.40	+
Manufacturing and trade sales (millions of 1972 dollars).....	r155,388	r156,140	p161,478	NA	0.11	0.75	NA	
Percent change in Coincident index....	....	....	....	....	0.74	1.69	0.80	
LAGGING INDICATORS								
*Average duration of unemployment (weeks).....	19.1	19.0	20.4	22.0	0.04	-0.51	-1.05	-
Ratio, deflated inventories to sales, manufacturing and trade (ratio).....	r1.66	r1.65	p1.60	NA	-0.13	-0.66	NA	
Labor cost per unit of output, mfg.--actual as percent of trend (percent)...	r96.3	r95.1	r94.2	p93.3	-0.44	-0.33	-0.64	-
Average prime rate charged by banks (percent).....	10.50	10.50	10.50	10.50	0.00	0.00	0.00	0
Commercial and industrial loans outstanding (millions of 1972 \$).....	105,668	r104,466	r102,593	NA	-0.30	-0.48	NA	
Ratio, consumer installment credit to personal income (percent).....	r12.93	r12.92	p12.88	NA	-0.04	-0.15	NA	
Percent change in Lagging index.....	....	....	....	....	-0.79	-2.12	NA	

* 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 0.139 for the leading index, -0.175 for the coincident index, and 0.018 for the lagging index.