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COMPOSITE INDEXES OF LEADING, COINCIDENT, AND LAGGING  
INDICATORS: JULY 1985

The composite index of leading indicators increased 0.4 percent in July to 168.7 (1967=100), according to preliminary estimates released today by the Commerce Department's Bureau of Economic Analysis.

On the basis of more complete data, the index increased 0.4 percent in June and 0.3 percent in May. A month ago, the bureau reported estimates that showed the index increased 1.0 percent in June and 0.1 percent in May. Change in credit outstanding was the major contributor to the June revision. Net business formation was the major contributor to the May revision.

Six of 11 indicators available for July contributed to the increase in the index. They were, ordered from the largest positive contributor to the smallest: money supply in 1972 dollars, stock prices, average weekly initial claims for state unemployment insurance, net business formation, change in credit outstanding, and manufacturers' new orders for consumer goods and materials in 1972 dollars.

Three of 11 made negative contributions. They were, ordered from the largest negative contributor to the smallest: change in sensitive materials prices, contracts and orders for plant and equipment in 1972 dollars, and building permits.

Two indicators were unchanged: vendor performance (i.e., companies receiving slower deliveries from vendors) and average workweek.

The composite index of coincident indicators, a monthly approximation of aggregate economic activity, increased 0.2 percent in July to 159.2 (1967=100). On the basis of more complete data, the index decreased 0.5 percent in June and 0.2 percent in May.

The composite index of lagging indicators decreased 0.3 percent in July to 127.8 (1967=100). On the basis of more complete data, the index was unchanged in June and increased 1.8 percent in May.

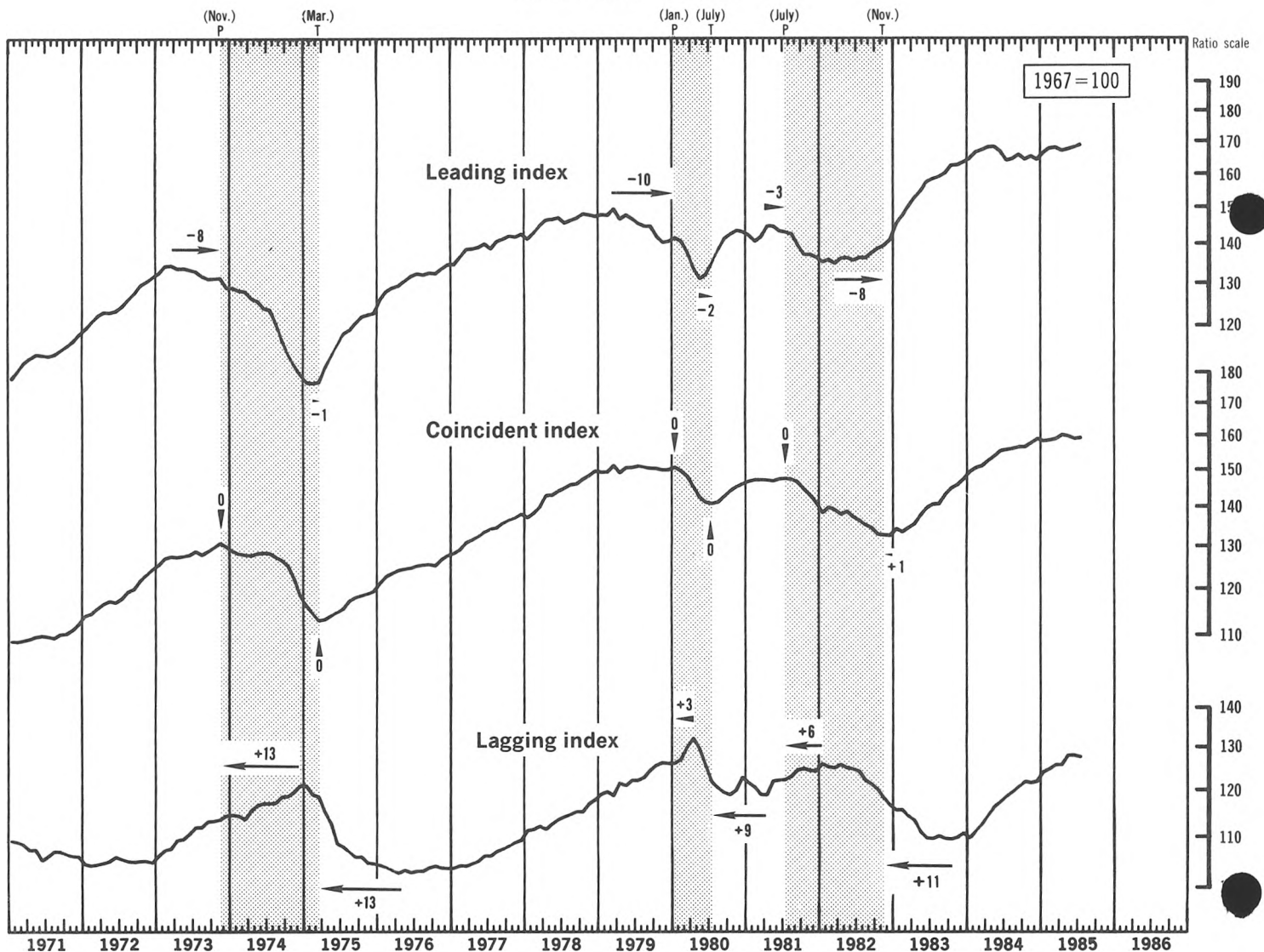
The leading index is designed to predict monthly movements in aggregate economic activity, which is approximated by the coincident index. The lagging index is expected to move, after a time lag, in the same direction as the coincident index and thus to confirm the movements in the coincident index.

These concepts are explained more fully in the 1984 edition of Handbook of Cyclical Indicators (price \$5.50, stock number 003-010-00127-5), which is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

More data on the composite indexes, as well as other important measures of economic activity, appear each month in Business Conditions Digest, also available from the Superintendent of Documents. Annual subscription: \$44.00.

Next release date: September 30 for the August composite indexes.

### 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 arrows indicate the length of leads (-) and lags (+), in months, from the 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)																
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	136.2	136.1	137.5	138.6	139.4	140.9	135.2	135.9	136.6	139.6
1983	145.2	147.4	150.2	152.5	154.4	157.3	158.2	158.9	160.0	162.4	162.5	163.4	147.6	154.7	159.0	162.8
1984	164.5	166.5	167.2	168.1	168.2	166.7	163.9	164.4	165.7	164.2	165.2	164.1	166.1	167.7	164.7	164.5
1985	166.3	167.7	r167.9	r166.9	r167.4	r168.0	p168.7						r167.3	167.4		
Leading index--percent change from preceding month (quarter)																
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	0.5	-0.1	1.0	0.8	0.6	1.1	-1.1	0.5	0.5	2.2
1983	3.1	1.5	1.9	1.5	1.2	1.9	0.6	0.4	0.7	1.5	0.1	0.6	5.7	4.8	2.8	2.4
1984	0.7	1.2	0.4	0.5	0.1	-0.9	-1.7	0.3	0.8	-0.9	0.6	-0.7	2.0	1.0	-1.8	-0.1
1985	1.3	0.8	r0.1	r-0.6	r0.3	r0.4	p0.4						r1.7	0.1		
Coincident index (1967=100)																
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	135.2	134.5	132.9	132.7	132.6	139.2	138.0	135.4	132.7
1983	134.3	133.5	134.6	135.6	137.9	139.8	140.7	140.8	143.3	145.0	145.9	147.5	134.1	137.8	141.6	146.1
1984	149.5	150.6	151.1	152.6	153.9	155.4	155.7	156.0	156.5	156.5	157.7	158.9	150.4	154.0	156.1	157.7
1985	158.2	158.5	158.9	r160.1	r159.7	r158.9	p159.2						158.5	r159.6		
Coincident index--percent change from preceding month (quarter)																
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	-0.9	-0.5	-1.2	-0.2	-0.1	-2.5	-0.9	-1.9	-2.0
1983	1.3	-0.6	0.8	0.7	1.7	1.4	0.6	0.1	1.8	1.2	0.6	1.1	1.1	2.8	2.8	3.2
1984	1.4	0.7	0.3	1.0	0.9	1.0	0.2	0.2	0.3	0.0	0.8	0.8	2.9	2.4	1.4	1.0
1985	-0.4	0.2	0.3	r0.8	r-0.2	r-0.5	p0.2						0.5	r0.7		
Lagging index (1967=100)																
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	124.3	122.3	121.4	120.2	118.2	116.7	125.5	125.3	122.7	118.4
1983	115.7	115.8	114.4	113.5	111.0	109.8	109.7	110.3	109.7	109.6	110.0	110.9	115.3	111.4	109.9	110.2
1984	109.8	111.3	112.8	114.6	116.4	117.5	118.8	119.8	121.0	122.0	121.7	122.1	111.3	116.2	119.9	121.9
1985	124.2	124.9	125.9	125.9	r128.2	r128.2	p127.8						125.0	r127.4		
Lagging index--percent change from preceding month (quarter)																
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	-0.4	-1.6	-0.7	-1.0	-1.7	-1.3	0.7	-0.2	-2.1	-3.5
1983	-0.9	0.1	-1.2	-0.8	-2.2	-1.1	-0.1	0.5	-0.5	-0.1	0.4	0.8	-2.6	-3.4	-1.3	0.3
1984	-1.0	1.4	1.3	1.6	1.6	0.9	1.1	0.8	1.0	0.8	-0.2	0.3	1.0	4.4	3.2	1.7
1985	1.7	0.6	0.8	0.0	r1.8	r0.0	p-0.3						2.5	r1.9		

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
	Apr. 1985	May 1985	June 1985	July 1985	Apr. to May	May to June	June to July	June to July
LEADING INDICATORS								
Average workweek, production workers, manufacturing (hours).....	40.2	r40.4	40.4	p40.4	0.15	0.00	0.00	0
*Average weekly initial claims, state unemployment insurance (thousands)....	387	383	392	381	0.03	-0.06	0.09	+
New orders, mfg., consumer goods and materials (billions of 1972 dollars)...	r37.47	37.88	r37.40	p37.60	0.05	-0.06	0.03	+
Vendor performance, companies receiving slower deliveries from vendors (pct.)..	44	44	44	44	0.00	0.00	0.00	0
Net business formation (index: 1967=100).	r116.6	r114.3	r117.6	p118.0	-0.28	0.40	0.05	+
Contracts and orders, plant & equipment (billions of 1972 dollars).....	r14.13	r14.79	r15.57	p15.03	0.10	0.11	-0.08	-
Building permits (index: 1967=100).....	135.9	141.8	136.5	135.1	0.13	-0.11	-0.03	-
#Change in inventories on hand and on order (ann. rate, billions of 1972 \$)..	r8.91	r0.02	p-3.57	NA	-0.50	-0.20	NA	
#Change in sensitive materials prices (percent).....	-0.64	-0.22	-0.13	-0.35	0.17	0.04	-0.09	-
Stock prices, 500 common stocks (index: 1941-43=10).....	180.62	184.90	188.89	192.54	0.15	0.13	0.13	+
Money supply (M2) (billions of 1972 \$)...	949.2	954.0	r962.8	p967.9	0.16	0.29	0.18	+
Change in credit--business and consumer borrowing (annual rate, percent).....	r11.5	11.3	5.3	p6.1	-0.01	-0.31	0.05	+
Percent change in Leading Index.....	....	....	....	....	0.30	0.36	0.42	
COINCIDENT INDICATORS								
Employees on nonagricultural payrolls (thousands).....	97,120	r97,421	r97,449	p97,692	0.26	0.02	0.27	+
Personal income less transfer payments (annual rate, billions of 1972 \$).....	r1,217.4	r1,204.0	r1,205.2	p1,205.3	-0.55	0.05	0.01	+
Industrial production, total (index: 1977=100).....	r124.1	r124.3	r124.7	p124.9	0.04	0.09	0.06	+
Manufacturing and trade sales (millions of 1972 dollars).....	r181,651	r182,714	p179,190	NA	0.13	-0.43	NA	
Percent change in Coincident Index....	....	....	....	....	-0.25	-0.50	0.19	
LAGGING INDICATORS								
*Average duration of unemployment (weeks).....	16.1	14.9	15.4	15.4	0.56	-0.24	0.00	0
Ratio, deflated inventories to sales, manufacturing and trade (ratio).....	1.56	1.55	p1.58	NA	-0.13	0.40	NA	
Labor cost per unit of output, mfg.--actual as percent of trend (percent)...	r85.5	r85.0	84.6	p84.1	-0.18	-0.15	-0.27	-
Average prime rate charged by banks (percent).....	10.50	10.31	9.78	9.50	-0.13	-0.37	-0.29	-
Commercial and industrial loans outstanding (millions of 1972 \$).....	r127,296	r128,089	r126,722	p127,544	0.16	-0.28	0.25	+
Ratio, consumer installment credit to personal income (percent).....	r15.23	r15.62	p15.78	NA	1.50	0.61	NA	
Percent change in Lagging Index.....	....	....	....	....	1.83	0.00	-0.31	

\* 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.