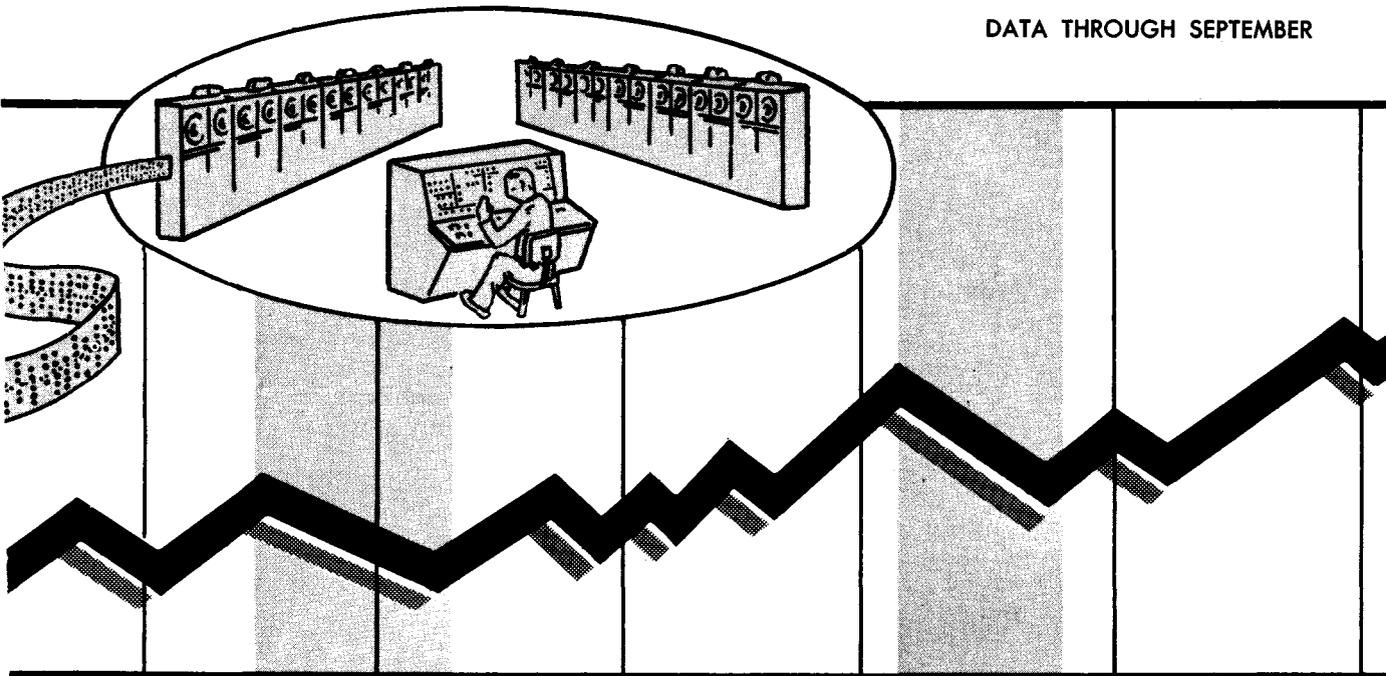


OCTOBER 1963

# Business Cycle Developments

DATA THROUGH SEPTEMBER



U.S. DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

# Business Cycle Developments

OCTOBER 1963

DATA THROUGH SEPTEMBER

Series ES1 No. 63-10

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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, D.C. 20233.

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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. Cyclical comparisons shown in tables 7, 8, and 9 relate changes in the current expansion to changes over periods of like duration during previous expansions. In some cases the intervals covered by the current expansion are longer than those of previous expansions. In tables 7 and 8 on reference cycle comparisons, the percentage changes continue to be for the same period as covered by the current expansion although, for some periods, a contraction was underway. In table 9 on specific cycle comparisons, the percentage changes cover only the period of the specific expansion; i.e., to the specific peak level. For some expansions this interval is shorter than that of the current expansion.
2. Series 30, Nonagricultural Placements, All Industries, has been revised because of the introduction of a trading-day adjustment.
3. The summary measures shown for individual monthly series in appendix C have been recomputed for a more current period. The new computations change the period of the moving averages shown in chart 1 for series 9, 82, 83, 84, and 91.
4. Appendix G shows historical data for series 30, 53, and 54.

The November issue of Business Cycle Developments is scheduled for release on November 21, 1963.

## BACKGROUND MATERIALS

To aid users of Business Cycle Developments, a paper "Business Cycle Indicators—The Known and the Unknown" by Julius Shiskin was included as appendix H of the September 1963 issue. This paper explains what is known about business cycle indicators, the problems of using them, and the research needed to improve their usefulness. It was presented at the 34th session of the International Statistical Institute in Ottawa, Canada, on August 24, 1963.

A limited number of copies of the September issue of Business Cycle Developments are available, free of charge. If you would like copies, write to the Chief Economic Statistician, Bureau of the Census, Washington, D.C., 20233.

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# 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 labor 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 and method of computation).

MCD is, on average, 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 business failures and Federal cash payments, will show their cyclical movements about as clearly as the seasonally adjusted data for such smooth series as industrial production and

personal income.<sup>1</sup> 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 years beginning with 1960.

Because of advance reporting and preliminary seasonal factors, the MCD's for current data are usually larger than those computed from historical series and shown in appendix C.

## 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.<sup>2</sup> 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, comparisons are made over

<sup>1</sup>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).

<sup>2</sup>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.

1-month intervals (January-February, February-March, etc.) and generally for either 3- or 5-month intervals depending upon the irregularity of the series. Quarterly series are shown at 1-quarter or 4-quarter intervals. The indexes based on 1-month intervals are more "current" but they are also more irregular than the 3- or 5-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 1-month and either 3- or 5-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); and 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.

Directions of change for each index component are shown for consecutive months and, depending upon the irregularity of the series, for either 3- or 5-month spans.

## 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 comparison 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 labor 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.

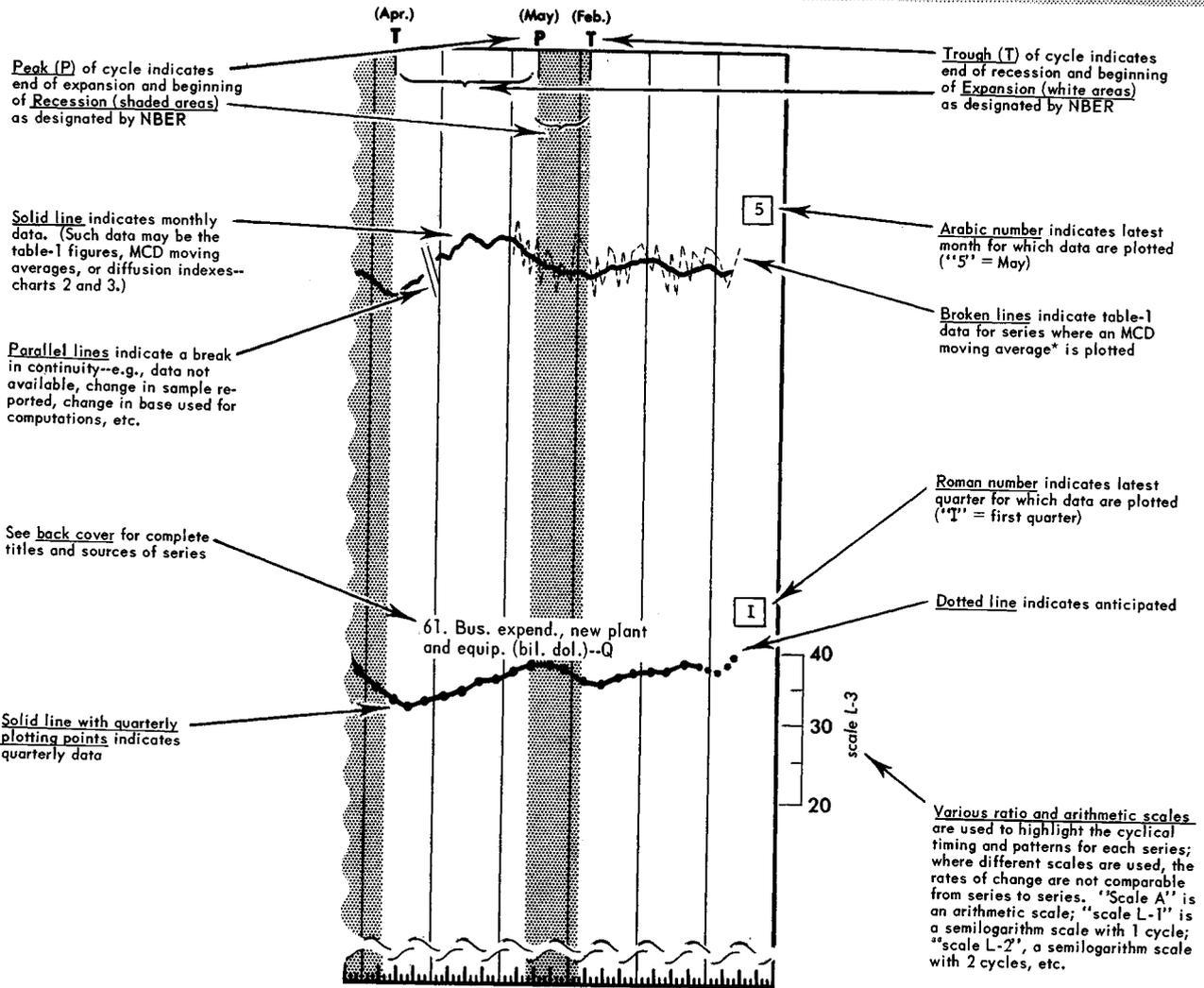
Historical Time Series (charts 1, 2, and 3).—These charts show the cyclical fluctuations of each series against the background of expansions and recessions in general business activity from 1948 to the current month. Shaded areas on the charts indicate periods of business cycle recession between business 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



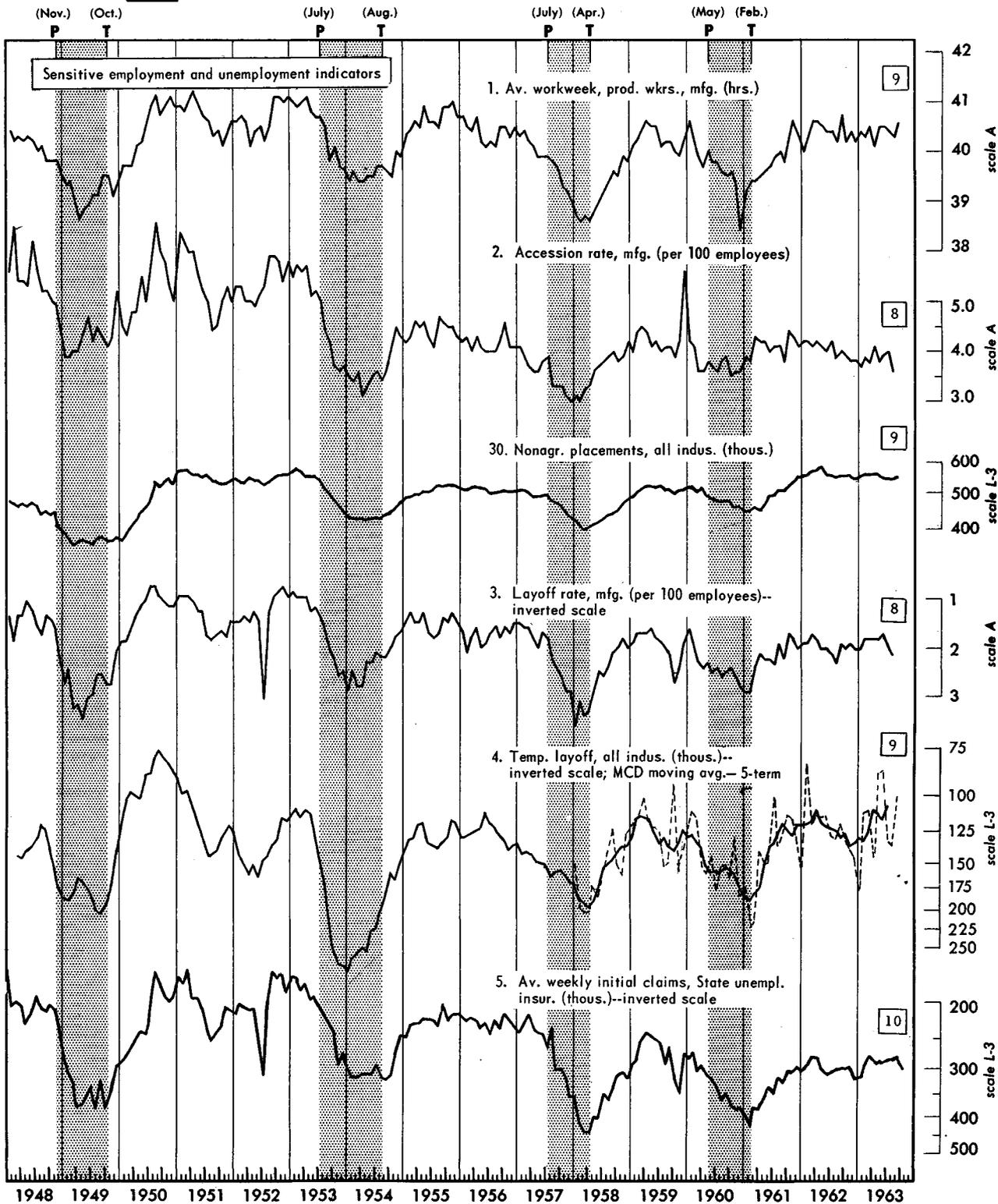
\*Certain irregular series are shown in terms of their MCD moving averages. These series are noted. Such averages are plotted 2 months behind actual data for MCD 5-term moving averages and 2½ months behind, for MCD 6-term moving averages. See text for description of MCD moving averages.

**CHART 1**

**BUSINESS CYCLE SERIES: 1948 TO PRESENT**

**A**

**NBER Leading Indicators**



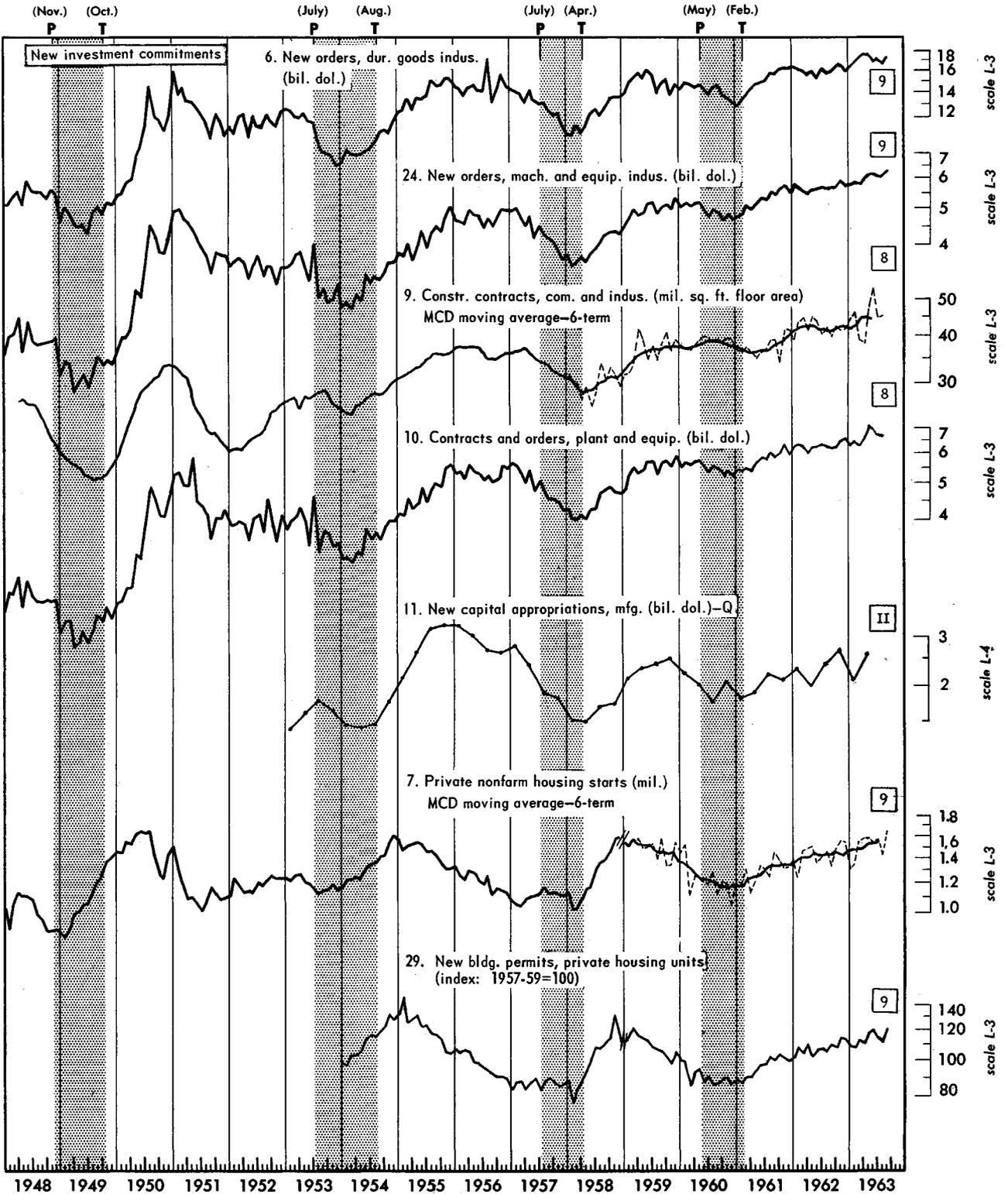
See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

A

NBER Leading Indicators—Con.



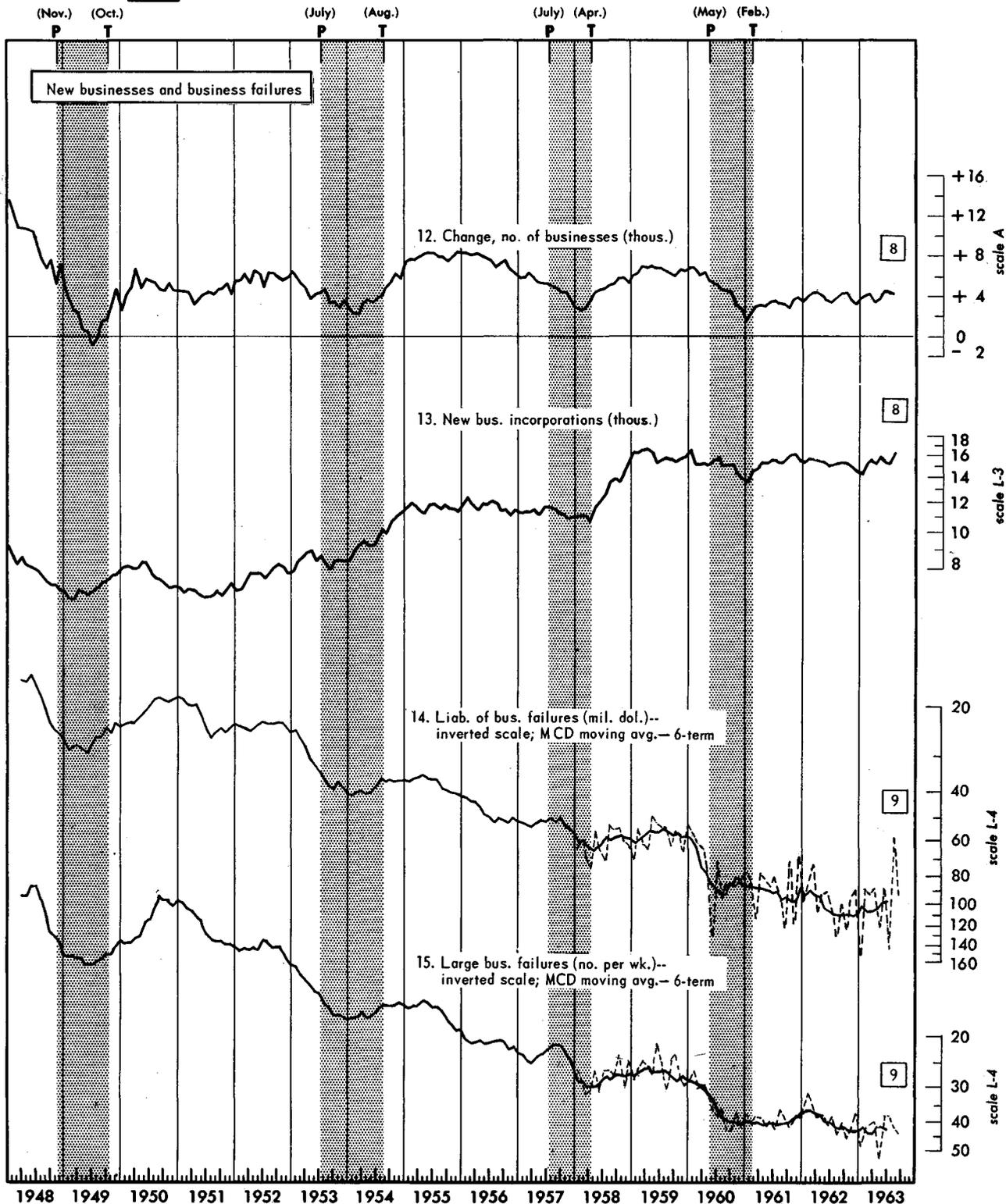
See "How to Read Charts 1, 2, and 3," page 5.

**CHART 1**

**BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.**

**A**

**NBER Leading Indicators—Con.**



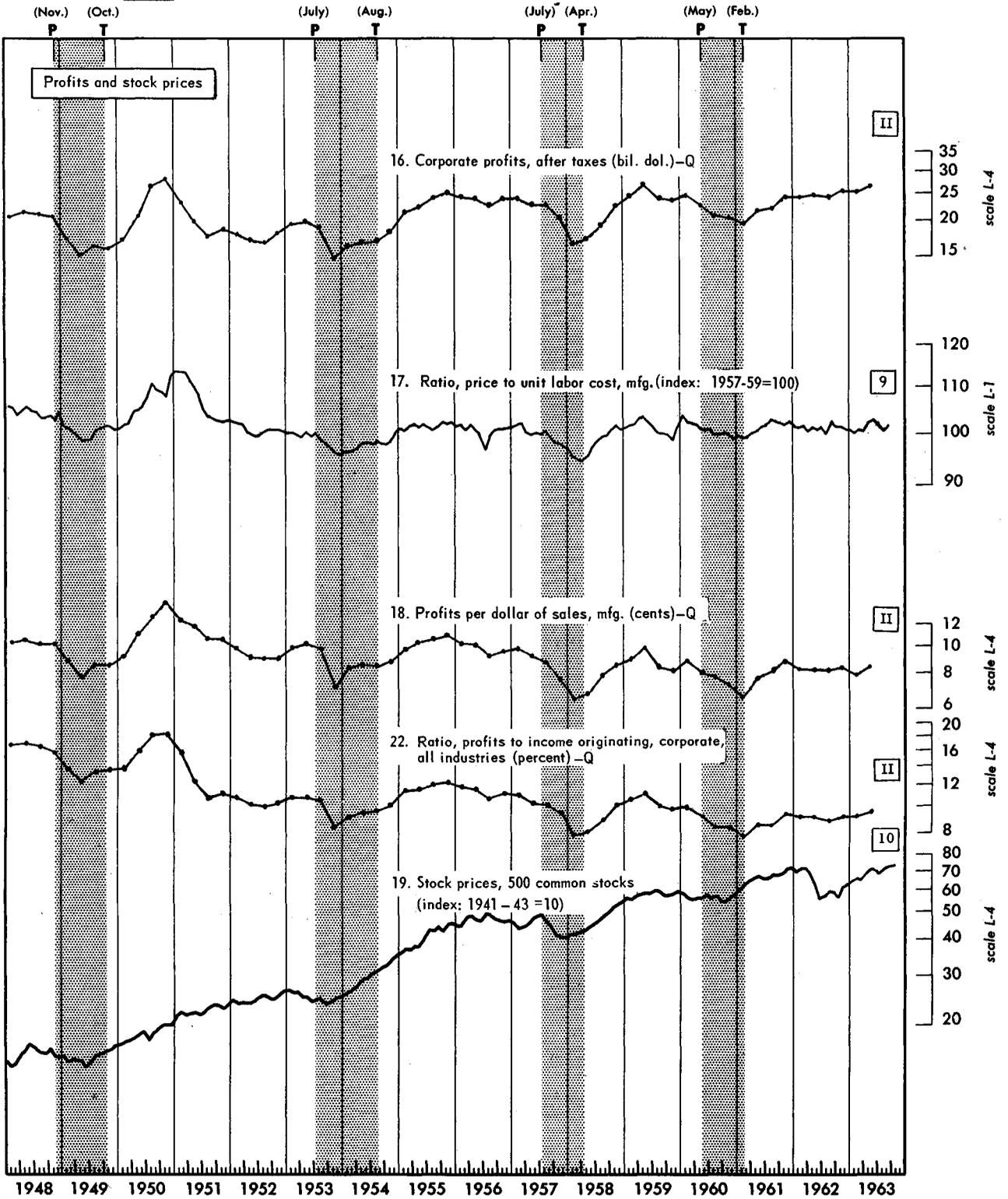
See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

A

NBER Leading Indicators—Con.



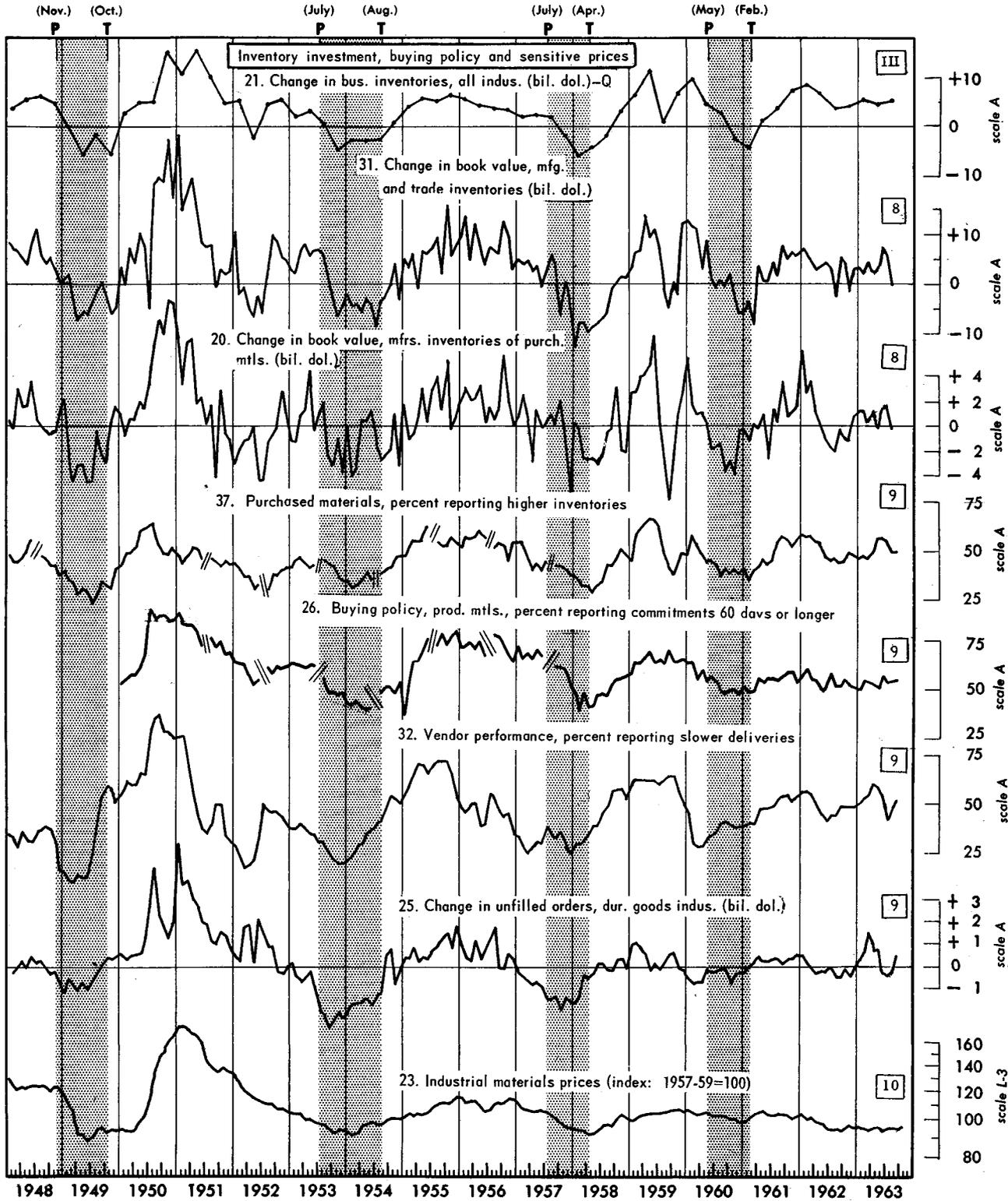
See "How to Read Charts 1, 2, and 3," page 5.

**CHART 1**

**BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.**

**A**

**NBER Leading Indicators—Con.**



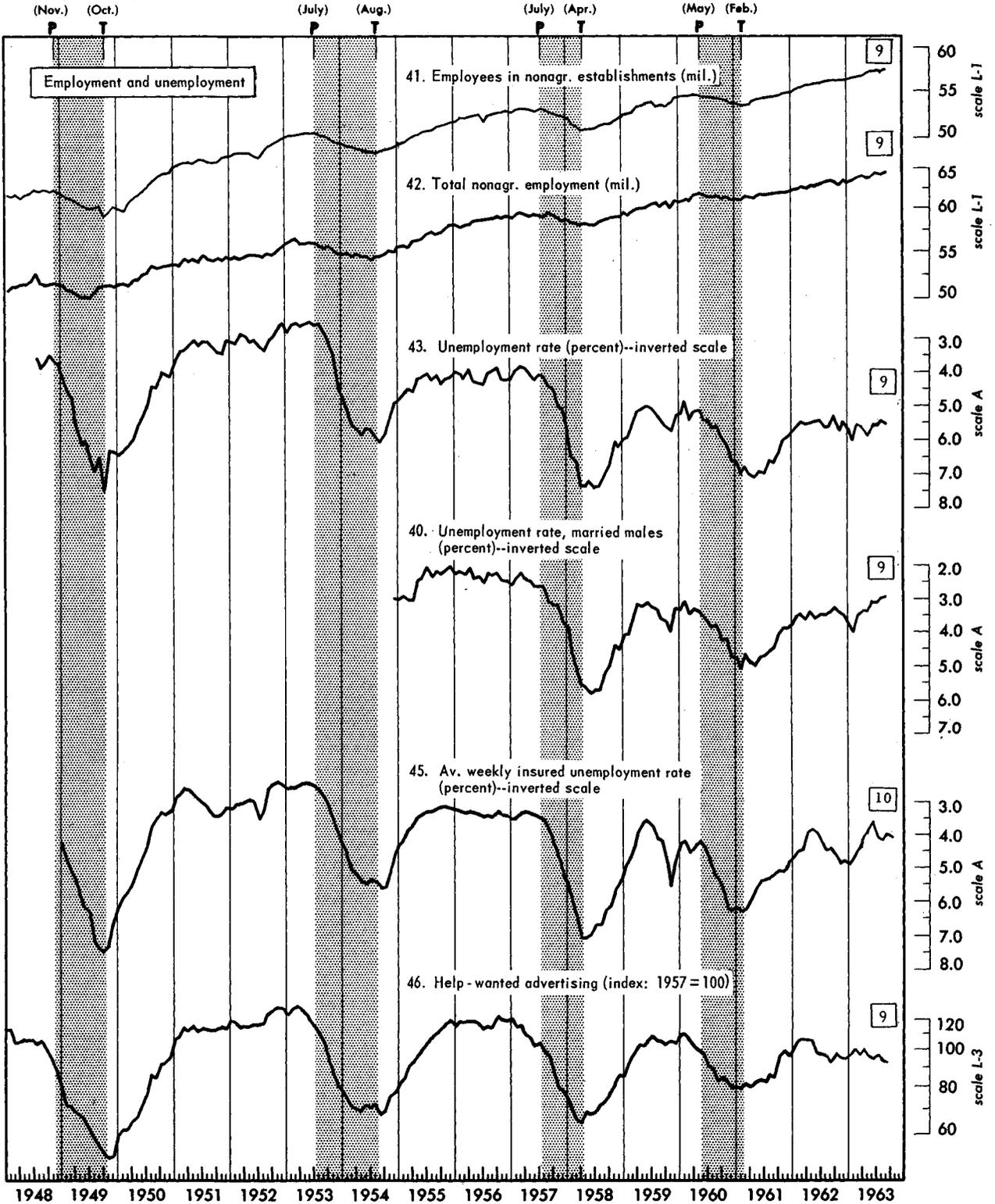
See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

B

NBER Roughly Coincident Indicators



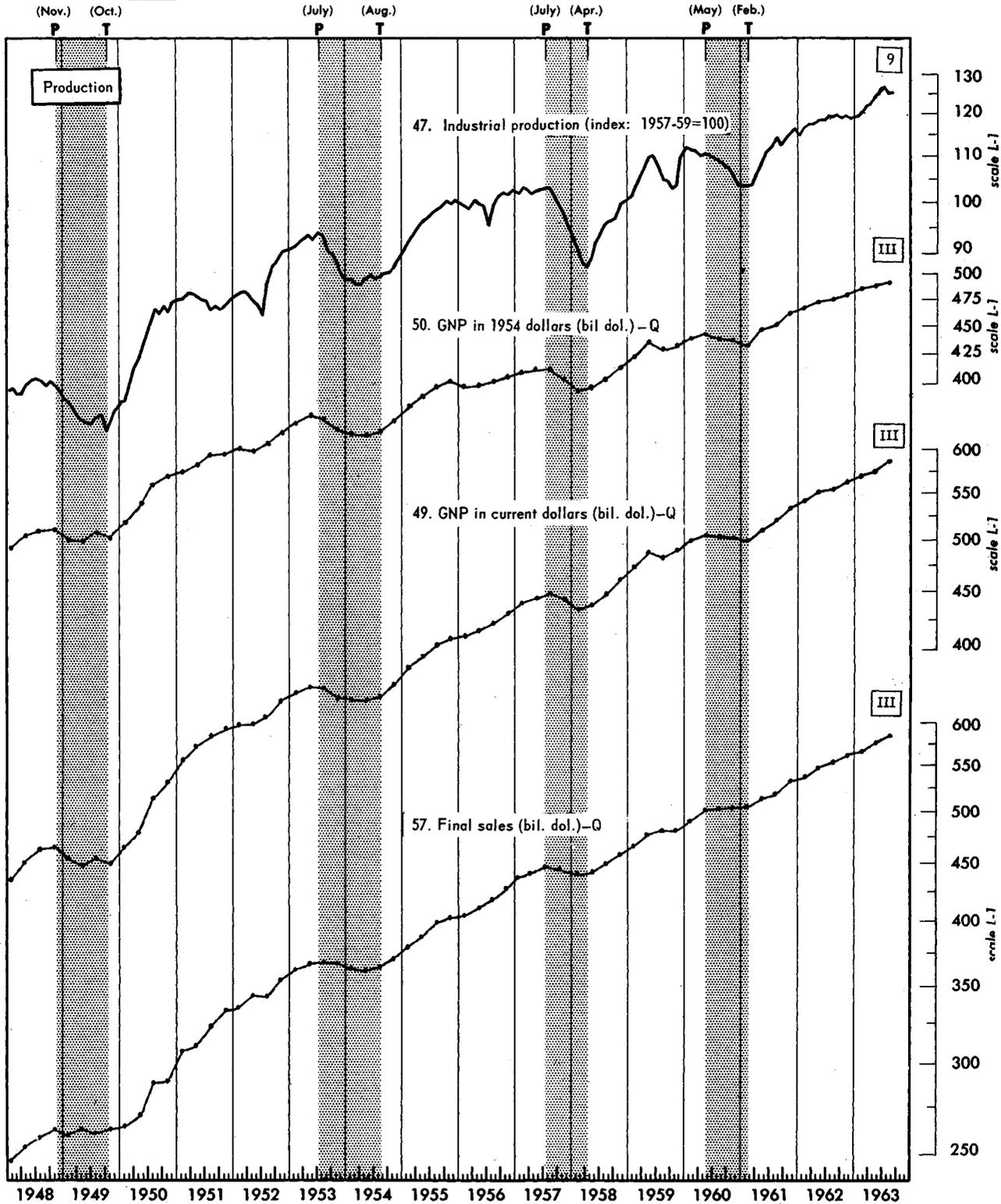
See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

B

NBER Roughly Coincident Indicators—Con.



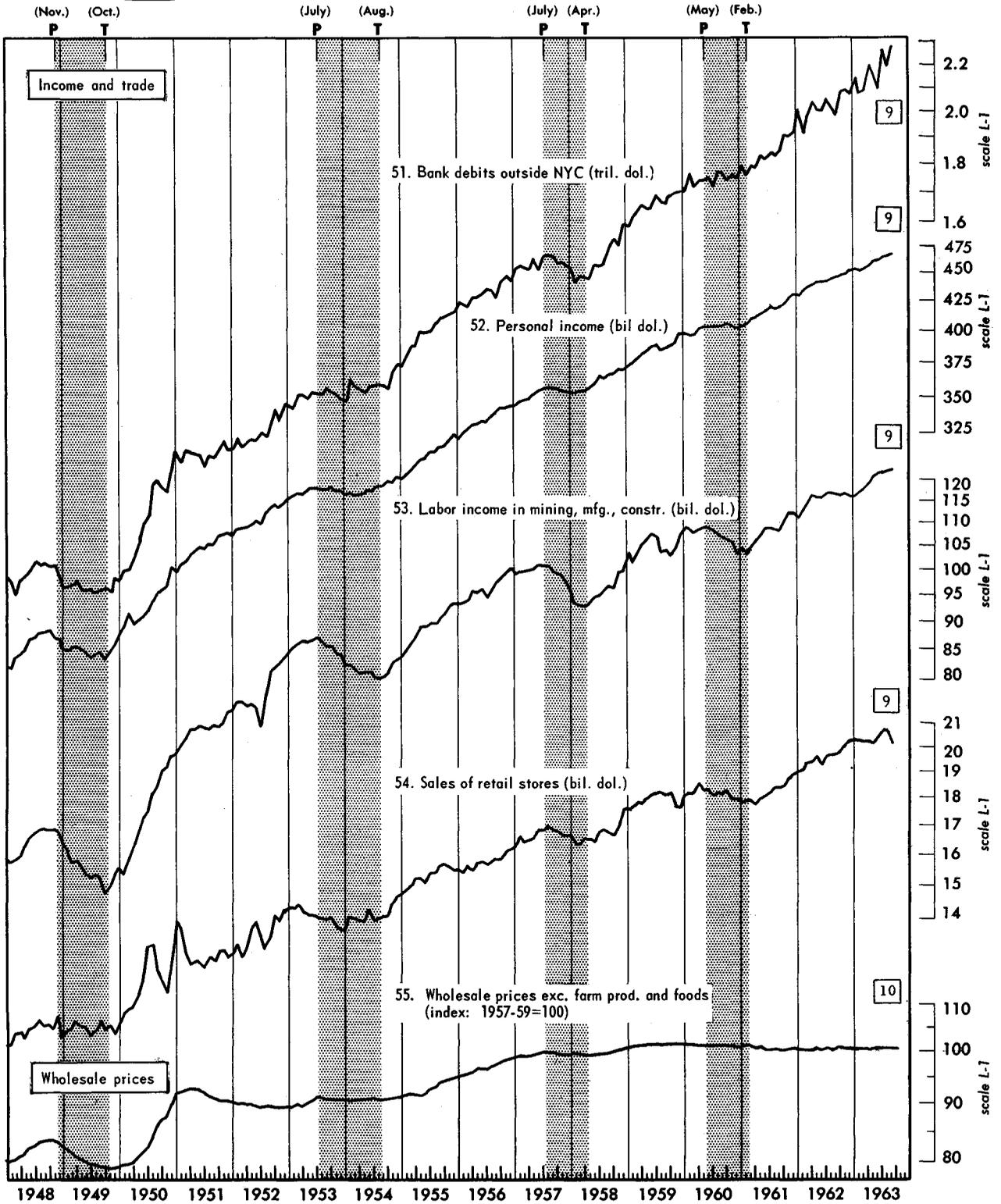
See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

B

NBER Roughly Coincident Indicators—Con.

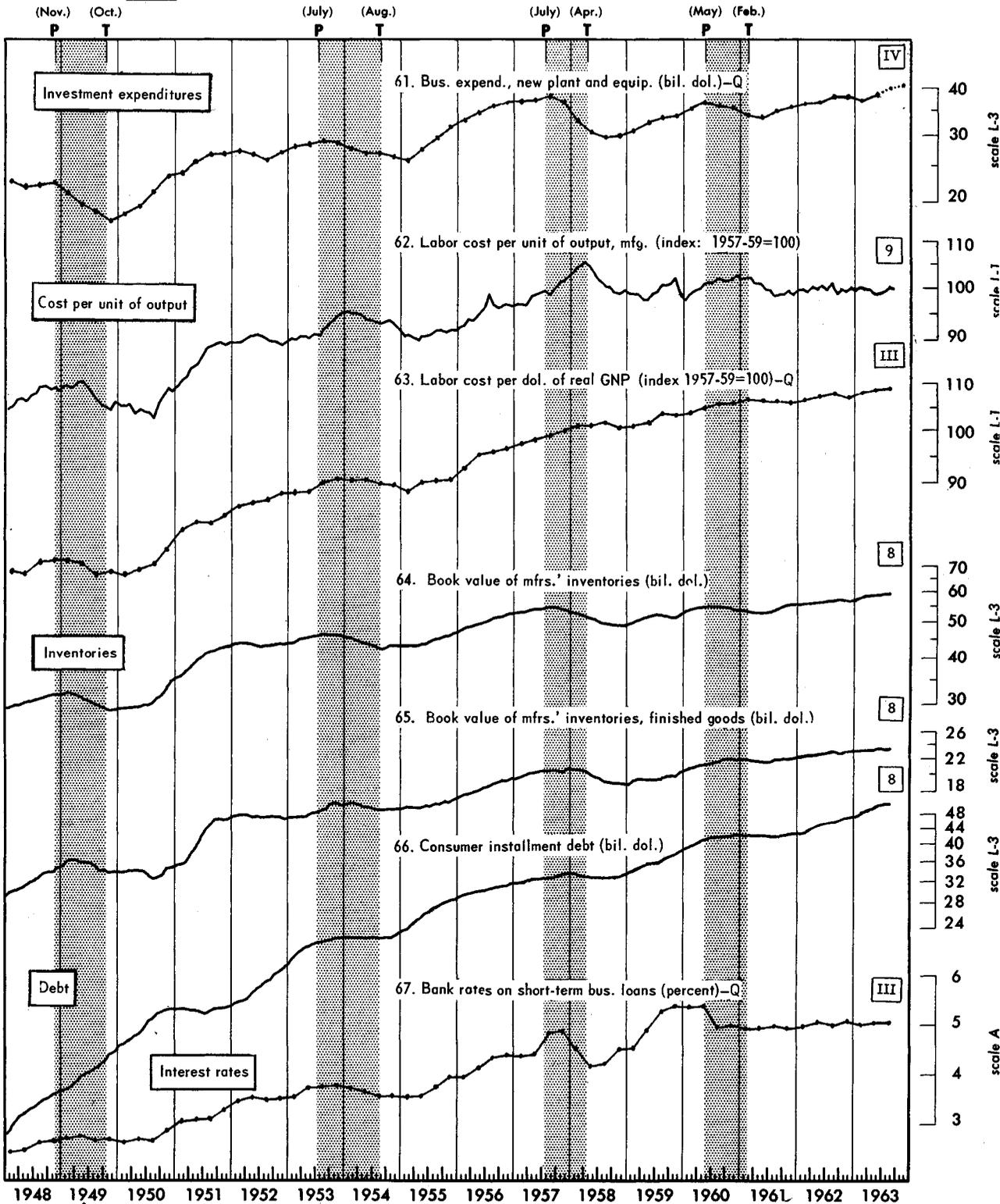


See "How to Read Charts 1, 2, and 3," page 5.

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

**C**

**NBER Lagging Indicators**



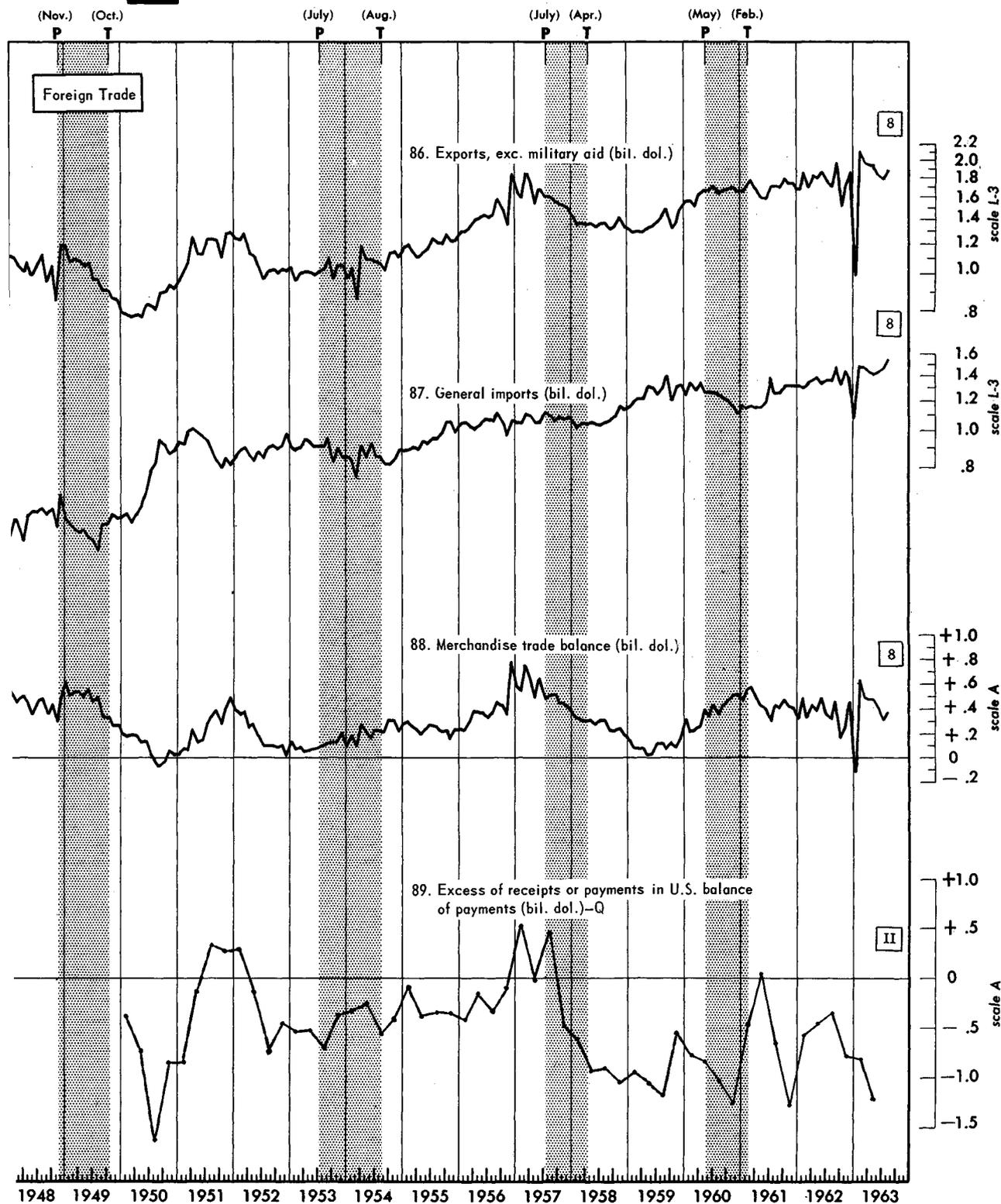
See "How to Read Charts 1, 2, and 3," page 5.

**CHART 1**

**BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.**

**D**

**Other U.S. Series With Business Cycle Significance**



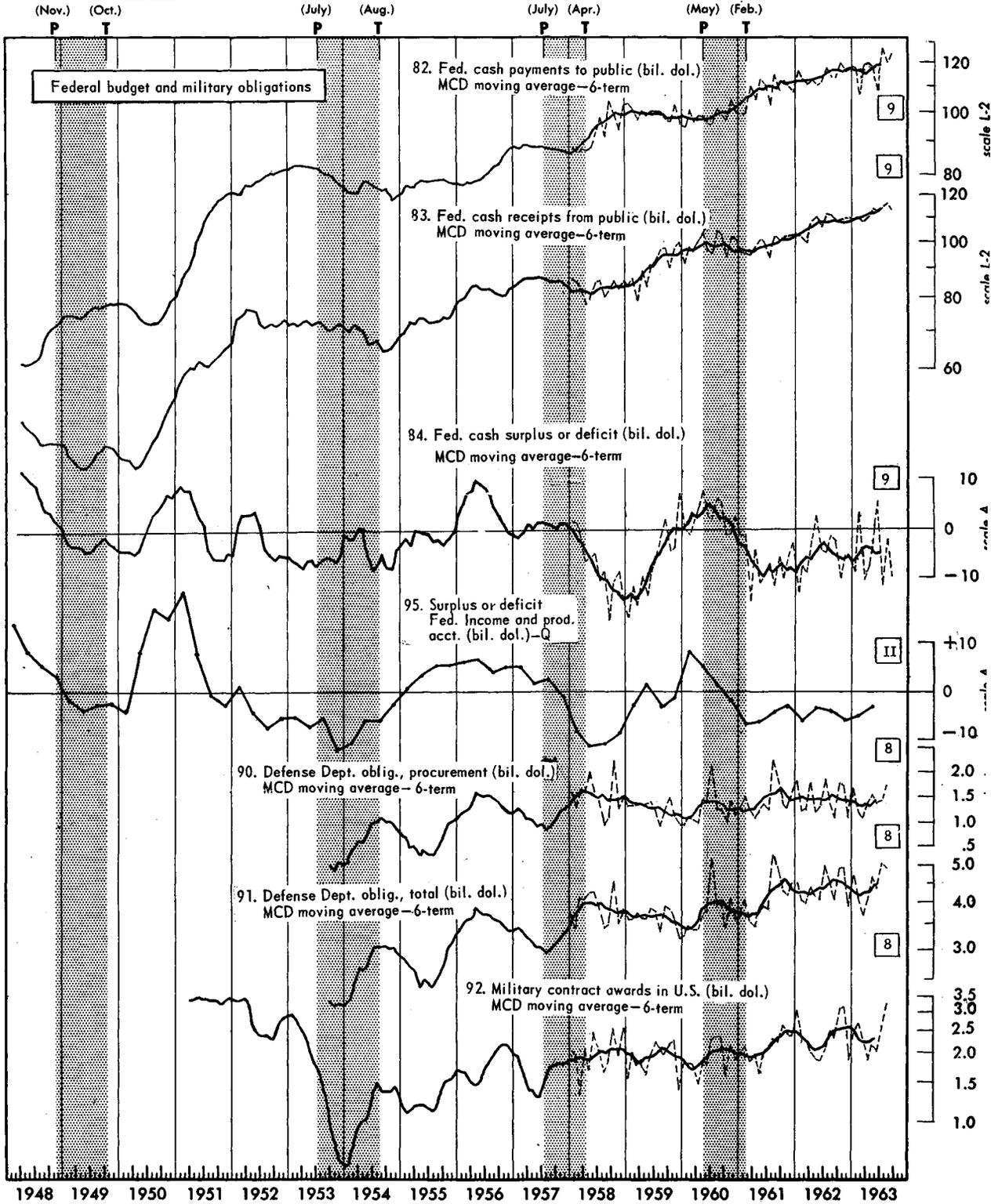
See "How to Read Charts 1, 2, and 3," page 5.

**CHART 1**

**BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.**

**D**

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



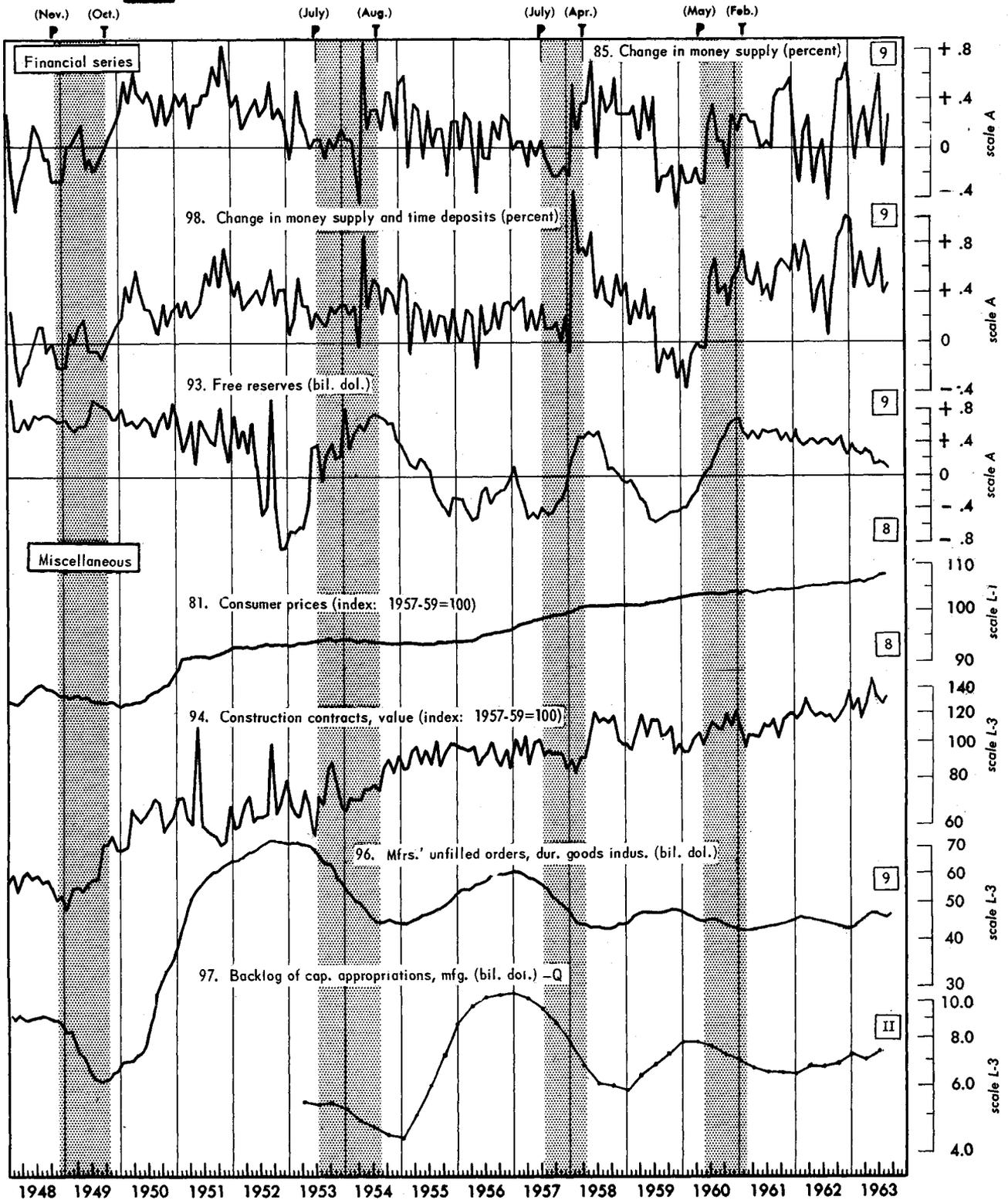
See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

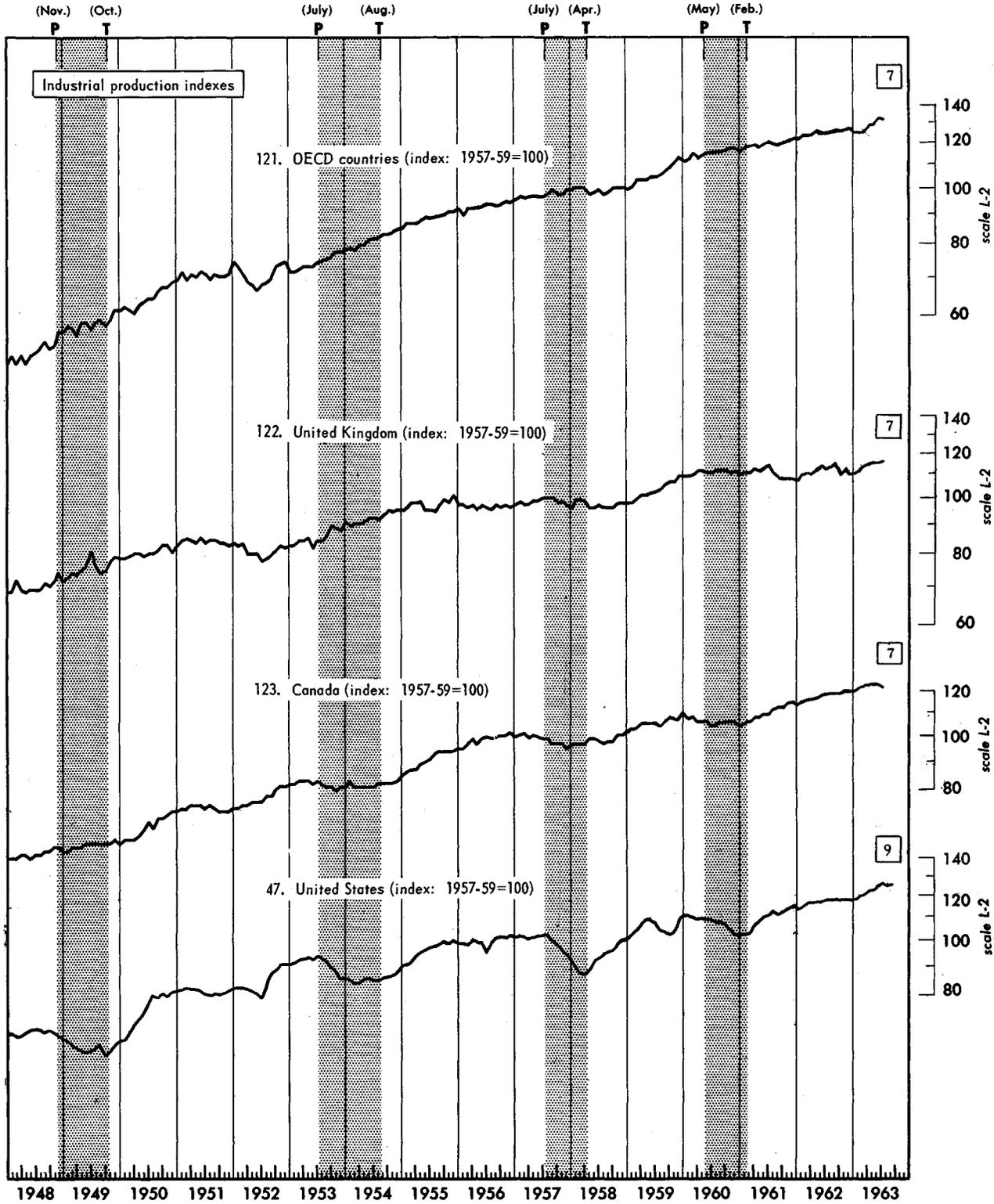
D

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



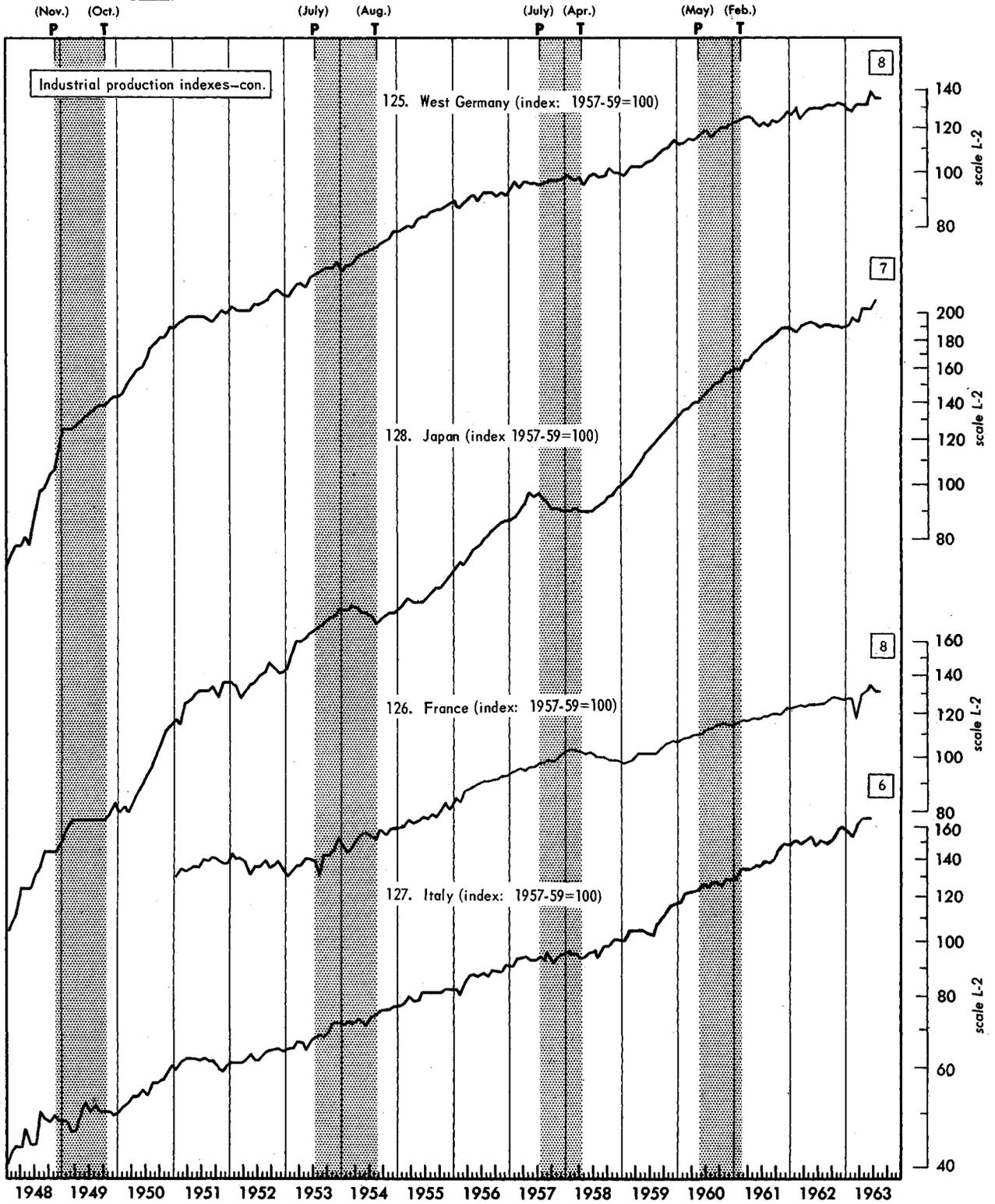
See "How to Read Charts 1, 2, and 3," page 5.

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, by (H); the reverse is true for inverse series (series 3, 4, 5, 14, 15, 40, 43, and 45). Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. The "r" indicates revised; "p", preliminary; "e", estimated; "a", anticipated; and "NA", not available.

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 <sup>1</sup>	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.) Revised <sup>2</sup>	(Per 100 employees)	(Thous.)	(Thous.)	(Bil. dol.)	(Bil. dol.)
1960								
January.....	40.6	4.2	518	1.6	122	281	14.19	5.04
February.....	40.2	4.1	519	1.9	110	271	14.80	5.14
March.....	39.9	3.6	501	2.3	116	303	14.64	5.06
April.....	39.7	3.6	512	2.4	156	294	14.47	5.12
May.....	40.0	3.8	490	2.3	160	316	14.68	5.17
June.....	39.8	3.7	481	2.5	145	322	14.34	5.01
July.....	39.8	3.6	475	2.4	177	335	13.84	4.78
August.....	39.6	3.8	472	2.6	154	363	14.41	4.96
September.....	39.5	3.9	476	2.5	153	351	14.62	4.87
October.....	39.6	(L)3.5	471	2.4	166	373	13.74	(L)4.65
November.....	39.3	3.6	453	2.6	128	385	13.60	4.81
December.....	(L)38.4	3.6	459	2.8	183	381	13.22	4.66
1961								
January.....	39.2	3.9	(L)444	2.9	173	393	(L)12.88	4.79
February.....	39.4	3.8	447	(L)2.9	(L)222	(L)429	13.36	4.80
March.....	39.4	4.3	459	2.4	215	379	13.82	5.10
April.....	39.5	4.2	448	2.1	141	381	14.38	4.99
May.....	39.6	4.2	469	2.2	150	358	14.79	5.17
June.....	39.8	4.0	494	2.2	151	334	14.90	5.30
July.....	39.9	4.1	493	2.3	101	348	15.02	5.28
August.....	40.0	4.1	512	1.9	136	316	15.63	5.55
September.....	39.8	3.8	507	2.2	127	329	15.74	5.45
October.....	40.3	(H)4.4	524	1.7	113	304	16.07	5.59
November.....	40.6	4.3	540	1.8	115	305	16.10	5.74
December.....	40.3	4.1	551	2.0	127	296	16.24	5.48
1962								
January.....	40.0	4.2	557	1.9	154	304	16.43	5.78
February.....	40.3	4.2	559	1.9	(H)82	291	16.19	5.71
March.....	40.6	4.1	572	1.7	118	279	16.00	5.59
April.....	40.6	4.2	574	1.8	112	280	15.73	5.47
May.....	40.5	4.1	(H)592	2.0	116	300	15.97	5.60
June.....	40.4	4.0	557	2.0	114	309	15.44	5.62
July.....	40.4	4.2	557	2.1	128	308	16.27	5.71
August.....	40.2	3.9	550	2.3	131	303	15.91	5.60
September.....	(H)40.7	4.0	555	1.9	120	300	15.89	5.69
October.....	40.2	3.9	554	2.0	129	300	16.57	5.62
November.....	40.4	3.8	559	1.9	139	298	16.34	5.85
December.....	40.2	3.8	540	2.0	114	317	16.02	5.74
1963								
January.....	40.4	3.7	552	2.0	179	316	16.71	5.75
February.....	40.3	3.9	557	1.8	112	295	17.09	5.89
March.....	40.5	3.8	557	1.8	108	(H)277	17.48	5.84
April.....	40.1	4.1	563	1.8	146	288	(H)17.89	6.01
May.....	40.5	3.8	554	1.8	87	287	17.70	6.14
June.....	40.5	3.9	543	(H)1.7	85	288	17.08	6.15
July.....	40.4	r4.0	541	r1.9	130	286	r17.23	r6.09
August.....	40.3	p3.6	538	p2.1	134	285	r16.85	r6.07
September.....	p40.6	(NA)	554	(NA)	100	284	p17.52	(H)p6.28
October.....						<sup>3</sup> 300		
November.....								
December.....								

<sup>1</sup>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.

<sup>2</sup>See "New Features and Changes For This Issue," page ii.

<sup>3</sup>Week ended October 12, 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, by (H); the reverse is true for inverse series (series 3, 4, 5, 14, 15, 40, 43, and 45). Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. The "r" indicates revised; "p", preliminary; "e", estimated; "a", anticipated; and "NA", not available.

Year and month	NBEE Leading Indicators--Continued						
	9. Construc- tion contracts awarded for commercial and industrial buildings	10. Contracts and orders for plant and equipment	11. Newly ap- proved capital appropriations, 602 manufac- turing corpo- rations	7. New private nonfarm dwel- ling units started	29. Index of new private housing units authorized by local build- ing permits	12. Net change in business population, operating businesses	13. Number of new busi- ness incor- porations
	(Mil. sq. ft. floor space)	(Bil. dol.)	(Bil. dol.)	(Ann. rate, thous.)	(1957-59=100)	(Thous.)	(Number)
1960							
January.....	37.32	5.56	...	1,444	100.2	...	16,561
February.....	36.93	5.69	2.27	1,508	98.2	+19	15,274
March.....	36.73	5.61	...	1,107	86.0	...	15,233
April.....	38.73	5.72	...	1,252	93.9	...	15,280
May.....	39.25	5.78	2.02	1,249	95.4	+17	15,176
June.....	40.31	5.58	...	1,231	88.1	...	15,630
July.....	38.87	5.39	...	1,184	91.5	...	15,828
August.....	39.38	5.58	⓪1.78	1,285	87.8	+14	15,114
September.....	38.96	5.51	...	1,113	88.4	...	15,112
October.....	39.44	⓪5.27	...	1,210	89.9	...	15,035
November.....	39.44	5.39	2.10	1,192	90.8	+10	14,264
December.....	38.15	5.28	...	⓪1,041	⓪87.0	...	14,097
1961							
January.....	36.21	5.53	...	1,216	89.5	...	⓪13,607
February.....	36.49	5.45	1.84	1,199	88.2	⓪+6	14,570
March.....	37.49	5.58	...	1,305	91.3	...	14,658
April.....	35.62	5.53	...	1,133	91.4	...	15,327
May.....	⓪35.16	5.73	1.93	1,215	93.2	+10	15,298
June.....	36.73	5.90	...	1,340	98.7	...	15,431
July.....	36.57	5.82	...	1,305	98.9	...	15,492
August.....	39.32	6.13	2.23	1,252	101.9	+10	15,277
September.....	38.73	5.97	...	1,453	100.2	...	15,402
October.....	33.88	6.16	...	1,381	104.2	...	16,035
November.....	41.61	6.42	2.10	1,319	101.8	+10	16,149
December.....	41.69	6.02	...	1,324	99.0	...	15,711
1962							
January.....	38.99	6.34	...	1,392	102.8	...	15,279
February.....	44.10	6.38	2.34	1,253	109.8	+11	15,775
March.....	45.19	6.31	...	1,460	105.0	...	15,727
April.....	40.87	6.11	...	1,489	111.5	...	15,372
May.....	45.39	6.27	2.02	1,501	103.7	+12	15,363
June.....	42.99	6.29	...	1,366	107.1	...	14,990
July.....	39.86	6.37	...	1,423	108.6	...	15,171
August.....	42.65	6.29	2.41	1,459	106.3	+11	15,216
September.....	39.90	6.24	...	1,328	110.2	...	15,232
October.....	41.62	6.24	...	1,491	109.5	...	15,121
November.....	41.68	6.50	⓪2.71	1,564	114.9	+11	14,892
December.....	42.48	6.59	...	1,541	114.5	...	14,767
1963							
January.....	44.94	6.36	...	1,317	110.0	...	14,457
February.....	46.98	6.51	2.15	1,353	109.3	+11	15,398
March.....	38.92	6.37	...	1,549	112.9	...	15,604
April.....	37.87	6.63	...	1,590	111.3	...	15,257
May.....	47.95	⓪7.02	2.59	1,590	117.9	⓪+12	15,756
June.....	⓪53.97	6.87	...	1,554	120.5	...	15,512
July.....	44.78	6.70	...	r1,575	115.1	...	15,356
August.....	45.31	6.68	(NA)	r1,419	r111.4	(NA)	16,201
September.....	(NA)	(NA)	...	⓪p1,654	⓪p121.2	...	(NA)
October.....							
November.....							
December.....							

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, by (H); the reverse is true for inverse series (series 3, 4, 5, 14, 15, 40, 43, and 45). Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. The "r" indicates revised; "p", preliminary; "e", estimated; "a", anticipated; and "NA", not available.

Year and month	NBER Leading Indicators--Continued							
	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*	21. Change in bus. inventories, farm and nonfarm, after valuation adjustment
	(Mil. dol.)	(Number per week)	(Ann. rate, bil. dol.)	(1957-59=100)	(Cents)	(Percent)	(1941-43=10)	(Ann. rate, bil. dol.)
1960								
January.....	52.88	29	...	103.6	...	...	58.03	...
February.....	57.60	27	24.1	102.3	8.8	9.7	55.78	+9.
March.....	61.57	30	...	101.9	...	...	55.02	..
April.....	63.71	30	...	101.4	...	...	55.73	..
May.....	76.52	32	22.6	100.8	8.0	9.1	55.22	+4.
June.....	(L)131.31	36	...	100.4	...	...	57.26	..
July.....	71.04	38	...	100.4	...	...	55.84	..
August.....	94.66	36	20.9	99.9	7.8	8.4	56.51	+2.
September.....	86.02	43	...	99.9	...	...	54.81	..
October.....	85.98	(L)43	...	100.0	...	...	(L)53.73	..
November.....	80.44	37	20.4	99.9	7.2	8.4	55.47	-2.
December.....	82.78	41	...	98.9	...	...	56.80	..
1961								
January.....	77.79	38	...	99.2	...	...	59.72	..
February.....	83.73	41	(L)19.2	(L)98.9	(L)6.6	(L)7.7	62.17	(L)4.
March.....	116.17	39	...	99.0	...	...	64.12	..
April.....	76.88	39	...	100.0	...	...	65.83	..
May.....	82.96	42	21.6	100.2	7.6	8.5	66.50	+1.
June.....	86.69	40	...	100.9	...	...	65.62	..
July.....	80.15	43	...	101.2	...	...	65.44	..
August.....	94.47	36	22.0	102.6	7.9	8.5	67.79	+3.
September.....	126.12	39	...	102.2	...	...	67.26	..
October.....	72.28	42	...	102.0	...	...	68.00	..
November.....	119.93	39	24.3	101.7	(H)8.6	9.3	71.08	+7.
December.....	71.81	38	...	102.1	...	...	71.74	..
1962								
January.....	101.53	37	...	101.2	...	...	69.07	..
February.....	86.03	(H)32	24.2	101.0	8.2	9.1	70.22	(H)8.
March.....	74.89	36	...	101.4	...	...	70.29	..
April.....	108.58	38	...	100.6	...	...	68.05	..
May.....	94.54	38	24.6	101.1	8.1	9.1	62.99	+6.
June.....	91.70	41	...	100.7	...	...	55.63	..
July.....	107.48	38	...	101.3	...	...	56.97	..
August.....	132.64	45	24.3	100.0	8.1	8.9	58.52	+3.
September.....	103.73	40	...	102.4	...	...	58.00	..
October.....	122.39	46	...	101.3	...	...	56.17	..
November.....	98.94	42	25.5	101.3	8.3	9.1	60.04	+4.
December.....	90.41	37	...	100.9	...	...	62.64	..
1963								
January.....	153.15	49	...	100.7	...	...	65.06	..
February.....	90.04	42	25.4	100.0	7.9	9.1	65.92	+5.
March.....	93.49	41	...	100.8	...	...	65.67	..
April.....	89.72	40	...	100.6	...	...	68.76	..
May.....	122.31	54	(H)26.8	102.1	8.5	(H)9.5	70.14	+2.
June.....	89.37	38	...	(H)103.1	...	...	70.11	..
July.....	142.28	38	...	r101.9	...	...	69.07	..
August.....	(H)58.40	42	(NA)	r100.6	(NA)	(NA)	70.98	+2.
September.....	92.59	44	...	p101.9	...	...	(H)72.85	..
October.....							172.88	..
November.....								..
December.....								..

<sup>1</sup>Average for October 15, 16, and 17, 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, by (H); the reverse is true for inverse series (series 3, 4, 5, 14, 15, 40, 43, and 45). Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. The "r" indicates revised; "p", preliminary; "e", estimated; "a", anticipated; and "NA", not available.

Year and month	NBER Leading Indicators--Continued						
	31. Change in book value of manufacturing and trade inventories, total	29. Change in book value of mfrs.' inventories, purchased materials	37. Purchased materials, percent reporting higher inventories	26. Buying policy, production mats., 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.)	(Percent reporting)	(Percent reporting)	(Percent reporting)	(Bil. dol.)	(1957-59=100)
1960							
January.....	+12.8	+4.6	48	64	44	-0.52	105.7
February.....	+11.7	+1.5	58	64	30	-0.78	104.3
March.....	+11.4	+0.8	52	56	(L)27	-0.77	102.4
April.....	+3.2	+1.0	47	61	28	-0.68	103.8
May.....	+8.5	+0.4	44	55	32	-0.19	104.1
June.....	+2.3	-1.6	45	57	34	-0.22	102.7
July.....	-1.5	-1.4	42	54	36	-0.24	101.6
August.....	+0.4	-1.2	37	50	40	-0.17	102.1
September.....	-0.6	-3.2	41	49	41	-0.13	101.2
October.....	+2.4	-2.4	38	50	39	(L)-0.77	99.7
November.....	-2.1	(L)-3.4	41	50	38	-0.41	98.5
December.....	-6.2	-0.4	39	(L)48	38	-0.30	(L)96.8
1961							
January.....	-5.8	-0.3	41	51	38	-0.37	97.3
February.....	-3.2	-1.0	(L)35	49	40	-0.02	99.3
March.....	(L)-8.7	+0.1	39	50	40	+0.02	103.1
April.....	+4.1	-0.1	42	57	47	+0.46	104.1
May.....	+0.7	+0.8	46	54	48	+0.23	(H)104.4
June.....	+0.4	-2.2	43	56	48	+0.11	101.0
July.....	+4.5	+1.1	46	56	49	+0.31	101.7
August.....	+1.8	+0.2	54	55	52	+0.35	102.9
September.....	(H)+7.8	+3.0	57	57	55	+0.06	102.9
October.....	+4.2	+0.5	56	59	55	+0.29	102.3
November.....	+6.1	+0.9	52	59	51	+0.34	98.9
December.....	+5.0	+1.3	55	54	53	+0.55	101.0
1962							
January.....	+7.6	(H)+5.0	(H)58	57	56	+0.53	102.9
February.....	+6.3	+2.2	57	(H)61	56	+0.22	100.6
March.....	+4.2	+2.9	57	56	55	-0.10	100.4
April.....	+2.5	+1.0	55	55	48	-0.34	98.3
May.....	+3.1	+0.2	53	49	46	-0.31	97.8
June.....	+4.3	-1.0	48	52	42	-0.32	95.4
July.....	+3.3	-1.5	45	58	44	-0.05	94.2
August.....	-3.0	-1.7	46	52	44	-0.57	94.5
September.....	+5.7	-0.1	44	52	48	-0.55	94.0
October.....	+3.8	-0.8	45	55	48	-0.18	94.9
November.....	-1.9	-0.9	49	52	48	-0.52	96.4
December.....	+3.1	+0.7	48	51	48	r-0.03	95.8
1963							
January.....	+3.3	+1.1	46	50	50	+0.31	95.5
February.....	+1.9	+1.0	48	55	52	+0.61	95.1
March.....	+4.7	+0.3	46	54	54	(H)+1.42	94.4
April.....	+2.8	+1.0	49	53	(H)60	+0.64	94.5
May.....	+3.8	-0.3	57	52	58	+0.81	95.2
June.....	+7.5	+1.1	57	57	54	-0.36	93.9
July.....	r+5.4	r+1.5	55	54	42	r-0.45	94.2
August.....	p-0.1	p-0.7	50	55	48	r-0.20	94.2
September.....	(NA)	(NA)	50	56	52	p+0.41	94.1
October.....							<sup>1</sup> 96.3
November.....							
December.....							

<sup>1</sup>Average for October 15, 16, and 17, 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, by (H); the reverse is true for inverse series (series 3, 4, 5, 14, 15, 40, 43, and 45). Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. The "r" indicates revised; "p", preliminary; "e", estimated; "a", anticipated; and "NA", not available.

Year and month	NBER Roughly Coincident Indicators							
	41. Number of employees in nonagricultural establishments	42. Total nonagricultural employment, labor force survey <sup>1</sup>	43. Unemployment rate, total <sup>1</sup>	40. Unemployment rate, married males <sup>1</sup>	45. Avg. 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
	(Thous.)	(Thous.)	(Percent)	(Percent)	(Percent)	(1957=100)	(1957-59=100)	(Ann. rate, bil. dol.)
1960								
January.....	54,331	60,521	5.29	3.38	4.27	109.0	111.7	...
February.....	54,527	60,863	4.96	3.11	4.17	110.1	111.0	439.9
March.....	54,499	60,464	5.45	3.53	4.54	105.4	110.5	...
April.....	54,728	61,144	5.21	3.35	4.26	100.3	109.7	...
May.....	54,555	61,252	5.18	3.42	4.19	99.7	109.9	442.1
June.....	54,449	61,215	5.46	3.60	4.39	97.8	109.6	...
July.....	54,395	61,090	5.48	3.72	4.67	90.1	109.1	...
August.....	54,352	60,982	5.66	3.85	5.10	89.4	108.7	440.2
September.....	54,248	61,114	5.60	3.80	5.38	82.6	107.8	...
October.....	54,160	60,857	5.98	4.28	5.68	84.6	107.0	...
November.....	54,015	61,142	6.20	4.22	6.27	82.2	105.4	437.1
December.....	53,752	(L)60,801	6.60	4.74	(L)6.33	(L)79.0	103.6	...
1961								
January.....	53,725	60,980	6.68	4.78	6.15	79.9	(L)103.3	...
February.....	(L)53,541	60,912	7.03	(L)5.09	6.32	79.3	103.4	(L)434.0
March.....	53,615	61,314	6.82	4.72	6.26	81.1	103.8	...
April.....	53,713	61,111	7.01	4.91	5.91	79.8	106.6	...
May.....	53,911	61,091	(L)7.11	5.00	5.61	82.0	108.8	443.4
June.....	54,165	61,448	6.91	4.78	5.32	83.8	110.9	...
July.....	54,294	61,254	6.96	4.74	5.29	82.6	112.0	...
August.....	54,444	61,283	6.67	4.61	5.22	86.1	113.4	450.4
September.....	54,480	61,330	6.69	4.54	5.10	84.8	112.0	...
October.....	54,593	61,476	6.42	4.12	5.04	95.9	113.5	...
November.....	54,825	61,766	6.07	3.94	5.08	99.1	114.8	463.1
December.....	54,927	61,788	5.98	3.91	4.81	96.9	115.6	...
1962								
January.....	54,946	61,882	5.84	3.81	4.71	102.3	114.6	...
February.....	55,223	62,148	5.69	3.59	4.52	105.9	116.3	467.8
March.....	55,368	62,356	5.49	3.53	4.41	(H)106.3	117.3	...
April.....	55,703	62,295	5.58	3.69	3.93	106.1	117.8	...
May.....	55,822	62,552	5.52	3.48	3.82	106.0	118.3	474.0
June.....	55,908	62,541	5.50	3.64	3.96	98.5	118.4	...
July.....	56,010	62,715	5.43	3.54	4.25	97.9	119.4	...
August.....	56,019	63,017	5.67	3.54	4.41	97.0	119.4	475.6
September.....	56,125	63,074	5.63	3.43	4.38	92.8	119.8	...
October.....	56,195	63,036	(H)5.34	3.35	4.55	96.8	119.2	...
November.....	56,205	62,708	5.76	3.43	4.84	95.9	119.5	481.7
December.....	56,211	63,248	5.54	3.57	4.79	e95.2	119.1	...
1963								
January.....	56,333	62,988	5.77	3.81	4.84	e97.5	119.2	...
February.....	56,458	63,245	6.09	4.04	4.69	e100.5	120.2	485.3
March.....	56,706	63,628	5.59	3.50	4.39	e98.5	121.3	...
April.....	56,873	63,851	5.65	3.37	4.03	100.2	122.5	...
May.....	57,060	63,643	5.91	3.37	3.96	95.9	124.5	489.2
June.....	57,194	63,693	5.66	3.12	(H)3.53	94.7	r125.8	...
July.....	r57,340	64,137	5.61	3.14	4.08	96.2	(H)126.5	...
August.....	r57,325	64,079	5.48	2.96	4.14	94.0	125.6	(H)494.3
September.....	(H)p57,427	(H)64,192	5.55	(H)2.92	4.00	p92.9	p125.7	...
October.....					24.08			
November.....								
December.....								

<sup>1</sup>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.

<sup>2</sup>Week ended October 5, 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, by (H); the reverse is true for inverse series (series 3, 4, 5, 14, 15, 40, 43, and 45). Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. The "r" indicates revised; "p", preliminary; "e", estimated; "a", anticipated; and "NA", not available.

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	395.9	108.7	18,097	101.5
February.....	500.4	491.1	1,765.4	395.6	108.5	18,200	101.4
March.....	...	...	1,715.2	395.9	107.9	18,178	101.4
April.....	...	...	1,731.2	400.8	108.3	18,557	101.4
May.....	504.1	499.9	1,731.2	402.3	108.8	18,320	101.2
June.....	...	...	1,739.0	403.0	108.4	18,312	101.3
July.....	...	...	1,714.0	402.7	108.3	18,113	101.3
August.....	503.5	500.7	1,771.8	403.5	107.6	18,195	101.3
September.....	...	...	1,766.5	404.4	107.0	18,207	101.1
October.....	...	...	1,738.0	405.2	106.9	18,298	101.2
November.....	502.1	504.4	1,758.9	404.5	105.5	18,080	101.1
December.....	...	...	(L)1,742.3	(L)403.2	103.7	18,008	101.0
1961							
January.....	...	...	1,786.2	404.4	104.0	17,942	101.0
February.....	(L)500.4	504.7	1,755.0	405.3	(L)103.3	17,965	101.1
March.....	...	...	1,785.1	410.1	104.2	17,971	101.1
April.....	...	...	1,781.8	411.7	106.0	(L)17,811	100.9
May.....	512.5	511.4	1,829.3	414.5	107.1	18,003	100.9
June.....	...	...	1,824.0	417.3	108.5	18,098	100.7
July.....	...	...	1,839.9	420.8	108.9	18,234	100.7
August.....	521.9	518.3	1,832.7	419.1	108.5	18,373	100.8
September.....	...	...	1,848.2	420.5	108.3	18,371	100.8
October.....	...	...	1,904.6	424.3	110.1	18,494	100.7
November.....	537.8	530.5	1,903.8	428.4	111.7	18,775	100.8
December.....	...	...	1,916.9	431.3	111.8	18,879	100.9
1962							
January.....	...	...	2,009.7	430.1	111.3	18,990	100.8
February.....	544.5	536.3	1,916.6	434.0	112.8	19,139	100.7
March.....	...	...	1,985.3	436.4	114.0	19,320	100.7
April.....	...	...	2,044.4	439.5	116.1	19,389	(L)100.7
May.....	552.4	546.0	2,015.0	440.8	116.0	19,585	100.9
June.....	...	...	2,000.2	441.7	115.9	19,311	100.8
July.....	...	...	2,054.8	443.5	116.6	19,658	100.9
August.....	556.8	553.1	2,017.0	444.6	116.8	19,671	100.8
September.....	...	...	1,988.5	445.5	116.7	19,769	100.9
October.....	...	...	2,080.9	447.7	116.5	19,875	100.9
November.....	565.2	561.2	2,090.5	449.9	116.9	20,112	100.8
December.....	...	...	2,066.9	452.1	116.5	20,253	100.7
1963							
January.....	...	...	2,148.8	454.0	116.4	20,387	100.5
February.....	571.8	566.6	2,086.4	452.9	117.1	20,374	100.5
March.....	...	...	2,096.3	454.8	117.8	20,350	100.5
April.....	...	...	2,198.7	457.4	119.4	20,276	100.2
May.....	579.6	575.3	2,151.1	460.1	120.8	20,200	100.5
June.....	...	...	2,105.3	462.6	121.6	20,486	100.8
July.....	...	...	2,276.6	464.2	121.6	(H)r20,719	100.9
August.....	(H)588.5	(H)584.0	r2,194.1	r465.1	r121.8	r20,676	(H)101.0
September.....	...	...	(H)p2,280.0	(H)p466.4	(H)p122.0	p20,170	100.9
October.....	...	...	...	...	...	...	<sup>1</sup> 100.9
November.....	...	...	...	...	...	...	...
December.....	...	...	...	...	...	...	...

<sup>1</sup>Week ended October 15, 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, by (H); the reverse is true for inverse series (series 3, 4, 5, 14, 15, 40, 43, and 45). Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. The "r" indicates revised; "p", preliminary; "e", estimated; "a", anticipated; and "NA", not available.

Year and month	NBER Lagging Indicators						
	61. Business expenditures on new plant and equipment, total	62. Index of labor 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 indus.	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.)	(Percent)
1960							
January.....	...	97.1	...	53.3	20.4	38,971	...
February.....	35.15	98.6	103.3	53.9	20.6	39,452	5.34
March.....	...	99.1	...	54.3	20.8	39,878	...
April.....	...	99.7	...	54.7	21.0	40,377	...
May.....	36.30	100.3	104.3	55.0	21.2	40,672	5.35
June.....	...	100.9	...	55.1	21.3	41,013	...
July.....	...	100.9	...	54.9	21.4	41,299	...
August.....	35.90	101.4	105.2	55.0	21.6	41,508	4.97
September.....	...	101.2	...	54.7	21.9	41,762	...
October.....	...	101.2	...	54.4	21.9	41,898	...
November.....	35.50	101.7	105.2	54.0	21.9	42,032	4.99
December.....	...	102.2	...	53.7	21.8	42,143	...
1961							
January.....	...	101.9	...	53.7	21.8	42,118	...
February.....	33.85	102.1	106.0	53.6	21.8	42,032	4.97
March.....	...	102.0	...	(L)53.3	21.7	41,986	...
April.....	...	100.8	...	53.4	21.7	41,865	...
May.....	(L)33.50	100.4	106.0	53.4	21.5	(L)41,856	4.97
June.....	...	99.6	...	53.4	21.5	41,900	...
July.....	...	99.3	...	(L)53.5	(L)21.5	41,904	...
August.....	34.70	(L)98.1	105.8	54.0	21.7	41,959	4.99
September.....	...	98.4	...	54.4	21.8	42,008	...
October.....	...	98.5	...	54.8	21.9	42,170	...
November.....	35.40	99.1	(L)104.7	55.0	21.9	42,439	(L)4.96
December.....	...	98.7	...	55.2	22.0	42,787	...
1962							
January.....	...	99.4	...	55.7	22.1	43,066	...
February.....	35.70	99.5	105.8	56.2	22.1	43,338	4.98
March.....	...	99.0	...	56.6	22.2	43,716	...
April.....	...	99.9	...	56.7	22.2	44,209	...
May.....	36.95	99.7	106.5	56.8	22.3	44,648	5.01
June.....	...	100.1	...	56.9	22.4	45,069	...
July.....	...	99.7	...	57.0	22.5	45,455	...
August.....	(H)38.35	(H)101.0	107.1	57.0	22.6	45,813	4.99
September.....	...	98.9	...	57.2	22.7	46,015	...
October.....	...	99.7	...	57.3	22.7	46,399	...
November.....	37.95	99.5	106.6	57.2	22.8	46,980	(H)5.02
December.....	...	99.9	...	57.4	23.0	47,438	...
1963							
January.....	...	99.4	...	57.5	23.0	47,925	...
February.....	36.95	100.1	107.1	57.7	23.0	48,350	5.00
March.....	...	99.0	...	57.9	23.2	48,739	...
April.....	...	99.1	...	58.1	23.2	49,270	...
May.....	38.05	98.3	108.3	58.4	23.3	49,704	5.01
June.....	...	97.9	...	58.8	23.6	50,137	...
July.....	...	r99.2	...	r58.9	23.5	50,638	...
August.....	(H)a39.95	r100.5	(H)108.6	(H)p59.0	(H)p23.7	(H)51,063	5.01
September.....	...	p98.9	...	(NA)	(NA)	(NA)	...
October.....	...	...	...	...	...	...	...
November.....	a41.15	...	...	...	...	...	...
December.....	...	...	...	...	...	...	...

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, by (H); the reverse is true for inverse series (series 3, 4, 5, 14, 15, 40, 43, and 45). Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. The "r" indicates revised; "p", preliminary; "e", estimated; "a", anticipated; and "NA", not available.

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 cash surplus(+) or deficit (-)	95. Surplus (+) or deficit (-), Federal income and product acct.	90. Defense Department obligations, procurement
	(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.)
1960									
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	-775	97.8	96.6	-1.2	+8.2	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	-831	94.4	102.9	+8.5	+5.2	1,488
June.....	1,633.8	1,276.5	+357.3	...	91.9	94.8	+2.9	...	1,397
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	-1,018	97.4	104.0	+6.6	+1.4	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	<sup>1</sup> -1,257	102.0	101.4	-0.6	-1.2	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	-472	95.4	94.1	-1.3	-6.0	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	<sup>2</sup> +31	110.9	99.8	-11.1	-5.4	1,220
June.....	1,581.9	1,173.8	+408.1	...	106.5	97.7	-8.8	...	1,390
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	-655	112.7	101.0	-11.7	-4.0	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	-1,274	106.5	101.3	-5.2	-2.5	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	-585	108.8	101.3	-7.5	-5.6	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	-452	106.8	109.9	+3.1	-3.0	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	-356	111.6	110.1	-1.5	-3.6	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	-793	114.7	109.0	-5.7	-5.3	1,755
December.....	1,838.9	1,371.9	+467.0	...	115.2	109.0	-6.2	...	1,022
1963									
January.....	982.2	1,093.2	-111.0	...	r116.5	107.7	r-8.8	...	1,732
February.....	2,130.7	1,493.2	+637.5	-851	106.5	109.8	+3.3	-4.6	1,228
March.....	1,990.8	1,484.3	+506.5	...	r116.0	106.9	r-9.1	...	1,023
April.....	1,918.1	1,423.3	+494.8	...	r117.3	110.1	r-7.2	...	1,275
May.....	1,900.5	1,406.2	+494.3	-1,262	116.2	113.9	-2.3	-3.0	1,594
June.....	1,813.6	1,410.2	+403.4	...	r108.4	112.2	r+3.8	...	r1,392
July.....	1,779.4	1,469.2	+310.2	...	126.1	114.9	-11.2	...	1,417
August.....	1,896.6	1,532.5	+364.1	(NA)	118.4	116.1	-2.3	(NA)	1,713
September.....	(NA)	(NA)	(NA)	(NA)	122.2	112.4	-9.8	(NA)	(NA)
October.....									
November.....									
December.....									

<sup>1</sup>Includes single direct investment transactions of \$370 million.

<sup>2</sup>Includes \$650 million in special debt payments to the United States.

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, by (⊕); the reverse is true for inverse series (series 3, 4, 5, 14, 15, 40, 43, and 45). Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. The "r" indicates revised; "p", preliminary; "e", estimated; "a", anticipated; and "NA", not available.

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
	(Mil. dol.)	(Mil. dol.)	(Percent)	(Percent)	(Mil. dol.)	(1957-59=100)	(1957-59=100)	(Bil. dol.)	(Bil. dol.)
1960									
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	7.92
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	7.68
July.....	5,305	2,231	+0.21	+0.53	+120	103.1	113	44.67	...
August.....	3,824	2,302	+0.36	+0.67	+247	103.3	109	44.50	...
September.....	3,999	2,361	+0.07	+0.38	+414	103.2	107	44.37	7.27
October.....	3,357	1,477	+0.07	+0.47	+480	103.5	117	43.60	...
November.....	4,109	2,127	-0.14	+0.28	+614	103.6	111	43.19	...
December.....	3,583	1,797	+0.28	+0.52	+669	103.8	120	42.89	7.02
1961									
January.....	3,641	1,944	+0.14	+0.56	+696	103.9	108	42.52	...
February.....	4,065	2,153	+0.28	+0.74	+517	104.0	95	42.49	...
March.....	3,537	1,757	+0.28	+0.51	+486	104.0	104	42.51	6.68
April.....	3,381	1,910	+0.21	+0.46	+551	103.9	103	42.97	...
May.....	3,727	1,530	+0.21	+0.64	+453	103.9	102	43.20	...
June.....	3,893	1,993	0.00	+0.36	+549	104.1	111	43.31	6.55
July.....	3,784	2,087	+0.07	+0.45	+530	104.4	110	43.62	...
August.....	5,344	2,232	0.00	+0.32	+537	104.4	116	43.97	...
September.....	4,874	2,158	+0.42	+0.58	+547	104.5	103	44.03	6.58
October.....	4,296	2,651	+0.49	+0.67	+442	104.5	114	44.32	...
November.....	4,121	2,379	+0.49	+0.62	+517	104.5	116	44.66	...
December.....	4,476	2,281	+0.55	+0.57	+419	104.5	119	45.21	6.53
1962									
January.....	4,488	3,073	+0.14	+0.79	+555	104.7	115	45.74	...
February.....	3,990	2,135	-0.27	+0.57	+434	104.9	119	45.96	...
March.....	3,914	2,225	+0.14	+0.82	+382	105.1	131	45.86	6.82
April.....	4,402	1,885	+0.27	+0.69	+441	105.2	121	45.52	...
May.....	4,126	1,808	-0.27	+0.21	+440	105.4	117	45.22	...
June.....	4,019	1,808	-0.07	+0.42	+391	105.4	120	44.90	6.81
July.....	5,026	2,068	+0.07	+0.51	+440	105.5	117	44.85	...
August.....	4,623	2,488	-0.41	+0.04	+439	105.6	118	44.28	...
September.....	3,968	2,242	+0.14	+0.46	+375	105.9	113	43.73	6.87
October.....	4,914	3,089	+0.55	+0.84	+419	105.9	117	43.55	...
November.....	4,936	3,154	+0.55	+0.91	+473	105.9	123	43.03	...
December.....	3,785	1,758	+0.68	+1.03	+268	105.8	138	43.00	7.29
1963									
January.....	4,714	2,390	+0.54	+0.98	+384	106.2	121	43.40	...
February.....	4,050	2,674	-0.07	+0.44	+300	106.2	130	44.01	...
March.....	3,593	2,157	+0.20	+0.72	+271	106.3	118	45.43	7.06
April.....	4,031	1,786	+0.34	+0.52	+313	106.2	125	46.07	...
May.....	4,682	2,165	0.00	+0.44	+248	106.4	144	46.88	...
June.....	r4,357	1,962	+0.27	+0.47	+141	106.7	135	46.52	7.46
July.....	5,019	2,572	+0.60	+0.75	+158	107.1	126	r46.06	...
August.....	4,871	3,213	-0.13	+0.39	r+137	107.2	132	r45.86	...
September.....	(NA)	(NA)	-p+0.27	p+0.47	p+90	(NA)	(NA)	p46.27	(NA)
October.....									
November.....									
December.....									

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, by ⊕; the reverse is true for inverse series (series 3, 4, 5, 14, 15, 40, 43, and 45). Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. The "r" indicates revised; "p", preliminary; "e", estimated; "a", anticipated; and "NA", not available.

Year and month	International comparisons of industrial production							
	121. OECD, <sup>1</sup> 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
	(1957-59= 100)	(1957-59= 100)	(1957-59= 100)	(1957-59= 100)	(1957-59= 100)	(1957-59= 100)	(1957-59= 100)	(1957-59= 100)
1960								
January.....	111	109	109	112	113	107	118	132
February.....	112	109	107	111	113	108	122	136
March.....	114	110	108	110	115	108	123	137
April.....	113	112	105	110	115	110	123	140
May.....	114	112	105	110	116	110	124	140
June.....	116	111	105	110	118	111	126	143
July.....	118	111	104	109	118	112	125	145
August.....	116	112	104	109	115	112	127	148
September.....	116	112	105	108	118	115	127	151
October.....	117	112	105	107	120	114	126	151
November.....	118	110	105	105	120	115	129	157
December.....	118	112	105	104	122	114	129	158
1961								
January.....	117	109	104	103	124	115	130	162
February.....	119	110	105	103	125	116	134	160
March.....	119	110	105	104	126	116	134	166
April.....	120	111	107	107	126	116	134	166
May.....	119	110	107	109	124	117	136	172
June.....	120	113	109	111	121	117	136	175
July.....	120	113	109	112	122	118	138	179
August.....	119	111	111	113	121	118	137	182
September.....	120	110	112	112	124	119	140	183
October.....	121	109	112	114	123	119	145	187
November.....	122	109	114	115	124	119	149	190
December.....	123	109	114	116	128	122	148	191
1962								
January.....	122	108	113	115	126	122	149	190
February.....	124	110	115	116	129	123	151	188
March.....	123	111	116	117	125	124	149	193
April.....	124	110	116	118	128	123	151	194
May.....	125	113	117	118	129	124	153	196
June.....	124	114	118	118	130	123	147	194
July.....	125	113	118	119	130	125	151	191
August.....	126	114	119	119	131	125	149	194
September.....	127	115	119	120	132	126	150	194
October.....	127	110	119	119	132	128	153	192
November.....	128	113	120	120	133	128	158	192
December.....	127	110	120	119	132	126	160	191
1963								
January.....	126	110	120	119	129	127	158	193
February.....	126	111	121	120	128	127	155	199
March.....	126	113	122	121	132	117	r162	197
April.....	130	114	123	122	133	129	r166	r205
May.....	130	115	r124	124	133	131	r166	r205
June.....	132	115	r124	126	r139	134	166	205
July.....	131	116	122	126	135	130	(NA)	212
August.....	(NA)	(NA)	(NA)	126	135	130	(NA)	(NA)
September.....				p126	(NA)	(NA)		
October.....								
November.....								
December.....								

<sup>1</sup>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, 1953-1963 <sup>1</sup>	1963								
			Jan. to Feb.	Feb. to Mar.	Mar. to Apr.	Apr. to May	May to June	June to July	July to Aug.	Aug. to Sept.	Sept. to Oct. <sup>2</sup>
<b>NBER LEADING INDICATORS</b>											
1. Average workweek of production workers, manufacturing.....	Percent..	0.5	-0.2	+0.5	-1.0	+1.0	0.0	-0.2	-0.2	+0.7	
2. Accession rate, manufacturing.....	..do....	4.9	+5.4	-2.6	+7.9	-7.3	+2.6	+2.6	-10.0	NA	
30. Nonagri. placements, all industries...	..do....	1.8	+0.9	0.0	+1.1	-1.6	-2.0	-0.4	-0.6	+3.0	
3. Layoff rate, manufacturing (inverted)...	..do....	9.5	+10.0	0.0	0.0	0.0	+5.6	-11.8	-10.5	NA	
4. Number of persons on temporary lay-off, all industries (inverted).....	..do....	17.8	+37.4	+3.6	-35.2	+40.4	+2.3	-52.9	-3.1	+25.4	
5. Avg. weekly initial claims for unemployment insurance, State (inverted)...	..do....	5.3	+6.6	+6.1	-4.0	+0.3	-0.3	+0.7	+0.3	+0.4	-5.6
6. Value of manufacturers' new orders, durable goods industries.....	..do....	3.8	+2.3	+2.3	+2.3	-1.1	-3.5	+0.9	-2.2	+4.0	
24. Value of manufacturers' new orders, machinery and equipment industries...	..do....	4.6	+2.4	-0.8	+2.9	+2.2	+0.2	-1.0	-0.3	+3.5	
9. Construction contracts awarded for commercial and industrial buildings...	..do....	9.7	+4.5	-17.2	-2.7	+26.6	+12.6	-17.0	+1.2	NA	
10. Contracts and orders for plant and equipment.....	..do....	4.6	+2.4	-2.2	+4.1	+5.9	-2.1	-2.5	-0.3	NA	
11. Newly approved capital appropriations, 602 manufacturing corporations <sup>3</sup> .....	..do....	11.2	-20.7	...	...	+20.5	...	...	NA		
7. New private nonfarm dwelling units started.....	..do....	7.3	+2.7	+14.5	+2.6	0.0	-2.3	+1.4	-9.9	+16.6	
29. Index of new private housing units authorized by local bldg. permits....	..do....	3.8	-0.6	+3.3	-1.4	+5.9	+2.2	-4.5	-3.2	+8.8	
12. Net change in business population, operating businesses <sup>3 4</sup> .....	Thous....	2	0	...	...	+1	...	...	NA		
13. Number of new business incorporations.	Percent..	2.7	+6.5	+1.3	-2.2	+3.3	-1.5	-1.0	+5.5	NA	
14. Current liabilities of business failures (inverted).....	..do....	16.9	+41.2	-3.8	+4.0	-36.3	+26.9	-59.2	+59.0	-58.5	
15. No. of business failures with liabilities of \$100,000 and over (inv.)....	..do....	13.1	+14.3	+2.4	+2.4	-35.0	+29.6	0.0	-10.5	-4.8	
16. Corporate profits after taxes <sup>3</sup> .....	..do....	7.7	-0.4	...	...	+5.5	...	...	NA		
17. Price per unit of labor cost index....	..do....	0.7	-0.7	+0.8	-0.2	+1.5	+1.0	-1.2	-1.3	+1.3	
18. Profits (before taxes) per dollar of sales, all mfg. corporations <sup>3</sup> .....	..do....	7.7	-4.8	...	...	+7.6	...	...	NA		
22. Ratio, profits (after taxes) to income originating, corporate, all indus. <sup>3</sup> ...	..do....	5.8	0.0	...	...	+4.4	...	...	NA		
19. Index of stock prices, 500 stocks.....	..do....	2.6	+1.3	-0.4	+4.7	+2.0	0.0	-1.5	+2.8	+2.6	0.
21. Change in bus. inventories, farm and nonfarm, after val. adjustment <sup>3 4</sup> ....	Ann.rate, bil.dol.	2.5	+1.1	...	...	-0.8	...	...	+0.2		
31. Change in book value of mfg. and trade inventories, total <sup>4</sup> .....	..do....	3.6	-1.4	+2.8	-1.9	+1.0	+3.7	-2.1	-5.5	NA	
20. Change in book value of mfrs.' inventories, purchased materials <sup>4</sup> .....	..do....	1.6	-0.1	-0.7	+0.7	-1.3	+1.4	+0.4	-2.2	NA	
37. Purchased materials, percent reporting higher inventories.....	Percent..	6.8	+4.3	-4.2	+6.5	+16.3	0.0	-3.5	-9.1	0.0	
26. Buying policy, prod. mtl.s., percent report. commitments 60 days or more..	..do....	5.8	+10.0	-1.8	-1.9	-1.9	+9.6	-5.3	+1.9	+1.8	
32. Vendor performance, percent reporting slower deliveries.....	..do....	7.7	+4.0	+3.8	+11.1	-3.3	-6.9	-22.2	+14.3	+8.3	
25. Change in mfrs.' unfilled orders, durable goods industries <sup>4</sup> .....	Bil. dol.	0.38	+0.30	+0.81	-0.78	+0.17	-1.17	-0.09	+0.25	+0.61	
23. Index of industrial materials prices..	Percent..	1.3	-0.4	-0.7	+0.1	+0.7	-1.4	+0.3	0.0	-0.1	+2
<b>NBER ROUGHLY COINCIDENT INDICATORS</b>											
41. Number of employees in nonagricultural establishments.....	..do....	0.3	+0.2	+0.4	+0.3	+0.3	+0.2	+0.3	0.0	+0.2	
42. Total nonagricultural employment, labor force survey.....	..do....	0.4	+0.4	+0.6	+0.4	-0.3	+0.1	+0.7	-0.1	+0.2	
43. Unemployment rate, total (inverted)...	..do....	4.1	-5.5	+8.2	-1.1	-4.6	+4.2	+0.9	+2.3	-1.3	
40. Unemploy. rate, married males (inv.)...	..do....	5.5	-6.0	+13.4	+3.7	0.0	+7.4	-0.6	+5.7	+1.4	
45. Avg. weekly insured unemployment rate, State programs (inverted).....	..do....	4.8	+3.1	+6.4	+8.2	+1.7	+10.9	-15.6	-1.5	+3.4	-2

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, 1953-1963 <sup>1</sup>	1963								
			Jan. to Feb.	Feb. to Mar.	Mar. to Apr.	Apr. to May	May to June	June to July	July to Aug.	Aug. to Sept.	Sept. to Oct. <sup>2</sup>
NBER ROUGHLY COINCIDENT INDICATORS--Con.											
46. Index of help-wanted advertising in newspapers.....	Percent..	3.4	+3.1	-2.0	+1.7	-4.3	-1.3	+1.6	-2.3	-1.2	
47. Index of industrial production.....	..do....	1.1	+0.8	+0.9	+1.0	+1.6	+1.0	+0.6	-0.7	+0.1	
50. Gross national product in 1954 dol. <sup>3</sup> ..	..do....	1.4	+0.8	...	...	+0.8	...	...	+1.0		
49. Gross national product in cur. dol. <sup>3</sup> ..	..do....	1.9	+1.2	...	...	+1.4	...	...	+1.5		
57. Final sales (series 49 minus 21) <sup>3</sup> .....	..do....	1.6	+1.0	...	...	+1.5	...	...	+1.5		
51. Bank debits outside NYC, 343 centers..	..do....	1.5	-2.9	+0.5	+4.9	-2.2	-2.1	+8.1	-3.6	+3.9	
52. Personal income.....	..do....	0.5	-0.2	+0.4	+0.6	+0.6	+0.5	+0.3	+0.2	+0.3	
53. Labor income in mining, manufacturing, and construction.....	..do....	0.8	+0.6	+0.6	+1.4	+1.2	+0.7	0.0	+0.2	+0.2	
54. Sales of retail stores.....	..do....	0.8	-0.1	-0.1	-0.4	-0.4	+1.4	+1.1	-0.2	-2.4	
55. Index of wholesale prices except farm products and foods.....	..do....	0.2	0.0	0.0	-0.3	+0.3	+0.3	+0.1	+0.1	-0.1	0.0
NBER LAGGING INDICATORS											
61. Business expenditures on new plant and equipment, total <sup>3</sup> .....	..do....	3.6	-2.6	...	...	+3.0	...	...	<sup>5</sup> +5.0		
62. Index of labor cost per unit of output, total manufacturing.....	..do....	0.6	+0.7	-1.1	+0.1	-0.8	-0.4	+1.3	+1.3	-1.6	
63. Index of labor cost per unit of output, total GNP <sup>3</sup> .....	..do....	1.0	+0.5	...	...	+1.1	...	...	+0.3		
64. Book value of mfrs.' inventories, all manufacturing industries.....	..do....	0.6	+0.3	+0.3	+0.3	+0.5	+0.7	+0.2	+0.2	NA	
65. Book value of mfrs.' inventories of finished goods, all mfg. industries..	..do....	0.6	0.0	+0.9	0.0	+0.4	+1.3	-0.4	+0.9	NA	
66. Consumer installment debt.....	..do....	0.8	+0.9	+0.8	+1.1	+0.9	+0.9	+1.0	+0.8	NA	
67. Bank rates on short-term business loans, 19 cities <sup>3</sup> .....	..do....	3.0	-0.4	...	...	+0.2	...	...	0.0		
OTHER U.S. SERIES WITH BUSINESS CYCLE SIGNIFICANCE											
86. Exports, excluding military aid shipments, total.....	..do....	4.6	+116.9	-6.6	-3.7	-0.9	-4.6	-1.9	+6.6	NA	
87. General imports, total.....	..do....	3.6	+36.6	-0.6	-4.1	-1.2	+0.3	+4.2	+4.3	NA	
88. Merchandise trade balance <sup>4</sup> .....	Mil. dol.	59.5	+748.5	-131.0	-11.7	-0.5	-90.9	-93.2	+53.9	NA	
89. Excess of receipts or payments in U.S. balance of payments <sup>3 4</sup> .....	..do....	286	-58	...	...	-411	...	...	NA		
82. Federal cash payments to the public...	Percent..	5.7	-8.6	+8.9	+1.1	-0.9	-6.7	+16.3	-6.1	+3.2	
83. Federal cash receipts from the public.	..do....	5.4	+1.9	-2.6	+3.0	+3.5	-1.5	+2.4	+1.0	-3.2	
84. Federal cash surplus or deficit <sup>4</sup> .....	Ann.rate, bil.dol.	5.5	+12.1	-12.4	+1.9	+4.9	+6.1	-15.0	+8.9	-7.5	
95. Surplus or deficit, Federal income and product account <sup>3 4</sup> .....	..do....	2.5	+0.7	...	...	+1.6	...	...	NA		
90. Defense Dept. obligations, procurement.	Percent..	26.9	-29.1	-16.7	+24.6	+25.0	-12.7	+1.8	+20.9	NA	
91. Defense Dept. obligations, total.....	..do....	15.1	-14.1	-11.3	+12.2	+16.1	-6.9	+15.2	-2.9	NA	
92. Military prime contract awards to U.S. business firms.....	..do....	26.2	+11.9	-19.3	-17.2	+21.2	-9.4	+31.1	+24.9	NA	
85. Change in money supply excluding time deposits <sup>4</sup> .....	..do....	0.23	-0.61	+0.27	+0.14	-0.34	+0.27	+0.33	-0.73	+0.40	
93. Free reserves <sup>4</sup> .....	Mil. dol.	107	-84	-29	+42	-65	-107	+17	-21	-47	
81. Index of consumer prices.....	Percent..	0.2	0.0	+0.1	-0.1	+0.2	+0.3	+0.4	+0.1	NA	
94. Index of construc. contracts, total..	..do....	7.0	+7.4	-9.2	+5.9	+15.2	-6.3	-6.7	+4.8	NA	
96. Mfrs.' unfilled orders, dur. goods....	..do....	1.4	+1.4	+3.2	+1.4	+1.8	-0.8	-1.0	-0.4	+0.9	
97. Backlog of cap. appropriations, mfg. <sup>3</sup>	..do....	6.3	-3.2	...	...	+5.7	...	...	NA		
98. Change in money supply including time deposits <sup>4</sup> .....	..do....	0.21	-0.54	+0.28	-0.20	-0.08	+0.03	+0.28	-0.36	+0.08	

<sup>1</sup>This average is based on month-to-month (or quarter-to-quarter) changes without regard to sign. The period varies among the series, covering 1953-63 for most monthly series and 1948-62 for most quarterly series. <sup>2</sup>Percentage changes cover part of this period only. <sup>3</sup>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 Jan.-Feb. column refers to the change from the 4th quarter of 1962 to the 1st quarter of 1963. <sup>4</sup>Figures are the month-to-month (quarter-to-quarter) differences in the figures shown in table 1. <sup>5</sup>Anticipated. Percent change from 3rd quarter to 4th quarter, based on anticipated data is +3.0.

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.....	<sup>1</sup> 18	<sup>2</sup> 19	23	23	<sup>1</sup> 18	<sup>2</sup> 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	June 1963	July 1963	Aug. 1963	Sept. 1963
	NBER LEADING INDICATORS							
8 months or more.....	6	2	17	4	12	12	10	6
7 months.....	1	1	1	4	...	...	...	...
6 months.....	...	2	1	4	...	...	...	2
5 months.....	4	1	1	2	...	...	2	2
4 months.....	2	4	...	4	...	2	2	...
3 months.....	...	1	1	...	2	2	2	1
2 months.....	2	2	1	1	2	2	5	...
1 month.....	2	3	...	2	2	5	...	1
Benchmark month.....	1	3	1	2	5	0	2	4
Number of series used.....	<sup>1</sup> 18	<sup>2</sup> 19	23	23	23	23	23	16
Percent of series high on benchmark date.	6	16	4	9	22	0	9	25
NBER ROUGHLY COINCIDENT INDICATORS								
8 months or more.....	1	...	1	...	3	2	2	2
7 months.....	...	...	...	...	...	...	...	...
6 months.....	...	...	...	...	...	...	...	...
5 months.....	...	...	...	4	...	...	...	...
4 months.....	4	...	...	2	...	...	...	...
3 months.....	...	...	2	...	...	...	...	1
2 months.....	...	2	...	...	2	...	1	2
1 month.....	1	3	5	2	...	1	5	1
Benchmark month.....	5	6	3	3	6	8	3	5
Number of series used.....	11	11	11	11	11	11	11	11
Percent of series high on benchmark date.	45	55	27	27	55	73	27	45

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

<sup>1</sup>5 series were not available.

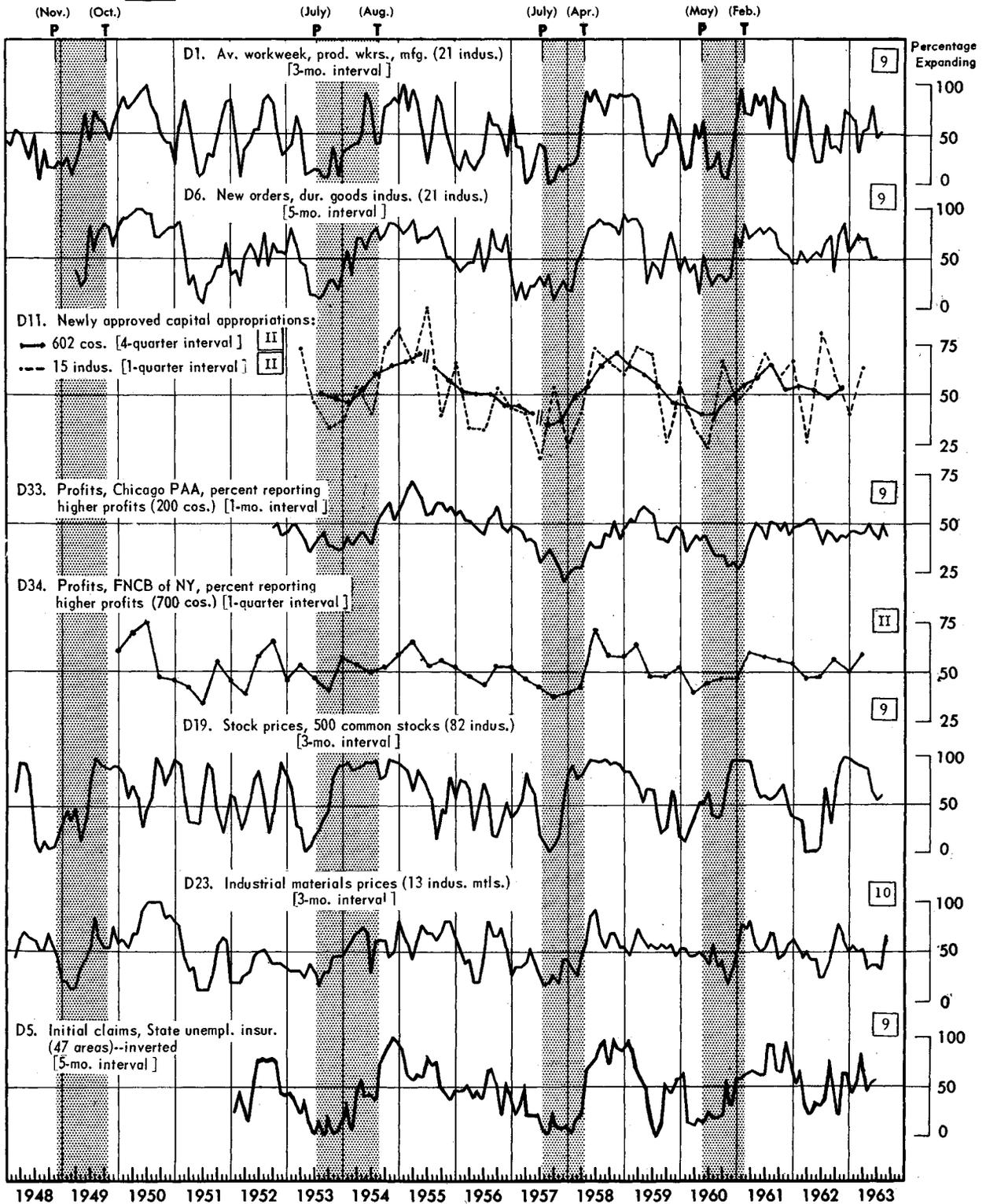
<sup>2</sup>2 series were not available and 2 series were omitted because their peaks were reached during the Korean War and such peaks were disregarded in this distribution.

**CHART 2**

**DIFFUSION INDEXES: 1948 TO PRESENT**

**A**

**NBER Leading Indicators**



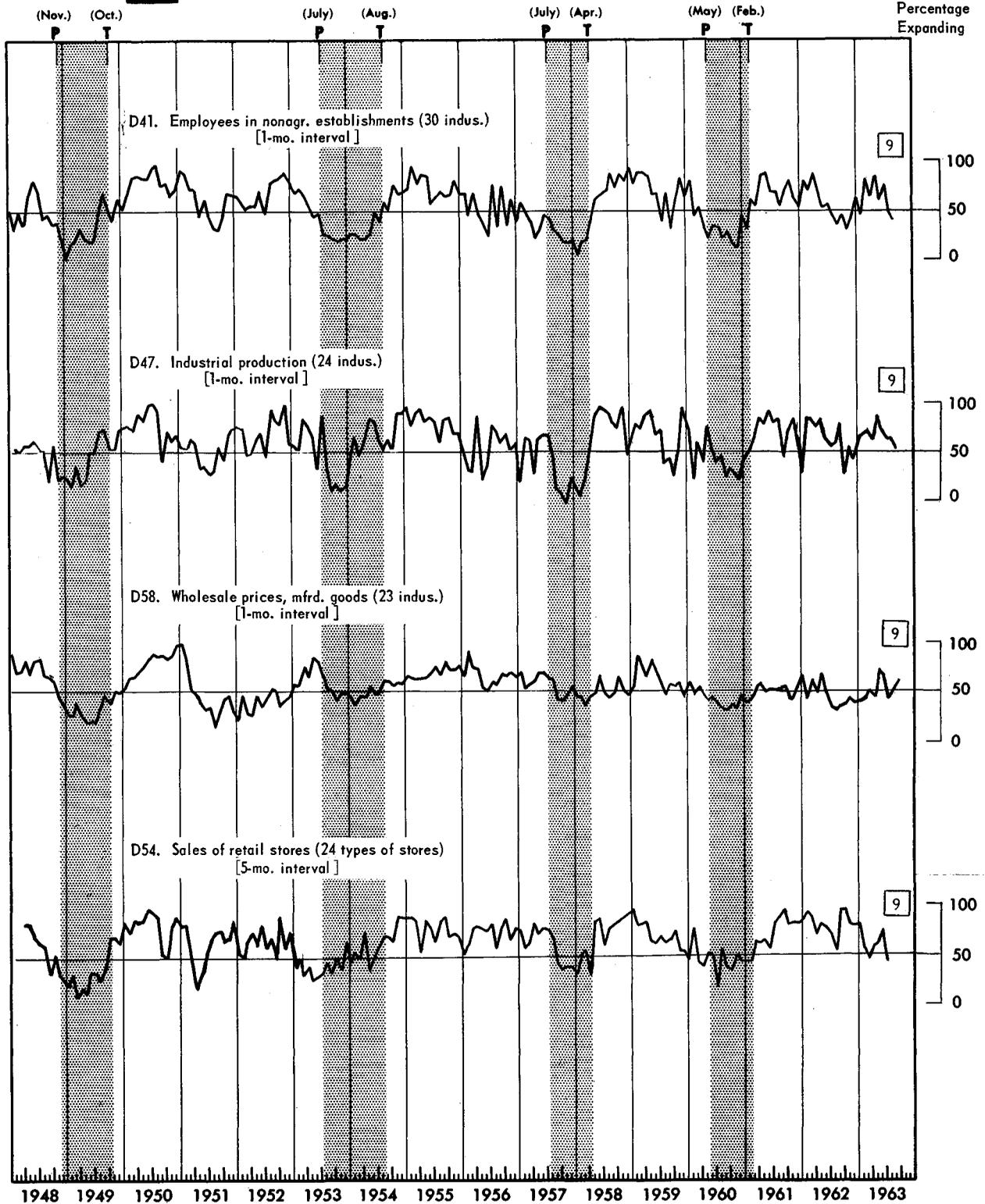
See "How to Read Charts 1, 2, and 3," page 5.

**CHART 2**

DIFFUSION INDEXES: 1948 TO PRESENT—Con.

**B**

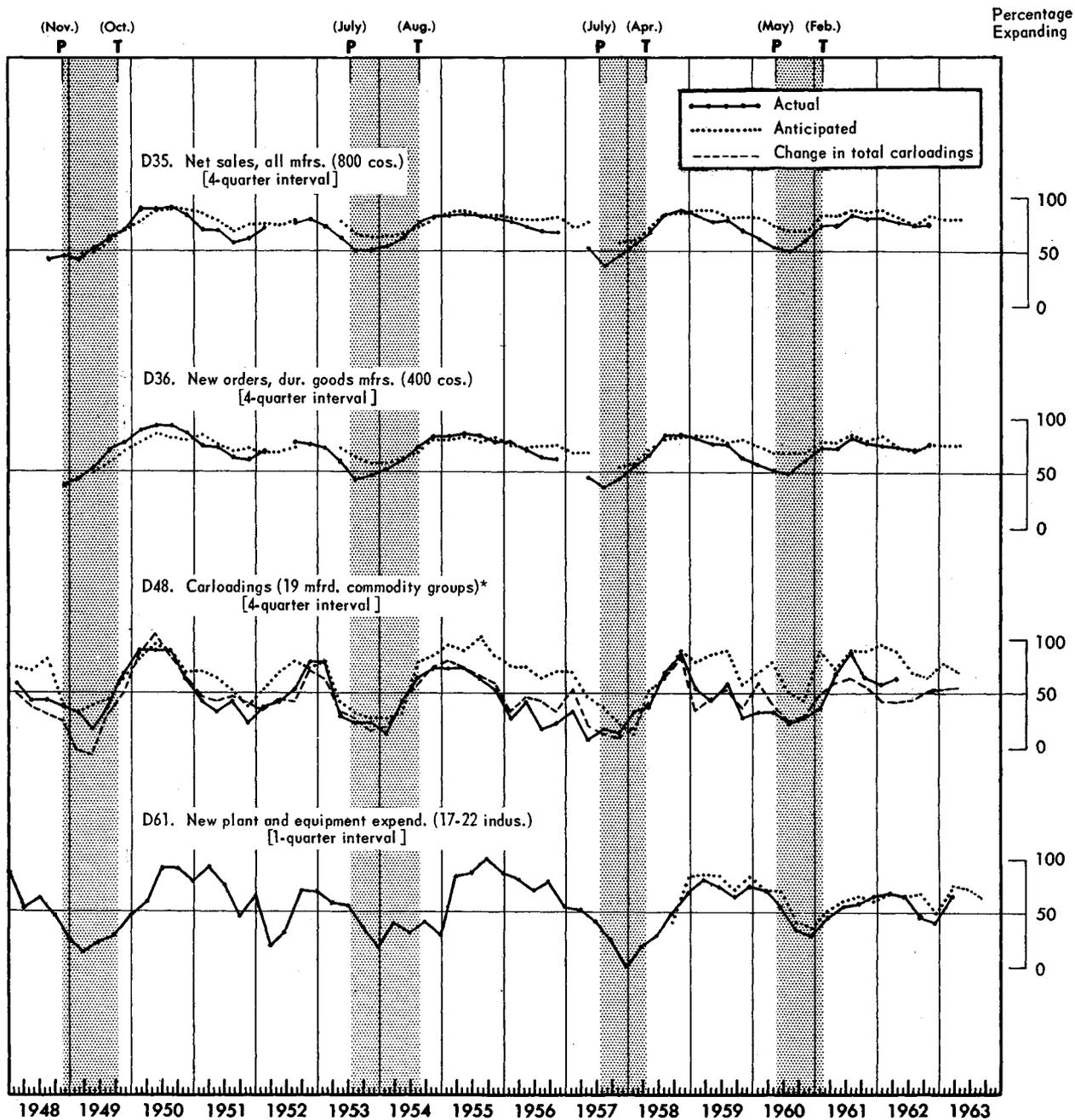
**NBER Roughly Coincident Indicators**



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 (July 1963)	2nd Q 1962 - 2nd Q 1963	4th Q 1962 - 4th Q 1963
D48 (September 1963)	4th Q 1961 - 4th Q 1962	4th Q 1961 - 4th Q 1962
D61 (August 1963)	1st Q 1963 - 2nd Q 1963	3rd Q 1963 - 4th Q 1963

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

## Analytical Measures

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 placed on the 3d month and 5-month figures are placed on the 4th month of span; 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. The "r" indicates revised; "p", preliminary; and "NA", not available.

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)
	1-month interval	3-month interval	1-month interval	5-month interval	a. 602 companies	b. 15 industries	
1960							
January.....	40.5	38.1	28.6	38.1	...	56.7	46
February.....	14.3	14.3	61.9	52.4	44	...	36
March.....	35.7	19.0	14.3	38.1	...	...	40
April.....	35.7	59.5	57.1	45.2	...	33.3	44
May.....	81.0	45.2	54.8	16.7	40	...	42
June.....	19.0	64.3	28.6	54.8	...	...	44
July.....	50.0	14.3	38.1	33.3	...	23.3	39
August.....	31.0	16.7	71.4	23.8	40	...	34
September.....	19.0	31.0	33.3	33.3	...	...	34
October.....	83.3	7.1	28.6	33.3	...	66.7	34
November.....	7.1	4.8	61.9	28.6	48	...	28
December.....	7.1	23.8	28.6	33.3	...	...	30
1961							
January.....	95.2	66.7	52.4	76.2	...	46.7	27
February.....	71.4	95.2	47.6	61.9	54	...	31
March.....	54.8	71.4	78.6	85.7	...	...	37
April.....	81.0	69.0	52.4	71.4	...	53.3	46
May.....	45.2	90.5	59.5	76.2	58	...	50
June.....	90.5	78.6	57.1	81.0	...	...	48
July.....	64.3	88.1	59.5	76.2	...	70.0	42
August.....	73.8	54.8	73.8	81.0	64	...	51
September.....	38.1	97.6	57.1	78.6	...	...	50
October.....	85.7	85.7	57.1	61.9	...	56.7	47
November.....	66.7	81.0	57.1	57.1	52	...	50
December.....	23.8	26.2	28.6	54.8	...	...	44
1962							
January.....	14.3	21.4	71.4	47.6	...	66.7	48
February.....	73.8	59.5	57.1	47.6	54	...	49
March.....	73.8	88.1	45.2	57.1	...	...	50
April.....	76.2	78.6	50.0	47.6	...	26.7	52
May.....	21.4	40.5	42.9	52.4	52	...	52
June.....	28.6	21.4	38.1	57.1	...	...	48
July.....	35.7	21.4	81.0	52.4	...	80.0	40
August.....	47.6	59.5	33.3	66.7	48	...	46
September.....	81.0	35.7	33.3	71.4	...	...	45
October.....	7.1	38.1	71.4	38.1	...	60.0	42
November.....	59.5	31.0	54.8	76.2	53	...	44
December.....	59.5	73.8	38.1	85.7	...	...	43
1963							
January.....	52.4	71.4	57.1	57.1	...	40.0	46
February.....	73.8	64.3	61.9	66.7	(NA)	...	46
March.....	40.5	31.0	57.1	76.2	...	...	45
April.....	16.7	52.4	57.1	71.4	...	63.3	46
May.....	81.0	54.8	69.0	r71.4	...	...	50
June.....	47.6	78.6	40.5	r50.0	...	...	46
July.....	45.2	47.6	r66.7	p52.4	...	(NA)	42
August.....	r42.9	p52.4	r38.1	...	...	...	50
September.....	p57.1	...	p61.9	...	...	...	44

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 placed on the 3d month and 5-month figures are placed on the 4th month of span; 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 D1a, 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. The "r" indicates revised; "p", preliminary; and "NA", not available.

Year and month	NBER Leading indexes--Continued						
	D34. Profits, mfg., FNCB (around 700 corporations)	D19. Index of stock prices, 500 common stocks (80 industries) <sup>1</sup>		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	5-month interval
1960							
January.....	52	28.5	27.1	69.2	53.8	34.0	59.6
February.....	...	11.2	11.8	42.3	53.8	54.8	63.8
March.....	...	33.5	27.6	46.2	46.2	10.6	14.9
April.....	40	52.4	41.2	53.8	46.2	47.9	11.7
May.....	...	36.5	52.4	50.0	50.0	38.3	17.0
June.....	...	75.9	50.6	57.7	46.2	37.2	14.9
July.....	45	32.9	63.5	46.2	38.5	55.3	26.6
August.....	...	76.5	38.8	46.2	57.7	17.0	23.4
September.....	...	15.3	36.5	42.3	34.6	68.1	20.2
October.....	47	23.5	42.4	23.1	42.3	42.6	21.3
November.....	...	89.4	76.5	46.2	15.4	36.2	57.4
December.....	...	80.7	93.8	26.9	30.8	53.2	31.9
1961							
January.....	47	87.0	96.3	38.5	46.2	59.6	57.4
February.....	...	96.3	96.3	69.2	76.9	31.9	59.6
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	68.1
June.....	...	40.2	57.3	46.2	50.0	58.5	66.0
July.....	58	42.1	57.9	50.0	53.8	51.1	61.7
August.....	...	81.1	54.9	76.9	69.2	61.7	93.6
September.....	...	39.6	55.5	53.8	69.2	46.8	93.6
October.....	56	45.7	62.2	38.5	42.3	78.7	68.1
November.....	...	87.8	72.6	30.8	46.2	74.5	63.8
December.....	...	56.1	52.4	65.4	57.7	23.4	91.5
1962							
January.....	54	26.2	39.6	73.1	61.5	57.4	74.5
February.....	...	74.4	37.8	34.6	53.8	83.0	51.1
March.....	...	48.2	32.9	46.2	42.3	46.8	66.0
April.....	47	9.1	0.0	38.5	50.0	46.8	31.9
May.....	...	1.2	1.2	53.8	42.3	40.4	21.3
June.....	...	1.2	1.2	23.1	42.3	14.9	34.0
July.....	48	67.7	8.5	30.8	23.1	68.1	31.9
August.....	...	78.0	67.1	42.3	23.1	57.4	38.3
September.....	...	34.8	31.1	50.0	42.3	44.7	78.7
October.....	56	6.7	72.6	57.7	65.4	46.8	48.9
November.....	...	98.8	90.2	69.2	79.2	72.3	22.3
December.....	...	84.8	98.8	37.5	62.5	27.7	63.8
1963							
January.....	50	97.6	97.6	58.3	50.0	36.2	63.8
February.....	...	79.3	93.8	66.7	58.3	87.2	44.7
March.....	...	43.8	91.2	46.2	50.0	47.9	53.2
April.....	59	91.2	90.0	50.0	53.8	44.7	83.0
May.....	...	85.0	88.0	46.2	34.6	48.9	46.8
June.....	...	51.9	62.5	65.4	38.5	71.3	53.2
July.....	(NA)	29.4	54.4	34.6	38.5	46.8	57.4
August.....	...	75.0	60.2	46.2	34.6	55.3	
September.....	...	76.9		50.0	<sup>2</sup> 65.4	36.2	
October.....	...			<sup>2</sup> 73.1			
November.....	...						
December.....	...						

<sup>1</sup>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).

<sup>2</sup>Average for October 15, 16, and 17, 1963.

## Analytical Measures

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 placed on the 3d month and 5-month figures are placed on the 4th month of span; 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. The "r" indicates revised; "p", preliminary; and "NA", not available.

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	5-month interval	1-month interval
1960							
January.....	65.0	85.0	70.8	75.0	47.9	45.8	60.3
February.....	80.0	71.7	20.8	43.8	43.8	77.1	45.6
March.....	46.7	56.7	58.3	41.7	45.8	43.8	56.8
April.....	53.3	43.3	39.6	68.8	89.6	39.6	46.7
May.....	35.0	33.3	75.0	66.7	4.2	52.1	40.4
June.....	23.3	23.3	54.2	66.7	66.7	50.0	45.4
July.....	35.0	23.3	39.6	41.7	45.8	18.8	39.6
August.....	35.0	26.7	45.8	20.8	45.8	56.3	32.5
September.....	23.3	33.3	25.0	20.8	45.8	37.5	32.0
October.....	30.0	25.0	33.3	16.7	79.2	35.4	36.9
November.....	18.3	18.3	27.1	12.5	22.9	50.0	32.5
December.....	13.3	20.0	20.8	20.8	37.5	43.8	46.7
1961							
January.....	45.0	15.0	45.8	37.5	58.3	43.8	38.6
February.....	33.3	40.0	52.1	62.5	41.7	43.8	41.3
March.....	61.7	43.3	66.7	81.3	60.4	64.6	54.6
April.....	56.7	78.3	83.3	83.3	22.9	62.5	59.7
May.....	86.7	85.0	77.1	87.5	79.2	64.6	49.1
June.....	88.3	90.0	91.7	83.3	77.1	56.3	51.9
July.....	70.0	90.0	79.2	100.0	60.4	83.3	50.4
August.....	70.0	66.7	83.3	79.2	68.8	87.5	52.1
September.....	56.7	80.0	45.8	79.2	39.6	95.8	55.9
October.....	71.7	80.0	72.9	75.0	83.3	81.3	43.4
November.....	81.7	78.3	83.3	87.5	87.5	83.3	41.2
December.....	63.3	76.7	56.3	41.7	60.4	83.3	51.1
1962							
January.....	55.0	78.3	29.2	50.0	58.3	85.4	64.7
February.....	80.0	88.3	83.3	66.7	50.0	93.8	43.5
March.....	71.7	88.3	83.3	91.7	70.8	89.6	61.1
April.....	86.7	80.0	75.0	83.3	68.8	70.8	46.7
May.....	71.7	73.3	83.3	70.8	58.3	81.3	68.6
June.....	55.0	65.0	62.5	79.2	18.8	79.2	47.6
July.....	56.7	51.7	54.2	68.8	83.3	70.8	33.0
August.....	46.7	38.3	58.3	79.2	75.0	54.2	30.3
September.....	36.7	35.0	79.2	41.7	64.6	95.8	36.3
October.....	45.0	26.7	29.2	62.5	39.6	95.8	39.0
November.....	33.3	28.3	54.2	45.8	87.5	81.3	45.6
December.....	43.3	43.3	41.7	58.3	66.7	79.2	35.9
1963							
January.....	63.3	53.3	66.7	54.2	50.0	81.3	38.6
February.....	48.3	65.0	68.8	81.3	54.2	56.3	r41.3
March.....	83.3	71.7	72.9	83.3	52.1	45.8	50.3
April.....	66.7	83.3	62.5	91.7	41.7	58.3	42.3
May.....	85.0	78.3	87.5	87.5	52.1	r62.5	73.0
June.....	61.7	r75.0	r75.0	83.3	75.0	r75.0	r67.1
July.....	r75.0	r58.3	r64.6	r81.3	r66.7	p43.8	41.7
August.....	r50.0	p66.7	r64.6	p70.8	r70.8		r52.1
September.....	p41.7		p52.1		p20.8		p60.2
October.....							
November.....							
December.....							

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; and "NA", not available.

Year and month	D35. Net sales, manufactures (800 companies)		D36. New orders, durable manufactures (400 companies)		D48. Freight carloadings (19 manufactured commodity groups)			D61. New plant and equipment expenditures (16 industries)	
	4-quarter interval		4-quarter interval		4-quarter interval			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.....	...	...	...	...	...	...	...	...	...
April.....	...	...	...	...	...	...	...	71.9	71.9
May.....	53	74	51	68	31.6	78.9	-103	...	...
June.....	...	...	...	...	...	...	...	...	...
July.....	...	...	...	...	...	...	...	56.2	71.9
August.....	50	70	50	68	21.1	50.0	-279	...	...
September.....	...	...	...	...	...	...	...	...	...
October.....	...	...	...	...	...	...	...	34.4	43.8
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.....	...	...	...	...	...	...	...	...	...
April.....	...	...	...	...	...	...	...	46.9	53.1
May.....	74	83	73	78	68.4	73.7	+79	...	...
June.....	...	...	...	...	...	...	...	...	...
July.....	...	...	...	...	...	...	...	56.2	62.5
August.....	82	88	82	86	87.5	89.5	+125	...	...
September.....	...	...	...	...	...	...	...	...	...
October.....	...	...	...	...	...	...	...	59.4	65.6
November.....	81	86	78	82	63.2	89.5	+62	...	...
December.....	...	...	...	...	...	...	...	...	...
1962									
January.....	...	...	...	...	...	...	...	65.6	62.5
February.....	80	88	76	84	57.9	94.7	-67	...	...
March.....	...	...	...	...	...	...	...	...	...
April.....	...	...	...	...	...	...	...	68.8	68.8
May.....	76	80	74	74	63.2	89.5	-96	...	...
June.....	...	...	...	...	...	...	...	...	...
July.....	...	...	...	...	...	...	...	65.6	65.6
August.....	72	74	71	70	(NA)	68.4	-66	...	...
September.....	...	...	...	...	...	...	...	...	...
October.....	...	...	...	...	...	...	...	46.9	68.8
November.....	74	82	76	76	...	63.2	r+28	...	...
December.....	...	...	...	...	...	...	...	...	...
1963									
January.....	...	...	...	...	...	...	...	40.6	50.0
February.....	(NA)	80	(NA)	76	...	78.9	r+38	...	...
March.....	...	...	...	...	...	...	...	...	...
April.....	...	...	...	...	...	...	...	65.6	75.0
May.....	...	80	...	76	...	68.4	...	...	...
June.....	...	...	...	...	...	...	...	...	...
July.....	...	...	...	...	...	...	...	(NA)	71.9
August.....	...	...	...	...	...	...	...	...	...
September.....	...	...	...	...	...	...	...	...	...
October.....	...	...	...	...	...	...	...	...	62.5
November.....	...	...	...	...	...	...	...	...	...
December.....	...	...	...	...	...	...	...	...	...

Table 6.--DIRECTION OF CHANGE IN SERIES COMPONENTS OVER SPECIFIED TIME SPANS AND PERCENT OF SERIES RISING: JULY 1962 TO PRESENT

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

21 industry components	1-month spans												3-month spans																											
	1962						1963						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	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				
Percent rising.....	36	48	81	7	60	60	52	74	40	17	81	48	45	43	57	21	21	60	36	38	31	74	71	64	31	52	55	79	48	52										
All manufacturing industries.....	o	-	+	-	+	-	+	-	+	-	+	o	-	-	+	-	-	+	-	+	-	+	-	+	-	+	o	+	-	+										
DURABLE GOODS INDUSTRIES																																								
Ordnance and accessories.....	-	+	o	-	+	+	o	+	-	o	+	+	+	+	+	+	o	-	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Lumber and wood products.....	+	+	+	-	+	o	o	+	-	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Furniture and fixtures.....	+	+	o	-	o	-	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Stone, clay, and glass products.....	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Primary metal products.....	-	+	+	-	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Fabricated metal products.....	-	o	+	+	o	+	+	o	-	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Machinery, except electrical.....	o	o	+	-	o	+	o	+	-	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Electrical machinery.....	o	o	+	-	o	o	o	+	-	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Transportation equipment.....	+	+	+	-	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Instruments and related products.....	o	+	+	-	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Miscellaneous manufacturing industries.....	o	-	+	-	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
NONDURABLE GOODS INDUSTRIES																																								
Food and kindred products.....	+	-	+	-	+	o	-	+	+	-	+	+	+	+	+	+	+	o	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Tobacco manufactures.....	o	-	+	-	+	-	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Textile mill products.....	-	-	o	-	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Apparel and allied products.....	-	-	+	-	+	+	+	o	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Paper and allied products.....	-	o	+	-	+	+	+	o	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Printing and publishing.....	o	o	+	-	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 1962 TO PRESENT--Continued

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

21 industry components	1-month spans												5-month spans																								
	1962						1963						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	Feb-Jul	Mar-Aug	Apr-Sep	May-Oct	Jun-Nov	Jul-Dec	Aug-Jan	Sep-Feb	Oct-Mar	Nov-Apr	Dec-May	Jan-Jun	Feb-Jul	Mar-Aug	Apr-Sep	May-Oct	Jun-Nov	Jul-Dec	
Percent rising.....	81	33	33	71	55	38	57	62	57	57	69	40	67	38	62								52	57	52	67	71	38	76	86	57	67	76	71	71	50	52
All durable goods industries <sup>1</sup> .....	+	-	-	+	-	-	+	+	+	+	-	-	+	-	+								+	-	+	+	+	-	+	+	+	+	+	+	+	-	-
Iron and steel.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Primary nonferrous metals.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Other primary metals.....	+	+	+	+	+	+	+	+	+	+	o	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Electrical generator apparatus*.....	+	+	+	+	+	+	+	+	+	+	+	o	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Radio, television, and equipment.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Other electrical equipment*.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Motor vehicles.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Motor vehicle parts.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Aircraft.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Other transportation equipment*.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stone, clay, and glass products.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Metalworking machinery*.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Special industrial machinery*.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
General industrial machinery*.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Engines and turbines*.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Agricultural implements.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Construction machinery*.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Office machines*.....	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
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.

<sup>1</sup>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 1962 TO PRESENT--Continued

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

24 industry components <sup>1</sup>	1-month spans												3-month spans																						
	1962						1963						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	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
Percent rising <sup>2</sup> .....	68	78	35	7	99	85	98	79	44	91	85	52	29	75	77	1	8	67	31	73	90	99	98	94	91	90	88	62	54	60					
500 stock prices.....	+	+	-	-	+	+	+	+	-	+	+	o	-	+	+	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Mining and smelting.....	-	+	+	+	+	+	+	+	NA	NA	NA	NA	NA	NA	NA	-	-	+	+	+	+	+	+	NA											
Coal, bituminous.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Food composite.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Tobacco (cigarette manufacturing).....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Textile weavers.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Paper.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Publishing.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Chemicals.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Drugs.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Oil composite.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Building materials composite.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Steel.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Metal fabricating.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Machinery composite.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Office and business equipment.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Electric household appliances.....	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Electronics.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Automobiles.....	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Radio and television broadcasters.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
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.

<sup>1</sup>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.

<sup>2</sup>Based on 82 industries, July 1962 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 1962 TO PRESENT--Continued

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

13 industrial materials components	1-month spans												3-month spans																										
	1962						1963						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 <sup>1</sup>	Oct-Nov	Nov-Dec	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 <sup>1</sup>	Aug-Nov	Sep-Dec			
Percent rising.....	31	42	50	58	69	38	58	67	46	50	46	65	35	46	50	73								42	23	23	42	65	79	62	50	58	50	54	35	38	38	35	65
All industrial materials.....	-	+	-	+	+	-	-	-	-	+	+	-	+	o	-	+								+	-	-	+	+	+	+	-	-	+	-	-	+	+		
Copper scrap (lb.).....	-	+	-	+	+	-	+	+	+	+	+	+	o	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	o		
Lead scrap (lb.).....	+	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	+	+	+	+		
Burlap (yd.).....	-	-	+	+	+	NA	NA	NA	+	+	+	+	+	+	+	+								+	+	+	+	+	+	NA	NA	+	+	+	+	+	+		
Cotton (lb.), 15 market average.....	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	o								+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Print cloth (yd.), average.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	o								+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Wool tops (lb.).....	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	o								+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Hides (lb.).....	-	+	+	-	+	-	-	+	-	o	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Rosin (100 lb.).....	o	o	o	o	+	-	o	o	o	o	o	o	+	+	+	o								o	o	o	+	+	+	+	+	+	+	+	+	+	+		
Rubber (lb.).....	-	+	+	+	+	-	-	+	+	+	+	+	+	+	+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Tallow (lb.).....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								-	-	-	-	-	-	-	-	-	-	-	-	-	-		

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

<sup>1</sup>Average for October 15, 16, and 17, 1963.



Table 6.--DIRECTION OF CHANGE IN SERIES COMPONENTS OVER SPECIFIED TIME SPANS AND PERCENT OF SERIES RISING: JULY 1962 TO PRESENT--Continued

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

30 industry components	1-month spans												3-month spans																											
	1962					1963							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	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				
Percent rising.....	57	47	37	45	33	43	63	48	83	67	85	62	75	50	42	65	52	38	35	27	28	43	53	65	72	83	78	75	58	67										
All nonagricultural establishments.....	+	o	+	+	o	o	+	+	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Ordnance and accessories.....	+	+	-	o	o	-	o	-	-	-	+	-	-	o	o	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Lumber and wood products.....	-	o	+	o	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Furniture and fixtures.....	o	+	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Stone, clay, and glass products.....	o	+	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Primary metal industries.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Fabricated metal products.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Machinery.....	+	+	-	+	-	+	+	-	o	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Electrical equipment.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Transportation equipment.....	o	-	+	o	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Instruments and related products.....	+	o	-	+	-	+	+	o	+	+	+	+	+	o	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Miscellaneous manufacturing industries.....	+	-	-	o	o	-	o	o	+	o	+	-	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Food and kindred products.....	o	+	+	+	-	+	-	-	+	+	+	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Tobacco manufactures.....	+	+	o	o	-	+	-	o	o	+	-	-	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Textile mill products.....	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Apparel and related products.....	o	o	-	+	-	+	+	+	+	+	+	+	+	o	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Paper and allied products.....	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Printing and publishing.....	+	+	o	o	-	-	+	+	+	+	+	+	o	o	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Chemicals and allied products.....	+	+	o	o	o	o	+	+	o	+	o	-	+	o	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Petroleum and related products.....	+	+	o	o	o	o	+	+	+	+	+	+	+	o	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Rubber and plastics products.....	-	o	-	o	o	-	+	o	+	+	-	-	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Leather and leather products.....	-	o	-	o	o	-	-	o	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Mining.....	-	o	-	-	-	-	-	o	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Contract construction.....	+	o	-	+	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Transportation and public utilities.....	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Wholesale trade.....	o	+	+	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Retail trade.....	o	+	+	+	+	+	+	+	+	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Finance, insurance, real estate.....	+	+	+	+	+	+	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Services and miscellaneous.....	+	+	o	+	+	+	+	+	+	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Federal government.....	+	o	-	o	+	-	+	-	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
State and local government.....	o	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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

Analytical Measures

Table 6.--DIRECTION OF CHANGE IN SERIES COMPONENTS OVER SPECIFIED TIME SPANS AND PERCENT OF SERIES RISING: JULY 1962 TO PRESENT--Continued

G.--(D47) Index of Industrial Production

24 industry components	1-month spans												3-month spans																										
	1962						1963						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	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			
Percent rising <sup>1</sup> .....	54	58	79	29	54	42	67	69	73	62	88	75	65	65	52	79	69	79	42	62	46	58	54	81	83	92	88	83	81	71									
All industrial production.....	+	o	+	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	-	+	-	o	+	+	+	+	+	+	+	+	-								
DURABLE GOODS																																							
Primary and fabricated metals.....	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Primary metal products.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Fabricated metal products.....	o	o	o	o	o	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Machinery and related products.....	o	o	o	o	o	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Machinery, except electrical.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Electrical machinery.....	+	o	+	+	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Transportation equipment.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Instruments and related products.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Clay, glass, and lumber.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Clay, glass, and stone.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lumber and products.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Furniture and miscellaneous.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Furniture and fixtures.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Miscellaneous.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
NONDURABLE GOODS																																							
Textile, apparel, and leather.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Textile mill products.....	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Apparel products.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Leather and products.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Paper and printing.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Paper and products.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Printing and publishing.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Chemicals, petroleum, and rubber.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Chemicals and products.....	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Petroleum products.....	+	+	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Rubber and plastics products.....	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Foods, beverages, and tobacco.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Food and beverages.....	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Tobacco products.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
MINERALS																																							
Coal.....	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Crude oil and natural gas.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Metal, stone, and earth minerals.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Metal mining.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stone and earth minerals.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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

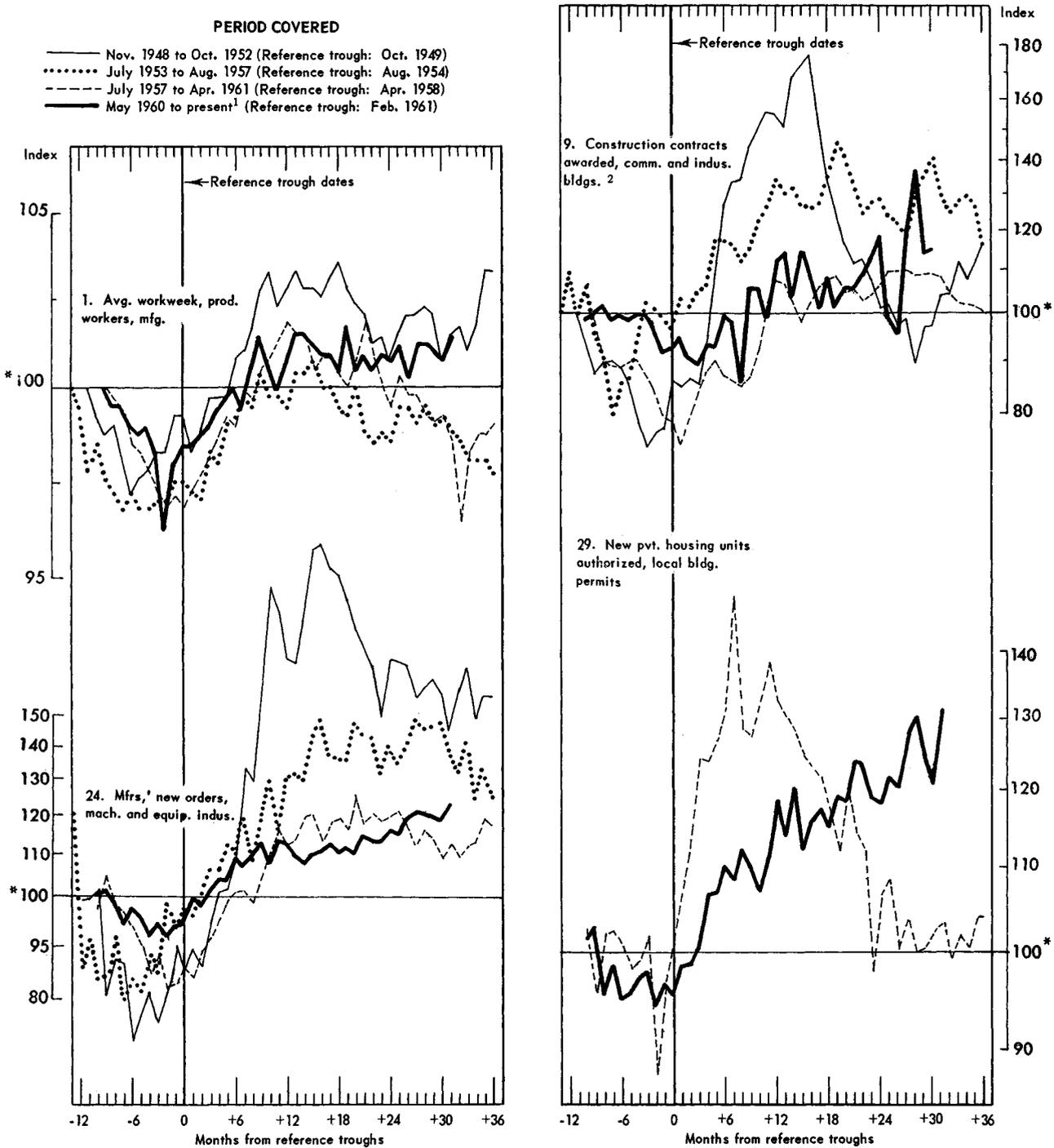
<sup>1</sup>The direction of change is shown for industry groups where actual data for separate industries are not available; however, estimates for each industry are used to compute the percent rising. The percent rising is based on 24 industry components.



**CHART 4**

**COMPARISONS OF REFERENCE CYCLE PATTERNS**

Percent of reference peak levels of selected series compared for 4 business cycles. Period begins with the reference peak date preceding 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 values are shown in appendix C.

<sup>1</sup>See table 1 for latest month in current period. Percent changes for this month and comparable months of previous expansions are shown in table 7. the 1949, 1954, and 1958 cycles, a 3-term moving average is shown.

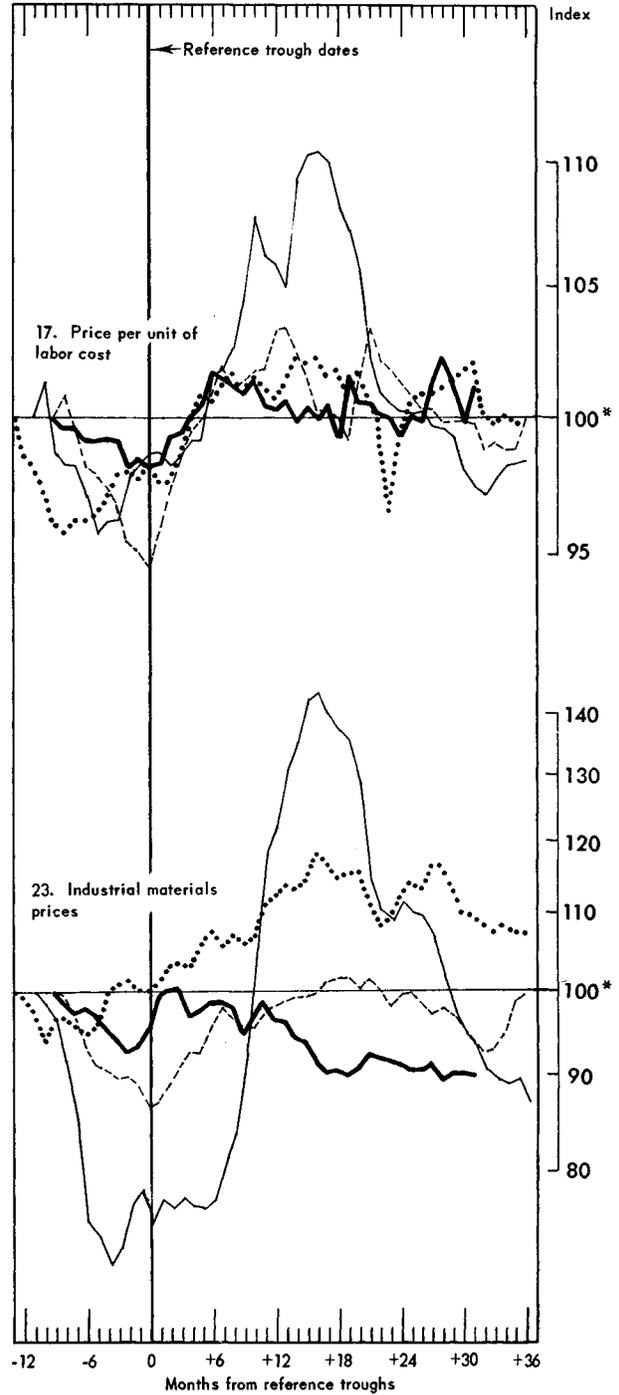
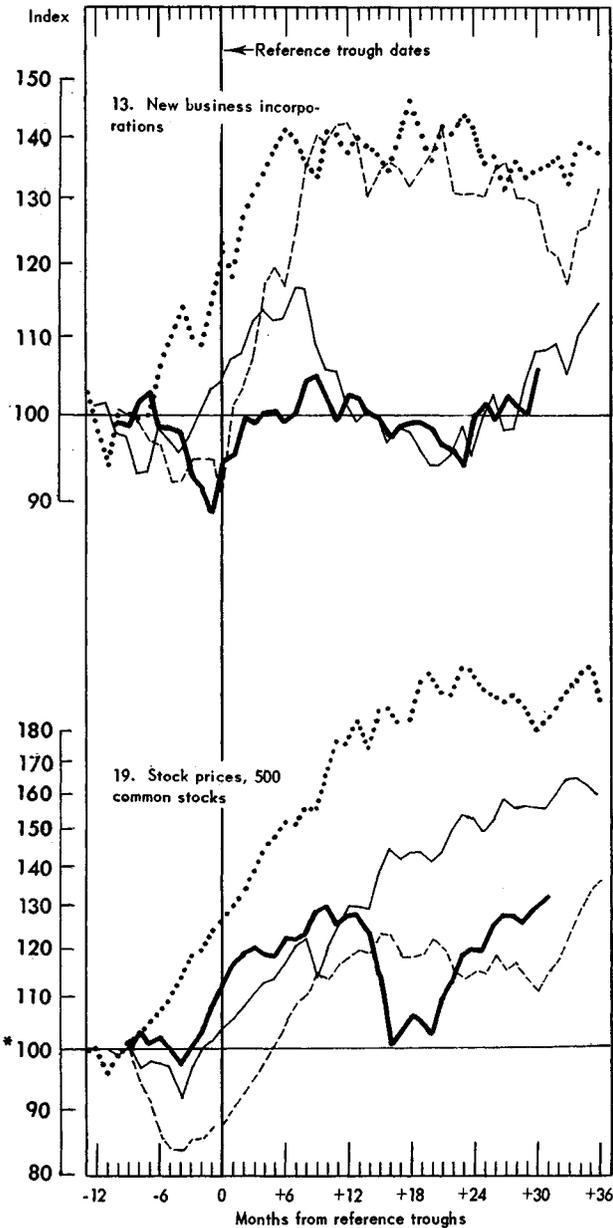
**CHART 4**

**COMPARISONS OF REFERENCE CYCLE PATTERNS--Con.**

Percent of reference peak levels of selected series compared for 4 business cycles. Period begins with the reference peak date preceding the trough of each cycle.

**PERIOD COVERED**

- Nov. 1948 to Oct. 1952 (Reference trough: Oct. 1949)
- ..... July 1953 to Aug. 1957 (Reference trough: Aug. 1954)
- - - July 1957 to Apr. 1961 (Reference trough: Apr. 1958)
- May 1960 to present<sup>1</sup> (Reference trough: Feb. 1961)



\*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 values are shown in appendix C.

<sup>1</sup>See table 1 for latest month in current period. Percent changes for this month and comparable months of previous expansions are shown in table 7.

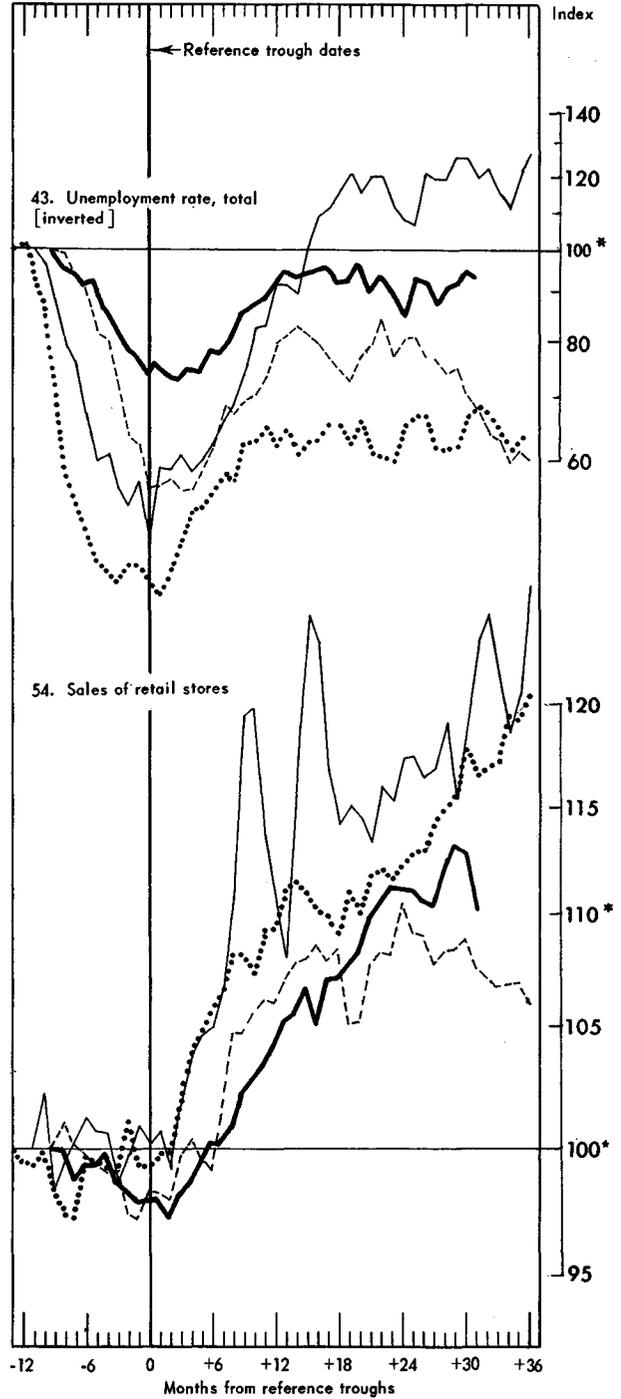
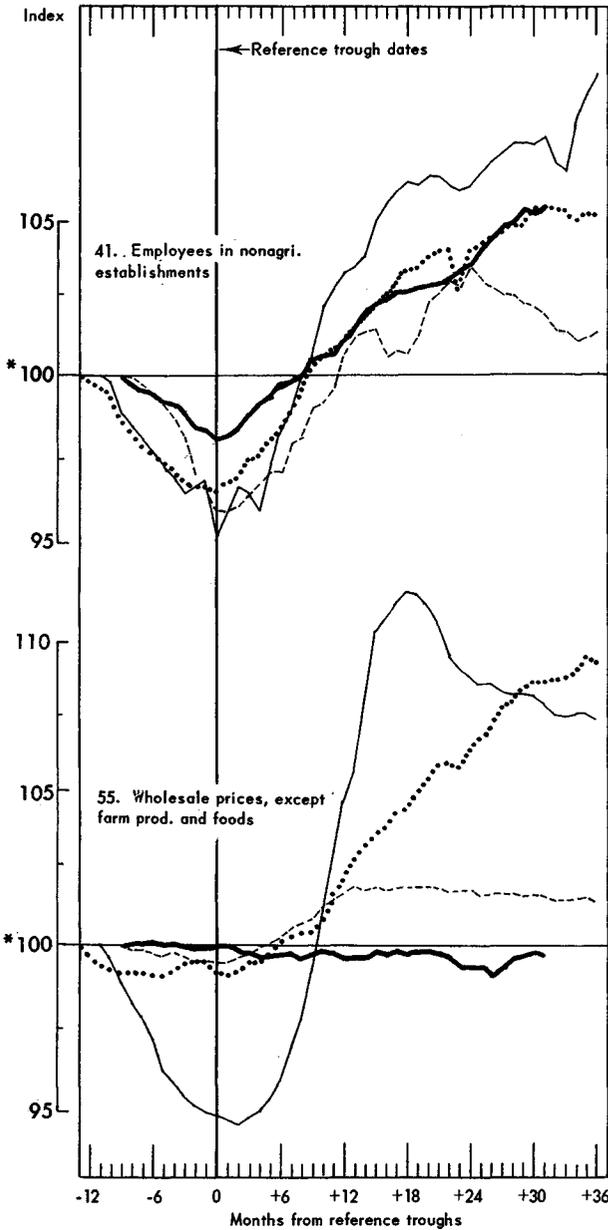
**CHART 4**

**COMPARISONS OF REFERENCE CYCLE PATTERNS--Con.**

Percent of reference peak levels of selected series compared for 4 business cycles. Period begins with the reference peak date preceding the trough of each cycle.

**PERIOD COVERED**

- Nov. 1948 to Oct. 1952 (Reference trough: Oct. 1949)
- ..... July 1953 to Aug. 1957 (Reference trough: Aug. 1954)
- - - July 1957 to Apr. 1961 (Reference trough: Apr. 1958)
- May 1960 to present<sup>1</sup> (Reference trough: Feb. 1961)



\* 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 values are shown in appendix C.

<sup>1</sup>See table 1 for latest month in current period. Percent changes for this month and comparable months of previous expansions are shown in table 7.

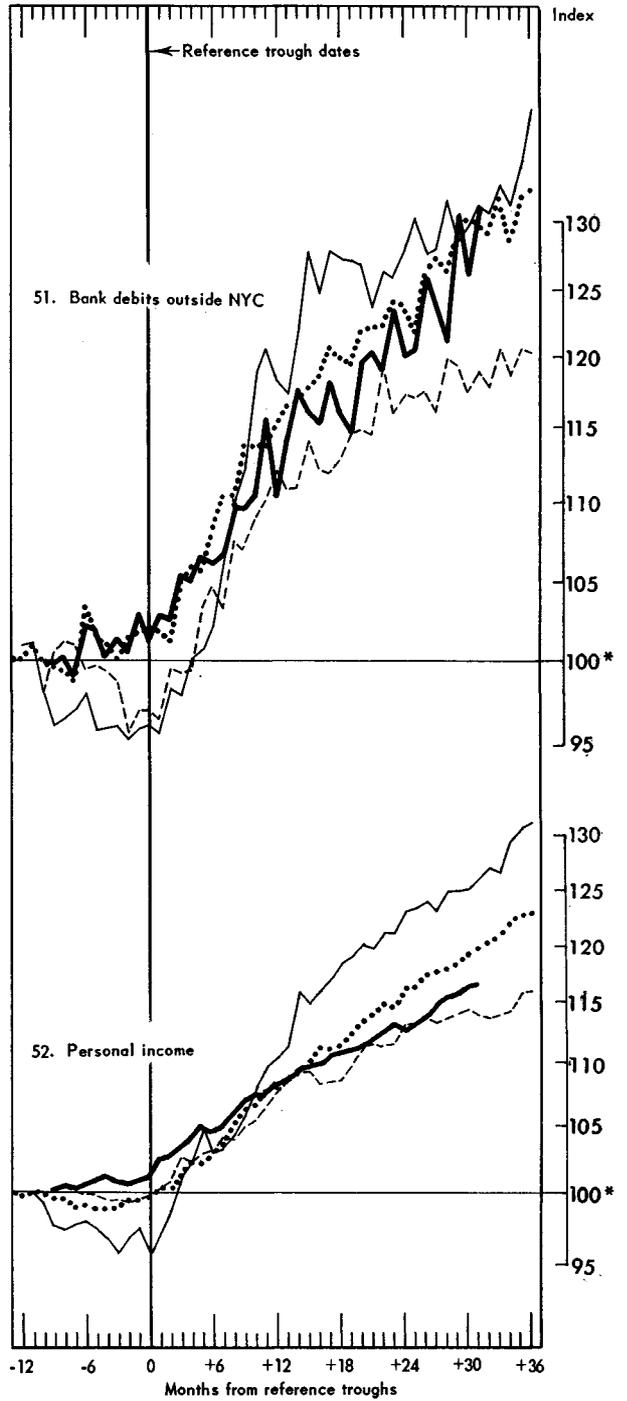
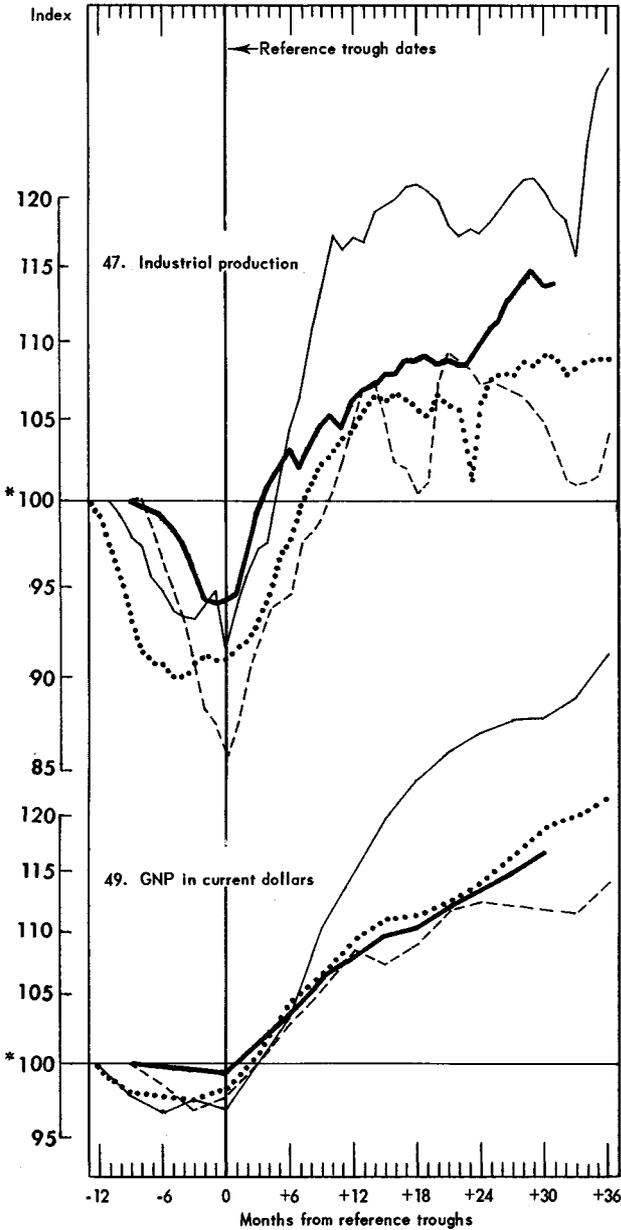
**CHART 4**

**COMPARISONS OF REFERENCE CYCLE PATTERNS--Con.**

Percent of reference peak levels of selected series compared for 4 business cycles. Period begins with the reference peak date preceding the trough of each cycle.

**PERIOD COVERED**

- Nov. 1948 to Oct. 1952 (Reference trough: Oct. 1949)
- ..... July 1953 to Aug. 1957 (Reference trough: Aug. 1954)
- - - - July 1957 to Apr. 1961 (Reference trough: Apr. 1958)
- May 1960 to present<sup>1</sup> (Reference trough: Feb. 1961)



\*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 values are shown in appendix C.

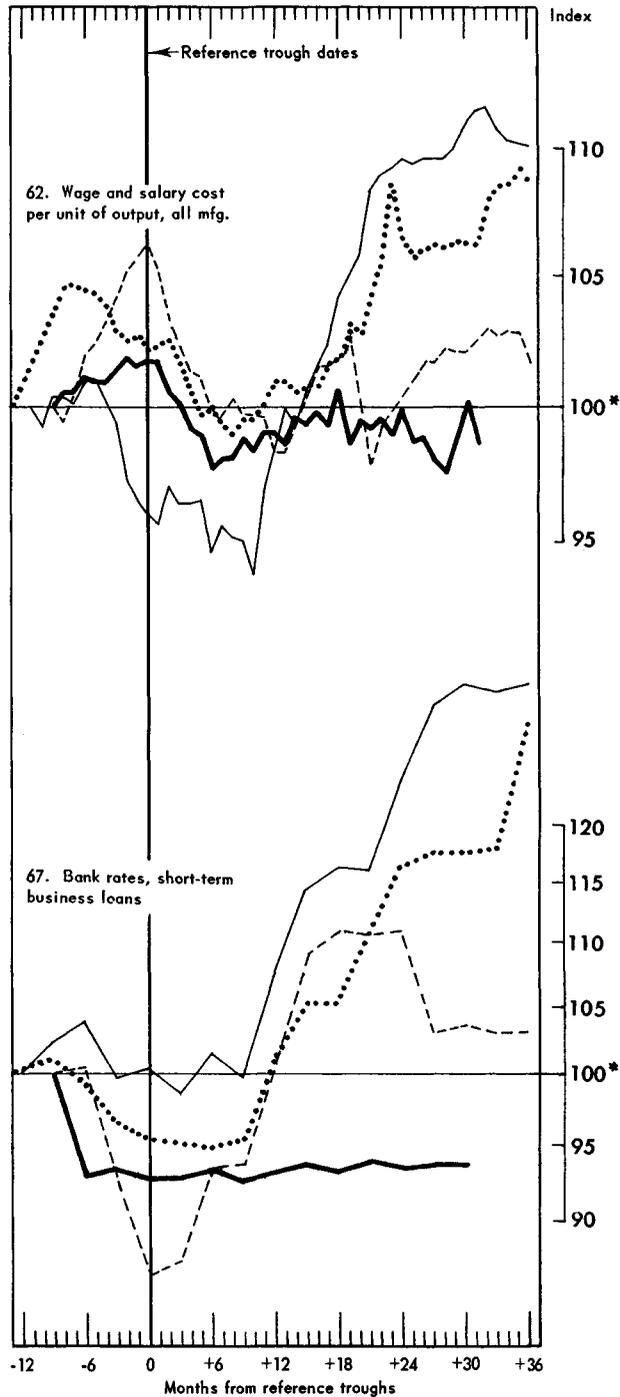
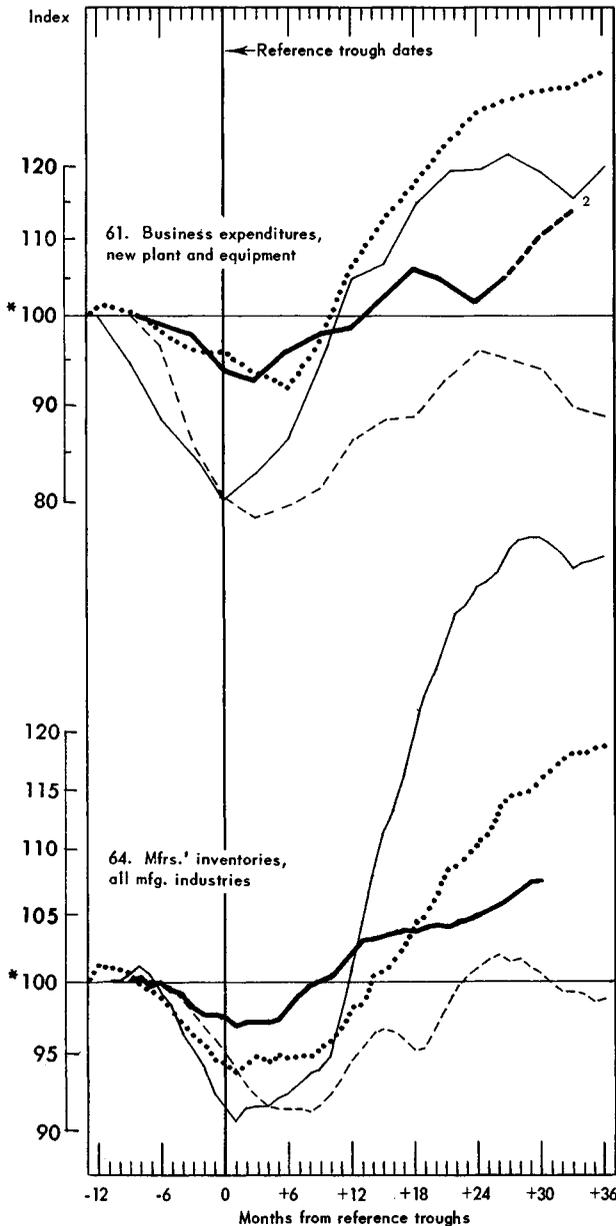
<sup>1</sup>See table 1 for latest month in current period. Percent changes for this month and comparable months of previous expansions are shown in table 7.

**CHART 4**      **COMPARISONS OF REFERENCE CYCLE PATTERNS--Con.**

Percent of reference peak levels of selected series compared for 4 business cycles. Period begins with the reference peak date preceding the trough of each cycle.

**PERIOD COVERED**

- Nov. 1948 to Oct. 1952 (Reference trough: Oct. 1949)
- ..... July 1953 to Aug. 1957 (Reference trough: Aug. 1954)
- - - July 1957 to Apr. 1961 (Reference trough: Apr. 1958)
- May 1960 to present<sup>1</sup> (Reference trough: Feb. 1961)



\*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 values are shown in appendix C.

<sup>1</sup>See table 1 for latest month in current period. Percent changes for this month and comparable months of previous expansions are shown in table 7.

<sup>2</sup>Last 2 quarters anticipated.

**CHART 5**

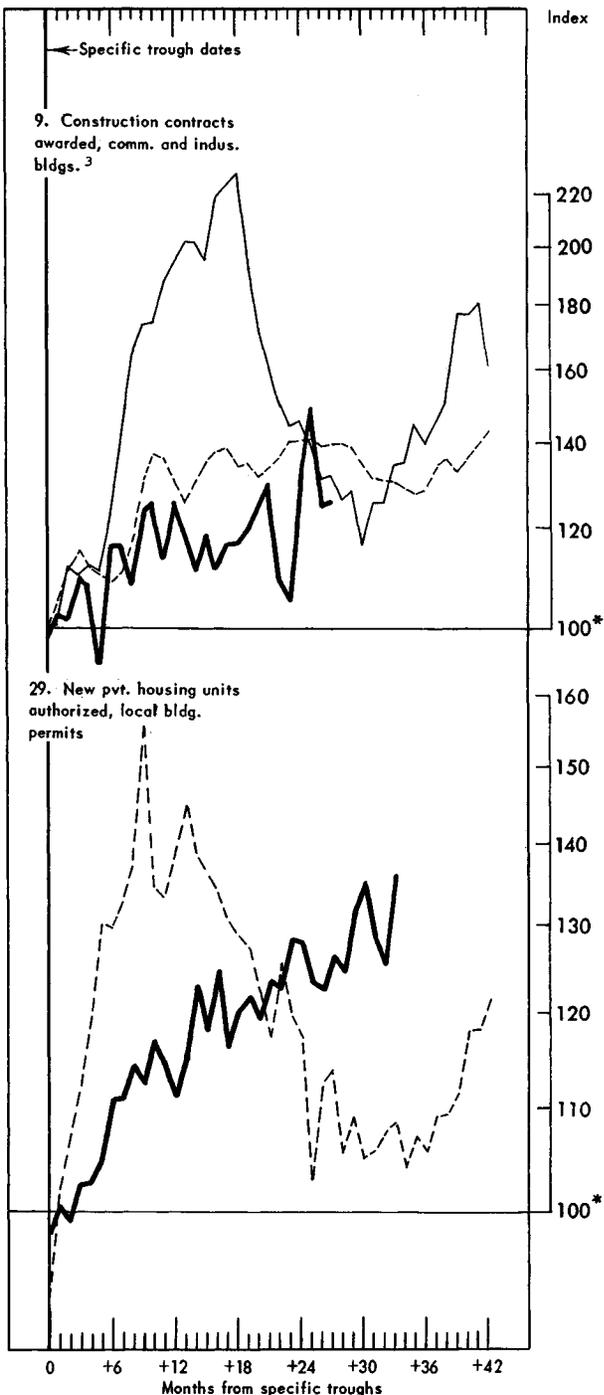
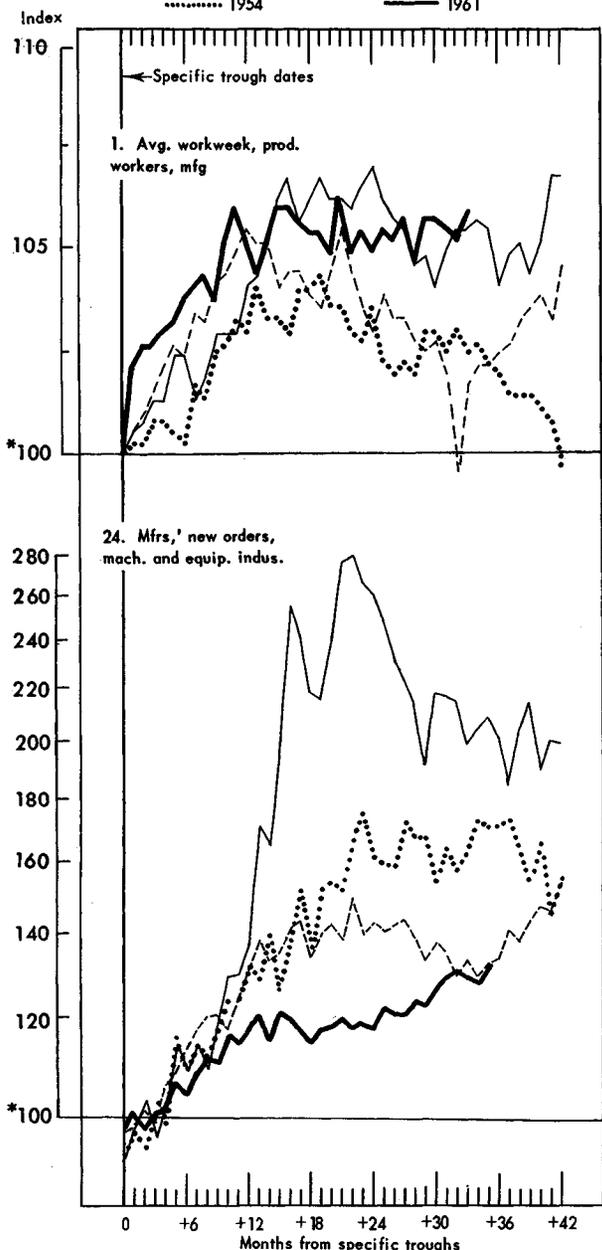
**COMPARISONS OF SPECIFIC CYCLE PATTERNS**

Percent of specific trough levels of selected series compared for 4 business expansions. Period begins with the specific trough date<sup>1</sup> of each series for each expansion.

**PERIOD COVERED**

From specific trough dates to 42 months later.<sup>2</sup> Specific trough dates are the dates each series actually begins the expansion identified with the reference trough of--

— 1949                      - - - - 1958  
 ..... 1954                ——— 1961



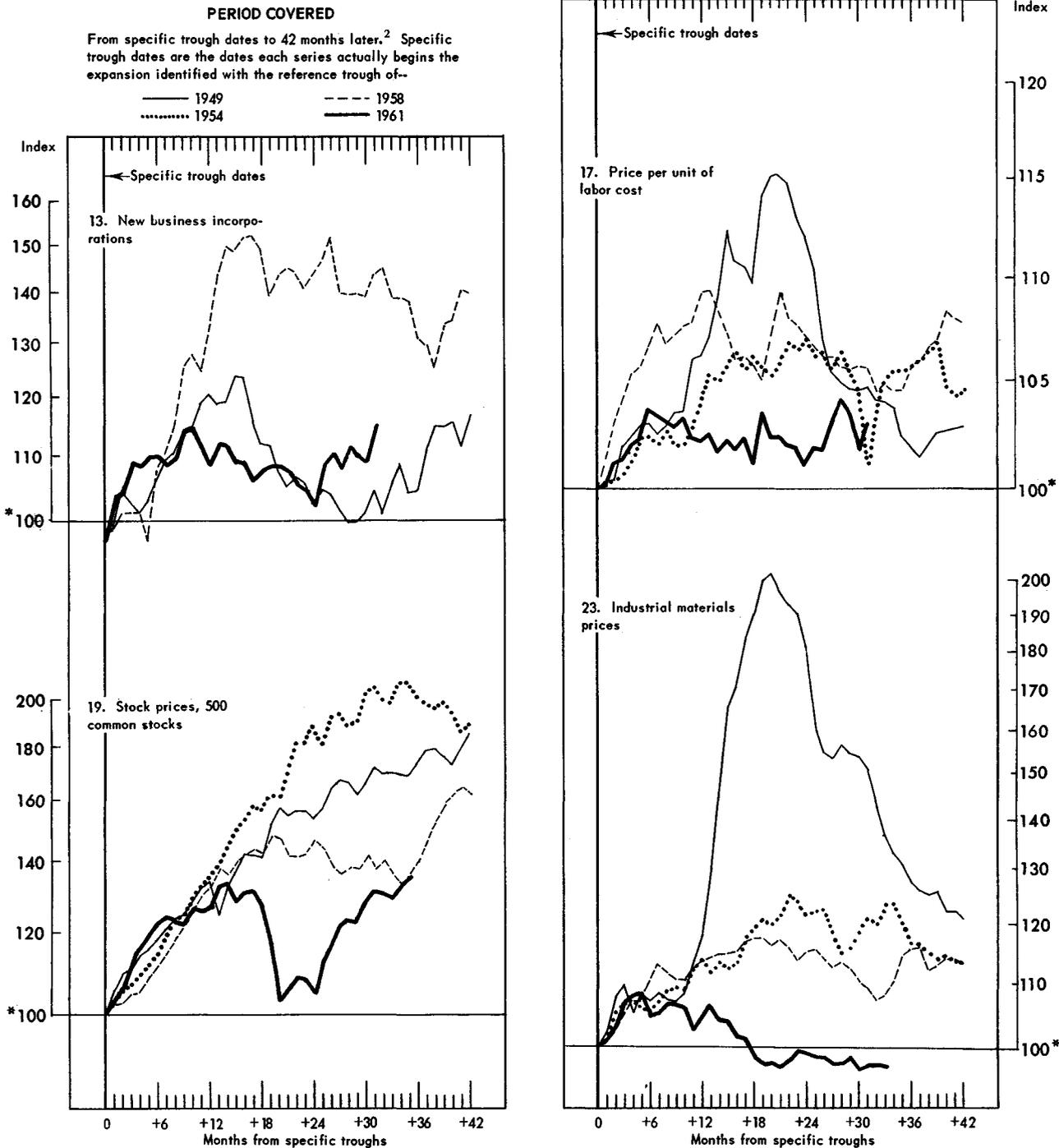
\*Specific trough level. For series with a "months for cyclical dominance" (MCD) of "1" or "2", the figure for the specific trough is set at "100". For series with an MCD of "3" or more, the average of the 3 months centered on the specific trough month is set at "100". For quarterly series, the specific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

<sup>1</sup>See appendix B for specific dates. <sup>2</sup>See table 1 for latest month in current period. Percent changes for this month and comparable months after the specific troughs of previous expansions are shown in table 9. <sup>3</sup>For the current cycle, changes are based on the low (L) shown in table 1. For the 1949 and 1958 cycles, a 3-term moving average is shown.

**CHART 5**

**COMPARISONS OF SPECIFIC CYCLE PATTERNS--Con.**

Percent of specific trough levels of selected series compared for 4 business expansions. Period begins with the specific trough date<sup>1</sup> of each series for each expansion.



\*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 values are shown in appendix C.

<sup>1</sup>See appendix B for specific dates. <sup>2</sup>See table 1 for latest month in current period. Percent changes for this month and comparable months after the specific troughs of previous expansions are shown in table 9.

**CHART 5**

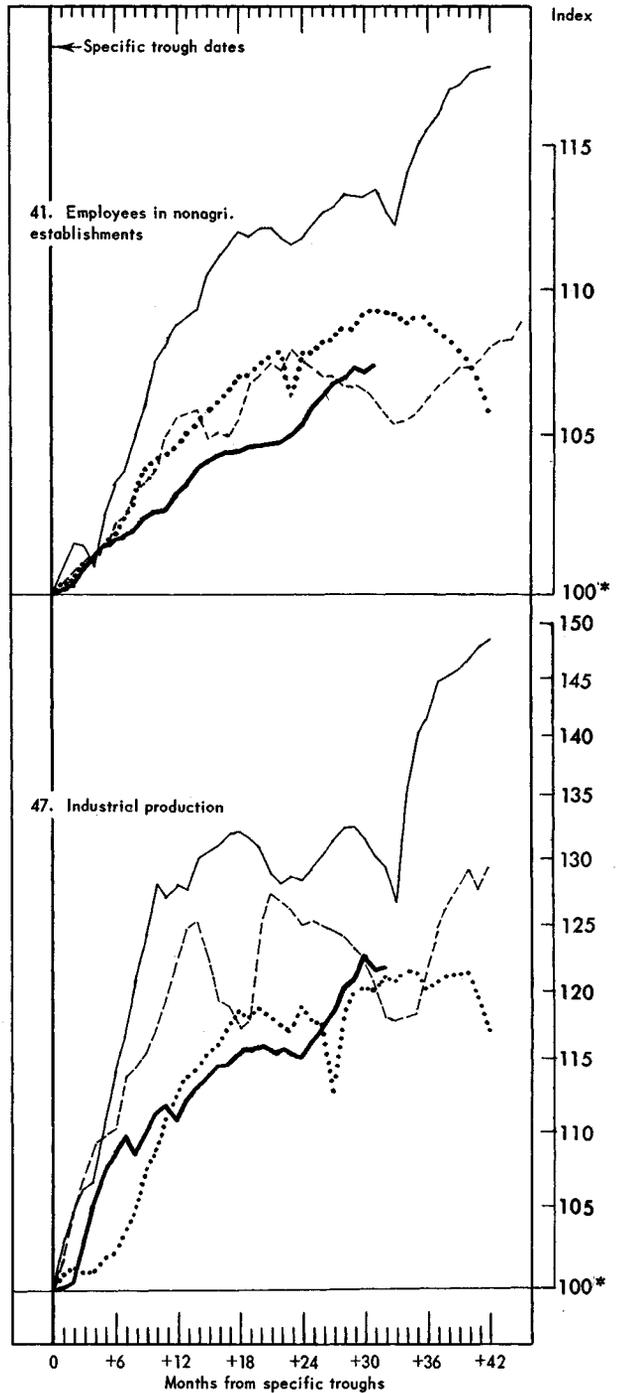
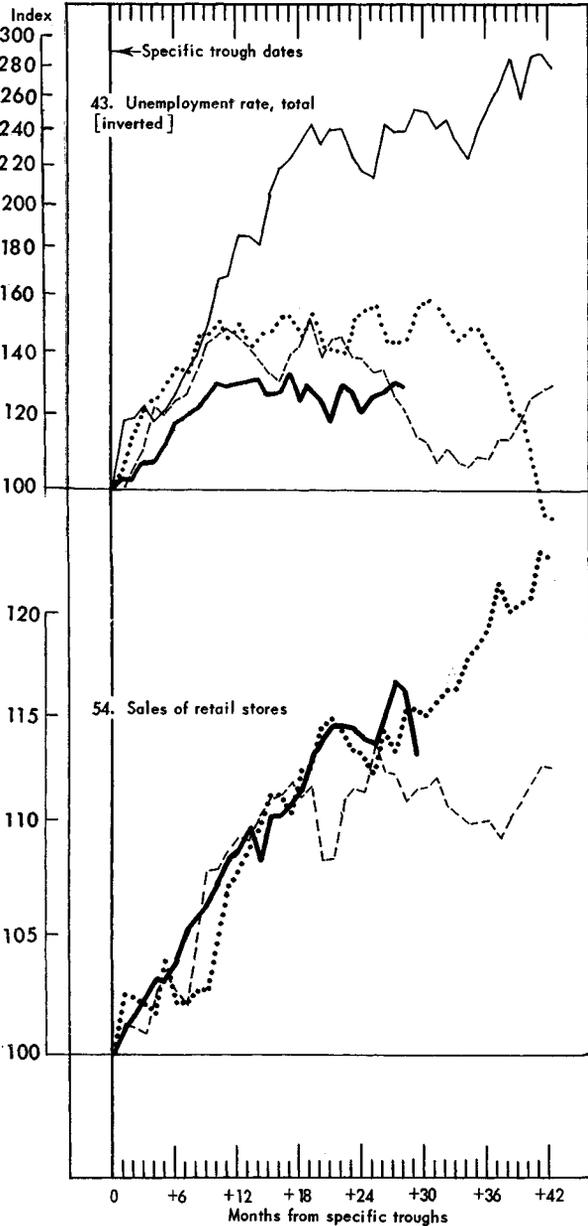
**COMPARISONS OF SPECIFIC CYCLE PATTERNS--Con.**

Percent of specific trough levels of selected series compared for 4 business expansions. Period begins with the specific trough date<sup>1</sup> of each series for each expansion.

**PERIOD COVERED**

From specific trough dates to 42 months later.<sup>2</sup> Specific trough dates are the dates each series actually begins the expansion identified with the reference trough of--

— 1949                      - - - 1958  
 ..... 1954                — 1961



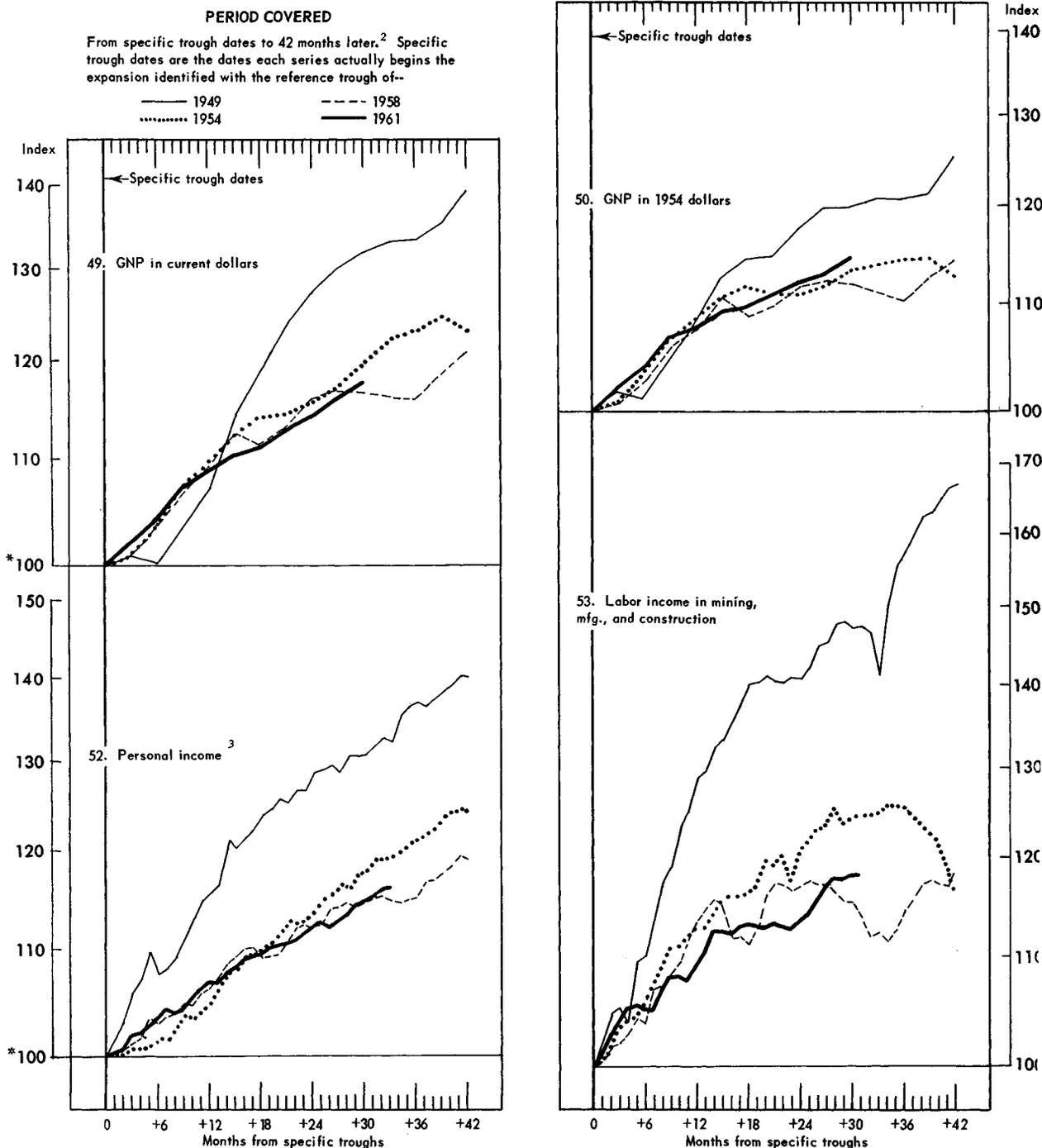
\*Specific trough level. For series with a "months for cyclical dominance" (MCD) of "1" or "2", the figure for the specific trough is set at "100". For series with an MCD of "3" or more, the average of the 3 months centered on the specific trough month is set at "100". For quarterly series, the specific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

<sup>1</sup>See appendix B for specific dates. <sup>2</sup>See table 1 for latest month in current period. Percent changes for this month and 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 of selected series compared for 4 business expansions. Period begins with the specific trough date<sup>1</sup> of each series for each expansion.



\*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 values are shown in appendix C.

<sup>1</sup>See appendix B for specific dates. <sup>2</sup>See table 1 for latest month in current period. Percent changes for this month and comparable months after the specific troughs of previous expansions are shown in table 9. <sup>3</sup>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, 54, 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, and 51), 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 <sup>1</sup>	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
<b>NBER LEADING INDICATORS</b>										
1. Average workweek of production workers, manufacturing.....	31	NA	95.8	91.8	70.6	98.7	101.5	98.8	98.5	101.5
2. Accession rate, manufacturing.....	30	46.7	29.9	38.9	56.4	128.0	104.9	80.1	95.5	97.3
3. Layoff rate, manufacturing (inverted).....	30	14.5	20.3	48.4	59.3	113.0	122.2	87.5	79.2	114.3
6. Value of manufacturers' new orders, durable goods industries.....	31	173.8	124.8	57.5	55.0	216.4	140.6	124.5	103.5	120.9
7. New private nonfarm dwelling units started..	31	208.3	125.6	45.0	46.5	202.5	127.5	89.9	104.7	133.0
9. Construction contracts awarded for commercial and industrial bldgs., floor space <sup>2</sup> ...	30	40.0	105.4	70.4	23.0	214.7	97.2	141.1	109.5	114.9
13. Number of new business incorporations.....	30	68.0	97.7	104.2	70.1	79.9	107.7	133.9	128.8	105.5
14. Current liabilities of bus. failures (inv.)..	31	22.2	94.1	52.3	218.9	118.6	123.5	70.5	60.5	97.8
16. Corporate profits after taxes (Q).....	27	62.0	96.2	73.6	22.1	115.1	88.1	121.4	92.5	118.6
17. Price per unit of labor cost index.....	31	NA	NA	NA	NA	NA	97.6	102.1	99.8	101.1
19. Index of stock prices, 500 common stocks....	31	100.5	157.6	165.3	39.6	64.9	155.2	181.3	114.3	131.9
23. Index of industrial materials prices.....	31	62.3	81.5	76.5	75.5	92.7	93.4	109.8	94.9	90.4
24. Value of manufacturers' new orders, machinery and equipment industries.....	31	NA	NA	NA	NA	NA	145.3	139.6	112.0	123.1
29. Index of new private housing units authorized by local building permits.....	31	NA	NA	NA	NA	NA	NA	NA	103.2	131.1
<b>NBER ROUGHLY COINCIDENT INDICATORS</b>										
41. Number of employees in nonagricultural establishments.....	31	87.6	95.6	92.2	85.0	107.6	107.6	105.4	101.9	105.3
43. Unemployment rate, total (inverted).....	31	NA	NA	NA	NA	107.1	118.1	68.2	67.3	93.3
47. Index of industrial production.....	31	107.4	106.6	96.2	81.9	118.4	119.0	109.1	103.1	114.4
49. Gross national product in current dollars (Q)	30	NA	113.3	105.1	68.6	113.8	128.4	118.9	112.0	116.7
50. Gross national product in 1954 dollars (Q)..	30	NA	113.5	110.5	85.3	NA	117.5	109.8	106.4	111.8
51. Bank debits outside NYC, 343 centers.....	31	97.7	121.2	107.5	56.0	111.6	131.2	129.2	119.1	131.5
52. Personal income.....	31	NA	112.4	102.8	71.3	113.7	125.9	119.6	113.8	115.9
54. Sales of retail stores.....	31	109.4	108.8	94.6	76.3	116.9	122.8	116.8	107.6	110.1
55. Index of wholesale prices, all commodities other than farm products and foods.....	31	65.7	89.3	86.6	85.4	97.3	107.7	108.7	101.5	99.7
<b>NBER LAGGING INDICATORS</b>										
61. Business expenditures on new plant and equipment, total (Q): <sup>3</sup>										
a.....	27	54.5	108.1	104.3	40.6	105.1	121.6	129.8	95.1	104.8
b.....	33	51.3	96.2	75.7	47.8	NA	115.2	131.8	89.7	113.4
62. Index of labor cost per unit of output, total manufacturing.....	31	82.2	91.5	90.9	81.7	98.1	111.6	106.3	102.5	98.6
64. Manufacturers' inventories, book value.....	30	NA	NA	NA	75.6	110.2	138.5	116.3	100.6	107.3
66. Consumer installment debt.....	30	NA	NA	NA	78.5	140.1	179.8	144.8	128.5	125.5
67. Bank rates on short-term business loans, 19 cities (Q).....	30	88.1	91.5	103.2	59.8	98.5	133.0	117.4	103.3	93.6

NOTE: For the expansions beginning in July 1921, July 1924, November 1927, and April 1958, the peak had been passed and a reference contraction was underway by the month indicated in the first column. See appendix A for the reference peak dates and earlier issues of Business Cycle Developments for the levels reached on those dates.

NA Not available.

<sup>1</sup>Based on period from February 1961 (current trough) to latest month for which data are available.

<sup>2</sup>Except for 1961, changes are computed in a 3-term moving average of the seasonally adjusted series.

<sup>3</sup>Comparisons are made for this series on the basis of (a) the period 27 months after the February 1961 trough (actual expenditures) and (b) the period 33 months after the same period (anticipated expenditures for 4th 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, 54, 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, and 51), 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 <sup>1</sup>	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
<b>NBER LEADING INDICATORS</b>										
1. Average workweek of production workers, manufacturing.....	31	+3.9	+4.8	-6.5	+4.7	+13.2	+2.3	+1.3	+1.8	+3.0
2. Accession rate, manufacturing.....	30	NA	+39.5	-46.8	+37.7	+43.2	+18.1	+10.4	+17.6	-10.0
3. Layoff rate, manufacturing (inverted).....	30	NA	-34.6	-31.7	+60.5	+127.8	+82.2	+35.4	+33.3	+30.2
6. Value of manufacturers' new orders, durable goods industries.....	31	+146.3	+11.4	-42.5	+186.2	+260.0	+52.0	+33.9	+20.9	+31.2
7. New private nonfarm dwelling units started..	31	+112.7	+26.8	-56.7	+208.3	+115.6	-11.5	-24.7	+9.3	+33.4
9. Construction contracts awarded for commercial and industrial bldgs., floor space <sup>2</sup> ...	30	+46.6	+51.9	-18.9	+92.6	+334.9	+12.6	+45.7	+39.3	+23.4
13. Number of new business incorporations.....	30	-6.1	+31.9	+0.4	-11.6	-7.2	+3.1	+13.4	+34.9	+13.5
14. Current liabilities of bus. failures (inv.)..	31	+31.4	+4.4	-43.1	+165.2	+60.7	+5.2	-26.0	-19.6	0.0
16. Corporate profits after taxes (Q).....	27	NA	+78.6	0.0	NA	+281.2	+12.7	+42.5	+22.2	+39.6
17. Price per unit of labor cost index.....	31	NA	NA	NA	NA	NA	-1.2	+4.0	+5.5	+3.0
19. Index of stock prices, 500 common stocks....	31	+35.8	+51.3	+26.1	+91.3	+3.3	+49.3	+43.3	+31.0	+17.2
23. Index of industrial materials prices.....	31	+48.8	-2.8	-21.6	+81.8	+36.9	+24.4	+9.8	+9.2	-5.2
24. Value of manufacturers' new orders, machinery and equipment industries.....	31	NA	NA	NA	NA	NA	+65.3	+46.3	+33.6	+28.3
29. Index of new private housing units authorized by local building permits.....	31	NA	NA	NA	NA	NA	NA	-23.7	+1.5	+35.2
<b>NBER ROUGHLY COINCIDENT INDICATORS</b>										
41. Number of employees in nonagricultural establishments.....	31	+27.1	+10.0	-4.0	+24.3	+20.0	+13.4	+9.1	+6.2	+7.3
43. Unemployment rate, total (inverted).....	31	NA	NA	NA	+45.3	+90.7	+141.0	+54.5	+19.4	+26.7
47. Index of industrial production.....	31	+57.2	+29.8	+2.2	+69.8	+73.4	+30.0	+19.9	+20.0	+21.6
49. Gross national product in current dollars (Q)	30	+28.7	+15.9	+4.6	+36.1	+29.2	+32.8	+21.1	+14.8	+17.6
50. Gross national product in 1954 dollars (Q)..	30	+27.7	+13.9	+8.0	+18.4	NA	+19.2	+13.1	+10.6	+13.9
51. Bank debits outside NYC, 343 centers.....	31	+26.0	+25.1	-1.1	+46.8	+33.7	+36.6	+27.2	+23.0	+28.4
52. Personal income.....	31	+32.5	+12.9	+0.4	+44.9	+27.7	+31.6	+19.9	+14.2	+15.1
54. Sales of retail stores.....	31	+16.7	+8.8	-5.4	+45.0	+43.4	+22.8	+17.6	+9.3	+12.3
55. Index of wholesale prices, all commodities other than farm products and foods.....	31	+4.3	-2.3	-6.9	+17.4	+2.8	+13.4	+9.5	+2.0	-0.2
<b>NBER LAGGING INDICATORS</b>										
61. Business expenditures on new plant and equipment, total (Q): <sup>3</sup>										
a.....	27	+58.9	+54.9	+18.8	+136.8	+76.1	+51.9	+35.8	+18.4	+12.4
b.....	33	+49.5	+37.9	-13.9	+178.6	NA	+44.0	+38.0	+11.6	+21.6
62. Index of labor cost per unit of output, total manufacturing.....	31	-8.6	-11.0	-7.7	+11.4	-5.5	+16.0	+4.1	-3.5	-3.1
64. Manufacturers' inventories, book value.....	30	NA	NA	NA	+27.7	+16.5	+51.4	+23.3	+5.6	+10.1
66. Consumer installment debt.....	30	NA	NA	NA	+64.3	+50.2	+44.9	+40.1	+27.4	+21.5
67. Bank rates on short-term business loans, 19 cities (Q).....	30	-18.3	+4.3	+7.2	-23.2	+0.9	+32.5	+23.0	+19.7	+0.8

NOTE: For the expansions beginning in July 1921, July 1924, November 1927, and April 1958, the peak had been passed and a reference contraction was underway by the month indicated in the first column. See appendix A for the reference peak dates and earlier issues of Business Cycle Developments for the levels reached on those dates.

NA Not available.

<sup>1</sup>Based on period from February 1961 (current trough) to latest month for which data are available.

<sup>2</sup>Except for 1961, changes are computed in a 3-term moving average of the seasonally adjusted series.

<sup>3</sup>Comparisons are made for this series on the basis of (a) the period 27 months after the February 1961 trough (actual expenditures) and (b) the period 33 months after the same period (anticipated expenditures for 4th 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, 53, and 54), 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, and 29), 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 <sup>1</sup>	July 1921	July 1924	Nov. 1927	Mar. 1933	June 1938	Oct. 1949	Aug. 1954	Apr. 1958	Feb. 1961
<b>Percent of specific peak prior to reference expansion beginning in year shown</b>										
<b>NBER LEADING INDICATORS</b>										
1. Average workweek of production workers, manufacturing.....	33	NA	*97.8	*100.0	66.5	94.6	NSC	*99.8	*99.0	100.0
9. Construction contracts awarded for commercial and industrial bldgs., floor space <sup>2</sup> ...	27	*45.2	*114.6	*108.2	17.7	192.9	41.4	NSC	95.5	<sup>3</sup> 117.6
13. Number of new business incorporations.....	31	*86.3	*106.8	*110.5	*70.4	50.0	61.6	NSC	*138.1	98.3
17. Price per unit of labor cost index.....	31	NA	NA	NA	NA	NA	*107.2	*90.3	*101.0	98.4
19. Index of stock prices, 500 common stocks....	35	*99.2	141.3	NSC	31.2	54.9	141.1	*186.3	*122.5	121.9
23. Index of industrial materials prices.....	33	*71.3	*100.8	*76.6	66.5	91.0	*135.1	*65.1	*92.9	88.9
24. Value of manufacturers' new orders, machinery and equipment industries.....	35	NA	NA	NA	NA	NA	*211.9	*103.7	*110.2	122.3
29. Index of new private housing units authorized by local building permits.....	33	NA	*96.5	101.4						
<b>NBER ROUGHLY COINCIDENT INDICATORS</b>										
41. Number of employees in nonagricultural establishments.....	31	*91.3	*96.6	*105.6	85.0	107.1	107.5	*105.4	*103.0	104.9
43. Unemployment rate, total (inverted).....	28	NA	NA	NA	NA	89.5	112.7	61.3	*78.0	89.4
47. Index of industrial production.....	32	*112.3	*108.2	*116.2	74.3	116.5	116.1	108.8	*109.0	112.5
49. Gross national product in current dollars (Q)	30	NA	NSC	NSC	68.6	108.3	127.2	116.6	*112.4	116.7
50. Gross national product in 1954 dollars (Q)..	30	NA	NSC	NSC	80.0	NA	116.7	108.7	*107.6	111.8
52. Personal income.....	33	NA	*111.1	*112.9	73.0	114.2	125.2	117.7	113.5	<sup>3</sup> 115.1
53. Labor income in mining, mfg., and construc..	31	NA	NA	NA	62.5	119.9	129.3	115.1	*108.3	112.1
54. Sales of retail stores.....	29	97.1	NSC	NSC	74.4	108.5	NSC	109.6	*109.4	108.7
<b>Percent change from specific trough related to reference expansion beginning in year shown</b>										
<b>NBER LEADING INDICATORS</b>										
1. Average workweek of production workers, manufacturing.....	33	*+15.4	*+7.9	*+4.5	-1.6	+13.5	+5.2	*+4.1	*+5.2	+5.7
9. Construction contracts awarded for commercial and industrial bldgs., floor space <sup>2</sup> ...	27	*+118.4	*+82.6	*+40.1	+83.4	+324.7	+32.8	NSC	+39.6	<sup>3</sup> +26.4
13. Number of new business incorporations.....	31	*+23.6	*+42.9	*+20.5	*+12.8	-37.4	+4.2	NSC	*+51.7	+15.0
17. Price per unit of labor cost index.....	31	NA	NA	NA	NA	NA	*+15.2	*+6.8	*+9.4	+3.0
19. Index of stock prices, 500 common stocks....	35	*+4.2	+65.9	NSC	+104.4	+0.6	+69.9	*+109.6	*48.1	+35.6
23. Index of industrial materials prices.....	33	*+75.0	*+36.7	*+7.3	+78.9	+40.8	*+100.3	*+24.7	*+17.4	-2.8
24. Value of manufacturers' new orders, machinery and equipment industries.....	35	NA	NA	NA	NA	NA	*+181.2	*+73.8	*+48.6	+31.5
29. Index of new private housing units authorized by local building permits.....	33	NA	*+56.3	+36.0						
<b>NBER ROUGHLY COINCIDENT INDICATORS</b>										
41. Number of employees in nonagricultural establishments.....	31	*+32.6	*+12.0	*+11.5	+24.3	+20.0	+13.4	*+9.1	*+7.6	+7.3
43. Unemployment rate, total (inverted).....	28	NA	NA	NA	+39.0	+63.1	+140.2	+44.3	*+50.4	+28.1
47. Index of industrial production.....	32	*+66.1	*+31.7	*+24.9	+59.4	+75.2	+28.9	+20.9	*+27.2	+21.7
49. Gross national product in current dollars (Q)	30	NA	NSC	NSC	+36.1	+29.2	+31.9	+19.8	*+16.4	+17.6
50. Gross national product in 1954 dollars (Q)..	30	NA	NSC	NSC	+18.7	NA	+19.5	+12.8	*+12.5	+13.9
52. Personal income.....	33	*+32.8	*+15.3	*+15.9	+48.4	+30.7	+32.0	+19.2	+14.9	<sup>3</sup> +15.7
53. Labor income in mining, mfg., and construc..	31	NA	NA	NA	+75.7	+64.0	+47.9	+24.6	*+17.6	+18.1
54. Sales of retail stores.....	29	+13.8	NSC	NSC	+45.0	+34.3	NSC	+15.2	*+13.7	+13.2

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

\*Indicates that a specific peak had been passed and a specific contraction was underway for this series by the month indicated in the first column. The figure shown represents the change to the specific peak and the period covered is shorter than that of the current expansion (col. 1). See appendix B for specific peak dates.

<sup>1</sup>Based on period of the most recent specific expansion for each series; i.e., from the most recent specific trough to the latest month shown in table 1. The number of months is the same for each expansion except those indicated by an asterisk. Specific trough dates are shown in appendix B.

<sup>2</sup>Except for 1961, changes are computed in a 3-term moving average of the seasonally adjusted series.

<sup>3</sup>Since no specific trough or peak has been designated, figures are based on the low (L) shown in table 1 and the high preceding that low.



# 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 pre- vious 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	<u>54</u>
December 1867	June 1869.....	<u>32</u>	<u>18</u>	<u>78</u>	<u>50</u>
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	<u>10</u>	<u>51</u>	<u>17</u>
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	<u>93</u>
October 1945	November 1948.....	<u>8</u>	37	<u>88</u>	45
October 1949	July 1953.....	11	<u>45</u>	48	<u>56</u>
August 1954	July 1957.....	<u>13</u>	35	<u>58</u>	48
April 1958	May 1960.....	9	25	44	34
February 1961		9		34	
Average, all cycles:					
	26 cycles, 1854-1961.....	19	30	49	<sup>1</sup> 49
	10 cycles, 1919-1961.....	15	35	50	<sup>2</sup> 54
	4 cycles, 1945-1961.....	10	36	46	<sup>3</sup> 46
Average, peacetime cycles:					
	22 cycles, 1854-1961.....	20	26	45	<sup>4</sup> 46
	8 cycles, 1919-1961.....	16	28	45	<sup>5</sup> 48
	3 cycles, 1945-1961.....	10	32	42	<sup>6</sup> 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.

<sup>1</sup>25 cycles, 1857-1960.

<sup>2</sup>9 cycles, 1920-1960.

<sup>3</sup>3 cycles, 1948-1960

<sup>4</sup>21 cycles, 1857-1960.

<sup>5</sup>7 cycles, 1920-1960.

<sup>6</sup>2 cycles, 1948-1960.

Source: National Bureau of Economic Research.

## Appendixes

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

Specific trough and peak dates are the actual dates 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
<b>NBER LEADING INDICATORS</b>									
1. Average workweek of production workers, manufacturing.....	Dec.'60	Apr.'58	Apr.'54	Apr.'49	Jan.'38	Jun.'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.	Feb.'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						
<b>NBER ROUGHLY COINCIDENT INDICATORS</b>									
41. Number of employees in nonagricultural establishments.....	Feb.'61	May '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.....	Apr.'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
<b>NBER LEADING INDICATORS</b>									
1. Average workweek of production workers, manufacturing.....	Apr.'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	Dec.'55	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						
<b>NBER ROUGHLY COINCIDENT INDICATORS</b>									
41. Number of employees in nonagricultural establishments.....	Apr.'60	Mar.'57	Jul.'53	Jul.'48	Jul.'37	Aug.'29	Jan.'26	Jun.'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	Aug.'57	Mar.'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	CI	I	C	I/C	MCD	I/C for MCD span	Average duration of run (ADR)			
							CI	I	C	MCD
NBER LEADING INDICATORS										
1. Average workweek of production workers, manufacturing.....	.49	.42	.21	2.00	2	.95	2.15	1.65	10.58	4.06
2. Accession rate, manufacturing.....	4.92	4.69	1.72	2.73	3	.89	1.85	1.54	9.00	5.64
30. Nonagricultural placements, all industries....	1.82	1.29	1.18	1.09	2	.59	2.27	1.63	9.77	5.25
3. Layoff rate, manufacturing.....	9.52	8.05	4.02	2.00	3	.70	2.21	1.73	8.40	5.39
4. Number of persons on temporary layoff, all industries.....	17.76	17.12	3.99	4.29	5	.89	1.63	1.44	6.35	3.08
5. Average weekly initial claims for unemployment insurance, State programs.....	5.29	4.62	2.49	1.86	2	.86	1.72	1.51	9.77	3.94
6. Value of manufacturers' new orders, durable goods industries.....	3.83	3.39	1.59	2.13	3	.63	2.23	1.61	9.77	4.03
24. Value of manufacturers' new orders, machinery and equipment industries.....	4.55	4.22	1.50	2.81	3	.81	1.59	1.40	11.55	3.68
9. Construction contracts awarded for commercial and industrial buildings.....	9.66	9.43	1.67	5.65	6	( <sup>1</sup> )	1.70	1.54	6.63	3.03
10. Contracts and orders for plant and equipment....	4.57	4.28	1.44	2.97	3	.86	1.58	1.43	11.45	3.35
7. New private nonfarm dwelling units started....	7.34	7.31	1.14	6.41	6	( <sup>1</sup> )	1.53	1.53	6.13	2.32
29. Index of new private housing units authorized by local building permits.....	3.82	3.39	1.48	2.29	3	.68	1.89	1.53	14.38	3.32
13. Number of new business incorporations.....	2.68	2.36	1.10	2.15	3	.77	2.10	1.70	6.30	3.02
14. Current liabilities of business failures.....	16.86	16.36	2.52	6.49	6	( <sup>1</sup> )	1.48	1.32	5.77	2.26
15. Number of business failures with liabilities of \$100,000 and over.....	13.09	12.81	2.11	6.07	6	( <sup>1</sup> )	1.53	1.37	9.77	5.30
17. Price per unit of labor cost index.....	.69	.56	.33	1.70	2	.94	2.23	1.74	7.47	3.60
19. Index of stock prices, 500 common stocks.....	2.65	1.86	1.67	1.11	2	.68	2.35	1.67	12.70	3.94
37. Purchased materials, percent reporting higher inventories.....	6.81	5.29	3.10	1.71	3	.66	2.54	1.76	10.58	4.63
26. Buying policy--production materials, percent reporting commitments 60 days or longer.....	5.81	5.32	2.14	2.49	3	.76	1.87	1.63	12.70	3.91
32. Vendor performance, percent reporting slower deliveries.....	7.68	5.54	4.73	1.17	2	.79	3.53	2.12	9.77	4.20
23. Index of industrial materials prices.....	1.32	1.04	.74	1.41	2	.95	2.44	2.05	11.55	4.06
NBER ROUGHLY COINCIDENT INDICATORS										
41. Number of employees in nonagricultural establishments.....	.30	.15	.25	.60	1	.60	5.29	2.05	14.11	5.29
42. Total nonagricultural employment, labor force survey.....	.35	.29	.19	1.53	2	.76	1.98	1.55	14.11	3.23
43. Unemployment rate, total.....	4.14	2.98	2.45	1.22	2	.65	2.40	1.65	7.47	3.41
40. Unemployment rate, married males.....	5.50	4.46	2.96	1.51	2	.70	2.10	1.34	9.36	3.78
45. Average weekly insured unemployment rate, State programs.....	4.82	2.56	3.56	.72	1	.72	3.74	2.12	9.07	3.74
46. Index of help-wanted advertising in newspapers.....	3.38	2.21	2.38	.93	1	.93	2.27	1.41	9.07	2.27
47. Index of industrial production.....	1.09	.58	.79	.73	1	.73	3.53	2.05	9.77	3.53
51. Bank debits outside NYC, 343 centers.....	1.48	1.44	.60	2.40	3	.54	1.69	1.53	18.14	4.31
52. Personal income.....	.49	.27	.41	.66	1	.66	3.43	1.84	18.14	3.43
53. Labor income in mining, manufacturing, and construction.....	.81	.53	.61	.87	1	.87	3.43	1.90	11.55	3.43
54. Sales or retail stores.....	.78	.63	.44	1.43	2	.85	2.53	1.80	9.54	3.62
55. Index of wholesale prices, all commodities other than farm products and foods.....	.17	.10	.13	.77	1	.77	3.53	2.65	11.55	3.53
NBER LAGGING INDICATORS										
62. Index of labor cost per unit of output, total manufacturing.....	.65	.48	.36	1.33	2	.72	2.27	1.55	9.07	4.34
64. Book value of manufacturers' inventories, all manufacturing industries.....	.60	.24	.54	.44	1	.44	7.41	2.38	12.60	7.41
65. Book value of manufacturers' inventories of finished goods, all manufacturing indus.....	.62	.34	.55	.62	1	.62	7.41	2.80	15.75	7.41
66. Consumer installment debt.....	.83	.17	.78	.22	1	.22	11.45	2.29	18.00	11.45

See footnotes at end of table.

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

Monthly series	$\bar{CI}$	$\bar{I}$	$\bar{C}$	$\bar{I}/\bar{C}$	MCD	$\bar{I}/\bar{C}$ for MCD span	Average duration of run (ADR)			
							CI	I	C	MCD
OTHER U.S. SERIES WITH BUSINESS CYCLE SIGNIFICANCE										
81. Index of consumer prices.....	.15	.10	.13	.77	1	.77	6.00	2.25	25.20	6.00
82. Federal cash payments to the public.....	5.68	5.59	.82	6.82	6	( <sup>1</sup> )	1.51	1.41	8.47	2.18
83. Federal cash receipts from the public.....	5.37	5.20	.95	5.47	6	( <sup>1</sup> )	1.74	1.57	7.47	2.60
86. Exports, excluding military aid shipments, total.....	4.59	4.39	1.11	3.95	4	.96	1.77	1.66	7.06	2.75
87. General imports, total.....	3.61	3.47	.97	3.58	4	.85	1.59	1.51	7.53	2.97
94. Index of construction contracts, total value.	7.03	6.69	1.69	3.96	5	.84	1.52	1.45	7.88	3.59
97. Defense Department obligations, procurement..	26.87	26.37	4.09	6.45	6	( <sup>1</sup> )	1.51	1.46	5.93	2.27
91. Defense Department obligations, total.....	15.12	14.78	2.70	5.47	6	( <sup>1</sup> )	1.47	1.43	6.61	2.48
92. Military prime contract awards to U.S. business firms.....	26.25	26.21	6.12	4.28	6	( <sup>1</sup> )	1.58	1.47	5.95	2.86
96. Manufacturers' unfilled orders, durable goods industries.....	1.36	.46	1.23	.37	1	.37	6.05	2.15	14.11	6.05
INTERNATIONAL COMPARISONS OF INDUSTRIAL PRODUCTION										
121. OECD European countries, index of indus. prod..	.86	.83	.50	1.66	2	.89	3.47	2.40	31.25	7.75
122. United Kingdom, index of indus. prod.....	1.14	1.09	.47	2.32	3	.81	2.40	1.87	8.93	5.59
123. Canada, index of indus. prod.....	.90	.77	.52	1.48	2	.72	3.47	2.12	15.63	8.27
125. West Germany, index of indus. prod.....	1.42	1.18	.69	1.71	2	.93	2.86	2.14	18.00	5.43
126. France, index of indus. prod.....	1.36	1.20	.68	1.76	2	.89	3.21	2.08	25.00	11.27
127. Italy, index of indus. prod.....	1.44	1.41	.74	1.91	3	.64	2.70	1.82	31.00	6.42
128. Japan, index of indus. prod.....	1.62	.93	1.30	.72	1	.72	6.89	2.30	17.71	6.89
Quarterly series	$\bar{CI}$	$\bar{I}$	$\bar{C}$	$\bar{I}/\bar{C}$	QCD	$\bar{I}/\bar{C}$ for QCD span	Average duration of run (ADR)			
							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, manufac- turing.....	6.27	1.26	5.79	.22	1	.22	4.38	1.94	5.83	4.38

NOTE: Measures for monthly series are computed for the period, January 1953 to mid-1963, except for series 7, 86, and 87; for series 7, the period begins with May 1959 and for series 86 and 87, the period ends with June 1962.

<sup>1</sup>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 Electronic Computers and Business Indicators, by Julius Shiskin, issued as Occasional Paper 57 by the National Bureau of Economic Research, 1957 (reprinted from Journal of Business, October 1957).

" $\bar{CI}$ ", is the average month-to-month (or quarter-to-quarter) percentage change, without regard to sign, in the

seasonally adjusted series. " $\bar{I}$ " is the same for the irregular component, obtained by dividing the cyclical component into the seasonally adjusted series. " $\bar{C}$ " is the same for the cyclical component, a smooth, flexible moving average of the seasonally adjusted series.

"MCD" (months for cyclical dominance) provides an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. It is small for smooth series and large for irregular series. In deriving MCD, percentage changes are computed separately for the irregular component and the cyclical component for 1-month spans (Jan.-Feb., Feb.-Mar., etc.), 2-month spans (Jan.-Mar., Feb.-Apr., etc.), up to 5-month spans. Averages, without regard to sign, are then computed for the changes

NOTES FOR APPENDIX C--Continued

ver each span. MCD is the shortest span in months for which the average percentage change (without regard to sign) in the cyclical component is larger than the average percentage change (without regard to sign) in the irregular component, and remains so. Thus, it indicates the point at which fluctuations in the seasonally adjusted series become dominated by cyclical rather than irregular movements. Since changes are not computed for spans greater than 5 months, all series with an MCD greater than "5" are shown as "6". Similarly, "QCD" provides an estimate of the appropriate time span over which to observe cyclical movements in quarterly series. It is the shortest span (in quarters) for which the average percentage change (without regard to sign) in the cyclical component is larger than the average percentage change (without regard to sign) in the irregular component, and remains so.

" $\bar{I}/\bar{C}$ " 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  $\bar{I}/\bar{C}$  ratio is shown for the MCD period. For quarterly series,  $\bar{I}/\bar{C}$  is shown for 1-quarter spans and QCD spans.

"Average Duration of Run" (ADR) is another 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, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted

series CI, irregular component I, cyclical component C, and the MCD curve. The MCD curve is a moving average (with the number of terms equal to MCD) of the seasonally adjusted series.

A comparison of these measures of ADR with the expected ADR of a random series gives an indication of whether the changes approximate those of a random series. Over 1-month intervals in a random series, the expected value of the ADR is 1.5. The actual value of ADR falls between 1.36 and 1.75 about 95 percent of the time. Over 1-month intervals in a moving average (MCD) of a random series, the expected value of ADR is 2.0. For example, the ADR of CI is 1.58 for series 10, Contracts and Orders for Plant and Equipment. This indicates that 1-month changes in the seasonally adjusted series, on the average, reverse sign about as often as expected in a random series. The ADR measures shown in the next two columns, 1.43 for I and 11.45 for C, suggest that the seasonally adjusted series has been successfully separated into an essentially random component and a cyclical (nonrandom) component. Finally, ADR is 3.35 for the MCD moving average. This indicates that a 3-month moving average of the seasonally adjusted series (3 months being the MCD span) reverses direction, on the average, about every 3 months. The increase in the ADR from 1.58 for CI to 3.35 for the MCD moving average indicates that, for this series, month-to-month changes in the MCD moving average usually reflect the underlying cyclical-trend movements of the series, whereas the month-to-month changes in the seasonally adjusted series usually do not.

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

Series	1962		1963											
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
4. Number of persons on temporary layoff, all industries.....	83.4	102.6	121.0	116.2	97.5	82.2	92.2	83.8	99.9	140.7	89.7	88.4	81.9	102.7
5. Av. weekly initial claims for unemployment insurance, State.....	104.8	132.5	140.7	109.1	97.3	94.3	82.7	82.6	103.0	85.5	77.7	90.9	105.0	132.5
13. No. of new business incorp. <sup>1</sup> .....	86.8	94.3	120.0	91.0	104.2	106.8	106.7	96.8	103.5	93.8	88.3	101.4	82.5	94.3
14. Cur. liabilities of bus. failures.	99.9	89.9	105.1	105.2	107.5	112.3	96.7	96.4	84.7	111.7	92.8	97.4	100.2	89.3
15. No. of bus. failures with liabilities of \$100,000 and over...	96.0	88.6	111.3	113.6	116.8	110.4	94.9	105.5	89.3	95.9	89.6	88.7	96.0	88.5
17. Price per unit of labor cost index.....	101.1	98.1	98.6	100.6	100.9	100.5	100.0	101.0	95.4	99.3	101.8	103.4	101.2	98.1
18. Profits (before taxes) per dol. of sales, all mfg. corp. <sup>2</sup> .....	98.8	...	...	97.9	...	...	106.1	...	...	97.4	...	...	98.8	...
30. Nonagri. placements, all indus. <sup>1</sup> .	95.3	80.4	83.1	75.9	89.1	103.3	110.5	106.3	105.7	113.5	119.6	116.4	94.0	82.7
37. Purchased materials, percent reporting higher inventories.....	96.2	98.8	109.0	108.5	110.6	109.4	102.1	96.1	93.9	91.6	91.9	92.5	96.1	98.9
55. Index of wholesale prices, exc. farm products and foods.....	99.9	100.0	100.2	100.1	100.1	100.2	100.0	99.9	99.9	99.8	99.9	99.8	99.9	100.0
62. Index of labor cost per unit of output, total manufacturing.....	98.8	101.7	101.9	99.7	99.5	99.8	100.0	98.9	104.7	100.4	98.2	96.5	98.8	101.7
81. Index of consumer prices.....	100.1	100.0	99.8	99.9	99.9	100.0	99.8	99.9	100.0	99.9	100.2	100.1	100.1	100.0
82. Federal cash payments to public..	104.8	98.3	90.8	98.9	92.3	98.9	103.2	106.0	95.6	114.4	93.8	102.8	105.2	98.3
83. Federal cash receipts from pub..	102.3	105.1	70.0	113.1	129.6	79.0	119.3	149.5	49.0	113.3	124.4	46.0	102.8	105.1
90. Defense Department obligations--procurement.....	96.0	117.4	76.9	91.6	132.2	81.2	69.2	192.7	77.9	78.1	97.1	89.2	96.0	117.4
91. Defense Dept. oblig., total.....	90.7	105.0	90.6	90.0	117.7	96.4	84.7	148.2	96.7	86.7	97.2	95.4	90.7	105.0
92. Military prime contract awards to U.S. business firms.....	72.9	108.5	89.5	79.7	125.3	93.2	92.8	216.4	68.0	72.9	92.7	90.4	72.9	108.5
128. Japan, index of industrial production.....	99.6	103.2	94.3	100.3	109.1	99.4	100.2	100.4	98.8	96.5	98.6	99.8	99.6	103.2

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.

<sup>1</sup>Factors are a combination of seasonal and trading-day factors.

<sup>2</sup>Quarterly series; figures are placed in middle month of quarter.

Appendix materials retain their original alphabetical designations. Therefore, when appendixes are dropped from an issue, the continuity is interrupted.

"Appendix E.—Summary Description of X-9 and X-10 Versions of the Census Method II Seasonal Adjustment Program" and "Appendix F.—Percent Change for Selected Series Over Contraction and Expansion Periods of Business Cycles: 1920 To 1961", not included in this issue, appeared in the September 1963 issue.

#### Appendix G.—HISTORICAL DATA FOR SELECTED SERIES

Series are in one of the following categories: (1) Those that are new to the report, (2) those that have been revised historically, and (3) those for which historical data have not previously been shown. See table 1 for later data.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
30. Nonagricultural placements, all industries (Thousands)*												
1948.....	472	466	458	463	458	470	461	434	445	432	447	403
1949.....	393	380	362	373	372	367	361	379	380	370	369	380
1950.....	371	388	404	420	441	453	477	527	515	530	545	520
1951.....	569	574	572	557	553	546	557	539	532	523	528	532
1952.....	547	527	526	550	537	538	521	530	544	554	556	555
1953.....	563	580	569	548	548	551	541	520	497	482	464	447
1954.....	425	426	421	425	419	420	427	422	432	433	446	463
1955.....	482	481	492	490	500	496	503	520	515	521	523	520
1956.....	510	503	514	517	514	511	494	498	502	506	502	502
1957.....	505	508	498	485	486	489	492	473	466	459	441	79
1958.....	419	409	395	401	409	415	421	434	440	445	460	476
1959.....	484	493	511	517	521	516	521	508	508	499	509	508
1960.....	518	519	501	512	490	481	475	472	476	471	453	459
53. Labor income in mining, manufacturing, and construction (Annual rate, billions of dollars)*												
1948.....	55.3	54.9	55.1	55.6	56.8	57.7	58.3	58.7	58.8	58.5	58.5	58.2
1949.....	57.2	56.4	54.7	55.0	54.7	53.6	53.2	53.3	53.2	51.4	52.3	53.9
1950.....	54.2	53.5	55.4	56.8	58.6	60.3	61.2	63.4	64.5	66.3	66.8	68.1
1951.....	68.7	69.9	70.9	72.1	72.2	72.8	72.4	72.3	72.8	72.6	73.2	74.8
1952.....	75.0	76.1	76.2	75.8	76.0	75.5	72.8	77.6	80.1	81.1	82.5	83.8
1953.....	84.0	84.9	85.8	86.1	86.0	86.4	86.6	86.2	85.3	85.1	84.0	83.6
1954.....	82.2	82.2	81.5	81.0	81.1	81.1	80.2	80.0	80.2	81.0	82.5	83.1
1955.....	83.5	84.4	85.7	87.0	88.6	88.8	89.5	89.5	90.3	91.3	92.6	92.9
1956.....	92.9	93.0	93.6	95.6	95.4	96.0	94.2	96.4	97.4	98.5	98.8	100.2
1957.....	99.0	99.6	99.7	99.8	99.9	100.5	100.5	100.4	99.7	98.9	98.3	97.2
1958.....	95.3	93.1	92.7	92.5	92.9	94.1	94.6	95.2	96.6	96.0	99.0	99.3
1959.....	100.3	101.3	103.3	105.0	106.1	107.1	106.6	103.6	103.7	102.9	104.3	107.7
1960.....	108.7	108.5	107.9	108.3	108.8	108.4	108.3	107.6	107.0	106.9	105.5	103.7
54. Sales of retail stores (Millions of dollars)*												
1948.....	10,883	10,866	11,021	11,210	10,906	11,173	11,257	11,331	11,230	11,240	11,159	11,404
1949.....	10,949	11,099	11,191	11,290	11,223	11,217	10,993	11,106	11,263	11,160	11,221	11,052
1950.....	11,339	11,589	11,674	11,716	11,916	12,345	13,300	13,349	12,694	12,358	12,069	12,959
1951.....	13,885	13,716	13,021	12,735	12,840	12,792	12,651	12,936	12,855	13,094	13,099	12,924
1952.....	13,030	13,274	12,890	13,208	13,708	13,885	13,512	13,212	13,430	14,047	13,891	14,266
1953.....	14,352	14,325	14,418	14,218	14,167	14,146	14,090	14,017	14,007	14,060	13,855	13,719
1954.....	13,712	14,055	14,020	13,991	13,957	14,272	13,991	13,996	14,073	14,081	14,406	14,671
1955.....	14,765	14,896	15,005	15,255	15,260	15,126	15,404	15,418	15,677	15,715	15,652	15,531
1956.....	15,495	15,370	15,663	15,516	15,771	15,797	15,744	15,826	15,906	15,933	16,106	16,193
1957.....	16,329	16,635	16,453	16,493	16,534	16,820	16,799	16,967	16,841	16,782	16,699	16,647
1958.....	16,659	16,374	16,319	16,535	16,517	16,476	16,746	16,853	16,745	16,662	17,048	17,605
1959.....	17,613	17,752	17,858	17,827	17,995	18,134	18,154	18,249	18,121	18,209	17,680	17,692
1960.....	18,097	18,200	18,178	18,557	18,320	18,312	18,113	18,195	18,207	18,298	18,080	18,008

\*Data are seasonally adjusted.

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2....	6	..	..	..	..	20	30	..	..	..	..	57	58	..	..	..	63	..	..	..	..
3....	6	..	..	..	..	20	30	..	..	..	..	57	58	..	..	..	63	..	..	..	..
4....	6	..	..	..	..	20	30	..	..	..	..	..	..	..	..	..	63	65	..	..	..
5....	6	..	..	..	..	20	30	..	..	..	..	..	..	..	..	..	63	65	..	..	66 (7-163)
6....	7	..	..	..	..	20	30	..	..	..	..	57	58	..	..	..	63	..	..	..	66 (7-163)
7....	7	..	..	..	..	21	30	..	..	..	..	57	58	..	..	..	63	..	..	..	..
9....	7	..	..	48	53	21	30	..	..	..	..	57	58	59	..	62	63	..	..	..	..
10....	7	..	..	..	..	21	30	..	..	..	..	..	..	..	..	..	63	..	..	..	..
11....	7	..	..	..	..	21	30	..	..	..	..	..	..	..	..	..	64	..	..	..	..
12....	8	..	..	..	..	21	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13....	8	..	..	49	54	22	30	..	..	..	..	57	58	59	..	62	63	65	..	..	66 (8-163)
14....	8	..	..	..	..	22	30	..	..	..	..	57	58	..	..	..	63	65	..	..	..
15....	8	..	..	..	..	22	30	..	..	..	..	..	..	..	..	..	63	65	..	..	..
16....	9	..	..	..	..	22	30	..	..	..	..	57	58	..	..	..	64	..	..	..	..
17....	9	..	..	49	54	22	30	..	..	..	..	57	58	59	..	62	63	65	..	..	68 (6-163)
18....	9	..	..	..	..	22	30	..	..	..	..	..	..	..	..	..	64	65	..	..	..
19....	9	..	..	49	54	22	30	..	..	..	..	57	58	59	..	62	63	..	..	..	..
20....	10	..	..	..	..	23	30	..	..	..	..	..	..	..	..	..	..	..	..	..	66 (8-163)
21....	10	..	..	..	..	22	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22....	9	..	..	..	..	22	30	..	..	..	..	..	..	..	..	..	64	..	..	..	..
23....	10	..	..	49	54	23	30	..	..	..	..	57	58	59	..	62	63	..	..	..	..
24....	7	..	..	48	53	20	30	..	..	..	..	57	58	59	..	62	63	..	..	..	66 (7-163)
25....	10	..	..	..	..	23	30	..	..	..	..	..	..	..	..	..	..	..	..	..	66 (8-163)
26....	10	..	..	..	..	23	30	..	..	..	..	..	..	..	..	..	63	..	..	..	..
29....	7	..	..	48	53	21	30	..	..	..	..	57	58	59	..	62	63	..	..	..	..
30....	6	..	..	..	..	20	30	..	..	..	..	..	..	..	..	..	63	65	..	..	66 (10-163)
31....	10	..	..	..	..	23	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..
32....	10	..	..	..	..	23	30	..	..	..	..	..	..	..	..	..	63	..	..	..	..
37....	10	..	..	..	..	23	30	..	..	..	..	..	..	..	..	..	63	65	..	..	68 (6-163)
40....	11	..	..	..	..	24	30	..	..	..	..	..	..	..	..	..	63	..	..	..	..
41....	11	..	..	50	55	24	30	..	..	..	..	57	58	59	..	62	63	..	..	..	68
42....	11	..	..	..	..	24	30	..	..	..	..	..	..	..	..	..	63	..	..	..	..
43....	11	..	..	50	55	24	30	..	..	..	..	57	58	59	..	62	63	..	..	..	68
45....	11	..	..	..	..	24	30	..	..	..	..	..	..	..	..	..	63	..	..	..	..
46....	11	..	..	..	..	24	31	..	..	..	..	..	..	..	..	..	63	..	..	..	..
47....	12	..	..	51	55	24	31	..	..	..	..	57	58	59	..	62	63	..	..	..	68
49....	12	..	..	51	56	25	31	..	..	..	..	57	58	59	..	62	64	..	..	..	68
50....	12	..	..	..	56	24	31	..	..	..	..	57	58	59	..	62	64	..	..	..	68
51....	13	..	..	51	..	25	31	..	..	..	..	57	58	..	..	..	63	..	..	..	68
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53....	13	..	..	..	56	25	31	..	..	..	..	..	..	59	..	62	63	..	..	..	66 (10-163)
54....	13	..	..	50	55	25	31	..	..	..	..	57	58	59	..	62	63	..	..	..	66 (10-163)
55....	13	..	..	50	..	25	31	..	..	..	..	57	58	..	..	..	63	65	..	..	..
57....	12	..	..	..	..	25	31	..	..	..	..	..	..	..	..	..	64	..	..	..	..
61....	14	..	..	52	..	26	31	..	..	..	..	57	58	..	..	..	64	..	..	..	..
62....	14	..	..	52	..	26	31	..	..	..	..	57	58	..	..	..	63	65	..	..	68 (6-163)
63....	14	..	..	..	..	26	31	..	..	..	..	..	..	..	..	..	64	..	..	..	..
64....	14	..	..	52	..	26	31	..	..	..	..	57	58	..	..	..	63	..	..	..	..
65....	14	..	..	..	..	26	31	..	..	..	..	..	..	..	..	..	63	..	..	..	..
66....	14	..	..	..	..	26	31	..	..	..	..	57	58	..	..	..	63	..	..	..	..
67....	14	..	..	52	..	26	31	..	..	..	..	57	58	..	..	..	64	..	..	..	..
81....	17	..	..	..	..	28	31	..	..	..	..	..	..	..	..	..	64	65	..	..	..
82....	16	..	..	..	..	27	31	..	..	..	..	..	..	..	..	..	64	65	..	..	..
83....	16	..	..	..	..	27	31	..	..	..	..	..	..	..	..	..	64	65	..	..	..
84....	16	..	..	..	..	27	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..
85....	17	..	..	..	..	28	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..
86....	15	..	..	..	..	27	31	..	..	..	..	..	..	..	..	..	64	..	..	..	..
87....	15	..	..	..	..	27	31	..	..	..	..	..	..	..	..	..	64	..	..	..	..
88....	15	..	..	..	..	27	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..
89....	15	..	..	..	..	27	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..
90....	16	..	..	..	..	27	31	..	..	..	..	..	..	..	..	..	64	65	..	..	..
91....	16	..	..	..	..	28	31	..	..	..	..	..	..	..	..	..	64	65	..	..	..

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<sup>3</sup>Date in parentheses indicates issue in which data are shown.

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93....	17	..	..	..	..	28	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..
94....	17	..	..	..	..	28	31	..	..	..	..	..	..	..	..	..	64	..	..	..	..
95....	16	..	..	..	..	27	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..
96....	17	..	..	..	..	28	31	..	..	..	..	..	..	..	..	..	64	..	..	..	..
97....	17	..	..	..	..	28	31	..	..	..	..	..	..	..	..	..	64	..	..	..	..
98....	17	..	..	..	..	28	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..
121...	18	..	..	..	..	29	..	..	..	..	..	..	..	..	..	..	64	..	..	..	..
122...	18	..	..	..	..	29	..	..	..	..	..	..	..	..	..	..	64	..	..	..	..
123...	18	..	..	..	..	29	..	..	..	..	..	..	..	..	..	..	64	..	..	..	..
125...	19	..	..	..	..	29	..	..	..	..	..	..	..	..	..	..	64	..	..	..	..
126...	19	..	..	..	..	29	..	..	..	..	..	..	..	..	..	..	64	..	..	..	..
127...	19	..	..	..	..	29	..	..	..	..	..	..	..	..	..	..	64	..	..	..	..
128...	19	..	..	..	..	29	..	..	..	..	..	..	..	..	..	..	64	65	..	..	..
D1....	..	33	..	..	..	..	..	..	36	..	40	..	..	..	..	..	..	..	..	..	..
D5....	..	33	..	..	..	..	..	..	37	..	44	..	..	..	..	..	..	..	..	..	..
D6....	..	33	..	..	..	..	..	..	36	..	41	..	..	..	..	..	..	..	..	..	..
D11...	..	33	..	..	..	..	..	..	36	..	..	..	..	..	..	..	..	..	..	..	..
D19...	..	33	..	..	..	..	..	..	37	..	42	..	..	..	..	..	..	..	..	..	..
D23...	..	33	..	..	..	..	..	..	37	..	43	..	..	..	..	..	..	..	..	..	..
D33...	..	33	..	..	..	..	..	..	36	..	..	..	..	..	..	..	..	..	..	..	..
D34...	..	33	..	..	..	..	..	..	37	..	..	..	..	..	..	..	..	..	..	..	..
D35...	..	..	35	..	..	..	..	..	..	39	..	..	..	..	..	..	..	..	..	..	..
D36...	..	..	35	..	..	..	..	..	..	39	..	..	..	..	..	..	..	..	..	..	..
D41...	..	34	..	..	..	..	..	..	..	38	..	45	..	..	..	..	..	..	..	..	..
D47...	..	34	..	..	..	..	..	..	..	38	..	46	..	..	..	..	..	..	..	..	..
D48...	..	..	35	..	..	..	..	..	..	39	..	..	..	..	..	..	..	..	..	..	..
D54...	..	34	..	..	..	..	..	..	..	38	..	47	..	..	..	..	..	..	..	..	..
D58...	..	34	..	..	..	..	..	..	..	38	..	..	..	..	..	..	..	..	..	..	..
D61...	..	..	35	..	..	..	..	..	..	39	..	..	..	..	..	..	..	..	..	..	..

<sup>1</sup>See back cover for series titles and sources.

## 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 "EQQ", "EOM" indicates that data are for the end of the month and "EQQ" 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 (EQQ)--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, wholesale prices of manufactured goods index to index of compensation of employees (sum of wages, salaries, and supplements to wages and salaries) per unit of output (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 materials (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

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
37. Percent reporting higher inventories, purchased materials (M)--National Association of Purchasing Agents; seasonal adjustment by Bureau of the Census

### 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
- \*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 labor cost per unit of output, total manufacturing--ratio, index of compensation of employees in manufacturing (the sum of wages and salaries and supplements to wages and salaries) 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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OFFICIAL BUSINESS  
FIRST CLASS MAIL

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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.

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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.