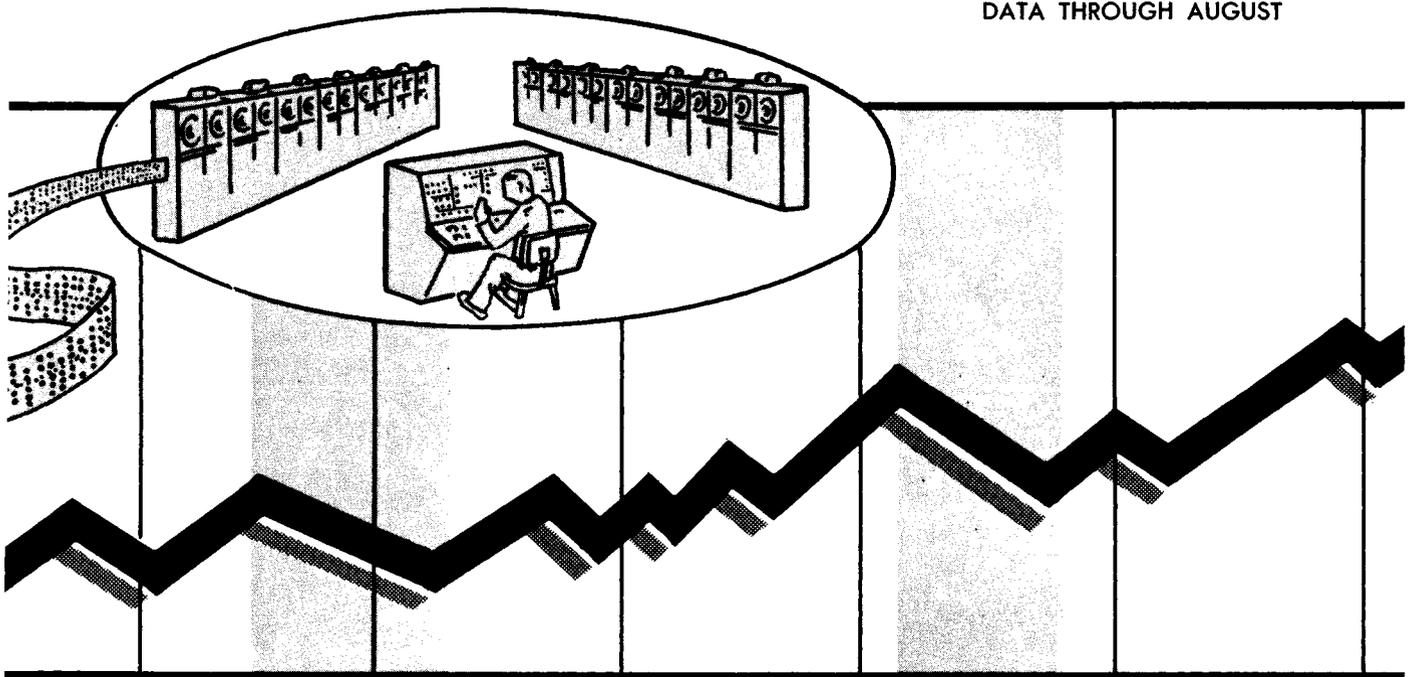


SEPTEMBER 1964

Business Cycle Developments

DATA THROUGH AUGUST



U.S. DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

Business Cycle Developments

SEPTEMBER 1964

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Series ES1 No. 64-9

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The cooperation of various government and private agencies which provide data is gratefully acknowledged. The agencies furnishing data are indicated in the list of series and sources on the back cover of this report.

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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 30 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 22nd 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. Series 17, 62, 47, and D-47 have been revised from January 1961 to December 1963, to reflect a new seasonal adjustment of the industrial production data.

2. Series 11 and D-11 have been revised to reflect the change from 602 to 1,000 in the number of manufacturing corporations included in the National Industrial Conference Board's survey of newly approved capital appropriations. The new coverage begins with the second quarter 1964. The data for the period 1960 through the first quarter 1964 have been adjusted to the level of the new series by the source agency. In Chart 1, the level of the old series has been adjusted to the level of the new series by the Census Bureau.

3. Series 7, New private nonfarm dwelling units started, has been revised for 1963 on the basis of more complete information.

4. Series 29, New private housing units authorized by local building permits, has been revised for the period 1962 to date to reflect a new seasonal adjustment.

5. Series 31, Change in book value of manufacturing and trade inventories, has been revised for the period January 1963 to date because of the adoption of the 1963 survey of retail trade as the benchmark for the retail segment of this series.

6. Appendix F, includes historical data for series 47, 86, 87, 88, 89, 90, 91, and 92.

The October issue of Business Cycle Developments is scheduled for release on October 22.

Contents

	Page
Preface.....	i
New Features and Changes for This Issue	ii
Descriptions and Procedures	
Business Cycle Series.....	1
Method of Presentation	1
Designation of Business Cycle Turning Points.....	1
Seasonal and Related Statistical Adjustments.....	1
MCD Moving Averages	2
Analytical Measures of Current Change	2
Comparisons of Cyclical Patterns	3
Charts.....	4
How to Read Charts 1, 2, and 3	5
Basic Data	
Table 1.—Basic Data and Current Changes for Business Cycle Series: 4 Most Recent Months	6
Chart 1.—Business Cycle Series: 1948 to Present.....	8
Table 2.—Basic Data for Business Cycle Series: January 1961 to Present.....	22
Analytical Measures	
Table 3.—Distribution of Highs in Business Cycle Indicators During Recent Months Compared With Periods Around Previous Business Cycle Peaks	34
Chart 2.—Diffusion Indexes: 1948 to Present.....	35
Chart 3.—Diffusion Indexes, Actual and Anticipated: 1948 to Present.....	37
Table 4.—Diffusion Indexes for 11 Major Economic Activities: January 1961 to Present.....	38
Table 5.—Diffusion Indexes, Actual and Anticipated, for 4 Manufacturing Activities: January 1961 to Present	41
Table 6.—Direction of Change in Series Components and Percent of Series Rising: July 1963 to Present	42
Cyclical Patterns	
Chart 4.—Comparisons of Reference Cycle Patterns	50
Chart 5.—Comparisons of Specific Cycle Patterns	55
Table 7.—Percent of Reference Peak Levels as Measured at Designated Months After the Reference Trough Dates in the 9 Most Recent Expansions	58
Table 8.—Percent Change From Reference Trough Levels as Measured at Designated Months After the Reference Trough Dates in the 9 Most Recent Expansions	59
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.....	60
Technical Papers and Background Materials	
Series 54, Sales of Retail Stores: Descriptions and Procedures	61
Appendixes	
(Standard appendixes B, C, and E are omitted from this issue)	
Appendix A.—Business Cycle Reference Dates and Duration of Expansions and Contractions in the United States: 1854 to 1961	67
Appendix D.—Current Seasonal Adjustment Factors for Business Cycle Series Adjusted by Bureau of the Census or NBER (November 1963 to December 1964)	68
Appendix F.—Historical Data for Selected Series	69
Index	
Series Index to Charts, Tables, and Appendixes.....	71

Technical Papers and Background Materials

To aid users of Business Cycle Developments, technical papers dealing with the statistical adjustments and series used in BCD will be included in this report from time to time. The following papers have been included as part of this program:

- No. 1.—Summary Description of the X-9 and X-10 Versions of the Census Method II Seasonal Adjustment Program (published as appendix E in the September 1963 issue). A new version of this program is scheduled to be released later this year. Announcement will be made at that time.
- No. 2.—Business Cycle Indicators—The Known and the Unknown by Julius Shiskin (published as appendix H in 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.
- No. 3.—Census Trading-Day Adjustment Method by Allan H. Young (published in May 1964 issue). This paper is a summary of the technique used at the Census Bureau to adjust monthly series for variations arising from the number of trading or working days in the month. This technique will be included in a new variant of the Census Method II seasonal-adjustment program (X-11) to be released later this year.
- No. 4.—Eight Series on Manufacturers' Orders and Inventories: Descriptions and Procedures by John Musgrave and John Kuntz (published in July 1964 issue). This paper describes eight BCD series (6, 20, 24, 25, 64, 65, 96, and 99) which are compiled and seasonally adjusted by the Bureau of the Census, briefly explains their typical business cycle behavior, and gives a comprehensive list of sources of such information.
- No. 5.—Series 54, Sales of Retail Stores: Descriptions and Procedures by Max Shor and Allan Young (published in this issue).

A limited number of copies of these articles are available, free of charge, from the Chief Economic Statistician, Bureau of the Census, Washington, D.C., 20233. Copies for classroom use can usually be provided.

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 tables 1 and 2).—Over 50 business cycle indicators and about 30 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 3-6).—These measures aid in forming a judgment of the imminence of a turning point in the business cycle and 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 and Related Statistical 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, 5, 9, 10, 11, 13, 14, 15, 17, 18, 30, 37, 55, 62, 81, 82, 83, 84, 90, 91, 92, 97, 112, and 128. Seasonal adjustments for these series were developed by either the NBER or the Bureau of the Census using Method II. The adjustment factors are shown in appendix table D, except for series 11 and 97 which are the sums of seasonally adjusted components, and series 9 and 10 which are 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.

Method II adjusts for changes in average climatic conditions and institutional arrangements during the year. Adjustments for variations in the number of trading days are also made for some series; for example, new building permits. Further adjustments for variable holidays, such as Easter, are made for certain series; for example, retail sales of apparel. Studies are now underway to determine whether similar adjustments for Labor Day, Thanksgiving Day, and the day of the week upon which Christmas falls would be useful.

Studies of the effects of unusual weather upon some series have also been started. It is important to note, however, that present methods adjust for average weather conditions and not for the dispersion about this average; that is, present methods are designed to adjust for normal but not abnormal weather at any time of the year. For this reason, many seasonally adjusted series, such as housing starts, will tend to be low in months when the weather is unusually bad and high in months when the weather is unusually good. While it eventually may be possible, Census methods do not at present make any adjustments for such variations.

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.

MCD moving averages are shown in chart 1 for all series with an MCD of "5" or more. To provide an indication of the variation about these moving averages, seasonally adjusted data are also plotted for years beginning with 1958. Although not so smooth as more powerful moving averages such as

the weighted 15-term Spencer curve, the MCD curve is more current and has a smaller rounding bias around business cycle peaks and troughs. On balance, the MCD curve seems to offer a reasonable compromise in terms of currency, smoothness, and fidelity to the patterns of business cycle fluctuations.

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. MCD is usually computed for a fairly long period, one covering both expansions and contractions.¹ Since the pace of change varies from phase to phase of the business cycle, such a measure will not provide an accurate estimate of the span over which to estimate cyclically significant changes at all times. Thus MCD computed for the period 1953-63 is likely to be too high during the early stages of recovery when expansion has usually been rapid and too low during the late stages of expansion when the rate of advance has usually been small. This limitation should also be borne in mind when making use of this measure.²

Analytical Measures of Current Change

Three kinds of analytical measures are presented—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.

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 1-month intervals (January-February, February-March, etc.) and generally for either 3- or 5-month intervals depending upon the irregularity of the

¹Various 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.

²For 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).

series. 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 15 indicator series (see tables 4 and 5). Eighteen 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 these indicators show comparisons for components over 1-month and either 3- or 5-month spans. The 11 other diffusion indexes are based on 7 indicators closely related to the above 9 indicators. They include two National Industrial Conference Board indexes (1- and 3-quarter spans) based on newly approved capital appropriations (17 industries); the First National City Bank of New York index based on quarterly profit reports (700 companies); and 8 NBER diffusion indexes—actual and anticipated—for the following: Manufacturers' sales (800 companies) and new orders (400 companies), based on data from Dun and Bradstreet, Inc.; carloadings (19 commodity groups), based on data from the Association of American Railroads; and new plant and equipment expenditures (16 industries), based on data from the Office of Business Economics and the Securities and Exchange Commission.

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

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

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

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

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

The letter "H" is used in the basic data table (table 2) 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—whether it is in an expansion or contraction.

Expansions may be compared by measuring changes from the immediately preceding peak levels. In table 7 of this report, the current expansion is measured from the May 1960 reference peak to the month of latest reported data. For earlier expansions, percentage changes are 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 number of months for each expansion, the spans from the preceding peak dates are different, depending on the length of the contractions for each period. Also, for those earlier periods of expansion that were shorter than the current one, the comparisons made in table 7 reflect the status at a point after a new contraction had set in. 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 expansions.

Expansions also may be compared by computing changes from reference trough levels and from reference trough dates (table 8). This type of comparison measures the extent of the rise from the trough level so many months after the upswing began. The same situation exists here as for the comparisons shown in table 7: For earlier expansions that were shorter than the current one, the comparisons show the status at a point after a new contraction had set in.

Contractions can be 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. These comparisons will be made during a contraction period.

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 (See appendix B). Specific cycle comparisons are shown in table 9. These comparisons differ from those shown for reference cycles in that they show the status only up to the specific peak date. For some series past specific expansions were shorter than the current one and, therefore, the earlier comparisons span fewer months than those for the current expansion.

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 pro-

cedure 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.

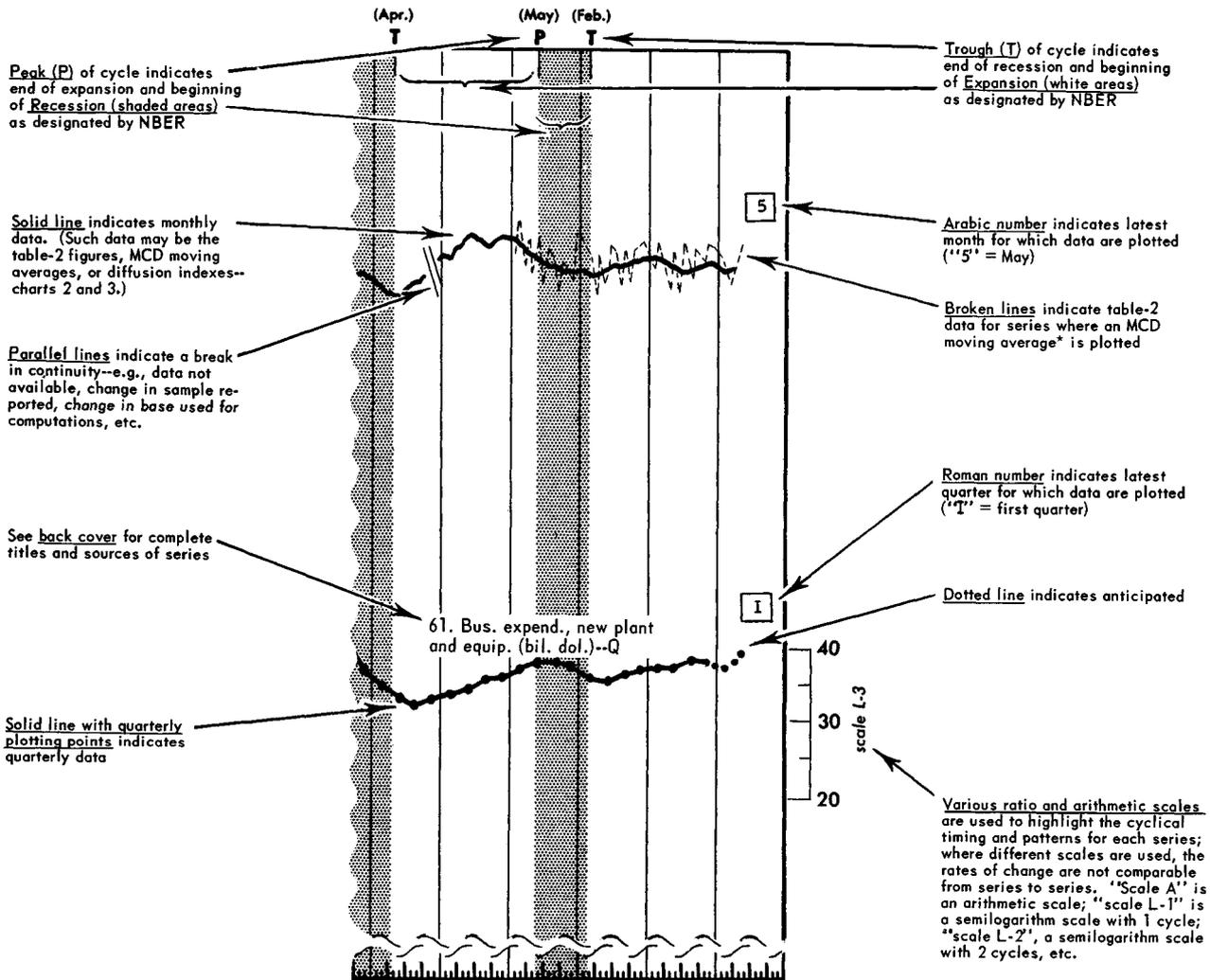
Historical Time Series (charts 1, 2, and 3).—These charts show the cyclical fluctuations of each series against the background of expansions and recessions in general business activity from 1948 to the current month. Shaded areas on the charts indicate periods of business cycle recession between business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

Several different ratio and 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 with its performance during the expansion phase of previous business cycles. The usual date sequence followed in charts is disregarded, and instead the data are aligned at the strategic point of the business cycle: For expansions, the reference trough (chart 4) and specific trough (chart 5). Thus these charts facilitate judgements on the vigor of the current expansion relative to cyclical movements during the corresponding expansions 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 aligned. In chart 4, the levels of the preceding peaks are also aligned and in chart 5, the levels of the preceding troughs are also aligned. 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.

Table 1.--BASIC DATA AND CURRENT CHANGES FOR BUSINESS CYCLE SERIES: 4 MOST RECENT MONTHS

Series descriptions (See complete titles and sources on back cover)	Basic data ¹				Percent change ²				
	Unit of measure	May 1964	June 1964	July 1964	Aug. 1964	Avg. change, 1953- 1963 ³	May to June 1964	June to July 1964	July to Aug. 1964
NBER LEADING INDICATORS									
1. Avg. workweek, prod. workers, mfg....	Hours.....	40.7	40.6	r40.5	p40.7	0.5	-0.2	-0.2	+0.5
2. Accession rate, manufacturing.....	Per 100 empl.	3.8	r4.1	p3.9	(NA)	4.9	+7.9	-4.9	(NA)
30. Nonagri. placements, all industries.	Thous.....	533	516	523	499	1.8	-3.2	+1.4	-4.6
3. Layoff rate, manufacturing.....	Per 100 empl.	1.7	r1.6	p1.8	(NA)	9.5	+5.9	-12.5	(NA)
4. Temporary layoff, all industries....	Thous.....	104	117	129	87	17.8	-12.5	-10.3	+32.6
5. Avg. weekly initial claims, State unemployment insurance.....	..do.....	260	259	261	240	5.3	+0.4	-0.8	+8.0
6. New orders, durable goods indus....	Bil. dol....	19.94	r20.02	r21.35	p19.40	3.8	+0.4	+6.6	-9.1
24. New orders, mach. and equip. indus..	..do.....	3.93	r3.92	3.84	p3.72	4.5	-0.3	-2.0	-3.1
9. Construction contracts, commercial and industrial.	Mil. sq. ft. floor space.	46.22	48.22	53.55	(NA)	9.7	+4.3	+11.1	(NA)
10. Contracts and orders, plant, equip..	Bil. dol....	4.63	r4.63	p4.56	(NA)	4.9	0.0	-1.5	(NA)
11. New capital appropriations, mfg. ⁴...	..do.....	p4.87				11.6			
7. Private nonfarm housing starts.....	Ann. rate, thous.....	r1507	r1585	r1466	p1380	7.3	+5.2	-7.5	-5.9
29. New bldg. permits, private housing..	1957-59=100..	r112.1	r115.2	r109.9	p113.1	3.8	+2.8	-4.6	+2.9
12. Net change, number of businesses ^{4 5} .	Thous.....	+17			2				
13. New business incorporations.....	Number.....	15932	15797	15852	(NA)	2.7	-0.8	+0.3	(NA)
14. Liabilities of business failures....	Mil. dol....	90.44	153.07	151.92	76.20	16.9	-69.3	+0.8	+49.8
15. Large business failures.....	No. per week.	39	38	43	40	13.1	+2.6	-13.2	+7.0
16. Corporate profits after taxes ⁴	Ann. rate, bil. dol....	r31.9				6.3			
17. Ratio, price to unit labor cost, mfg..	1957-59=100..	103.7	r102.9	103.2	p102.8	0.7	-0.8	+0.3	-0.4
18. Profits per dol. of sales, mfg. ⁴	Cents.....	8.9				6.8			
22. Ratio, profits to income originat- ing, corporate, all industries ⁴	Percent.....	r10.5				5.1			
19. Stock prices, 500 common stocks*....	1941-43=100..	80.72	80.24	83.22	82.00	2.6	-0.6	+3.7	-1.5
21. Change in business inventories, all industries ^{4 5}	Ann. rate, bil. dol....	+3.7				2.5			
31. Change in book value, manufacturing and trade inventories ⁵.....	..do.....	r+1.6	r+1.4	p-0.4	(NA)	3.5	-0.2	-1.8	(NA)
20. Change in book value, mfrs.' inven- tories of materials and supplies ⁵..	..do.....	-0.1	r-0.7	p-2.3	(NA)	1.5	-0.6	-1.6	(NA)
37. Purchased materials, percent report- ing higher inventories.....	Percent.....	51	56	58	57	6.8	+9.8	+3.6	-1.7
26. Buying policy, prod. mtl., commit- ments 60 days or longer*.....	..do.....	58	59	58	58	5.8	+1.7	-1.7	0.0
32. Vendor performance, percent report- ing slower deliveries*.....	..do.....	63	55	59	65	7.7	-12.7	+7.3	+10.2
25. Change in unfilled orders, durable goods industries ⁵	Bil. dol....	+0.38	r+0.81	r+1.42	p+1.05	0.49	+0.43	+0.61	-0.37
23. Industrial materials prices*.....	1957-59=100..	100.9	101.4	102.5	105.7	1.3	+0.5	+1.1	+3.1
NBER ROUGHLY COINCIDENT INDICATORS									
41. Employees in nonagri. establishments.	Thous.....	58590	r58782	r58929	p58944	0.3	+0.3	+0.3	0.0
42. Total nonagricultural employment....	..do.....	65889	65549	65706	65678	0.4	-0.5	+0.2	0.0
43. Unemployment rate, total.....	Percent.....	5.1	5.3	4.9	5.1	4.2	-3.9	+7.5	-4.1
40. Unemployment rate, married males....	..do.....	2.6	2.8	2.7	2.6	6.0	-7.7	+3.6	+3.7
45. Avg. weekly insured unemploy, State.	..do.....	3.6	3.6	3.6	3.5	4.8	0.0	0.0	+2.8
46. Help-wanted advertising.....	1957-59=100..	118	121	124	p123	3.1	+2.5	+2.5	-0.8
47. Industrial production.....	..do.....	131.3	r131.6	132.7	p133.5	1.1	+0.2	+0.8	+0.6
50. GNP in 1954 dollars ⁴	Ann. rate, bil. dol....	513.5				1.3			
49. GNP in current dollars ⁴.....	..do.....	618.6				1.5			
57. Final sales ⁴.....	..do.....	614.9				1.3			
51. Bank debits outside NYC.....	..do.....	2313.0	2328.8	2430.9	p2372.9	1.5	+0.7	+4.4	-2.4
52. Personal income.....	..do.....	487.8	489.3	r491.4	p493.9	0.5	+0.3	+0.4	+0.5
53. Labor income in mining, mfg., constr..	..do.....	125.8	126.4	r126.9	p127.7	0.8	+0.5	+0.4	+0.6
54. Sales of retail stores.....	Mil. dol....	21777	r21773	r21964	p22115	0.8	0.0	+0.9	+0.7
55. Wholesale prices, except farm prod- ucts and foods.....	1957-59=100..	101.1	101.0	101.2	p101.2	0.2	-0.1	+0.2	0.0

Table 1.--BASIC DATA AND CURRENT CHANGES FOR BUSINESS CYCLE SERIES: 4 MOST RECENT MONTHS--Continued

Series descriptions (See complete titles and sources on back cover)	Unit of measure	Basic data ¹				Percent change ²			
		May 1964	June 1964	July 1964	Aug. 1964	Avg. change, 1953- 1963 ³	May to June 1964	June to July 1964	July to Aug. 1964
NBER LAGGING INDICATORS									
61. Business expenditures, new plant and equipment ⁴	Ann. rate, bil. dol....	r43.50	...	...	ra44.55	3.2	...	...	+2.4
62. Labor cost per unit of output, mfg..	1957-59=100..	97.5	r98.1	98.0	p98.3	0.6	+0.6	-0.1	+0.3
68. Labor cost per dollar of real corporate GNP ⁴.....	..do.....	104.9				0.9			
64. Book value of mfrs.' inventories....	Bil. dol.....	60.5	60.4	p60.4	(NA)	0.5	-0.2	0.0	(NA)
65. Book value of mfrs.' inventories of finished goods.....	..do.....	21.6	r21.5	p21.6	(NA)	0.8	-0.5	+0.5	(NA)
66. Consumer installment debt.....	Mil. dol.....	55220	55590	56073	(NA)	0.8	+0.7	+0.9	(NA)
67. Bank rates on short-term business loans* ⁴	Percent.....	4.99				2.3			
OTHER U.S. SERIES WITH BUSINESS CYCLE SIGNIFICANCE									
82. Federal cash payments to public.....	Ann. rate, bil. dol....	110.3	120.0	126.9	117.1	5.7	+8.8	+5.8	-7.7
83. Federal cash receipts from public...	..do.....	105.1	114.4	116.4	110.0	5.4	+8.8	+1.7	-5.5
84. Federal cash surplus or deficit ⁵....	..do.....	-5.2	-5.6	-10.5	-7.1	5.6	-0.4	-4.9	+3.4
95. Balance, Federal income and product account ⁴ ⁵.....	..do.....	-9.2				2.5			
90. Defense Dept. oblig., procurement...	Mil. dol.....	2192	p1015	1691	(NA)	26.9	-53.7	+66.6	(NA)
91. Defense Dept. obligations, total....	..do.....	4941	p4211	5274	(NA)	15.1	-14.8	+25.2	(NA)
92. Military contract awards in U.S.....	..do.....	2465	1663	(NA)		26.2	-32.5	(NA)	
99. New orders, defense products.....	Bil. dol.....	2.48	r2.34	r3.30	p2.07	23.3	-5.6	+41.0	-37.3
93. Free reserves* ⁵	Mil. dol.....	+78	+118	r+132	p+77	104.2	+40	+14	-55
85. Change in money supply ⁵	Percent.....	r0.00	+0.71	+0.71	p+0.32	0.23	+0.71	0.00	-0.39
98. Change in money supply and time deposits ⁵.....	..do.....	r+0.37	+0.81	+0.73	p+0.62	0.21	+0.44	-0.08	-0.11
110. Total private borrowing ⁴	Ann. rate, bil. dol....	(NA)				11.6			
111. Corporate gross savings ⁴.....	..do.....	(NA)				8.6			
112. Change, business loans ⁵.....	..do.....	+5.60	+3.88	+3.84	+4.75	1.22	-1.72	-0.04	+0.91
113. Change, consumer installment debt ⁵..	..do.....	+5.92	+4.44	+5.80	(NA)	0.85	-1.48	+1.36	(NA)
114. Treasury bill rate*.....	Percent.....	3.48	3.48	3.48	3.51	7.3	0.0	0.0	+0.9
115. Treasury bond yields*.....	..do.....	4.16	4.13	4.13	4.14	1.8	-0.7	0.0	+0.2
116. Corporate bond yields*.....	..do.....	4.48	4.49	4.43	4.43	1.7	+0.2	-1.3	0.0
117. Municipal bond yields*.....	..do.....	3.20	3.20	3.18	3.19	2.6	0.0	-0.6	+0.3
118. Mortgage yields*.....	..do.....	5.45	5.45	5.46	5.46	0.58	0.0	+0.2	0.0
86. Exports, excluding military aid.....	Mil. dol.....	2052.1	2004.3	2111.4	(NA)	4.6	-2.3	+5.3	(NA)
87. General imports.....	..do.....	1548.1	1505.5	1589.6	(NA)	3.6	-2.8	+5.6	(NA)
88. Merchandise trade balance ⁵.....	..do.....	+504.0	+498.8	+521.8	(NA)	59.0	-5.2	+23.0	(NA)
89. U.S. balance of payments ⁴ ⁵.....	..do.....	-789				286			
81. Consumer prices.....	1957-59=100..	108.0	108.1	108.1	(NA)	0.2	+0.1	0.0	(NA)
94. Construction contracts, value.....	..do.....	138	138	140	(NA)	7.0	0.0	+1.4	(NA)
96. Unfilled orders, dur. goods indus...	Bil. dol.....	49.22	r50.04	r51.46	p51.57	1.5	+1.7	+2.8	+0.2
97. Backlog of capital appro. mfg. ⁶.....	..do.....	...	(NA)			5.9	(NA)		

r = revised; p = preliminary; e = estimated; a = anticipated; NA = not available.

¹Series are seasonally adjusted except for those series, indicated by an asterisk (*), that appear to contain no seasonal movement. See additional basic data and notes in table 2.

²To 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). Percent changes are calculated in the usual way but the signs are reversed; e.g., if the rate of decrease is 0.6 percent, it is shown as +0.6. See footnote 5 for other "change" qualifications.

³This 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 series.

⁴Quarterly series. Figures are placed in the middle month of quarter.

⁵Since basic data for this series are expressed in plus or minus amounts, the changes are month-to-month (or quarter-to-quarter) differences expressed in the same unit of measure as the basic data, rather than in percent.

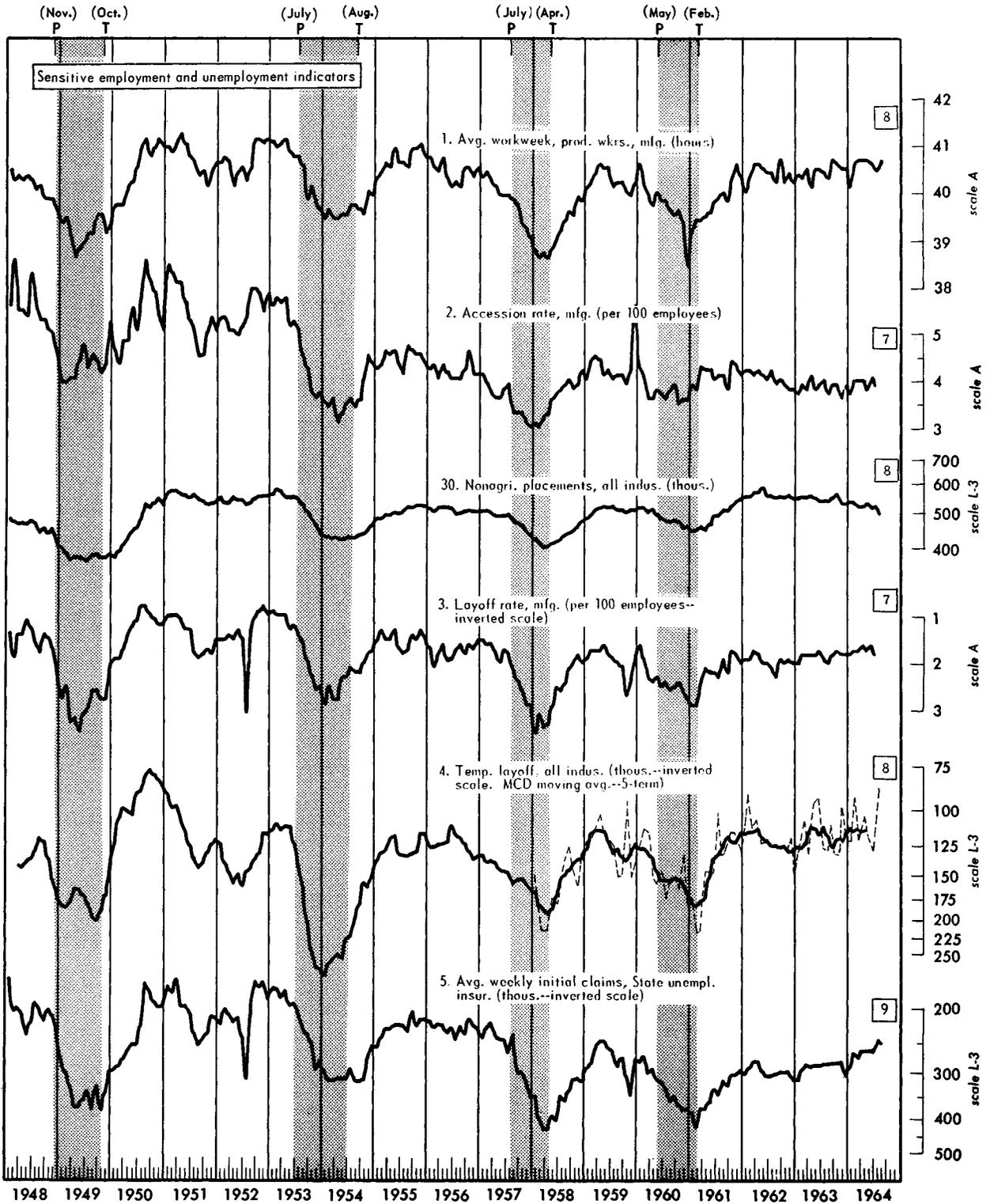
⁶End-of-quarter series. Figures are placed in the last month of quarter.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT

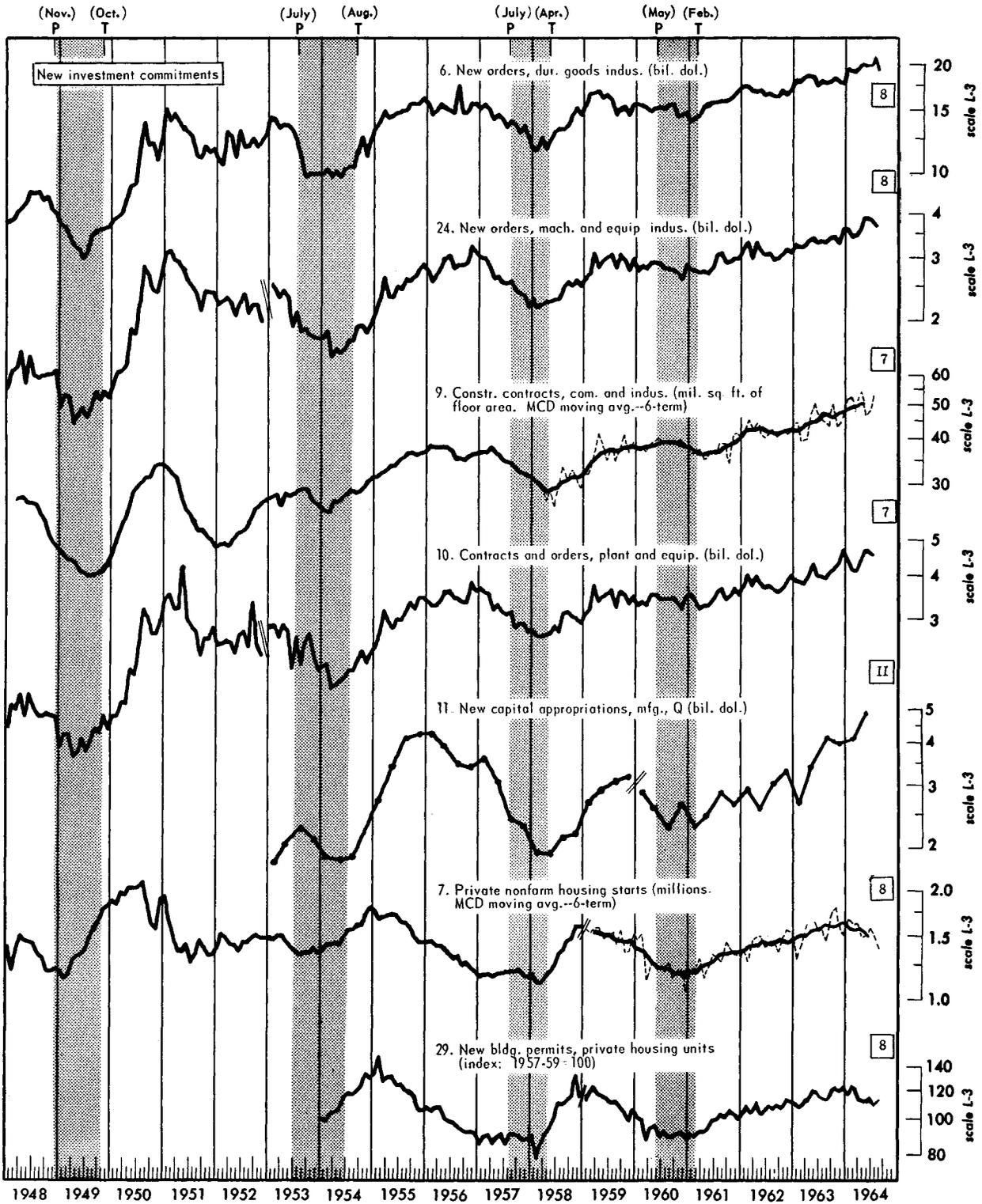
A

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.**



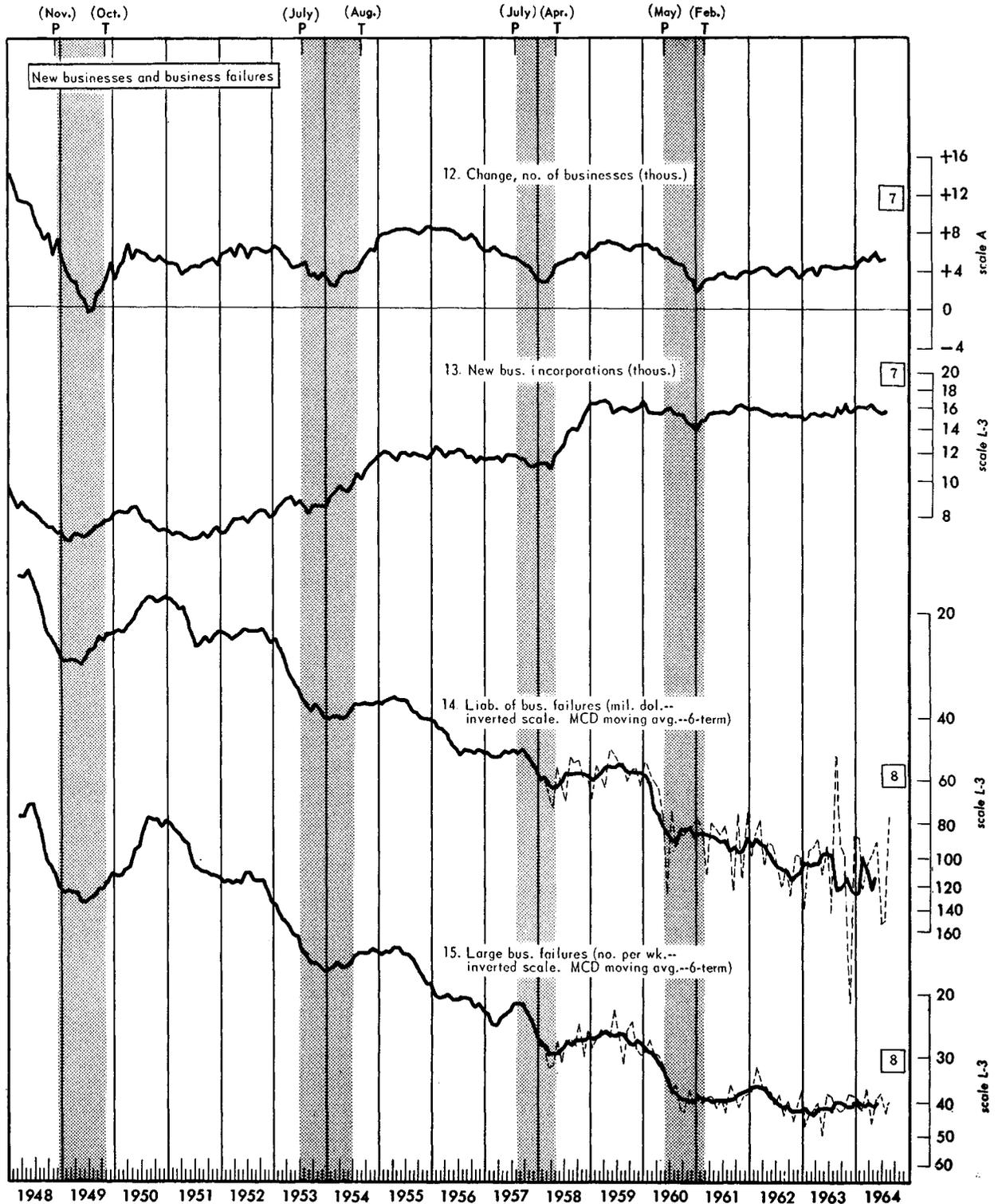
See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

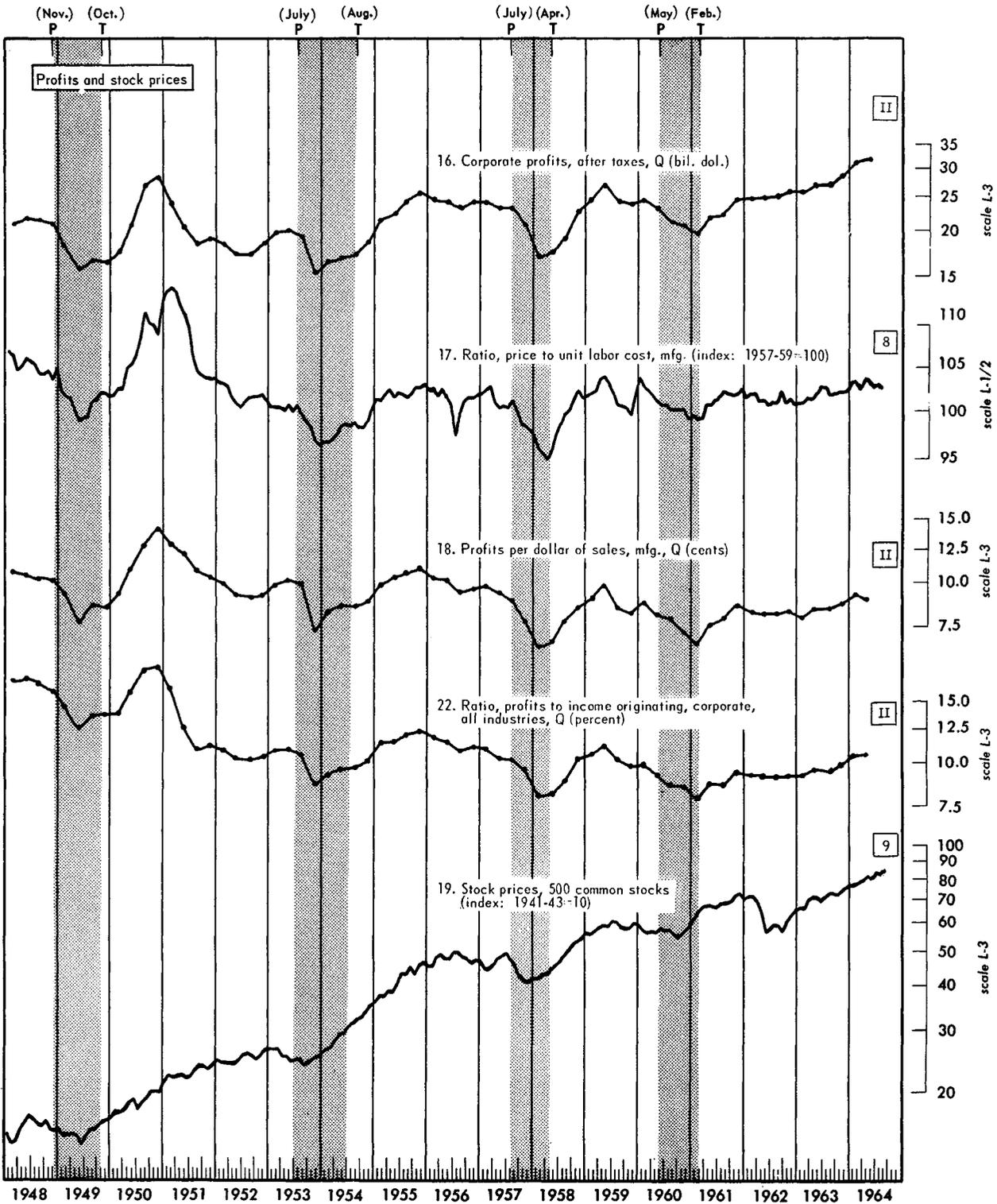
A

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.**



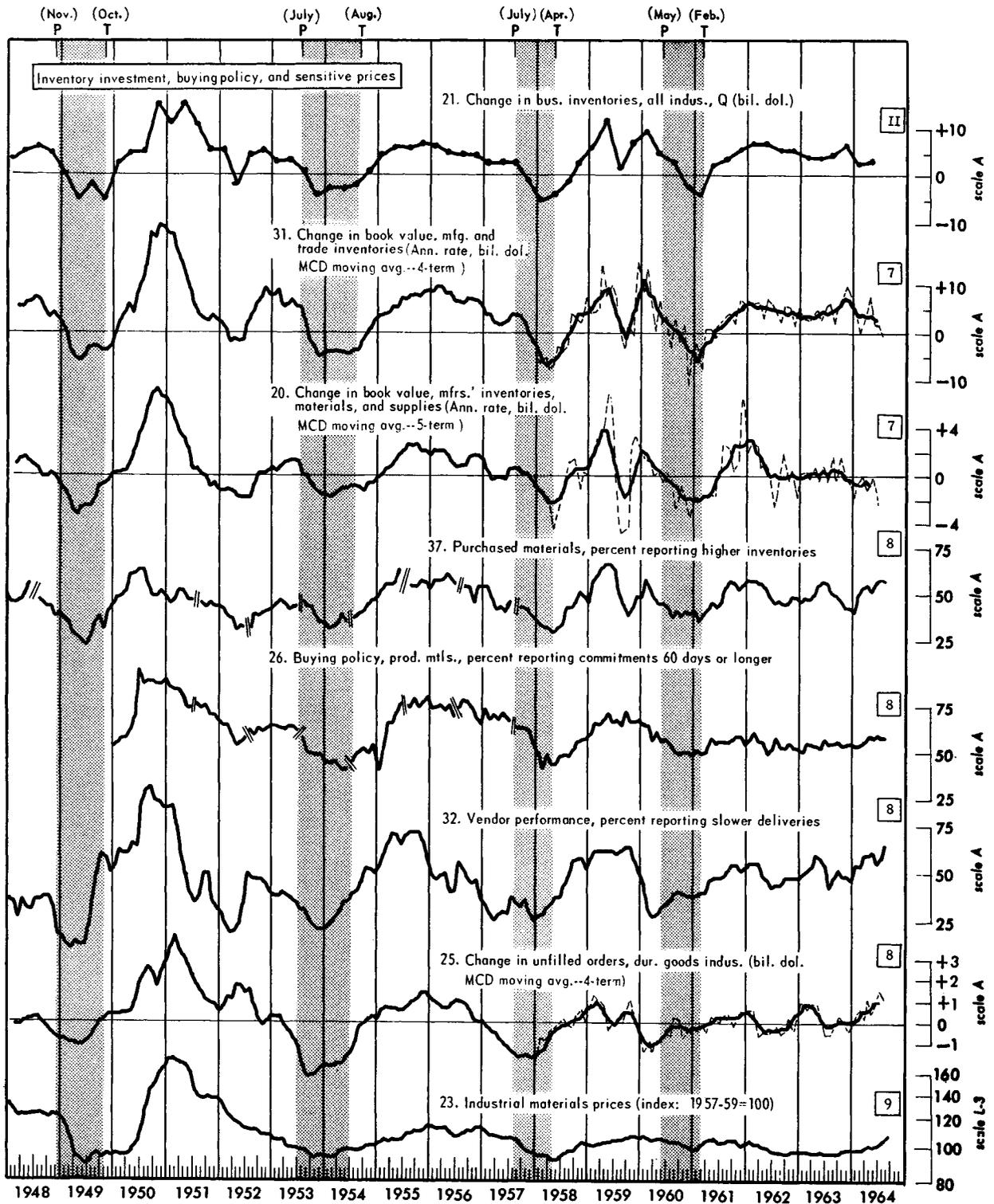
See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

A

NBER Leading Indicators—Con.



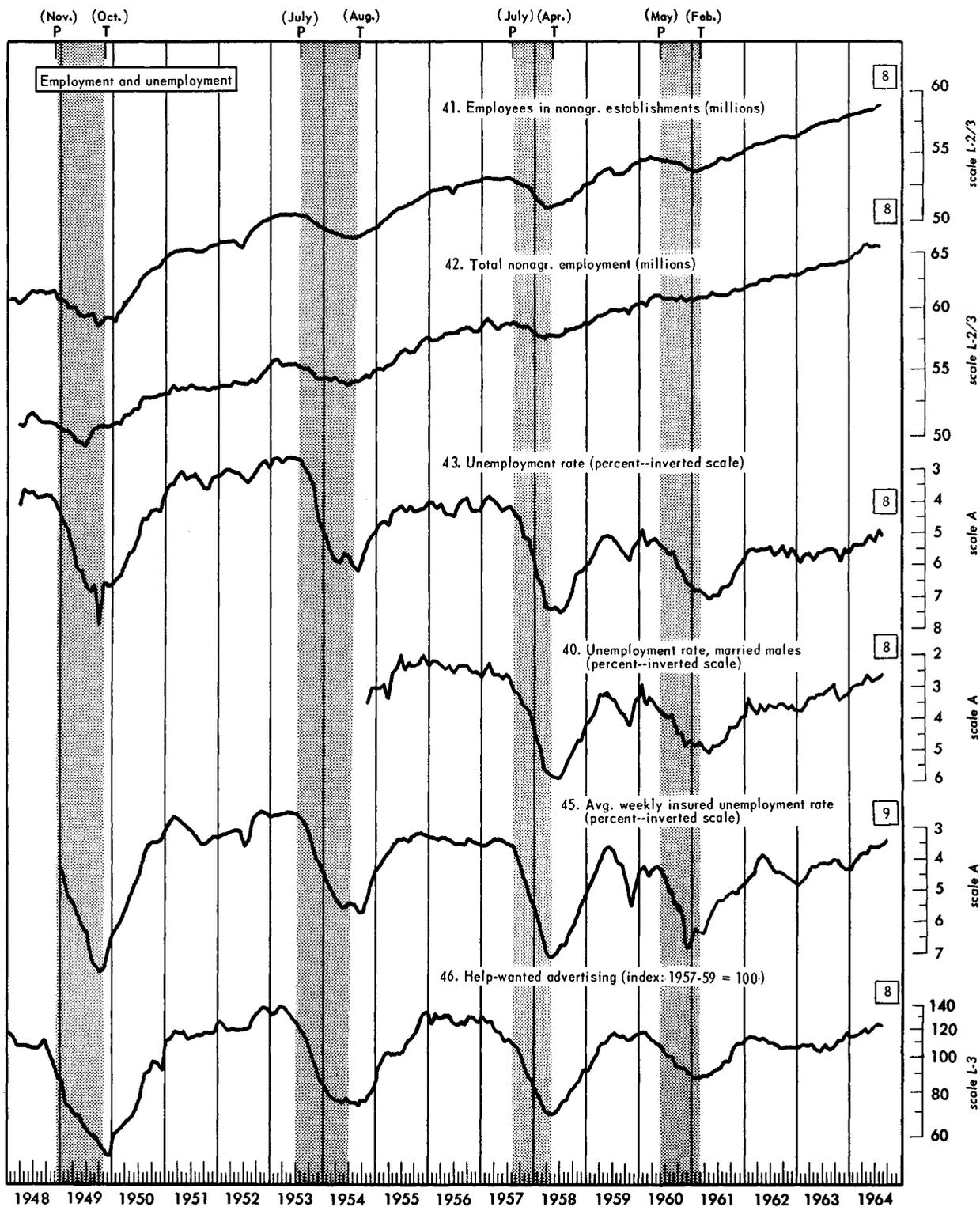
See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

B

NBER Roughly Coincident Indicators



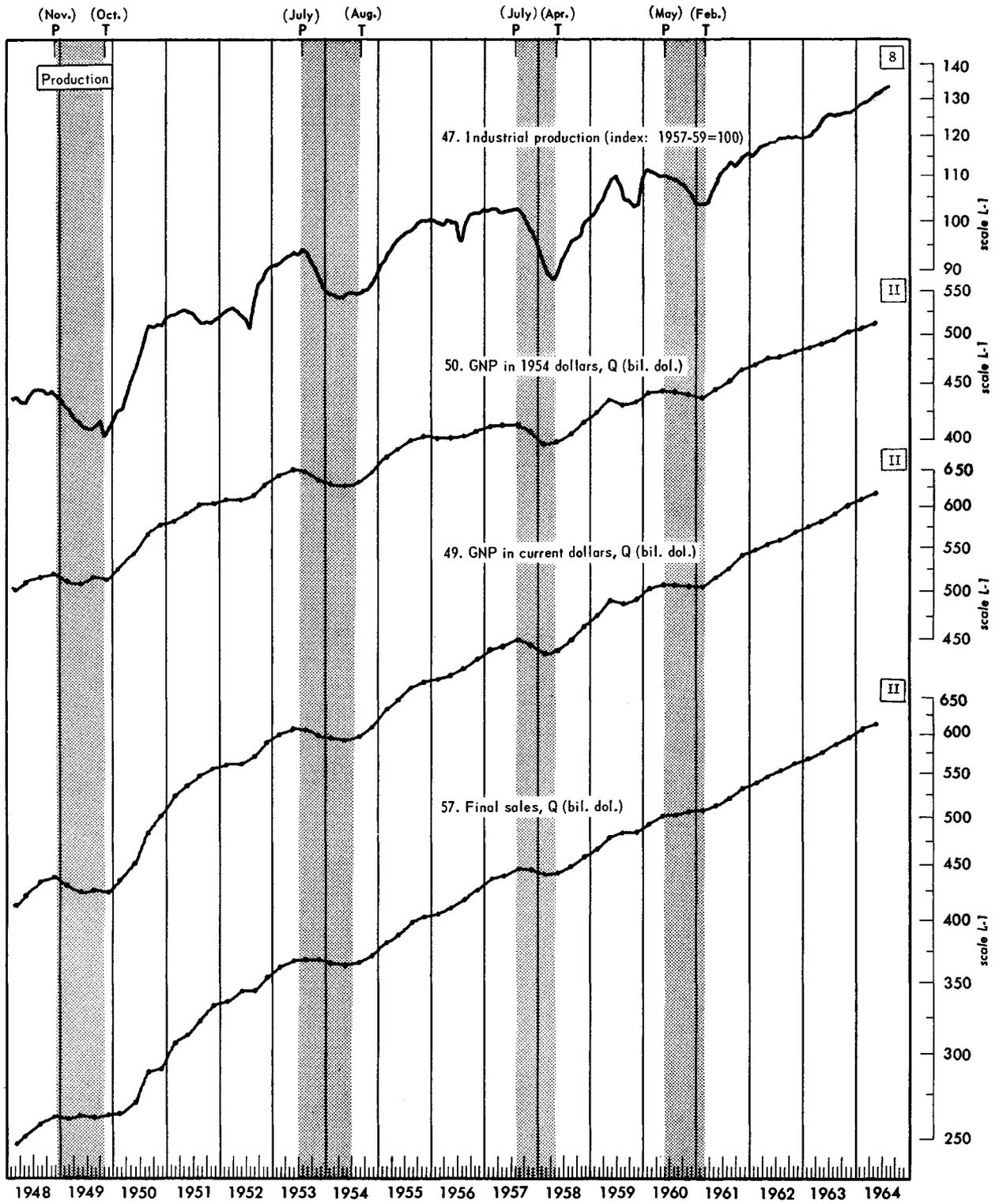
See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

B

NBER Roughly Coincident Indicators—Con.



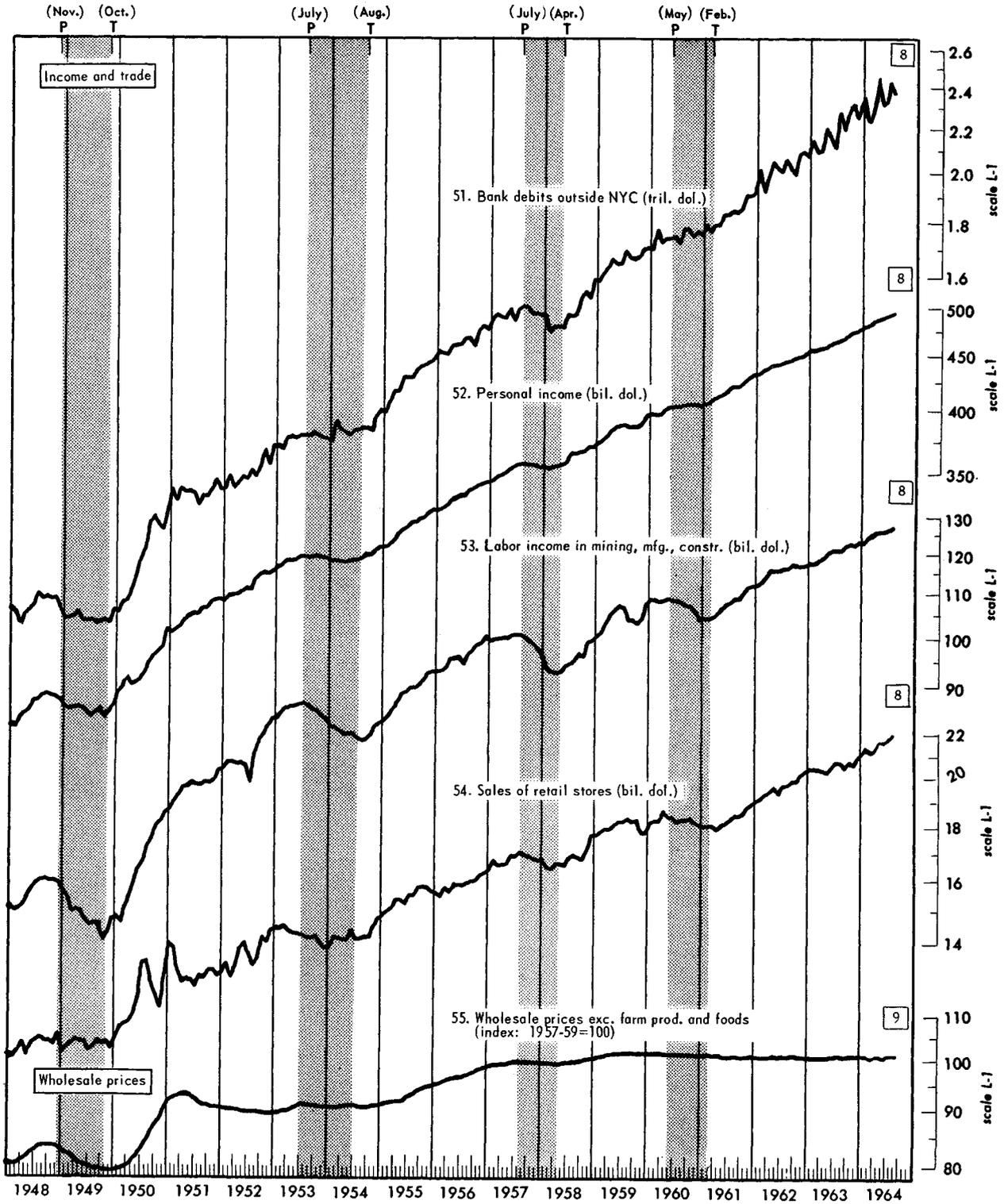
See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

B

NBER Roughly Coincident Indicators--Con.

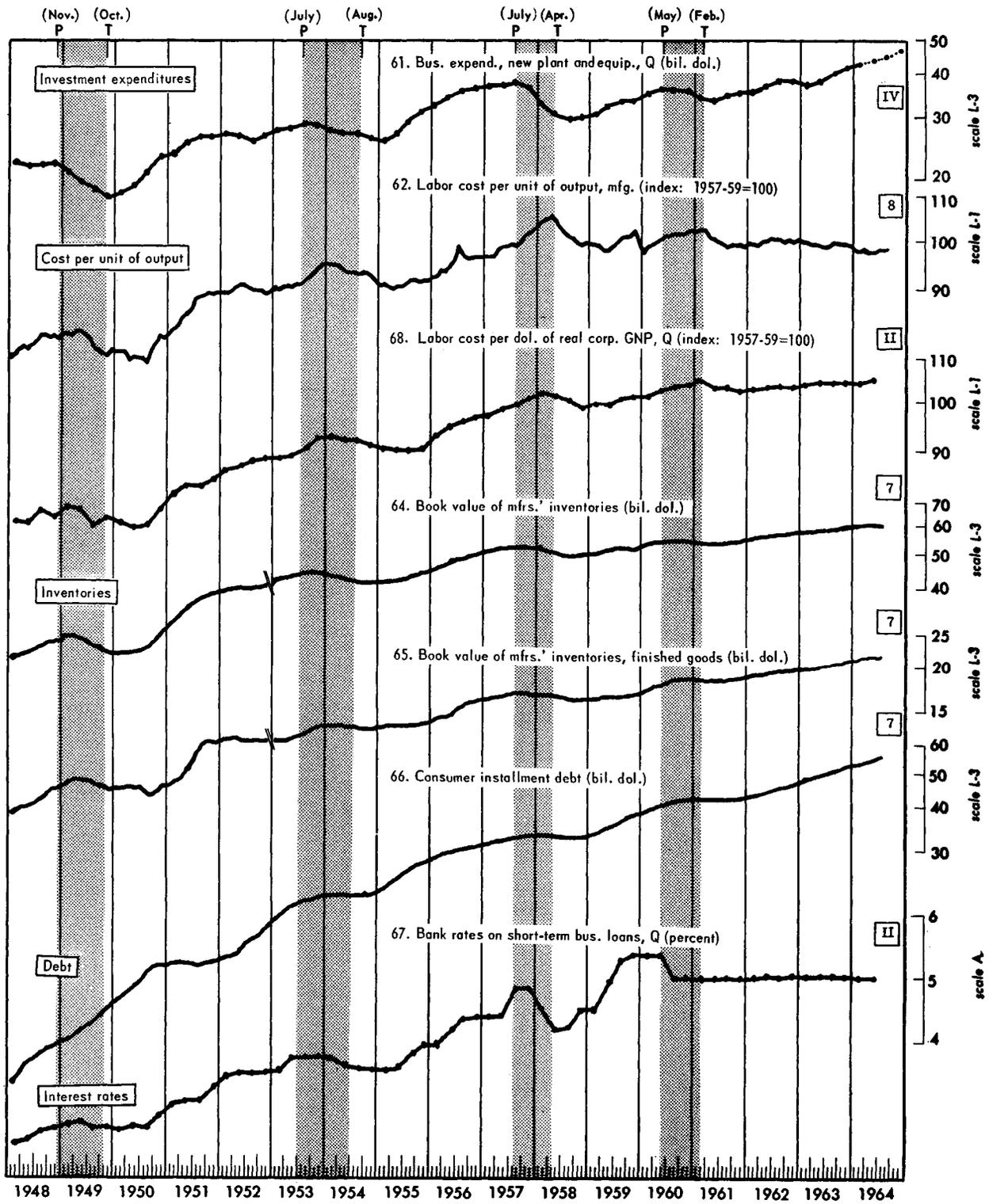


See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

NBER Lagging Indicators



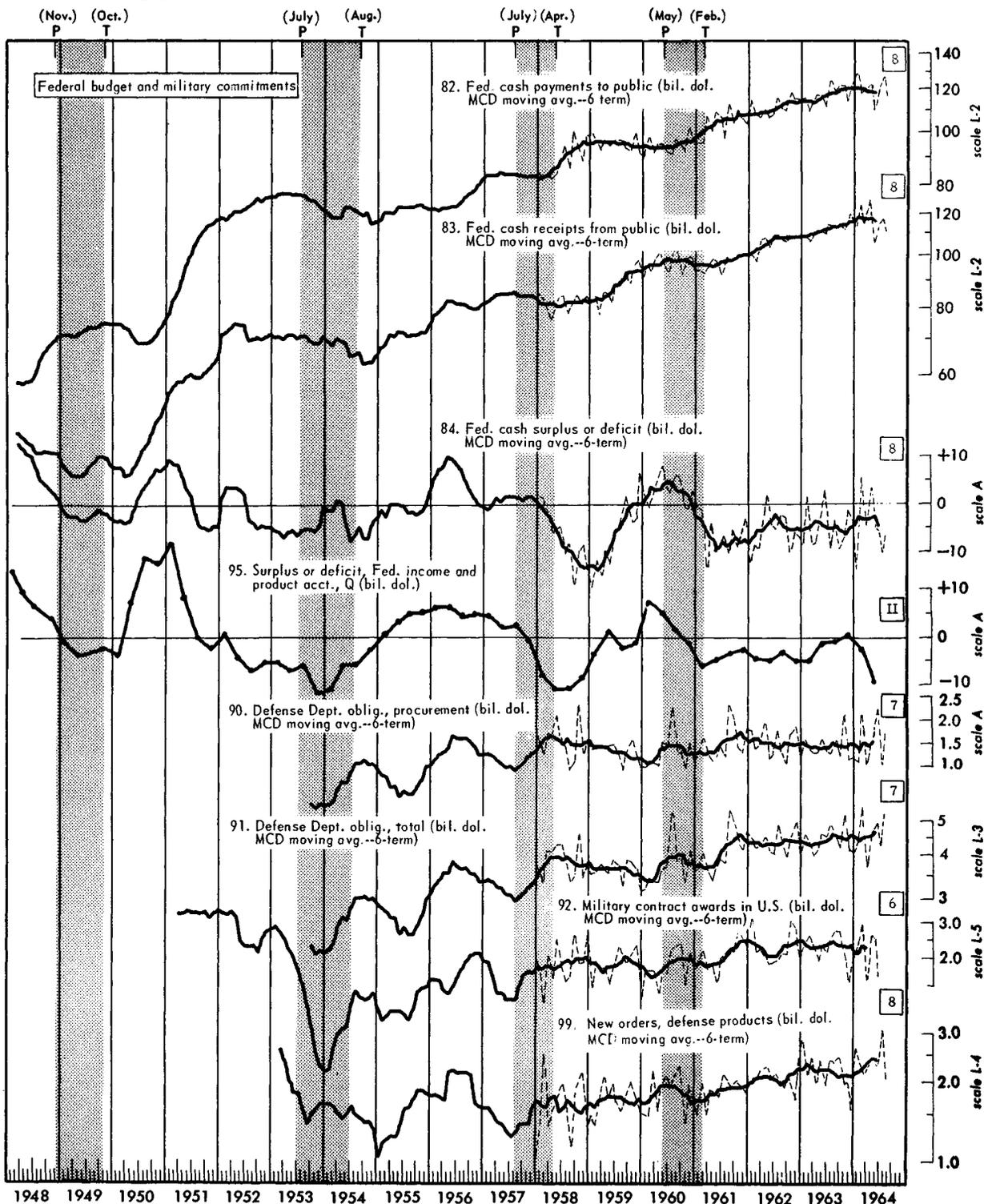
See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

D

Other U.S. Series with Business Cycle Significance



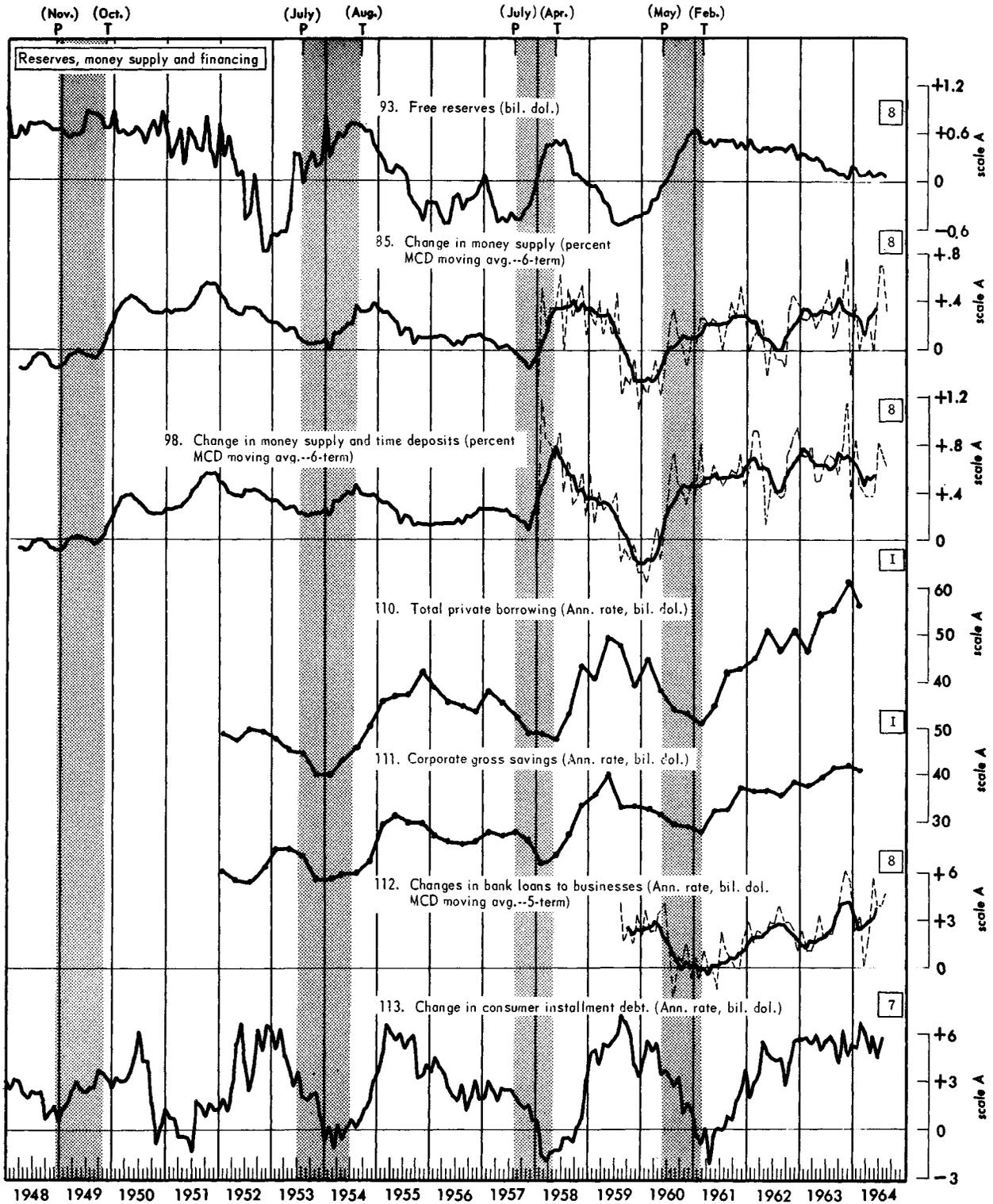
See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

D

Other U.S. Series with Business Cycle Significance--Con.

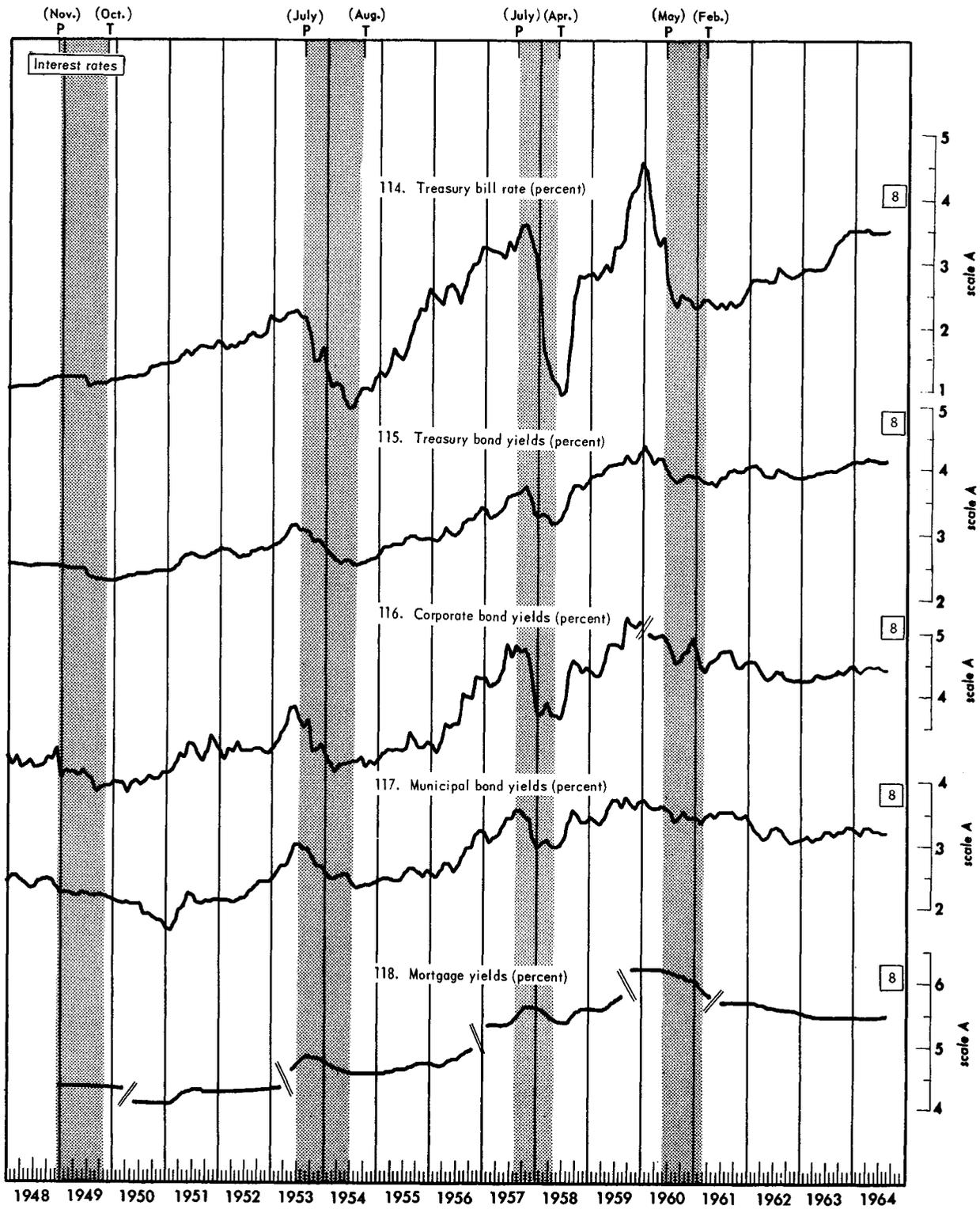


See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

D Other U.S. Series with Business Cycle Significance--Con.



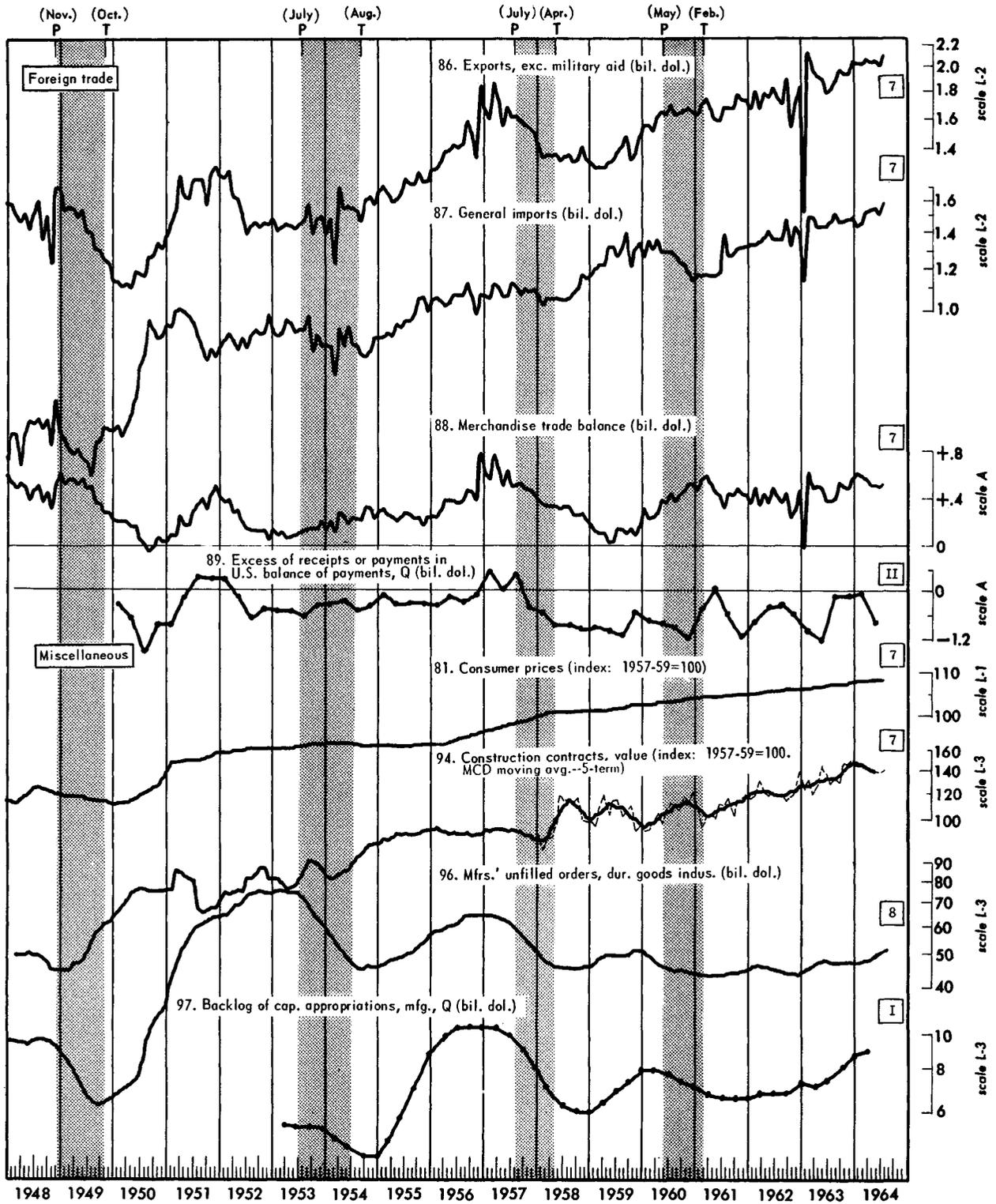
See "How to Read Charts 1, 2, and 3," page 5.

CHART 1

BUSINESS CYCLE SERIES: 1948 TO PRESENT—Con.

D

Other U.S. Series with Business Cycle Significance--Con.



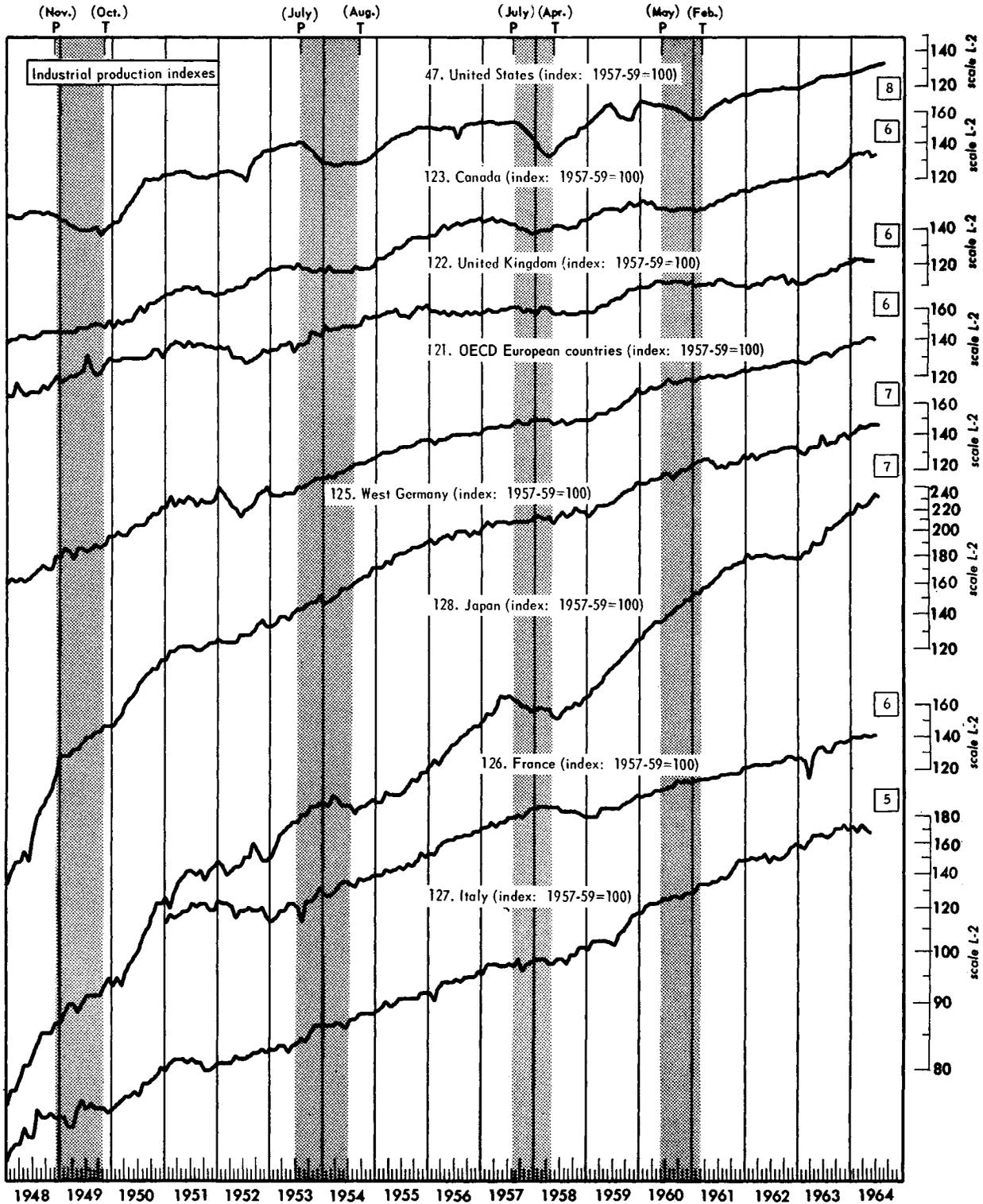
See "How to Read Charts 1, 2, and 3," page 5.

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.

Table 2.—BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1961 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 \square and current highs, by \square ; 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. Avg. work-week, production workers, manufacturing ¹	2. Accession rate, manufacturing ²	30. Nonagricultural placements, all industries	3. Layoff rate, manufacturing	4. Persons on temporary layoff, all industries ³	5. Average weekly initial claims, State unemployment insurance ⁴	6. New orders, durable goods industries	24. New orders, machinery and equipment industries ⁵
	(Hours)	(Per 100 employees)	(Thous.)	(Per 100 employees)	(Thous.)	(Thous.)	(Bil. dol.)	(Bil. dol.)
1961								
January.....	39.2	3.9	\square 444	2.9	173	393	\square 13.95	2.76
February.....	39.4	3.8	447	\square 2.9	\square 222	\square 429	14.31	2.74
March.....	39.4	4.3	459	2.4	215	379	14.53	2.71
April.....	39.5	4.2	448	2.1	141	381	15.51	2.74
May.....	39.6	4.2	469	2.2	150	358	15.59	2.70
June.....	39.8	4.0	494	2.2	151	334	15.89	2.80
July.....	39.9	4.1	493	2.3	101	348	15.92	3.03
August.....	40.0	4.1	512	1.9	136	316	16.12	3.07
September.....	39.8	3.8	507	2.2	127	329	15.97	2.88
October.....	40.3	\square 4.4	524	1.7	113	304	16.26	2.91
November.....	40.6	4.3	540	1.8	115	305	16.74	2.98
December.....	40.3	4.1	551	2.0	127	296	17.26	2.96
1962								
January.....	40.0	4.2	557	1.9	135	304	17.70	3.15
February.....	40.3	4.2	559	1.9	88	291	17.70	3.30
March.....	40.6	4.1	572	1.7	118	279	17.15	2.97
April.....	40.6	4.2	574	1.8	107	280	17.02	3.31
May.....	40.5	4.1	\square 592	2.0	126	300	17.22	3.10
June.....	40.4	4.0	557	2.0	124	309	16.65	3.02
July.....	40.4	4.2	557	2.1	128	308	16.91	3.07
August.....	40.2	3.9	550	2.3	127	303	16.59	2.94
September.....	40.7	4.0	555	1.9	127	300	16.55	2.98
October.....	40.2	3.9	554	2.0	125	300	17.29	3.05
November.....	40.4	3.8	563	1.9	133	298	16.73	3.16
December.....	40.2	3.8	547	2.0	120	317	17.33	3.07
1963								
January.....	40.4	3.7	552	2.0	152	313	18.47	3.25
February.....	40.3	3.9	555	1.8	121	294	18.23	3.21
March.....	40.5	3.8	553	1.8	107	285	18.78	3.22
April.....	40.1	4.1	560	1.8	138	290	19.04	3.35
May.....	40.5	3.8	551	1.8	95	286	18.74	3.42
June.....	40.5	3.9	541	1.7	92	287	17.68	3.29
July.....	40.4	4.0	541	1.9	131	283	18.28	3.33
August.....	40.3	3.7	540	2.0	130	285	18.06	3.31
September.....	40.7	3.9	552	1.8	108	282	18.24	3.42
October.....	40.6	3.9	570	1.7	135	281	18.62	3.44
November.....	40.5	3.6	530	1.8	134	280	18.11	3.27
December.....	40.5	3.9	532	1.8	97	308	17.97	3.61
1964								
January.....	40.1	3.7	536	1.8	123	289	19.74	3.62
February.....	40.6	4.0	535	1.7	123	264	19.50	3.41
March.....	40.7	4.0	520	1.7	91	273	19.26	3.46
April.....	40.7	4.0	522	1.6	122	260	20.46	3.61
May.....	40.7	3.8	533	1.7	104	260	19.94	\square 3.93
June.....	40.6	r4.1	516	\square r1.6	117	259	r20.02	r3.92
July.....	r40.5	p3.9	523	pl.8	129	261	\square r21.35	3.84
August.....	\square p40.7	(NA)	499	(NA)	\square 87	\square 240	p19.40	p3.72
September.....						⁶ 249		
October.....								
November.....								
December.....								

¹ \square = December 1960. ² \square = October 1960.

³ 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.

⁴ Data exclude Puerto Rico which is included in figures published by source agency.

⁵ \square = November 1960.

⁶ Week ended September 5.

Table 2.—BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1961 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						
	9. Construction contracts, commercial and industrial buildings	10. Contracts and orders, plant and equipment	11. Newly approved capital appropriations, 602 manufacturing corporations ¹	7. New private nonfarm dwelling units started ²	29. New private housing units authorized by local building permits ²	12. Net change in business population, operating businesses	13. New business incorporations.
	(Mil. sq. ft. floor space)	(Bil. dol.)	(Bil. dol.) Revised ³	(Ann. rate, thous.) Revised ³	(1957-59=100) Revised ³	(Thous.)	(Number)
1961							
January.....	36.21	3.51	...	1,216	89.5	...	(L)13,607
February.....	36.49	3.39	2.26	1,199	88.2	(L)+6	14,570
March.....	37.49	(L)3.20	...	1,305	91.3	...	14,658
April.....	35.62	3.28	...	1,133	91.4	...	15,327
May.....	(L)35.16	3.27	2.46	1,215	93.2	+10	15,298
June.....	36.73	3.39	...	1,340	98.7	...	15,431
July.....	36.57	3.57	...	1,305	98.9	...	15,492
August.....	39.32	3.66	2.85	1,252	101.9	+9	15,277
September.....	38.73	3.40	...	1,453	100.2	...	15,402
October.....	33.88	3.48	...	1,381	104.2	...	16,035
November.....	41.61	3.66	2.62	1,319	101.8	+11	16,149
December.....	41.69	3.50	...	1,324	99.0	...	15,881
1962							
January.....	38.70	3.71	...	1,392	103.8	...	15,599
February.....	42.75	3.98	2.86	1,253	109.1	+11	15,758
March.....	45.90	3.71	...	1,460	104.0	...	15,670
April.....	42.72	3.96	...	1,489	111.9	...	15,372
May.....	44.64	3.76	2.56	1,501	103.8	+12	15,245
June.....	41.16	3.66	...	1,366	106.1	...	14,947
July.....	40.56	3.72	...	1,423	108.7	...	15,171
August.....	42.69	3.61	3.04	1,459	107.1	+11	15,056
September.....	40.96	3.56	...	1,328	109.1	...	15,249
October.....	41.08	3.66	...	1,491	107.2	...	14,892
November.....	42.20	3.82	3.25	1,564	113.0	+11	14,951
December.....	41.89	3.99	...	1,541	112.0	...	14,985
1963							
January.....	44.61	3.84	...	1,287	111.8	...	14,924
February.....	45.11	3.82	2.68	1,438	108.2	+11	15,390
March.....	39.42	3.75	...	1,551	112.9	...	15,563
April.....	40.23	3.98	...	1,656	113.6	...	15,305
May.....	47.00	4.28	3.35	1,651	120.0	+11	15,682
June.....	51.39	3.96	...	1,558	119.3	...	15,536
July.....	45.78	3.94	...	1,584	116.5	...	15,431
August.....	44.93	3.91	4.07	1,454	113.5	+13	16,093
September.....	43.88	4.08	...	1,712	121.0	...	15,689
October.....	50.81	4.17	...	(H) 1,824	123.6	...	(H)16,275
November.....	43.14	4.32	3.93	1,544	119.9	+12	15,759
December.....	44.15	(H)4.68	...	1,524	123.7	...	15,867
1964							
January.....	51.64	4.37	...	1,688	117.6	...	16,193
February.....	52.47	4.12	4.01	1,613	(H) 123.9	+16	16,086
March.....	48.17	4.10	...	1,638	121.5	...	16,064
April.....	(H)54.84	4.37	...	1,501	112.9	...	16,242
May.....	46.22	4.63	(H)p4.87	1,507	112.1	(H)+17	15,932
June.....	48.22	r4.63	...	1,585	115.2	...	15,797
July.....	53.55	p4.56	...	1,466	109.9	...	15,852
August.....	(NA)	(NA)	...	p1,380	p113.1	...	(NA)
September.....							
October.....							
November.....							
December.....							

¹ (L) = 3rd quarter 1960.

² (L) = December 1960.

³ See "New Features and Changes for This Issue," page ii.

Table 2.—BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1961 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 ¹	15. Business failures with liabilities of \$100,000 and over ²	16. Corporate profits after taxes	17. Ratio, price to unit labor cost index, manufacturing	18. Profits (before taxes) per dol. sales, all mfg. corporations	22. Ratio, profits to income originating, corporate, all indus.	19. Stock prices, 500 common stocks* ²	21. Change in business inventories after valuation adjustment, all indus.
	(Mil. dol.)	(Number per week)	(Ann. rate, bil. dol.)	(1957-59=100) Revised ³	(Cents)	(Percent)	(1941-43=10)	(Ann. rate, bil. dol.)
1961								
January.....	77.79	38	...	99.3	...	...	59.72	...
February.....	83.73	41	(L) 19.5	(L) 98.8	(L) 6.6	(L) 7.9	62.17	(L) -3.9
March.....	116.17	39	...	98.9	...	...	64.12	...
April.....	76.88	39	...	100.4	...	...	65.83	...
May.....	82.96	42	21.8	100.3	7.6	8.6	66.50	+2.1
June.....	86.69	40	...	101.0	...	...	65.62	...
July.....	80.15	43	...	101.4	...	...	65.44	...
August.....	94.47	36	22.0	102.0	7.9	8.5	67.79	+3.7
September.....	126.12	39	...	101.6	...	...	67.26	...
October.....	72.28	42	...	101.5	...	...	68.00	...
November.....	119.93	39	24.5	101.7	8.6	9.3	71.08	+5.6
December.....	71.81	38	...	102.3	...	...	71.74	...
1962								
January.....	101.53	37	...	101.3	...	...	69.07	...
February.....	86.03	(H) 32	24.5	101.7	8.2	9.2	70.22	(H) +6.9
March.....	77.40	36	...	101.8	...	...	70.29	...
April.....	107.15	38	...	100.9	...	...	68.05	...
May.....	89.80	38	24.9	101.1	8.1	9.1	62.99	+6.1
June.....	93.15	41	...	103.4	...	...	55.63	...
July.....	107.98	38	...	100.7	...	...	56.97	...
August.....	121.85	45	25.0	100.7	8.1	9.1	58.52	+5.1
September.....	106.02	40	...	101.9	...	...	58.00	...
October.....	129.87	46	...	100.7	...	...	56.17	...
November.....	96.62	42	25.7	101.1	8.3	9.1	60.04	+5.4
December.....	99.61	37	...	100.5	...	...	62.64	...
1963								
January.....	146.46	49	...	100.6	...	...	65.06	...
February.....	93.05	43	25.5	100.8	7.9	9.1	65.92	+3.6
March.....	94.12	42	...	101.3	...	...	65.67	...
April.....	88.15	40	...	101.3	...	...	68.76	...
May.....	115.05	51	26.6	101.8	8.5	9.4	70.14	+3.6
June.....	91.07	38	...	102.7	...	...	70.11	...
July.....	144.50	39	...	102.3	...	...	69.07	...
August.....	(H) 52.86	42	26.7	101.5	8.5	9.3	70.98	+4.2
September.....	94.52	43	...	101.9	...	...	72.85	...
October.....	99.92	42	...	102.0	...	...	73.03	...
November.....	255.72	38	28.3	101.9	8.8	9.8	72.62	+6.4
December.....	87.17	39	...	102.4	...	...	74.17	...
1964								
January.....	87.70	41	...	103.2	...	...	76.45	...
February.....	121.87	42	31.2	103.3	(H) 9.1	10.4	77.39	+2.5
March.....	107.25	37	...	102.7	...	...	78.80	...
April.....	98.50	46	...	(H) 103.8	...	...	79.94	...
May.....	90.44	39	(H) r31.9	103.7	8.9	(H) r10.5	80.72	+3.7
June.....	153.07	38	...	102.9	...	...	80.24	...
July.....	151.92	43	...	103.2	...	...	(H) 83.22	...
August.....	76.20	40	...	p102.8	...	...	82.00	...
September.....							*83.34	
October.....								
November.....								
December.....								

¹ **(L)** = June 1960. ² **(L)** = October 1960.

³ See "New Features and Changes for This Issue," page ii.

⁴ Average for September 15, 16, and 17.

Table 2.--BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1961 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, manufacturing and trade inventories, total ¹	20. Change in book value, mfrs.' inventories of materials and supplies ¹	37. Purchased materials, percent reporting higher inventories	26. Production mats., percent reporting commitments 60 days or longer* ¹	32. Vendor performance, percent reporting slower deliveries* ²	25. Change in unfilled orders, durable goods industries ³	23. Industrial materials prices* ¹
	(Ann. rate, bil. dol.) Revised ⁴	(Ann. rate, bil. dol.)	(Percent reporting)	(Percent reporting)	(Percent reporting)	(Bil. dol.)	(1957-59=100)
1961							
January.....	-4.3	-1.6	41	51	38	-0.39	97.3
February.....	-2.2	-1.9	(L) 35	49	40	-0.07	99.3
March.....	-7.2	-2.0	39	50	40	-0.42	103.1
April.....	+1.0	-1.5	42	57	47	+0.36	104.1
May.....	+0.8	-1.3	46	54	48	+0.07	104.4
June.....	-0.8	-1.6	43	56	48	+0.11	101.0
July.....	+2.0	+0.8	46	56	49	+0.37	101.7
August.....	+3.1	+2.9	54	55	52	+0.42	102.9
September.....	+4.0	+2.2	57	57	55	+0.01	102.9
October.....	+1.9	+0.3	56	59	55	+0.25	102.3
November.....	+7.0	+1.3	52	59	51	+0.41	98.9
December.....	+6.2	(H)+6.6	55	54	53	+0.65	101.0
1962							
January.....	+6.0	+1.9	58	57	56	+0.63	102.9
February.....	+5.7	+3.0	57	(H) 61	56	+0.62	100.6
March.....	+6.0	+2.7	57	56	55	-0.67	100.4
April.....	+2.6	+0.8	55	55	48	-0.34	98.3
May.....	+7.1	+1.0	53	49	46	-0.46	97.8
June.....	+5.6	+0.2	48	52	42	-0.37	95.4
July.....	+3.9	-2.4	45	58	44	-0.25	94.2
August.....	+2.0	-0.3	46	52	44	-0.60	94.5
September.....	+5.6	+1.8	44	52	48	-0.36	94.0
October.....	+5.5	-0.2	45	55	48	+0.21	94.9
November.....	+1.2	+0.5	49	52	48	-0.40	96.4
December.....	+5.1	-1.7	48	51	48	+0.91	95.8
1963							
January.....	+3.1	+0.6	46	50	50	+0.96	95.5
February.....	+2.5	+0.4	48	55	52	+0.68	95.1
March.....	+3.0	-0.2	47	54	54	+0.94	94.4
April.....	+4.6	+0.9	50	53	60	+0.85	94.5
May.....	+2.7	-0.3	55	52	58	+0.33	95.2
June.....	+5.1	+0.7	57	57	54	-0.58	93.9
July.....	+6.0	-0.5	56	54	42	-0.54	94.2
August.....	+1.8	+1.7	50	55	48	-0.05	94.2
September.....	+5.6	-0.4	49	56	52	+0.38	94.1
October.....	+7.1	+1.7	46	53	48	+0.10	96.3
November.....	(H)+9.6	-0.2	42	54	48	-0.09	97.3
December.....	+7.2	-0.7	42	55	46	-0.40	97.7
1964							
January.....	+3.5	-1.9	40	53	55	+0.40	98.5
February.....	0.0	-0.5	50	54	54	+0.57	98.5
March.....	+3.7	0.0	54	56	60	+0.16	98.9
April.....	+7.8	-1.0	55	59	60	+1.04	102.4
May.....	+1.6	-0.1	51	58	63	+0.38	100.9
June.....	+1.4	r-0.7	56	59	55	r+0.81	101.4
July.....	p-0.4	p-2.3	(H) 58	58	59	(H)r+1.42	102.5
August.....	(NA)	(NA)	57	58	(H) 65	p+1.05	(H) 105.7
September.....							⁵ 108.2
October.....							
November.....							
December.....							

¹ (L) = December 1960. ² (L) = March 1960. ³ (L) = January 1960.

⁴ See "New Features and Changes for This Issue," page ii.

⁵ Average for September 15, 16, and 17.

Table 2.—BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1961 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. Employees in nonagricultural establishments	42. Total nonagricultural employment, labor force survey ^{1 2}	43. Unemployment rate, total ¹	40. Unemployment rate, married males ¹	45. Avg. weekly insured unemployment rate, State programs ³	46. Help-wanted advertising in newspapers	47. Industrial production	50. Gross national product in 1954 dollars
	(Thous.)	(Thous.)	(Percent)	(Percent)	(Percent)	(1957-59=100)	(1957-59=100) Revised ⁴	(Ann. rate, bil. dol.)
1961								
January.....	53,725	61,034	6.7	4.7	6.2	88	103.6	...
February.....	(L) 53,541	60,897	6.9	4.8	6.3	(L) 88	(L) 103.6	(L) 434.2
March.....	53,615	61,229	6.9	4.7	(L) 6.3	90	104.0	...
April.....	53,713	61,154	7.0	4.9	5.9	89	106.7	...
May.....	53,911	61,134	(L) 7.1	(L) 5.0	5.6	91	108.7	444.4
June.....	54,165	61,622	6.9	4.8	5.3	93	110.5	...
July.....	54,294	61,259	6.9	4.8	5.3	94	111.5	...
August.....	54,444	61,274	6.7	4.7	5.2	98	112.9	450.6
September.....	54,480	61,299	6.7	4.6	5.1	98	111.6	...
October.....	54,593	61,463	6.6	4.2	5.0	107	113.4	...
November.....	54,825	61,896	6.2	4.2	5.1	110	114.9	462.5
December.....	54,927	61,747	6.0	3.9	4.8	110	115.8	...
1962								
January.....	54,946	61,899	5.8	3.8	4.7	114	115.0	...
February.....	55,223	62,179	5.5	3.3	4.5	115	116.4	469.1
March.....	55,368	62,253	5.5	3.6	4.4	115	117.5	...
April.....	55,703	62,247	5.6	3.8	3.9	112	118.0	...
May.....	55,822	62,663	5.5	3.5	3.8	114	118.2	475.1
June.....	55,908	62,752	5.5	3.7	4.0	109	118.1	...
July.....	56,010	62,620	5.4	3.5	4.2	110	119.0	...
August.....	56,019	63,021	5.7	3.6	4.4	108	119.0	478.3
September.....	56,125	63,039	5.6	3.5	4.4	107	119.7	...
October.....	56,195	63,007	5.4	3.5	4.5	107	119.1	...
November.....	56,205	62,870	5.8	3.6	4.6	107	119.8	483.0
December.....	56,211	63,240	5.5	3.5	4.7	e107	119.4	...
1963								
January.....	56,333	63,090	5.7	3.7	4.8	e107	119.8	...
February.....	56,458	63,227	5.9	3.7	4.6	e109	120.6	485.4
March.....	56,706	63,478	5.7	3.5	4.4	e108	121.9	...
April.....	56,873	63,770	5.7	3.3	4.2	109	122.7	...
May.....	57,060	63,690	5.9	3.3	4.2	105	124.4	487.9
June.....	57,194	63,843	5.7	3.2	4.1	104	125.6	...
July.....	57,340	64,092	5.6	3.2	4.1	109	125.6	...
August.....	57,344	64,069	5.5	3.1	4.1	105	125.4	494.8
September.....	57,453	64,167	5.5	3.0	4.0	107	125.7	...
October.....	57,646	64,128	5.6	2.9	4.0	111	126.1	...
November.....	57,580	64,319	5.9	3.4	4.1	112	126.1	502.0
December.....	57,748	64,315	5.5	3.3	4.3	118	127.0	...
1964								
January.....	57,850	64,631	5.6	3.2	4.3	116	127.7	...
February.....	58,183	65,035	5.4	3.0	4.0	117	128.2	508.0
March.....	58,327	65,207	5.4	2.9	3.8	118	129.0	...
April.....	58,502	65,811	5.4	2.9	3.8	120	130.5	...
May.....	58,590	(H) 65,889	5.1	2.6	3.6	118	131.3	(H) 513.5
June.....	r58,732	65,549	5.3	2.8	3.6	121	131.6	...
July.....	r58,929	65,706	(H) 4.9	2.7	3.6	(H) 124	132.7	...
August.....	(H) p58,944	65,678	5.1	(H) 2.6	(H) 3.5 s3.4	p123	(H) p133.5	...
September.....								
October.....								
November.....								
December.....								

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

²(L) = December 1960.

³Data exclude Puerto Rico which is included in figures published by source agency.

⁴See "New Features and Changes for This Issue," page ii.

⁵Week ended August 29.

Table 2.--BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1961 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 ¹	52. Personal income ¹	53. Labor income in mining, manufacturing, and construction ¹	54. Sales of retail stores	55. 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)
1961							
January.....	...	...	1,786.2	405.0	104.2	17,942	101.0
February.....	(L)501.4	505.3	1,755.0	406.2	104.0	17,965	101.1
March.....	...	...	1,785.1	410.3	104.5	17,971	101.1
April.....	...	...	1,781.8	411.6	105.4	(L)17,811	100.9
May.....	513.9	511.8	1,829.3	413.6	106.4	18,003	100.9
June.....	...	...	1,824.0	416.1	107.7	18,098	100.7
July.....	...	...	1,839.9	420.0	108.0	18,234	100.7
August.....	522.4	518.7	1,832.7	420.0	108.8	18,373	100.8
September.....	...	...	1,848.2	421.8	108.8	18,371	100.8
October.....	...	...	1,904.6	425.4	110.6	18,494	100.7
November.....	536.9	531.4	1,903.8	429.0	111.7	18,775	100.8
December.....	...	...	1,916.9	431.5	112.1	18,879	100.9
1962							
January.....	...	...	2,009.7	431.6	112.0	18,990	100.8
February.....	545.5	538.7	1,916.6	434.9	113.0	19,139	100.7
March.....	...	...	1,985.3	437.6	114.2	19,320	100.7
April.....	...	...	2,044.4	440.2	115.9	19,389	100.7
May.....	553.4	547.3	2,015.0	441.0	115.4	19,585	100.9
June.....	...	...	2,000.2	441.7	115.4	19,311	100.8
July.....	...	...	2,054.8	443.3	116.3	19,658	100.9
August.....	559.0	554.0	2,017.0	444.1	116.1	19,671	100.8
September.....	...	...	1,988.5	446.2	117.1	19,844	100.9
October.....	...	...	2,080.9	447.7	116.8	19,837	100.9
November.....	566.6	561.2	2,090.5	449.5	116.6	20,112	100.8
December.....	...	...	2,066.9	452.0	117.0	20,253	100.7
1963							
January.....	...	...	2,148.0	454.9	117.4	20,387	100.5
February.....	571.8	568.2	2,085.5	454.1	117.4	20,374	100.5
March.....	...	...	2,095.6	456.5	118.3	20,350	100.5
April.....	...	...	2,198.1	457.6	118.8	20,276	(L)100.4
May.....	577.4	573.7	2,150.7	460.2	120.1	20,200	100.5
June.....	...	...	2,105.4	462.7	120.8	20,486	100.8
July.....	...	...	2,276.8	464.0	120.7	20,719	100.9
August.....	587.2	583.0	2,189.7	466.1	120.7	20,666	100.9
September.....	...	...	2,275.0	468.9	122.1	20,426	100.8
October.....	...	...	2,316.3	472.7	122.5	20,716	100.9
November.....	599.0	592.6	2,246.9	473.8	122.2	20,558	100.9
December.....	...	...	2,320.5	477.1	123.1	21,019	101.0
1964							
January.....	...	...	2,355.1	479.4	122.7	21,000	101.1
February.....	608.8	606.4	2,239.9	480.5	124.2	21,533	101.1
March.....	...	...	2,322.5	482.9	124.6	21,223	101.0
April.....	...	...	(H)2,451.3	486.6	125.9	21,392	101.1
May.....	(H)618.6	(H)614.9	2,313.0	487.8	125.8	21,777	101.1
June.....	...	...	2,328.8	489.3	126.4	r21,773	101.0
July.....	...	...	2,430.9	r491.4	r126.9	r21,964	101.2
August.....	...	...	p2,372.9	(H)p493.9	(H)p127.7	(H)p22,115	(H)p101.2
September.....	...	...	...	...	...	...	101.2
October.....	...	...	...	...	...	...	...
November.....	...	...	...	...	...	...	...
December.....	...	...	...	...	...	...	...

¹ (L) = December 1960.

² Week ended September 15.

Table 2.—BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1961 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, new plant and equipment, total	62. Labor cost per unit of output, manufacturing	68. Labor cost per dollar of real corporate GNP	64. Book value of mfrs.' inventories	65. Book value of mfrs.' inventories of finished goods	66. Consumer installment debt	67. Bank rates on short-term business loans, 19 cities*
	(Ann. rate, bil. dol.)	(1957-59=100) Revised ¹	(1957-59=100)	(Bil. dol.)	(Bil. dol.)	(Mil. dol.)	(Percent)
1961							
January.....	...	101.8	...	53.7	18.4	42,109	...
February.....	33.85	102.4	104.9	53.7	18.4	42,035	4.97
March.....	...	102.3	...	53.5	18.3	42,041	...
April.....	...	100.5	...	53.4	18.4	(L)41,867	...
May.....	(L)33.50	100.3	103.4	53.4	18.3	41,870	4.97
June.....	...	99.5	...	(L)53.4	18.4	41,895	...
July.....	...	99.1	...	53.6	(L)18.3	41,903	...
August.....	34.70	98.5	103.8	53.9	18.5	41,987	4.99
September.....	...	99.1	...	53.9	18.5	42,052	...
October.....	...	98.9	...	54.3	18.6	42,221	...
November.....	35.40	99.0	(L)102.3	54.7	18.7	42,442	(L)4.96
December.....	...	(L)98.4	...	55.1	18.8	42,774	...
1962							
January.....	...	99.4	...	55.4	19.0	42,960	...
February.....	35.70	99.0	102.9	55.7	19.1	43,220	4.98
March.....	...	98.8	...	56.0	19.1	43,532	...
April.....	...	99.8	...	56.1	19.2	44,017	...
May.....	36.95	99.8	103.4	56.4	19.3	44,437	5.01
June.....	...	(H)100.4	...	56.3	19.4	44,826	...
July.....	...	100.1	...	56.9	19.5	45,200	...
August.....	38.35	100.2	103.5	57.0	19.5	45,588	4.99
September.....	...	99.6	...	57.3	19.7	45,838	...
October.....	...	100.1	...	57.4	19.7	46,206	...
November.....	37.95	99.5	103.2	57.6	19.8	46,689	(H)5.02
December.....	...	100.1	...	57.8	19.8	47,174	...
1963							
January.....	...	99.7	...	57.9	19.9	47,659	...
February.....	36.95	99.6	104.2	58.0	20.0	48,154	5.00
March.....	...	99.0	...	58.1	20.0	48,631	...
April.....	...	98.9	...	58.3	20.0	49,152	...
May.....	38.05	98.8	104.8	58.5	20.1	49,593	5.01
June.....	...	98.3	...	58.7	20.3	50,079	...
July.....	...	98.8	...	58.9	20.3	50,588	...
August.....	40.00	99.5	104.7	58.9	20.4	51,069	5.01
September.....	...	99.3	...	59.1	20.6	51,410	...
October.....	...	98.9	...	59.3	20.6	51,941	...
November.....	41.20	99.1	104.6	59.8	21.0	52,324	5.00
December.....	...	98.6	...	60.1	21.2	52,784	...
1964							
January.....	...	97.9	...	60.0	21.2	53,212	...
February.....	42.55	97.8	104.2	60.1	21.4	53,791	4.99
March.....	...	98.3	...	60.3	21.4	54,315	...
April.....	...	97.5	...	60.5	21.6	54,727	...
May.....	(H)r43.50	97.5	(H)104.9	(H)60.5	21.6	55,220	4.99
June.....	...	98.1	...	60.4	r21.5	55,590	...
July.....	...	98.0	...	p60.4	(H)p21.6	(H)56,073	...
August.....	ra44.55	p98.3	...	(NA)	(NA)	(NA)	...
September.....	...	...	...	...	...	...	...
October.....	...	...	...	...	...	...	...
November.....	ra46.15	...	...	...	...	...	...
December.....	...	...	...	...	...	...	...

¹ See "New Features and Changes for This Issue," page ii.

Table 2.—BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1961 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							
	82. Federal cash payments to public	83. Federal cash receipts from public	84. Federal cash surplus (+), or deficit (-)	95. Surplus (+), or deficit (-), Fed. income and product account	90. Defense Department obligations, procurement	91. Defense Department obligations, total	92. Military prime contract awards to U.S. business firms	99. New orders, defense products
	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Bil. dol.)
1961								
January.....	95.5	94.2	-1.3	...	1,277	3,641	1,944	1.45
February.....	95.4	94.1	-1.3	-6.0	1,555	4,065	2,153	2.00
March.....	107.4	92.6	-14.8	...	1,230	3,537	1,757	1.48
April.....	100.6	97.0	-3.6	...	1,047	3,381	1,910	1.85
May.....	110.9	99.8	-11.1	-4.7	1,220	3,727	1,530	1.82
June.....	106.5	97.7	-8.8	...	1,390	3,893	1,993	1.73
July.....	97.7	91.2	-6.5	...	1,181	3,784	2,087	2.11
August.....	112.7	101.0	-11.7	-3.4	2,278	5,344	2,232	1.96
September.....	104.1	99.2	-4.9	...	1,933	4,874	2,158	1.92
October.....	109.8	99.5	-10.3	...	1,354	4,296	2,651	1.97
November.....	106.5	101.3	-5.2	-2.6	1,286	4,121	2,379	1.86
December.....	104.3	101.7	-2.6	...	1,773	4,653	2,281	1.82
1962								
January.....	115.1	101.7	-13.4	...	1,718	4,434	3,073	1.99
February.....	108.8	101.3	-7.5	-4.4	1,319	4,181	2,135	2.05
March.....	107.4	98.1	-9.3	...	1,435	4,230	2,225	2.11
April.....	110.1	107.8	-2.3	...	1,885	4,486	2,062	2.24
May.....	106.8	109.9	+3.1	-4.6	1,142	4,059	1,887	2.24
June.....	108.9	104.4	-4.5	...	1,246	4,024	1,930	2.08
July.....	116.3	111.2	-5.1	...	1,731	4,864	2,017	2.07
August.....	111.6	110.1	-1.5	-2.9	1,240	4,300	2,149	1.94
September.....	109.9	107.6	-2.3	...	1,044	3,928	2,111	1.88
October.....	118.6	107.8	-10.8	...	1,684	4,553	2,983	2.09
November.....	114.7	109.0	-5.7	-4.5	1,818	4,952	2,734	1.70
December.....	115.2	109.0	-6.2	...	1,158	3,974	1,984	2.53
1963								
January.....	115.3	108.6	-6.7	...	1,565	4,642	2,343	2.89
February.....	109.2	110.6	+1.4	-4.8	1,325	4,253	2,571	2.09
March.....	114.5	108.9	-5.6	...	1,258	3,905	2,168	2.42
April.....	117.2	110.2	-7.0	...	1,304	4,108	1,973	1.97
May.....	115.8	112.2	-3.6	-1.0	1,530	4,601	2,250	2.40
June.....	110.2	111.9	+1.7	...	1,298	4,378	2,125	1.90
July.....	124.7	114.9	-9.8	...	1,255	4,834	2,506	2.40
August.....	118.1	114.7	-3.4	-0.7	1,512	4,497	2,704	2.36
September.....	121.9	113.1	-8.8	...	1,221	4,215	2,688	2.47
October.....	122.3	115.1	-7.2	...	2,038	5,176	2,224	1.92
November.....	114.2	113.3	-0.9	+0.6	1,125	4,138	1,566	1.97
December.....	122.7	118.5	-4.2	...	1,182	4,090	2,041	1.48
1964								
January.....	128.6	114.8	-13.8	...	1,071	4,370	2,337	2.67
February.....	117.2	123.4	+6.2	-2.4	2,067	5,484	2,854	2.40
March.....	120.3	115.3	-5.0	...	1,030	3,731	1,603	2.18
April.....	123.2	126.6	+3.4	...	1,516	4,592	2,529	2.37
May.....	110.3	105.1	-5.2	-9.2	2,192	4,941	2,465	2.48
June.....	120.0	114.4	-5.6	...	p1,015	p4,211	1,663	r2.34
July.....	126.9	116.4	-10.5	...	1,691	5,274	(NA)	r3.30
August.....	117.1	110.0	-7.1	...	(NA)	(NA)	(NA)	p2.07
September.....								
October.....								
November.....								
December.....								

Table 2.--BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1961 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--Continued					
	93. Free reserves*	85. Change in total U.S. money supply	98. Change in money supply and time deposits	110. Total private borrowing	111. Corporate gross savings	112. Change, business loans
	(Mil. dol.)	(Percent)	(Percent)	(Annual rate, million dollars)	(Annual rate, million dollars)	(Annual rate, billion dollars)
1961						
January.....	+696	+0.07	+0.37	...	...	+0.54
February.....	+517	+0.28	+0.79	29,352	26,580	-0.77
March.....	+486	+0.28	+0.46	...	...	+0.92
April.....	+551	+0.21	+0.46	...	...	-0.37
May.....	+453	+0.28	+0.64	33,864	32,072	-0.31
June.....	+549	+0.21	+0.55	...	...	-1.50
July.....	+530	0.00	+0.45	...	...	+2.18
August.....	+537	+0.21	+0.50	41,844	32,308	+1.00
September.....	+547	+0.42	+0.58	...	...	+0.56
October.....	+442	+0.28	+0.53	...	...	+0.01
November.....	+517	+0.55	+0.71	42,632	37,304	-0.01
December.....	+419	+0.28	+0.44	...	...	+1.72
1962						
January.....	+555	0.00	+0.57	...	...	+2.90
February.....	+434	+0.14	+0.91	44,848	36,224	+1.51
March.....	+382	+0.21	+0.91	...	...	+2.23
April.....	+441	+0.27	+0.64	...	...	+2.09
May.....	+440	-0.20	+0.13	51,340	36,668	+2.09
June.....	+391	+0.07	+0.51	...	...	+2.77
July.....	+440	-0.07	+0.38	...	...	+2.66
August.....	+439	-0.07	+0.34	46,344	35,108	+3.85
September.....	+375	-0.14	+0.38	...	...	+2.82
October.....	+419	+0.34	+0.71	...	...	+2.82
November.....	+473	+0.48	+0.87	51,416	38,628	+2.28
December.....	+268	+0.41	+0.95	...	...	+0.95
1963						
January.....	+375	+0.27	+0.69	...	...	+2.26
February.....	+301	+0.27	+0.69	46,188	37,376	+1.01
March.....	+269	+0.34	+0.76	...	...	+1.01
April.....	+313	+0.20	+0.48	...	...	+1.57
May.....	+247	+0.27	+0.48	54,824	39,700	+3.18
June.....	+138	+0.40	+0.63	...	...	+1.74
July.....	+161	+0.53	+0.71	...	...	+1.97
August.....	+133	+0.13	+0.66	55,208	41,920	+2.03
September.....	+91	+0.26	+0.54	...	...	+2.94
October.....	+94	+0.46	+0.73	...	...	+4.67
November.....	+33	+0.79	+1.15	61,556	42,328	+6.10
December.....	+209	-0.20	+0.34	...	...	+5.34
1964						
January.....	+171	+0.39	+0.83	...	...	+2.26
February.....	+91	0.00	+0.45	56,352	40,920	+3.05
March.....	+98	+0.26	+0.37	...	...	+0.05
April.....	+162	r+0.19	r+0.37	...	...	+1.81
May.....	+78	r0.00	r+0.37	(NA)	(NA)	+5.60
June.....	+118	+0.71	+0.81	...	...	+3.88
July.....	r+132	+0.71	+0.73	...	...	+3.84
August.....	p+77	p+0.32	p+0.62	...	...	+4.75
September.....						
October.....						
November.....						
December.....						

Table 2.—BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1961 TO PRESENT—Continued

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Year and month	Other U.S. series with business cycle significance--Continued					
	113. Change, consumer installment debt	114. Treasury bill rate*	115. Treasury bond yields*	116. Corporate bond yields*	117. Municipal bond yields*	118. Mortgage yields*
	(Annual rate, billion dollars)	(Percent)	(Percent)	(Percent)	(Percent)	(Percent)
1961						
January.....	-0.36	2.30	3.89	4.63	3.40	6.00
February.....	-0.89	2.41	3.81	4.43	3.31	5.89
March.....	+0.07	2.42	3.78	4.36	3.45	5.82
April.....	-2.09	2.33	3.80	4.56	3.50	5.77
May.....	+0.04	2.29	3.73	4.61	3.43	5.74
June.....	+0.30	2.36	3.88	4.73	3.52	5.72
July.....	+0.10	2.27	3.90	4.74	3.52	5.68
August.....	+1.01	2.40	4.00	4.75	3.52	5.68
September.....	+0.78	2.30	4.02	4.69	3.53	5.69
October.....	+2.03	2.35	3.98	4.45	3.42	5.70
November.....	+2.65	2.46	3.98	4.48	3.41	5.70
December.....	+3.98	2.62	4.06	4.56	3.47	5.69
1962						
January.....	+2.23	2.75	4.08	4.55	3.34	5.69
February.....	+3.12	2.75	4.09	4.54	3.21	5.68
March.....	+3.74	2.72	4.01	4.42	3.14	5.65
April.....	+5.82	2.74	3.89	4.31	3.06	5.64
May.....	+5.04	2.69	3.88	4.26	3.11	5.60
June.....	+4.67	2.72	3.90	4.30	3.26	5.59
July.....	+4.49	2.94	4.02	4.41	3.28	5.58
August.....	+4.66	2.84	3.98	4.39	3.23	5.57
September.....	+3.00	2.79	3.94	4.28	3.11	5.56
October.....	+4.42	2.75	3.89	4.27	3.02	5.55
November.....	+5.80	2.80	3.87	4.23	3.04	5.54
December.....	+5.82	2.86	3.87	4.28	3.07	5.53
1963						
January.....	+5.82	2.91	3.89	4.22	3.10	5.52
February.....	+5.94	2.92	3.92	4.25	3.15	5.48
March.....	+5.72	2.90	3.93	4.26	3.05	5.47
April.....	+6.25	2.91	3.97	4.35	3.10	5.46
May.....	+5.29	2.92	3.97	4.35	3.11	5.45
June.....	+5.83	3.00	4.00	4.32	3.21	5.45
July.....	+6.11	3.14	4.01	4.34	3.22	5.45
August.....	+5.77	3.32	3.99	4.33	3.13	5.45
September.....	+4.09	3.38	4.04	4.40	3.20	5.45
October.....	+6.37	3.45	4.07	4.36	3.20	5.45
November.....	+4.60	3.52	4.11	4.42	3.30	5.45
December.....	+5.52	3.52	4.14	4.49	3.27	5.45
1964						
January.....	+5.14	3.53	4.15	4.49	3.22	5.45
February.....	+6.95	3.53	4.14	4.38	3.14	5.45
March.....	+6.29	3.55	4.18	4.45	3.28	5.45
April.....	+4.94	3.48	4.20	4.49	3.28	5.45
May.....	+5.92	3.48	4.16	4.48	3.20	5.45
June.....	+4.44	3.48	4.13	4.49	3.20	5.45
July.....	+5.80	3.48	4.13	4.43	3.18	5.46
August.....	(NA)	3.51	4.14	4.43	3.19	5.46
September.....						
October.....						
November.....						
December.....						

Table 2.—BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1961 TO PRESENT—Continued

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Year and month	Other U.S. series with business cycle significance—Continued							
	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	81. Consumer prices	94. Construction contracts, total value	96. Manufacturers' unfilled orders, durable goods industries	97. Backlog of capital appropriations, manufacturing
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(1957-59=100)	(1957-59=100)	(Bil. dol.)	(Bil. dol.)
1961								
January.....	1,622.7	1,161.4	+461.3	...	103.9	108	43.01	...
February.....	1,711.6	1,149.8	+561.8	-486	104.0	95	42.94	...
March.....	1,750.7	1,162.9	+587.8	...	104.0	104	42.52	6.68
April.....	1,661.5	1,152.0	+509.5	...	103.9	103	42.88	...
May.....	1,585.1	1,152.9	+432.2	¹ +47	103.9	102	42.95	...
June.....	1,581.9	1,173.8	+408.1	...	104.1	111	43.06	6.55
July.....	1,688.5	1,379.3	+309.2	...	104.4	110	43.43	...
August.....	1,688.9	1,253.6	+435.3	-700	104.4	116	43.85	...
September.....	1,678.4	1,262.0	+416.4	...	104.5	103	43.86	6.58
October.....	1,779.8	1,300.1	+479.7	...	104.5	114	44.11	...
November.....	1,733.1	1,308.5	+424.6	-1,231	104.5	116	44.52	...
December.....	1,724.8	1,314.5	+410.3	...	104.5	119	45.17	6.53
1962								
January.....	1,668.3	1,326.5	+341.8	...	104.7	115	45.80	...
February.....	1,809.3	1,319.8	+489.5	-748	104.9	119	46.42	...
March.....	1,672.0	1,341.7	+330.3	...	105.1	131	45.75	6.82
April.....	1,795.4	1,365.0	+430.4	...	105.3	121	45.41	...
May.....	1,761.7	1,404.1	+357.6	-440	105.4	117	44.95	...
June.....	1,835.6	1,350.7	+484.9	...	105.4	120	44.58	6.81
July.....	1,748.3	1,346.6	+401.7	...	105.3	117	44.33	...
August.....	1,702.5	1,345.9	+356.6	-334	105.5	118	43.73	...
September.....	1,907.9	1,471.4	+436.5	...	105.9	113	43.37	6.87
October.....	1,542.8	1,312.1	+230.7	...	105.8	117	43.58	...
November.....	1,724.6	1,424.9	+299.7	-681	105.8	123	43.18	...
December.....	1,838.7	1,376.5	+462.2	...	105.9	138	44.09	7.29
1963								
January.....	984.8	1,091.6	-106.8	...	106.1	121	45.06	...
February.....	2,117.5	1,497.4	+620.1	-1,062	106.1	130	45.74	...
March.....	1,960.4	1,486.7	+473.7	...	106.2	118	46.68	7.06
April.....	1,912.7	1,417.2	+495.5	...	106.3	125	47.53	...
May.....	1,892.6	1,420.2	+472.4	-1,295	106.4	144	47.86	...
June.....	1,784.7	1,420.5	+364.2	...	106.7	135	47.28	7.53
July.....	1,823.0	1,457.5	+365.5	...	106.9	126	46.74	...
August.....	1,894.6	1,508.3	+386.3	-153	107.1	132	46.70	...
September.....	1,979.6	1,450.4	+529.2	...	106.9	128	47.07	8.02
October.....	1,946.4	1,458.8	+487.6	...	107.0	146	47.17	...
November.....	1,944.6	1,471.9	+472.7	-134	107.2	144	47.08	...
December.....	2,049.4	1,480.0	+569.4	...	107.7	148	46.68	8.75
1964								
January.....	2,037.3	1,421.8	+615.5	...	107.8	147	47.07	...
February.....	2,028.7	1,445.3	+583.4	-75	107.6	143	47.64	...
March.....	2,077.5	1,522.9	+554.6	...	107.7	140	47.80	8.96
April.....	2,046.0	1,542.1	+503.9	...	107.9	138	48.84	...
May.....	2,052.1	1,548.1	+504.0	-789	108.0	138	49.22	...
June.....	2,004.3	1,505.5	+498.8	...	108.1	138	r50.04	(NA)
July.....	2,111.4	1,589.6	+521.8	...	108.1	140	r51.46	...
August.....	(NA)	(NA)	(NA)	...	(NA)	(NA)	p51.57	...
September.....								
October.....								
November.....								
December.....								

¹Includes \$650 million in special debt payments to the United States.

Table 2.—BASIC DATA FOR BUSINESS CYCLE SERIES: JANUARY 1961 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	International comparisons of industrial production							
	47. United States, industrial production	123. Canada, industrial production	122. United Kingdom, industrial production	121. OECD, ¹ European countries, industrial production	125. West Germany, industrial production	126. France, industrial production	127. Italy, industrial production	128. Japan, industrial production
	(1957-59=100) Revised ²	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)
1961								
January.....	104	104	109	117	124	115	130	155
February.....	104	105	110	119	125	116	134	154
March.....	104	105	110	119	126	116	134	158
April.....	107	107	111	120	126	116	134	159
May.....	109	107	110	119	124	117	136	162
June.....	110	109	113	120	121	117	136	165
July.....	112	109	113	120	122	118	138	169
August.....	113	111	111	119	121	118	137	172
September.....	112	112	110	120	124	119	140	172
October.....	113	112	109	121	123	119	145	175
November.....	115	114	109	122	124	119	149	176
December.....	116	114	109	123	128	122	148	177
1962								
January.....	115	113	108	122	126	122	149	182
February.....	116	115	110	124	129	123	151	178
March.....	118	116	111	123	125	124	149	181
April.....	118	116	110	124	128	123	151	181
May.....	118	117	113	125	129	124	153	182
June.....	118	118	114	124	130	123	147	180
July.....	119	118	113	125	130	125	151	179
August.....	119	119	114	126	131	125	149	180
September.....	120	119	115	127	132	126	150	181
October.....	119	119	110	127	132	128	153	179
November.....	120	120	113	128	133	128	158	179
December.....	119	120	110	127	132	126	160	178
1963								
January.....	120	120	110	127	129	127	158	179
February.....	121	121	111	126	128	125	155	184
March.....	122	122	113	127	132	116	161	184
April.....	123	122	114	130	133	129	165	191
May.....	124	123	115	131	133	133	165	190
June.....	126	123	115	132	139	134	166	191
July.....	126	121	116	132	133	r129	163	203
August.....	125	123	118	130	135	r129	166	202
September.....	126	125	117	133	135	136	171	207
October.....	126	126	120	135	139	137	171	211
November.....	126	128	121	136	141	136	173	214
December.....	127	131	121	136	137	138	170	217
1964								
January.....	128	133	123	138	141	140	172	217
February.....	128	134	123	138	143	139	r169	226
March.....	129	133	123	r139	146	139	173	223
April.....	130	r135	122	r141	r145	141	169	224
May.....	131	132	122	r141	r146	140	166	r228
June.....	132	p133	p122	p140	r146	141	(NA)	235
July.....	133	(NA)	(NA)	(NA)	p146	(NA)	(NA)	p233
August.....	p134				(NA)			(NA)
September.....								
October.....								
November.....								
December.....								

¹Organization for Economic Cooperation and Development.

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

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

Number of months before benchmark date that high was reached	Number of series that reached a high before benchmark dates--							
	Business cycle peak				3d month before business cycle peak			
	Nov. 1948	July 1953	July 1957	May 1960	Aug. 1948	Apr. 1953	Apr. 1957	Feb. 1960
	NBER LEADING INDICATORS							
8 months or more.....	12	7	22	14	11	3	20	12
7 months.....	1	1	...	2	1	4	...	1
6 months.....	...	3	1	1	...	...	1	...
5 months.....	4	1	...	3	...	2	1	1
4 months.....	1	...	...	2	1	2	...	2
3 months.....	...	2	...	1	...	3	1	1
2 months.....	...	2	...	...	4	1	...	3
1 month.....	...	...	...	...	1	...	...	2
Benchmark month.....	...	3	...	...	...	4	...	1
Number of series used.....	¹ 18	² 19	23	23	¹ 18	² 19	23	23
Percent of series high on benchmark date.	0	16	0	0	0	21	0	4
	NBER ROUGHLY COINCIDENT INDICATORS							
8 months or more.....	3	1	2	1	1	...	1	1
7 months.....	...	...	...	...	2	...	...	...
6 months.....	...	...	...	...	...	...	1	...
5 months.....	...	1	1	...	...	2	...	...
4 months.....	4	1	3	2	...	...	1	1
3 months.....	1	...	...	3	...	...	...	...
2 months.....	2	2	...	...	...	1	2	...
1 month.....	...	3	...	2	4	4	3	3
Benchmark month.....	1	3	5	3	4	4	3	6
Number of series used.....	11	11	11	11	11	11	11	11
Percent of series high on benchmark date.	9	27	45	27	36	36	27	55
	6th month before business cycle peak				Current expansion			
	May 1948	Jan. 1953	Jan. 1957	Nov. 1959	May 1964	June 1964	July 1964	Aug. 1964
	NBER LEADING INDICATORS							
8 months or more.....	6	2	17	4	8	10	10	4
7 months.....	1	1	1	4	2	1	1	...
6 months.....	...	2	1	4	1	1	...	1
5 months.....	4	1	1	2	1	...	1	...
4 months.....	2	4	...	4	...	1	...	1
3 months.....	...	1	1	...	1	...	2	1
2 months.....	2	2	1	1	...	4	3	...
1 month.....	2	3	...	2	5	4	2	4
Benchmark month.....	1	3	1	2	5	2	4	5
Number of series used.....	¹ 18	² 19	23	23	23	23	23	16
Percent of series high on benchmark date.	6	16	4	9	22	9	17	31
	NBER ROUGHLY COINCIDENT INDICATORS							
8 months or more.....	1	...	1	...	...	...	...	...
7 months.....	...	...	...	...	...	...	...	...
6 months.....	...	...	...	...	...	...	...	...
5 months.....	...	...	...	4	...	...	...	...
4 months.....	4	...	...	2	...	...	...	1
3 months.....	...	...	2	...	...	...	1	1
2 months.....	...	2	...	...	...	1	1	...
1 month.....	1	3	5	2	3	4	...	2
Benchmark month.....	5	6	3	3	8	6	9	7
Number of series used.....	11	11	11	11	11	11	11	11
Percent of series high on benchmark date.	45	55	27	27	73	55	82	64

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

¹5 series were not available.

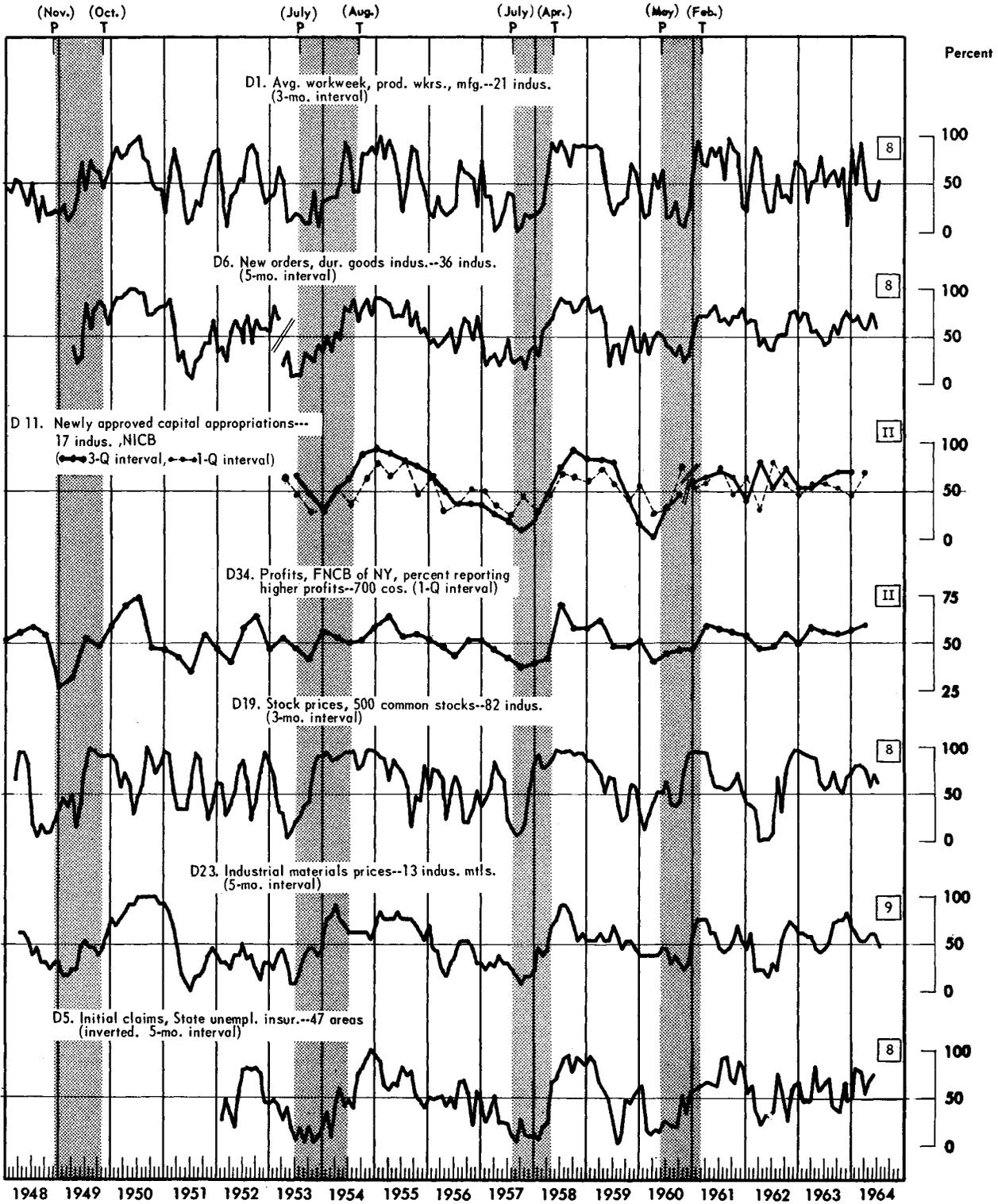
²2 series were not available and 2 series were omitted because their peaks were reached during the Korean War and such peaks were disregarded in this distribution.

CHART 2

DIFFUSION INDEXES: 1948 TO PRESENT

A

NBER Leading Indicators



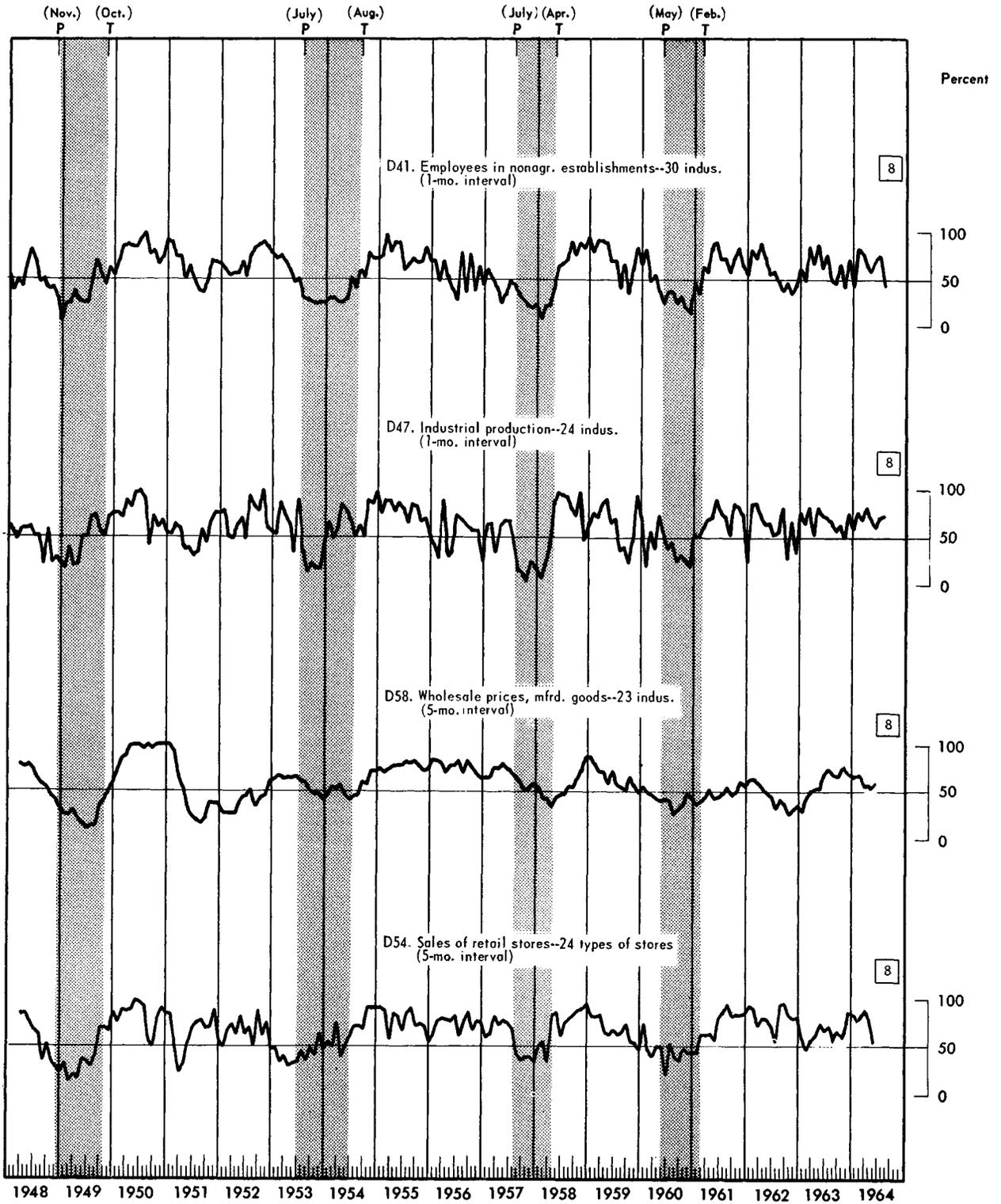
See "How to Read Charts 1, 2, and 3," page 5.

CHART 2

DIFFUSION INDEXES: 1948 TO PRESENT--Con.

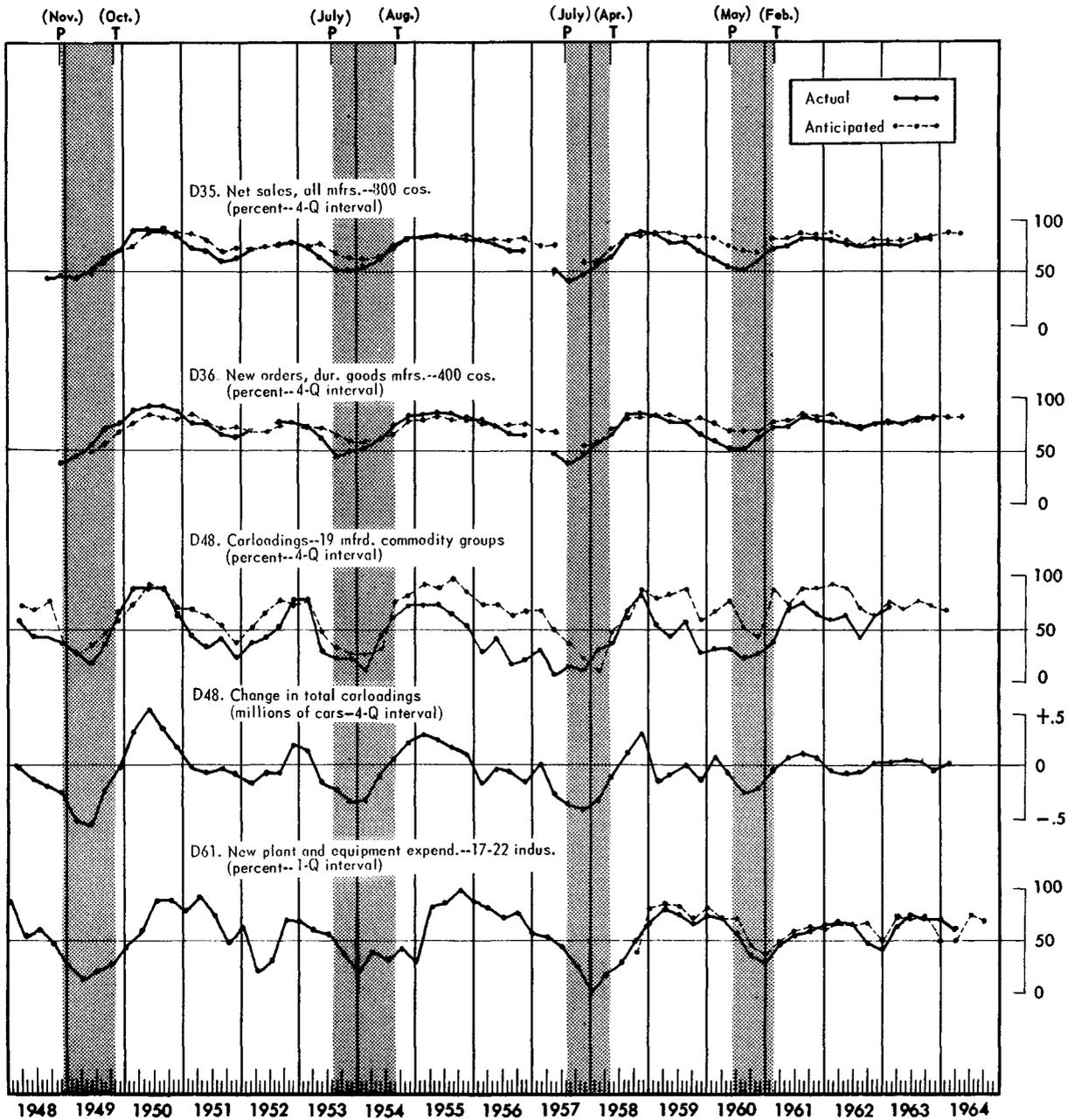
B

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 1964)	2nd Q 1963 - 2nd Q 1964	4th Q 1963 - 4th Q 1964
D48 (June 1964)	3rd Q 1962 - 3rd Q 1963	3rd Q 1963 - 3rd Q 1964
D 61 (August 1964)	1st Q 1964 - 2nd Q 1964	3rd Q 1964 - 4th Q 1964

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

Analytical Measures

Table 4.--DIFFUSION INDEXES FOR 11 MAJOR ECONOMIC ACTIVITIES: JANUARY 1961 TO PRESENT

Percent of series components rising. 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; 3-quarter figures are placed on the 1st month of the 3d quarter; 1-quarter figures are placed in the 1st month of the 2d quarter. Seasonally adjusted components are used except in indexes D19, which requires no adjustment, and D34, which is 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 (36 industries)		D11. Newly approved capital appropriations, NICB (17 industries)	
	1-month interval	3-month interval	1-month interval	5-month interval	1-quarter interval	3-quarter interval
1961					Revised ¹	Revised ¹
January.....	95.2	66.7	33.3	52.8	53	59
February.....	71.4	95.2	48.6	72.2	...	...
March.....	54.8	71.4	66.7	72.2	...	...
April.....	81.0	69.0	62.5	72.2	59	65
May.....	45.2	90.5	63.9	77.8	...	...
June.....	90.5	78.6	66.7	83.3	...	...
July.....	64.3	88.1	36.1	66.7	76	71
August.....	73.8	54.8	63.9	69.4	...	...
September.....	38.1	97.6	47.2	62.5	...	...
October.....	85.7	85.7	55.6	72.2	47	65
November.....	66.7	81.0	61.1	70.8	...	...
December.....	23.8	26.2	58.3	80.6	...	...
1962						
January.....	14.3	21.4	63.9	63.9	65	41
February.....	73.8	59.5	52.8	68.1	...	...
March.....	73.8	88.1	36.1	66.7	...	...
April.....	76.2	78.6	51.4	41.7	32	82
May.....	21.4	40.5	56.9	48.6	...	...
June.....	28.6	21.4	37.5	37.5	...	...
July.....	35.7	21.4	56.9	36.1	82	53
August.....	47.6	59.5	36.1	52.8	...	...
September.....	81.0	35.7	48.6	52.8	...	...
October.....	7.1	38.1	68.1	52.8	59	74
November.....	59.5	31.0	50.0	75.0	...	...
December.....	59.5	73.8	47.2	77.8	...	...
1963						
January.....	52.4	71.4	63.9	66.7	47	53
February.....	73.8	64.3	43.1	75.0	...	...
March.....	40.5	31.0	54.2	73.6	...	...
April.....	16.7	52.4	63.9	55.6	59	53
May.....	81.0	54.8	52.8	56.9	...	...
June.....	47.6	78.6	47.2	50.0	...	...
July.....	45.2	47.6	51.4	41.7	59	65
August.....	42.9	59.5	52.8	45.8	...	...
September.....	66.7	64.3	52.8	62.5	...	...
October.....	57.1	47.6	69.4	54.2	53	71
November.....	21.4	66.7	33.3	69.4	...	...
December.....	83.3	7.1	62.5	77.8	...	...
1964						
January.....	0.0	85.7	55.6	66.7	47	71
February.....	85.7	50.0	44.4	72.2	...	...
March.....	28.6	92.9	58.3	61.1	...	...
April.....	78.6	40.5	61.1	r58.3	71	...
May.....	35.7	r33.3	44.4	r75.0	...	...
June.....	21.4	r33.3	r50.0	p59.7	...	...
July.....	r52.4	p54.8	r59.7	...	...	...
August.....	p69.0	...	p37.5	...	...	...
September.....	...	...	...	...	...	...
October.....	...	...	...	...	...	...
November.....	...	...	...	...	...	...
December.....	...	...	...	...	...	...

¹ See "New Features and Changes for This Issue," page ii.

Table 4.—DIFFUSION INDEXES FOR 11 MAJOR ECONOMIC ACTIVITIES: JANUARY 1961 TO PRESENT—Continued

Percent of series components rising. 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; 3-quarter figures are placed on the 1st month of the 3d quarter; 1-quarter figures are placed in the 1st month of the 2d quarter. Seasonally adjusted components are used except in indexes D19, which requires no adjustment, and D34, which is 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., FNCE (around 700 corporations)	D19. Index of stock prices, 500 common stocks (80 industries) ¹		D23. Index of industrial materials prices (13 industrial materials)		D5. Initial claims for unemployment insurance, State programs, week ended nearest the 22d (47 areas)	
	1-quarter interval	1-month interval	3-month interval	1-month interval	5-month interval	1-month interval	5-month interval
1961							
January.....	47	87.0	96.3	42.3	61.5	59.6	57.4
February.....	...	96.3	96.3	76.9	76.9	31.9	59.6
March.....	...	86.0	95.1	84.6	76.9	80.9	61.7
April.....	60	72.6	93.9	73.1	76.9	40.4	66.0
May.....	...	81.1	70.7	53.8	61.5	48.9	68.1
June.....	...	40.2	57.3	46.2	61.5	58.5	66.0
July.....	58	42.1	57.9	53.8	46.2	51.1	61.7
August.....	...	81.1	54.9	46.2	42.3	61.7	93.6
September.....	...	39.6	55.5	61.5	46.2	46.8	93.6
October.....	56	45.7	62.2	38.5	53.8	78.7	68.1
November.....	...	87.8	72.6	15.4	69.2	74.5	63.8
December.....	...	56.1	52.4	61.5	53.8	23.4	91.5
1962							
January.....	54	26.2	39.6	76.9	46.2	57.4	74.5
February.....	...	74.4	37.8	38.5	61.5	83.0	51.1
March.....	...	48.2	32.9	38.5	23.1	46.8	66.0
April.....	47	9.1	0.0	15.4	23.1	46.8	31.9
May.....	...	1.2	1.2	42.3	23.1	40.4	21.3
June.....	...	1.2	1.2	26.9	15.4	14.9	34.0
July.....	48	67.7	8.5	23.1	30.8	68.1	31.9
August.....	...	78.0	67.1	34.6	23.1	57.4	38.3
September.....	...	34.8	31.1	61.5	53.8	44.7	78.7
October.....	56	6.7	72.6	53.8	66.7	46.8	48.9
November.....	...	98.8	90.2	84.6	75.0	72.3	22.3
December.....	...	84.8	98.8	66.7	69.2	27.7	63.8
1963							
January.....	50	97.6	97.6	58.3	61.5	23.4	69.1
February.....	...	79.3	93.8	58.3	61.5	85.1	48.9
March.....	...	43.8	91.2	50.0	58.3	31.9	48.9
April.....	59	91.2	90.0	38.5	58.3	44.7	85.1
May.....	...	85.0	88.0	50.0	46.2	48.9	54.3
June.....	...	51.9	62.5	61.5	42.3	70.2	63.8
July.....	56	29.4	54.4	53.8	46.2	42.6	68.1
August.....	...	75.0	60.2	53.8	53.8	48.9	70.2
September.....	...	76.9	74.4	53.8	73.1	44.7	40.4
October.....	55	44.9	56.4	76.9	76.9	61.7	31.9
November.....	...	44.9	50.6	69.2	76.9	31.9	68.1
December.....	...	68.4	68.4	53.8	84.6	34.0	48.9
1964							
January.....	57	74.7	73.7	61.5	69.2	85.1	51.1
February.....	...	64.7	81.0	57.7	61.5	12.8	83.0
March.....	...	78.2	82.1	38.5	53.8	66.0	78.7
April.....	60	75.6	77.9	61.5	53.8	75.5	55.3
May.....	...	52.6	57.7	38.5	61.5	51.1	70.2
June.....	...	35.3	70.5	50.0	61.5	51.1	76.6
July.....	...	89.7	61.5	65.4	² 46.2	59.6	
August.....	...	41.0		61.5		57.4	
September.....	...			² 61.5			
October.....	...						
November.....	...						
December.....	...						

¹The diffusion index is based on 82 components, January 1961 to February 1963; on 80 components, March 1963 to August 1963; on 79 components, September 1963 to March 1964; and on 78 components thereafter. 18 components and 5 composites, representing an additional 23 components, are shown in the direction-of-change table (table 6).

²Average for September 15, 16, and 17.

Analytical Measures

Table 4.—DIFFUSION INDEXES FOR 11 MAJOR ECONOMIC ACTIVITIES: JANUARY 1961 TO PRESENT—Continued

Percent of series components rising. 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; 3-quarter figures are placed on the 1st month of the 3d quarter; 1-quarter figures are placed in the 1st month of the 2d quarter. Seasonally adjusted components are used except in indexes D19, which requires no adjustment, and D34, which is 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 manufacturing industries)	
	1-month interval	3-month interval	1-month interval	3-month interval	1-month interval	5-month interval	1-month interval	5-month interval
1961			Revised ¹	Revised ¹				
January.....	45.0	15.0	56.3	45.8	58.3	43.8	39.1	43.5
February.....	33.3	40.0	50.0	64.6	41.7	43.8	47.8	34.8
March.....	61.7	43.3	62.5	81.3	60.4	64.6	41.3	39.1
April.....	56.7	78.3	70.8	83.3	22.9	62.5	65.2	43.5
May.....	86.7	85.0	72.9	83.3	79.2	64.6	45.7	52.2
June.....	88.3	90.0	91.7	83.3	77.1	56.3	37.0	41.3
July.....	70.0	90.0	77.1	97.9	60.4	83.3	50.0	43.5
August.....	70.0	66.7	72.9	79.2	68.8	87.5	56.5	47.8
September.....	56.7	80.0	54.2	85.4	39.6	95.8	60.9	54.3
October.....	71.7	80.0	87.5	87.5	83.3	81.3	39.1	45.7
November.....	81.7	78.3	83.3	91.7	87.5	83.3	47.8	50.0
December.....	63.3	76.7	75.0	62.5	60.4	83.3	56.5	60.9
1962								
January.....	55.0	78.3	25.0	56.3	58.3	85.4	69.6	54.3
February.....	80.0	88.3	87.5	77.1	50.0	93.8	43.5	63.0
March.....	71.7	88.3	87.5	87.5	70.8	89.6	52.2	63.0
April.....	86.7	80.0	75.0	87.5	68.8	70.8	58.7	58.7
May.....	71.7	73.3	64.6	72.9	58.3	81.3	45.7	52.2
June.....	55.0	65.0	66.7	75.0	18.8	79.2	43.5	47.8
July.....	56.7	51.7	52.1	68.8	83.3	70.8	39.1	43.5
August.....	46.7	38.3	58.3	85.4	75.0	54.2	41.3	30.4
September.....	36.7	35.0	83.3	58.3	64.6	95.8	54.3	41.3
October.....	45.0	26.7	29.2	66.7	39.6	95.8	34.8	34.8
November.....	33.3	28.3	68.8	50.0	87.5	81.3	45.7	23.9
December.....	43.3	43.3	35.4	68.8	66.7	79.2	39.1	30.4
1963								
January.....	63.3	53.3	79.2	66.7	50.0	81.3	39.1	34.8
February.....	48.3	65.0	66.7	83.3	54.2	56.3	43.5	28.3
March.....	83.3	71.7	83.3	85.4	52.1	45.8	37.0	45.7
April.....	66.7	83.3	54.2	91.7	41.7	58.3	41.3	50.0
May.....	85.0	78.3	83.3	83.3	52.1	62.5	58.7	52.2
June.....	61.7	75.0	75.0	87.5	75.0	75.0	63.0	52.2
July.....	75.0	60.0	72.9	89.6	66.7	66.7	47.8	69.6
August.....	48.3	50.0	68.8	77.1	64.6	70.8	58.7	73.9
September.....	45.0	48.3	58.3	72.9	25.0	54.2	58.7	71.7
October.....	65.0	40.0	64.6	70.8	58.3	68.8	76.1	69.6
November.....	41.7	63.3	50.0	77.1	54.2	58.3	69.6	73.9
December.....	70.0	48.3	77.1	68.8	77.1	87.5	60.9	71.7
1964								
January.....	43.3	73.3	58.3	83.3	43.8	81.2	58.7	67.4
February.....	83.3	75.0	79.2	83.3	70.8	79.2	63.0	69.6
March.....	76.7	85.0	70.8	91.7	52.1	81.2	45.7	54.3
April.....	63.3	80.0	83.3	87.5	52.1	r89.6	63.0	56.5
May.....	60.0	r78.3	70.8	79.2	66.7	r79.2	43.5	r52.2
June.....	r70.0	r80.0	62.5	83.3	r66.7	p54.2	45.7	p60.9
July.....	r76.7	p68.3	72.9	p75.0	r52.1		r67.4	
August.....	p43.3		p75.0		p56.2		p65.2	
September.....								
October.....								
November.....								
December.....								

¹See "New Features and Changes for This Issue," page 11.

Table 5.—DIFFUSION INDEXES, ACTUAL AND ANTICIPATED, FOR 4 MANUFACTURING ACTIVITIES: JANUARY 1961 TO PRESENT

Percent of series components rising. 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) 4-quarter interval		D36. New orders, durable manufactures (400 companies) 4-quarter interval		D48. Freight carloadings (19 manufactured commodity groups) 4-quarter interval			D61. New plant and equipment expenditures (16 industries) 1-quarter interval	
	Actual	Anticipated	Actual	Anticipated	Actual	Anticipated	Change in total (000)	Actual	Anticipated
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	r73.7	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	42.1	68.4	-66	...	...
September.....	...	...	...	...	...	...	...	...	...
October.....	...	...	...	...	...	...	...	46.9	68.8
November.....	74	82	76	76	63.2	63.2	+28	...	...
December.....	...	...	...	...	...	...	...	...	...
1963									
January.....	...	...	...	...	...	...	...	40.6	50.0
February.....	76	80	77	76	73.7	78.9	r+39	...	...
March.....	...	...	...	...	...	...	...	...	...
April.....	...	...	...	...	...	...	...	65.6	75.0
May.....	74	80	76	76	(NA)	68.4	+44	...	...
June.....	...	...	...	...	...	...	...	...	...
July.....	...	...	...	...	...	...	...	75.0	71.9
August.....	82	84	82	80	...	78.9	+39	...	...
September.....	...	...	...	...	...	...	...	...	...
October.....	...	...	...	...	...	...	...	71.9	75.0
November.....	84	85	82	84	...	73.7	-35	...	...
December.....	...	...	...	...	...	...	...	...	...
1964									
January.....	...	...	...	...	...	...	...	71.9	50.0
February.....	...	87	...	84	...	68.4	r+16	...	...
March.....	...	...	...	...	...	...	...	...	...
April.....	...	...	...	...	...	...	...	62.5	50.0
May.....	...	86	...	84	...	...	...	...	...
June.....	...	...	...	...	...	...	...	...	...
July.....	...	...	...	...	...	...	...	...	r75.0
August.....	...	...	...	...	...	...	...	...	...
September.....	...	...	...	...	...	...	...	...	...
October.....	...	...	...	...	...	...	...	...	68.8
November.....	...	...	...	...	...	...	...	...	...
December.....	...	...	...	...	...	...	...	...	...

Table 6.--DIRECTION OF CHANGE IN SERIES COMPONENTS AND PERCENT OF SERIES RISING: JULY 1963 TO PRESENT--Continued

(D23) Index of Industrial Materials Prices

13 industrial materials components	1-month spans												5-month spans																									
	1963						1964						1963						1964																			
	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 ¹	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-Sept	May-Oct	Jun-Nov	Jul-Dec		
Percent rising.....	54	54	54	77	69	54	62	58	38	62	38	50	65	62	62	46	42	46	54	73	77	77	85	69	62	54	54	62	62	46								
All industrial materials.....	+	o	-	+	+	+	+	o	+	+	-	+	+	+	+	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Copper scrap (lb.).....	+	-	+	+	-	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lead scrap (lb.).....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Steel scrap (ton).....	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Tin (lb.).....	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Zinc (lb.).....	+	+	-	-	-	+	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Burlap (yd.).....	+	+	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cotton (lb.), 15-market average.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Print cloth (yd.), average.....	+	+	+	+	+	+	+	o	+	+	+	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Wool tops (lb.).....	-	+	-	+	+	+	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hides (lb.).....	-	-	-	+	+	+	-	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Rosin (100 lb.).....	+	-	-	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Rubber (lb.).....	+	-	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Tallow (lb.).....	+	-	+	+	+	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

+ = rising; o = unchanged; - = falling. Series components are seasonally adjusted (except for all-industry totals) by the Bureau of the Census before the direction of change is determined.

¹Average for September 15, 16, and 17.

Table 6.--DIRECTION OF CHANGE IN SERIES COMPONENTS AND PERCENT OF SERIES RISING: JULY 1963 TO PRESENT--Continued

(D5) Initial Claims for Unemployment Insurance, State Programs

Labor market size rank	26 area components	1-month spans												5-month spans																											
		1963						1964						1963						1964																					
		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.....	43	49	45	62	32	34	85	13	66	76	51	51	60	57	54	64	68	70	40	32	68	49	51	83	79	55	70	77												
	47 labor market areas ¹	-	-	-	+	-	-	+	-	+	+	+	-	-	+	-	-	-	+	-	-	+	+	+	+	+	+	-	-	+											
	NORTHEAST REGION																																								
7	Boston.....	-	+	-	+	+	-	+	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
16	Buffalo.....	+	-	+	+	+	-	+	-	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11	Newark.....	+	+	-	+	+	+	+	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1	New York.....	+	+	-	+	+	+	+	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
21	Paterson*.....	+	-	+	-	-	+	+	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4	Philadelphia*.....	-	-	-	+	-	+	+	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
8	Pittsburgh.....	-	-	-	-	+	-	+	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
23	Providence**.....	+	-	+	-	-	-	+	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	NORTH CENTRAL REGION																																								
3	Chicago.....	-	+	-	+	-	+	+	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
18	Cincinnati.....	+	-	+	-	-	-	+	-	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10	Cleveland**.....	+	-	+	-	-	-	+	-	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
26	Columbus.....	+	-	-	+	-	-	+	-	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5	Detroit.....	+	-	+	+	+	-	+	-	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
25	Indianapolis.....	+	-	+	+	+	-	+	-	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
22	Kansas City.....	+	-	+	+	+	-	+	-	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
15	Milwaukee.....	+	+	+	+	+	-	+	-	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
13	Minneapolis.....	+	-	+	+	+	-	+	-	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9	St. Louis.....	-	-	+	+	-	-	+	-	-	-	+	+	+	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SOUTH REGION																																								
20	Atlanta.....	-	-	+	+	-	-	+	-	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	Baltimore.....	+	-	+	+	-	-	+	-	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	Dallas.....	+	+	-	+	-	-	+	-	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Houston.....	+	-	-	-	+	-	+	-	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WEST REGION																																								
2	Los Angeles.....	-	-	+	+	-	+	+	-	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
24	Portland.....	-	+	-	+	-	-	-	+	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	San Francisco.....	-	+	-	-	-	+	-	+	-	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	Seattle*.....	-	+	-	+	+	+	+	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- = rising; 0 = unchanged; + = falling. Because this series usually rises when general business activity falls and falls when business rises, it is inverted to show a comparable activity pattern. The direction of change is shown for the week ending nearest the 22d of the month. Series components are seasonally adjusted by the Bureau of the Census before the direction of change is determined.

*Designated by Bureau of Employment Security as an area of substantial unemployment (6 percent or more) in August 1964.

**Designated by Bureau of Employment Security as an area of substantial (6 percent or more) and persistent unemployment in August 1964.

¹The percent rising is based on 47 labor market areas. Directions of change are shown separately for only the largest 26.

Table 6.--DIRECTION OF CHANGE IN SERIES COMPONENTS AND PERCENT OF SERIES RISING: JULY 1963 TO PRESENT--Continued

(D47) Index of Industrial Production

24 industry components	1-month spans												3-month spans																																											
	1963						1964						1963						1964																																					
	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 ¹	73	69	58	65	50	77	58	79	71	83	71	62	73	75									88	90	77	73	71	77	69	83	83	92	88	79	83	75																				
All industrial production.....	o	-	+	+	o	+	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
DURABLE GOODS																																																								
Primary and fabricated metals.....					
Primary metal products.....	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Fabricated metal products.....	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Machinery and related products.....			
Machinery, except electrical.....	+	+	+									+	+	+	.	.	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Electrical machinery.....	+	o	+									+	+	+	.	.	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Transportation equipment.....	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Instruments and related products.....	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Clay, glass, and lumber.....			
Clay, glass, and stone.....	+	.	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lumber and products.....	.	+	+	+	o	+	+	+	+	+	+	+	+	+		
Furniture and miscellaneous.....			
Furniture and fixtures.....	+	.	+	o									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Miscellaneous.....	+	+	+	.	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
NONDURABLE GOODS																																																								
Textile, apparel, and leather.....				
Textile mill products.....	+	+	+	+	+	+	.	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Apparel products.....	+	+	+	+	+	+	.	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Leather and products.....	+	+	+	+	+	+	.	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Paper and printing.....		
Paper and products.....	+	+	.	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Printing and publishing.....	.	+	o	o	+	+	+	+
Chemicals, petroleum, and rubber.....		
Chemicals and products.....	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Petroleum products.....	+	.	.	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Rubber and plastics products.....	.	+	+	+	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	
Foods, beverages, and tobacco.....		
Food and beverages.....	+	.	.	+									+	+	o	+	.	+	+	+	+	+	o	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Tobacco products.....	+	.	.	.	+	+									+	.	+	.	.	.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	
MINERALS																																																								
Coal.....	o	+	.	.	.	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Crude oil and natural gas.....	+	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Metal, stone, and earth minerals.....		
Metal mining.....	.	+	.	.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Stone and earth minerals.....	.	.	o	+	+	.	.	+	+	.	+	+	+	+									.	.	o	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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

NA = not available.

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

Table 6.--DIRECTION OF CHANGE IN SERIES COMPONENTS AND PERCENT OF SERIES RISING: JULY 1963 TO PRESENT--Continued

(D54) Sales of Retail Stores

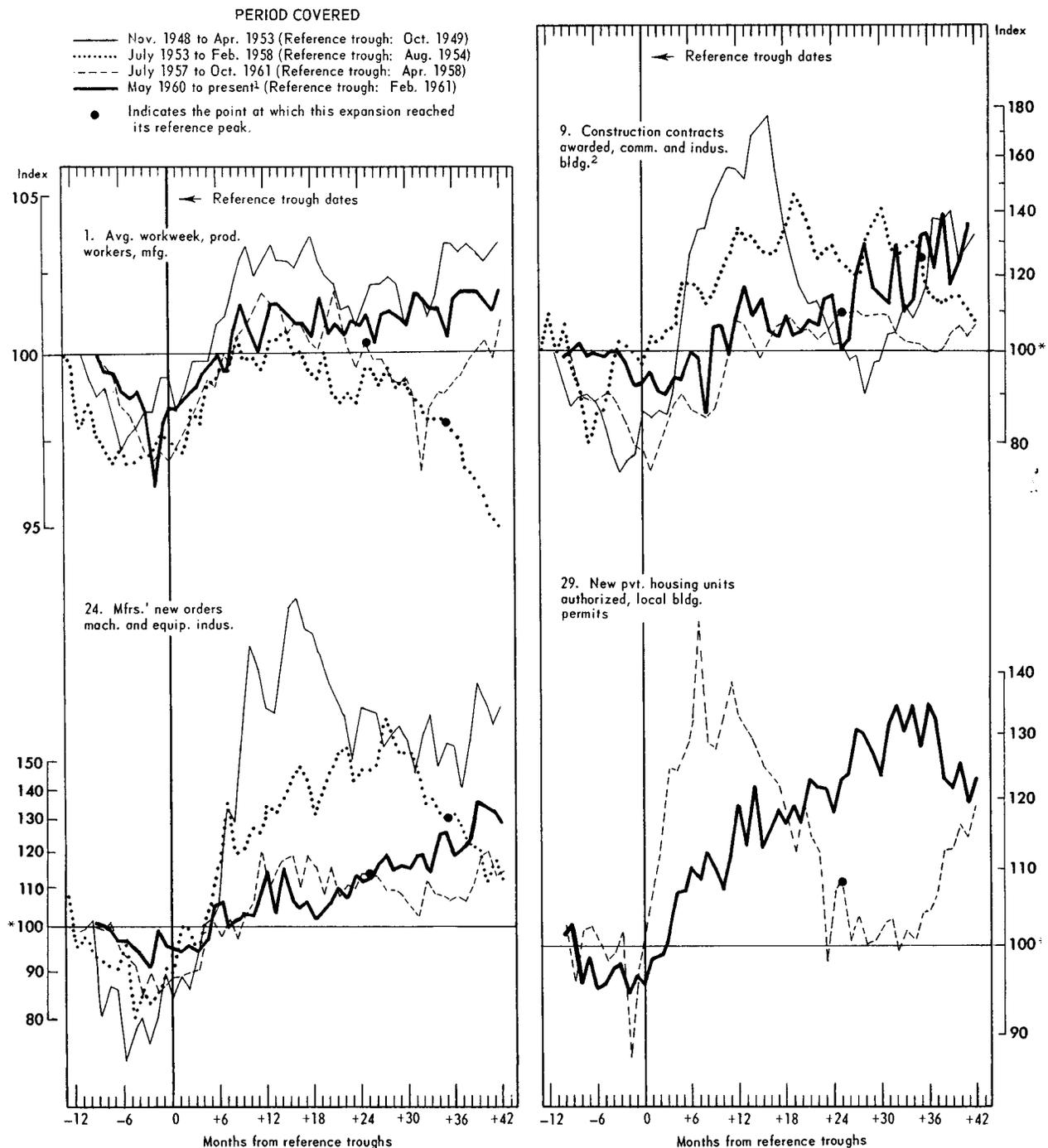
24 retail store components	1-month spans												5-month spans																																											
	1963						1964						1963						1964																																					
	Jun-Jul	Jul-Aug	Aug-Sep	Sep-Oct	Oct-Nov	Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	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.....	67	65	25	58	54	77	44	71	52	52	67	67	52	56									62	75	67	71	54	69	58	88	81	79	81	90	79	54																				
All retail sales.....	+	-	-	+	-	+	-	+	-	+	+	o	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Grocery stores.....	+	-	-	+	+	+	+	-	+	-	-	+	+	-									+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Other food stores.....	+	+	-	-	+	+	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Eating places.....	-	+	-	+	+	+	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Department stores.....	-	+	-	-	+	+	+	+	+	o	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Mail-order stores.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Variety stores.....	-	+	-	-	+	+	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Other general stores.....	+	+	-	-	+	o	-	+	-	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Men's wear stores.....	+	+	-	-	+	+	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Women's apparel stores.....	+	+	-	-	+	+	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Family apparel stores.....	+	+	-	-	+	+	-	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Shoe stores.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Furniture stores.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Appliance and radio stores.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Building material dealers.....	-	+	-	+	-	-	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Hardware stores.....	o	+	-	+	+	+	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Farm equipment dealers.....	+	+	+	+	+	-	-	+	o	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Passenger car and other automotive dealers.....	+	-	-	+	-	+	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Tire and battery dealers.....	-	+	+	+	+	+	-	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Gasoline stations.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Drug and proprietary stores.....	o	+	+	-	-	+	o	-	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Jewelry stores.....	-	o	-	+	-	+	-	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Liquor stores.....	+	+	+	-	-	+	-	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Other durable goods stores.....	+	-	-	-	-	+	+	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Other nondurable goods stores.....	-	+	+	-	-	+	-	+	+	+	+	+	+	+									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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

CHART 4

COMPARISONS OF REFERENCE CYCLE PATTERNS

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



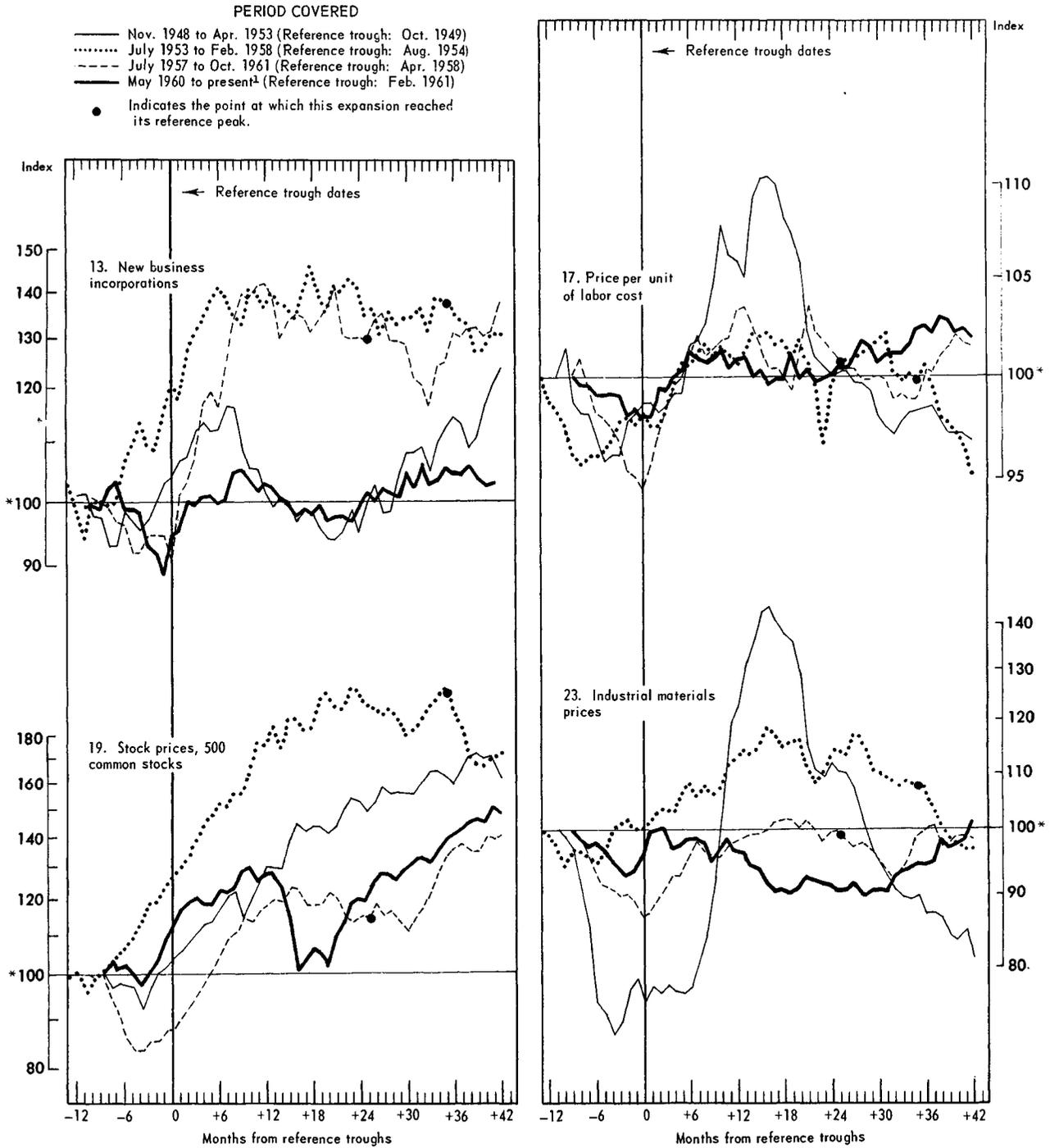
*Reference peak level. For series with a "months for cyclical dominance" (MCD) of "1" or "2", the figure for the reference peak is set at "100". For series with an MCD of "3" or more, the average of the 3 months centered on the reference peak month is set at "100". For quarterly series, the reference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

¹See table 2 for latest month in current period. Percent changes for this month and comparable months of previous expansions are shown in table 7.

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

CHART 4 COMPARISONS OF REFERENCE CYCLE PATTERNS--Con.

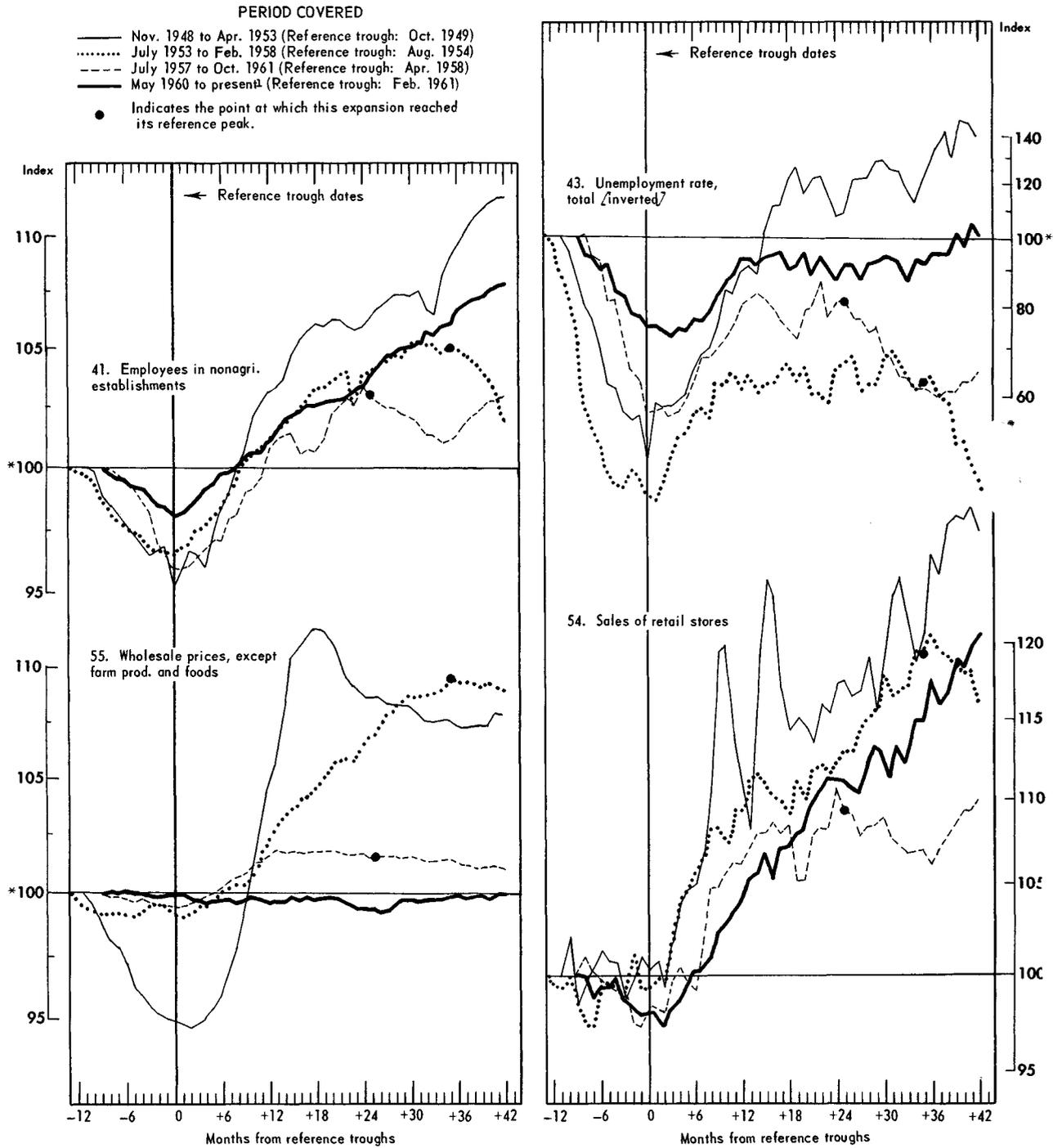
Percent of reference peak levels of selected series compared for 4 business cycles. Period begins with the reference peak date preceding the trough of each cycle.



*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.
¹See table 2 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.



*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.

¹See table 2 for latest month in current period. Percent changes for this month and comparable months of previous expansions are shown in table 7.

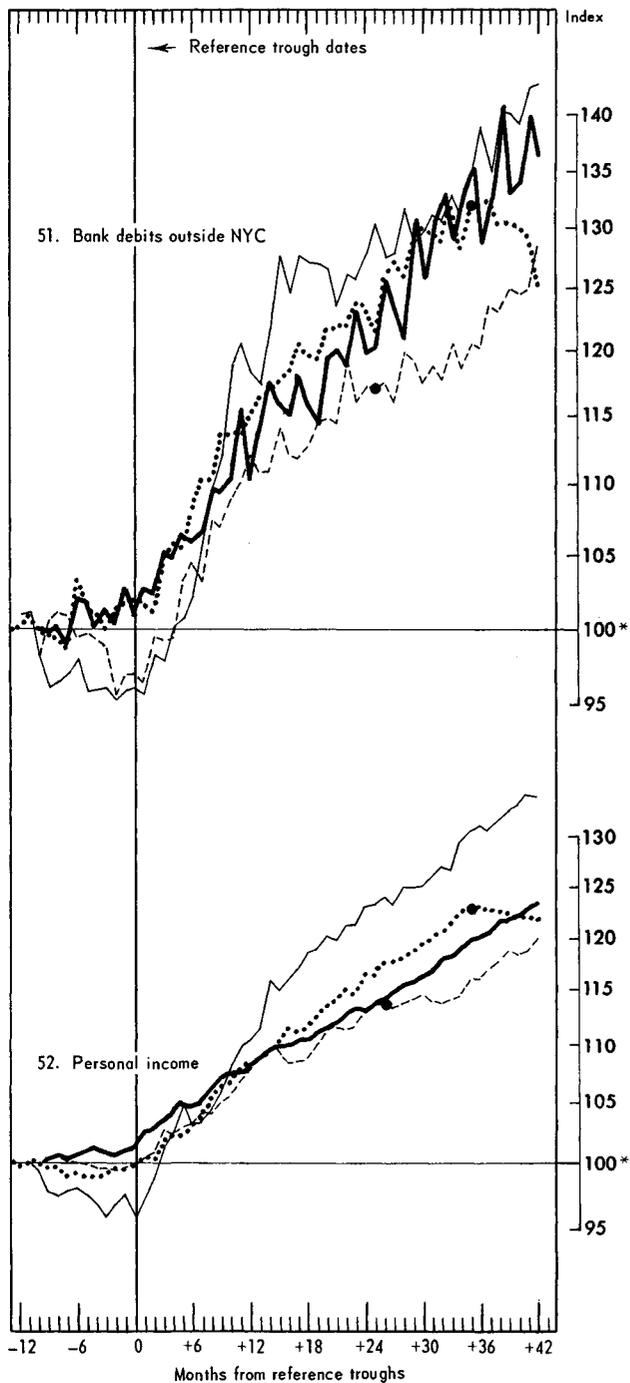
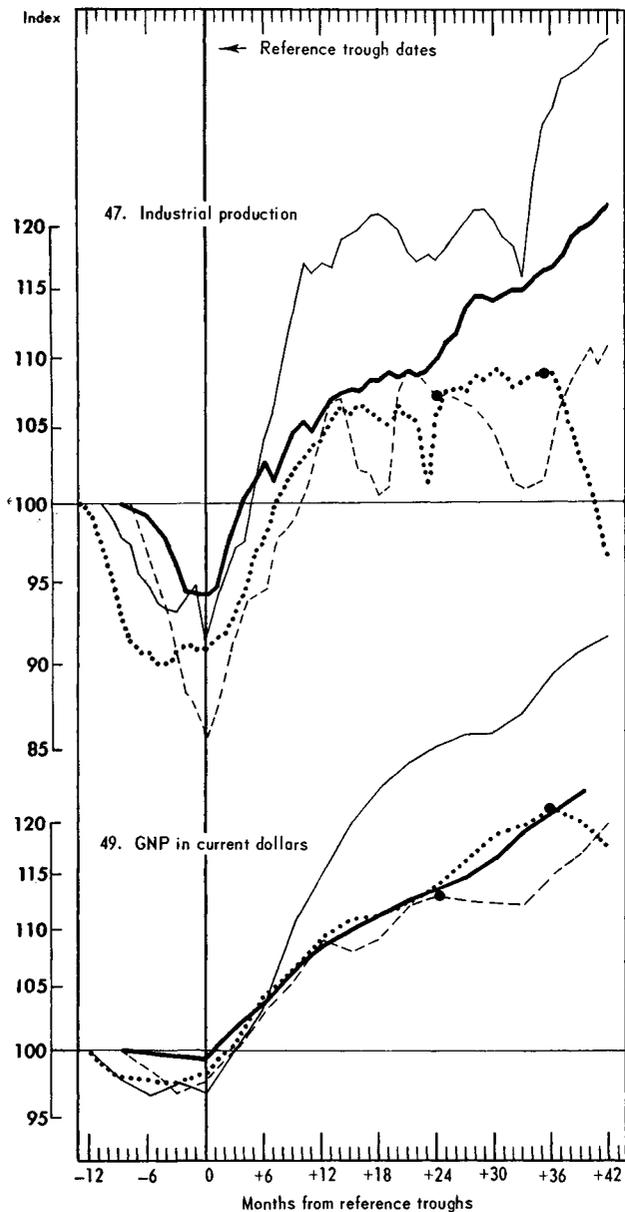
CHART 4

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 Apr. 1953 (Reference trough: Oct. 1949)
 - July 1953 to Feb. 1958 (Reference trough: Aug. 1954)
 - - - July 1957 to Oct. 1961 (Reference trough: Apr. 1958)
 - May 1960 to present¹ (Reference trough: Feb. 1961)
- Indicates the point at which this expansion reached its reference peak.



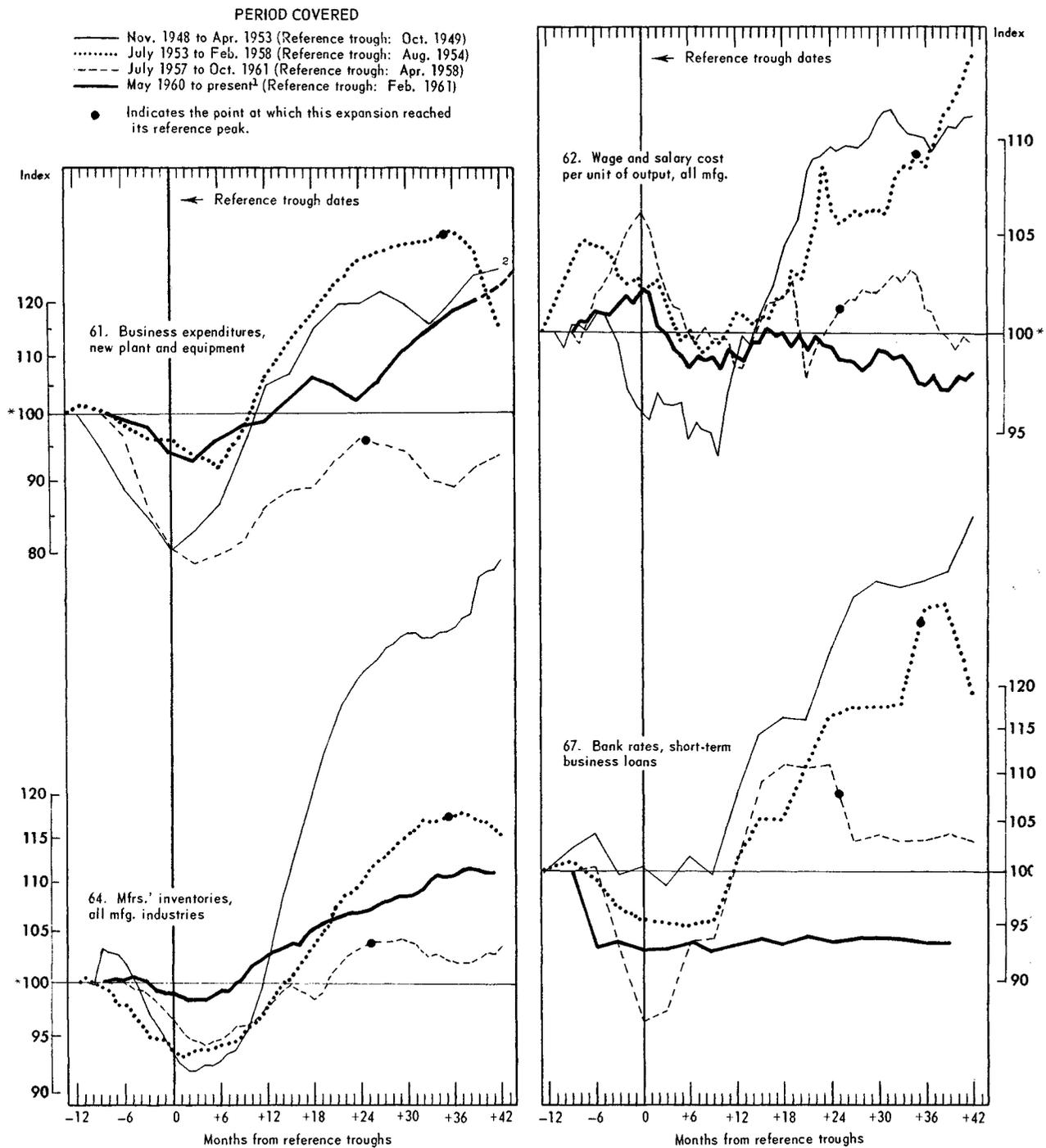
*Reference peak level. For series with a "months for cyclical dominance" (MCD) of "1" or "2", the figure for the reference peak is set at "100". For series with an MCD of "3" or more, the average of the 3 months centered on the reference peak month is set at "100". For quarterly series, the reference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

¹See table 2 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.



*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.

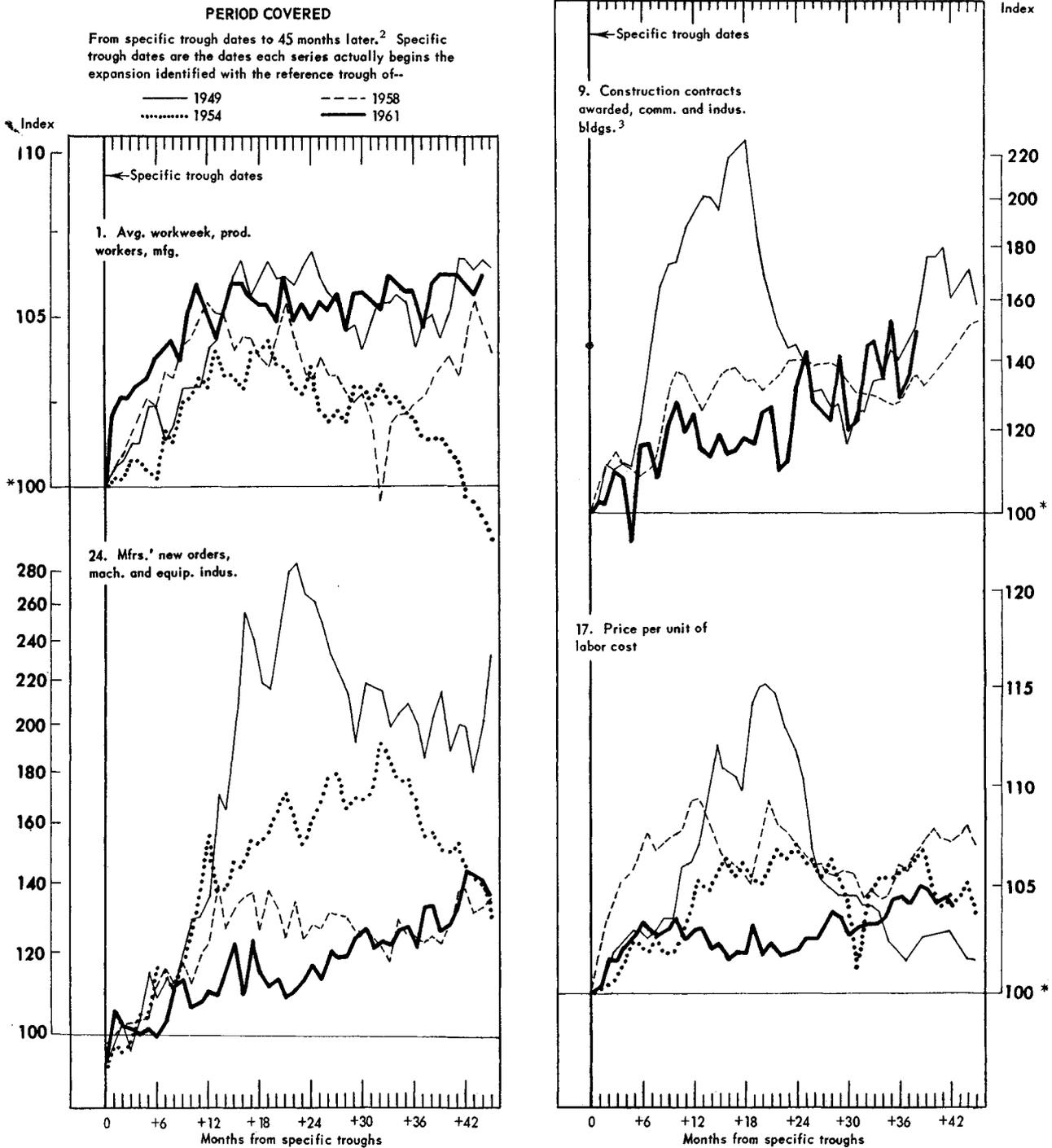
¹See table 2 for latest month in current period. Percent changes for this month and comparable months of previous expansions are shown in table 7.

²Last 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 date¹ of each series for each expansion.



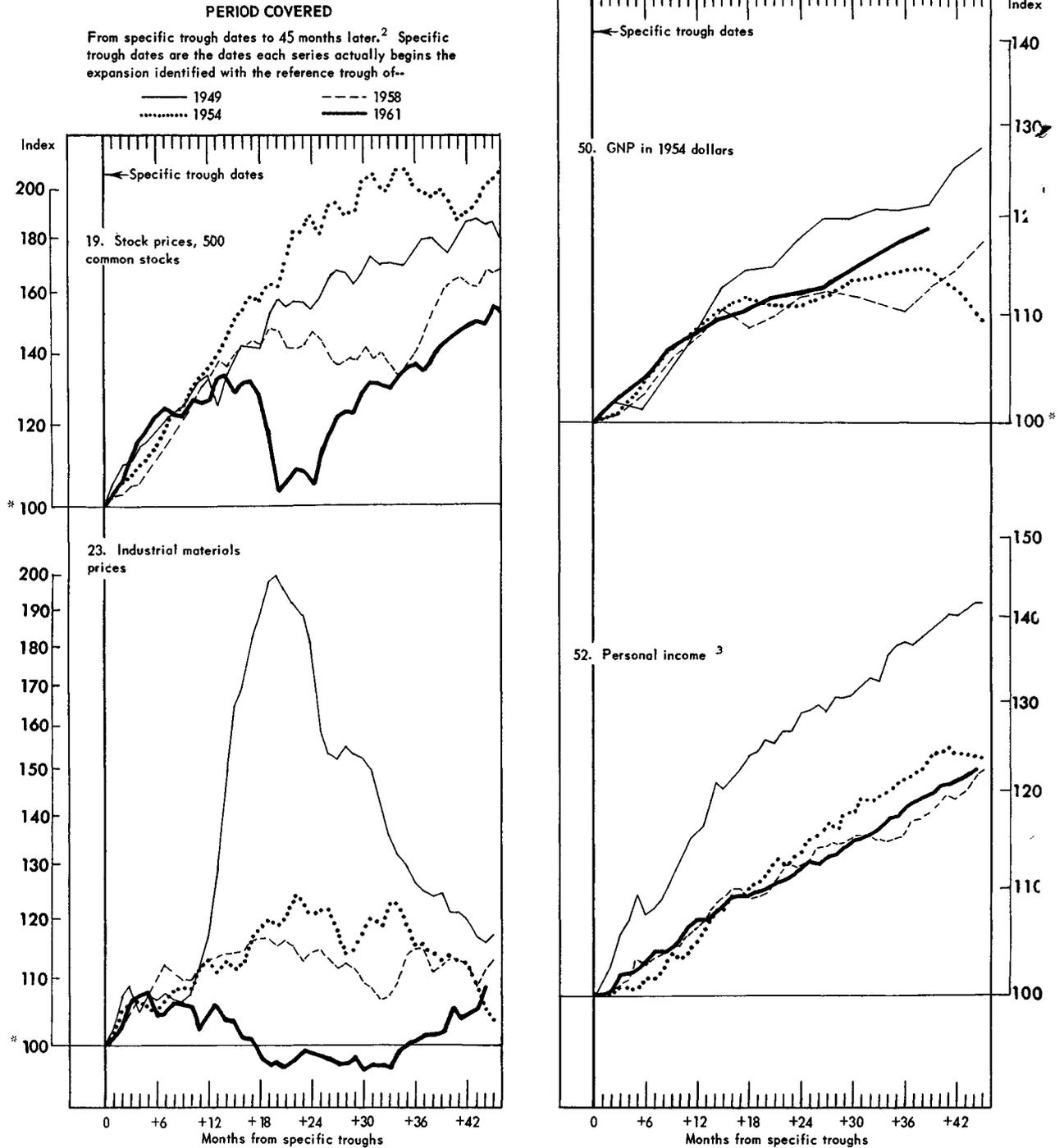
* Specific trough level. For series with a "months for cyclical dominance" (MCD) of "1" or "2", the figure for the specific trough is set at "100". For series with an MCD of "3" or more, the average of the 3 months centered on the specific trough month is set at "100". MCD values are shown in appendix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

¹See appendix B for specific dates. ²See table 2 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. ³For the current cycle, changes are based on the low (L) shown in table 2. 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 date¹ of each series for each expansion.



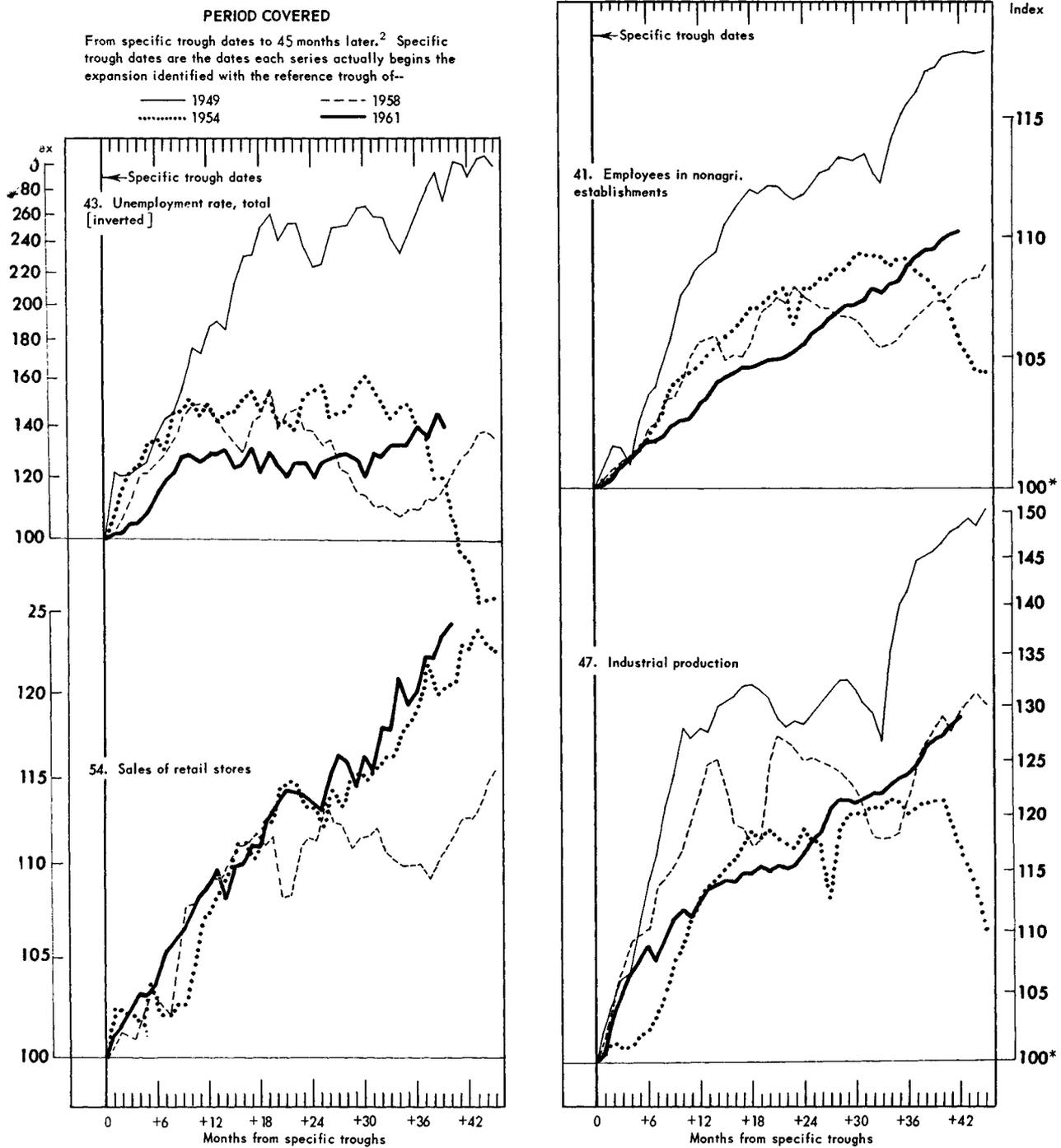
*Specific trough level. For series with a "months for cyclical dominance" (MCD) of "1" or "2", the figure for the specific trough is set at "100". For series with an MCD of "3" or more, the average of the 3 months centered on the specific trough month is set at "100". For quarterly series, the specific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

¹See appendix B for specific dates. ²See table 2 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. ³For the current cycle, changes are based on the low (L) shown in table 2.

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 date¹ 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.

¹See appendix B for specific dates. ²See table 2 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.

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 ¹	Percent of reference peak prior to reference expansion beginning in--								
		July 1921	July 1924	Nov. 1927	Mar. 1933	June 1938	Oct. 1949	Aug. 1954	Apr. 1958	Index ²
NBER LEADING INDICATORS										
1. Average workweek of production workers, manufacturing.....	42	(NA)	95.6	88.1	72.6	102.8	103.3	94.8	101.0	101.8
2. Accession rate, manufacturing.....	41	39.7	29.3	37.1	52.3	104.0	117.5	63.7	103.6	105.4
3. Layoff rate, manufacturing (inverted).....	41	20.6	27.9	56.6	40.0	119.6	183.3	38.9	86.4	133.3
6. Value of manufacturers' new orders, durable goods industries.....	42	190.8	116.6	42.1	74.8	199.2	170.1	96.1	117.0	127.3
7. New private nonfarm dwelling units started..	42	164.9	166.2	43.8	67.8	139.2	124.7	82.0	116.4	110.9
9. Construction contracts awarded for commercial and industrial bldgs., floor space ² ...	41	42.1	98.4	32.3	37.8	204.7	128.1	111.4	104.0	135.8
13. Number of new business incorporations.....	41	74.5	102.5	99.4	63.8	60.0	120.0	130.2	131.9	103.2
14. Current liabilities of bus. failures (inv.)..	42	17.3	110.2	65.9	(NA)	118.6	98.9	59.2	67.3	118.8
16. Corporate profits after taxes (Q).....	39	78.0	75.0	5.7	47.1	218.6	95.5	103.6	97.3	141.2
17. Price per unit of labor cost index.....	42	(NA)	(NA)	(NA)	(NA)	(NA)	97.0	95.3	101.4	102.0
19. Index of stock prices, 500 common stocks....	42	119.8	202.2	110.1	53.3	53.9	161.6	169.9	140.2	148.5
23. Index of industrial materials prices.....	42	70.3	82.8	56.1	79.0	107.1	80.6	97.0	98.6	101.5
24. Value of manufacturers' new orders, machinery and equipment industries.....	42	(NA)	(NA)	(NA)	(NA)	(NA)	171.3	111.1	114.7	128.
29. Index of new private housing units authorized by local building permits.....	42	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	118.5	12'
NBER ROUGHLY COINCIDENT INDICATORS										
41. Number of employees in nonagricultural establishments.....	42	84.2	92.2	79.1	91.3	118.9	111.7	102.1	102.9	106
43. Unemployment rate, total (inverted).....	42	(NA)	(NA)	(NA)	(NA)	(NA)	137.5	40.9	64.2	102
47. Index of industrial production.....	42	109.2	103.1	82.7	95.2	144.9	135.7	96.0	111.0	121
49. Gross national product in current dollars (Q)	39	(NA)	112.5	86.9	78.8	140.2	137.1	119.9	116.5	122.
50. Gross national product in 1954 dollars (Q)..	39	(NA)	114.6	98.9	98.1	(NA)	124.1	108.2	109.6	116.
51. Bank debits outside NYC, 343 centers.....	42	105.1	123.3	85.9	64.3	137.9	143.2	125.1	129.0	136.
52. Personal income.....	42	(NA)	114.5	89.6	78.6	141.2	134.2	121.4	119.7	122.
54. Sales of retail stores.....	42	106.3	108.8	89.2	86.8	129.5	127.4	116.2	110.1	120.
55. Index of wholesale prices, all commodities other than farm products and foods.....	42	65.1	86.6	76.1	87.3	108.4	107.7	109.0	101.1	100.
NBER LAGGING INDICATORS										
61. Business expenditures on new plant and equipment, total (Q): ³										
a.....	39	48.0	90.8	54.3	55.4	(NA)	125.1	128.9	91.9	119
b.....	45	54.8	100.2	41.4	64.7	(NA)	129.5	107.9	94.6	127
62. Index of labor cost per unit of output, total manufacturing.....	42	75.6	90.1	84.8	81.7	113.2	111.3	114.9	99.7	98
64. Manufacturers' inventories, book value.....	41	(NA)	(NA)	(NA)	83.4	(NA)	150.3	116.2	103.1	111
66. Consumer installment debt.....	41	(NA)	(NA)	(NA)	107.6	156.5	(NA)	153.4	128.2	137
67. Bank rates on short-term business loans, 19 cities (Q).....	39	77.7	87.7	93.3	55.4	(NA)	134.1	130.0	103.3	93

NOTE: For the expansions beginning in July 1921, July 1924, November 1927, August 1954, 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.

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

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

³Comparisons are made for this series on the basis of (a) the period 39 months after the February 1961 trough (actual expenditures) and (b) the period 45 months after the same period (anticipated expenditures for 4th quarter 1964).

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 ¹	Percent change from reference trough of expansion beginning in--								
		July 1921	July 1924	Nov. 1927	Mar. 1933	June 1938	Oct. 1949	Aug. 1954	Apr. 1958	Feb. 1961
NBER LEADING INDICATORS										
1. Average workweek of production workers, manufacturing.....	42	+5.2	+4.6	-10.3	+7.7	+17.8	+4.1	-2.8	+4.4	+3.3
2. Accession rate, manufacturing.....	41	(NA)	+36.5	-49.3	+27.9	+16.4	+32.3	-12.3	+12.9	-2.5
3. Layoff rate, manufacturing (inverted).....	41	(NA)	-9.9	-20.2	+8.3	+141.2	+173.3	-39.8	+45.5	+51.9
6. Value of manufacturers' new orders, durable goods industries.....	42	+170.4	+4.1	-57.9	(NA)	(NA)	+96.3	+7.3	+32.6	+36.0
7. New private nonfarm dwelling units started..	42	+68.5	+67.9	-57.9	(NA)	+48.2	-11.0	-29.9	+20.0	+11.3
9. Construction contracts awarded for commercial and industrial bldgs., floor space ² ...	41	+54.4	+41.7	-62.8	+215.9	(NA)	+48.5	+15.0	+32.4	+45.8
13. Number of new business incorporations.....	41	+2.9	+38.4	-4.2	-19.5	-30.3	+14.8	+10.3	+38.2	+11.0
14. Current liabilities of bus. failures (inv.)..	42	+2.8	+22.2	-28.4	(NA)	+61.3	-15.7	-37.8	-10.5	+21.5
16. Corporate profits after taxes (Q).....	39	(NA)	+39.3	-92.3	+33.3	(NA)	+22.2	+21.6	+28.7	+63.6
17. Price per unit of labor cost index.....	42	(NA)	(NA)	(NA)	(NA)	(NA)	-1.8	-2.9	+7.2	+4.0
19. Index of stock prices, 500 common stocks....	42	+62.0	+94.1	-16.0	+157.6	-14.2	+55.5	+34.3	+60.6	+31.9
23. Index of industrial materials prices.....	42	+68.0	-1.2	-42.4	+90.2	+58.3	+7.3	-3.0	+13.4	+6.4
4. Value of manufacturers' new orders, machinery and equipment industries.....	42	(NA)	(NA)	(NA)	(NA)	(NA)	+95.4	+19.3	+29.9	+35.9
Index of new private housing units authorized by local building permits.....	42	(NA)	(NA)	(NA)	(NA)	(NA)	-2.5	-34.6	+16.5	+26.1
NBER ROUGHLY COINCIDENT INDICATORS										
Number of employees in nonagricultural establishments.....	42	+22.3	+6.1	-17.6	+33.5	+32.7	+17.7	+5.7	+7.3	+10.1
Unemployment rate, total (inverted).....	42	(NA)	(NA)	(NA)	+90.5	(NA)	+187.3	-5.4	+13.0	+35.3
Index of industrial production.....	42	+59.8	+25.6	-12.1	+97.4	+112.1	+48.2	+5.5	+29.2	+28.9
Gross national product in current dollars (Q)	39	+25.3	+15.1	-13.4	+56.4	+59.2	+41.8	+22.2	+19.5	+23.4
Gross national product in 1954 dollars (Q)...	39	+26.0	+14.9	-3.3	+36.2	(NA)	+25.9	+11.5	+14.0	+18.3
Bank debits outside NYC, 343 centers.....	42	+35.6	+27.3	-21.0	+68.5	+65.1	+49.1	+23.2	+33.1	+33.7
Personal income.....	42	+37.8	+14.5	-11.2	+59.8	+58.5	+40.2	+21.7	+20.1	+21.6
Sales of retail stores.....	42	+13.3	+8.8	-10.8	+65.0	+58.9	+27.4	+17.0	+11.8	+23.1
Index of wholesale prices, all commodities other than farm products and foods.....	42	+3.0	-5.1	-18.3	+20.5	+14.8	+13.4	+9.9	+1.6	+0.1
NBER LAGGING INDICATORS										
Business expenditures on new plant and equipment, total (Q): ³										
a.....	39	+39.8	+30.2	-38.2	+223.1	(NA)	+56.3	+35.0	+14.4	+28.5
b.....	45	+59.5	+43.6	-52.9	+276.9	(NA)	+61.8	+13.0	+17.7	+36.3
Index of labor cost per unit of output, total manufacturing.....	42	-61.0	-12.3	-13.8	+11.4	+9.1	+15.7	+12.5	-6.2	-4.0
Manufacturers' inventories, book value.....	41	(NA)	(NA)	(NA)	+40.8	(NA)	+61.0	+24.3	+6.9	+12.5
Consumer installment debt.....	41	(NA)	(NA)	(NA)	+125.2	+67.8	+91.4	+48.4	+27.2	+33.4
Bank rates on short-term business loans, 19 cities (Q).....	39	-27.9	0.0	-3.1	-28.9	(NA)	+33.6	+36.2	+19.7	+0.4

NOTE: For the expansions beginning in July 1921, July 1924, November 1927, August 1954, 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.

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

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

³Comparisons are made for this series on the basis of (a) the period 39 months after the February 1961 trough (actual expenditures) and (b) the period 45 months after the same period (anticipated expenditures for 4th quarter 1964).

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 ¹	July 1921	July 1924	Nov. 1927	Mar. 1933	June 1938	Oct. 1949	Aug. 1954	Apr. 1958	Feb. 1961
		Percent of specific peak prior to reference expansion beginning in year shown								
NBER LEADING INDICATORS										
1. Average workweek of production workers, manufacturing.....	44	(NA)	*97.8	*100.0	69.1	100.5	(NSC)	*99.8	*99.0	100.2
9. Construction contracts awarded for commercial and industrial bldgs., floor space ² ...	38	*45.2	*114.6	*108.2	24.6	183.9	47.4	(NSC)	92.9	³ 139.0
13. Number of new business incorporations.....	42	*86.3	*106.8	*110.5	*70.4	37.7	68.5	(NSC)	*138.1	96.2
17. Price per unit of labor cost index.....	42	(NA)	(NA)	(NA)	(NA)	(NA)	*107.2	*90.3	*101.0	99.2
19. Index of stock prices, 500 common stocks....	46	*99.2	170.0	(NSC)	47.5	47.8	*155.6	*186.3	*122.5	137.3
23. Index of industrial materials prices.....	44	*71.3	*100.8	*76.6	75.6	105.0	*135.1	*65.1	*92.9	99.8
24. Value of manufacturers' new orders, machinery and equipment industries.....	45	(NA)	(NA)	(NA)	(NA)	(NA)	*211.6	*106.2	*99.2	126.5
29. Index of new private housing units authorized by local building permits.....	44	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	*96.5	94.6
NBER ROUGHLY COINCIDENT INDICATORS										
41. Number of employees in nonagricultural establishments.....	42	*91.3	*96.6	*105.6	91.3	118.4	111.6	*105.4	*103.0	107.7
43. Unemployment rate, total (inverted).....	39	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	*67.5	*78.2	96.
47. Index of industrial production.....	42	*112.3	*108.2	*116.2	82.8	143.5	133.5	*109.2	*109.0	119
49. Gross national product in current dollars(Q)	39	(NA)	(NSC)	(NSC)	78.8	133.5	130.5	*121.6	*112.4	127
50. Gross national product in 1954 dollars (Q)..	39	(NA)	(NSC)	(NSC)	88.3	(NA)	118.6	*110.1	*107.6	11
52. Personal income.....	44	(NA)	*111.1	*112.9	81.0	141.3	135.0	*122.6	119.4	³ 12
53. Labor income in mining, mfg., and construc..	44	(NA)	(NA)	(NA)	76.9	171.0	146.9	*116.1	*108.3	11
54. Sales of retail stores.....	40	102.9	(NSC)	(NSC)	87.2	132.0	(NSC)	114.7	*109.4	11
Percent change from specific trough related to reference expansion beginning in year shown										
NBER LEADING INDICATORS										
1. Average workweek of production workers, manufacturing.....	44	*+15.4	*+7.9	*+4.5	+2.2	+20.5	+6.5	*+4.1	*+5.2	+6
9. Construction contracts awarded for commercial and industrial bldgs., floor space ² ...	38	*+118.5	*+82.6	*+40.1	+154.4	(NA)	+52.1	(NSC)	+35.9	³ +49.
13. Number of new business incorporations.....	42	*+23.6	*+42.9	*+20.5	*+12.8	-52.8	+15.9	(NSC)	*+51.7	+12.
17. Price per unit of labor cost index.....	42	(NA)	(NA)	(NA)	(NA)	(NA)	*+15.2	*+6.8	*+9.4	+4.
19. Index of stock prices, 500 common stocks....	46	*+46.2	+99.6	(NSC)	+211.9	-12.5	*+87.4	*+109.6	*+48.1	+52
23. Index of industrial materials prices.....	44	*+75.0	*+36.7	*+7.3	+103.3	+62.5	*+100.3	*+24.7	*+17.4	+9
24. Value of manufacturers' new orders, machinery and equipment industries.....	45	(NA)	(NA)	(NA)	(NA)	(NA)	*+180.1	*+89.9	*+36.7	+36
29. Index of new private housing units authorized by local building permits.....	44	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	*+56.3	+26
NBER ROUGHLY COINCIDENT INDICATORS										
41. Number of employees in nonagricultural establishments.....	42	*+32.6	*+12.0	*+11.5	+33.5	+32.7	+17.7	*+9.1	*+7.6	+10
43. Unemployment rate, total (inverted).....	39	(NA)	(NA)	(NA)	+90.1	(NA)	+169.6	*+61.9	*+54.2	+39
47. Index of industrial production.....	42	*+66.1	*+31.7	*+24.9	+77.5	+112.2	+48.2	*+21.3	*+27.2	+28
49. Gross national product in current dollars(Q)	39	(NA)	(NSC)	(NSC)	+56.4	+59.2	+35.3	*+24.9	*+16.4	+23
50. Gross national product in 1954 dollars (Q)..	39	(NA)	(NSC)	(NSC)	+31.1	(NA)	+21.5	*+14.3	*+12.5	+18
52. Personal income.....	44	*+32.8	*+15.3	*+15.9	+64.7	+61.7	+41.6	*+24.2	+20.8	³ +22.
53. Labor income in mining, mfg., and construc..	44	(NA)	(NA)	(NA)	+116.2	+133.8	+68.1	*+25.6	*+17.6	+23.
54. Sales of retail stores.....	40	+20.7	(NSC)	(NSC)	+70.0	+63.4	(NSC)	+20.6	*+13.7	+24.

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.

¹Based 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 2. The number of months is the same for each expansion except those indicated by an asterisk (*). Specific trough dates are shown in appendix B.

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

³Since no specific trough or peak has been designated, figures are based on the low (L) shown in table 2 and the high preceding that low.

Technical Papers and Background Materials

Series 54, Sales of Retail Stores: Descriptions and Procedures

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INTRODUCTION

The monthly volume of retail sales is regarded by the business analyst as a significant indicator of current economic conditions. Retail sales absorb a substantial portion of the disposable income available to the American consumer. The amount of such sales (in total and by the 24 kinds of retail business for which these figures are compiled) is of vital interest to all business firms involved in the production and distribution of these retailed products.

Retail sales data are available on a monthly basis from 1935 to date. During the post-World War II period, this monthly series exhibited a pattern which coincided with other direct measures of aggregate economic activity whose movements are used to define the business cycle. However, this series was little affected by the 1945 recession and levelled off rather than declined during the recession of 1948-49. Its timing at other business cycle turning points is presented in the following table showing leads (-) and lags (+) in retail sales at business cycle turning points since 1935:

Business cycle peak month	Lead (-) or lag (+) at peak month
January 1937.....	+4
February 1945.....	No specific cycle
November 1948.....	No specific cycle
July 1953.....	-4
July 1957.....	+1
July 1960.....	-1
Business cycle trough month	Lead (-) or lag (+) at trough month
June 1938.....	-1
October 1945.....	No specific cycle
October 1949.....	No specific cycle
August 1954.....	-7
April 1958.....	-1
February 1961.....	+2

When using retail store sales as an indicator of current business conditions, we must consider not only its past cyclical record at peaks and troughs but also the degree to which the current month-to-month changes

may be reflecting the underlying cyclical movements as distinguished from erratic or irregular movements. In addition, it is useful to consider in some detail the adjustments made to the unadjusted data to arrive at the seasonally adjusted series. And, of course, what constitutes a retail transaction, how the unadjusted data are compiled, and to what extent the data adequately represent all retail activities must also be considered.

DIFFICULTIES IN APPRAISING CURRENT MONTH-TO-MONTH CHANGES

Month-to-month changes in seasonally adjusted retail sales often consist largely of erratic movements that obscure underlying cyclical movements. However, over longer spans cyclical movements cumulate and dominate the erratic or irregular movements which tend to offset one another. (See "Sales of retail stores," chart 1, page 15, *Business Cycle Developments*.) "MCD" (months for cyclical dominance) thus provides an estimate of the appropriate time span over which to observe cyclical movements in retail sales. For the period 1953-63, MCD for the retail sales series is "2", indicating that changes over spans of 2 months or longer usually reflect cyclical movements in the series, while changes over 1-month spans tend to be dominated by the irregular movements.

Other conditions also cause difficulty in evaluating current month-to-month changes in the retail sales series. Since monthly seasonal factors for the current year are preliminary, and because advance reporting estimates are used for the current month (see the description below on collection of data), the retail sales estimates for the most recent months tend to be even more irregular than the historical series, which is based upon final seasonal factors and final estimates of unadjusted retail sales. Because of these conditions, the significance of changes over recent 2-month spans

NOTE: Several people have provided the authors with valuable assistance. This paper was written at the Bureau of the Census under the direction of Julius Shiskin. Gerald Donahoe made a major contribution to the new Census Bureau seasonal adjustment of retail sales and assisted in preparing this paper. Murray Dessel reviewed the paper. Geraldine Censky and Marie Wann provided editorial review.

may also tend to be obscured by the irregular component. For purposes of current analysis, therefore, it is often necessary to use changes over 3-month spans to sufficiently reduce the effects of the irregular component.

More details concerning MCD are given in BCD, appendix C, and in reference 3. (See references at end of this paper.)

SEASONAL AND TRADING-DAY ADJUSTMENTS

Seasonally adjusted monthly data for total retail store sales are obtained by summing the estimated sales of 24 different kinds of retail business, each of which has been individually adjusted for trading-day and seasonal fluctuations. Motor vehicle sales are also adjusted for variation in the annual introduction date of new models. Similarly, some of the other kinds of retail business have been adjusted for variation in the dates of Easter, Labor Day, and Thanksgiving. These 24 kinds of business are shown in Business Cycle Developments, table 6, direction of change for sales of retail stores.

Monthly estimates of seasonally adjusted total retail sales and sales by kind of business were recently revised for the period 1953-63 (5).² The revised seasonally adjusted total retail sales data for the years 1960-63 was included in Business Cycle Developments, beginning with the September 1963 issue. The revised data for 1953-60 was shown in appendix F of the October 1963 issue. The unadjusted monthly data, trading-day factors, seasonal factors, and seasonally adjusted data for 1953-63 are shown in the table, page 64. Types of variations for which the retail sales series have been adjusted are described below.

Month-to-month changes in unadjusted retail sales are greatly affected by seasonal influences that recur with approximately the same impact and timing every year. In many kinds of retail business the most important seasonal influence is the effect of Christmas upon sales in December. For some other kinds of business, the seasonal sales pattern arises not so much from customs or institutions, such as Christmas, but more directly from the effects of climate in various parts of the United States. Such kinds of business include gasoline service stations, tire and battery dealers, farm equipment dealers, and lumber and building materials dealers whose sales increase each spring and in early summer and then decrease in the fall.

Seasonal variations were estimated with the X-9 version of the Census Method II seasonal adjustment program (see BCD technical paper No. 1 for a detailed description).

In addition to the effect of seasonal influences that recur in the same month every year, there are two other types of variation that are linked to the calendar. One of these, trading-day variation, arises because of different combinations of the days of the week in the same month in different years. For example, consider the month of May: In 1963 there were five Wednesdays, Thursdays, and Fridays and four Saturdays, Sundays, Mondays, and Tuesdays while in 1962 there were five

Tuesdays, Wednesdays, and Thursdays and four Fridays, Saturdays, Sundays, and Mondays. If more sales are made on Fridays than on Tuesdays, May sales would tend to be higher in 1963 than in 1962 when the reverse occurred, other things being equal. Trading-day variation has been estimated from information contained within the monthly series using techniques developed by the Organization for Economic Cooperation and Development (1) and by the Bureau of the Census (6).

The second type of calendar variation arises from holidays, where the effect of the holiday upon monthly sales may shift between adjacent months, depending upon the date of the holiday. A prime example is the increase in sales of apparel associated with Easter. Easter variation has also been estimated from information contained within the data (1). Beginning with December 1963 data, adjustments are also made for variation in sales in August and September arising from the date of Labor Day and for variation in sales in November and December arising from the date of Thanksgiving.

Besides the above three types of variation related to the calendar (i.e., seasonal, trading-day, and holidays) another type of variation affects monthly retail sales patterns; namely, the effect of the date fixed to introduce new-model automobiles. Although the introduction of new models might be termed a custom or institution, the variation it causes in sales cannot be related to the calendar as simply as Christmas or Easter, since each manufacturer can and does alter from year to year, such variables as the date of introduction and the extent of changes in style and mechanical features. In addition, the manufacturer attempts to anticipate the market for old models during changeover period. To minimize the effect on estimate of the underlying cyclical movement, an attempt is made to adjust the motor vehicle monthly retail sales series for the timing of new-model introduction.

Variation related to new-model introductions was estimated by adapting the X-9 program. First, the series for motor vehicle retail sales was rearranged so that low points associated with the new-model introductions occurred at the same point for each year. The X-9 program was used to estimate recurrent variation in this specially arranged series. Next the series was recast into its original order and the X-9 program was applied again, this time to estimate recurrent variation related to the calendar. The final seasonal adjustment factor was then taken to be a combination of the model-year and calendar-year factors isolated by the X-9 adjustments.

Summary measures describing the elements making up the month-to-month variations in total retail sales are presented here for the period 1953-63. The average month-to-month percent changes (without regard to sign) are as follows:

Unadjusted series, \bar{O}	27.40
Trading-day adjusted series.....	6.92
Trading-day and seasonally adjusted series, \bar{CI}	0.80

²After adjusting selected kinds of business for Easter variation. Before such adjustments were made, the average change in the unadjusted series was 7.50 per cent.

¹Numbers in parenthesis indicate references cited. See references at end of paper.

Trading-day component.....	1.96
Seasonal component, \bar{S}^3	6.75
Irregular component, \bar{I}	0.65
Cyclical component, \bar{C}	0.43

Details concerning \bar{C} , \bar{I} , and \bar{I} and their relation to MCD are presented, for retail sales and other indicators, in appendix C of Business Cycle Developments.

Note that the average change in the unadjusted series is 7.40 percent. After removing the trading-day and seasonal variation, the average month-to-month change is reduced to 0.80 percent. If smoothing techniques (such as MCD described above) are used, it is possible to further disentangle the series by decomposing the seasonally adjusted series into its cyclical and irregular components. When the cyclical component of the series finally emerges, it has an average month-to-month percent change of only 0.43 percent.

The summary measures of month-to-month changes show that seasonal and trading day variations are very large relative to the month-to-month cyclical changes in retail sales. Removal of these variations greatly facilitates cyclical analysis, since the underlying cyclical changes can then be detected over 2- or 3-month spans using MCD techniques. If these variations are not removed, cyclical changes can not be detected in spans less than 12 months (comparisons for same month r ago). Even for 12-month spans, trading-day and ay variations will at times continue to obscure yclical movements.

In addition to the variations described above for adjustments are made, monthly data on retail may also be affected by extreme or unusual er conditions. The seasonal adjustment process adjust for the fact that, on average, February s volume will typically differ from that of March July. The process does not take into account, wever, the effects of atypical weather conditions in particular month (such as an extremely heavy snow-orm in February, or unseasonably hot or cold weather uly). Relationships between retail sales and extreme factors are also being investigated (4). Results necessarily based on the limited broad national monthly data available, reveal statistically significant correlations between unusual weather and retail sales for only a few months of the year. Two relatively new retail series—one providing national weekly statistics and the second, monthly geographic area sales data—may prove useful in future work in this field. t present, to the extent they exist, the effects of pical weather have not been eliminated from the sonally adjusted series and contribute, therefore, the erratic nature of the month-to-month changes etail store sales.

DEVELOPMENT OF MONTHLY RETAIL SALES DATA

Collection of Data

Statistics on sales of retail stores, shown in s Business Cycle Developments for 1951 to date, are n estimates derived by the Bureau of the Census s monthly sample survey of retail establish-

th-of-month variation is included in the seasonal nt.

ments of all sizes and types throughout the country. Prior to 1951, the series was derived by applying monthly trend estimates, compiled from reports by a small fixed sample of retail stores canvassed by the Census Bureau, to benchmark quarterly estimates of retail sales developed on the basis of reported changes in sales tax collections, Internal Revenue Service income-tax data compilations, and other sources (2).

In the current sample survey, business establishments are classified as retail if they are primarily engaged in selling merchandise for personal, household, or farm consumption. They are further classified by kind of retail business, on the basis of principal commodities sold. Retail stores in the sample are classified in accordance with the descriptions shown in the 1957 Standard Industrial Classification Manual, issued by the U.S. Bureau of the Budget.

The classification unit is the individual establishment at a separate physical location, and not the entire company or legal entity which owns or operates the establishment. Thus, only those establishments of a given firm which are classified as retail are included in the survey. Each of these is assigned to its appropriate kind of retail business classification.

Nature of the Sample

The Census Bureau's current sample of retail establishments, on which the monthly sales estimates are based, is composed as follows:

1. All large retail organizations which, in the 1958 Census of Business, were reported as operating 11 or more retail stores in the United States are included each month. These organizations report the combined sales of all their retail stores in the United States. For those firms with stores in more than one kind of retail business, the reported figures are prorated on the basis of the percentage distribution of the firm's total sales by the different kinds of business reported in the 1958 Census of Business. (For purposes of developing estimates by geographic area, figures are also obtained each month for a sample of individual establishments of these firms.)
2. All other large retail stores (i.e., those with an annual sales volume in excess of \$5 million in 1954) are included each month, regardless of their location in the United States.
3. The remaining retail stores are represented by stores located in 233 Census sample areas. These Census sample areas, generally consisting of combinations of two or three counties, were chosen randomly (with known probability of selection), one from each of 233 primary strata. The sample of establishments within these areas consists of the following:
 - (a) All stores located anywhere in the Census sample areas which meet certain minimum annual sales criteria. These stores report in the survey each month.
 - (b) All stores located in a sample of land segments called "area segments" (with known prob-

Technical Papers and Background Materials

SERIES 54, SALES OF RETAIL STORES, 1953 TO 1963

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Unadjusted data (million dollars)												
1953.....	12,903	12,198	13,807	14,016	14,520	14,443	14,250	14,044	13,952	14,820	13,828	16,314
1954.....	12,213	11,947	13,409	14,197	14,116	14,533	14,260	13,770	14,013	14,538	14,401	17,738
1955.....	13,148	12,642	14,573	15,490	15,333	15,600	15,261	15,481	15,765	15,684	15,752	19,124
1956.....	13,727	13,551	15,719	14,889	16,109	16,579	15,382	16,187	15,583	16,130	16,493	19,380
1957.....	14,741	14,058	15,789	16,442	17,205	17,114	16,864	17,490	16,373	16,949	17,133	19,844
1958.....	15,286	13,783	15,549	16,273	17,364	16,603	16,596	17,000	16,326	17,360	17,039	21,174
1959.....	16,225	14,961	17,190	17,589	18,600	18,708	18,332	18,054	17,570	19,095	17,635	21,454
1960.....	16,312	15,829	17,419	19,200	18,548	18,918	18,066	18,153	17,898	18,648	18,385	22,153
1961.....	15,803	15,064	17,926	17,389	18,522	18,896	17,912	18,315	18,149	18,751	19,215	22,869
1962.....	17,007	16,042	19,036	19,251	20,226	20,254	19,138	19,920	18,863	20,576	20,911	24,127
1963.....	18,261	17,087	19,653	20,518	21,228	20,737	20,540	21,018	19,267	21,528	21,494	25,104
Trading-day adjustment factors (percent)												
1953.....	101.9	99.1	98.0	100.0	100.1	99.8	101.5	98.6	99.8	101.9	98.1	99.8
1954.....	100.1	99.1	99.8	101.5	98.6	99.8	101.9	98.0	100.0	100.1	99.8	101.5
1955.....	98.6	99.1	99.8	102.0	98.0	100.0	100.1	99.8	101.5	98.6	99.8	101.9
1956.....	98.0	102.7	101.9	98.1	99.8	102.0	98.0	101.5	98.5	99.8	101.5	98.6
1957.....	99.8	99.1	100.1	99.8	101.5	98.5	99.8	101.9	98.1	99.8	102.0	98.0
1958.....	101.5	99.1	98.6	99.8	101.9	98.1	99.8	100.1	99.8	101.5	98.5	99.8
1959.....	101.9	99.1	98.0	100.0	100.1	99.8	101.5	98.6	99.8	101.9	98.1	99.8
1960.....	100.1	102.6	99.8	102.0	98.0	100.0	100.1	99.8	101.5	98.6	99.8	101.9
1961.....	98.0	99.1	101.5	98.5	99.8	101.5	98.6	99.8	102.0	98.0	100.0	100.1
1962.....	99.8	99.1	101.9	98.1	99.8	102.0	98.0	101.5	98.5	99.8	101.5	98.6
1963.....	99.8	99.1	100.1	99.8	101.5	98.5	99.8	101.9	98.1	99.8	102.0	98.6
Seasonal adjustment factors (percent)												
1953.....	88.2	85.9	97.7	98.6	102.4	102.3	99.6	101.6	99.8	103.4	101.7	111
1954.....	89.0	85.8	95.8	100.0	102.6	102.0	100.0	100.4	99.6	103.1	100.2	117
1955.....	90.3	85.6	97.3	99.5	102.5	103.1	99.0	100.6	99.1	101.2	100.8	118
1956.....	90.4	85.8	98.5	97.8	102.3	102.9	99.7	100.8	99.5	101.4	100.9	117
1957.....	90.5	85.3	95.9	99.9	102.5	103.3	100.6	101.2	99.1	101.2	100.6	121
1958.....	90.4	84.9	96.6	98.6	103.2	102.7	99.3	100.8	97.7	102.6	101.5	120
1959.....	90.4	85.0	98.2	98.7	103.3	103.4	99.5	100.3	97.2	102.9	101.7	121.5
1960.....	90.0	84.8	96.0	101.4	103.3	103.3	99.6	100.0	96.8	103.4	101.9	120.7
1961.....	89.9	84.6	98.3	99.1	103.1	102.9	99.6	99.9	96.9	103.5	102.3	121.0
1962.....	89.7	84.6	96.7	101.2	103.5	102.8	99.3	99.8	96.5	103.9	102.4	120.8
1963.....	89.8	84.6	96.5	101.4	103.5	102.8	99.3	99.8	96.2	104.1	102.5	121.9
Seasonally and trading-day adjusted data (million dollars)												
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.....	13,097	18,200	18,178	18,557	18,320	18,312	18,113	18,195	18,207	18,298	18,080	18,008
1961.....	17,942	17,965	17,971	17,811	18,003	18,098	18,234	18,373	18,371	18,494	18,775	18,876
1962.....	18,990	19,139	19,320	19,389	19,585	19,311	19,658	19,671	19,844	19,837	20,112	20,25
1963.....	20,387	20,374	20,350	20,276	20,200	20,486	20,719	20,666	20,426	20,716	20,558	21,07

75 percent for the advance subsample estimates. To the extent that the retail sales experience of nonrespondents differs from those reporting in the survey, the estimates derived may be subject to some bias.

3. Biases may also arise through the use of estimates by respondents when retail sales totals derived directly from their records are not available. This appears to be primarily a reporting problem in developing advance estimates, since these are based on data collected shortly after the end of the month, at a time when store records relating to the month's sales may not have been fully summarized.

4. The month-to-month ratio of change in retail sales used in developing the advance estimate is based on the experience of a fixed panel of respondents. It excludes the experience of retail stores opened after the advance subsample was selected (except for large retail firms reporting organizational sales totals). The subsample panel used for May 1962 through January 1964 was selected from retail stores in business during the period, February-March 1961. A new panel, selected from stores in business during the period, July-August 1963, has been used starting with February 1964.

5. The full-sample estimates are believed to have a small upward bias since, in canvassing the sample area segments, field interviewers may fail to establish the fact that stores closed or inactive during the current month may have had some activity in the previous month. This results in a small overstatement (estimated at slightly above 0.1 percent in recent months) in the current-to-previous-month trend used in developing the ratio estimate component of the composite estimate. This overstatement is cumulative; however, as a result of the composite estimating procedure, this accumulation is limited to a constant upward bias of approximately 0.4 percent for the preliminary sales dollar volume level estimates and about 0.3 percent for the final level estimates. The month-to-month change based on the two "final" estimates is not affected by this

bias; a slight bias (about 0.1 percent) exists only in the percentage change between a preliminary estimate month (the second most recent month in this publication) and a final-estimate month.

Differences observed among the three successive monthly estimates are believed to be due largely to these limitations in data collection and estimation procedures. For the past 12 months, the difference, for all retail stores combined has averaged about 0.2 percent between the advance subsample and preliminary full-sample estimates, and about 0.2 percent between the preliminary and final estimates. Revisions in the successive estimates have been greater for individual kind-of-business categories.

REFERENCES

1. Marris, Stephen N., "The Measurement of Calendar Variation," Seasonal Adjustment on Electronic Computers, OECD, Paris, 1960, pp. 343-359.
2. Moore, Geoffrey H., editor, Business Cycle Indicators, volume II, Princeton University Press, 1961 p. 49.
3. Shiskin, Julius, "Electronic Computers and Business Indicators," Journal of Business, October 1957 (Republished as Occasional Paper 57 by the National Bureau of Economic Research, 1957).
4. Shor, Max, "Exploratory Work in Measuring the Effect of Weather Factors on Retail Sales," 1963 Proceedings of the Business and Economics Section of the American Statistical Association.
5. U.S. Bureau of the Census, Monthly Retail Report. The revised seasonally adjusted report was first included in the July 1963 issue.
6. Young, Allan, "Census Trading-Day Adjustment Method" Business Cycle Developments, May 1964, pp. 59-64.

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.....	<u>7</u>	<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>	<u>37</u>	<u>88</u>	<u>45</u>
October 1949	July 1953.....	11	45	48	<u>56</u>
August 1954	July 1957.....	<u>13</u>	35	<u>58</u>	48
April 1958	May 1960.....	<u>9</u>	25	<u>44</u>	34
February 1961		9		34	
Average, all cycles:					
26 cycles, 1854-1961.....		19	30	49	¹ 49
10 cycles, 1919-1961.....		15	35	50	² 54
4 cycles, 1945-1961.....		10	36	46	³ 46
Average, peacetime cycles:					
22 cycles, 1854-1961.....		20	26	45	⁴ 46
8 cycles, 1919-1961.....		16	28	45	⁵ 48
3 cycles, 1945-1961.....		10	32	42	⁶ 42

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.

¹25 cycles, 1857-1960. ⁴21 cycles, 1857-1960.
²9 cycles, 1920-1960. ⁵7 cycles, 1920-1960.
³4 cycles, 1945-1960. ⁶3 cycles, 1945-1960.

Source: National Bureau of Economic Research.

Appendix D.--CURRENT SEASONAL ADJUSTMENT FACTORS FOR BUSINESS CYCLE SERIES ADJUSTED BY BUREAU OF THE CENSUS OR NBER
(NOVEMBER 1963 TO DECEMBER 1964)

Series	1963		1964											
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
4. Temporary layoff, all industries.	86.7	95.9	144.5	107.7	98.9	86.6	84.0	76.7	98.3	146.0	82.4	90.7	86.6	95.2
5. Avg. weekly initial claims, State unemployment insurance....	103.1	133.7	142.1	109.5	94.4	93.8	83.0	82.9	104.7	85.5	78.7	89.0	103.0	134.2
13. New business incorporations ¹	82.3	97.5	116.3	96.3	110.0	106.9	102.9	106.7	108.2	90.5	92.5	99.0	82.3	104.2
14. Liabilities of business failures.	102.5	78.5	110.3	101.7	103.5	114.6	103.3	94.4	82.7	124.9	91.0	92.0	102.6	77.0
15. Large business failures.....	94.3	85.7	111.7	112.8	115.0	109.1	99.7	104.7	87.6	95.9	90.3	93.5	94.3	85.3
17. Ratio, price to unit labor cost, manufacturing.....	101.1	97.7	98.0	99.4	100.0	100.3	100.8	102.3	96.2	99.1	101.7	103.3	101.1	97.7
18. Profits per dol. of sales, mfg. ² .	100.8	...	...	94.7	...	...	106.2	...	...	97.6	...	...	100.8	...
30. Nonagri. placements, all indus. ¹ .	93.1	81.1	82.6	77.4	92.0	103.6	107.4	110.8	105.0	111.0	124.4	112.6	93.3	82.2
37. Purchased materials, percent re- porting higher inventories.....	95.1	96.7	109.6	107.4	109.3	109.1	106.3	96.7	92.8	91.6	93.7	92.1	95.1	96.6
55. Wholesale prices, except farm products and foods.....	100.0	100.2	100.2	100.1	100.1	100.0	100.0	99.9	99.9	99.9	99.9	100.1	100.0	100.2
62. Labor cost per unit of output, manufacturing.....	98.9	102.3	102.3	100.6	99.9	99.4	99.0	97.6	103.9	100.8	97.9	96.9	98.9	102..
81. Index of consumer prices.....	100.2	99.9	99.9	100.0	100.0	99.9	99.8	99.9	100.2	100.0	100.2	100.2	100.2	99.1
82. Federal cash payments to public..	103.1	98.5	91.9	96.2	93.7	99.0	103.7	102.9	96.6	115.0	93.8	105.7	102.9	98.
83. Federal cash receipts from pub...	101.9	106.4	69.3	112.1	126.6	79.0	121.6	149.8	48.9	115.1	123.5	46.1	102.0	106.
90. Defense Department obligations-- procurement.....	92.8	102.7	85.8	85.7	102.5	79.7	72.3	207.0	89.6	89.2	97.1	95.8	92.9	102.7
91. Defense Dept. oblig., total.....	90.3	99.6	92.2	85.7	108.0	94.6	86.2	147.1	101.1	94.3	98.1	103.6	90.3	99.6
92. Military contract awards in U.S..	84.8	94.5	91.5	83.3	124.8	84.0	89.6	197.9	69.9	88.0	99.0	93.9	84.8	94.5
112. Change, business loans ³	100.8	101.7	100.2	99.4	100.4	100.7	100.1	99.7	99.1	98.7	99.3	99.8	100.9	101.8
128. Japan, index of industrial pro- duction.....	99.0	102.0	94.7	100.9	108.4	100.3	100.5	99.4	99.1	96.8	99.1	100.3	99.0	102.0

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.

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

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

³Factors apply to total series before month-to-month changes are computed.

Appendix F.--HISTORICAL DATA FOR SELECTED SERIES

Each month historical data are presented for certain series that either have not been shown here previously or have been revised historically. The months of issue for series previously included in this appendix are given in the index. Current data are shown in tables 2, 4, and 5. Data are seasonally adjusted.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
86. Exports, excluding military aid shipments, total (Mil. dol.)												
1948.....	1,109.3	1,101.1	1,049.2	1,023.1	1,062.4	989.2	1,069.0	1,125.5	950.5	1,055.6	855.7	1,188.6
1949.....	1,190.4	1,072.2	1,094.6	1,084.8	1,046.5	1,077.4	976.2	976.8	907.2	905.7	868.0	857.8
1950.....	794.9	791.8	772.5	786.1	772.2	830.6	820.6	812.9	888.3	892.8	940.1	914.4
1951.....	969.9	1,022.7	1,079.7	1,255.7	1,133.0	1,131.2	1,233.1	1,234.0	1,233.0	1,101.3	1,273.7	1,309.2
1952.....	1,249.3	1,236.3	1,280.4	1,138.2	1,128.8	1,063.4	970.0	1,012.1	1,028.3	1,004.1	1,026.4	1,016.2
1953.....	1,047.4	986.6	1,006.8	1,017.1	1,009.1	995.8	1,018.4	1,033.5	1,110.6	974.8	1,044.4	1,050.3
1954.....	974.8	1,043.1	857.0	1,192.9	1,087.4	1,095.7	1,084.4	1,072.5	1,022.6	1,135.5	1,149.4	1,108.0
1955.....	1,176.6	1,199.1	1,156.7	1,119.1	1,131.8	1,164.5	1,240.2	1,210.7	1,202.3	1,274.1	1,217.9	1,224.4
1956.....	1,296.8	1,297.6	1,337.3	1,399.4	1,409.1	1,437.8	1,414.5	1,443.9	1,586.5	1,503.6	1,350.0	1,854.1
1957.....	1,657.4	1,599.4	1,878.6	1,733.9	1,547.3	1,690.1	1,608.2	1,610.1	1,582.0	1,549.8	1,533.2	1,506.7
1958.....	1,420.3	1,350.6	1,369.8	1,363.1	1,374.2	1,332.3	1,364.9	1,370.6	1,325.3	1,345.0	1,425.5	1,337.3
1959.....	1,318.5	1,292.1	1,300.9	1,296.8	1,326.6	1,345.9	1,394.6	1,429.2	1,498.8	1,335.2	1,380.7	1,497.2
1960.....	1,561.3	1,565.7	1,518.1	1,622.2	1,659.3	1,633.8	1,706.5	1,624.8	1,647.2	1,667.6	1,680.6	1,645.3
87. General imports, total (Mil. dol.)												
1948.....	526.4	589.0	581.6	510.0	589.6	619.7	609.4	625.6	596.4	620.4	555.0	676.5
1949.....	587.0	567.3	547.6	534.1	548.3	523.6	515.0	486.6	565.2	572.3	602.6	593.2
1950.....	592.5	606.3	576.9	605.8	636.4	684.1	787.2	821.5	955.4	911.6	876.1	890.8
.....	938.4	926.6	996.8	1,005.0	985.4	966.7	939.7	885.2	837.6	799.3	844.7	812.0
.....	856.1	881.1	903.8	869.1	838.9	882.2	845.5	897.0	915.7	898.6	904.8	978.8
.....	902.0	888.6	901.2	957.8	942.2	906.9	913.7	910.4	970.3	831.6	898.1	849.6
.....	855.7	845.7	752.2	919.1	852.1	928.5	855.7	852.1	815.0	812.9	836.4	889.3
.....	888.3	890.6	905.2	889.8	939.5	924.0	956.9	953.5	981.5	1,051.1	1,059.1	989.6
.....	1,047.1	1,057.1	1,035.8	1,013.5	1,035.1	1,067.8	1,066.6	1,066.2	1,170.5	1,056.8	977.2	1,071.0
.....	1,058.1	1,050.2	1,118.2	1,098.5	1,052.5	1,057.9	1,122.0	1,101.6	1,063.2	1,089.7	1,075.3	1,090.0
.....	1,054.5	1,016.4	1,050.7	1,045.8	1,053.8	1,041.6	1,039.6	1,050.6	1,075.9	1,098.2	1,164.7	1,138.0
.....	1,164.6	1,194.5	1,213.5	1,210.3	1,312.9	1,311.7	1,251.1	1,298.3	1,407.9	1,200.5	1,298.6	1,333.2
.....	1,246.3	1,348.0	1,289.8	1,348.6	1,269.0	1,276.5	1,270.7	1,255.8	1,220.6	1,206.0	1,161.7	1,124.8
88. Merchandise trade balance--series 86 minus series 87 (Mil. dol.)												
1948.....	+582.9	+512.1	+467.6	+513.1	+472.8	+369.5	+459.6	+499.9	+354.1	+435.2	+300.7	+512.1
1949.....	+603.4	+504.9	+547.0	+550.7	+498.2	+553.8	+461.2	+490.2	+342.0	+333.4	+265.4	+264.6
1950.....	+202.4	+185.5	+195.6	+180.3	+135.8	+146.5	+33.4	-8.6	-67.1	-18.8	+64.0	+23.6
1951.....	+31.5	+96.1	+82.9	+250.7	+147.6	+164.5	+293.4	+348.8	+395.4	+302.0	+429.0	+497.2
1952.....	+393.2	+355.2	+376.6	+269.1	+289.9	+181.2	+124.5	+115.1	+112.6	+105.5	+121.6	+37.4
1953.....	+145.4	+80.0	+105.6	+59.3	+66.9	+88.9	+104.7	+123.1	+140.3	+143.2	+146.3	+200.7
1954.....	+119.1	+197.4	+104.8	+273.8	+235.3	+167.2	+228.7	+220.4	+207.6	+322.6	+313.0	+218.7
1955.....	+288.3	+308.5	+251.5	+229.3	+192.3	+240.5	+283.3	+257.2	+220.8	+223.0	+158.8	+234.8
1956.....	+249.7	+240.5	+301.5	+385.9	+374.0	+370.0	+347.9	+377.7	+466.0	+446.8	+372.8	+783.1
1957.....	+599.3	+549.2	+760.4	+635.4	+494.8	+632.2	+486.2	+508.5	+518.8	+460.1	+457.9	+416.7
1958.....	+365.8	+334.2	+319.1	+317.3	+320.4	+290.7	+325.3	+320.0	+249.4	+246.8	+260.8	+199.3
1959.....	+153.9	+97.6	+87.4	+86.5	+13.7	+34.2	+143.5	+130.9	+90.9	+134.7	+82.1	+164.0
1960.....	+315.0	+217.7	+228.3	+273.6	+390.3	+357.3	+435.8	+369.0	+426.6	+461.6	+518.9	+520.5
89. Excess of receipts (+) or payments (-) in U. S. balance of payments (Mil. dol.)												
.....
.....
.....	...	-396	...	...	-741	...	...	-1,623	...	...	-842	...
.....	...	-843	...	...	-137	...	...	+355	...	...	+282	...
.....	...	+292	...	...	-183	...	...	-750	...	...	-451	...
.....	...	-529	...	...	-524	...	...	-695	...	...	-354	...
.....	...	-312	...	...	-249	...	...	-554	...	...	-401	...
.....	...	-90	...	...	-388	...	...	-333	...	...	-338	...
.....	...	-407	...	...	-143	...	...	-322	...	...	-96	...
.....	...	+511	...	...	-14	...	...	+452	...	...	-481	...
.....	...	-609	...	...	-927	...	...	-902	...	...	-1,039	...
.....	...	-951	...	...	-1,062	...	...	-1,191	...	...	-539	...
.....	...	-795	...	...	-850	...	...	-989	...	...	-1,247	...

Appendixes

Appendix F.--HISTORICAL DATA FOR SELECTED SERIES--Continued

Each month historical data are presented for certain series that either have not been shown here previously or have been revised historically. The months of issue for series previously included in this appendix are given in the index. Current data are shown in tables 2, 4, and 5. Data are seasonally adjusted.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
47. U. S. index of industrial production (1957-59=100)												
1948.....	68.0	68.1	67.4	67.4	68.8	69.4	69.5	69.3	68.7	69.2	68.4	67.9
1949.....	66.9	66.4	65.2	64.7	64.0	63.8	63.7	64.3	64.9	62.6	64.1	65.4
1950.....	66.5	66.7	69.0	71.2	72.9	75.1	77.5	80.0	79.4	80.0	79.8	81.2
1951.....	81.6	81.8	82.3	82.5	82.2	81.8	80.6	80.0	80.3	80.1	80.9	81.4
1952.....	82.2	82.7	82.9	82.2	81.4	80.7	79.1	84.4	87.4	88.3	90.2	90.7
1953.....	91.0	91.4	92.3	92.8	93.3	92.8	93.9	93.2	91.3	89.9	87.7	85.8
1954.....	85.2	85.1	84.5	84.5	85.3	85.7	85.4	85.4	86.0	86.3	87.4	88.9
1955.....	90.9	91.9	93.5	95.0	96.1	96.8	97.6	98.0	99.0	100.0	99.9	100.1
1956.....	99.8	99.2	98.8	100.2	99.6	99.3	95.1	99.7	101.2	101.6	101.5	102.2
1957.....	101.9	102.5	102.4	101.5	101.8	102.1	102.2	102.3	100.9	99.0	97.1	95.0
1958.....	92.6	90.1	88.5	87.8	89.5	92.3	94.0	95.8	96.2	96.8	99.8	100.4
1959.....	101.2	103.0	104.8	107.1	109.4	109.9	107.5	104.1	104.0	102.8	103.4	109.5
1960.....	111.7	111.0	110.5	109.7	109.9	109.6	109.1	108.7	107.8	107.0	105.4	103.6
90. Defense department obligations, procurement (Mil. dol.)												
1948.....	...	...	...	...	...	...	...	...	...	...	...	...
1949.....	...	...	...	...	...	...	...	...	...	...	...	...
1950.....	...	...	...	...	...	...	...	...	...	...	...	...
1951.....	...	...	...	...	...	...	...	...	...	...	...	...
1952.....	...	...	...	...	...	...	...	...	...	...	...	...
1953.....	...	...	...	...	...	...	470	172	200	206	304	...
1954.....	34	740	14	386	758	1,067	1,064	490	1,370	1,651	680	...
1955.....	320	625	514	861	405	305	474	-872	1,489	324	466	...
1956.....	1,278	781	1,739	1,118	1,158	1,767	1,735	2,424	1,250	1,051	1,196	...
1957.....	1,140	1,407	1,117	1,347	802	744	707	827	1,265	786	1,418	...
1958.....	1,637	1,232	1,669	1,619	2,042	1,580	1,404	891	1,121	2,291	1,238	...
1959.....	1,330	1,362	1,371	1,398	1,381	1,425	1,202	870	1,319	1,517	1,124	...
1960.....	937	1,104	1,020	983	1,488	1,397	2,204	1,256	1,256	945	1,468	...
91. Defense department obligations, total (Mil. dol.)												
1948.....	...	...	...	...	...	...	...	...	...	...	...	...
1949.....	...	...	...	...	...	...	...	...	...	...	...	...
1950.....	...	...	...	...	...	...	...	...	...	...	...	...
1951.....	...	...	...	...	...	...	...	...	...	...	...	...
1952.....	...	...	...	...	...	...	...	...	...	...	...	...
1953.....	...	...	...	...	...	...	2,689	2,579	2,150	2,247	2,298	1,180
1954.....	2,120	2,952	1,899	2,568	2,837	2,874	2,945	2,602	3,378	3,701	2,817	3,014
1955.....	2,442	2,812	2,613	3,180	2,449	2,366	2,379	1,145	3,522	2,376	2,591	3,254
1956.....	3,376	3,009	4,248	3,515	3,240	4,179	3,447	4,588	3,358	3,145	3,430	3,349
1957.....	3,325	3,594	3,254	3,543	3,020	2,745	3,017	2,915	3,184	2,855	3,499	3,406
1958.....	3,720	3,334	4,091	4,078	4,251	4,279	3,818	3,355	3,541	4,596	3,481	3,816
1959.....	3,538	3,601	3,739	3,620	3,569	3,863	3,729	3,263	3,906	3,802	3,608	3,160
1960.....	3,234	3,439	3,368	3,362	3,677	3,771	5,305	3,824	3,999	3,357	4,109	3,587
92. Military prime contract awards to U. S. business firms (Mil. dol.)												
1948.....	...	...	...	...	...	...	...	...	...	...	...	...
1949.....	...	...	...	...	...	...	...	...	...	...	...	...
1950.....	...	...	...	...	...	...	...	...	...	...	...	...
1951.....	3,976	3,493	3,001	2,892	3,760	2,759	4,097	4,241	2,333	2,823	3,462	...
1952.....	2,528	5,479	2,959	2,088	3,059	4,292	1,158	1,002	2,116	2,143	3,295	...
1953.....	3,682	2,295	2,381	2,462	2,038	2,042	2,035	1,089	1,004	959	265	...
1954.....	616	564	826	1,068	1,326	1,116	886	767	2,454	2,271	481	...
1955.....	1,049	1,306	1,028	1,468	841	1,287	997	1,357	691	1,127	1,633	...
1956.....	1,349	1,480	1,471	1,026	1,426	1,661	1,217	2,269	2,469	1,959	2,354	...
1957.....	1,600	2,007	1,458	1,723	627	900	1,622	1,417	1,497	1,593	2,140	...
1958.....	1,938	1,227	2,063	1,608	2,457	1,867	1,560	1,686	2,561	1,906	1,936	...
1959.....	1,465	1,916	1,772	1,762	1,513	1,905	2,249	1,986	1,931	2,123	2,289	...
1960.....	1,770	1,740	1,738	1,368	1,811	1,687	2,231	2,302	2,361	1,477	2,127	...

Index

SERIES INDEX TO CHARTS, TABLES, AND APPENDIXES (Page numbers)

Series number ¹	Charts					Tables									Appendixes								
	1	2	3	4	5	1	2	3	4	5	6	7	8	9	A	B ²	C ²	D	E ²	F ³		G	
																				Page	Issue	Page	Issue
1...	8	..	..	50	55	6	22	..	..	..	..	58	59	60	..	62	63	..	..	66	1-64	..	..
2...	8	..	..	..	..	6	22	..	..	..	..	58	59	..	..	..	63	..	..	66	2-64	..	..
3...	8	..	..	..	..	6	22	..	..	..	..	58	59	..	..	..	63	..	..	65	5-64	..	..
4...	8	..	..	..	..	6	22	..	..	..	..	..	..	..	..	..	63	68	..	66	11-63	..	..
5...	8	..	..	..	..	6	22	..	..	..	..	..	..	..	..	..	63	68	..	66	7-63	..	..
6...	9	..	..	..	..	6	22	..	..	..	..	58	59	..	..	..	63	..	..	65	5-64	..	..
7...	9	..	..	..	..	6	23	..	..	..	..	58	59	..	..	..	63	..	..	63	6-64	..	..
9...	9	..	..	50	55	6	23	..	..	..	..	58	59	60	..	62	63	..	..	..	..	..	..
1...	9	..	..	..	..	6	23	..	..	..	..	..	..	..	..	..	63	..	..	..	..	..	..
...	9	..	..	..	..	6	23	..	..	..	..	..	..	..	..	..	64	..	..	65	5-64	..	..
2...	10	..	..	..	..	6	23	..	..	..	..	..	..	..	..	..	..	..	..	63	6-64	..	..
3...	10	..	..	51	..	6	23	..	..	..	..	58	59	60	..	62	63	68	..	66	8-63	..	..
14...	10	..	..	..	..	6	24	..	..	..	..	58	59	..	..	..	63	68	..	66	11-63	..	..
15...	10	..	..	..	..	6	24	..	..	..	..	..	..	..	..	..	63	68	..	66	3-64	..	..
16...	11	..	..	..	..	6	24	..	..	..	..	58	59	..	..	..	64	..	..	64	6-64	..	..
17...	11	..	..	51	55	6	24	..	..	..	..	58	59	60	..	62	63	68	..	68	6-63	..	..
18...	11	..	..	..	..	6	24	..	..	..	..	..	..	..	..	..	64	68	..	64	6-64	..	..
19...	11	..	..	51	56	6	24	..	..	..	..	58	59	60	..	62	63	..	..	66	4-64	..	..
20...	12	..	..	..	..	6	25	..	..	..	..	..	..	..	..	..	65	..	..	64	6-64	..	..
21...	12	..	..	..	..	6	24	..	..	..	..	..	..	..	..	..	..	..	..	64	6-64	..	..
22...	11	..	..	..	..	6	24	..	..	..	..	..	..	..	..	..	64	..	..	65	6-64	..	..
23...	12	..	..	51	56	6	25	..	..	..	..	58	59	60	..	62	63	..	..	66	1-64	..	..
24...	9	..	..	50	55	6	22	..	..	..	..	58	59	60	..	62	63	..	..	66	12-63	..	..
25...	12	..	..	..	..	6	25	..	..	..	..	..	..	..	..	..	65	..	..	66	12-63	..	..
26...	12	..	..	..	..	6	25	..	..	..	..	..	..	..	..	..	63	..	..	65	6-64	..	..
29...	9	..	..	50	..	6	23	..	..	..	..	58	59	60	..	62	63	..	..	63	6-64	..	..
30...	8	..	..	..	..	6	22	..	..	..	..	..	..	..	..	..	63	68	..	66	10-63	..	..
31...	12	..	..	..	..	6	25	..	..	..	..	..	..	..	..	..	65	..	..	65	6-64	..	..
32...	12	..	..	..	..	6	25	..	..	..	..	..	..	..	..	..	63	..	..	66	3-64	..	..
37...	12	..	..	..	..	6	25	..	..	..	..	..	..	..	..	..	63	68	..	68	6-63	..	..
40...	13	..	..	..	..	6	26	..	..	..	..	..	..	..	..	..	63	..	..	68	8-64	..	..
41...	13	..	..	52	57	6	26	..	..	..	..	58	59	60	..	62	63	..	67	68	8-64	..	..
42...	13	..	..	..	..	6	26	..	..	..	..	..	..	..	..	..	63	..	..	68	8-64	..	..
43...	13	..	..	52	57	6	26	..	..	..	..	58	59	60	..	62	63	..	67	66	2-64	..	..
45...	13	..	..	..	..	6	26	..	..	..	..	..	..	..	..	..	63	..	..	66	3-64	..	..
46...	13	..	..	..	..	6	26	..	..	..	..	..	..	..	..	..	63	..	..	66	2-64	..	..
47...	14	..	..	53	57	6	26	..	..	..	..	58	59	60	..	62	63	..	67	70	9-64	..	..
9...	14	..	..	53	..	6	27	..	..	..	..	58	59	60	..	62	64	..	67	68	8-64	..	..
..	14	..	..	..	56	6	26	..	..	..	..	58	59	60	..	62	64	..	67	69	8-64	..	..
..	15	..	..	53	..	6	27	..	..	..	..	58	59	..	..	..	63	..	67	69	8-64	..	..
..	15	..	..	53	56	6	27	..	..	..	..	58	59	60	..	62	63	..	67	69	8-64	..	..
..	15	..	..	..	..	6	27	..	..	..	..	..	..	..	..	..	63	..	..	66	10-63	..	..
..	15	..	..	52	57	6	27	..	..	..	..	58	59	60	..	62	63	..	67	66	10-63	..	..
..	15	..	..	52	..	6	27	..	..	..	..	58	59	..	..	..	63	68	..	69	8-64	..	..
..	14	..	..	..	..	6	27	..	..	..	..	..	..	..	..	..	64	..	..	70	8-64	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	66	4-64	..	..
..	6	..	..	54	..	7	28	..	..	..	..	58	59	..	..	..	64	..	..	65	6-64	..	..
..	..	..	..	54	..	7	28	..	..	..	..	58	59	..	..	..	63	68	..	68	6-63	..	..
..	..	..	..	54	..	7	28	..	..	..	..	58	59	..	..	..	63	..	..	66	6-64	..	..
..	..	..	..	..	..	7	28	..	..	..	..	..	..	..	..	..	63	..	..	66	6-64	..	..
..	..	..	..	..	..	7	28	..	..	..	..	58	59	..	..	..	63	..	..	70	8-64	..	..
..	..	..	..	..	..	7	28	..	..	..	..	58	59	..	..	..	64	..	..	70	8-64	..	..
..	..	..	..	..	..	7	28	..	..	..	..	..	..	..	..	..	64	..	..	66	4-64	..	..

¹ See cover for series titles and sources. May 1964, this appendix was "G".

²Page number shown is for August 1964 issue.

SERIES INDEX TO CHARTS, TABLES, AND APPENDIXES--Continued
(Page numbers)

Series number ¹	Charts					Tables									Appendixes								
	1	2	3	4	5	1	2	3	4	5	6	7	8	9	A	B	C ²	D	E	F ³		G	
																				Page	Issue	Page	Issue
81...	20	..	..	..	..	7	32	..	..	..	..	..	..	..	..	64	68	..	70	8-64	..	..
82...	17	..	..	..	..	7	29	..	..	..	..	..	..	..	..	63	68	..	..	..	..	..
83...	17	..	..	..	..	7	29	..	..	..	..	..	..	..	..	63	68	..	..	..	..	..
84...	17	..	..	..	..	7	29	..	..	..	..	..	..	..	..	65	..	..	..	..	..	..
85...	18	..	..	..	..	7	30	..	..	..	..	..	..	..	..	65	..	..	73	7-64	..	..
86...	20	..	..	..	..	7	32	..	..	..	..	..	..	..	..	64	..	..	69	9-64	..	..
87...	20	..	..	..	..	7	32	..	..	..	..	..	..	..	..	64	..	..	69	9-64	..	..
88...	20	..	..	..	..	7	32	..	..	..	..	..	..	..	..	65	..	..	69	9-64	..	..
89...	20	..	..	..	..	7	32	..	..	..	..	..	..	..	..	..	..	69	9-64	..	..
90...	17	..	..	..	..	7	29	..	..	..	..	..	..	..	..	63	68	..	70	9-64	..	..
91...	17	..	..	..	..	7	29	..	..	..	..	..	..	..	..	63	68	..	70	9-64	..	..
92...	17	..	..	..	..	7	29	..	..	..	..	..	..	..	..	63	68	..	70	9-64	..	..
93...	18	..	..	..	..	7	30	..	..	..	..	..	..	..	..	65	..	..	..	..	..	..
94...	20	..	..	..	..	7	32	..	..	..	..	..	..	..	..	64	..	..	..	..	..	..
95...	17	..	..	..	..	7	29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
96...	20	..	..	..	..	7	32	..	..	..	..	..	..	..	..	64	..	..	66	6-64	..	..
97...	20	..	..	..	..	7	32	..	..	..	..	..	..	..	..	64	..	..	..	..	..	..
98...	18	..	..	..	..	7	30	..	..	..	..	..	..	..	..	65	..	..	73	7-64	..	..
99...	17	..	..	..	..	7	29	..	..	..	..	..	..	..	..	63	..	..	66	6-64	..	..
110..	18	..	..	..	..	7	30	..	..	..	..	..	..	..	..	64	..	..	71	7-64	73	7-64
111..	18	..	..	..	..	7	30	..	..	..	..	..	..	..	..	64	..	..	71	7-64	73	7-64
112..	18	..	..	..	..	7	30	..	..	..	..	..	..	..	..	65	68	..	71	7-64	73	7-64
113..	18	..	..	..	..	7	31	..	..	..	..	..	..	..	..	65	..	..	71	7-64	73	7-64
114..	19	..	..	..	..	7	31	..	..	..	..	..	..	..	..	63	..	..	71	7-64	74	7-64
115..	19	..	..	..	..	7	31	..	..	..	..	..	..	..	..	63	..	..	72	7-64	74	7-64
116..	19	..	..	..	..	7	31	..	..	..	..	..	..	..	..	63	..	..	72	7-64	74	7-64
117..	19	..	..	..	..	7	31	..	..	..	..	..	..	..	..	63	..	..	72	7-64	74	7-64
118..	19	..	..	..	..	7	31	..	..	..	..	..	..	..	..	63	..	..	72	7-64	74	7-64
121..	21	..	..	..	..	..	33	..	..	..	..	..	..	..	..	64	..	..	..	..	..	..
122..	21	..	..	..	..	..	33	..	..	..	..	..	..	..	..	64	..	..	..	..	..	..
123..	21	..	..	..	..	..	33	..	..	..	..	..	..	..	..	64	..	..	..	..	..	..
125..	21	..	..	..	..	..	33	..	..	..	..	..	..	..	..	64	..	..	..	..	..	..
126..	21	..	..	..	..	..	33	..	..	..	..	..	..	..	..	64	..	..	..	..	..	..
127..	21	..	..	..	..	..	33	..	..	..	..	..	..	..	..	64	..	..	..	..	..	..
128..	21	..	..	..	..	..	33	..	..	..	..	..	..	..	..	64	68	..	..	..	..	..
D1...	..	35	..	..	..	..	..	..	38	..	..	..	..	..	..	..	..	..	66	5-64	..	..
D5...	..	35	..	..	..	..	..	..	39	..	45	..	..	..	..	..	..	..	..	..	..	..
D6...	..	35	..	..	..	..	..	..	38	..	42	..	..	..	..	..	..	..	66	5-64	..	..
D11..	..	35	..	..	..	..	..	..	38	..	..	..	..	..	..	..	..	..	..	..	..	..
D19..	..	35	..	..	..	..	..	..	39	..	43	..	..	..	..	..	..	..	..	..	..	..
D23..	..	35	..	..	..	..	..	..	39	..	44	..	..	..	..	..	..	..	66	5-64	..	..
D34..	..	35	..	..	..	..	..	..	39	..	..	..	..	..	..	..	..	..	..	..	..	..
D35..	..	..	37	..	..	..	..	..	..	41	..	..	..	..	..	..	..	..	..	..	..	..
D36..	..	..	37	..	..	..	..	..	..	41	..	..	..	..	..	..	..	..	..	..	..	..
D41..	..	36	..	..	..	..	..	..	..	40	..	46	..	..	..	..	..	..	..	..	..	..
D47..	..	36	..	..	..	..	..	..	..	40	..	47	..	..	..	..	..	..	..	..	..	..
D48..	..	..	37	..	..	..	..	..	..	41	..	..	..	..	..	..	..	..	..	..	..	..
D54..	..	36	..	..	..	..	..	..	..	40	..	48	..	..	..	..	..	..	..	..	..	..
D58..	..	36	..	..	..	..	..	..	..	40	..	49	..	..	..	..	..	..	..	..	..	..
D61..	..	..	37	..	..	..	..	..	..	41	..	..	..	..	..	..	..	..	..	..	..	..

¹See back cover for series titles and sources.
³Before May 1964, this appendix was "G".

²Page number shown is for August 1964 issue.

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
- *7. New private nonfarm dwelling units started (M).--Department of Commerce, Bureau of the Census
 - 1. 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.
 - 2. Contracts and orders for plant and equipment (M).--Department of Commerce, Bureau of the Census, 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
- Change in book value of manufacturers' inventories of materials and supplies (EOM).--Department of Commerce, Bureau of the Census
 - 1. Change in business inventories, farm and nonfarm, after valuation adjustment (GNP component) (Q).--Department of Commerce, Office of Business Economics
 - 2. Ratio of profits (after taxes) to income originating, corporate, all industries (Q).--Department of Commerce, Office of Business Economics
 - 3. Index of industrial materials prices (M).--Department of Labor, Bureau of Labor Statistics; no seasonal adjustment
 - 4. Index of manufacturers' new orders, machinery and equipment (M).--Department of Commerce, Bureau of the Census
 - 5. Index of manufacturers' unfilled orders, durable goods industries (EOM).--Department of Commerce, Bureau of the Census
 - 6. Index of policy--production materials, percent reporting commitments 30 days or longer (M).--National Association of Purchasing Agents; no seasonal adjustment
 - 7. Index of new private housing units authorized by local building departments (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
- *64. Book value of manufacturers' inventories, all manufacturing industries (EOM).--Department of Commerce, Bureau of the Census
- 65. Book value of manufacturers' inventories of finished goods, all manufacturing industries (EOM).--Department of Commerce, Bureau of the Census
- *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
- *67. Bank rates on short-term business loans, 19 cities (Q).--Board of Governors of the Federal Reserve System; no seasonal adjustment
- 68. Index of labor cost per dollar of real corporate gross national product (ratio of compensation of employees in corporate enterprises to value of corporate product in 1954 dollars) (Q).--Department of Commerce, Office of Business Economics, National Income Division

Continued on reverse

OFFICIAL BUSINESS
FIRST CLASS MAIL

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

28 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. 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. 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. 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, Bureau of the Census
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
99. **New orders, defense products (M).**--Department of Commerce, Bureau of the Census
110. **Total funds raised by private nonfinancial borrowers in credit markets (Q).**--Board of Governors of the Federal Reserve System
111. **Gross retained earnings of nonfinancial corporations (Q).**--Board of Governors of the Federal Reserve System

112. **Net change in bank loans to businesses (M).**-- Board of Governors of the Federal Reserve System; seasonal adjustment by Bureau of the Census
113. **Net change in consumer installment debt (EOM).**-- Board of Governors of the Federal Reserve System
114. **Discount rate on new issues of 91-day Treasury bills (M).** Board of Governors of the Federal Reserve System; no seasonal adjustment
115. **Yield on long-term Treasury bonds (M).**--Treasury Department; no seasonal adjustment
116. **Yield on new issues of high-grade corporate bonds (M).**--First National City Bank of New York and Treasury Department, no seasonal adjustment
117. **Yield on municipal bonds, 20-bond average (M).**-- The Bond Buyer; no seasonal adjustment
118. **Secondary market yields on FHA mortgages (M).**--Federal Housing Administration; no seasonal adjustment

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).**--Central Statistical Office (London)
123. **Canada, index of industrial production (M).**--Dominion Bureau of Statistics (Ottawa)
125. **West Germany, index of industrial production (M).**--Deutsche Bundesbank (Frankfurt)
126. **France, index of industrial production (M).**--Statistical Office (Paris)
127. **Italy, index of industrial production (M).**--Organization for Economic Cooperation and Development
128. **Japan, index of industrial production (M).**--Ministry of International Trade and Industry (Tokyo); seasonal adjustment by compiler and Bureau of the Census
- ... **United States, index of industrial production (M).**--See serie 47.

DIFFUSION INDEXES

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

- D34. **Profits, Manufacturing, FNCB (Q).**--First National of New York; no seasonal adjustment of series. Diffusion indexes are seasonally adjusted. Bureau of Economic Research, Inc.
- D35. **Net sales, total manufactures (Q).**--Dun and Br; no seasonal adjustment
- D36. **New orders, durable manufactures (Q).**--Dun Inc.; no seasonal adjustment
- D48. **Freight carloadings (Q).**--Association of A; no seasonal adjustment
- D58. **Wholesale prices, manufacturing (M).**--Department of Labor Statistics; seasonal adjustment by Bureau of the Census