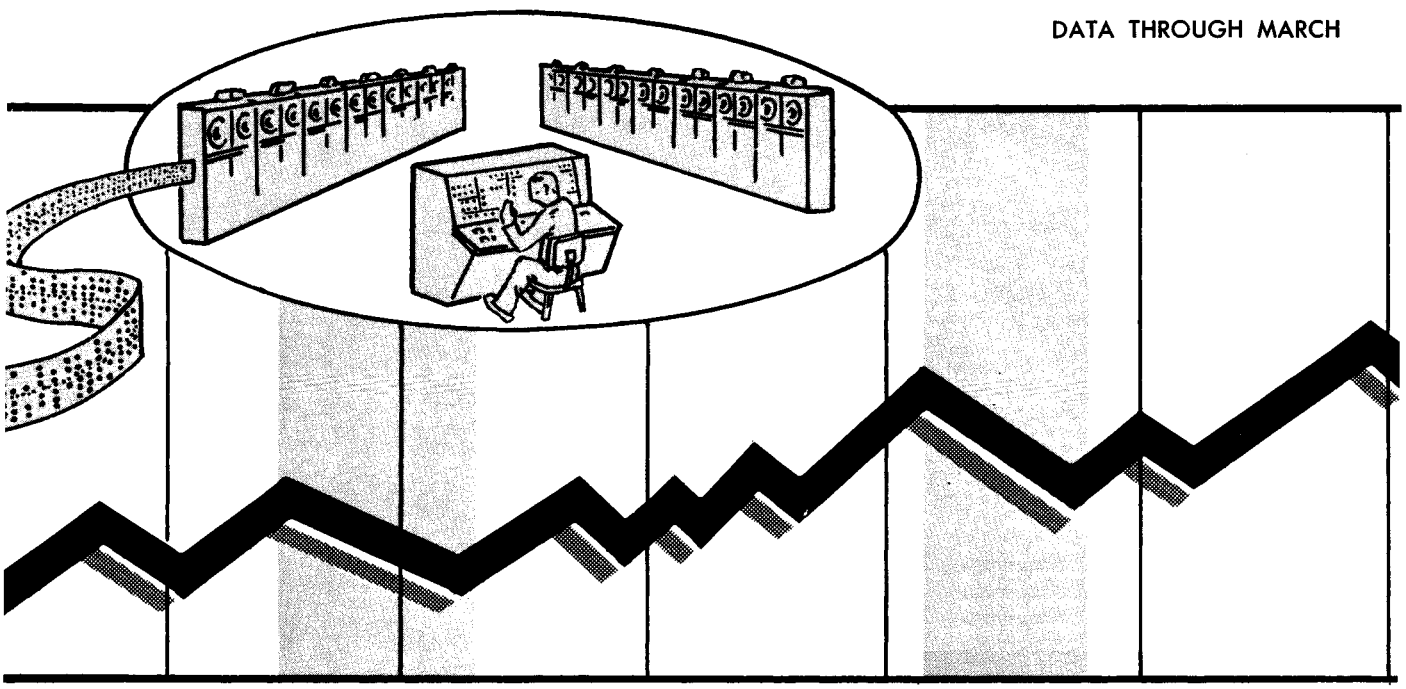
APRIL 1963

Business Cycle Developments

DATA THROUGH MARCH



U.S. DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

Business Cycle Developments

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Series ES1 No. 63-4

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The cooperation of the various government and private agencies which provide data for the report is gratefully acknowledged. Credit is given to these agencies in the list of series and sources on the back cover of this report.

Correspondence about technical subject matter should be addressed to the Office of the Chief Economic Statistician, Bureau of the Census, Washington 25, D. C.

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Preface

This report has been prepared to bring together many of the available economic indicators in convenient form for analysis and interpretation by specialists in business cycle analysis. The presentation and classification of series in this report follows the business indicators approach. The classification of series and the business cycle turning dates are those designated by the National Bureau of Economic Research (NBER) which, in recent years, has been the leader in this field of investigation. However, this publication is not to be taken as implying acceptance or endorsement by the Bureau of the Census or any other government agency of any particular approach to business cycle analysis. It is intended only to supplement other reports of the Department of Commerce that provide data for analyzing current business conditions.

The unique features are the arrangement of data according to their usual timing relations during the course of the business cycle and the inclusion of special analytical measures and historical cyclical comparisons that help in evaluating the current stage of the business cycle.

About 70 principal indicators and over 300 components are used for the different measures shown. The movements of the series are shown against the background of the expansions and contractions of the general business cycle so that "leads" and "lags" can be readily detected and unusual cyclical developments spotted. The exact number of series included for the total and important classes of series may vary from month to month because of additions of new series and revisions in the composition of indexes. Almost all of the basic data are available in published reports. A complete list of the series and the sources of data is shown on the back cover of this report. All the data shown are seasonally adjusted where seasonal variations appear to exist.

The chief merits of this report are the speed with which the data for indicators are collected, assembled, and published and the arrangement of the series for business cycle studies. Electronic computers are used for many of the computations, thus making early publication possible. Publication is scheduled for around the 20th of the month following the month of data.

New Features and Changes for This Issue

A limited number of changes are made from time to time to reflect the change from one stage of the business cycle to another, to show new findings of business cycle research and newly available economic series, or to emphasize the activity of a particular series or series group. Such changes may involve additions or deletions of series used, changes in placement in relation to other series, changes in components of indexes, etc. These changes will be listed in this section each month. The changes made in this issue are as follows:

1. The level of the series on consumer installment debt (series 66) has been revised because of a correction of the December 1958 figure.

2. The diffusion index for initial claims for unemployment insurance, State programs (D5), has been revised back to December 1961 to reflect a new seasonal adjustment of components.

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BACKGROUND MATERIALS

Experimental work for this report was carried out in collaboration with the National Bureau of Economic Research which is responsible for much of the early research in this field. The book, "Signals of Recession and Recovery," contains an explanation of research findings helpful in interpreting current cyclical trends, a more detailed description of the indicators and measures used, and additional historical data. This book was issued as Occasional Paper 77 of the National Bureau of Economic Research, 261 Madison Avenue, New York 16, N.Y. (207 pages, price $3). Other references, both to historical studies and current interpretations of the indicators, appear in this book.

* *

Descriptions and Procedures

Business Cycle Series

Intensive research over many years has provided a record of the typical sequence of changes in economic processes during a business cycle; more specifically, a list of significant series that usually lead, those that usually move with, and those that usually lag behind cyclical movements in aggregate economic activity. The series have been grouped, in accordance with the NBER classification, as "leading," "roughly coincident," or "lagging" indicators. In addition, other series are included in this report for a more complete coverage of the national economy. The series are described as follows:

NBER Leading Indicators.—Around 30 series usually reach peaks or troughs before those in aggregate economic activity as measured by the roughly coincident series (see below). For this reason, they are designated as "leading" series. One group of these series pertains to activities in the labor market, another to orders and contracts, and so on.

NBER Roughly Coincident Indicators.—About 15 series are direct measures of aggregate economic activity or move roughly together with it; for example, nonagricultural employment, industrial production and retail sales. For this reason they are referred to as "roughly coincident" series.

NBER Lagging Indicators.—Some series, such as new plant and equipment expenditures and manufacturers' inventories, usually have reached turning points after they were reached in aggregate economic activity, and for this reason, they are designated as "lagging" series.

Other series.—Additional U.S. series with business cycle significance are also shown. Some of these series, such as change in money supply, merchandise trade balance, and cash surplus or deficit, represent important factors in the economy, but they have not qualified as indicators for various reasons, such as irregularity in timing. Finally, industrial production indexes for several countries which have important trade relations with the United States are presented.

Method of Presentation

Data are shown in this report in three general categories, as follows:

Basic data (chart 1 and table 1).—Over 50 business cycle indicators and 20 additional series with business cycle significance are included. Together they provide a broad view of current and prospective business cycle fluctuations in the economy as well as the basis for making an economic interpretation of these fluctuations.

Analytical measures (charts 2-3 and tables 2-6).—These are measures which aid in forming a judgment of (1) the magnitude of current changes compared to previous changes, (2) the imminence of a turning point in the business cycle, and (3) the extent of current changes in different parts of the economy. They also aid in pointing to developments in particular industries and places.

Cyclical patterns (charts 4-5 and tables 7-9).—The current cyclical change is compared with changes at corresponding stages of earlier cycles. These comparisons are made in different ways depending upon the phase of the business cycle.

In addition to the data shown as part of the regular report, certain appendix materials are presented. These materials include historical data, key information, and adjustment factors.

Designation of Business Cycle Turning Points

The historical business cycle turning points are those designated by the NBER. They mark the approximate date when aggregate economic activity reached its cyclical high or low levels. As a matter of general practice, a business cycle turning point will not be designated until at least 6 months after it has occurred.

Seasonal Adjustments

Official seasonally adjusted data are used in this report wherever they are available. However, for the special purposes of business cycle studies, a number of series that are not ordinarily published in seasonally adjusted form are shown on a seasonally adjusted basis in this report. These series are as follows:

4. Number of persons on temporary layoff, all industries
5. Average weekly initial claims for unemployment insurance, State programs
9. Construction contracts awarded for commercial and industrial buildings, floor space

13. Number of new business incorporations
14. Current liabilities of business failures
15. Number of business failures with liabilities of $100,000 and over
17. Price per unit of labor cost index
18. Profits (before taxes) per dollar of sales, all manufacturing corporations

30. Nonagricultural placements, all industries
55. Index of wholesale prices, all commodities other than farm products and foods
62. Index of wage and salary cost per unit of output, total manufacturing
81. Index of consumer prices
82. Federal cash payments to the public
83. Federal cash receipts from the public
84. Federal cash surplus or deficit

90. Defense Department obligations, procurement
91. Defense Department obligations, total
92. Military prime contract awards to U.S. business firms
97. Backlog of capital appropriations, manufacturing
128. Japan, index of industrial production

Seasonal adjustments for these series were developed by either the Bureau of the Census or the NBER. The adjustment factors used are shown in the appendix table D, except for series 97 which is the sum of seasonally adjusted components, and series 9 which is based on unpublished source data. Seasonally adjusted data prepared by the collecting agency will be substituted for the series mentioned above whenever they are published.

MCD Moving Averages

MCD (months for cyclical dominance) is an estimate of the appropriate span over which to observe the cyclical movements in a monthly series. This span is usually longer than a single month because month-to-month changes are often dominated by erratic movements, but shorter than the frequently used 12-month span (change from the same month a year ago), and is different for different series (see appendix C for MCD values).

MCD is the first interval of months for which the average amplitude of the cyclical factor is greater than that of the irregular factor and remains so. It is small for smooth series and large for irregular series. The differences between moving averages of the period equal to MCD are commensurate with the differences between seasonally adjusted values separated by the same MCD span; thus, the month-to-month differences in a 3-month moving average are commensurate with differences in seasonally adjusted values over 3-month spans. MCD moving averages all have about the same degree of smoothness. Consequently, MCD moving averages of highly irregular series, such as Federal cash payments and Defense Department obligations, will show their cyclical movements about as clearly as the seasonally adjusted data for such smooth series as industrial production and personal income.[1] MCD moving averages are shown for some series in chart 1. To provide an indication of the variation about these moving averages, seasonally adjusted data are also plotted for the 3 most recent years.

Analytical Measures of Current Change

Four kinds of analytical measures are presented—rates of change, diffusion indexes, timing distributions, and direction-of-change tables. These measures aid in forming a judgment of the magnitude of current changes compared to previous changes, the imminence of a turning point in the business cycle, and the extent of current changes in different parts of the economy. They also point to developments in particular industries and places.

Rates of change.—There is considerable interest in the rate of acceleration during expansions and the rate of retardation during recessions.[2] For this reason, rates of change for the principal monthly and quarterly business cycle series are included in table 2 of this report. Rates of change are helpful in judging and appraising trends of acceleration or retardation in a current business cycle phase, despite the fact that the erratic nature of month-to-month rates of change often makes it difficult to determine the significance of a change until some months after it has occurred. For series, such as unemployment and layoffs, which usually move down during expansions and up during recessions, the changes are inverted so that, in table 2, rises are shown as declines and declines as rises.

Diffusion indexes.—Diffusion indexes are simple summary measures of groups of economic series. They express, for a given group, the percent of the series which has risen over given intervals of time. Their turning points tend to lead the turning points of the aggregate and they measure how widespread a business change is. They vary between the limits of 100 (all components rising) and zero (all components falling). Widespread increases are often associated with rapid growth in aggregate activity, and widespread declines with sharp reductions.

The diffusion indexes in this report are grouped according to the timing classification of the NBER. For monthly series, two comparison intervals are used: 1-month intervals (January-February, February-March, etc.) and 3-month intervals January-April, February-May, etc.). The indexes based on 1-month intervals are more "current" but

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[1]For a more complete description of MCD and its use in studying economic series, see Business Cycle Indicators, Geoffrey H. Moore, editor; National Bureau of Economic Research, Inc., vol. 1, ch. 18, "Statistics for Short-Term Economic Forecasting," by Julius Shiskin (Princeton University Press: 1961).

[2]Various terms are used to describe the phases of the business cycle. In this report both "contraction" and "recession" are used to describe the declining phase. No difference in meaning is intended.

they are also more irregular than the 3-month indexes (see chart 2). Quarterly series are compared over 1-quarter intervals and 4-quarter intervals.

Series numbers preceded by the letter "D" designate diffusion indexes. When one of these numbers corresponds to a basic indicator series number, it means that the diffusion index has been computed from components of the indicator series; for example, the diffusion index numbered "D6" is computed from components of series number 6. Diffusion indexes not computed from basic series components are assigned new numbers.

This report includes 29 diffusion indexes based on 16 indicator series (see tables 4 and 5). Seventeen of these indexes are computed by the Bureau of the Census utilizing nearly 300 components of 9 indicators (D1, D5, D6, D19, D23, D41, D47, D54, and D58). Indexes for 8 of these indicators show comparisons for components over both 3-month and 1-month spans while, for 1 indicator (D58), comparisons are over 1-month spans only. The 12 other diffusion indexes are based on 7 indicators closely related to the above 9 indicators. They include two indexes on capital appropriations (602 companies and 15 industries)—NBER indexes based on data from the National Industrial Conference Board; the Chicago Purchasing Agents Association index based on monthly reports of changes in profits (200 companies); the First National City Bank of New York index based on quarterly profit reports (700 companies); and 8 NBER diffusion indexes—actual and anticipated—for the following: Manufacturers' sales (800 companies) and new orders (400 companies), based on data from Dun and Bradstreet, Inc.; carloadings (19 commodity groups), based on data from the Association of American Railroads; and new plant and equipment expenditures (16 industries), based on data from the Office of Business Economics and the Securities and Exchange Commission.

Diffusion indexes that are based on anticipations show what proportion of business enterprises (or industries) are forecasting a rise in activity. Comparisons with indexes based on actual changes show whether there is a generally optimistic bias or a lag in recognition of actual developments.

Diffusion indexes constructed on the basis of current data are often highly irregular and require careful judgment in their use and interpretation.

Timing distributions.—Distributions of current "highs" appear to be helpful in appraising the evidence for a prospective business cycle turning point. Each month a timing distribution is constructed which shows the number of series reaching high values during each month of the expansion. The timing distribution is summarized by showing the number of series reaching new highs and the percent currently high for each of several recent months (see table 3). Similar distributions of "lows" will be prepared during contractions.

To provide historical perspective for interpreting the distribution of current highs, such distributions are also shown for leading and coincident series as they appear 3 months and 6 months before the peak of each of the earlier post-World War II expansions and at their peaks.

To compile timing distributions for the current cyclical phase, the data for the principal business cycle indicators are scanned each month. During a business cycle expansion, the high value for each series is recorded. (For inverted series, that is series with negative conformity to the business cycle, low values are taken during expansions and high values during contractions.) If the values for 2 or more months are equal, the latest date is taken as the high month. In selecting these values, erratic values are disregarded, although it is, of course, difficult to identify an erratic value, particularly for the current month.

The letter "H" is used in the basic data table (table 1) to identify and highlight the current high values during the expansion, and the letter "L" to identify the low values preceding the current highs. The highs designated during the current cyclical phase will not necessarily be the specific cycle peaks. Thus, as new high levels are reached during the expansion, the current highs will be moved ahead. On the other hand, lows preceding current highs are usually specific cycle troughs. Comparisons of the current timing distributions with those for periods around earlier business cycle troughs and peaks are helpful for appraising the evidence of a prospective business cycle turning point.

Interpretations of timing distributions must be made in light of the fact that a contraction following a high value reached several months ago may be the result of an erratic fluctuation and that a new high may be reached in some future month. In short, when the percent currently high falls below 50 percent for both the leading and roughly coincident series, this does not necessarily signify that a business cycle peak has occurred. It may do so, but it may also simply reflect a short reversal in the upward movement.

Direction-of-change tables.—Direction-of-change tables show directions of change ("+" for rising, "o" for unchanged, and "-" for falling) in the components used for the diffusion indexes. These tables provide a convenient view of changing business conditions and are helpful in making an economic interpretation of the movements in the more highly aggregated statistical measures. That is, they show which economic activities went up, which went down, and how long such movements have persisted. They also help to show how a recession or recovery spreads from one sector of the economy to another.

Comparisons of Cyclical Patterns

In forming a judgment about the current intensity and probable ultimate character of a cyclical fluctuation, some economists find it helpful to compare the behavior of the indicator series and diffusion indexes in the current business cycle phase with their behavior during the corresponding phase of previous business cycles. These comparisons are made in different ways depending upon the phase of the business cycle.

Contractions are compared by computing changes over the span from the most recent business cycle peak to the current month and over equal spans from previous reference peaks. This type of com-

parison is designated as representing changes from reference peak levels and from reference peak dates.

Expansions may be compared by measuring changes from the immediately preceding peak levels. In this report the current expansion is related to the May 1960 reference peak. For earlier expansions, percentage changes are also computed from their respective reference peaks to dates which are the same number of months beyond the succeeding reference troughs as the current expansion is beyond its reference trough. This type of comparison is designated as representing changes computed from reference peak levels and from reference trough dates. Although the spans from reference trough dates are the same for each expansion, the spans from the preceding peak dates are different, depending on the length of the contractions. This type of comparison answers the question whether, and by how much, the current level of activity exceeds or falls short of the level at the preceding business cycle peak, a given number of months after the recovery began, and how the current situation compares in this respect with earlier recoveries.

Expansions also may be compared by computing changes from reference trough levels and from reference trough dates. This type of comparison measures the extent of the rise from the trough level so many months after the upswing began.

In addition to comparing cyclical fluctuations on the basis of reference dates (which are the same for all series), comparisons are made on the basis of specific peak and trough dates identified for each series. For example, the specific peak in retail sales corresponding to the May 1960 reference peak is April 1960; the specific peak in stock prices is July 1959.

Recent performance in several individual indicators is compared graphically with that in earlier business cycles. In making graphic comparisons, the reference peak or trough levels are set equal to 100, and the reference peak or trough dates are alined depending on the phase of the business cycle.

In order to make historical comparisons, it is frequently necessary to use data for a closely related series for cycles prior to the initial date covered by the series used currently. Such comparisons are, therefore, to be considered only approximate. Nearly all series have undergone change in definition, coverage, or estimation procedure since 1919. The principal cases of this sort are as follows:

7. New private nonfarm dwelling units started (prior to 1939: Residential building contracts, floor space)
41. Number of employees in nonagricultural establishments (prior to 1929: Employment in manufacturing)
52. Personal income (prior to 1929: Quarterly data as published by Barger and Klein)
54. Sales of retail stores (prior to 1935: Department store sales)
62. Index of wage and salary cost per unit of output, total manufacturing (prior to 1946: Production worker wage cost per unit).

Charts

Two types of charts are used to highlight the cyclical patterns of the business cycle indicators: Historical time series and cyclical comparisons.

Historical Time Series (charts 1, 2, and 3).— These charts show the cyclical fluctuations of each series against the background of expansions and recessions in general business activity from 1948 to the current month. Shaded areas on the charts indicate periods of business cycle recession between business cycle peak dates (beginnings of shaded areas) and business cycle trough dates (ends of shaded areas). The shading for a new recession will be entered only after a trough has been designated.

Five ratio scales and several arithmetic scales are used to highlight the cyclical movements of the various series. The scale selected for each series is identified in the margin of the chart. Rates of change of various series can be compared with each other only where scales are identical. See the diagram, page 5, for additional help in using these charts.

Cyclical Comparisons (charts 4 and 5).— These charts compare the performance of each series during the current expansion or recession with that during the corresponding phase of previous business cycles. In these charts the usual date sequence followed in charts is disregarded, and instead the data are alined at a strategic point of the business cycle, either the trough or the peak. Thus these charts facilitate judgements on the vigor of a current expansion or the severity of a current recession relative to cyclical movements during the corresponding phases of previous cycles.

Two types of cyclical comparisons are made. Chart 4 compares the pattern of the current business or reference cycle (i.e., the cycle for aggregate economic activity) with movements over the corresponding phase of previous reference cycles. Chart 5 compares the pattern of the current specific cycle (i.e., the cycle for a particular series) with the movements over the corresponding phases of previous specific cycles in that series. In both charts, the trough dates are alined. In chart 4, the levels of the preceding peaks are also alined and in chart 5, the levels of the preceding troughs are also alined. See the section, "Comparisons of Cyclical Patterns", for more detailed descriptions of these comparisons.

How to Read Charts 1, 2, and 3

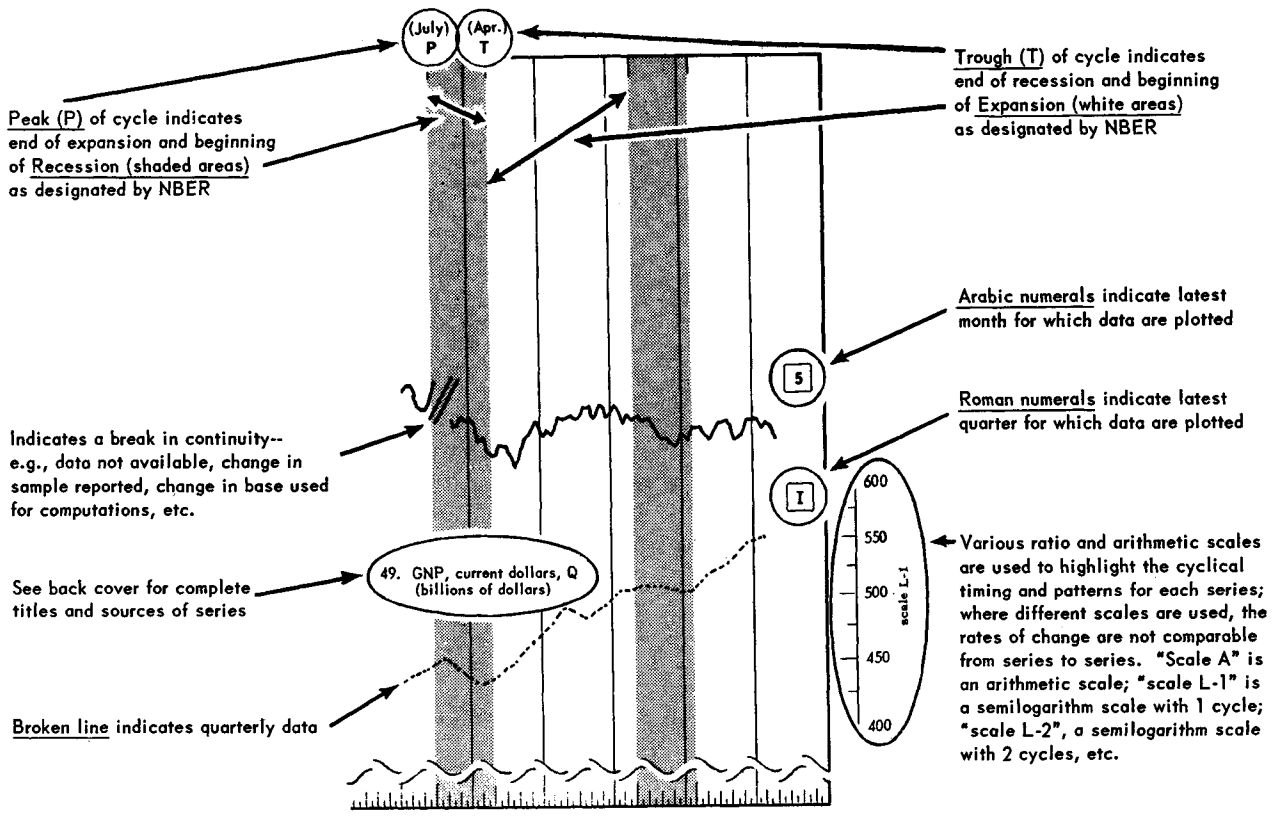

CHART 1 BUSINESS CYCLE SERIES: 1948 TO PRESENT

A NBER Leading Indicators

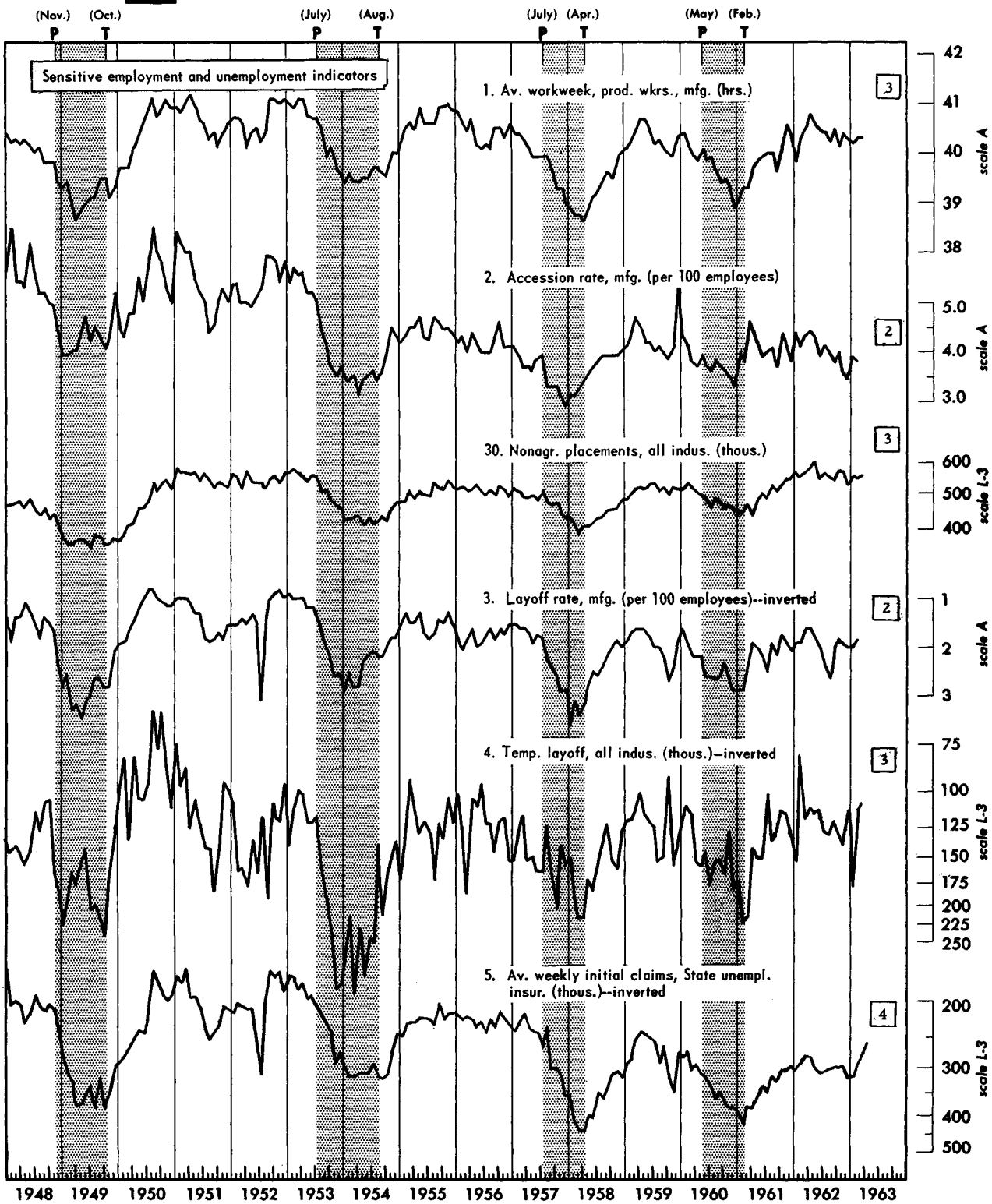

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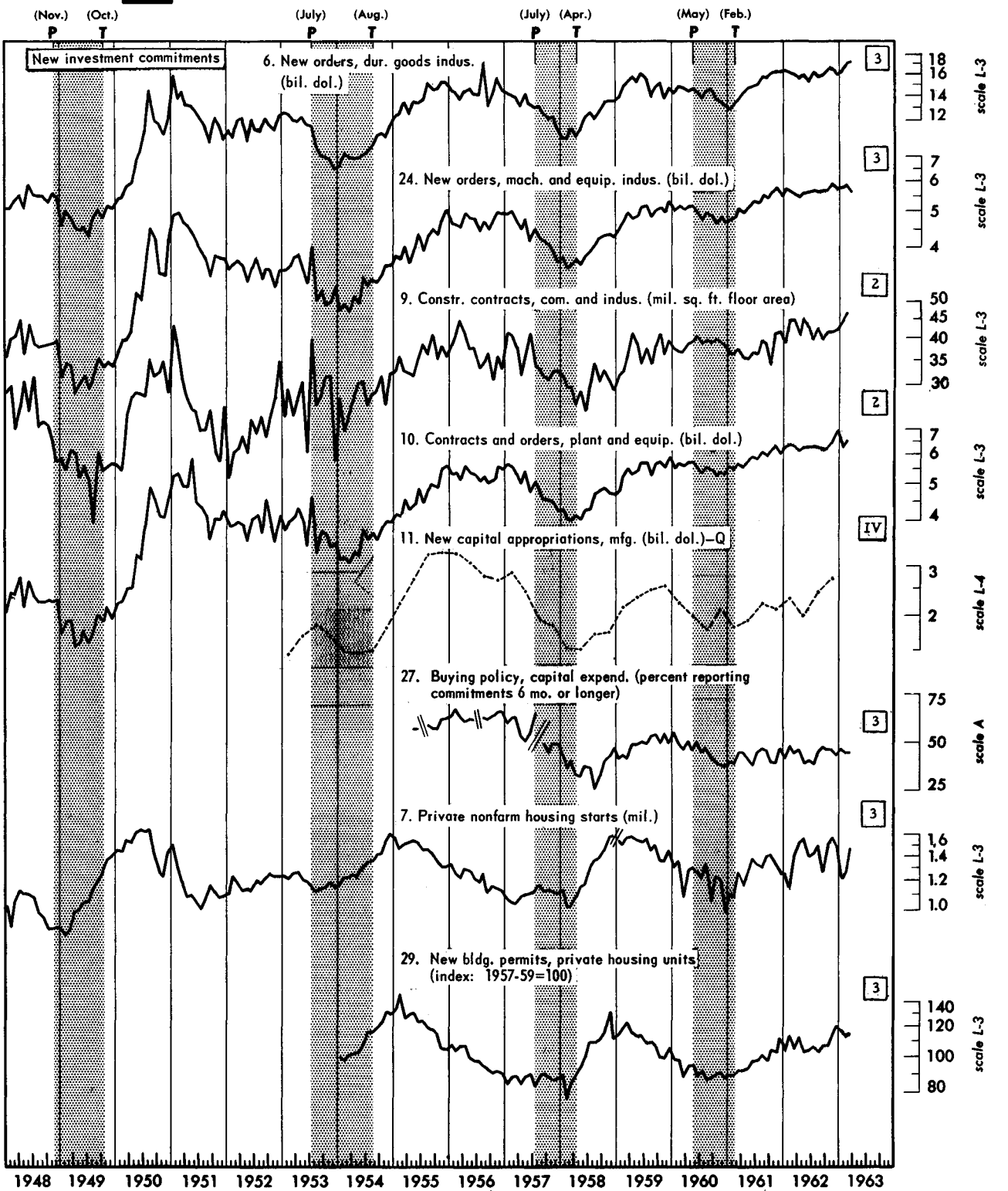
CHART 1 BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

A NBER Leading Indicators—Con.



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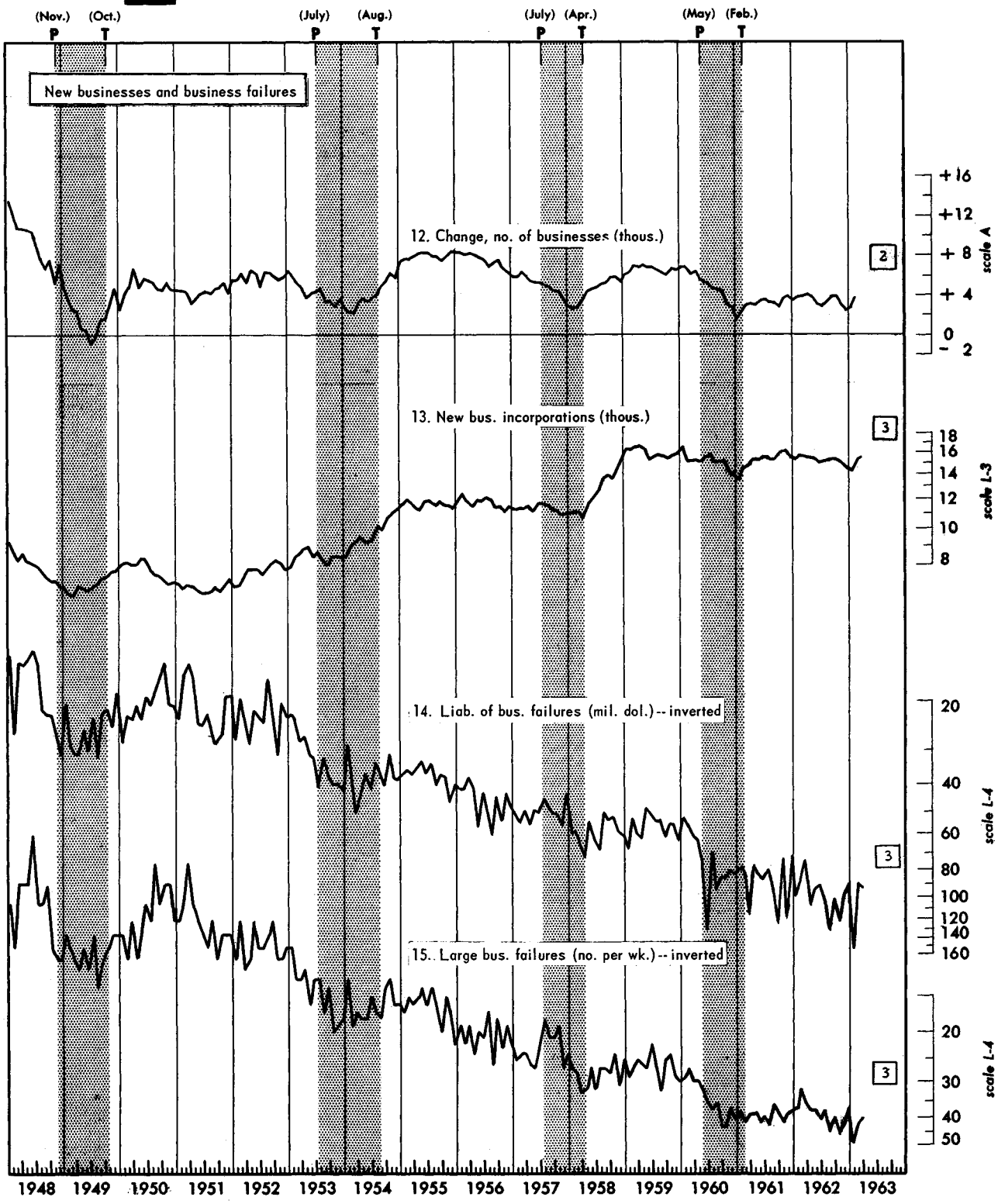
A NBER Leading Indicators—Con.



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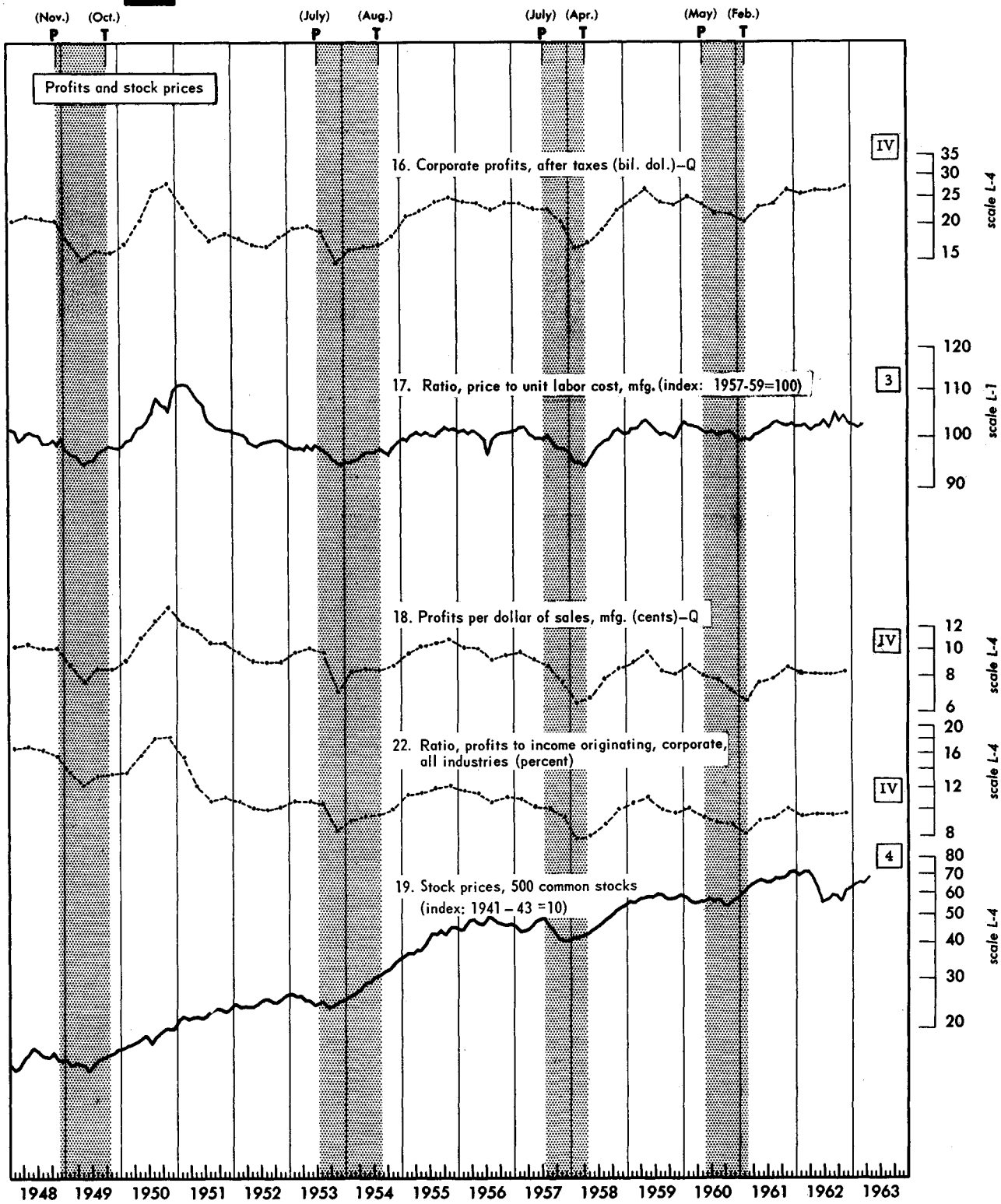

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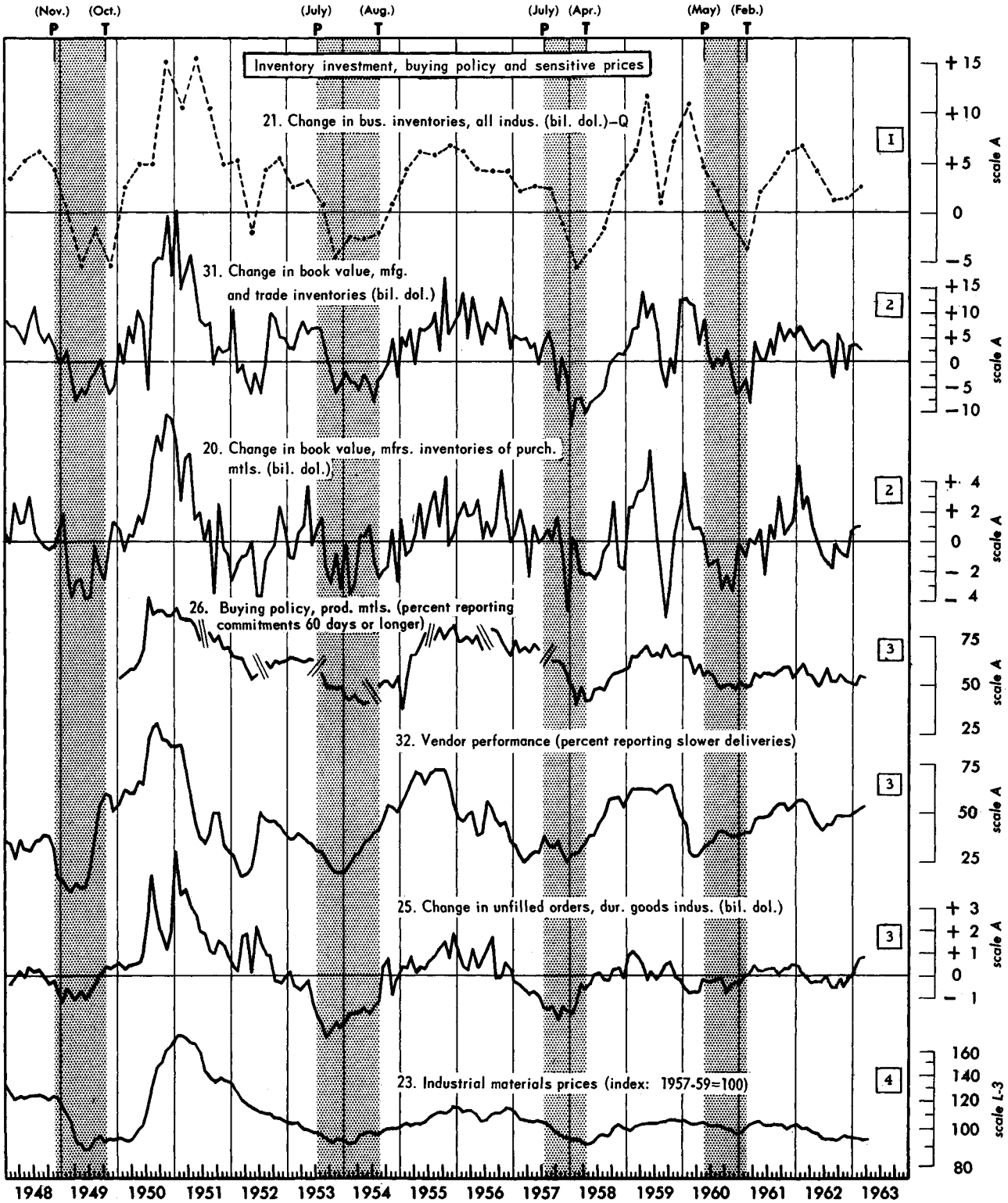

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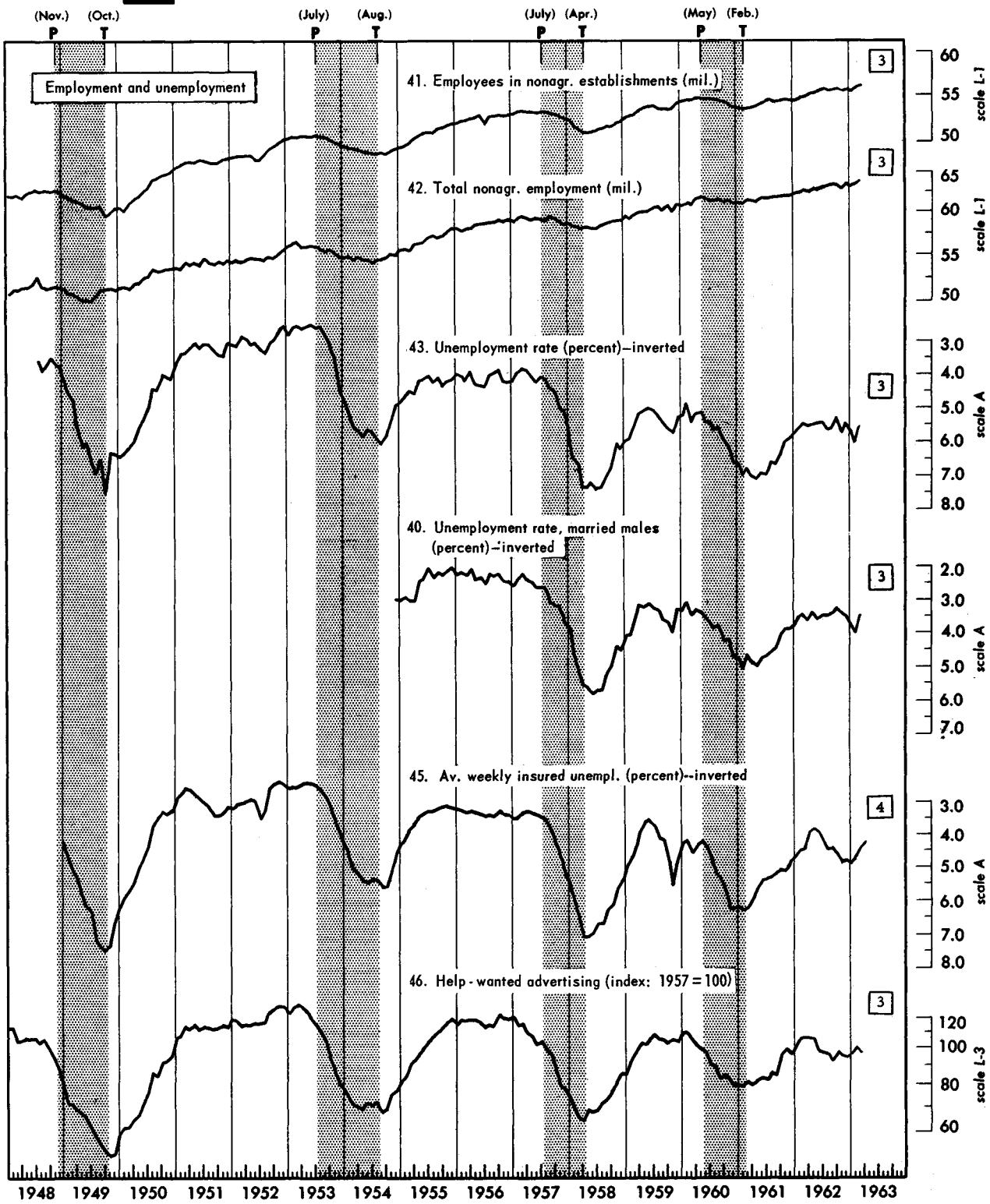
CHART 1 BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

B NBER Roughly Coincident Indicators



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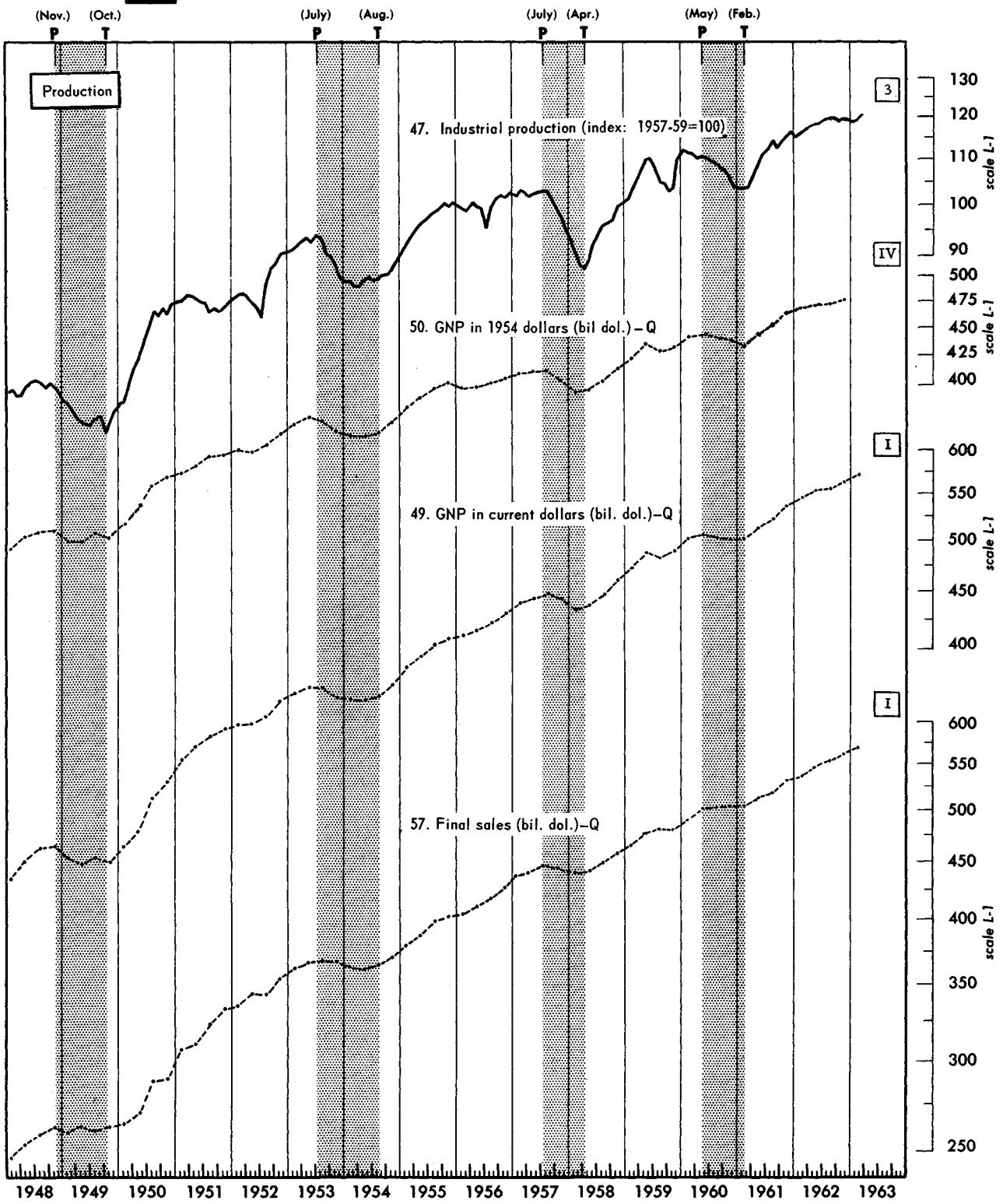

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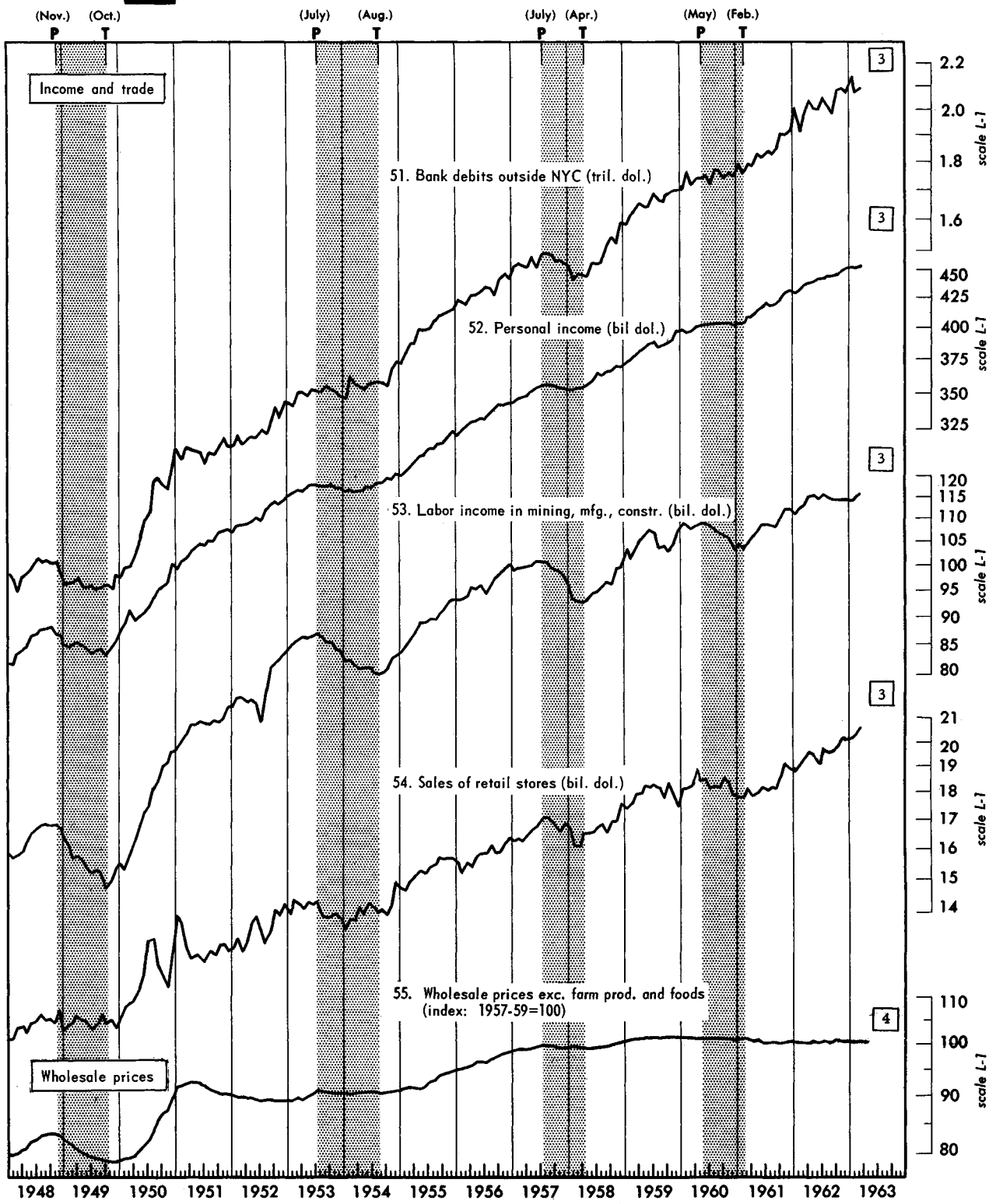
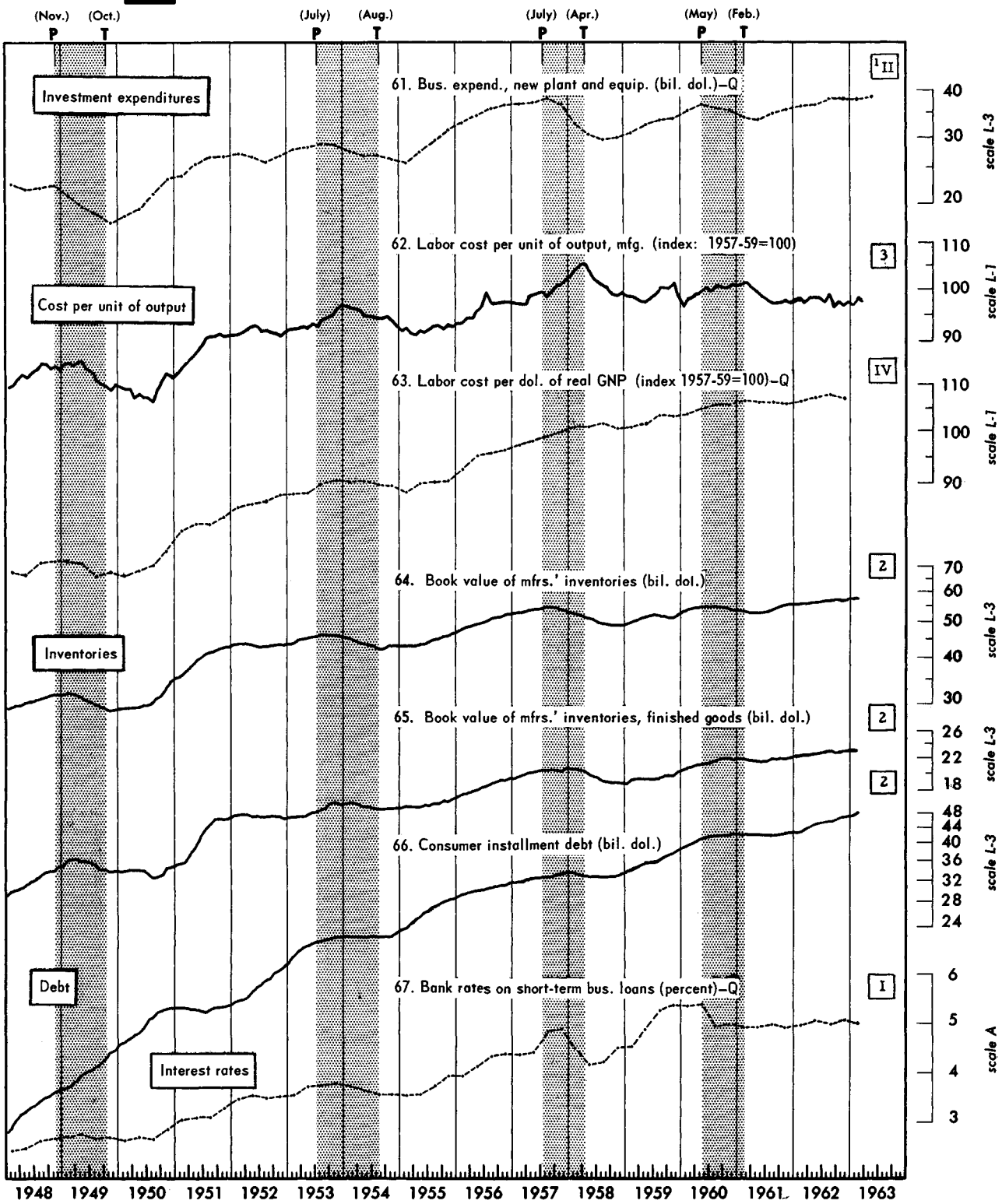


See "How to Read Charts 1, 2, and 3," page 5.

CHART 1 BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

C

NBER Lagging Indicators

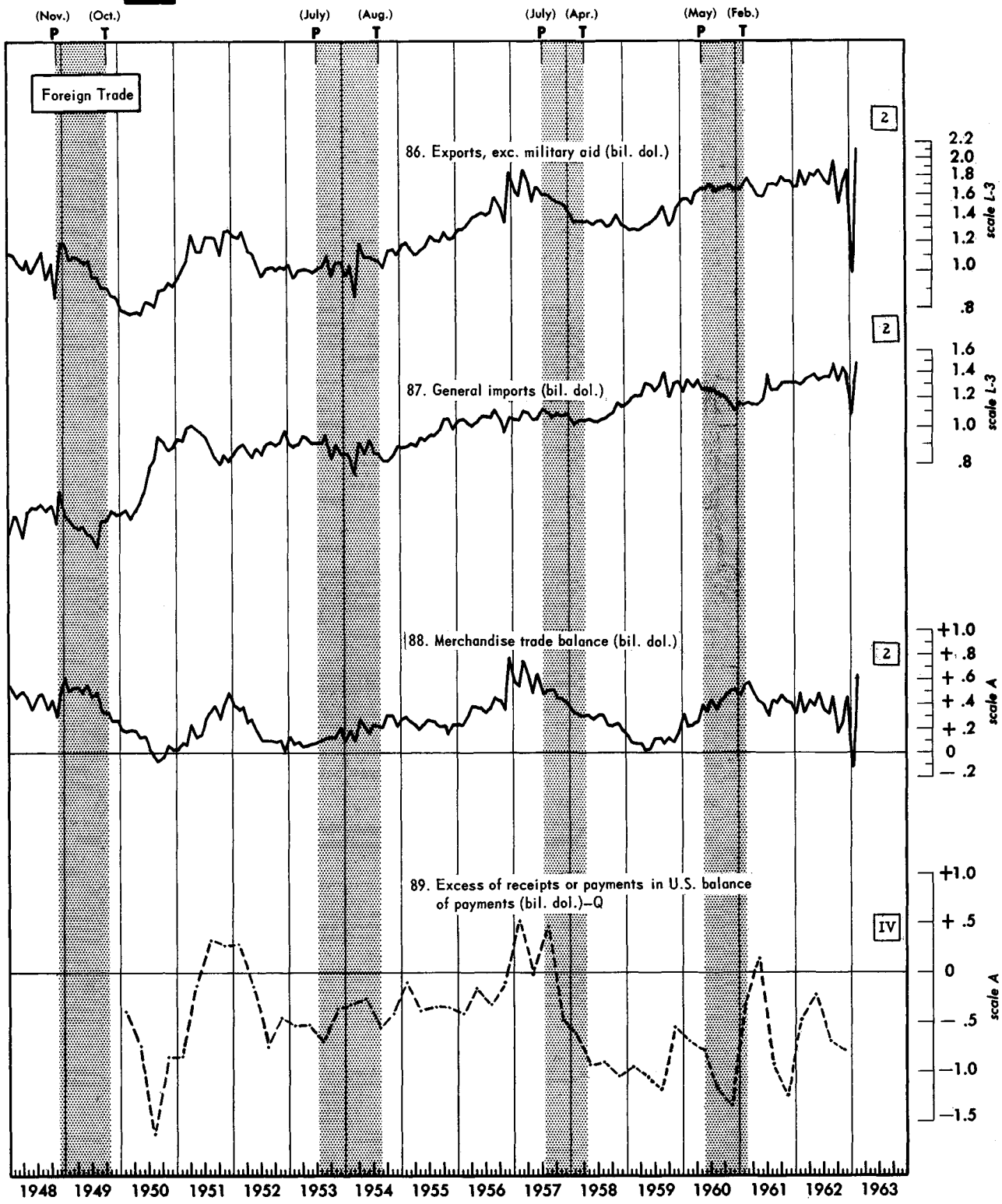


See "How to Read Charts 1, 2, and 3," page 5.

[1]Last 2 quarters are anticipated.

CHART 1 BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

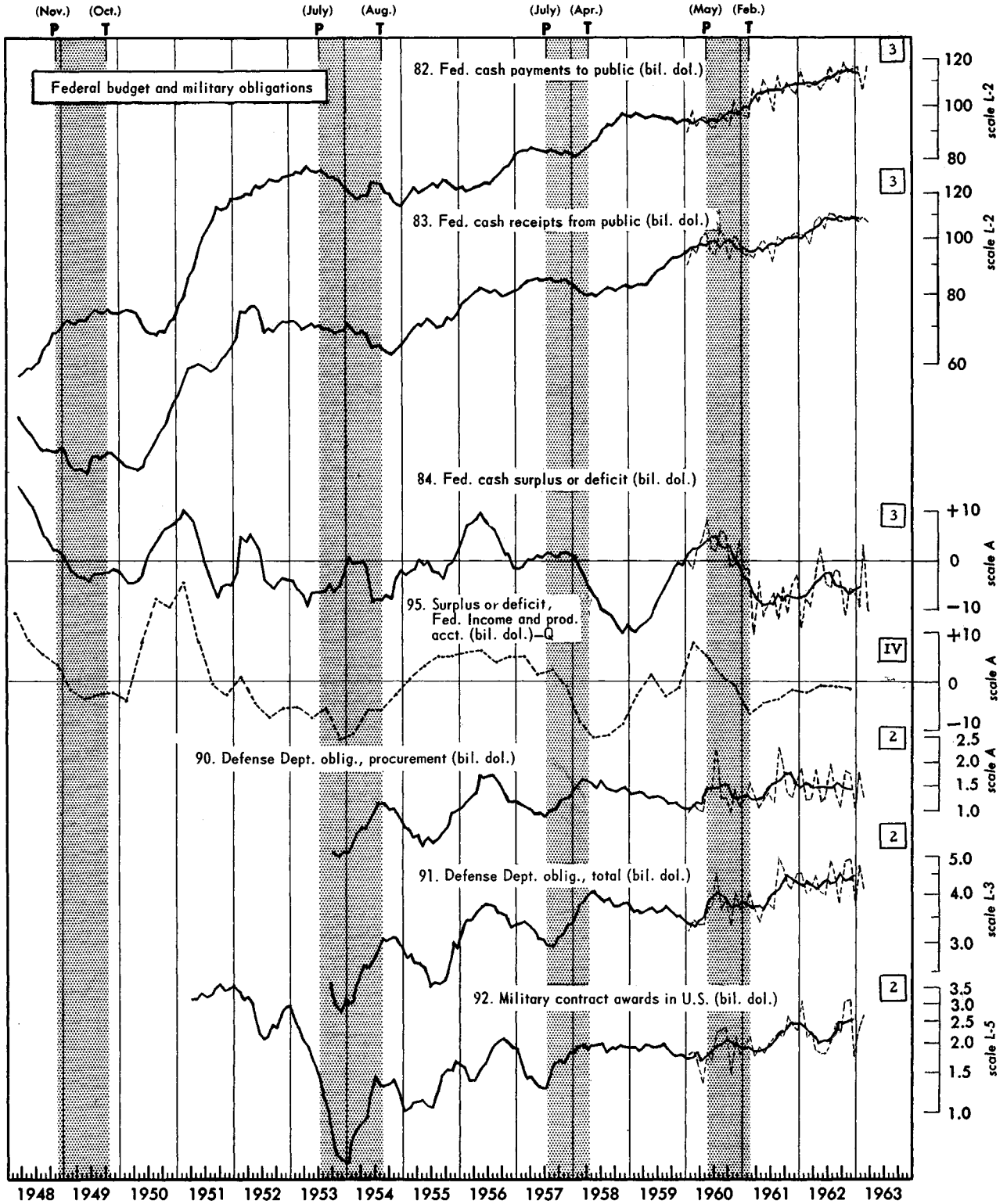
D Other U.S. Series With Business Cycle Significance



See "How to Read Charts 1, 2, and 3," page 5.

CHART 1 BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

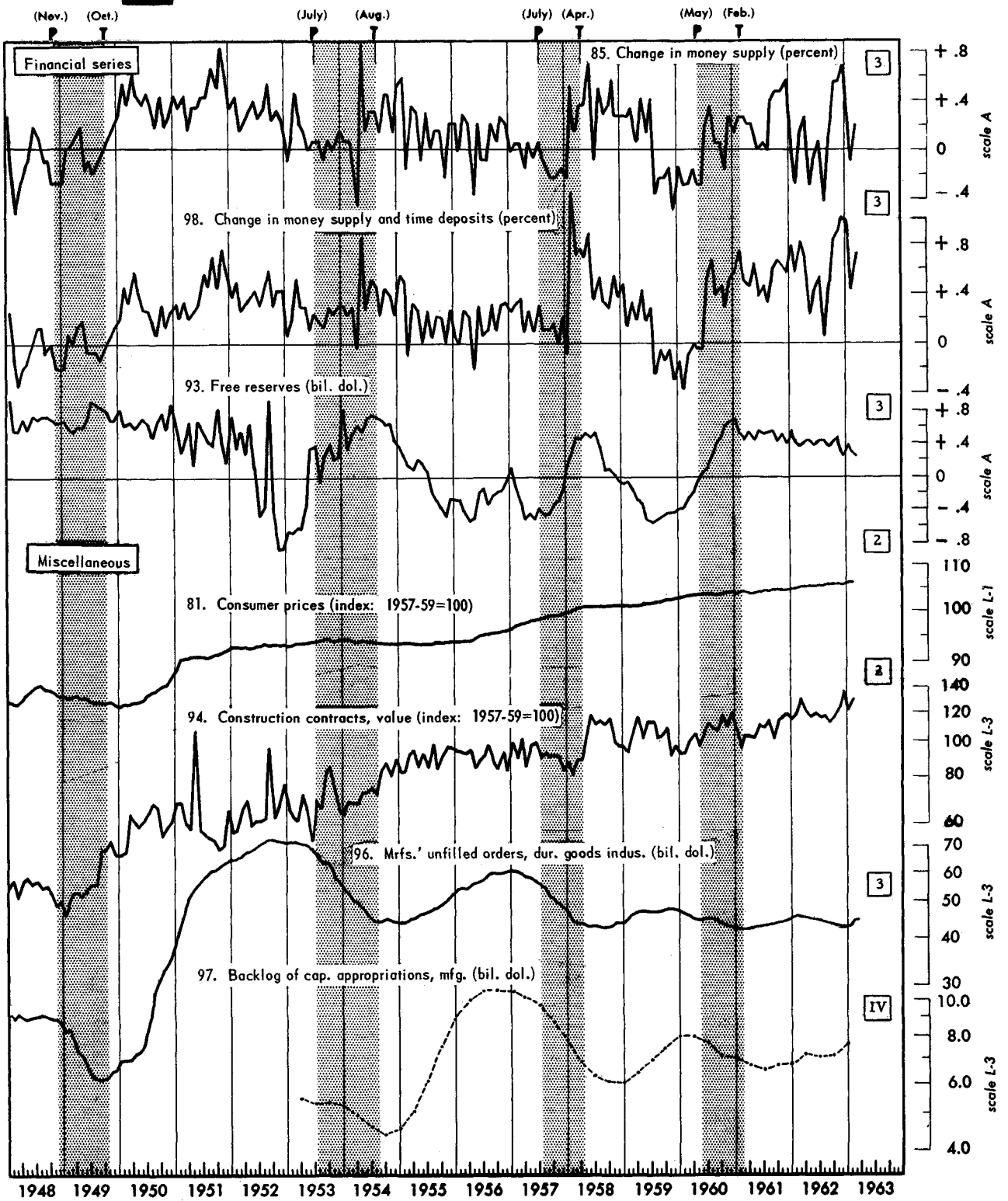
D Other U.S. Series With Business Cycle Significance—Con.



See "How to Read Charts 1, 2, and 3," page 5. Solid lines show the MCD moving averages. These averages are plotted 2 months behind current data (broken lines) for series with an MCD of 5 and 21/2 months behind for series with an MCD of 6. See appendix C for MCD values. See text for description of MCD moving averages.

CHART 1 BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

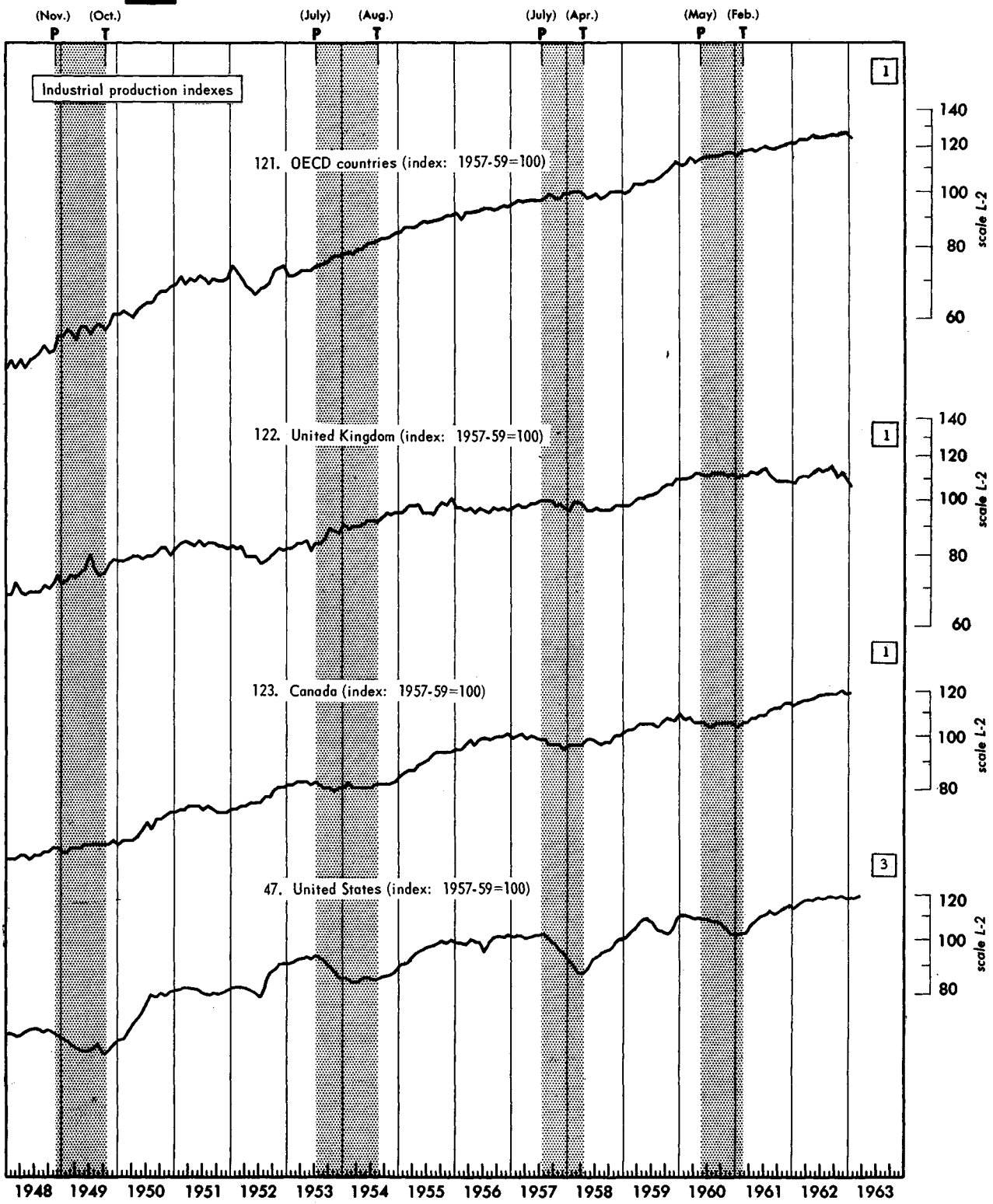
D Other U.S. Series With Business Cycle Significance—Con.



See "How to Read Charts 1, 2, and 3," page 5.

CHART 1 BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

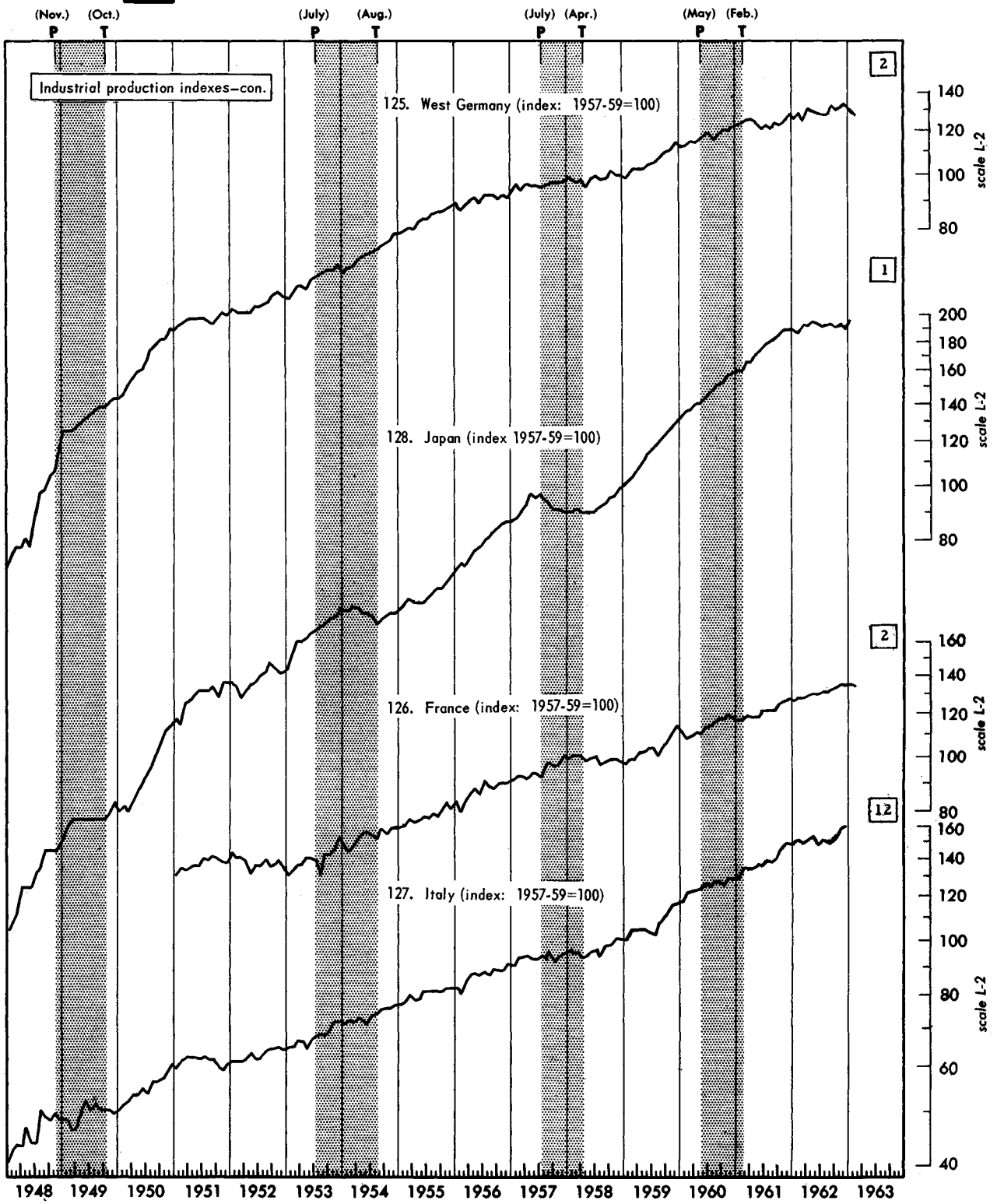
E International Comparisons of Industrial Production



See "How to Read Charts 1, 2, and 3," page 5.

CHART 1 BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

E International Comparisons of Industrial Production—Con.



See "How to Read Charts 1, 2, and 3," page 5.

Table 1.--BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1960 TO PRESENT

Series are seasonally adjusted except those that appear to contain no seasonal movement. Unadjusted series are indicated by an asterisk (*). Low values preceding current highs are indicated by (L) and current highs are indicated by [H]; the reverse is true for inverted series (series 3, 4, 5, 14, 15, 40, 43, 45). Series numbers are for identification purposes only and do not reflect series relationships or order. Sources are shown in "Complete Titles and Sources of Principal Business Cycle Series and Diffusion Indexes" on the back cover. "r" indicates revised; "p", preliminary.

Year and month	NBER Leading Indicators							
	1. Average workweek of production workers, manufacturing	2. Accession rate, manufacturing	30. Nonagricultural placements, all industries	3. Layoff rate, manufacturing	4. Number of persons on temporary layoff, all industries[1]	5. Avg. weekly initial claims for unemployment insurance, State programs	6. Value of mfrs.' new orders, durable goods industries	24. Value of mfrs.' new orders, machinery and equipment industries
	(Hours per prod. wkr.)	(Per 100 employees)	(Thous.)	(Per 100 employees)	(Thous.)	(Thous.)	(Bil. dol.)	(Bil. dol.)
1960								
January	40.4	4.3	506	1.6	122	281	14.19	5.04
February	40.1	4.1	535	1.9	110	271	14.80	5.14
March	39.9	3.8	513	2.2	116	303	14.64	5.06
April	39.8	3.7	504	2.2	156	294	14.47	5.12
May	40.1	3.9	494	2.2	160	316	14.68	5.17
June	39.9	3.7	482	2.6	145	322	14.34	5.01
July	39.9	3.6	460	2.6	177	335	13.84	4.78
August	39.6	3.8	488	2.7	154	363	14.41	4.96
September	39.4	3.7	473	2.6	153	351	14.62	4.87
October	39.5	3.6	460	2.3	166	373	13.74	(L)4.65
November	39.3	3.5	461	2.6	128	385	13.60	4.81
December	(L)38.5	(L)3.3	455	2.9	183	381	13.22	4.66
1961								
January	39.0	4.0	443	2.9	173	393	(L)12.88	4.79
February	39.3	3.8	443	(L)2.9	(L)222	(L)429	13.36	4.80
March	39.3	[H]4.6	467	2.3	215	379	13.82	5.10
April	39.7	4.4	(L)440	1.9	141	381	14.38	4.99
May	39.8	4.2	478	2.0	150	358	14.79	5.17
June	39.9	3.9	497	2.2	151	334	14.90	5.30
July	40.0	4.0	481	2.5	101	348	15.02	5.28
August	40.0	4.1	519	1.9	136	316	15.63	5.55
September	39.6	3.7	502	2.2	127	329	15.74	5.45
October	40.2	4.4	527	1.7	113	304	16.07	5.59
November	40.6	4.0	542	1.8	115	305	16.10	5.74
December	40.4	3.8	544	2.1	127	296	16.24	5.48
1962								
January	39.8	4.4	565	1.9	154	304	16.43	5.78
February	40.3	4.1	550	1.9	[H]82	291	16.19	5.71
March	40.5	4.3	568	1.6	118	279	16.00	5.59
April	[H]40.8	4.4	578	[H]1.6	112	280	15.73	5.47
May	40.6	4.3	[H]602	1.8	116	300	15.97	5.60
June	40.5	3.9	546	2.0	114	309	15.44	5.62
July	40.5	4.1	560	2.4	128	308	16.27	5.71
August	40.2	4.0	551	2.6	131	303	15.91	5.60
September	40.5	3.8	540	2.0	120	300	15.89	5.69
October	40.1	4.0	569	1.8	129	300	16.57	5.62
November	40.4	3.6	563	1.9	139	298	16.34	[H]5.85
December	40.3	3.5	529	2.0	114	317	16.02	5.74
1963								
January	40.2	r3.9	558	r2.0	179	316	r16.71	r5.75
February	40.3	p3.8	547	p1.8	112	295	r17.15	r5.84
March	p40.3	(NA)	550	(NA)	108	[H]277	[H]p17.18	p5.64
April						[2]257		
May								
June								

[1]Beginning with April 1962, the 1960 Census is used as the benchmark for computing this series. Prior to April 1962, the 1950 Census is used as the benchmark.

[2]Week ended April 6, 1963.

Table 1.--BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1960 TO PRESENT--Continued

Series are seasonally adjusted except those that appear to contain no seasonal movement. Unadjusted series are indicated by an asterisk (*). Low values preceding current highs are indicated by (L) and current highs are indicated by [H]; the reverse is true for inverted series (series 3, 4, 5, 14, 15, 40, 43, 45). Series numbers are for identification purposes only and do not reflect series relationships or order. Sources are shown in "Complete Titles and Sources of Principal Business Cycle Series and Diffusion Indexes" on the back cover. "r" indicates revised; "p", preliminary.

Year and month	NBER Leading Indicators--Continued						
	9. Construction contracts awarded for commercial and industrial buildings	10. Contracts and orders for plant and equipment	11. Newly approved capital appropriations, 602 manufacturing corporations	27. Buying policy, capital expend., pct. reporting commitments 6 mo. and over*	7. New private nonfarm dwelling units started	29. Index of new private housing units authorized by local building permits	12. Net change in business population, operating businesses
	(Mil. sq. ft. floor space)	(Bil. dol.)	(Bil. dol.)	(Percent reporting)	(Ann. rate, thous.)	(1957-59=100)	(Thous.)
1960							
January	37.32	5.56		55	1,302	98.3	
February	36.93	5.69	2.24	50	1,366	97.9	+19
March	36.73	5.61		46	1,089	88.1	
April	38.73	5.72		50	1,275	95.1	
May	39.25	5.78	2.01	46	1,309	95.9	+17
June	40.31	5.58		50	1,264	88.5	
July	38.87	5.39		45	1,209	91.6	
August	39.38	5.58	(L)1.79	47	1,335	87.3	+14
September	38.96	5.51		43	1,067	87.4	
October	39.44	(L)5.27		39	1,237	89.9	
November	39.44	5.39	2.11	38	1,206	91.4	+10
December	38.15	5.33		(L)37	(L)987	(L)87.1	
1961							
January	36.21	5.60		40	1,108	89.3	
February	36.49	5.45	1.82	39	1,087	89.4	(L)+6
March	37.49	5.62		45	1,258	92.3	
April	35.62	5.54		45	1,162	92.5	
May	(L)35.16	5.72	1.92	41	1,278	93.0	+10
June	36.73	5.91		38	1,376	97.6	
July	36.57	5.81		45	1,333	98.4	
August	39.32	6.11	2.24	47	1,303	101.2	+10
September	38.73	5.95		46	1,397	97.4	
October	33.88	6.13		39	1,413	103.1	
November	41.61	6.39	2.13	39	1,345	102.7	+10
December	41.69	6.06		47	1,255	111.6	
1962							
January	38.99	6.34		41	1,247	103.9	
February	44.10	6.39	2.32	47	1,134	113.1	+11
March	45.19	6.35		44	1,407	105.3	
April	40.87	6.12		46	1,521	112.4	
May	45.39	6.28	2.00	39	1,566	103.2	[H]+11
June	42.99	6.28		41	1,399	104.0	
July	39.86	6.36		38	1,447	106.1	
August	42.65	6.26	2.43	46	1,500	102.8	+10
September	39.90	6.21		[H]48	1,261	107.3	
October	41.62	6.21		47	1,504	107.4	
November	41.68	6.48	[H]2.74	47	[H]1,571	115.8	+9
December	42.48	[H]6.99		43	1,453	[H] 120.6	
1963							
January	44.94	r6.36		47	r1,220	117.3	
February	[H]46.98	p6.50	(NA)	45	r1,253	r112.8	(NA)
March	(NA)	(NA)		45	p1,471	p113.9	
April							
May							
June							

Table 1.--BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1960 TO PRESENT--Continued

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Year and month	NBER Leading Indicators--Continued							
	13. Number of new business incorporations	14. Current liabilities of business failures	15. Business failures with liabilities of $100,000 and over	16. Corporate profits after taxes	17. Price per unit of labor cost index	18. Profits (before taxes) per dol. sales, all mfg. corporations	22. Ratio, profits to income originating, corporate, all industries	19. Index of stock prices, 500 common stocks*
1960	(Number)	(Mil. dol.)	(Number per week)	(Ann. rate, bil. dol.)	(1957-59=100)	(Cents)	(Percent)	(1941-43=10)
January	16,561	52.88	29		103.6			58.03
February	15,274	57.60	27	24.9	102.9	8.8	10.0	55.78
March	15,233	61.57	30		102.7			55.02
April	15,280	63.71	30		102.1			55.73
May	15,176	76.52	32	23.5	101.5	8.0	9.4	55.22
June	15,630	(L)131.31	36		101.1			57.26
July	15,828	71.04	38		101.5			55.84
August	15,114	94.66	36	21.9	100.7	7.8	8.9	56.51
September	15,112	86.02	43		100.8			54.81
October	15,035	85.98	(L)43		101.0			(L)53.73
November	14,264	80.44	37	21.7	101.2	7.2	8.8	55.47
December	14,097	82.78	41		100.1			56.80
1961								
January	(L)13,607	77.79	38		(L)99.6			59.72
February	14,570	83.73	41	(L)20.3	99.9	(L)6.6	(L)8.2	62.17
March	14,658	116.17	39		99.8			64.12
April	15,327	76.88	39		100.9			65.83
May	15,298	82.96	42	22.9	101.1	7.6	9.1	66.50
June	15,431	86.69	40		101.7			65.62
July	15,492	80.15	43		102.3			65.44
August	15,277	94.47	36	23.7	103.4	7.9	9.3	67.79
September	15,402	126.12	39		103.6			67.26
October	16,035	72.28	42		103.2			68.00
November	[H]16,149	119.93	39	26.3	102.9	[H]8.6	[H]10.0	71.08
December	15,711	[H]71.81	38		103.2			[H]71.74
1962								
January	15,279	101.53	37		102.2			69.07
February	15,775	86.03	[H]32	25.6	102.4	8.2	9.5	70.22
March	15,727	74.89	36		102.8			70.29
April	15,372	108.58	38		101.9			68.05
May	15,363	94.54	38	26.1	102.2	8.1	9.6	62.99
June	14,990	91.70	41		102.3			55.63
July	15,171	107.48	38		103.4			56.97
August	15,216	132.64	45	26.1	102.1	8.1	9.6	58.52
September	15,232	103.73	40		[H]105.0			58.00
October	15,121	122.39	46		103.4			56.17
November	14,892	98.94	42	[H]27.3	104.4	8.3	9.7	60.04
December	14,767	90.41	37		r103.2			62.64
1963								
January	14,457	153.15	49		102.9			65.06
February	15,398	90.04	42	(NA)	r102.3	(NA)	(NA)	65.92
March	15,474	93.49	41		p102.7			65.67
April								[1]68.89
May								
June								

[1]April 18, 1963.

Table 1.--BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1960 TO PRESENT--Continued

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Year and month	NBER Leading Indicators--Continued						
	21. Change in bus. inventories, farm and nonfarm, after valuation adjustment	31. Change in book value of manufacturing and trade inventories, total	20. Change in book value of mfrs.' inventories, purchased materials	26. Buying policy, production matls., percent reporting commitments 60 days or longer*	32. Vendor performance, percent reporting slower deliveries*	25. Change in manufacturers' unfilled orders, durable goods industries	23. Index of industrial materials prices*
	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Percent reporting)	(Percent reporting)	(Bil. dol.)	(1957-59=100)
1960							
January		+12.8	+4.6	64	44	-0.52	105.7
February	+10.8	+11.7	+1.5	64	30	-0.78	104.3
March		+11.4	+0.8	56	(L)27	-0.77	102.4
April		+3.2	+1.0	61	28	-0.68	103.8
May	+4.4	+8.5	+0.4	55	32	-0.19	104.1
June		+2.3	-1.6	57	34	-0.22	102.7
July		-1.5	-1.4	54	36	-0.24	101.6
August	+2.1	+0.4	-1.2	50	40	-0.17	102.1
September		-0.6	-3.2	49	41	-0.13	101.2
October		+2.4	-2.4	50	39	(L) -0.77	99.7
November	-1.1	-2.1	(L) -3.4	50	38	-0.41	98.5
December		-6.2	-0.4	(L)48	38	-0.30	(L)96.8
1961							
January		-5.8	-0.3	51	38	-0.37	97.3
February	(L)-3.6	-3.2	-1.0	49	40	-0.02	99.3
March		(L)-8.7	+0.1	50	40	+0.02	103.1
April		+4.1	-0.1	57	47	+0.46	104.1
May	+2.1	+0.7	+0.8	54	48	+0.23	[H]104.4
June		+0.4	-2.2	56	48	+0.11	101.0
July		+4.5	+1.1	56	49	+0.31	101.7
August	+4.0	+1.8	+0.2	55	52	+0.35	102.9
September		[H]+7.8	+3.0	57	55	+0.06	102.9
October		+4.2	+0.5	59	55	+0.29	102.3
November	+6.0	+6.1	+0.9	59	51	+0.34	98.9
December		+5.0	+1.3	54	53	+0.55	101.0
1962							
January		+7.6	[H]+5.0	57	56	+0.53	102.9
February	[H]+6.7	+6.3	+2.2	[H]61	[H]56	+0.22	100.6
March		+4.2	+2.9	56	55	-0.10	100.4
April		+2.5	+1.0	55	48	-0.34	98.3
May	+4.0	+3.1	+0.2	49	46	-0.31	97.8
June		+4.3	-1.0	52	42	-0.32	95.4
July		+3.3	-1.5	58	44	-0.05	94.2
August	+1.0	-3.0	-1.7	52	44	-0.57	94.5
September		+5.7	-0.1	52	48	-0.55	94.0
October		+3.8	-0.8	55	48	-0.18	94.9
November	+1.2	-1.9	-0.9	52	48	-0.52	96.4
December		+3.1	+0.7	51	48	-0.03	95.8
1963							
January		r+3.3	r+1.1	50	50	r+0.40	95.5
February	p+2.5	p+2.4	p+1.1	55	52	r+0.72	95.1
March		(NA)	(NA)	54	54	[H]p+0.79	94.4
April							[1]94.9
May							
June							

[1]April 18, 1963.

Table 1.--BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1960 TO PRESENT--Continued

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Year and month	NBER Roughly Coincident Indicators							
	41. Number of employees in nonagricultural establishments	42. Total nonagricultural employment, labor force survey[1]	43. Unemployment rate, total[1]	40. Unemployment rate, married males[1]	45. Average weekly insured unemployment rate, State programs	46. Index of help-wanted advertising in newspapers	47. Index of industrial production	50. Gross national product in 1954 dollars
1960	(Thous.)	(Thous.)	(Percent)	(Percent)	(Percent)	(1957=100)	(1957-59=100)	(Ann. rate, bil. dol.)
January	54,211	60,521	5.29	3.38	4.27	109.0	111.7	
February	54,445	60,863	4.96	3.11	4.17	110.1	111.0	440.9
March	54,427	60,464	5.45	3.53	4.54	105.4	110.5	
April	54,702	61,144	5.21	3.35	4.26	100.3	109.7	
May	54,584	61,252	5.18	3.42	4.19	99.7	109.9	442.3
June	54,538	61,215	5.46	3.60	4.39	97.8	109.6	
July	54,514	61,090	5.48	3.72	4.67	90.1	109.1	
August	54,403	60,982	5.66	3.85	5.10	89.4	108.7	439.7
September	54,301	61,114	5.60	3.80	5.38	82.6	107.8	
October	54,190	60,857	5.98	4.28	5.68	84.6	107.0	
November	53,995	61,142	6.20	4.22	6.27	82.2	105.4	437.7
December	53,707	(L)60,801	6.60	4.74	(L)6.33	(L)79.0	103.6	
1961								
January	53,581	60,980	6.68	4.78	6.15	79.9	(L)103.3	
February	(L)53,485	60,912	7.03	(L)5.09	6.32	79.3	103.4	(L)433.9
March	53,561	61,314	6.82	4.72	6.26	81.1	103.8	
April	53,663	61,111	7.01	4.91	5.91	79.8	106.6	
May	53,894	61,091	(L)7.11	5.00	5.61	82.0	108.8	443.9
June	54,182	61,448	6.91	4.78	5.32	83.8	110.9	
July	54,335	61,254	6.96	4.74	5.29	82.6	112.0	
August	54,333	61,283	6.67	4.61	5.22	86.1	113.4	450.4
September	54,304	61,330	6.69	4.54	5.10	84.8	112.0	
October	54,385	61,476	6.42	4.12	5.04	95.9	113.5	
November	54,525	61,766	6.07	3.94	5.08	99.1	114.8	463.4
December	54,492	61,788	5.98	3.91	4.81	96.9	115.6	
1962								
January	54,434	61,882	5.84	3.81	4.71	102.3	114.3	
February	54,773	62,148	5.69	3.59	4.52	105.9	116.0	467.4
March	54,901	62,356	5.49	3.53	4.41	[H]106.3	117.0	
April	55,260	62,295	5.58	3.69	3.93	106.1	117.7	
May	55,403	62,552	5.52	3.48	[H]3.82	106.0	118.4	470.8
June	55,535	62,541	5.50	3.64	3.96	98.5	118.6	
July	55,617	62,715	5.43	3.54	4.25	97.9	119.3	
August	55,536	63,017	5.67	3.54	4.41	97.0	119.7	471.6
September	55,583	63,074	5.63	3.43	4.38	92.8	119.8	
October	55,647	63,036	[H]5.34	[H]r3.35	4.55	96.8	119.2	
November	55,597	62,708	5.76	r3.43	4.84	95.9	119.6	[H]477.7
December	55,580	63,248	5.54	r3.57	4.79	e95.2	119.1	
1963								
January	r55,536	62,988	5.77	3.81	4.84	e97.5	118.9	
February	r55,727	63,245	6.09	4.04	4.69	e100.5	r119.4	(NA)
March	[H]p55,928	[H]63,628	5.59	3.50	4.39	p98.5	[H]p120.4	
April					[2]4.23			
May								
June								

[e]Estimated.

[1]Beginning with April 1962, the 1960 Census is used as the benchmark for computing this series. Prior to April 1962, the 1950 Census is used as the benchmark.

[2]Week ended March 30, 1963.

Table 1.--BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1960 TO PRESENT--Continued

Series are seasonally adjusted except those that appear to contain no seasonal movement. Unadjusted series are indicated by an asterisk (*). Low values preceding current highs are indicated by (L) and current highs are indicated by [H]; the reverse is true for inverted series (series 3, 4, 5, 14, 15, 40, 43, 45). Series numbers are for identification purposes only and do not reflect series relationships or order. Sources are shown in "Complete Titles and Sources of Principal Business Cycle Series and Diffusion Indexes" on the back cover. "r" indicates revised; "p", preliminary.

Year and month	NBER Roughly Coincident Indicators--Continued						
	49. Gross national product in current dollars	57. Final sales (series 49 minus 21)	51. Bank debits outside NYC, 343 centers	52. Personal income	53. Labor income in mining, manufacturing, and construction	54. Sales of retail stores	55. Index of wholesale prices except farm products and foods
	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Mil. dol.)	(1957-59=100)
1960							
January			1,692.2	395.7	108.7	18,100	101.5
February	501.7	490.8	1,765.4	395.2	108.5	18,161	101.4
March			1,715.2	395.3	107.9	18,219	101.4
April			1,731.2	400.2	108.3	18,860	101.4
May	504.8	500.4	1,731.2	401.6	108.8	18,428	101.2
June			1,739.0	402.5	108.4	18,466	101.3
July			1,714.0	402.4	108.3	18,118	101.3
August	503.7	501.5	1,771.8	403.2	107.6	18,201	101.3
September			1,766.5	403.8	107.0	18,104	101.1
October			1,738.0	404.7	106.9	18,543	101.2
November	503.3	504.4	1,758.9	403.8	105.5	18,398	101.1
December			(L)1,742.3	(L)402.6	103.7	17,887	101.0
1961							
January			1,786.2	403.4	104.0	(L)17,773	101.0
February	(L)500.8	(L)504.4	1,755.0	404.2	(L)103.3	17,786	101.1
March			1,785.1	408.5	104.2	18,117	101.1
April			1,781.8	410.6	106.0	17,851	100.9
May	513.1	511.0	1,829.3	413.3	107.1	17,985	100.9
June			1,824.0	416.4	108.5	18,189	100.7
July			1,839.9	420.1	108.9	18,017	100.7
August	522.3	518.3	1,832.7	418.3	108.5	18,172	100.8
September			1,848.2	419.7	108.3	18,131	100.8
October			1,904.6	423.6	110.1	18,577	100.7
November	538.6	532.6	1,903.8	427.8	111.7	19,098	100.8
December			1,916.9	430.5	111.8	18,827	100.9
1962							
January			2,009.7	428.8	110.8	18,898	100.8
February	545.0	538.3	1,916.6	431.9	112.1	19,027	100.7
March			1,985.3	435.2	113.0	19,328	100.7
April			2,044.4	438.3	115.0	19,673	(L)100.7
May	552.0	547.9	2,015.0	439.7	115.1	19,508	100.9
June			2,000.2	440.7	114.9	19,163	100.8
July			2,054.8	441.9	115.2	19,761	100.9
August	555.3	554.2	2,017.0	443.0	115.0	19,645	100.8
September			1,988.5	443.5	114.8	19,693	100.9
October			2,080.9	445.6	114.8	19,821	[H]100.9
November	563.5	562.3	2,090.5	448.2	114.8	20,230	100.8
December			2,066.9	450.4	114.8	20,203	100.7
1963							
January			[H]2,148.6	452.4	114.5	r20,247	100.5
February	[H]p572.0	[H]p569.5	2,086.3	r451.1	r115.2	r20,452	r100.5
March			p2,091.6	[H]p452.7	[H]p115.9	[H]p20,695	100.5
April							[1]100.3
May							
June							

[1]Week ended April 16, 1963.

Table 1.–BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1960 TO PRESENT–Continued

Series are seasonally adjusted except those that appear to contain no seasonal movement. Unadjusted series are indicated by an asterisk (*). Low values preceding current highs are indicated by (L) and current highs are indicated by [H]; the reverse is true for inverted series (series 3, 4, 5, 14, 15, 40, 43, 45). Series numbers are for identification purposes only and do not reflect series relationships or order. Sources are shown in "Complete Titles and Sources of Principal Business Cycle Series and Diffusion Indexes" on the back cover. "r" indicates revised; "p", preliminary.

Year and month	NBER Lagging Indicators						
	61. Business expenditures on new plant and equipment, total	62. Index of wage and salary cost per unit of output, total manufacturing	63. Index of labor cost per unit of output, total GNP	64. Book value of manufacturers' inventories, all manufacturing industries	65. Book value of mfrs.' inventories of finished goods, all manufacturing ind.	66. Consumer installment debt	67. Bank rates on short-term business loans, 19 cities*
	(Ann. rate, bil. dol.)	(1957-59=100)	(1957-59=100)	(Bil. dol.)	(Bil. dol.)	(Mil. dol.) Revised[1]	(Percent)
1960							
January		96.7		53.3	20.4	38,971	
February	35.15	98.1	103.2	53.9	20.6	39,452	5.34
March		98.5		54.3	20.8	39,878	
April		99.1		54.7	21.0	40,377	
May	36.30	99.6	104.3	55.0	21.2	40,672	5.35
June		100.1		55.1	21.3	41,013	
July		99.8		54.9	21.4	41,299	
August	35.90	100.5	105.4	55.0	21.6	41,508	4.97
September		100.4		54.7	21.9	41,762	
October		100.2		54.4	21.9	41,898	
November	35.50	100.4	105.0	54.0	21.9	42,032	4.99
December		101.0		53.7	21.8	42,143	
1961							
January		100.9		53.7	21.8	42,118	
February	33.85	101.1	106.1	53.6	21.8	42,032	4.97
March		101.2		(L)53.3	21.7	41,986	
April		100.0		53.4	21.7	41,865	
May	(L)33.50	99.6	105.8	53.4	21.5	(L)41,856	4.97
June		98.8		53.4	21.5	41,900	
July		98.3		53.5	(L)21.5	41,904	
August	34.70	97.4	105.8	54.0	21.7	41,959	4.99
September		(L)97.3		54.4	21.8	42,008	
October		97.5		54.8	21.9	42,170	
November	35.40	98.0	(L)104.7	55.0	21.9	42,439	(L)4.96
December		97.5		55.2	22.0	42,787	
1962							
January		98.0		55.7	22.1	43,066	
February	35.70	98.2	105.5	56.2	22.1	43,338	4.98
March		97.7		56.6	22.2	43,716	
April		98.7		56.7	22.2	44,209	
May	36.95	98.7	106.9	56.8	22.3	44,648	5.01
June		98.6		56.9	22.4	45,069	
July		97.6		57.0	22.5	45,455	
August	[H]38.35	[H]98.9	[H]107.6	57.0	22.6	45,813	4.99
September		96.4		57.2	22.7	46,015	
October		97.7		57.3	22.7	46,399	
November	37.95	96.8	106.8	57.2	22.8	46,980	[H]5.02
December		r97.4		57.4	23.0	47,438	
1963							
January		96.9		r57.5	23.0	47,942	
February	[2]37.95	r97.9	(NA)	[H]p57.7	[H]p23.0	[H]48,378	5.00
March		p97.2		(NA)	(NA)	(NA)	
April							
May	[2]38.65						
June							

[1]See "New Features and Changes For This Issue," page ii.
[2]Anticipated.

Table 1.--BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1960 TO PRESENT--Continued

Series are seasonally adjusted except those that appear to contain no seasonal movement. Unadjusted series are indicated by an asterisk (*). Low values preceding current highs are indicated by Ⓛ and current highs are indicated by Ⓗ; the reverse is true for inverted series (series 3, 4, 5, 14, 15, 40, 43, 45). Series numbers are for identification purposes only and do not reflect series relationships or order. Sources are shown in "Complete Titles and Sources of Principal Business Cycle Series and Diffusion Indexes" on the back cover. "r" indicates revised; "p", preliminary.

Year and month	Other U.S. series with business cycle significance								
	86. Exports, excluding military aid shipments, total	87. General imports, total	88. Merchandise trade balance (series 86 minus 87)	89. Excess, receipts(+) or payments (-) in U.S. balance of payments	82. Federal cash payments to the public	83. Federal cash receipts from the public	84. Federal surplus (+) or deficit (-)	95. Surplus (+) or deficit (-), Federal income and product acct.	90. Defense Department obligations, procurement
1960	(Mil. dol.)	(Mil.dol.)	(Mil.dol.)	(Mil. dol.)	(Ann.rate, bil.dol.)	(Ann.rate, bil.dol.)	(Ann.rate, bil.dol.)	(Ann. rate, bil. dol.)	(Mil. dol.)
January	1,561.3	1,246.3	+315.0		89.9	89.9	0.0		937
February	1,565.7	1,348.0	+217.7	-680	97.8	96.6	-1.2	+8.1	1,104
March	1,518.1	1,289.8	+228.3		91.9	94.2	+2.3		1,020
April	1,622.2	1,348.6	+273.6		94.9	99.8	+4.9		983
May	1,659.3	1,269.0	+390.3	-775	94.4	102.9	+8.5	+5.5	1,488
June	1,633.8	1,276.5	+357.3		91.9	94.8	+2.9		1,392
July	1,706.5	1,270.7	+435.8		91.5	93.6	+2.1		2,204
August	1,624.8	1,255.8	+369.0	-1,157	97.4	104.0	+6.6	+1.5	1,256
September	1,647.2	1,220.6	+426.6		95.0	100.5	+5.5		1,256
October	1,667.6	1,206.0	+461.6		92.7	91.7	-1.0		945
November	1,680.6	1,161.7	+518.9	[1]-1,313	102.0	101.4	-0.6	-0.4	1,468
December	1,645.3	1,124.8	+520.5		96.3	99.5	+3.2		1,096
1961									
January	1,622.7	1,161.4	+461.3		95.5	94.2	-1.3		1,277
February	1,711.6	1,149.8	+561.8	-342	95.4	94.1	-1.3	-6.3	1,555
March	1,750.7	1,162.9	+587.8		107.4	92.6	-14.8		1,230
April	1,661.5	1,152.0	+509.5		100.6	97.0	-3.6		1,047
May	1,585.1	1,152.9	+432.2	[2]+159	110.9	99.8	-11.1	-4.2	1,220
June	1,581.9	1,173.8	+408.1		106.5	97.7	-8.8		1,343
July	1,688.5	1,379.3	+309.2		97.7	91.2	-6.5		1,181
August	1,688.9	1,253.6	+435.3	-913	112.7	101.0	-11.7	-3.3	2,278
September	1,678.4	1,262.0	+416.4		104.1	99.2	-4.9		1,933
October	1,779.8	1,300.1	+479.7		109.8	99.5	-10.3		1,354
November	1,733.1	1,308.5	+424.6	-1,264	106.5	101.3	-5.2	-1.3	1,286
December	1,724.8	1,314.5	+410.3		104.3	101.7	-2.6		1,589
1962									
January	1,654.8	1,327.4	+327.4		115.1	101.7	-13.4		1,872
February	1,812.1	1,315.4	+496.7	-495	108.8	101.3	-7.5	-2.4	1,211
March	1,674.4	1,339.3	+335.1		107.4	98.1	-9.3		1,254
April	1,802.6	1,363.8	+438.8		110.1	107.8	-2.3		1,831
May	1,782.1	1,386.4	+395.7	-214	106.8	109.9	+3.1	-0.7	1,182
June	1,838.3	1,342.4	+495.9		108.9	104.4	-4.5		1,325
July	1,728.9	1,361.8	+367.1		116.3	111.2	-5.1		1,934
August	1,687.3	1,364.2	+323.1	-681	111.6	110.1	-1.5	-0.9	1,386
September	1,943.3	1,476.4	+466.9		109.9	107.6	-2.3		1,037
October	1,492.8	1,318.9	+173.9		118.6	107.8	-10.8		1,805
November	1,695.2	1,431.7	+263.5	-791	114.7	109.0	-5.7	-1.4	1,755
December	1,838.9	1,371.9	+467.0		115.2	109.0	-6.2		1,022
1963									
January	982.1	1,093.2	-111.1		116.7	107.7	-9.0		1,732
February	2,130.6	1,493.2	+637.4	(NA)	106.5	109.8	+3.3	(NA)	1,228
March	(NA)	(NA)	(NA)		117.0	106.9	-10.1		(NA)
April									
May									
June									

[1]Includes single direct investment transactions of $370 million.
[2]Includes $650 million in special debt payments to the United States.

Table 1.--BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1960 TO PRESENT--Continued

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Year and month	Other U.S. series with business cycle significance--Continued								
	91. Defense Department obligations, total	92. Military prime contract awards to U.S. business firms	85. Percent change in total U.S. money supply	98. Percent change in money supply and time deposits	93. Free reserves*	81. Index of consumer prices	94. Index of construction contracts, total value	96. Mfrs.' unfilled orders, durable goods industries	97. Backlog of capital appropriations, manufacturing
1960	(Mil. dol.)	(Mil. dol.)	(Percent)	(Percent)	(Mil.dol.)	(1957-59=100)	(1957-59=100)	(Bil.dol.)	(Bil.dol.)
January	3,234	1,770	-0.14	-0.14	-375	102.3	93	47.56	
February	3,439	1,740	-0.28	-0.38	-365	102.5	93	46.77	
March	3,368	1,738	-0.28	-0.10	-219	102.6	100	46.00	8.05
April	3,362	1,368	-0.14	0.00	-194	102.9	105	45.32	
May	3,677	1,811	-0.28	-0.05	-33	103.0	97	45.13	
June	3,771	1,687	-0.28	-0.05	+37	103.1	108	44.91	7.74
July	4,674	2,231	+0.21	+0.53	+120	103.1	113	44.67	
August	3,624	2,302	+0.36	+0.67	+247	103.3	109	44.50	
September	3,876	2,361	+0.07	+0.38	+414	103.2	107	44.37	7.15
October	3,316	1,477	+0.07	+0.47	+480	103.5	117	43.60	
November	4,100	2,127	-0.14	+0.28	+614	103.6	111	43.19	
December	3,639	1,797	+0.28	+0.52	+669	103.8	120	42.89	7.07
1961									
January	3,702	1,944	+0.14	+0.56	+696	103.9	108	42.52	
February	4,153	2,153	+0.28	+0.74	+517	104.0	95	42.49	
March	3,714	1,757	+0.28	+0.51	+486	104.0	104	42.51	6.72
April	3,441	1,910	+0.21	+0.46	+551	103.9	103	42.97	
May	3,736	1,530	+0.21	+0.64	+453	103.9	102	43.20	
June	3,784	1,993	0.00	+0.36	+549	104.1	111	43.31	6.58
July	3,702	2,087	+0.07	+0.45	+530	104.4	110	43.62	
August	5,037	2,232	0.00	+0.32	+537	104.4	116	43.97	
September	4,718	2,158	+0.42	+0.58	+547	104.5	103	44.03	6.68
October	4,252	2,651	+0.49	+0.67	+442	104.5	114	44.32	
November	4,112	2,379	+0.49	+0.62	+517	104.5	116	44.66	
December	4,549	2,281	+0.55	+0.57	+419	104.5	119	45.21	6.83
1962									
January	4,558	3,073	+0.14	+0.79	+555	104.7	115	45.74	
February	4,076	2,135	-0.27	+0.57	+434	104.9	119	45.96	
March	4,143	2,225	+0.14	+0.82	+382	105.1	131	45.86	7.15
April	4,505	1,885	+0.27	+0.69	+441	105.2	121	45.52	
May	4,107	1,808	-0.27	+0.21	+440	105.4	117	45.22	
June	3,981	1,808	-0.07	+0.42	+391	105.4	120	44.90	7.06
July	4,908	2,068	+0.07	+0.51	+440	105.5	117	44.85	
August	4,347	2,488	-0.41	+0.04	+439	105.6	118	44.28	
September	3,838	2,242	+0.14	+0.46	+375	105.9	113	43.73	7.24
October	4,869	3,089	+0.55	+0.84	+419	105.9	117	43.55	
November	4,927	3,154	+0.55	+0.91	+473	105.9	123	43.03	
December	3,849	1,758	+0.68	+1.03	+268	105.8	138	43.00	7.76
1963									
January	4,788	2,390	+0.54	+0.98	+384	106.2	121	r43.40	
February	4,142	2,674	r-0.07	r+0.44	r+300	106.2	130	r44.12	
March	(NA)	(NA)	p+0.20	p+0.72	p+271	(NA)	(NA)	p44.90	(NA)
April									
May									
June									

Table 1.--BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1960 TO PRESENT--Continued

Series are seasonally adjusted except those that appear to contain no seasonal movement. Unadjusted series are indicated by an asterisk (*). Low values preceding current highs are indicated by (L) and current highs are indicated by [H]; the reverse is true for inverted series (series 3, 4, 5, 14, 15, 40, 43, 45). Series numbers are for identification purposes only and do not reflect series relationships or order. Sources are shown in "Complete Titles and Sources of Principal Business Cycle Series and Diffusion Indexes" on the back cover. "r" indicates revised; "p", preliminary.

Year and month	International comparisons of industrial production							
	121. OECD,[1] European countries, index of industrial production	122. United Kingdom, index of industrial production	123. Canada, index of industrial production	47. United States, index of industrial production	125. West Germany, index of industrial production	126. France, index of industrial production	127. Italy, index of industrial production	128. Japan, index of industrial production
1960	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)
January	111	109	109	112	113	112	118	132
February	112	109	107	111	113	109	122	136
March	114	110	108	110	115	110	123	137
April	113	112	105	110	115	112	123	140
May	114	112	105	110	116	111	124	140
June	116	111	105	110	118	115	126	143
July	118	111	104	109	118	115	125	145
August	116	112	104	109	115	117	127	148
September	116	112	105	108	118	119	127	151
October	117	112	105	107	120	119	126	151
November	118	110	105	105	120	121	129	157
December	118	112	105	104	122	119	129	158
1961								
January	117	109	104	103	124	117	130	162
February	119	110	105	103	125	119	134	160
March	119	110	105	104	126	121	134	166
April	120	111	107	107	126	119	134	166
May	119	110	107	109	124	119	136	172
June	120	113	109	111	121	121	136	175
July	120	113	109	112	122	121	138	179
August	119	111	111	113	121	121	137	182
September	120	110	112	112	124	121	140	183
October	121	109	112	114	123	125	145	187
November	122	109	114	115	124	126	149	190
December	123	109	114	116	128	127	148	191
1962								
January	r122	108	113	114	126	126	149	190
February	124	110	115	116	129	127	151	188
March	r123	111	116	117	125	127	149	193
April	r124	110	116	118	131	128	151	192
May	126	113	117	118	130	129	153	195
June	r124	114	118	119	129	129	147	194
July	125	113	118	119	128	130	151	191
August	r125	114	119	120	128	130	r149	193
September	127	115	119	120	133	132	r150	194
October	r125	110	119	119	130	133	r153	190
November	127	113	120	120	133	135	r158	192
December	r127	r109	r119	119	133	135	160	r190
1963								
January	125	106	119	119	r129	135	(NA)	r195
February	(NA)	(NA)	(NA)	119	128	134		(NA)
March				p120	(NA)	(NA)		
April								
May								
June								

[1]Organization for Economic Cooperation and Development.

Table 2.--RECENT CHANGES FOR BUSINESS CYCLE SERIES

To facilitate interpretations of cyclical movements, those series that usually fall when general business activity rises and rise when business falls are inverted so that rises are shown as declines and declines as rises (see series 3, 4, 5, 14, 15, 40, 43, and 45). The month-to-month percent changes are calculated in the usual way but the signs are reversed; for example, if the rate decreased by 0.6 percent, the sign of this drop is reversed and shown as +0.6.

Series	Measure of change	Avg. change, 1948-1961[1]	1962					1963			
			July to Aug.	Aug. to Sept.	Sept. to Oct.	Oct. to Nov.	Nov. to Dec.	Dec. to Jan.	Jan. to Feb.	Feb. to Mar.	Mar. to Apr.[2]
NBER LEADING INDICATORS											
1. Average workweek of production workers, manufacturing	Percent..	0.5	-0.7	+0.7	-1.0	+0.7	-0.2	-0.2	+0.2	0.0	
2. Accession rate, manufacturing	..do....	6.0	-2.4	-5.0	+5.3	-10.0	-2.8	+11.4	-2.6	NA	
30. Nonagri. placements, all industries	..do....	3.4	-1.6	-2.0	+5.4	-1.1	-6.0	+5.5	-2.0	+0.5	
3. Layoff rate, manufacturing (inverted)	..do....	11.9	-8.3	+23.1	+10.0	-5.6	-5.3	0.0	+10.0	NA	
4. Number of persons on temporary layoff, all industries (inverted)	..do....	19.4	-2.3	+8.4	-7.5	-7.8	+18.0	-57.0	+37.4	+3.6	
5. Avg. weekly initial claims for unemployment insurance, State (inverted)	..do....	7.0	+1.6	+1.0	0.0	+0.7	-6.4	+0.3	+6.6	+6.1	+7.2
6. Value of manufacturers' new orders, durable goods industries	..do....	5.6	-2.2	-0.1	+4.3	-1.4	-2.0	+4.3	+2.6	+0.2	
24. Value of manufacturers' new orders, machinery and equipment industries	..do....	6.1	-1.9	+1.6	-1.2	+4.1	-1.9	+0.2	+1.6	-3.4	
9. Construction contracts awarded for commercial and industrial buildings	..do....	12.4	+7.0	-6.4	+4.3	+0.1	+1.9	+5.8	+4.5	NA	
10. Contracts and orders for plant and equipment	..do....	6.4	-1.6	-0.8	0.0	+4.3	+7.9	-9.0	+2.2	NA	
11. Newly approved capital appropriations, 602 manufacturing corporations[3]	..do....	11.2	+21.5	...	...	+12.8	...	...	NA		
27. Buying policy, capital expend., percent reporting commitments 6 mo. or more	..do....	7.6	+21.1	+4.3	-2.1	0.0	-8.5	+9.3	-4.3	0.0	
7. New private nonfarm dwelling units started	..do....	4.1	+3.7	-15.9	+19.3	+4.5	-7.5	-16.0	+2.7	+17.4	
29. Index of new private housing units authorized by local bldg. permits	..do....	3.9	-3.1	+4.4	+0.1	+7.8	+4.1	-2.7	-3.8	+1.0	
12. Net change in business population, operating businesses[3] [4]	Thous....	3	-1	...	...	-1	...	...	NA		
13. Number of new business incorporations	Percent..	3.0	+0.3	+0.1	-0.7	-1.5	-0.8	-2.1	+6.5	+0.5	
14. Current liabilities of business failures (inverted)	..do....	16.3	-23.4	+21.8	-18.0	+19.2	+8.6	-69.4	+41.2	-3.8	
15. No. of business failures with liabilities of $100,000 and over (inv.)	..do....	17.3	-18.4	+11.1	-15.0	+8.7	+11.9	-32.4	+14.3	+2.4	
16. Corporate profits after taxes[3]	..do....	7.7	0.0	...	...	+4.6	...	...	NA		
17. Price per unit of labor cost index	..do....	0.7	-1.3	+2.8	-1.5	+1.0	-1.1	-0.3	-0.6	+0.4	
18. Profits (before taxes) per dollar of sales, all mfg. corporations[3]	..do....	7.7	0.0	...	...	+2.5	...	...	NA		
22. Ratio, profits (after taxes) to income originating, corporate, all indus.[3]	..do....	5.8	0.0	...	...	+1.0	...	...	NA		
19. Index of stock prices, 500 stocks	..do....	2.6	+2.7	-0.9	-3.2	+6.9	+4.3	+3.9	+1.3	-0.4	+4.9
21. Change in bus. inventories, farm and nonfarm, after val. adjustment[3] [4]	Ann.rate, bil.dol.	3.1	-3.0	...	...	+0.2	...	...	+1.3		
31. Change in book value of mfg. and trade inventories, total[4]	..do....	4.0	-6.3	+8.7	-1.9	-5.7	+5.0	+0.2	-0.9	NA	
20. Change in book value of mfrs.' inventories, purchased materials[4]	..do....	1.7	-0.2	+1.6	-0.7	-0.1	+1.6	+0.4	0.0	NA	
26. Buying policy, prod. mtls., percent report. commitments 60 days or more	Percent..	6.2	-10.3	0.0	+5.8	-5.5	-1.9	-2.0	+10.0	-1.8	
32. Vendor performance, percent reporting slower deliveries	..do....	11.3	0.0	+9.1	0.0	0.0	0.0	+4.2	+4.0	+3.8	
25. Change in mfrs.' unfilled orders, durable goods industries[4]	Bil. dol.	0.46	-0.52	+0.02	+0.37	-0.34	+0.49	+0.43	+0.32	+0.07	
23. Index of industrial materials prices	Percent..	2.2	+0.3	-0.5	+1.0	+1.6	-0.6	-0.3	-0.4	-0.7	+0.5
NBER ROUGHLY COINCIDENT INDICATORS											
41. Number of employees in nonagricultural establishments	..do....	0.4	-0.1	+0.1	+0.1	-0.1	0.0	-0.1	+0.3	+0.4	
42. Total nonagricultural employment, labor force survey	..do....	0.4	+0.5	+0.1	-0.1	-0.5	+0.9	-0.4	+0.4	+0.6	
43. Unemployment rate, total (inverted)	..do....	4.7	-4.4	+0.7	+5.2	-7.9	+3.8	-4.2	-5.5	+8.2	
40. Unemploy. rate, married males (inv.)	..do....	5.8	0.0	+3.1	+2.3	-2.4	-4.1	-6.7	-6.0	+13.4	
45. Avg. weekly insured unemployment rate, State programs (inverted)	..do....	5.6	-3.8	+0.7	-3.9	-6.4	+1.0	-1.0	+3.1	+6.4	+3.6

See footnotes at end of table.

Table 2.--RECENT CHANGES FOR BUSINESS CYCLE SERIES--Continued

To facilitate interpretations of cyclical movements, those series that usually fall when general business activity rises and rise when business falls are inverted so that rises are shown as declines and declines as rises (see series 3, 4, 5, 14, 15, 40, 43, and 45). The month-to-month percent changes are calculated in the usual way but the signs are reversed; for example, if the rate decreased by 0.6 percent, the sign of this drop is reversed and shown as +0.6.

Series	Measure of change	Avg. change, 1948-1961[1]	1962					1963			
			July to Aug.	Aug. to Sept.	Sept. to Oct.	Oct. to Nov.	Nov. to Dec.	Dec. to Jan.	Jan. to Feb.	Feb. to Mar.	Mar. to Apr.[2]
NBER ROUGHLY COINCIDENT INDICATORS--Con.											
46. Index of help-wanted advertising in newspapers	Percent..	3.3	-0.9	-4.3	+4.3	-0.9	-0.7	+2.4	+3.1	-2.0	
47. Index of industrial production	..do....	1.2	+0.3	+0.1	-0.5	+0.3	-0.4	-0.2	+0.4	+0.8	
50. Gross national product in 1954 dol.[3]	..do....	1.4	+0.2	...	...	+1.3	...	...	NA		
49. Gross national product in cur. dol.[3]	..do....	1.9	+0.6	...	...	+1.5	...	...	+1.5		
57. Final sales (series 49 minus 21)[3]	..do....	1.6	+1.1	...	...	+1.5	...	...	+1.3		
51. Bank debits outside NYC, 343 centers	..do....	1.6	-1.8	-1.4	+4.6	+0.5	-1.1	+4.0	-2.9	+0.3	
52. Personal income	..do....	0.7	+0.2	+0.1	+0.5	+0.6	+0.5	+0.4	-0.3	+0.4	
53. Labor income in mining, manufacturing, and construction	..do....	1.1	-0.2	-0.2	0.0	0.0	0.0	-0.3	+0.6	+0.6	
54. Sales of retail stores	..do....	1.6	-0.6	+0.2	+0.6	+2.1	-0.1	+0.2	+1.0	+1.2	
55. Index of wholesale prices except farm products and foods	..do....	0.3	-0.1	+0.1	0.0	-0.1	-0.1	-0.2	0.0	0.0	-0.2
NBER LAGGING INDICATORS											
61. Business expenditures on new plant and equipment, total[3]	..do....	3.6	+3.8	...	...	-1.0	...	...	[5]0.0		
62. Index of wage and salary cost per unit of output, total manufacturing	..do....	0.7	+1.3	-2.5	+1.3	-0.9	+0.6	-0.5	+1.0	-0.7	
63. Index of labor cost per unit of output, total GNP[3]	..do....	1.0	+0.7	...	...	-0.7	...	...	NA		
64. Book value of mfrs.' inventories, all manufacturing industries	..do....	0.9	0.0	+0.4	+0.2	-0.2	+0.3	+0.2	+0.3	NA	
65. Book value of mfrs.' inventories of finished goods, all mfg. industries	..do....	1.0	+0.4	+0.4	0.0	+0.4	+0.9	0.0	0.0	NA	
66. Consumer installment debt	..do....	1.2	+0.8	+0.4	+0.8	+1.3	+1.0	+1.1	+0.9	NA	
67. Bank rates on short-term business loans, 19 cities[3]	..do....	3.0	-0.4	...	...	+0.6	...	...	-0.4		
OTHER U.S. SERIES WITH BUSINESS CYCLE SIGNIFICANCE											
86. Exports, excluding military aid shipments, total	..do....	3.7	-2.4	+15.2	-23.2	+13.6	+8.5	-46.6	+116.9	NA	
87. General imports, total	..do....	3.5	+0.2	+8.2	-10.7	+8.6	-4.2	-20.3	+36.6	NA	
88. Merchandise trade balance[4]	Mil. dol.	58.6	-44.0	+143.8	-293.0	+89.6	+203.5	-578.1	+748.5	NA	
89. Excess of receipts or payments in U.S. balance of payments[3] [4]	..do....	332	-467	...	...	-110	...	...	NA		
82. Federal cash payments to the public	Percent..	7.2	-4.0	-1.5	+7.9	-3.3	+0.4	+1.3	-8.7	+9.9	
83. Federal cash receipts from the public	..do....	7.5	-1.0	-2.3	+0.2	+1.1	0.0	-1.2	+1.9	-2.6	
84. Federal cash surplus or deficit[4]	Ann.rate, bil.dol.	5.7	+3.6	-0.8	-8.5	+5.1	-0.5	-2.8	+12.3	-13.4	
95. Surplus or deficit, Federal income and product account[3] [4]	..do....	3.2	-0.2	...	...	-0.5	...	...	NA		
90. Defense Dept. obligations, procurement	Percent..	25.4	-28.3	-25.2	+74.1	-2.8	-41.8	+69.5	-29.1	NA	
91. Defense Dept. obligations, total	..do....	15.6	-11.4	-11.7	+26.9	+1.2	-21.9	+24.4	-13.5	NA	
92. Military prime contract awards to U.S. business firms	..do....	29.2	+20.3	-9.9	+37.8	+2.1	-44.3	+35.9	+11.9	NA	
85. Change in money supply excluding time deposits[4]	..do....	0.22	-0.48	+0.55	+0.41	0.00	+0.13	-0.14	-0.61	+0.27	
93. Free reserves[4]	Mil. dol.	138	-1	-64	+44	+54	-205	+116	-84	-29	
81. Index of consumer prices	Percent..	0.3	+0.1	+0.3	0.0	0.0	-0.1	+0.4	0.0	NA	
94. Index of construc. contracts, total	..do....	8.3	+0.9	-4.2	+3.5	+5.1	+12.2	-12.3	+7.4	NA	
96. Mfrs.' unfilled orders, dur. goods	..do....	2.1	-1.3	-1.2	-0.4	-1.2	-0.1	+0.9	+1.7	+1.8	
97. Backlog of cap. appropriations, mfg.[3]	..do....	6.3	+2.5	...	...	+7.2	...	...	NA		
98. Change in money supply including time deposits[4]	..do....	0.19	-0.47	+0.42	+0.38	+0.07	+0.12	-0.05	-0.54	+0.28	

[1]This average is based on month-to-month (or quarter-to-quarter) changes without regard to sign. The period varies among the series, beginning with the earliest date shown in chart 1 and ending on the date a revision or new seasonal adjustment made new computations feasible. [2]Percentage changes cover part of this period only. [3]Quarterly series; figures show change from previous quarter and are placed in middle month of quarter. Thus the figure for GNP (series 49) shown in the July-Aug. column refers to the change from the 2nd quarter of 1962 to the 3rd quarter of 1962. [4]Figures are the month-to-month (quarter-to-quarter) differences in the figures shown in table 1. [5]Anticipated. The percent change from 1st quarter to 2nd quarter, 1963, based on anticipated data is +1.8.

Table 3.--DISTRIBUTION OF HIGHS IN BUSINESS CYCLE INDICATORS DURING RECENT MONTHS COMPARED WITH PERIODS AROUND PREVIOUS BUSINESS CYCLE PEAKS

Number of months before benchmark date that high was reached	Number of series that reached a high before benchmark dates--							
	Business cycle peak				3d month before business cycle peak			
	Nov. 1948	July 1953	July 1957	May 1960	Aug. 1948	Apr. 1953	Apr. 1957	Feb. 1960
	NBER LEADING INDICATORS							
8 months or more	12	7	22	14	11	3	20	12
7 months	1	1	...	2	1	4	...	1
6 months	...	3	1	1	...	...	1	...
5 months	4	1	...	3	...	2	1	1
4 months	1	...	...	2	1	2	...	2
3 months	...	2	...	1	...	3	1	1
2 months	...	2	...	...	4	1	...	3
1 month	...	...	...	...	1	...	...	2
Benchmark month	...	3	...	...	...	4	...	1
Number of series used	[1]18	[2]19	23	23	[1]18	[2]19	23	23
Percent of series high on benchmark date.	0	16	0	0	0	21	0	4
	NBER ROUGHLY COINCIDENT INDICATORS							
8 months or more	3	1	2	1	1	...	1	1
7 months	...	...	...	...	2	...	...	...
6 months	...	...	...	...	...	...	1	...
5 months	...	1	1	...	...	2	...	...
4 months	4	1	3	2	...	...	1	1
3 months	1	...	...	3	...	...	...	...
2 months	2	2	...	...	...	1	2	...
1 month	...	3	...	2	4	4	3	3
Benchmark month	1	3	5	3	4	4	3	6
Number of series used	11	11	11	11	11	11	11	11
Percent of series high on benchmark date.	9	27	45	27	36	36	27	55

Number of months before benchmark date that high was reached	6th month before business cycle peak				Current expansion			
	May 1948	Jan. 1953	Jan. 1957	Nov. 1959	Dec. 1962	Jan. 1963	Feb. 1963	Mar. 1963
	NBER LEADING INDICATORS							
8 months or more	6	2	17	4	14	16	14	9
7 months	1	1	1	4	2	...	...	...
6 months	...	2	1	4	...	...	...	2
5 months	4	1	1	2	...	...	2	...
4 months	2	4	...	4	...	2	...	2
3 months	...	1	1	...	2	...	2	1
2 months	2	2	1	1	1	2	2	...
1 month	2	3	...	2	2	2	...	...
Benchmark month	1	3	1	2	2	1	3	3
Number of series used	[1]18	[2]19	23	23	23	23	23	17
Percent of series high on benchmark date.	6	16	4	9	9	4	13	18
	NBER ROUGHLY COINCIDENT INDICATORS							
8 months or more	1	...	1	...	1	2	1	2
7 months	...	...	...	...	1	....	1	...
6 months	...	...	...	...	...	1	...	...
5 months	...	...	...	4	1	...	1	2
4 months	4	...	...	2	...	1	2	...
3 months	...	...	2	...	1	3	...	...
2 months	...	2	...	...	3	...	1	1
1 month	1	3	5	2	2	1	2	...
Benchmark month	5	6	3	3	2	3	3	6
Number of series used	11	11	11	11	11	11	11	11
Percent of series high on benchmark date.	45	55	27	27	18	27	27	55

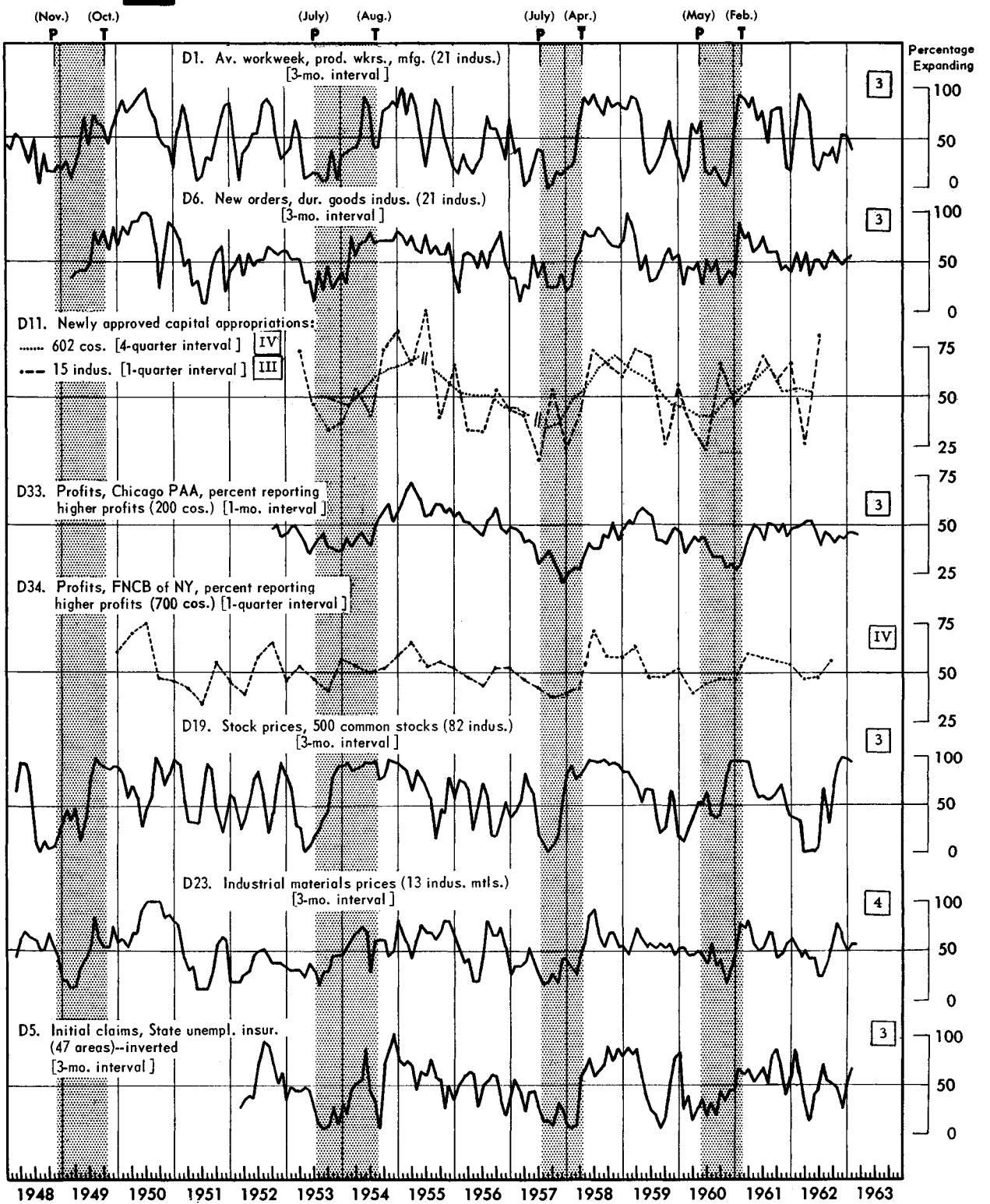
All quarterly series, 1 leading monthly series (series 15), and 1 roughly coincident series (series 40) are omitted from the distribution.

[1]5 series were not available.

[2]2 series were not available and 2 series were omitted because their peaks were reached during the Korean War and such peaks were disregarded in this distribution.

CHART 2 DIFFUSION INDEXES: 1948 TO PRESENT

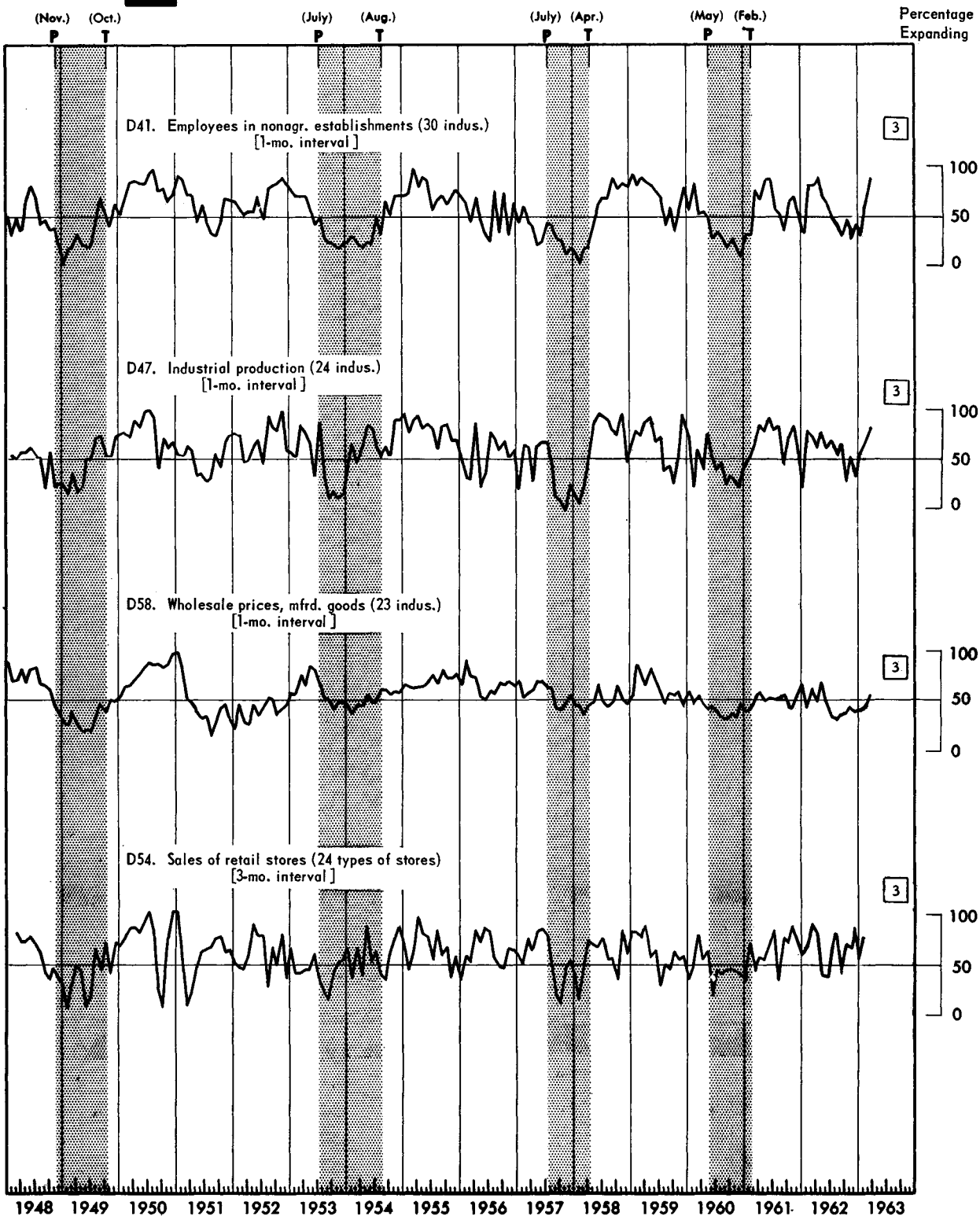
A NBER Leading Indicators



See "How to Read Charts 1, 2, and 3," page 5.

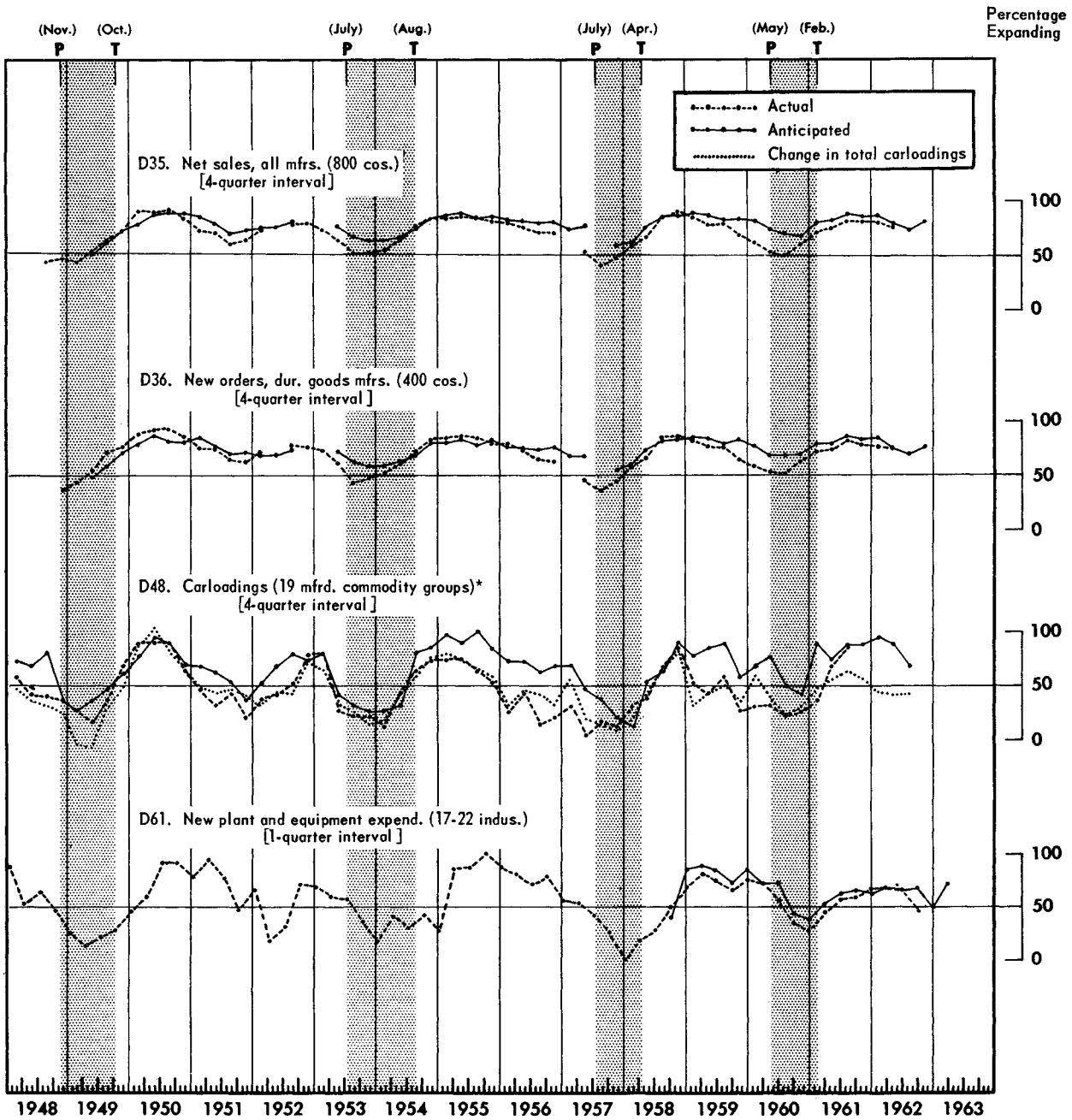
CHART 2 DIFFUSION INDEXES: 1948 TO PRESENT—Con.

B NBER Roughly Coincident Indicators



See "How to Read Charts 1, 2, and 3," page 5.

CHART 3 DIFFUSION INDEXES, ACTUAL AND ANTICIPATED: 1948 TO PRESENT



Data are centered within intervals. Latest data are as follows:

Series number and date of survey	Latest interval shown	
	Actual	Anticipated
D35, D36 (January 1963)	4th Q 1961 - 4th Q 1962	2nd Q 1962 - 2nd Q 1963
D48 (December 1962)	1st Q 1961 - 1st Q 1962	1st Q 1962 - 1st Q 1963
D61 (February 1963)	3rd Q 1962 - 4th Q 1962	1st Q 1963 - 2nd Q 1963

*Increase of 500,000 carloadings plotted at 100; no change at 50; decrease of 500,000 carloadings at 0.

Table 4.–DIFFUSION INDEXES (PERCENT RISING) FOR 12 MAJOR ECONOMIC ACTIVITIES: JANUARY 1960 TO PRESENT

Numbers are centered within intervals: 1-month figures are placed on latest month; 3-month figures are centered on the middle month; 4-quarter figures are centered in the middle quarter; 1-quarter figures are placed in the 1st month of the 2d quarter. Seasonally adjusted components are used except in indexes D11a, D19, D23, and D33, which require no adjustment, and D34 and D58, which are adjusted only for the index. Table 6 identifies the components for most of the indexes shown. "r" indicates revised; "p", preliminary.

Year and month	NBER Leading indexes						
	D1. Average workweek, manufacturing (21 industries)		D6. Value of manufacturers' new orders, durable goods industries (21 industries)		D11. Newly approved capital appropriations		D33. Profits, Chicago PAA (200 companies)
					a. 602 companies	b. 15 industries	
	1-month interval	3-month interval	1-month interval	3-month interval	4-quarter interval	1-quarter interval	1-month interval
1960							
January	21.4	31.0	28.6	57.1		56.7	46
February	19.0	7.1	61.9	28.6	44		36
March	35.7	21.4	14.3	47.6			40
April	38.1	66.7	57.1	42.9		33.3	44
May	78.6	54.8	54.8	50.0	40		42
June	19.0	69.0	28.6	28.6			44
July	40.5	16.7	38.1	52.4		23.3	39
August	26.2	14.3	71.4	38.1	40		34
September	19.0	23.8	33.3	52.4			34
October	78.6	9.5	28.6	26.2		66.7	34
November	16.7	2.4	61.9	35.7	48		28
December	7.1	14.3	28.6	42.9			30
1961							
January	85.7	54.8	52.4	33.3		46.7	27
February	78.6	95.2	47.6	90.5	54		31
March	69.0	90.5	78.6	76.2			37
April	83.3	81.0	52.4	81.0		53.3	46
May	50.0	92.9	59.5	61.9	58		50
June	90.5	69.0	57.1	66.7			48
July	40.5	78.6	59.5	76.2		70.0	42
August	42.9	45.2	73.8	61.9	64		51
September	38.1	78.6	57.1	61.9			50
October	69.0	81.0	57.1	61.9		56.7	47
November	78.6	81.0	57.1	42.9	52		50
December	38.1	21.4	28.6	47.6			44
1962							
January	11.9	19.0	71.4	42.9		66.7	48
February	78.6	61.9	57.1	61.9	54		49
March	76.2	95.2	45.2	42.9			50
April	92.9	85.7	50.0	61.9		26.7	52
May	26.2	76.2	42.9	38.1	52		52
June	38.1	23.8	38.1	52.4			48
July	28.6	19.0	81.0	52.4		80.0	40
August	33.3	35.7	33.3	42.9	(NA)		46
September	71.4	33.3	33.3	52.4			45
October	7.1	42.9	71.4	61.9		(NA)	42
November	71.4	26.2	54.8	52.4			44
December	57.1	r52.4	38.1	r47.6			43
1963							
January	r21.4	52.4	r57.1	52.4			46
February	r81.0	p38.1	r52.4	p57.1			46
March	p45.2		p47.6				45
April							
May							
June							

Table 4.--DIFFUSION INDEXES (PERCENT RISING) FOR 12 MAJOR ECONOMIC ACTIVITIES: JANUARY 1960 TO PRESENT--Continued

Numbers are centered within intervals: 1-month figures are placed on latest month; 3-month figures are centered on the middle month; 4-quarter figures are centered in the middle quarter; 1-quarter figures are placed in the 1st month of the 2d quarter. Seasonally adjusted components are used except in indexes D11a, D19, D23, and D33, which require no adjustment, and D34 and D58, which are adjusted only for the index. Table 6 identifies the components for most of the indexes shown. "r" indicates revised; "p", preliminary.

Year and month	NBER Leading indexes--Continued						
	D34. Profits, mfg., FNCB (around 700 corporations)	D19. Index of stock prices, 500 common stocks (80 industries)[1]		D23. Index of industrial materials prices (13 industrial materials)		D5. Initial claims for unemployment insurance, State programs, week ended nearest the 22nd (47 areas)	
	1-quarter interval	1-month interval	3-month interval	1-month interval	3-month interval	1-month interval	3-month interval
1960						Revised[2]	Revised[2]
January	52	28.5	27.1	69.2	53.8	34.0	83.3
February		11.2	11.8	42.3	53.8	54.8	26.2
March		33.5	27.6	46.2	46.2	10.6	40.5
April	40	52.4	41.2	53.8	46.2	47.9	14.9
May		36.5	52.4	50.0	50.0	38.3	29.8
June		75.9	50.6	57.7	46.2	37.2	38.3
July	45	32.9	63.5	46.2	38.5	55.3	19.1
August		76.5	38.8	46.2	57.7	17.0	34.0
September		15.3	36.5	42.3	34.6	68.1	21.3
October	47	23.5	42.4	23.1	42.3	42.6	45.7
November		89.4	76.5	46.2	15.4	36.2	36.2
December		80.7	93.8	26.9	30.8	53.2	46.8
1961							
January	47	87.0	96.3	38.5	46.2	59.6	46.8
February		96.3	96.3	69.2	76.9	31.9	68.1
March		86.0	95.1	80.8	73.1	80.9	61.7
April	60	72.6	93.9	65.4	80.8	40.4	66.0
May		81.1	70.7	53.8	57.7	48.9	53.2
June		40.2	57.3	46.2	50.0	58.5	61.7
July	58	42.1	57.9	50.0	53.8	51.1	68.1
August		81.1	54.9	76.9	69.2	61.7	61.7
September		39.6	55.5	53.8	69.2	46.8	80.9
October	56	45.7	62.2	38.5	42.3	78.7	87.2
November		87.8	72.6	30.8	46.2	74.5	72.3
December		56.1	52.4	65.4	57.7	23.4	40.4
1962							
January	54	26.2	39.6	73.1	61.5	57.4	57.4
February		74.4	37.8	34.6	53.8	83.0	85.1
March		48.2	32.9	46.2	42.3	46.8	67.0
April	47	9.1	0.0	38.5	50.0	46.8	34.0
May		1.2	1.2	53.8	42.3	40.4	14.9
June		1.2	1.2	23.1	42.3	14.9	40.4
July	48	67.7	8.5	30.8	23.1	68.1	44.7
August		78.0	67.1	42.3	23.1	57.4	70.2
September		34.8	31.1	50.0	42.3	44.7	55.3
October	56	6.7	72.6	57.7	65.4	46.8	51.1
November		98.8	90.2	69.2	79.2	72.3	46.8
December		84.8	98.8	37.5	62.5	27.7	27.7
1963							
January		97.6	97.6	58.3	50.0	36.2	55.3
February		79.3	93.8	66.7	58.3	87.2	66.0
March		43.8		46.2	[3]58.3	47.9	
April				[3]57.7			
May							
June							

[1]The diffusion index is based on 86 components through January 1960; on 85 components, February 1960 to November 1960; on 82 components, December 1960 to February 1963; and on 80 components thereafter. 19 components and 5 composites, representing an additional 22 components, are shown in the direction-of-change table (table 6C).

[2]See "New Features and Changes for This Issue," page ii.

[3]April 18, 1963.

Table 4.--DIFFUSION INDEXES (PERCENT RISING) FOR 12 MAJOR ECONOMIC ACTIVITIES: JANUARY 1960 TO PRESENT--Continued

Numbers are centered within intervals: 1-month figures are placed on latest month; 3-month figures are centered on the middle month; 4-quarter figures are centered in the middle quarter; 1-quarter figures are placed in the 1st month of the 2d quarter. Seasonally adjusted components are used except in indexes D11a, D19, D23, and D33, which require no adjustment, and D34 and D58, which are adjusted only for the index. Table 6 identifies the components for most of the indexes shown. "r" indicates revised; "p", preliminary.

Year and month	NBER Roughly Coincident indexes						
	D41. Number of employees in nonagricultural establishments (30 industries)		D47. Index of industrial production (24 industries)		D54. Sales of retail stores (24 types of stores)		D58. Index of wholesale prices (23 mfg. indus.)
	1-month interval	3-month interval	1-month interval	3-month interval	1-month interval	3-month interval	1-month interval
1960							
January	56.7	80.0	70.8	75.0	68.8	37.5	60.3
February	83.3	81.7	20.8	43.8	50.0	47.9	45.6
March	53.3	66.7	58.3	41.7	45.8	79.2	56.8
April	55.0	58.3	39.6	68.8	79.2	54.2	46.7
May	50.0	40.0	75.0	66.7	14.6	62.5	40.4
June	30.0	38.3	54.2	66.7	60.4	20.8	45.4
July	35.0	25.0	39.6	41.7	50.0	45.8	39.6
August	30.0	25.0	45.8	20.8	41.7	41.7	32.5
September	21.7	30.0	25.0	20.8	50.0	45.8	32.0
October	30.0	23.3	33.3	16.7	62.5	45.8	36.9
November	20.0	15.0	27.1	12.5	37.5	43.8	32.5
December	11.7	16.7	20.8	20.8	31.2	41.7	46.7
1961							
January	33.3	11.7	45.8	37.5	58.3	35.4	38.6
February	33.3	41.7	52.1	62.5	43.8	72.9	41.3
March	75.0	60.0	66.7	81.3	79.2	43.8	54.6
April	66.7	83.3	83.3	83.3	27.1	58.3	59.7
May	85.0	90.0	77.1	87.5	43.8	54.2	49.1
June	86.7	83.3	91.7	83.3	79.2	70.8	51.9
July	58.3	83.3	79.2	100.0	41.7	83.3	50.4
August	53.3	46.7	83.3	79.2	68.8	35.4	52.1
September	36.7	50.0	45.8	79.2	33.3	75.0	55.9
October	65.0	63.3	72.9	75.0	79.2	70.8	41.2
November	70.0	68.3	83.3	87.5	66.7	89.6	41.2
December	53.3	53.3	56.3	45.8	45.8	70.8	53.3
1962							
January	33.3	60.0	20.8	41.7	62.5	60.4	66.8
February	81.7	75.0	79.2	66.7	60.4	70.8	41.3
March	81.7	91.7	72.9	87.5	62.5	91.7	63.3
April	90.0	88.3	62.5	79.2	60.4	81.2	48.8
May	70.0	80.0	75.0	66.7	39.6	39.6	68.6
June	63.3	68.3	60.4	79.2	20.8	37.5	47.6
July	48.3	55.0	68.8	62.5	83.3	62.5	33.0
August	40.0	25.0	54.2	72.9	56.2	81.2	28.2
September	30.0	25.0	64.6	37.5	50.0	41.7	38.5
October	48.3	16.7	27.1	47.9	29.2	70.8	36.9
November	28.3	26.7	54.2	r39.6	85.4	68.8	43.4
December	41.7	r28.3	33.3	r50.0	52.1	r87.5	38.1
1963							
January	r30.0	r46.7	r58.3	r50.0	r50.0	r58.3	38.6
February	r65.0	p63.3	r68.8	p75.0	r66.7	p79.2	r39.1
March	p90.0		p81.2		p68.8		p54.6
April							
May							
June							

Table 5.–DIFFUSION INDEXES, ACTUAL AND ANTICIPATED, FOR 4 MANUFACTURING ACTIVITIES: JANUARY 1960 TO PRESENT

Numbers are centered within intervals: 4-quarter figures are centered in the middle quarter; 1-quarter figures are placed in the 1st month of the 2d quarter. "r" indicates revised; "p", preliminary.

Year and month	D35. Net sales, manufactures (800 companies) 4-quarter interval		D36. New orders, durable manufactures (400 companies) 4-quarter interval		D48. Freight carloadings (19 manufactured commodity groups) 4-quarter interval			D61. New plant and equipment expenditures (16 industries) 1-quarter interval	
	Actual	Anticipated	Actual	Anticipated	Actual	Anticipated	Change in total (000)	Actual	Anticipated
1960									
January								75.0	84.4
February	61	82	58	76	31.6	68.4	+96		
March								71.9	71.9
April									
May	53	74	51	68	31.6	78.9	-103		
June								56.2	71.9
July									
August	50	70	50	68	21.1	50.0	-279		
September								34.4	43.8
October									
November	60	68	62	68	26.3	42.1	-212		
December									
1961									
January								28.1	37.5
February	72	82	72	78	36.8	89.5	-28		
March								46.9	53.1
April									
May	74	83	73	78	68.4	73.7	+79		
June								56.2	62.5
July									
August	82	88	82	86	87.5	89.5	+125		
September								59.4	65.6
October									
November	81	86	78	82	(NA)	89.5	+62		
December									
1962									
January								65.6	62.5
February	80	88	76	84		94.7	-67		
March								68.8	68.8
April									
May	76	80	74	74		89.5	-96		
June								65.6	65.6
July									
August	(NA)	74	(NA)	70		68.4	r-66		
September								46.9	68.8
October									
November		82		76					
December									
1963									
January								(NA)	50.0
February									
March									
April									71.9
May									
June									

Table 6.--DIRECTION OF CHANGE IN SERIES COMPONENTS OVER SPECIFIED TIME SPANS AND PERCENT OF SERIES RISING: JULY 1960 TO PRESENT

A.--(D1) Average Workweek of Production Workers, Manufacturing

21 industry components	3-month spans																																	
	1960						1961												1962												1963					
	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun
Percent rising	69	17	14	24	10	2	14	55	95	90	81	93	69	79	45	79	81	81	21	19	62	95	86	76	24	19	36	33	43	26	52	52	38			
All manufacturing industries	+	-	-	-	-	-	-	o	+	+	+	+	+	+	-	+	+	+	-	-	+	+	+	o	-	-	o	-	+	-	+	-	o			
DURABLE GOODS INDUSTRIES																																		
Ordnance and accessories	+	o	+	-	-	-	-	-	+	+	o	o	-	+	+	+	+	+	-	-	+	+	o	o	-	+	-	+	o	+	+	+	-	
Lumber and wood products	-	-	-	-	-	-	+	+	+	-	+	+	+	+	-	+	o	-	-	+	-	+	+	+	+	+	+	-	-	-	+	+	-	
Furniture and fixtures	-	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	-	-	+	+	+	+	-	-	-	-	+	-	o	o	-	
Stone, clay, and glass products	+	o	-	-	-	-	-	-	+	+	+	+	+	+	+	-	-	-	-	-	+	+	+	+	+	o	+	-	-	-	-	-	+	
Primary metal products	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	o	+	+	+	+	+	+	-	-	-	-	+	+	+	+	+	+	+	
Fabricated metal products	+	o	-	-	-	-	-	-	+	+	+	+	+	+	-	o	+	+	-	-	+	+	+	+	-	-	-	o	+	-	+	-	+	
Machinery, except electrical	+	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	-	+	-	+	+	+	-	o	-	-	-	-	+	o	o	
Electrical machinery	+	o	-	+	-	-	-	+	+	+	o	+	-	+	-	+	+	+	-	-	+	+	+	o	-	-	-	-	o	-	-	-	+	
Transportation equipment	+	-	-	+	+	-	-	-	+	+	+	+	o	-	+	+	+	+	-	-	-	+	+	+	o	-	+	+	+	-	-	-	-	
Instruments and related products	+	-	-	-	-	-	-	+	+	+	+	+	o	+	+	+	+	+	-	-	-	+	+	+	-	-	-	-	-	+	-	+	-	
Miscellaneous manufacturing industries	+	-	-	-	-	-	-	+	+	+	-	+	+	+	o	+	+	+	-	-	+	+	+	-	-	-	+	-	-	-	o	+	o	
NONDURABLE GOODS INDUSTRIES																																		
Food and kindred products	+	-	+	+	-	-	-	+	+	+	+	+	+	-	-	+	-	-	-	-	+	+	+	+	+	-	o	-	+	-	o	-	+	
Tobacco manufactures	-	-	o	+	+	-	-	+	+	+	o	+	-	+	+	+	-	-	-	-	+	+	-	-	-	-	+	+	+	-	-	-	-	
Textile mill products	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	-	-	+	+	+	+	-	-	-	-	-	-	o	+	o	
Apparel and allied products	+	-	-	-	-	-	-	o	+	+	+	-	o	+	-	o	+	+	-	-	+	+	+	+	-	-	-	-	o	o	o	o	+	
Paper and allied products	o	-	-	-	-	-	-	+	+	+	+	+	+	+	-	o	+	+	-	-	-	+	o	+	o	-	-	-	o	+	+	+	-	
Printing and publishing	+	-	-	-	-	-	-	-	+	+	-	+	-	+	-	-	o	+	o	+	+	+	+	-	-	-	-	-	-	o	+	+	-	
Chemicals and allied products	-	-	-	-	-	-	-	o	+	+	o	+	+	+	-	+	+	+	-	-	+	+	+	+	-	-	-	o	-	-	-	o	o	
Petroleum and coal products	+	o	o	+	-	o	+	-	-	-	+	+	+	-	-	+	+	+	+	-	-	-	+	+	+	+	+	+	-	-	o	+	-	
Rubber products	+	-	-	-	-	-	-	o	+	+	+	+	-	-	+	+	+	+	+	-	-	+	+	+	-	-	-	+	+	o	+	+	-	
Leather and leather products	+	+	-	-	-	-	+	+	+	+	+	+	o	-	-	o	+	+	+	-	-	+	+	+	-	-	-	-	-	-	-	-	-	

+ = rising; o = unchanged; - = falling. Series components are seasonally adjusted by issuing agency before the direction of change is determined.

Table 6.--DIRECTION OF CHANGE IN SERIES COMPONENTS OVER SPECIFIED TIME SPANS AND PERCENT OF SERIES RISING: JULY 1960 TO PRESENT--Continued

B.--(D6) Value of Manufacturers' New Orders, Durable Goods Industries

21 industry components	3-month spans																																							
	1960						1961												1962												1963											
	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun
Percent rising	29	52	38	52	26	36	43	33	90	76	81	62	67	76	62	62	62	43	48	43	62	43	62	38	52	52	43	52	62	52	48	52	**57**			
All durable goods industries[1]	-	-	+	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	-	-	-	-	+	-	+	+	+	+	+	+	+			
Iron and steel	+	+	+	-	-	-	-	-	+	+	+	+	+	+	-	-	+	+	-	-	-	-	-	+	+	+	+	-	+	-	+	+				
Primary nonferrous metals	-	+	-	+	-	-	-	-	+	+	+	+	-	+	-	-	-	+	+	+	-	-	-	-	-	-	+	-	-	-	+	+				
Other primary metals	-	-	-	+	-	-	-	-	+	+	+	+	+	+	+	+	+	-	+	-	+	+	+	-	-	-	+	+	+	-	+	-				
Electrical generator apparatus*	+	-	+	-	+	-	+	-	+	+	-	-	-	+	+	+	+	-	-	-	+	-	+	+	-	-	+	+	+	+	-	-				
Radio, television, and equipment	-	+	+	+	-	+	-	-	-	+	+	-	+	+	+	+	+	-	+	-	-	-	-	-	-	+	-	+	-	+	+	+				
Other electrical equipment*	-	+	-	+	-	o	+	+	-	+	+	+	-	-	+	+	+	-	+	+	+	+	-	+	-	-	+	-	-	+	+	+	-			
Motor vehicles	-	-	+	+	-	-	-	-	+	+	+	+	+	-	-	+	+	+	-	-	+	+	+	-	+	-	+	-	+	-	-	+	+			
Motor vehicle parts	-	-	-	-	-	-	-	-	+	+	+	+	-	-	-	+	+	+	+	+	+	+	+	-	-	-	+	+	+	+	-	+	-			
Aircraft	+	+	+	-	-	-	+	+	+	+	-	-	-	+	+	-	-	-	-	+	+	+	+	-	-	+	+	-	-	-	+	+	+			
Other transportation equipment*	-	-	-	+	-	+	-	+	+	+	+	-	+	+	+	-	-	-	+	+	+	-	-	+	+	+	-	-	+	-	-	-	+			
Stone, clay, and glass products	-	+	+	+	-	-	-	-	+	+	+	+	+	+	+	+	+	+	-	-	-	+	+	+	+	+	-	+	+	+	+	-	-			
Metalworking machinery*	-	+	-	+	+	+	+	-	+	+	+	+	+	+	-	+	+	-	-	-	+	-	+	+	+	+	+	-	+	+	+	+	-			
Special industrial machinery*	-	-	-	-	o	-	-	-	+	+	+	+	-	+	-	+	-	-	-	+	+	-	-	-	-	+	-	-	-	+	-	-	-			
General industrial machinery*	-	-	-	-	+	-	-	-	+	+	-	-	+	+	+	+	+	+	+	-	-	-	+	+	+	+	-	-	-	-	+	+	+			
Engines and turbines*	-	-	-	+	-	+	-	+	+	-	+	-	+	+	+	o	-	-	+	-	-	-	-	-	+	+	-	+	-	+	+	+	-			
Agricultural implements	+	+	+	-	+	+	+	-	+	-	+	-	-	-	+	+	+	-	-	+	+	+	+	+	+	-	-	+	+	-	-	-	+			
Construction machinery*	+	+	-	-	-	-	+	+	+	-	-	-	+	+	+	o	+	-	-	-	-	+	+	+	-	-	-	-	+	+	+	+	-			
Office machines*	+	-	-	+	-	+	+	+	+	-	+	+	+	+	-	-	-	+	-	-	+	-	+	-	+	+	-	-	+	+	-	-	-			
Household appliances	-	+	+	+	-	-	-	-	+	-	+	+	+	+	+	-	-	-	-	+	+	+	+	-	-	-	+	+	+	-	-	+	+			
Other machinery*	-	-	-	-	+	+	+	+	+	+	+	+	+	-	-	+	+	+	-	+	-	-	-	-	+	-	-	+	+	-	-	-	+			
Fabricated metal products*	-	+	-	-	-	-	+	-	+	+	+	+	+	+	-	-	+	+	+	-	+	-	+	-	+	+	-	-	+	-	+	-	+			

+ = rising; o = unchanged; - = falling. Series components are seasonally adjusted by issuing agency before the direction of change is determined.
*Denotes machinery and equipment industries that comprise series 24.
[1]Includes durable goods industries not available separately.

Table 6.--DIRECTION OF CHANGE IN SERIES COMPONENTS OVER SPECIFIED TIME SPANS AND PERCENT OF SERIES RISING: JULY 1960 TO PRESENT--Continued

C.--(D19) Index of Stock Prices, 500 Common Stocks

24 industry components[1]	3-month spans																																			
	1960						1961												1962												1963					
	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun
Percent rising[2]	51	64	39	36	42	76	94	96	96	95	94	71	57	58	55	56	62	73	52	40	38	33	0	1	1	8	67	31	73	90	99	98	94			
500 stock prices	+	+	-	-	-	+	+	+	+	+	+	+	-	+	+	+	+	+	+	-	-	-	-	-	-	-	+	-	+	+	+	+	+			
Mining and smelting	+	+	+	-	+	+	+	+	+	+	+	+	+	+	-	-	-	+	+	-	-	-	-	-	-	-	-	-	+	+	+	+	NA			
Coal, bituminous	-	+	-	-	-	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-	+	+	+	+	+	+	+			
Food composite	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-	-	-	+	-	-	+	+	+	+			
Tobacco (cigarette manufacturing)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+			
Textile weavers	-	+	-	-	-	-	+	+	+	+	+	-	-	+	+	+	+	+	+	+	+	-	-	-	-	-	+	-	+	+	+	+	+			
Paper	-	-	-	-	-	+	+	+	+	+	+	-	-	+	+	+	+	+	-	-	-	o	-	-	-	-	-	-	+	+	+	+	+			
Publishing	+	+	-	-	+	+	+	+	+	+	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-	+	+	+	+	+	+	-			
Chemicals	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+	+	+			
Drugs	+	+	-	-	-	+	+	+	+	+	+	+	-	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+			
Oil composite	-	+	-	+	+	+	+	+	+	+	+	+	-	-	-	-	+	+	+	+	+	+	-	-	-	-	+	+	+	+	+	+	+			
Building materials composite	-	-	-	-	-	+	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+			
Steel	o	+	-	-	-	-	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+			
Metal fabricating	-	-	-	-	-	-	+	+	+	+	+	+	+	+	-	-	-	-	-	o	+	+	-	-	-	-	-	-	+	+	+	+	+			
Machinery composite	-	-	-	-	+	+	+	+	+	+	+	+	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-	+	+	+	+	+			
Office and business equipment	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-	-	-	+	-	-	+	+	+	+			
Electric household appliances	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+	+	-	-	+	-	-	-	-	-	+	+	+	+	+	+	+			
Electronics	-	-	-	-	-	+	+	+	+	+	+	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	+	+	+	+	+	+	+			
Automobiles	-	o	-	-	-	-	-	+	+	+	+	+	-	+	+	+	+	+	+	+	-	-	-	-	-	+	+	+	+	+	+	+	+			
Radio and television broadcasters	-	-	-	-	-	-	o	+	+	+	+	+	-	-	-	-	-	+	+	+	+	+	-	-	-	-	+	+	+	+	+	+	+			
Telephone companies	-	+	+	+	+	+	+	+	+	+	+	+	-	-	+	+	+	+	+	+	-	-	-	-	-	-	+	-	+	+	+	+	+			
Electric companies	+	+	+	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	-	+	-	-	-	-	+	+	+	+	+	+	+			
Natural gas distributors	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	-	+	-	-	-	-	+	-	+	+	+	+	+			
Retail stores composite	+	+	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-	-	+	-	+	+	+	+	+			
Life insurance	+	+	+	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	+	+	-	-	-	-	+	+	+	+	+	+	+			

+ = rising; o = unchanged; - = falling. Series components are not seasonally adjusted. NA Not available.

[1]The 24 components shown here include 19 of the more important industries and 5 composites representing an additional 22 of the industries used in computing the diffusion index.

[2]Based on 85 industries, July 1960 to November 1960, on 82 industries December to February 1963; and on 80 industries thereafter.

Table 6.--DIRECTION OF CHANGE IN SERIES COMPONENTS OVER SPECIFIED TIME SPANS AND PERCENT OF SERIES RISING: JULY 1960 TO PRESENT--Continued

D.--(D23) Index of Industrial Materials Prices

13 industrial materials components	3-month spans																																			
	1960						1961												1962												1963					
	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr[1]	Feb-May	Mar-Jun
Percent rising	46	38	58	35	42	15	31	46	77	73	81	58	50	54	69	69	42	46	58	62	54	42	50	42	42	23	23	42	65	79	62	50	58	58		
All industrial materials	-	-	-	-	-	-	-	+	+	+	+	-	-	-	+	+	-	-	+	+	-	-	-	-	-	-	-	+	+	+	+	-	-	-		
Copper scrap (lb.)	+	+	+	-	-	-	-	-	+	+	+	+	+	-	-	-	-	-	+	+	+	+	+	-	-	-	-	-	+	+	+	+	+	+		
Lead scrap (lb.)	o	o	-	-	-	-	-	-	+	+	+	o	o	o	o	o	-	-	-	-	-	-	+	+	o	-	-	+	+	+	+	+	+	-		
Steel scrap (ton)	-	+	+	-	-	-	+	+	+	+	+	+	-	+	+	+	-	-	+	+	-	-	-	-	-	+	+	-	-	+	+	+	-	+		
Tin (lb.)	+	+	+	-	+	-	-	-	+	+	+	+	+	+	+	+	+	-	-	-	+	+	-	-	-	-	-	-	+	+	+	-	-	+		
Zinc (lb.)	o	o	o	o	o	-	-	-	-	-	o	o	o	o	o	o	o	+	+	+	o	-	-	-	o	o	o	o	o	o	o	o	o	o		
Burlap (yd.)	-	-	+	+	+	+	+	+	+	-	-	-	-	-	+	+	+	+	+	+	-	-	-	+	+	-	-	-	+	NA	NA	-	NA	NA		
Cotton (lb.), 15 market average	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	o	+	+	+	+	+	+	-	-	-	-	+	+	+	+	+		
Print cloth (yd.), average	+	-	-	-	-	-	-	-	-	o	+	o	o	+	+	+	o	o	o	o	-	-	o	+	+	-	-	-	-	+	+	+	+	+		
Wool tops (lb.)	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	+	-	+	+	+	+	+	+	+	o	+	+	+	+	+	-		
Hides (lb.)	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-		
Rosin (100 lb.)	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	+	o	o	o	o	o	o	o	o	o	o	o	-	-	-	-	-	o	o		
Rubber (lb.)	+	-	-	-	-	-	-	-	+	+	+	-	-	-	+	-	-	-	-	+	+	+	+	-	-	-	-	+	+	+	-	-	-	-		
Tallow (lb.)	-	-	+	+	+	-	+	+	+	+	+	-	-	-	-	-	-	+	+	+	+	-	o	-	-	-	-	+	+	+	-	-	+	+		

+ = rising; o = unchanged; - = falling. Series components are not seasonally adjusted. NA Not available.

[1]Data for April 18, 1963.

Table 6.--DIRECTION OF CHANGE IN SERIES COMPONENTS OVER SPECIFIED TIME SPANS AND PERCENT OF SERIES RISING: JULY 1960 TO PRESENT--Continued

E.--(D5) Initial Claims for Unemployment Insurance, State Programs

Labor market size rank	26 area components	3-month spans																																		
		1960						1961												1962[1]												1963[1]					
		Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun
	Percent rising	38	19	34	21	46	36	47	47	68	62	66	53	62	68	62	81	87	72	40	57	85	67	34	15	40	45	70	55	51	47	28	55	66			
	47 labor market areas[1]	+	-	-	-	+	-	-	-	+	+	+	+	-	+	-	+	+	+	-	+	+	+	-	-	-	+	+	-	+	-	-	+	+			
	NORTHEAST REGION																																				
7	Boston	-	-	-	-	-	-	+	-	+	-	-	-	-	-	+	+	+	+	-	+	+	+	-	-	-	-	-	+	+	+	+	+	+			
16	Buffalo*	-	-	+	-	+	-	-	-	+	+	+	+	-	-	-	+	-	+	+	+	+	+	-	-	-	+	+	+	-	-	-	+	+			
11	Newark*	+	+	+	-	-	-	+	+	+	+	+	+	-	-	-	+	+	+	-	-	+	+	-	-	-	-	+	-	+	-	-	+	+			
1	New York	-	-	-	-	-	+	-	-	+	+	+	+	-	+	-	+	+	+	-	+	+	+	-	-	+	-	-	-	-	-	-	+	+			
21	Paterson	+	+	+	-	-	-	+	+	-	-	-	+	+	-	-	+	+	-	-	-	+	+	-	-	-	-	+	+	+	-	-	+	+			
4	Philadelphia*	-	-	-	-	+	-	-	-	+	+	+	-	+	+	+	-	+	+	+	-	+	-	-	-	+	-	+	+	-	-	-	+	+			
8	Pittsburgh**	-	+	-	+	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	-	+	+	-	-	-	+	+	+	+	+	-	+	+			
23	Providence**	-	-	-	-	-	+	+	-	+	+	+	-	-	-	+	+	+	+	-	-	+	+	+	-	-	-	-	+	-	+	-	+	-			
	NORTH CENTRAL REGION																																				
3	Chicago	-	-	-	-	o	-	-	+	+	+	+	+	+	+	-	+	+	+	-	-	+	+	-	-	-	+	+	+	+	-	-	-	+			
18	Cincinnati	-	-	+	-	-	-	+	-	-	-	-	+	-	+	+	+	+	+	-	+	+	+	+	-	-	+	+	+	-	+	+	+	+			
10	Cleveland	-	-	-	-	+	+	-	+	+	-	+	+	+	+	-	+	-	+	+	+	+	+	-	-	-	+	+	+	-	+	-	+	+			
26	Columbus	-	+	-	+	-	+	+	+	+	-	-	-	+	+	+	+	+	-	-	+	-	-	-	+	+	+	+	-	+	-	-	-	+			
5	Detroit**	+	-	+	-	+	-	-	-	-	+	+	+	-	+	-	+	-	+	+	-	-	+	+	+	+	+	-	-	-	-	+	-	+			
25	Indianapolis	+	-	-	-	+	-	-	-	+	+	+	-	-	+	-	+	+	+	+	+	+	+	-	-	-	+	+	+	-	+	+	-	-			
22	Kansas City	-	-	-	+	+	-	-	-	-	+	+	+	-	-	-	+	+	+	-	+	+	+	+	-	+	+	+	-	-	-	-	-	+			
15	Milwaukee	+	-	-	-	+	-	-	+	+	+	-	-	+	+	+	+	+	+	-	-	+	+	+	-	-	+	+	-	+	-	-	-	-			
13	Minneapolis	-	-	-	+	+	-	-	-	+	+	-	-	+	+	+	+	+	-	+	-	+	-	+	-	+	-	+	+	+	+	-	-	-			
9	St. Louis	+	-	-	-	-	-	-	-	-	+	+	+	+	-	-	-	+	+	-	+	+	+	+	-	+	-	+	-	+	+	-	+	+			
	SOUTH REGION																																				
20	Atlanta	-	-	+	-	+	-	-	+	-	+	+	+	-	-	-	+	+	+	+	+	+	-	-	-	+	+	+	-	-	-	-	-	+			
12	Baltimore	-	-	+	-	-	-	+	-	+	-	+	-	+	+	+	+	+	+	-	+	+	+	-	-	+	+	+	-	+	+	+	+	-			
17	Dallas	-	-	-	-	+	+	+	-	-	+	+	+	-	-	+	+	+	-	-	+	+	+	+	+	+	-	-	-	-	+	+	+	-			
14	Houston	-	-	+	-	+	-	-	+	+	-	-	-	+	+	-	+	+	+	+	+	+	+	+	-	-	-	-	-	-	-	-	+	+			
	WEST REGION																																				
2	Los Angeles	-	-	-	-	+	+	-	-	+	+	-	-	-	+	-	+	+	+	+	-	-	+	+	-	-	-	+	+	-	+	-	-	-			
24	Portland	+	-	-	-	-	-	+	-	-	-	-	-	+	+	+	+	+	-	-	+	+	-	-	+	+	+	+	+	+	+	-	-	-			
6	San Francisco	-	-	+	-	-	+	+	-	+	-	+	+	-	+	-	+	+	+	-	-	+	+	-	-	-	+	+	+	+	-	-	-	+			
19	Seattle	-	-	-	+	-	-	-	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	-	-	-	-	+	+	+	-	-	-	-			

- = rising; o = unchanged; + = falling. Because this series usually rises when general business activity falls and falls when business rises, it is inverted to show a comparable activity pattern. The direction of change is shown for the week ending nearest the 22d of the month. Series components are seasonally adjusted by the Bureau of the Census before the direction of change is determined.

*Denotes areas of substantial unemployment (6 percent or more) in March 1963 as designated by BES.

**Denotes areas of substantial (6 percent or more) and persistent unemployment in March 1963 as designated by BES.

[1]See "New Features and Changes For This Issue," page ii.

[2]The percent rising is based on 47 labor market areas. Directions of change are shown separately for only the largest 26.

Table 6.--DIRECTION OF CHANGE IN SERIES COMPONENTS OVER SPECIFIED TIME SPANS AND PERCENT OF SERIES RISING: JULY 1960 TO PRESENT..*Continued*

F.--(D41) Number of Employees in Nonagricultural Establishments

30 industry components	1-month spans																																			
	1960						1961												1962												1963							
	Jun-Jul	Jul-Aug	Aug-Sep	Sep-Oct	Oct-Nov	Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Sep-Oct	Oct-Nov	Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Sep-Oct	Oct-Nov	Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun
Percent rising	35	30	22	30	20	12	33	33	75	67	85	87	58	53	37	65	70	53	33	82	82	90	70	63	48	40	30	48	28	42	30	65	90			
All nonagricultural establishments	o	-	-	-	-	-	-	-	+	+	+	+	+	o	-	+	+	-	-	+	+	+	+	+	+	-	+	+	-	o	-	+	+			
Ordnance and accessories	+	+	o	o	+	o	o	o	+	-	+	o	+	o	+	+	-	-	-	o	o	+	o	-	+	+	-	+	-	-	-	o	o			
Lumber and wood products	-	-	-	-	-	-	+	-	+	+	+	+	-	o	+	-	+	-	-	+	-	+	-	+	-	+	-	-	+	-	+	o	+			
Furniture and fixtures	-	-	-	-	-	-	-	+	+	+	+	+	+	+	-	+	+	+	-	+	+	+	+	o	-	o	-	o	+	o	-	-	+			
Stone, clay, and glass products	-	-	-	-	-	-	-	-	+	+	+	+	+	+	-	+	-	-	-	+	-	+	+	o	o	+	-	+	-	-	-	o	+			
Primary metal products	-	-	-	-	-	-	-	-	+	+	+	+	+	o	+	-	+	+	+	+	+	+	-	-	-	-	-	-	-	+	o	+	+			
Fabricated metal products	-	-	-	-	-	-	-	-	o	+	+	o	-	+	-	-	+	+	-	+	+	+	+	-	-	-	+	-	-	+	-	+	+			
Machinery, except electrical	-	-	-	-	-	-	-	-	-	+	+	-	+	+	-	+	+	+	-	+	+	+	+	+	+	+	-	+	-	-	-	-	+			
Electrical machinery	-	-	-	-	+	-	+	+	+	+	+	+	-	+	-	+	+	+	+	+	+	+	+	+	-	-	-	+	-	+	-	o	+			
Transportation equipment	-	-	+	-	-	-	-	-	+	+	+	+	+	-	-	-	+	+	-	+	+	+	+	+	+	-	+	-	-	+	-	+	+			
Instruments and related products	-	-	-	-	-	-	-	-	o	+	+	+	+	+	-	-	+	-	-	+	+	o	+	+	o	o	-	o	o	o	o	+	+			
Miscellaneous manufacturing industries	-	-	-	-	-	-	-	+	-	+	+	+	-	-	-	+	+	-	-	+	+	+	+	+	+	-	-	+	-	-	-	o	+			
Food and kindred products	+	-	+	+	-	-	-	-	+	-	-	+	-	-	+	+	+	-	-	-	+	+	-	-	+	-	+	-	-	+	-	-	+			
Tobacco manufactures	+	-	+	+	-	-	-	o	+	-	-	o	-	+	+	-	-	o	+	-	o	o	-	o	+	+	+	-	-	-	-	-	+			
Textile mill products	-	-	-	-	-	-	-	-	+	+	+	+	o	-	-	+	+	+	o	-	+	+	+	o	-	-	-	-	-	-	-	o	+			
Apparel and related products	-	-	-	-	-	-	-	+	+	+	-	+	-	+	-	+	o	+	-	+	+	+	-	+	-	-	-	o	-	-	-	+	+			
Paper and allied products	-	-	-	-	-	-	+	-	+	o	+	+	-	o	-	+	+	+	-	+	+	+	o	+	-	o	-	+	-	+	-	+	+			
Printing and publishing	+	o	-	+	+	-	o	+	+	-	+	+	+	-	-	-	+	o	-	+	+	+	+	+	-	-	+	-	-	-	-	-	+			
Chemicals and allied products	o	-	-	-	-	-	-	-	+	+	+	+	+	-	-	+	+	+	-	+	o	+	+	+	+	-	-	-	+	-	+	+	+			
Petroleum and coal products	o	o	-	o	-	-	-	-	o	+	o	o	-	+	-	+	-	-	+	o	o	o	o	-	o	-	-	o	-	o	-	+	-			
Rubber products	-	-	-	-	-	-	-	-	+	+	+	+	+	o	o	-	+	+	o	+	+	o	+	+	-	-	-	-	-	o	+	o	+			
Leather and leather products	-	+	-	o	-	-	+	+	-	+	+	+	-	o	-	+	-	+	-	+	+	+	-	-	-	+	-	+	-	-	-	+	+			
Mining	-	+	-	-	-	-	-	-	+	-	+	-	+	-	+	-	+	-	-	o	+	+	+	-	-	-	-	-	-	-	-	+	+			
Contract construction	+	-	-	-	-	-	+	-	+	-	-	+	-	-	-	+	-	-	-	+	-	+	-	-	+	-	-	o	-	-	-	-	-			
Transportation and public utilities	-	-	-	-	-	-	-	-	-	-	+	+	+	-	o	-	-	-	-	+	+	+	o	-	-	+	-	+	-	+	-	+	+			
Wholesale trade	+	+	-	-	-	-	-	-	+	-	+	+	+	-	o	+	-	-	+	+	+	+	+	+	+	-	+	-	-	-	+	+	+			
Retail trade	+	-	-	+	-	-	+	-	-	+	+	+	+	-	-	o	+	o	+	+	o	+	+	+	+	-	-	-	+	-	+	+	+			
Finance, insurance, real estate	+	+	+	+	+	+	+	+	o	o	+	+	o	+	o	+	+	o	+	+	+	+	+	+	+	+	+	+	+	o	+	+	+			
Service	+	+	o	+	+	+	-	+	o	-	+	+	+	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	o			
Federal government	-	+	o	o	-	-	+	-	+	+	+	+	+	+	+	+	+	-	+	-	+	+	+	+	+	o	-	+	+	+	-	-	+			
State and local government	o	+	+	+	+	+	+	+	+	+	+	+	o	+	+	+	+	-	o	+	+	+	+	+	-	+	+	+	+	+	+	+	+			

+ = rising; o = unchanged; - = falling. Series components are seasonally adjusted by issuing agency before the direction of change is determined.

Table 6.--DIRECTION OF CHANGE IN SERIES COMPONENTS OVER SPECIFIED TIME SPANS AND PERCENT OF SERIES RISING: JULY 1960 TO PRESENT..Continued

G.--(D47) Index of Industrial Production

24 industry components	1-month spans																																	
	1960						1961												1962												1963					
	Jun-Jul	Jul-Aug	Aug-Sep	Sep-Oct	Oct-Nov	Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Sep-Oct	Oct-Nov	Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Sep-Oct	Oct-Nov	Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun
Percent rising[1]	40	46	25	33	27	21	46	52	67	83	77	92	79	83	46	73	83	56	21	79	73	62	75	60	69	54	65	27	54	33	58	69	81			
All industrial production	-	-	-	-	-	-	-	+	+	+	+	+	+	+	-	+	+	+	-	+	+	+	+	+	+	+	+	-	+	-	-	+	+			
DURABLE GOODS																																				
Primary and fabricated metals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
Primary metal products	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	-	-	+	+	+	-	-	-	-	-	+	+	-	+	-	+	+	+			
Fabricated metal products	+	+	-	-	-	-	-	-	+	+	+	+	+	+	-	+	+	-	-	+	+	+	+	+	+	+	-	-	+	-	+	+	+			
Machinery and related products	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
Machinery, except electrical	+	+	-	-	-	-	-	-	-	+	+	+	+	+	-	+	+	+	-	+	+	+	+	+	+	+	-	-	-	-	-	+	+			
Electrical machinery	-	+	-	-	+	-	-	+	+	+	+	+	+	-	-	+	+	+	-	+	+	+	+	+	-	-	+	-	-	+	-	+	+			
Transportation equipment	-	+	+	+	-	-	-	-	+	+	+	+	+	+	-	+	+	+	-	+	o	+	+	-	+	-	-	+	-	+	+	-	-			
Instruments and related products	o	-	-	+	-	-	-	-	-	+	+	+	+	+	+	o	+	+	-	-	+	+	+	+	+	+	-	-	+	+	-	+	-			
Clay, glass, and lumber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	+			
Clay, glass, and stone	-	+	-	-	-	-	-	-	+	+	+	+	+	+	-	-	-	-	-	+	-	+	+	+	+	+	o	-	+	-	+	-	+			
Lumber and products	-	-	-	-	-	+	+	+	+	+	+	+	-	-	-	-	+	+	-	+	-	-	+	+	-	+	+	-	+	+	-	+	NA			
Furniture and miscellaneous	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
Furniture and fixtures	-	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	o	-	+	+	+	+	-	-	+	+	-	+	-	+	-	+			
Miscellaneous	-	-	-	+	-	-	+	+	-	+	+	+	+	+	+	+	+	-	-	-	+	+	-	+	+	-	+	-	-	-	-	-	+			
NONDURABLE GOODS																																				
Textile, apparel, and leather	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	+	+			
Textile mill products	-	-	-	-	-	-	+	+	+	+	+	+	+	+	-	+	+	+	-	+	+	-	+	+	-	+	-	-	-	-	+	-	NA			
Apparel products	+	-	-	-	-	-	-	+	+	+	+	+	+	+	-	+	+	+	-	+	+	+	+	+	+	-	+	+	+	-	+	+	NA			
Leather and products	+	+	-	+	-	-	+	+	+	+	-	+	-	+	+	+	+	+	-	+	+	+	-	+	-	+	+	-	-	-	-	NA	NA			
Paper and printing	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	+	+			
Paper and products	+	-	+	-	+	-	+	+	+	+	+	+	-	+	-	-	+	+	-	+	+	-	+	-	+	-	+	-	+	-	NA	NA	NA			
Printing and publishing	-	+	+	+	o	-	-	-	+	+	o	+	+	+	+	+	+	-	+	+	-	+	+	-	+	+	-	-	+	-	-	+	-			
Chemicals, petroleum, and rubber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	+	+			
Chemicals and products	-	-	o	+	-	-	+	o	+	+	+	+	+	+	-	+	+	o	-	+	+	-	+	+	+	+	+	+	-	-	+	+	NA			
Petroleum products	+	+	+	-	+	+	-	+	-	-	+	-	+	+	-	+	-	-	+	-	+	-	+	+	-	-	+	o	-	+	+	-	NA			
Rubber and plastics products	-	-	-	-	-	-	-	-	-	+	+	+	+	+	-	+	+	+	-	+	-	+	+	+	+	-	-	+	-	+	-	NA	NA			
Foods, beverages, and tobacco	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	+	+			
Food and beverages	-	+	o	+	-	+	+	+	+	-	-	+	+	+	+	+	+	-	-	+	+	-	+	o	+	-	+	-	+	+	-	+	NA			
Tobacco products	-	-	+	-	+	-	-	+	-	+	-	+	-	+	-	+	+	-	-	+	+	-	+	-	+	-	+	-	+	-	+	NA	NA			
MINERALS																																				
Coal	+	-	-	+	-	+	-	-	-	+	+	+	-	+	+	+	+	o	+	-	+	+	-	-	o	+	+	+	+	-	+	+	-			
Crude oil and natural gas	+	+	-	-	+	-	+	+	+	+	-	-	+	+	-	+	+	-	-	-	+	+	-	+	+	-	+	+	-	-	-	+	+			
Metal mining	-	+	-	-	+	+	+	-	-	-	-	+	+	-	+	+	+	+	+	+	-	-	-	-	+	-	-	-	+	+	+	+	NA			
Stone and earth minerals	+	-	-	-	-	-	+	-	+	-	+	+	+	-	+	-	-	-	-	+	+	+	+	-	+	+	+	-	-	-	+	-	NA			

+ = rising; o = unchanged; - = falling. Series components are seasonally adjusted by issuing agency before the direction of change is determined.
NA = Not available.

[1]The direction of change is shown for industry groups where actual data for separate industries are not available; however, estimates for each industry are used to compute the percent rising. The percent rising is based on 24 industry components.

Table 6.--DIRECTION OF CHANGE IN SERIES COMPONENTS OVER SPECIFIED TIME SPANS AND PERCENT OF SERIES RISING: JULY 1960 TO PRESENT--Continued

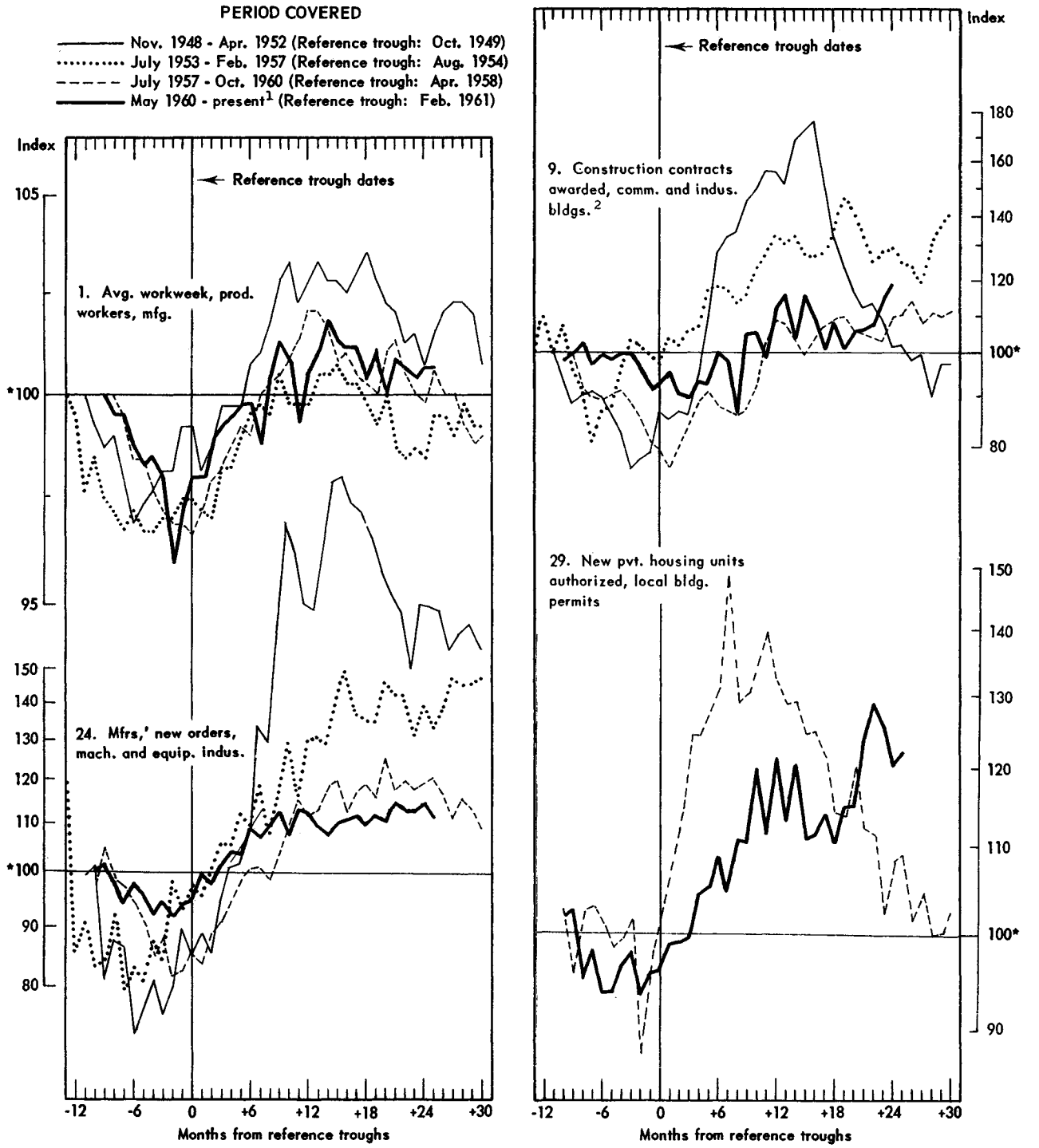
H.--(D54) Sales of Retail Stores

24 retail store components	3-month spans																																			
	1960						1961												1962												1963					
	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun	Apr-Jul	May-Aug	Jun-Sep	Jul-Oct	Aug-Nov	Sep-Dec	Oct-Jan	Nov-Feb	Dec-Mar	Jan-Apr	Feb-May	Mar-Jun
Percent rising	21	46	42	46	46	44	42	35	73	44	58	54	71	83	35	75	71	90	71	60	71	92	81	40	38	62	81	42	71	69	88	58	79			
All retail sales	-	-	-	+	+	-	-	-	+	+	+	+	+	+	-	+	+	+	+	-	+	+	+	-	+	+	+	+	+	+	+	+	+			
Grocery stores	+	-	-	+	+	+	+	-	+	-	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	o			
Other food stores	+	-	-	-	+	-	-	+	+	+	-	-	+	+	-	-	-	-	-	+	+	+	+	+	-	+	-	-	-	-	+	+	+			
Eating places	-	-	-	-	+	+	-	-	+	+	+	-	-	-	+	+	+	+	+	+	+	+	+	+	-	+	-	+	+	+	+	+	+			
Department stores	-	+	o	+	-	+	-	+	o	+	-	+	+	+	+	-	+	+	+	-	+	+	+	-	+	-	+	-	+	+	+	-	+			
Mail-order stores	-	+	+	+	+	+	-	-	+	+	+	-	-	+	-	+	+	+	-	-	-	+	+	+	-	+	+	-	-	-	+	-	+			
Variety stores	-	+	-	-	-	-	+	+	+	-	+	+	+	+	-	+	+	+	+	-	+	+	+	-	-	+	+	-	+	-	+	-	+			
Other general stores	-	+	+	+	-	-	+	+	+	-	-	-	+	+	-	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	-	-	+			
Men's wear stores	-	+	-	+	-	-	+	o	+	-	+	+	+	+	-	+	-	o	-	-	+	+	+	-	-	+	+	-	-	-	+	+	+			
Women's apparel stores	-	+	+	-	-	-	-	-	+	-	-	-	+	+	-	+	+	+	-	-	+	+	+	-	+	+	+	-	+	o	+	-	-			
Family apparel stores	-	+	-	-	+	+	+	-	+	-	+	-	+	+	-	+	+	+	+	+	+	+	+	-	-	-	+	-	-	+	+	+	-			
Shoe stores	-	+	+	-	-	-	+	+	+	o	-	-	+	+	-	+	-	+	+	+	+	+	+	-	-	+	+	+	-	+	+	+	+			
Furniture stores	-	-	+	+	-	-	-	-	-	+	+	+	+	+	+	-	-	+	+	+	-	+	+	-	+	+	+	-	-	-	+	+	+			
Appliance and radio stores	-	-	-	-	-	-	+	+	+	+	-	-	-	+	+	+	-	+	-	o	-	-	-	-	-	o	+	+	+	+	+	-	+			
Building material dealers	-	-	-	-	-	-	-	-	+	-	-	-	+	+	-	+	+	+	-	-	-	+	+	-	+	+	-	-	+	-	-	-	+			
Hardware stores	-	-	-	-	-	o	+	+	+	-	-	-	+	+	-	+	-	+	+	+	-	+	+	-	-	-	+	-	+	+	+	+	+			
Farm equipment dealers	+	-	+	+	+	+	-	-	-	-	-	+	+	+	-	+	+	+	+	+	+	+	-	+	-	-	+	+	+	+	+	o	-			
Motor vehicle dealers	-	-	-	+	+	-	-	-	+	+	+	+	-	-	+	+	+	+	+	-	+	+	+	-	+	-	-	+	+	+	-	+	+			
Tire and battery dealers	-	-	-	-	+	+	-	-	-	-	+	+	+	+	+	+	+	+	+	+	-	-	+	-	-	-	+	+	+	+	+	o	+			
Gasoline stations	-	+	+	+	o	+	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	-	o	-	+	+	+	+	+	+	+	+			
Drug and proprietary stores	+	+	+	+	+	+	-	-	+	+	+	+	+	+	-	-	+	+	+	-	-	+	+	+	-	-	-	-	+	+	+	-	+			
Jewelry stores	-	-	o	-	-	-	+	-	-	-	+	-	+	-	-	+	+	+	+	+	+	+	o	-	-	o	o	-	+	+	+	+	o			
Liquor stores	+	+	-	-	o	-	+	-	+	-	-	+	-	+	-	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	-	+			
Other durable goods stores	-	-	+	+	+	-	-	-	+	+	+	+	+	+	+	+	+	-	-	-	+	+	+	+	+	+	+	-	+	-	+	+	+			
Other nondurable goods stores	-	-	-	-	-	+	-	-	-	-	+	+	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	-			

+ = rising; o = unchanged; - = falling. Series components are seasonally adjusted by the Bureau of the Census before the direction of change is determined.

CHART 4 COMPARISONS OF REFERENCE CYCLE PATTERNS

Percent of reference peak levels measured from the reference peak date preceding the trough of each of 4 recent business cycles to 30 months after the trough of each cycle.



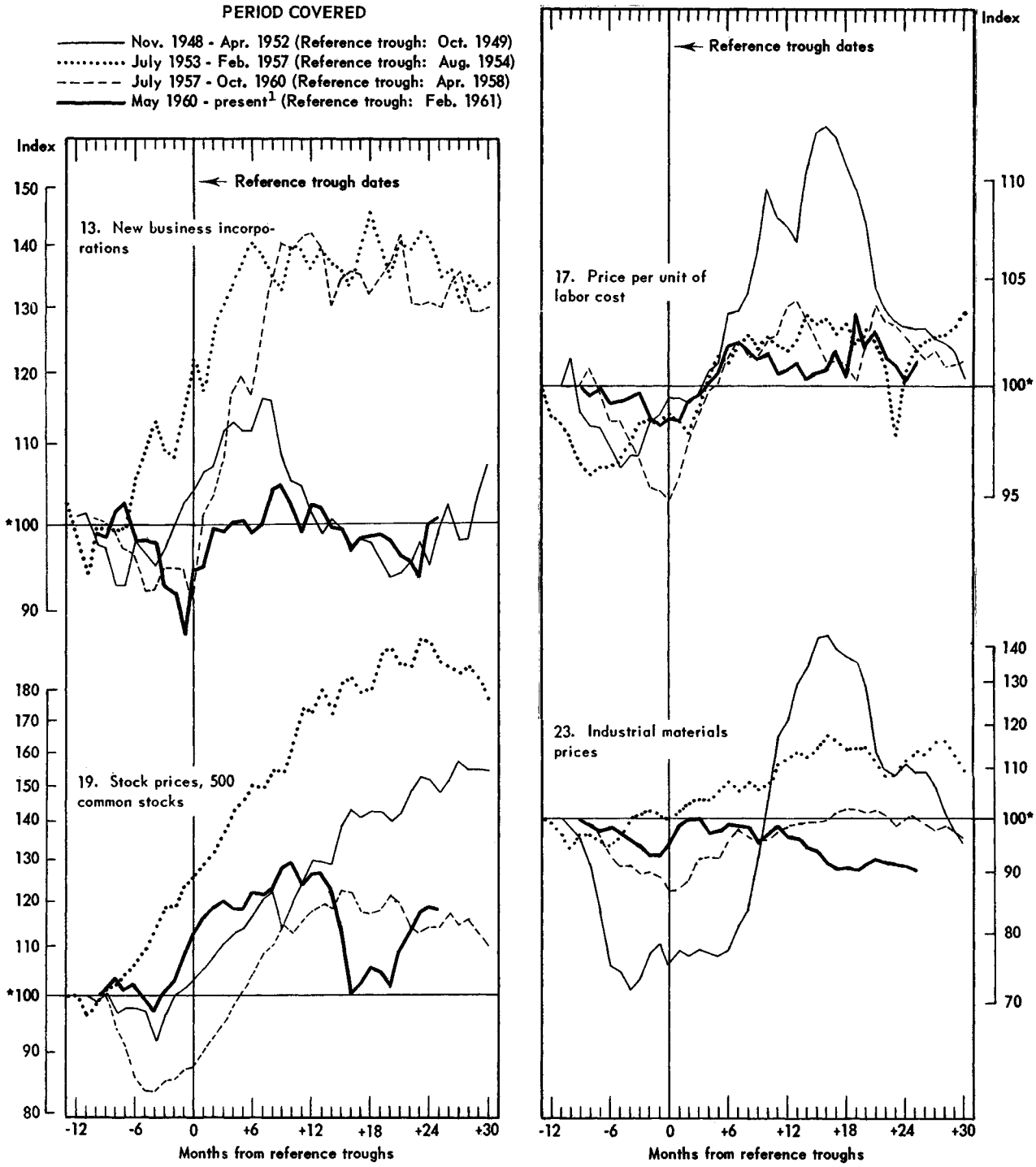
*Reference peak level. For series with a "months for cyclical dominance" (MCD) of "1" or "2", the figure for the reference peak is set at "100". For series with an MCD of "3" or more, the average of the 3 months centered on the reference peak month is set at "100". For quarterly series, the reference peak quarter is set at "100". MCD numbers are shown in appendix C.

[1]See table 1 for latest month in current period. Percent changes for this month and the comparable months of previous expansions are shown in table 7.

[2]For the 1949, 1954, and 1958 cycles a 3-term moving average is shown.

CHART 4 COMPARISONS OF REFERENCE CYCLE PATTERNS--Con.

Percent of reference peak levels measured from the reference peak date preceding the trough of each of 4 recent business cycles to 30 months after the trough of each cycle.

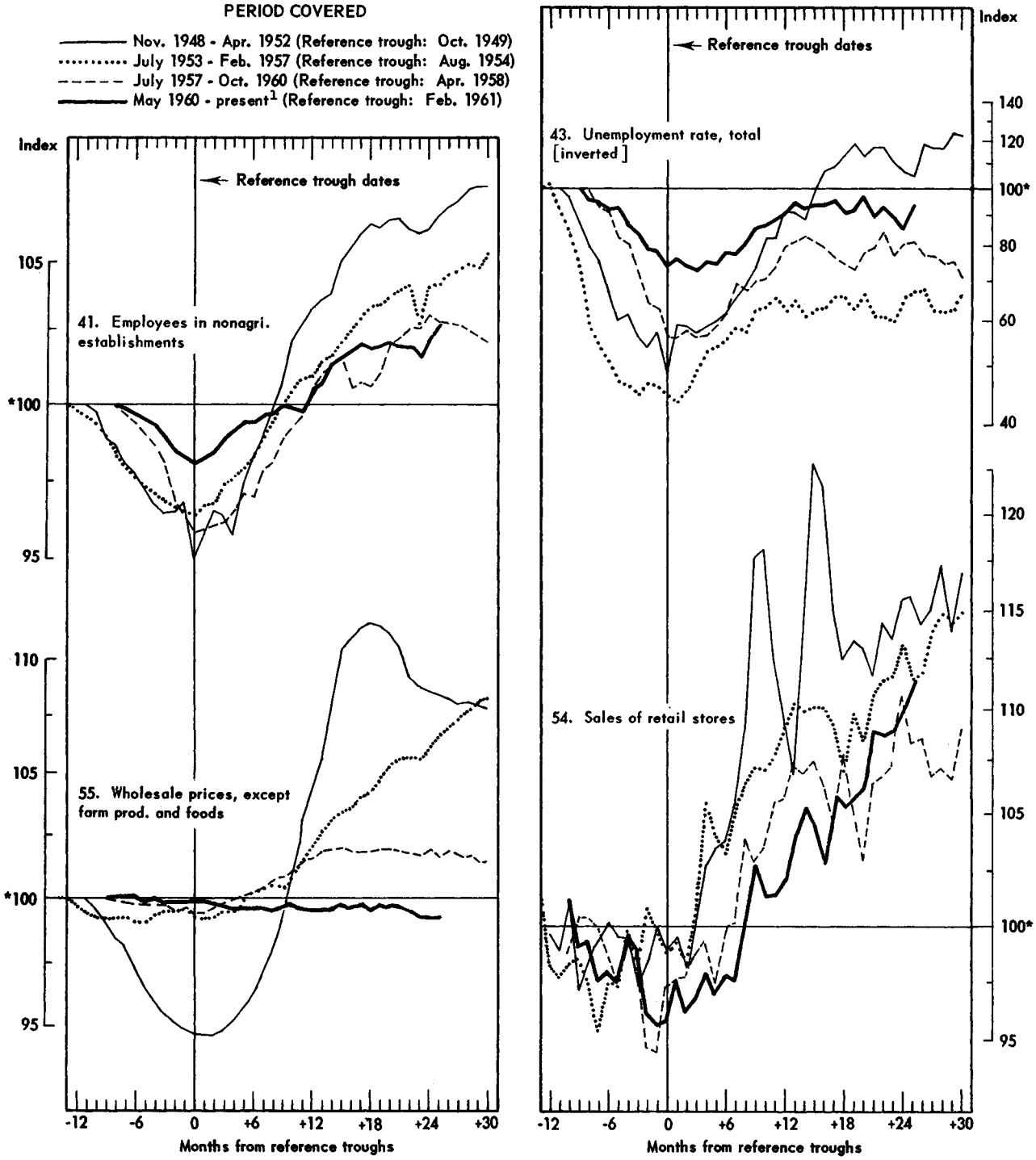


*Reference peak level. For series with a "months for cyclical dominance" (MCD) of "1" or "2", the figure for the reference peak is set at "100". For series with an MCD of "3" or more, the average of the 3 months centered on the reference peak month is set at "100". For quarterly series, the reference peak quarter is set at "100". MCD numbers are shown in appendix C.

[1]See table 1 for latest month in current period. Percent changes for this month and the comparable months of previous expansions are shown in table 7.

CHART 4 COMPARISONS OF REFERENCE CYCLE PATTERNS--Con.

Percent of reference peak levels measured from the reference peak date preceding the trough of each of 4 recent business cycles to 30 months after the trough of each cycle.

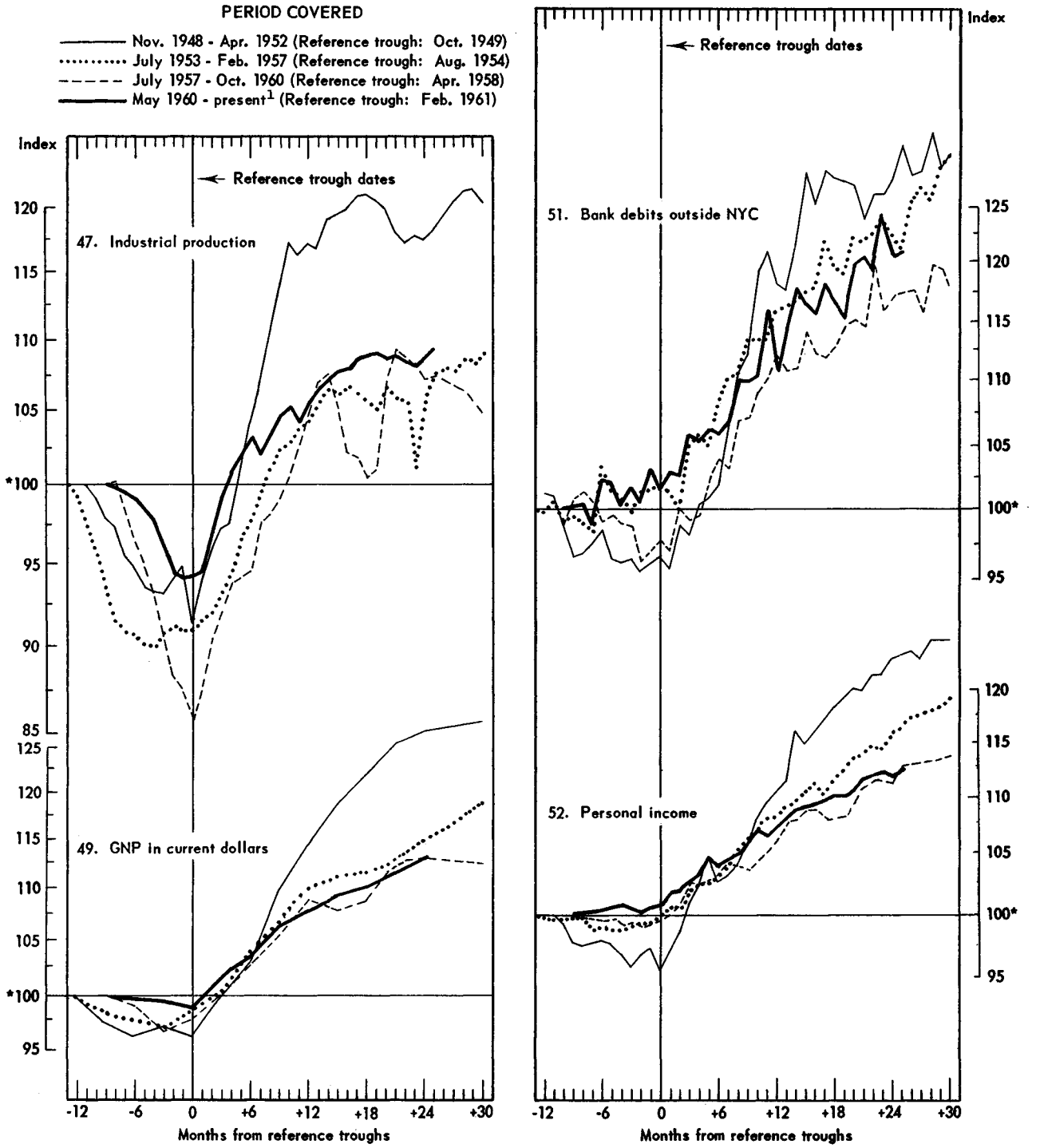


*Reference peak level. For series with a "months for cyclical dominance" (MCD) of "1" or "2", the figure for the reference peak is set at "100". For series with an MCD of "3" or more, the average of the 3 months centered on the reference peak month is set at "100". For quarterly series, the reference peak quarter is set at "100". MCD numbers are shown in appendix C.

[1]See table 1 for latest month in current period. Percent changes for this month and the comparable months of previous expansions are shown in table 7.

CHART 4 COMPARISONS OF REFERENCE CYCLE PATTERNS--Con.

Percent of reference peak levels measured from the reference peak date preceding the trough of each of 4 recent business cycles to 30 months after the trough of each cycle.

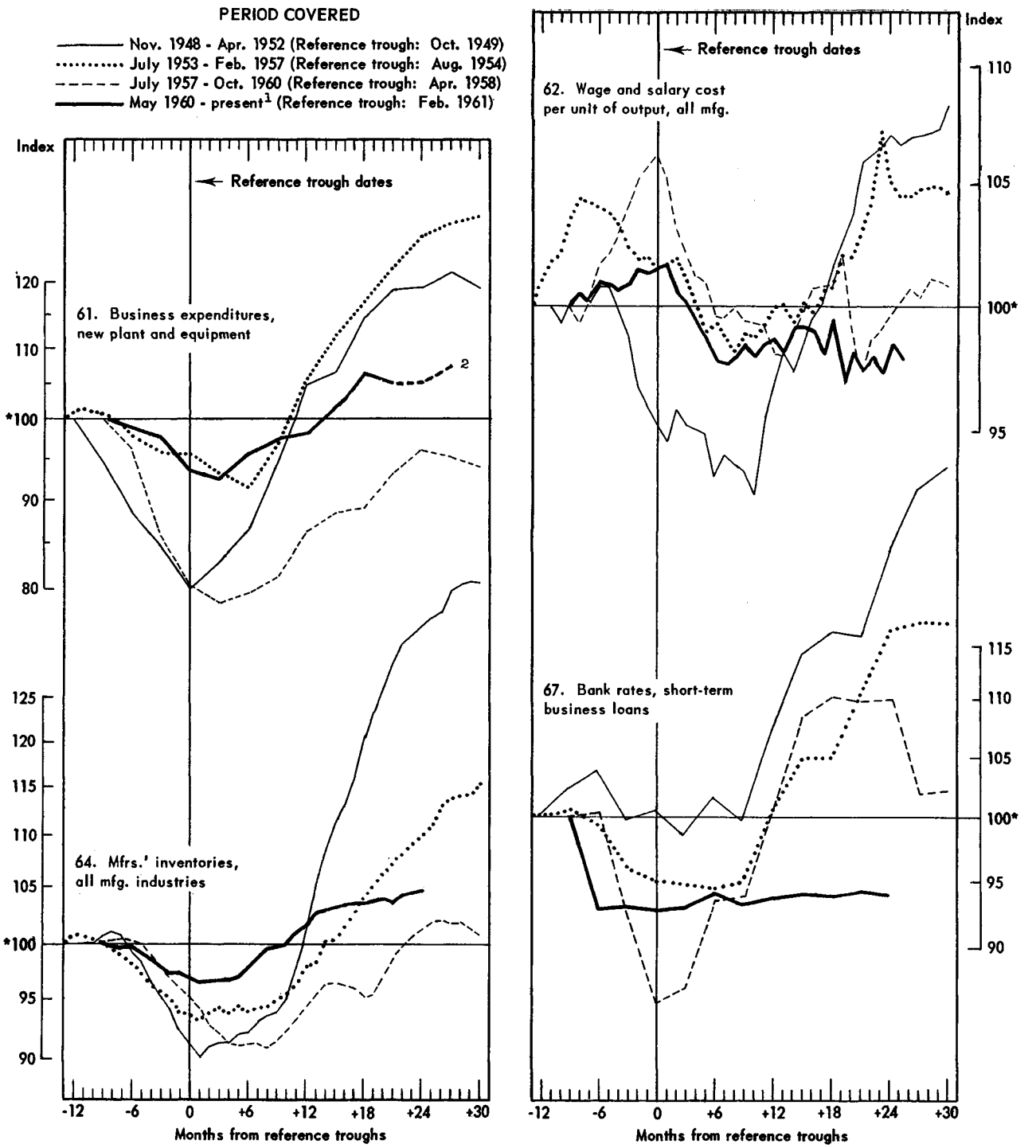


*Reference peak level. For series with a "months for cyclical dominance" (MCD) of "1" or "2", the figure for the reference peak is set at "100". For series with an MCD of "3" or more, the average of the 3 months centered on the reference peak month is set at "100". For quarterly series, the reference peak quarter is set at "100". MCD numbers are shown in appendix C.

[1]See table 1 for latest month in current period. Percent changes for this month and the comparable months of previous expansions are shown in table 7.

CHART 4 COMPARISONS OF REFERENCE CYCLE PATTERNS--Con.

Percent of reference peak levels measured from the reference peak date preceding the trough of each of 4 recent business cycles to 30 months after the trough of each cycle.



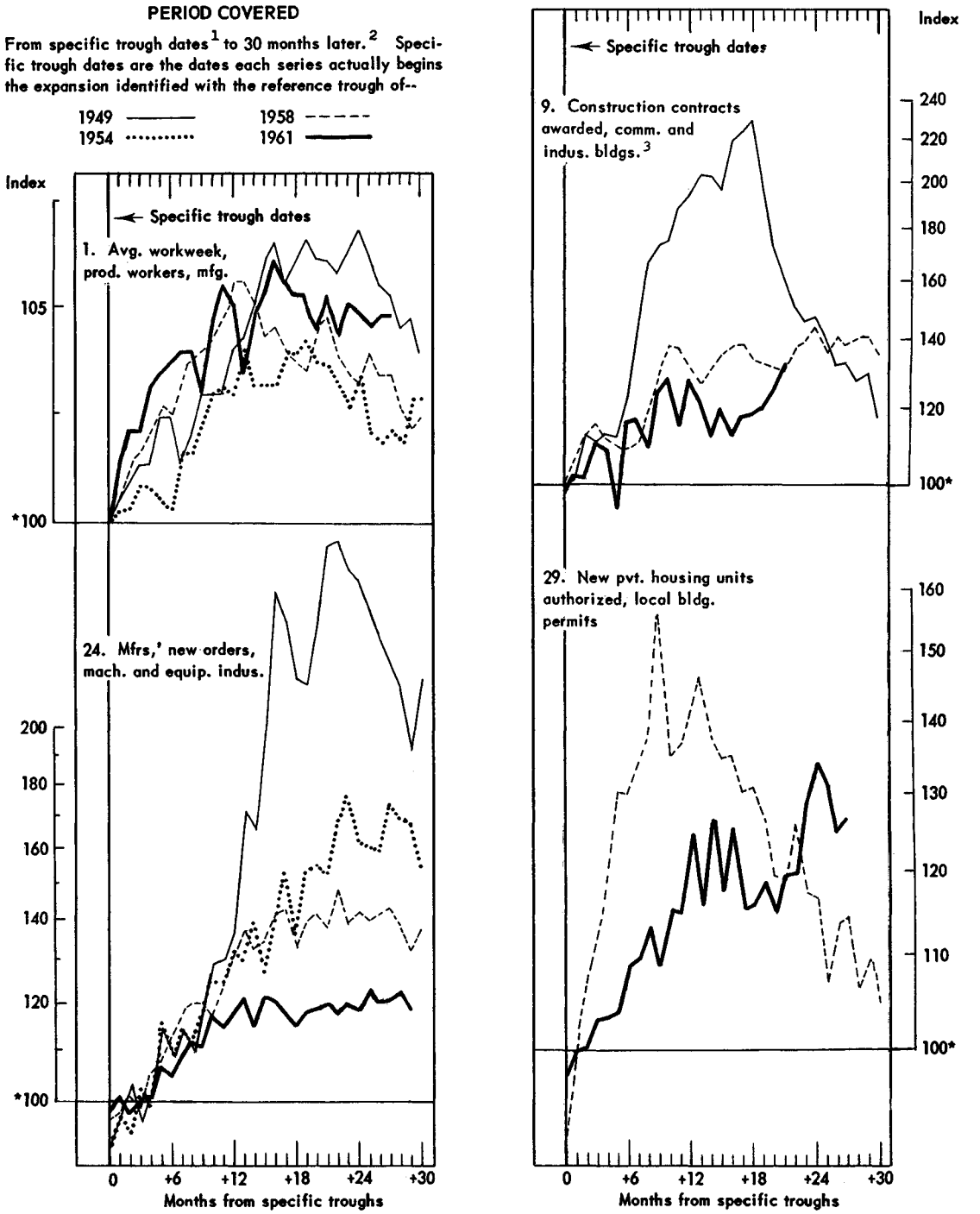
*Reference peak level. For series with a "months for cyclical dominance" (MCD) of "1" or "2", the figure for the reference peak is set at "100". For series with an MCD of "3" or more, the average of the 3 months centered on the reference peak month is set at "100". For quarterly series, the reference peak quarter is set at "100". MCD numbers are shown in appendix C.

[1]See table 1 for latest month in current period. Percent changes for this month and the comparable months of previous expansions are shown in table 7.

[2]Last two quarters anticipated.

CHART 5 COMPARISONS OF SPECIFIC CYCLE PATTERNS--Con.

Percent of specific trough levels measured from the specific trough date of each series in 4 recent expansions to 30 months after each specific trough.



*Specific trough level. For series with a "months for cyclical dominance" (MCD) of "1" or "2", the figure for the specific trough is set at "100". For series with an MCD of "3" or more, the average of the 3 months centered on the specific trough month is set at "100". For quarterly series, the specific trough quarter is set at "100". MCD numbers are shown in appendix C.

[1]See appendix B for specific dates.

[2]See table 1 for latest month in current period. Percent changes for this month and the comparable months after the specific troughs of previous expansions are shown in table 9.

[3]For the 1949 and 1958 cycles, a 3-term moving average is shown. For the current cycle, changes are based on the low (L) shown in table 1.

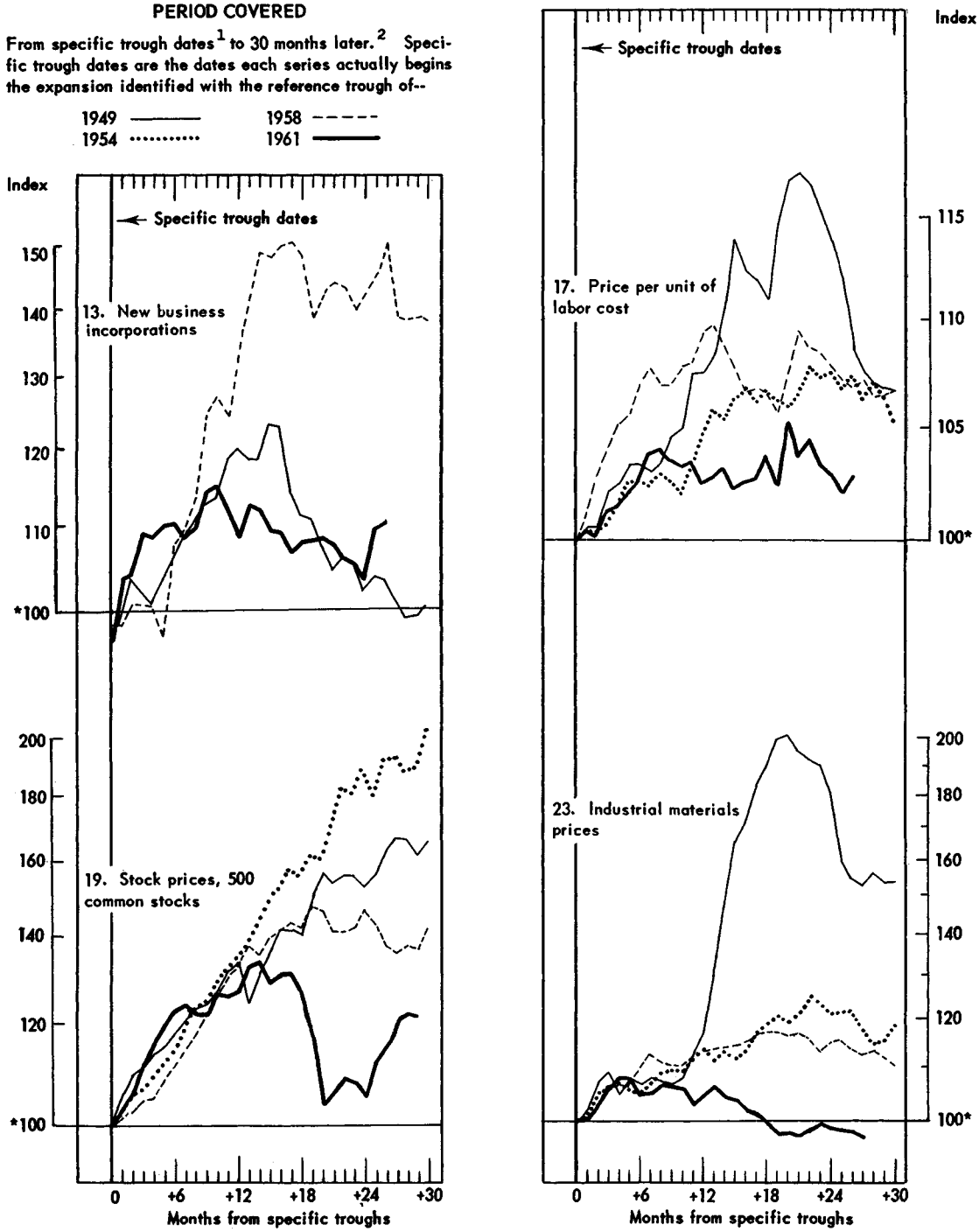
CHART 5 COMPARISONS OF SPECIFIC CYCLE PATTERNS--Con.

Percent of specific trough levels measured from the specific trough date of each series in 4 recent expansions to 30 months after each specific trough.

PERIOD COVERED

From specific trough dates[1] to 30 months later.[2] Specific trough dates are the dates each series actually begins the expansion identified with the reference trough of--

1949 ——— 1958 - - - - -
1954 ····· 1961 ———



*Specific trough level. For series with a "months for cyclical dominance" (MCD) of "1" or "2", the figure for the specific trough is set at "100". For series with an MCD of "3" or more, the average of the 3 months centered on the specific trough month is set at "100". For quarterly series, the specific trough quarter is set at "100". MCD numbers are shown in appendix C.

[1]See appendix B for specific dates.

[2]See table 1 for latest month in current period. Percent changes for this month and the comparable months after the specific troughs of previous expansions are shown in table 9.

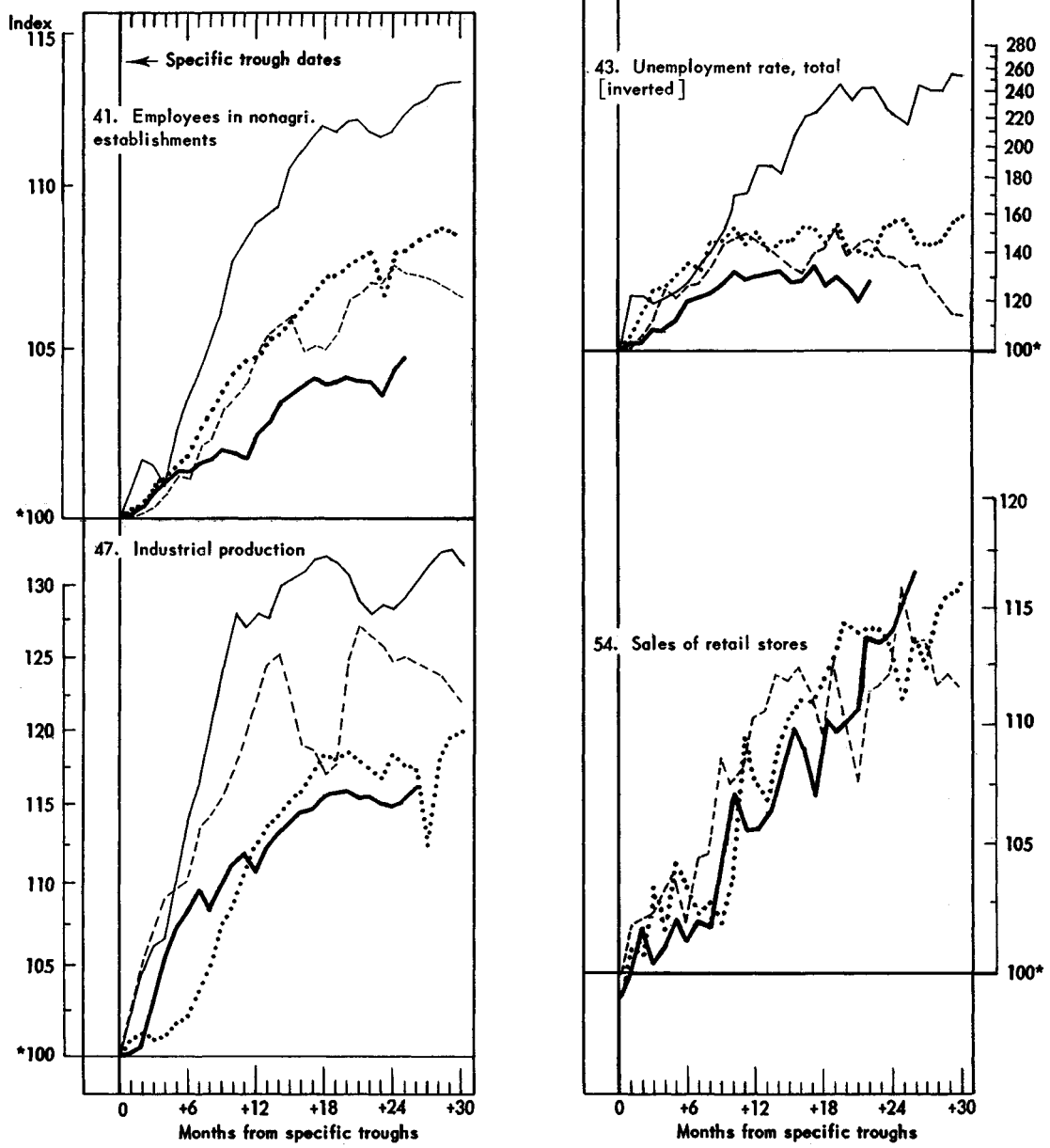
CHART 5 COMPARISONS OF SPECIFIC CYCLE PATTERNS--Con.

Percent of specific trough levels measured from the specific trough date of each series in 4 recent expansions to 30 months after each specific trough.

PERIOD COVERED

From specific trough dates[1] to 30 months later.[2] Specific trough dates are the dates each series actually begins the expansion identified with the reference trough of--

1949 ——— 1958 - - - - -
1954 ····· 1961 ———



*Specific trough level. For series with a "months for cyclical dominance" (MCD) of "1" or "2", the figure for the specific trough is set at "100". For series with an MCD of "3" or more, the average of the 3 months centered on the specific trough month is set at "100". For quarterly series, the specific trough quarter is set at "100". MCD numbers are shown in appendix C.

[1]See appendix B for specific dates.

[2]See table 1 for latest month in current period. Percent changes for this month and the comparable months after the specific troughs of previous expansions are shown in table 9.

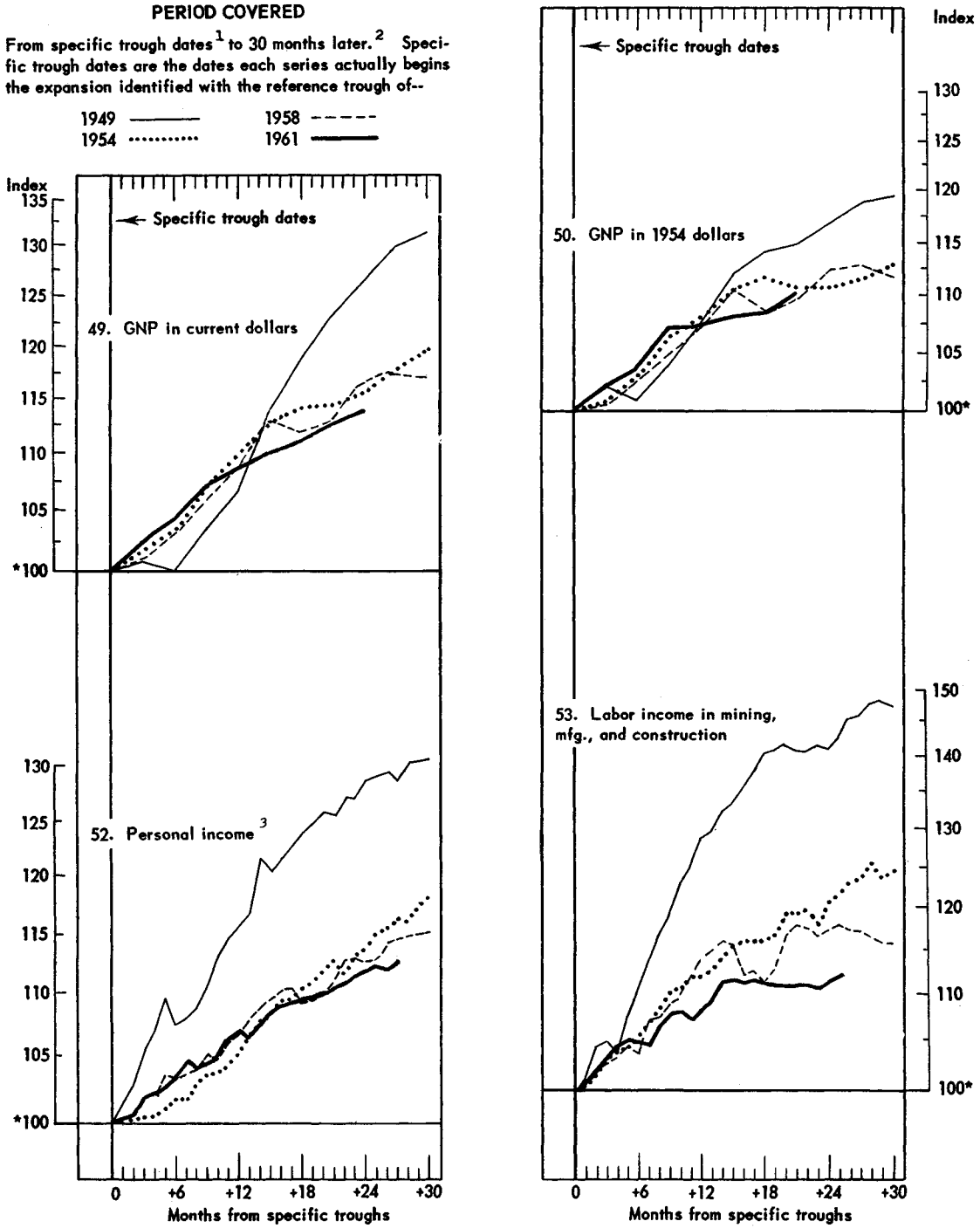
CHART 5 COMPARISONS OF SPECIFIC CYCLE PATTERNS--Con.

Percent of specific trough levels measured from the specific trough date of each series in 4 recent expansions to 30 months after each specific trough.

PERIOD COVERED

From specific trough dates[1] to 30 months later.[2] Specific trough dates are the dates each series actually begins the expansion identified with the reference trough of--

1949 ——— 1958 - - - - -
1954 ····· 1961 ———



*Specific trough level. For series with a "months for cyclical dominance" (MCD) of "1" or "2", the figure for the specific trough is set at "100". For series with an MCD of "3" or more, the average of the 3 months centered on the specific trough month is set at "100". For quarterly series, the specific trough quarter is set at "100". MCD numbers are shown in appendix C.

[1]See appendix B for specific dates.

[2]See table 1 for latest month in current period. Percent changes for this month and the comparable months after the specific troughs of previous expansions are shown in table 9.

[3]For the current cycle, changes are based on the low (L) shown in table 1.

Table 7.--PERCENT OF REFERENCE PEAK LEVELS AS MEASURED AT DESIGNATED MONTHS AFTER THE REFERENCE TROUGH DATES IN THE 9 MOST RECENT EXPANSIONS

For series with a "months for cyclical dominance" (MCD) of "1" or "2" (series 1, 17, 19, 23, 41, 43, 47, 52, 55, 62, 64, and 66), the figure for the reference peak month is used as the base. For series with an MCD of "3" or more (series 2, 3, 6, 7, 9, 13, 14, 24, 29, 51, and 54), the average of the 3 months centered on the reference peak month is used as the base. The base for quarterly series (series 16, 49, 50, 61, and 67) is the reference peak quarter. See also MCD footnote to appendix C.

Selected series	Months after reference trough[1]	Percent of reference peak prior to reference expansion beginning in--								
		July 1921	July 1924	Nov. 1927	Mar. 1933	June 1938	Oct. 1949	Aug. 1954	Apr. 1958	Feb. 1961
NBER LEADING INDICATORS										
1. Average workweek of production workers, manufacturing	25	NA	96.2	95.9	73.2	95.0	101.5	99.5	100.5	100.5
2. Accession rate, manufacturing	24	80.8	39.6	54.1	46.3	110.0	104.9	82.2	100.9	100.9
3. Layoff rate, manufacturing (inverted)	24	20.6	32.8	47.5	48.1	72.6	107.8	87.5	86.4	129.6
6. Value of manufacturers' new orders, durable goods industries	25	150.8	117.6	79.0	48.3	142.6	156.4	117.2	111.7	118.5
7. New private nonfarm dwelling units started	25	143.5	135.5	50.8	31.1	170.3	120.2	97.1	115.0	114.7
9. Construction contracts awarded for commercial and industrial bldgs., floor space[2]	24	32.7	112.4	113.4	17.2	101.5	101.1	129.2	106.6	119.1
13. Number of new business incorporations	25	78.9	94.6	98.8	67.2	82.8	99.5	134.5	130.0	100.7
14. Current liabilities of bus. failures (inv.)	25	21.6	146.3	66.0	270.0	87.9	139.7	79.6	63.6	96.8
16. Corporate profits after taxes (Q)	21	104.0	96.2	128.3	8.8	115.1	87.6	120.9	110.2	116.2
17. Price per unit of labor cost index	25	NA	NA	NA	NA	NA	102.7	101.7	101.7	101.2
19. Index of stock prices, 500 common stocks	25	91.7	151.3	164.4	30.0	61.5	148.5	192.8	113.8	118.9
23. Index of industrial materials prices	25	58.4	85.7	89.7	165.3	86.9	110.0	114.4	100.3	90.7
24. Value of manufacturers' new orders, machinery and equipment industries	25	NA	NA	NA	NA	NA	169.2	134.3	120.4	110.6
29. Index of new private housing units authorized by local building permits	25	NA	NA	NA	NA	NA	NA	NA	109.1	122.2
NBER ROUGHLY COINCIDENT INDICATORS										
41. Number of employees in nonagricultural establishments	25	90.0	96.2	99.9	83.0	100.1	106.5	104.1	102.8	102.5
43. Unemployment rate, total (inverted)	25	NA	NA	NA	NA	78.9	105.7	66.5	80.5	92.7
47. Index of industrial production	25	109.1	106.1	101.9	72.1	101.5	118.3	107.8	107.5	109.6
49. Gross national product in current dollars(Q)	24	NA	112.1	111.0	64.3	106.1	127.2	114.2	112.6	113.3
50. Gross national product in 1954 dollars (Q)	21	NA	111.0	115.2	79.6	NA	116.5	106.9	107.3	108.0
51. Bank debits outside NYC, 343 centers	25	92.2	117.1	112.0	53.6	98.0	130.2	121.4	117.3	120.6
52. Personal income	25	NA	113.3	110.4	68.3	102.4	123.3	116.4	113.0	112.7
54. Sales of retail stores	25	112.9	107.8	102.7	73.0	105.3	116.3	111.8	108.7	111.4
55. Index of wholesale prices, all commodities other than farm products and foods	25	65.4	93.5	90.5	85.0	96.1	108.5	106.7	101.6	99.3
NBER LAGGING INDICATORS										
61. Business expenditures on new plant and equipment, total (Q):[3]										
a	21	63.8	106.7	118.6	34.9	87.5	119.0	122.7	93.1	104.5
b	27	54.5	108.1	104.3	40.6	105.1	121.6	129.8	95.1	106.5
62. Wage and salary cost per unit of output, total manufacturing	25	80.0	91.5	93.9	86.7	96.2	106.7	104.5	100.2	97.6
64. Manufacturers' inventories, book value	24	NA	NA	NA	74.1	102.4	133.4	110.8	101.1	104.9
66. Consumer installment debt	24	NA	NA	NA	66.3	127.1	169.7	139.4	123.9	119.1
67. Bank rates on short-term business loans, 19 cities (Q)	24	91.7	91.1	120.0	62.9	88.2	123.9	116.6	110.8	93.5

NA Not available.

[1]Based on period from February 1961 (current trough) to latest month for which data are available.

[2]Except for 1961, changes are computed in a 3-term moving average of the seasonally adjusted series.

[3]Comparisons are made for this series on the basis of (a) the period 21 months after the February 1961 trough (actual expenditures) and (b) the period 27 months after the same period (anticipated expenditures for 2nd quarter 1963).

Table 8.--PERCENT CHANGE FROM REFERENCE TROUGH LEVELS AS MEASURED AT DESIGNATED MONTHS AFTER THE REFERENCE TROUGH DATES IN THE 9 MOST RECENT EXPANSIONS

For series with a "months for cyclical dominance" (MCD) of "1" or "2" (series 1, 17, 19, 23, 41, 43, 47, 52, 55, 62, 64, and 66), the figure for the reference trough month is used as the base. For series with an MCD of "3" or more (series 2, 3, 6, 7, 9, 13, 14, 24, 29, 51, and 54), the average of the 3 months centered on the reference trough month is used as the base. The base for quarterly series (series 16, 49, 50, 61, and 67) is the reference trough quarter. See also MCD footnote to appendix C.

Selected series	Months after reference trough[1]	Percent change from reference trough of expansion beginning in--								
		July 1921	July 1924	Nov. 1927	Mar. 1933	June 1938	Oct. 1949	Aug. 1954	Apr. 1958	Feb. 1961
NBER LEADING INDICATORS										
1. Average workweek of production workers, manufacturing	25	NA	+5.3	-2.3	-1.4	+8.9	+2.3	+2.0	+3.9	+2.5
2. Accession rate, manufacturing	24	NA	+84.6	-26.0	+14.0	+22.2	+18.1	+13.2	+8.8	-7.3
3. Layoff rate, manufacturing (inverted)	24	NA	+5.8	-33.0	+51.9	+46.4	+60.8	+35.4	+42.4	+50.0
6. Value of manufacturers' new orders, durable goods industries	25	+113.6	+5.0	-20.9	+151.7	+137.3	+69.2	+26.1	+30.5	+28.7
7. New private nonfarm dwelling units started	25	+46.6	+46.1	-51.1	+106.0	+81.3	-16.5	-18.7	+20.0	+27.8
9. Construction contracts awarded for commercial and industrial bldgs., floor space[2]	24	+20.1	+61.9	+30.7	+43.7	+105.7	+17.2	+33.4	+35.6	+27.9
13. Number of new business incorporations	25	+9.1	+27.8	-4.9	-15.2	-3.8	-4.9	+13.9	+36.2	+8.4
14. Current liabilities of bus. failures (inv.)	25	+28.2	+62.3	-28.3	+227.1	+19.4	+19.1	-16.4	-15.5	-1.0
16. Corporate profits after taxes (Q)	21	NA	+78.6	+74.4	NA	+281.2	+12.0	+41.9	+45.6	+34.5
17. Price per unit of labor cost index	25	NA	NA	NA	NA	NA	+3.2	+2.9	+7.2	+2.8
19. Index of stock prices, 500 common stocks	25	+24.0	+45.3	+25.4	+45.1	-2.2	+42.9	+52.4	+30.4	+5.6
23. Index of industrial materials prices	25	+39.4	+2.1	-8.0	+66.2	+29.6	+46.4	+14.4	+15.4	-4.9
24. Value of manufacturers' new orders, machinery and equipment industries	25	NA	NA	NA	NA	NA	+92.4	+40.7	+43.6	+15.1
29. Index of new private housing units authorized by local building permits	25	NA	NA	NA	NA	NA	NA	NA	+7.3	+26.1
NBER ROUGHLY COINCIDENT INDICATORS										
41. Number of employees in nonagricultural establishments	25	+30.5	+10.8	+4.1	+21.3	+11.7	+12.2	+7.8	+7.2	+4.6
43. Unemployment rate, total (inverted)	25	NA	NA	NA	+44.5	+40.4	+115.6	+50.6	+42.9	+25.8
47. Index of industrial production	25	+60.0	+30.0	+10.2	+51.7	+50.0	+29.2	+18.5	+25.2	+16.4
49. Gross national product in current dollars (Q)	24	NA	+14.7	+10.5	+27.5	+20.5	+31.6	+16.3	+15.5	+14.2
50. Gross national product in 1954 dollars (Q)	21	+25.2	+11.3	+12.6	+10.5	NA	+18.2	+10.2	+11.6	+10.1
51. Bank debits outside NYC, 343 centers	25	+19.0	+20.9	+3.0	+40.5	+17.3	+35.6	+19.5	+21.0	+17.8
52. Personal income	25	+29.5	+13.8	+7.8	+38.8	+15.0	+28.9	+16.7	+13.4	+12.0
54. Sales of retail stores	25	+18.0	+9.9	+2.7	+29.3	+27.3	+16.7	+12.7	+12.5	+15.7
55. Index of wholesale prices, all commodities other than farm products and foods	25	+3.8	+2.4	-2.7	+16.8	+1.5	+14.3	+7.5	+2.1	-0.6
NBER LAGGING INDICATORS										
61. Business expenditures on new plant and equipment, total (Q):[3]										
a	21	+86.0	+52.8	+35.0	+103.4	+46.7	+48.7	+28.5	+15.9	+12.1
b	27	+58.9	+54.9	+18.8	+136.8	+76.1	+51.9	+35.8	+18.4	+14.2
62. Wage and salary cost per unit of output, total manufacturing	25	-11.1	-11.0	-4.6	+18.2	-7.3	+11.9	+3.1	-5.7	-3.9
64. Manufacturers' inventories, book value	24	NA	NA	NA	+25.0	+8.1	+45.9	+17.5	+6.2	+7.6
66. Consumer installment debt	24	NA	NA	NA	+38.7	+36.3	+36.7	+34.9	+22.8	+15.6
67. Bank rates on short-term business loans, 19 cities (Q)	24	-14.9	+3.9	+24.7	-19.2	-9.6	+23.4	+22.2	+28.3	+0.6

NA Not available.

[1]Based on period from February 1961 (current trough) to latest month for which data are available.

[2]Except for 1961, changes are computed in a 3-term moving average of the seasonally adjusted series.

[3]Comparisons are made for this series on the basis of (a) the period 21 months after the February 1961 trough (actual expenditures) and (b) the period 27 months after the same period (anticipated expenditures for 2nd quarter 1963).

Table 9.--PERCENT OF SPECIFIC PEAK LEVELS AND PERCENT CHANGE FROM SPECIFIC TROUGH LEVELS AS MEASURED AT DESIGNATED MONTHS AFTER THE SPECIFIC TROUGH DATES IN THE 9 MOST RECENT EXPANSIONS

For series with a "months for cyclical dominance" (MCD) of "1" or "2" (series 1, 17, 19, 23, 41, 43, 47, 52, and 53), the figure for the specific peak (trough) month is used as the base. For series with an MCD of "3" or more (series 9, 13, 24, 29, and 54), the average of the 3 months centered on the specific peak (trough) month is used as the base. The base for quarterly series (series 49 and 50) is the specific peak (trough) quarter. See also MCD footnote to appendix C.

Selected series	Months after specific trough[1]	July 1921	July 1924	Nov. 1927	Mar. 1933	June 1938	Oct. 1949	Aug. 1954	Apr. 1958	Feb. 1961
NBER LEADING INDICATORS		Percent of specific peak prior to reference expansion beginning in year shown								
1. Average workweek of production workers, manufacturing	27	NA	96.6	88.4	68.9	91.7	NSC	97.8	97.3	99.0
9. Construction contracts awarded for commercial and industrial bldgs., floor space[2]	21	36.8	101.7	99.6	14.9	91.2	50.4	NSC	91.1	[3]121.9
13. Number of new business incorporations	26	82.1	93.1	108.3	67.0	57.5	61.1	NSC	137.7	93.9
17. Price per unit of labor cost index	26	NA	NA	NA	NA	NA	101.6	91.0	99.3	98.8
19. Index of stock prices, 500 common stocks	29	92.8	125.2	NSC	29.4	58.7	135.0	169.7	113.2	109.9
23. Index of industrial materials prices	27	57.1	79.3	49.5	64.2	81.8	102.7	61.5	89.1	89.1
24. Value of manufacturers' new orders, machinery and equipment industries	29	NA	NA	NA	NA	NA	144.2	99.8	98.1	109.9
29. Index of new private housing units authorized by local building permits	27	NA	NA	NA	NA	NA	NA	NA	70.8	95.2
NBER ROUGHLY COINCIDENT INDICATORS										
41. Number of employees in nonagricultural establishments	25	90.0	96.1	96.4	83.0	99.6	106.5	104.1	102.8	102.2
43. Unemployment rate, total (inverted)	22	NA	NA	NA	NA	68.6	113.4	58.8	74.7	88.7
47. Index of industrial production	26	111.4	108.2	101.9	60.7	101.5	117.1	105.8	106.9	107.8
49. Gross national product in current dollars(Q)	24	NA	NSC	NSC	64.3	101.0	122.8	112.5	111.9	113.3
50. Gross national product in 1954 dollars (Q)	21	NA	NSC	NSC	78.7	102.3	112.3	106.9	104.9	108.0
52. Personal income	27	NA	110.8	110.9	68.4	102.9	122.0	114.6	112.7	[3]111.9
53. Labor income in mining, mfg., and construc.	25	NA	NA	NA	61.1	97.8	124.5	112.5	108.3	106.5
54. Sales of retail stores	26	102.0	NSC	NSC	70.4	104.7	NSC	110.0	108.7	111.9
NBER LEADING INDICATORS		Percent change from specific trough related to reference expansion beginning in year shown								
1. Average workweek of production workers, manufacturing	27	+14.5	+6.6	-7.6	-7.6	+9.6	+5.2	+2.0	+3.4	+4.7
9. Construction contracts awarded for commercial and industrial bldgs., floor space[2]	21	+77.8	+62.0	+28.9	+54.4	+100.9	+61.7	NSC	+33.2	[3]+31.1
13. Number of new business incorporations	26	+17.6	+24.5	+18.1	+7.5	-28.0	+3.3	NSC	+51.3	+9.8
17. Price per unit of labor cost index	26	NA	NA	NA	NA	NA	+8.8	+7.2	+6.8	+3.1
19. Index of stock prices, 500 common stocks	29	+36.9	+47.1	NSC	+92.9	+7.5	+62.6	+90.9	+36.9	+22.2
23. Index of industrial materials prices	27	+40.1	+7.4	-30.7	+72.7	+32.2	+52.3	+17.8	+12.6	-2.5
24. Value of manufacturers' new orders, machinery and equipment industries	29	NA	NA	NA	NA	NA	+91.6	+67.2	+32.3	+18.0
29. Index of new private housing units authorized by local building permits	27	NA	NA	NA	NA	NA	NA	NA	+14.7	+27.5
NBER ROUGHLY COINCIDENT INDICATORS										
41. Number of employees in nonagricultural establishments	25	+30.5	+10.8	+1.7	+21.3	+11.7	+12.2	+7.8	+7.2	+4.6
43. Unemployment rate, total (inverted)	22	NA	NA	NA	+45.9	+25.0	+141.7	+38.5	+44.0	+27.2
47. Index of industrial production	26	+63.3	+32.5	+10.2	+32.1	+53.5	+30.0	+17.5	+24.8	+16.6
49. Gross national product in current dollars(Q)	24	NA	NSC	NSC	+27.5	+20.5	+27.3	+15.6	+15.9	+14.2
50. Gross national product in 1954 dollars (Q)	21	NA	NSC	NSC	+16.8	+17.9	+15.1	+10.9	+9.7	+10.1
52. Personal income	27	+29.8	+15.0	+13.8	+39.1	+17.7	+28.6	+16.0	+14.1	[3]+12.4
53. Labor income in mining, mfg., and construc.	25	NA	NA	NA	+71.6	+33.8	+42.4	+21.8	+17.6	+12.2
54. Sales of retail stores	26	+15.9	NSC	NSC	+24.6	+27.4	NSC	+13.8	+13.6	+16.2

NA Not available. NSC No specific cycle related to reference dates.

[1]Based on period from most recent specific trough of each series to the latest month for which data are available. The number is the same for each expansion. Specific trough and peak dates are shown in appendix B.

[2]Except for 1961, changes are computed in a 3-term moving average of the seasonally adjusted series.

[3]Since no specific trough has been designated, figures are based on the low (L) and high (H) shown in table 1.

Appendixes

Appendix A.--BUSINESS CYCLE REFERENCE DATES AND DURATION OF EXPANSIONS AND CONTRACTIONS IN THE UNITED STATES: 1854 TO 1961

Business cycle reference dates		Duration in months			
		Contraction (trough from previous peak)	Expansion (trough to peak)	Cycle	
				Trough from previous trough	Peak from previous peak
Trough	Peak				
December 1854	June 1857.....	xxx	30	xxx	xxx
December 1858	October 1860.....	18	22	48	40
June 1861	April 1865.....	8	46	30	54
December 1867	June 1869.....	32	18	78	50
December 1870	October 1873.....	18	34	36	52
March 1879	March 1882.....	65	36	99	101
May 1885	March 1887.....	38	22	74	60
April 1888	July 1890.....	13	27	35	40
May 1891	January 1893.....	10	20	37	30
June 1894	December 1895.....	17	18	37	35
June 1897	June 1899.....	18	24	36	42
December 1900	September 1902.....	18	21	42	39
August 1904	May 1907.....	23	33	44	56
June 1908	January 1910.....	13	19	46	32
January 1912	January 1913.....	24	12	43	36
December 1914	August 1918.....	23	44	35	67
March 1919	January 1920.....	7	10	51	17
July 1921	May 1923.....	18	22	28	40
July 1924	October 1926.....	14	27	36	41
November 1927	August 1929.....	13	21	40	34
March 1933	May 1937.....	43	50	64	93
June 1938	February 1945.....	13	80	63	93
October 1945	November 1948.....	8	37	88	45
October 1949	July 1953.....	11	45	48	56
August 1954	July 1957.....	13	35	58	48
April 1958	May 1960.....	9	25	44	34
February 1961		9		34	
Average, all cycles:					
26 cycles, 1854-1961.....		19	30	49	[1]49
10 cycles, 1919-1961.....		15	35	50	[2]54
4 cycles, 1945-1961.....		10	36	46	[3]46
Average, peacetime cycles:					
22 cycles, 1854-1961.....		20	26	45	[4]46
8 cycles, 1919-1961.....		16	28	45	[5]48
3 cycles, 1945-1961.....		10	32	42	[6]41

NOTE: Underscored figures are the wartime expansions (Civil War, World Wars I and II, and Korean War), the postwar contractions, and the full cycles that include the wartime expansions.

[1]25 cycles, 1857-1960.
[2]9 cycles, 1920-1960.
[3]3 cycles, 1948-1960
[4]21 cycles, 1857-1960.
[5]7 cycles, 1920-1960.
[6]2 cycles, 1948-1960.

Source: National Bureau of Economic Research.

Appendix B.--SPECIFIC TROUGH AND PEAK DATES FOR SELECTED BUSINESS INDICATORS

Specific trough and peak dates are the actual dates[1] that each series reaches its trough and peak. Reference dates are those dates designated as the trough or peak of business activity as a whole. This table shows, for selected leading and coincident series, the specific dates related to reference dates in 9 recent business cycles.

Selected series	Specific trough dates for reference expansions beginning in--								
	Feb. 1961	Apr. 1958	Aug. 1954	Oct. 1949	June 1938	Mar. 1933	Nov. 1927	July 1924	July 1921
NBER LEADING INDICATORS									
1. Average workweek of production workers, manufacturing	Dec.'60	Apr.'58	Apr.'54	Apr.'49	Jan.'38	Jul.'32	Apr.'28	Jul.'24	Feb.'21
9. Construction contracts awarded for commercial and industrial bldgs...	NSC	Jun.'58	NSC	Aug.'49	Sep.'38	Oct.'32	Sep.'27	Jul.'24	Mar.'21
13. Number of new business incorporations	Jan.'61	Nov.'57	NSC	Feb.'49	Sep.'39	Dec.'34	Dec.'26	Jun.'24	Jan.'21
17. Price per unit of labor cost index.	Jan.'61	Apr.'58	Dec.'53	May '49	NA	NA	NA	NA	NA
19. Index of stock prices, 500 stocks..	Oct.'60	Dec.'57	Sep.'53	Jun.'49	Apr.'38	Jun.'32	NSC	Oct.'23	Aug.'21
23. Index of industrial mat. prices....	Dec.'60	Apr.'58	Feb.'54	Jun.'49	Jun.'38	Jul.'32	Aug.'28	Jun.'24	Jul.'21
24. Value of mfrs.' new orders, machinery and equipment industries..	Oct.'60	Feb.'58	Jan.'54	Apr.'49	NA	NA	NA	NA	NA
29. Index of new private housing units authorized by local bldg. permits.	Dec.'60	Feb.'58	NA	NA	NA	NA	NA	NA	NA
NBER ROUGHLY COINCIDENT INDICATORS									
41. Number of employees in nonagricultural establishments	Feb.'61	Apr.'58	Aug.'54	Oct.'49	Jun.'38	Mar.'33	Jan.'28	Jul.'24	Jul.'21
43. Unemployment rate, total (inverted)	May '61	Jul.'58	Sep.'54	Oct.'49	Jun.'38	May '33	NA	NA	NA
47. Index of industrial production.....	Jan.'61	Apr.'58	Apr.'54	Oct.'49	May '38	Jul.'32	Nov.'27	Jul.'24	Apr.'21
49. GNP in current dollars (Q).....	1stQ'61	1stQ'58	2ndQ'54	2ndQ'49	2ndQ'38	1stQ'33	NSC	NSC	4thQ'21
50. GNP in 1954 dollars (Q).....	1stQ'61	1stQ'58	2ndQ'54	2ndQ'49	1stQ'38	3rdQ'32	NSC	NSC	NA
52. Personal income.....	NSC	Feb.'58	Mar.'54	Oct.'49	May '38	Mar.'33	4thQ'26	2ndQ'24	2ndQ'21
53. Labor income in mining, manufacturing and construction.....	Feb.'61	Apr.'58	Aug.'54	Oct.'49	Jun.'38	Mar.'33	NA	NA	NA
54. Sales of retail stores.....	Jan.'61	Mar.'58	Jan.'54	NSC	May '38	Mar.'33	NSC	NSC	Mar.'22

Selected series	Specific peak dates for reference contractions beginning in--								
	May 1960	July 1957	July 1953	Nov. 1948	May 1937	Aug. 1929	Oct. 1926	May 1923	Jan. 1920
NBER LEADING INDICATORS									
1. Average workweek of production workers, manufacturing	May '59	Nov.'55	Apr.'53	NSC	Dec.'36	Oct.'29	Nov.'25	Nov.'22	NA
9. Construction contracts awarded for commercial and industrial bldgs...	NSC	Mar.'56	NSC	Mar.'46	Jul.'37	Jan.'29	Sep.'25	Aug.'22	Dec.'19
13. Number of new business incorporations	Apr.'59	Feb.'56	NSC	Jul.'46	Dec.'36	Jan.'29	Oct.'25	Apr.'23	Dec.'19
17. Price per unit of labor cost index.	May '59	Mar.'57	Feb.'51	Jan.'48	NA	NA	NA	NA	NA
19. Index of stock prices, 500 stocks..	Jul.'59	Jul.'56	Jan.'53	Jun.'48	Feb.'37	Sep.'29	NSC	Mar.'23	Jul.'19
23. Index of industrial mat. prices....	Nov.'59	Dec.'55	Feb.'51	Jan.'48	Mar.'37	Mar.'29	Nov.'25	Mar.'23	Apr.'20
24. Value of mfrs.' new orders, machinery and equipment industries..	Dec.'59	Nov.'56	Feb.'51	Apr.'48	NA	NA	NA	NA	NA
29. Index of new private housing units authorized by local bldg. permits.	Nov.'58	Feb.'55	NA	NA	NA	NA	NA	NA	NA
NBER ROUGHLY COINCIDENT INDICATORS									
41. Number of employees in nonagricultural establishments	Apr.'60	Mar.'57	May '53	Jul.'48	Jul.'37	Aug.'29	Jan.'26	Jul.'23	Jan.'20
43. Unemployment rate, total (inverted)	Feb.'60	Mar.'57	Jun.'53	Jan.'48	Jul.'37	NA	NA	NA	NA
47. Index of industrial production.....	Jan.'60	Feb.'57	Jul.'53	Jul.'48	May '37	Jul.'29	Mar.'27	May '23	Feb.'20
49. GNP in current dollars (Q).....	2ndQ'60	3rdQ'57	2ndQ'53	4thQ'48	3rdQ'37	3rdQ'29	NSC	NSC	NA
50. GNP in 1954 dollars (Q).....	2ndQ'60	3rdQ'57	2ndQ'53	4thQ'48	3rdQ'37	3rdQ'29	NSC	NSC	NA
52. Personal income.....	NSC	Aug.'57	Oct.'53	Oct.'48	Jun.'37	Aug.'29	2ndQ'26	1stQ'24	NA
53. Labor income in mining, manufacturing and construction.....	May '60	Jul.'57	Jul.'53	Sep.'48	May '37	Sep.'29	NA	NA	NA
54. Sales of retail stores.....	Apr.'60	Jul.'57	Jul.'53	NSC	Sep.'37	Sep.'29	NSC	NSC	Jul.'20

NA not available. NSC No specific cycle related to reference dates.

Appendix C.--AVERAGE PERCENTAGE CHANGES AND RELATED MEASURES FOR MONTHLY AND QUARTERLY BUSINESS CYCLE SERIES

Monthly series	$\overline{CI}$	$\overline{I}$	$\overline{C}$	$\overline{I}/\overline{C}$	MCD	$\overline{I}/\overline{C}$ for MCD span	Average duration of run			
							CI	I	C	MCD
NBER LEADING INDICATORS										
1. Average workweek of production workers, manufacturing	.47	.40	.24	1.67	2	.95	2.57	1.84	9.82	4.26
2. Accession rate, manufacturing	6.03	5.31	2.08	2.55	3	.92	2.53	1.82	8.35	4.58
30. Nonagricultural placements, all industries	3.41	3.14	1.35	2.33	3	.55	1.86	1.49	8.67	4.53
3. Layoff rate, manufacturing	11.94	10.46	5.45	1.92	3	.76	2.49	1.80	7.59	5.16
4. Number of persons on temporary layoff, all industries	19.43	17.91	4.88	3.67	5	.81	1.66	1.49	7.10	3.37
5. Average weekly initial claims for unemployment insurance, State programs	6.98	6.12	3.16	1.94	2	.97	1.86	1.53	9.28	3.61
6. Value of manufacturers' new orders, durable goods industries	5.58	5.00	2.00	2.50	3	.75	1.94	1.48	10.64	3.34
24. Value of manufacturers' new orders, machinery and equipment industries	6.07	5.55	2.19	2.53	3	.73	1.68	1.47	12.82	3.56
9. Construction contracts awarded for commercial and industrial buildings	12.37	11.94	2.75	4.34	5	.80	1.62	1.49	8.28	3.45
10. Contracts and orders for plant and equipment	6.37	5.94	2.19	2.71	3	.79	1.59	1.37	8.56	3.55
27. Buying policy--production materials, percent reporting commitments 6 months or longer	7.56	7.12	2.36	3.02	4	.71	1.82	1.69	10.14	5.23
7. New private nonfarm dwelling units started	4.09	3.39	2.01	1.69	3	.67	2.29	1.67	11.46	4.46
29. Index of new private housing units authorized by local building permits	3.90	3.44	1.67	2.06	3	.60	1.93	1.53	12.43	3.70
13. Number of new business incorporations	3.04	2.57	1.30	1.98	3	.65	2.19	1.69	9.31	3.50
14. Current liabilities of business failures	16.32	16.05	2.81	5.71	6	(1)	1.57	1.42	5.32	2.22
15. Number of business failures with liabilities of $100,000 and over	17.30	17.36	3.26	5.33	6	(1)	1.54	1.39	6.21	2.82
17. Price per unit of labor cost index	.72	.56	.41	1.37	2	.80	2.70	1.80	11.53	4.10
19. Index of stock prices, 500 common stocks	2.58	1.90	1.49	1.28	2	.79	2.40	1.73	13.55	3.36
26. Buying policy--production materials, percent reporting commitments 60 days or longer	6.17	5.53	2.76	2.00	3	.66	1.90	1.61	11.55	4.63
32. Vendor performance, percent reporting slower deliveries	11.30	8.12	7.20	1.13	2	.77	3.18	2.01	9.94	3.59
23. Index of industrial materials prices	2.15	1.39	1.52	.91	1	.91	2.61	1.84	11.46	2.61
NBER ROUGHLY COINCIDENT INDICATORS										
41. Number of employees in nonagricultural establishments	.39	.22	.29	.76	1	.76	3.41	2.04	10.44	3.41
42. Total nonagricultural employment, labor force survey	.41	.32	.22	1.45	2	.72	1.94	1.62	15.73	3.44
43. Unemployment rate, total	4.73	3.46	2.91	1.19	2	.64	2.44	1.68	7.67	3.48
40. Unemployment rate, married males	5.80	4.62	3.26	1.42	2	.67	2.05	1.38	10.50	4.37
45. Average weekly insured unemployment rate, State programs	5.63	2.80	4.12	.68	1	.68	3.47	2.44	8.28	3.47
46. Index of help-wanted advertising in newspapers	3.28	2.10	2.26	.93	1	.93	2.30	1.40	8.13	2.30
47. Index of industrial production	1.16	.66	.81	.81	1	.81	4.25	1.87	11.00	4.25
51. Bank debits outside NYC, 343 centers	1.56	1.42	.70	2.03	3	.58	1.82	1.55	10.64	4.32
52. Personal income	.69	.43	.54	.80	1	.80	3.39	1.69	21.29	3.39
53. Labor income in mining, manufacturing, and construction	1.12	.69	.84	.82	1	.82	3.63	1.80	13.55	3.63
54. Sales of retail stores	1.58	1.43	.56	2.55	4	.70	1.84	1.67	8.77	3.56
55. Index of wholesale prices, all commodities other than farm products and foods	.30	.11	.27	.41	1	.41	5.22	2.53	12.85	5.22
NBER LAGGING INDICATORS										
62. Index of wage and salary cost per unit of output, total manufacturing	.66	.46	.40	1.15	2	.66	2.70	1.77	11.53	4.65
64. Book value of manufacturers' inventories, all manufacturing industries	.88	.27	.40	.34	1	.34	7.84	2.16	13.55	7.84
65. Book value of manufacturers' inventories of finished goods, all manufacturing industries	.99	.49	.84	.58	1	.58	6.48	2.61	13.55	6.48
66. Consumer installment debt	1.19	.28	1.12	.25	1	.25	8.79	2.29	18.56	8.79

See footnotes at end of table.

Appendix C.--AVERAGE PERCENTAGE CHANGES AND RELATED MEASURES FOR MONTHLY AND QUARTERLY BUSINESS CYCLE SERIES--Continued

Monthly series	$\overline{CI}$	$\overline{I}$	$\overline{C}$	$\overline{I}/\overline{C}$	MCD	$\overline{I}/\overline{C}$ for MCD span	Average duration of run			
							CI	I	C	MCD
OTHER U.S. SERIES WITH BUSINESS CYCLE SIGNIFICANCE										
81. Index of consumer prices	.28	.17	.23	.74	1	.74	4.48	2.18	19.89	4.48
82. Federal cash payments to the public	7.17	6.91	1.31	5.27	5	.92	1.47	1.39	7.59	2.30
83. Federal cash receipts from the public	7.49	7.23	1.46	4.95	5	.96	1.70	1.52	5.96	2.55
86. Exports, excluding military aid shipments, total	3.72	3.39	1.52	2.23	3	.69	1.89	1.51	7.84	4.08
87. General imports, total	3.52	3.02	1.32	2.29	3	.79	1.71	1.57	6.21	3.06
94. Index of construction contracts, total value	8.29	8.06	2.22	3.63	4	.96	1.67	1.47	7.26	2.93
90. Defense Department obligations, procurement	25.35	24.41	4.97	4.91	6	(1)	1.58	1.51	6.46	2.44
91. Defense Department obligations, total	15.57	15.00	2.88	5.21	5	.99	1.49	1.41	6.67	2.40
92. Military prime contract awards to U.S. business firms	29.19	29.33	6.21	4.72	6	(1)	1.61	1.50	5.38	2.76
96. Manufacturers' unfilled orders, durable goods industries	2.08	.64	1.97	.32	1	.32	5.96	2.14	16.70	5.96
INTERNATIONAL COMPARISONS OF INDUSTRIAL PRODUCTION										
121. OECD European countries, index of indus. prod.	1.32	1.03	.68	1.51	2	.82	2.91	1.95	17.11	5.28
122. United Kingdom, index of industrial prod	1.29	1.29	.49	2.63	3	.87	2.41	1.93	15.40	6.91
123. Canada, index of industrial production	.98	.88	.52	1.69	2	.98	3.44	2.27	15.50	6.13
125. West Germany, index of industrial production	1.61	1.15	.98	1.17	2	.64	2.46	1.62	17.78	4.08
126. France, index of industrial production	1.79	1.63	.65	2.51	3	.80	2.20	1.70	17.00	5.09
127. Italy, index of industrial production	1.70	1.61	.81	1.99	3	.63	2.27	1.67	22.00	9.50
128. Japan, index of industrial production	2.09	1.15	1.60	.72	1	.72	3.37	1.77	23.57	3.37

Quarterly series	$\overline{CI}$	$\overline{I}$	$\overline{C}$	$\overline{I}/\overline{C}$	QCD	$\overline{I}/\overline{C}$ for QCD span	Average duration of run			
							CI	I	C	QCD
NBER LEADING INDICATORS										
11. Newly approved capital appropriations, 602 manufacturing corporations	11.15	7.00	7.59	.92	1	.92	2.82	1.48	5.17	2.82
16. Corporate profits after taxes	7.66	4.54	5.35	.85	1	.85	2.83	1.65	3.64	2.83
18. Profits (before taxes) per dollar of sales, all manufacturing corporations	7.73	5.06	5.01	1.01	2	.51	2.83	1.42	5.67	3.85
22. Ratio, profits (after taxes) to income originating, corporate, all industries	5.78	3.73	4.17	.89	1	.89	2.89	1.49	5.50	2.89
NBER ROUGHLY COINCIDENT INDICATORS										
50. Gross national product in 1954 dollars	1.44	.65	1.13	.58	1	.58	3.19	1.50	5.10	3.19
49. Gross national product in current dollars	1.88	.69	1.59	.43	1	.43	4.25	1.42	6.38	4.25
57. Final sales (series 49 minus 21)	1.60	.82	1.45	.57	1	.57	4.64	1.46	7.29	4.64
NBER LAGGING INDICATORS										
61. Business expenditures on new plant and equipment, total	3.61	1.49	2.94	.51	1	.51	4.64	1.55	5.67	4.64
63. Index of labor cost per unit of output, total gross national product	1.02	.60	.84	.71	1	.71	2.68	1.31	7.29	2.68
67. Bank rates on short-term business loans, 19 cities	2.96	1.94	2.37	.82	1	.82	2.68	1.55	6.38	2.68
97. Backlog of capital appropriations, manufacturing	6.27	1.26	5.79	.22	1	.22	4.38	1.94	5.83	4.38

See footnotes on following page.

NOTES FOR APPENDIX C

[1]Not computed for series when MCD is "6" or more.

The following are brief definitions of the measures shown in this table. More complete explanations appear in Business Cycle Indicators, Geoffrey H. Moore, editor; National Bureau of Economic Research, Inc., vol. 1, ch. 17, "Electronic Computers and Business Indicators" by Julius Shiskin (Princeton University Press: 1961).

"$\overline{CI}$" is the average month-to-month (for quarterly series, quarter-to-quarter) percentage change, without regard to sign, in the seasonally adjusted series. "$\overline{I}$" is the same for the irregular component, which is obtained by dividing the cyclical component into the seasonally adjusted series. "$\overline{C}$" is the same for the cyclical component which is a smooth, flexible moving average.

"MCD" represents months for cyclical dominance. The average (without regard to sign) percentage changes in the irregular component and cyclical component are computed for 1-month spans (Jan.-Feb., Feb.-Mar., etc.), 2-month spans (Jan.-Mar., Feb.-Apr., etc.), up to 5-month spans. MCD is the shortest span for which the average change (without regard to sign) in the cyclical component is larger than the average change (without regard to sign) in the irregular component. Since changes are not computed for spans greater than 5 months, all series with an MCD greater than "5" are shown as "6". MCD is small for smooth series and large for erratic series. "QCD" represents quarters for cyclical dominance. It is the shortest span (in quarters) for which the average change (without regard to sign) in cyclical component is larger than the irregular average (without regard to sign) in component.

"$\overline{I}/\overline{C}$" is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series. For monthly series, it is shown for 1-month spans and for spans of the period of MCD. When MCD is "6", no $\overline{I}/\overline{C}$ ratio is shown for the MCD period. For quarterly series, $\overline{I}/\overline{C}$ is shown for 1-quarter spans and QCD spans.

"Average duration of run" is a measure of smoothness, and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between 2 months, it is assumed that the "no change" is a change in the same direction as the preceding change. The average duration of run is shown for the seasonally adjusted series CI, irregular component I, cyclical component C, and the MCD moving average. The MCD moving average is a moving average (with the number of terms equal to MCD) of the seasonally adjusted series. For quarterly series, average duration of run is the average number of consecutive quarterly changes in the same direction.

Appendix D.--CURRENT SEASONAL ADJUSTMENT FACTORS FOR BUSINESS CYCLE SERIES ADJUSTED BY BUREAU OF THE CENSUS OR NBER (MAY 1962 TO JUNE 1963)

Series	1962								1963					
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
4. Number of persons on temporary layoff, all industries	91.9	83.9	100.3	139.4	89.5	88.6	83.4	102.6	121.0	116.2	97.5	82.2	92.2	83.8
5. Av. weekly initial claims for unemploy. insurance, State	82.7	82.8	102.6	85.4	77.6	90.7	104.8	132.5	140.7	109.1	97.3	94.3	82.7	82.6
13. No. of new business incorp.[1]	106.8	101.6	98.6	98.3	83.9	101.3	86.8	94.3	120.0	91.0	104.2	106.8	106.7	96.8
14. Cur. liabilities of bus. failures	96.8	96.5	85.2	110.7	92.7	97.3	99.9	89.9	105.1	105.2	107.5	112.3	96.7	96.4
15. No. of bus. failures with liabilities of $100,000 and over	95.2	105.6	88.9	96.2	89.3	88.5	96.0	88.6	111.3	113.6	116.8	110.4	94.9	105.5
17. Price per unit of labor cost index	100.1	101.1	94.9	99.5	101.4	103.3	100.5	98.2	99.0	100.7	101.1	100.6	100.1	101.1
18. Profits (before taxes) per dol. of sales, all mfg. corp.[2]	106.0	...	...	97.4	...	...	98.8	...	...	97.9	...	...	106.1	...
30. Nonagri. placements, all indus.	108.9	110.9	103.6	116.5	120.7	113.1	94.7	82.0	82.3	77.4	90.2	99.8	109.0	110.9
55. Index of wholesale prices, exc. farm products and foods	100.0	99.9	99.9	99.8	99.9	99.8	99.9	100.0	100.2	100.1	100.1	100.2	100.0	99.9
62. Index of wage and salary cost per unit of output, total mfg.	99.7	98.7	105.2	100.2	98.4	96.5	99.2	102.0	101.9	99.6	99.3	99.6	99.8	98.7
81. Index of consumer prices	99.8	99.9	100.0	99.9	100.2	100.1	100.1	100.0	99.8	99.9	99.9	100.0	99.8	99.9
82. Federal cash payments to public	102.9	106.1	96.1	113.7	94.3	102.7	104.8	98.3	90.8	98.9	92.3	98.9	103.2	106.0
83. Federal cash receipts from pub.	118.5	150.3	49.3	112.6	124.2	46.2	102.3	105.1	70.0	113.1	129.6	79.0	119.3	149.5
90. Defense Department obligations--procurement	69.3	193.9	75.9	78.0	97.1	89.2	96.0	117.4	76.9	91.6	132.2	81.2	69.2	192.7
91. Defense Dept. oblig., total	85.2	150.0	98.2	92.2	100.5	96.6	90.9	103.2	89.2	88.0	110.8	94.0	85.4	149.7
92. Military prime contract awards to U.S. business firms	92.7	217.4	67.9	72.4	92.2	89.8	72.9	108.5	89.5	79.7	125.3	93.2	92.8	216.4
128. Japan, index of industrial production	99.9	100.4	99.3	96.6	98.6	99.8	99.6	103.2	94.3	100.3	109.1	99.4	100.2	100.4

These data are not published by the source agency in seasonally adjusted form. Seasonal adjustments were made by the Bureau of the Census or the National Bureau of Economic Research, Inc. Seasonally adjusted data prepared by the source agency will be substituted whenever they are published.

[1]Factors are a combination of seasonal and trading day factors.

[2]Quarterly series; figures are placed in middle month of quarter.

Appendix E.--SUMMARY DESCRIPTION OF X-9 AND X-10 VERSIONS OF THE CENSUS METHOD II SEASONAL ADJUSTMENT PROGRAM

Introduction

Two versions of the Census Method II seasonal adjustment program have been used to compute the new seasonal factors shown in appendix D. These versions, designated X-9 and X-10 (Experimental Programs 9 and 10), replaced, in February 1962, the method described in "Electronic Computers and Business Indicators," NBER Occasional Paper No. 57, and the X-3 version described in "Tests and Revisions of Bureau of the Census Methods of Seasonal Adjustments," Census Technical Paper No. 5. (The X-3 program had been used for about 2 years as the standard program prior to February 1962.) The X-9 program incorporates several changes from the original method and is recommended for general use for a wide range of series. The X-10 program incorporates the changes in X-9 plus a major departure from earlier versions of Method II. This major change in X-10 is the selection of the seasonal factor curve for each month on the basis of an estimate of the size of the irregular component for that month relative to the amount of moving seasonality present in an estimate of the seasonal factor. The selection of curves available for each month includes a 3-, 3x3-, 3x9-, and 3x15-term moving average and a horizontal straight line. This is in contrast to the original and X-9 methods of treating all months the same, either with the use of a 3x3 or 3x5 moving average.

These programs are available for several different electronic computers. Detailed specifications and additional information can be obtained by writing to the Office of the Chief Economic Statistician, Bureau of the Census, Washington 25, D.C.

Description of the X-9 Program

The changes from the original program included in X-9 are listed below:

(1) In the original version of Method II described in Occasional Paper No. 57 and X-3, "the six missing SI ratios at the beginning of the series are supplied by extending the first available ratios for the corresponding months back to the initial month of the series. The six missing ratios at the end are supplied similarly" (Occasional Paper No. 57, step 6d). In the new programs the missing values are not supplied until after the seasonal factors have been computed. They are then supplied by extending (i.e., repeating) the first available seasonal factor back to the initial month and similarly for the last available factor at the end of the series. The effect of this change is to reduce the weight given the end SI ratios in the computation of the preliminary seasonal factors.

(2) Extremes are replaced by averaging the two preceding and two following ratios, instead of averaging the extreme with the preceding and following values. This revision completely eliminates SI ratios defined as extreme from the computations of the seasonal factors (included in X-3).

(3) The 5-term moving average, used in computing the sigma control limits, is extended by repeating the last moving-average value instead of repeating the average of the last two ratios and taking the moving average. This revision improves the prospects that extreme values at the end of series will be identified as such.

(4) The method of centering or forcing the seasonal factors to add to 1200 for the calendar year has been replaced with a moving centering device which makes the seasonal factors add as closely as possible to 1200 for any 12-month period. The centering is done after the computation of a 3- or 5-term moving average for each month. Following the centering, a 3-term moving average is applied to each month. In the original version and X-3, the ratios were centered before moving averages were computed for each month.

(5) Less weight is given to the ratios for end years in the computation of the seasonals. To extend the 3x5 moving average, the end four ratios instead of the end two are averaged to obtain additional SI ratios (included in X-3). To extend the 3x3 moving average, the end three ratios, instead of the end two, are averaged to obtain additional SI ratios.

Description of the X-10 Program

The X-10 program includes the first four changes listed above for the X-9. In addition, for each month, the curve to measure the seasonal factor is selected on the basis of an estimate of the size of the irregular component relative to the amount of change in the seasonal factor. This estimate of the relative amount of irregular to changing seasonality is designated the moving seasonality ratio. Moving seasonality ratios are calculated as follows: First, a 7-term moving average of the SI ratios is computed for each month and taken as an estimate of the seasonal factor; this 7-term moving average is divided into the SI ratios and the resultant series is taken as an estimate of the irregular series. Next, the average year-to-year percent change without regard to sign is computed in the 7-term moving average and in the irregular series. Then, the average change in the estimate of the irregular to the average change in the estimate of the seasonal is calculated. This is the moving seasonality ratio. A moving average is then chosen for each month on the basis of this ratio as is shown in the table below. In constructing this table, the parameters have been chosen to select a curve which reduces the year-to-year percentage change in the residual irregular remaining in the estimate of the seasonal to about one-half the year-to-year percentage change in the seasonal.[1]

Moving seasonality ratio	Average of SI ratios for seasonal factor curve
0 to 1.49	3-term moving average
1.50 to 2.49	3x3-term moving average
2.50 to 4.49	3x5-term moving average
4.50 to 6.49	3x9-term moving average
6.50 to 8.49	3x15-term moving average
8.50 and over	All ratios (stable)

In the actual computations, the moving seasonality ratio selects from 1-, 3-, 5-, 9-, 15-term moving average and an average of all the ratios. After a selection is made and the appropriate moving average is calculated, a moving centering device is employed to make each 12-month period add as close to 1200 as possible. Finally, further smoothing of the data for each month is carried out by a 3-term moving average.

It has been possible thus far to conduct only a limited amount of testing of the X-10 program and for this reason especially careful review of such adjustments is required. In some cases the original Method II or other approaches will give similar or perhaps better results. The Bureau of the Census is continuing research intended to improve seasonal adjustment techniques and will provide new variants of the general method as is warranted from the evidence. The results of our experimental work will be reported in detail as soon as feasible.

[1]The variable seasonal factor technique was developed by Dr. Stephen N. Marris, Head of the Statistics Division of the Organisation for Economic Cooperation and Development, and is described in Seasonal Adjustment on Electronic Computers, pp. 257-309 (OECD, Paris, 1961. Copies can be obtained from the regional office: Organisation for European Economic Cooperation, 1346 Connecticut Avenue, N.W., Washington, D.C., price $9.50.) The Bureau of the Census and the OECD have cooperated in further theoretical and empirical development of this technique since completion of the OECD paper, and the X-10 program differs slightly from that in the original description.

Appendix F.--PERCENT CHANGE FOR SELECTED SERIES OVER CONTRACTION AND EXPANSION PERIODS OF BUSINESS CYCLES: 1920 TO 1961

Contractions: Reference peak to reference trough	Percent change: Reference peak to reference trough							43. Unemployment rate		
	41. Employees in nonagri. establishments	47. Index of industrial production	50. GNP in 1954 dollars (Q)[1]	49. GNP in current dollars (Q)[1]	51. Bank debits outside NYC	52. Personal income	54. Retail sales	Change in rate, peak to trough	Rate at peak	Rate at trough
Jan. 1920-July 1921	NA	-31.6	NA	-19.7	-22.5	-21.9	-4.3	[2]+7.9	[2]4.0	[2]11.9
May 1923-July 1924	NA	-18.0	-0.3	-2.3	-3.1	0.0	-1.9	[2]+2.3	[2]3.2	[2]5.5
Oct. 1926-Nov. 1927	NA	-5.9	+2.3	+0.4	+8.7	+0.9	0.0	[2]+2.2	[2]1.9	[2]4.1
Aug. 1929-Mar. 1933	-31.6	-51.8	-28.0	-49.6	-61.9	-50.8	-43.5	+25.4	[3]0.0	25.4
May 1937-June 1938	-10.4	-31.7	-8.9	-11.9	-16.5	-10.9	-14.1	+8.8	11.2	20.0
Feb. 1945-Oct. 1945[4]	-7.8	-31.4	NA	-10.9	-1.0	-4.0	+8.7	+2.2	1.1	3.3
Nov 1948-Oct. 1949	-5.1	-8.5	-1.4	-3.3	-4.0	-4.3	-0.3	+3.6	[3]4.0	7.6
July 1953-Aug 1954[5]	-3.4	-9.1	-3.0	-1.8	+1.6	-0.2	-0.8	+3.4	2.6	6.0
July 1957-Apr. 1958	-4.1	-14.1	-3.8	-2.5	-3.1	-0.3	-3.4	+3.2	4.2	7.4
May 1960-Feb. 1961	-2.0	-5.9	-1.9	-0.8	+2.4	+0.6	-3.5	+1.8	5.2	7.0
Median:[6]										
All contractions	-5.7	-16.0	-2.4	-2.9	-3.1	-2.2	-2.6	+3.3	3.6	7.2
Excluding postwar contractions	-6.5	-16.0	-2.6	-2.9	-3.6	-2.3	-3.4	+3.4	4.0	7.5
4 contractions since 1948	-3.8	-8.8	-2.4	-2.2	-0.8	-0.2	-2.1	+3.3	4.1	7.2

Expansions: Reference trough to reference peak	Percent change: Reference trough to reference peak							43. Unemployment rate		
	41 Employees in nonagri. establishments	47. Index of industrial production	50. GNP in 1954 dollars (Q)[1]	49 GNP in current dollars (Q)[1]	51. Bank debits outside NYC	52. Personal income	54. Retail sales	Change in rate, trough to peak	Rate at trough	Rate at peak
July 1921-May 1923	NA	+64.2	NA	+25.1	+23.5	+29.6	+15.7	[2]-8.7	[2]11.9	[2]3.2
July 1924-Oct. 1926	NA	+30.4	+12.4	+14.7	+18.9	+13.2	+9.9	[2]-3.6	[2]5.5	[2]1.9
Nov. 1927-Aug. 1929	NA	+24.1	+12.6	+13.3	+20.4	+12.2	+3.6	[2]-0.9	[2]4.1	[2 3]3.2
Mar. 1933-May 1937	+40.2	+119.9	+42.1	+73.9	+78.4	+76.3	+63.1	-14.2	25.4	11.2
June 1938-Feb. 1945[4]	+45.9	+183.3	NA	+169.6	+131.7	+157.3	+103.3	-18.9	20.0	1.1
Oct. 1945-Nov. 1948	+17.2	+21.9	+3.3	+34.9	+51.5	+28.5	+62.0	+0.3	3.3	[3]3.6
Oct. 1949-July 1953[5]	+17.7	+50.0	+27.4	+43.5	+49.3	+41.5	+26.3	-5.0	7.6	2.6
Aug. 1954-July 1957	+8.9	+19.7	+13.5	+23.8	+28.6	+22.8	+20.4	-1.8	6.0	4.2
Apr. 1958-May 1960	+7.2	+25.2	+11.9	+15.5	+21.2	+13.4	+13.5	-2.2	7.4	5.2
Median:[6]										
All expansions	+17.4	+35.2	+12.8	+27.9	+33.8	+27.0	+20.8	-3.6	7.0	3.3
Excluding wartime expansions	+13.0	+26.6	+12.5	+21.5	+24.4	+21.6	+16.5	-2.5	6.3	3.7
4 expansions since 1945	+13.0	+23.5	+12.7	+29.4	+39.0	+25.6	+23.4	-2.0	6.7	3.9

For series with a "months for cyclical dominance" (MCD) of "1" or "2" (series 41, 43, 47, and 52), the figure for the reference peak (trough) month is used as the base. For series with an MCD of "3" or more (series 51 and 54), the average of the 3 months centered on the reference peak (trough) month is used as the base. The base for quarterly series (series 49 and 50) is the reference peak (trough) quarter. See also MCD footnote to appendix C.

[1]The most recent quarterly reference dates are as follows: 2d quarter 1958 (trough); 2d quarter 1960 (peak); and 1st quarter 1961 (trough). For earlier dates, see Business Cycle Indicators (NBER), vol. 1, p. 670.

[2]Based on average for the calendar year.

[3]Differs from figure for same date in expansion (contraction) part of table because of change in series used.

[4]World War II contraction or expansion period.

[5]Korean War contraction or expansion period.

[6]The median is an average of the middle 2 or 3 items.

Source: National Bureau of Economic Research, Inc.

COMPLETE TITLES AND SOURCES OF PRINCIPAL BUSINESS CYCLE SERIES AND DIFFUSION INDEXES

The numbers assigned to the series are for identification purposes only and do not necessarily reflect series relationships or order. "M" indicates monthly series and "Q" indicates quarterly series. Data apply to the whole period except for series designated by "EOM" or "EOQ". "EOM" indicates that data are for the end of the month and "EOQ" indicates that data are for the end of the quarter. The general classification of series follows the approach of the National Bureau of Economic Research. The series preceded by an asterisk (*) were included in the 1960 NBER list of 26 indicators.

30 NBER LEADING INDICATORS

*1. **Average workweek of production workers, manufacturing (M).**--Department of Labor, Bureau of Labor Statistics

*2. **Accession rate, manufacturing (M).**--Department of Labor, Bureau of Labor Statistics

*3. **Layoff rate, manufacturing (M).**--Department of Labor, Bureau of Labor Statistics

4. **Number of persons on temporary layoff, all industries (M).**--Department of Labor, Bureau of Labor Statistics; seasonal adjustment by Bureau of the Census

5. **Average weekly initial claims for unemployment insurance, State programs (M).**--Department of Labor, Bureau of Employment Security; seasonal adjustment by Bureau of the Census

*6. **Value of manufacturers' new orders, durable goods industries (M).**--Department of Commerce, Bureau of the Census and Office of Business Economics

*7. **New private nonfarm dwelling units started (M).**--Department of Commerce, Bureau of the Census

*9. **Construction contracts awarded for commercial and industrial buildings, floor space (M).**--F. W. Dodge Corporation; seasonal adjustment by Bureau of the Census and National Bureau of Economic Research, Inc.

10. **Contracts and orders for plant and equipment (M).**--Department of Commerce, Office of Business Economics, and F. W. Dodge Corporation; seasonal adjustment by Bureau of the Census and National Bureau of Economic Research, Inc.

11. **Newly approved capital appropriations, 602 manufacturing corporations (Q).**--National Industrial Conference Board; component industries are seasonally adjusted by National Bureau of Economic Research, Inc., and added to obtain seasonally adjusted total.

*12. **Net change in the business population, operating businesses (EOQ).**--Department of Commerce, Office of Business Economics

13. **Number of new business incorporations (M).**--Dun and Bradstreet, Inc.; seasonal adjustment by Bureau of the Census and National Bureau of Economic Research, Inc.

*14. **Current liabilities of business failures (M).**--Dun and Bradstreet, Inc.; seasonal adjustment by Bureau of the Census and National Bureau of Economic Research, Inc.

15. **Number of business failures with liabilities of $100,000 and over (M).**--Dun and Bradstreet, Inc.; seasonal adjustment by Bureau of the Census and National Bureau of Economic Research, Inc.

*16. **Corporate profits after taxes (Q).**--Department of Commerce, Office of Business Economics

17. **Price per unit of labor cost index (ratio of wholesale prices of manufactured goods index to wage and salary cost per unit of output index) (M).**--Department of Commerce, Office of Business Economics; Department of Labor, Bureau of Labor Statistics; and Board of Governors of the Federal Reserve System; seasonal adjustment by Bureau of the Census

18. **Profits (before taxes) per dollar of sales, all manufacturing corporations (Q).**--Federal Trade Commission and Securities and Exchange Commission; seasonal adjustment by Bureau of the Census

*19. **Index of stock prices, 500 common stocks (M).**--Standard and Poor's Corporation; no seasonal adjustment

20. **Change in book value of manufacturers' inventories, purchased material (EOM).**--Department of Commerce, Office of Business Economics

*21. **Change in business inventories, farm and nonfarm, after valuation adjustment (GNP component) (Q).**--Department of Commerce, Office of Business Economics

22. **Ratio of profits (after taxes) to income originating, corporate, all industries (Q).**--Department of Commerce, Office of Business Economics

*23. **Index of industrial materials prices (M).**--Department of Labor, Bureau of Labor Statistics; no seasonal adjustment

24. **Value of manufacturers' new orders, machinery and equipment industries (M).**--Department of Commerce, Bureau of the Census, from special tabulations of the Office of Business Economics

25. **Change in manufacturers' unfilled orders, durable goods industries (EOM).**--Department of Commerce, Office of Business Economics

26. **Buying policy--production materials, percent reporting commitments 60 days or longer (M).**--National Association of Purchasing Agents; no seasonal adjustment

27. **Buying policy--capital expenditures, percent reporting commitments 6 months or longer (M).**--National Association of Purchasing Agents; no seasonal adjustment

29. **Index of new private housing units authorized by local building permits (M).**--Department of Commerce, Bureau of the Census

30. **Nonagricultural placements, all industries (M).**--Department of Labor, Bureau of Employment Security; seasonal adjustment by Bureau of the Census

31. **Change in book value of manufacturing and trade inventories, total (EOM).**--Department of Commerce, Office of Business Economics

32. **Vendor performance, percent reporting slower deliveries (M).**--Chicago Purchasing Agents Association; no seasonal adjustment

15 NBER ROUGHLY COINCIDENT INDICATORS

40. **Unemployment rate, married males, spouse present (M).**--Department of Labor, Bureau of Labor Statistics

*41. **Number of employees in nonagricultural establishments (M).**--Department of Labor, Bureau of Labor Statistics

42. **Total nonagricultural employment, labor force survey (M).**--Department of Labor, Bureau of Labor Statistics, and Department of Commerce, Bureau of the Census

*43. **Unemployment rate, total (M).**--Department of Labor, Bureau of Labor Statistics, and Department of Commerce, Bureau of the Census

45. **Average weekly insured unemployment rate, State programs (M).**--Department of Labor, Bureau of Employment Security

46. **Index of help-wanted advertising in newspapers (M).**--National Industrial Conference Board and B. K. Davis and Bro. Advertising Service

*47. **Index of industrial production (M).**--Board of Governors of the Federal Reserve System

*49. **Gross national product in current dollars (Q).**--Department of Commerce, Office of Business Economics

*50. **Gross national product in 1954 dollars (Q).**--Department of Commerce, Office of Business Economics

*51. **Bank debits outside New York City, 343 centers (M).**--Board of Governors of the Federal Reserve System

*52. **Personal income (M).**--Department of Commerce, Office of Business Economics

53. **Labor income in mining, manufacturing, and construction (M).**--Department of Commerce, Office of Business Economics

*54. **Sales of retail stores (M).**--Department of Commerce, Bureau of the Census and Office of Business Economics

*55. **Index of wholesale prices, all commodities, other than farm products and foods (M).**--Department of Labor, Bureau of Labor Statistics; seasonal adjustment by Bureau of the Census

57. **Final sales (series 49 minus series 21) (Q).**--Department of Commerce, Office of Business Economics

7 NBER LAGGING INDICATORS

*61. **Business expenditures on new plant and equipment, total (Q).**--Department of Commerce, Office of Business Economics; and the Securities and Exchange Commission

*62. **Index of wage and salary cost per unit of output, total manufacturing (ratio of index of wage and salary disbursements in manufacturing to index of industrial production, manufacturing) (M).**--Department of Commerce, Office of Business Economics, and the Board of Governors of the Federal Reserve System; seasonal adjustment by Bureau of the Census

63. **Index of labor cost per unit of output, total gross national product (ratio of compensation of employees to GNP in 1954 dollars) (Q).**--Department of Commerce, Office of Business Economics

*64. **Book value of manufacturers' inventories, all manufacturing industries (EOM).**--Department of Commerce, Office of Business Economics

65. **Book value of manufacturers' inventories of finished goods, all manufacturing industries (EOM).**--Department of Commerce, Office of Business Economics

*66. **Consumer installment debt, (EOM).**--Board of Governors of the Federal Reserve System. FRS seasonally adjusted net change added to seasonally adjusted figure for previous month to obtain current figure (NBER seasonally adjusted data through January 1955 used as base)

*67. **Bank rates on short-term business loans, 19 cities (Q).**--Board of Governors of the Federal Reserve System; no seasonal adjustment

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COMPLETE TITLES AND SOURCES OF PRINCIPAL BUSINESS CYCLE SERIES AND DIFFUSION INDEXES--Con.

18 OTHER U.S. SERIES WITH BUSINESS CYCLE SIGNIFICANCE

81. **Index of consumer prices (M).**--Department of Labor, Bureau of Labor Statistics; seasonal adjustment by Bureau of the Census
82. **Federal cash payments to the public (M).**--Treasury Department, Bureau of Accounts, and Executive Office of the President, Bureau of the Budget. Monthly seasonal adjustments by the Bureau of the Census do not equal quarterly totals of the official seasonally adjusted series because of differences in the method of seasonal adjustment
83. **Federal cash receipts from the public (M).**--Treasury Department, Bureau of Accounts, and Executive Office of the President, Bureau of the Budget. Monthly seasonal adjustments by the Bureau of the Census do not equal quarterly totals of the official seasonally adjusted series because of differences in the method of seasonal adjustment
84. **Federal cash surplus or deficit (M).**--Treasury Department, Bureau of Accounts, and Executive Office of the President, Bureau of the Budget. Monthly seasonal adjustments by the Bureau of the Census do not equal quarterly totals of the official seasonally adjusted series because of differences in the method of seasonal adjustment
85. **Percent change in total U.S. money supply (demand deposits plus currency) (M).**--Board of Governors of the Federal Reserve System
86. **Exports, excluding military aid shipments, total (M).**--Department of Commerce, Bureau of the Census
87. **General imports, total (M).**--Department of Commerce, Bureau of the Census
88. **Merchandise trade balance (series 86 minus series 87) (M).**--Department of Commerce, Bureau of the Census
89. **Excess of receipts or payments in U.S. balance of payments (Q).**--Department of Commerce, Office of Business Economics
90. **Defense Department obligations, procurement (M).**--Department of Defense, Fiscal Analysis Division; seasonal adjustment by Bureau of the Census
91. **Defense Department obligations, total (M).**--Department of Defense, Fiscal Analysis Division; seasonal adjustment by Bureau of the Census
92. **Military prime contract awards, U.S. business firms (M).**--Department of Defense, Directorate for Statistical Services; seasonal adjustment by Bureau of the Census
93. **Free reserves (member bank excess reserves minus borrowings) (M).**--Board of Governors of the Federal Reserve System; no seasonal adjustment
94. **Index of construction contracts, total value (M).**--F. W. Dodge Corporation
95. **Surplus or deficit, Federal income and product account (Q).**--Department of Commerce, Office of Business Economics
96. **Manufacturers' unfilled orders, durable goods industries (EOM).**--Department of Commerce, Office of Business Economics
97. **Backlog of capital appropriations, manufacturing (Q).**--National Industrial Conference Board; component industries are seasonally adjusted by National Bureau of Economic Research, Inc., and added to obtain seasonally adjusted total.
98. **Percent change in total U.S. money supply (demand deposits and currency) and commercial bank time deposits (M).**--Board of Governors of the Federal Reserve System

7 INTERNATIONAL COMPARISONS OF INDUSTRIAL PRODUCTION

121. **Organization for Economic Cooperation and Development, European Countries, index of industrial production (M).**--Organization for Economic Cooperation and Development
122. **United Kingdom, index of industrial production (M).**--Organization for Economic Cooperation and Development
123. **Canada, index of industrial production (M).**--Dominion Bureau of Statistics, Ottawa
125. **West Germany, index of industrial production (M).**--Organization for Economic Cooperation and Development
126. **France, index of industrial production (M).**--Organization for Economic Cooperation and Development
127. **Italy, index of industrial production (M).**--Organization for Economic Cooperation and Development
128. **Japan, index of industrial production (M).**--The Bank of Japan, Statistics Department; seasonal adjustment by Bureau of the Census

... **United States, index of industrial production (M).**--See series 47.

DIFFUSION INDEXES

The "D" preceding a number indicates a diffusion index. Diffusion indexes and corresponding business cycle series bear the same number and are obtained from the same sources. See sources above for D1, D5, D6, D11, D19, D23, D41, D47, D54, and D61. Sources for other diffusion indexes are as follows:

D33. **Profits, Chicago PAA (M).**--Purchasing Agents Association of Chicago; no seasonal adjustment
D34. **Profits, Manufacturing, FNCB (Q).**--First National City Bank of New York; no seasonal adjustment of series components. Diffusion indexes are seasonally adjusted by National Bureau of Economic Research, Inc.
D35. **Net sales, total manufactures (Q).**--Dun and Bradstreet, Inc., no seasonal adjustment
D36. **New orders, durable manufactures (Q).**--Dun and Bradstreet, Inc.; no seasonal adjustment
D48. **Freight carloadings (Q).**--Association of American Railroads; no seasonal adjustment
D58. **Wholesale prices, manufacturing (M).**--Department of Labor, Bureau of Labor Statistics; no seasonal adjustment of series components. Diffusion indexes are seasonally adjusted by National Bureau of Economic Research, Inc.