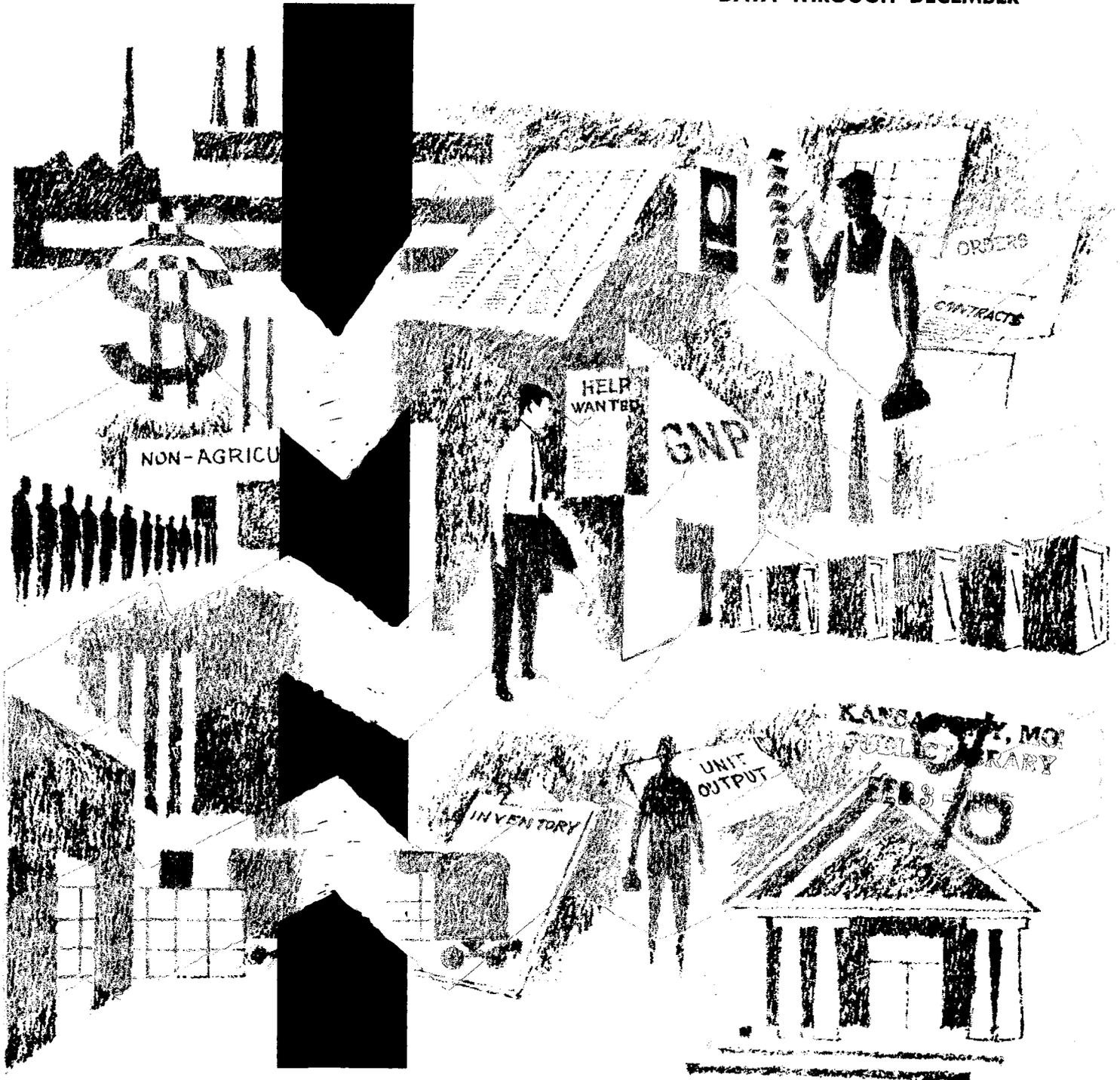


bcd

BUSINESS CYCLE DEVELOPMENTS

January 1965

DATA THROUGH DECEMBER



U.S. DEPARTMENT OF COMMERCE
Bureau of the Census



U.S. DEPARTMENT OF COMMERCE
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BUREAU OF THE CENSUS

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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 follow 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 87 principal indicators and over 300 components are included in preparing the report. 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. Series are seasonally adjusted except those that do not appear to contain seasonal movement.

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 22d of the month following the month of data.

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Series are grouped according to their usual timing and shown against the background of contractions (shaded areas on charts) and expansions in general business activity. Leading Series begin to fall before, Coincident Series fall with, and Lagging Series fall after a contraction has begun.



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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. Changes made in this issue are as follows:

1. Twenty-two series have been revised using the new seasonal adjustment factors shown in appendix D, in accordance with our policy of bringing seasonal factors up to date annually. These factors are based on the X-9 and X-10 versions of the Census Method II seasonal adjustment program. The table below shows the series number, the program used, and the period of revision for each of the series.

Series number	Program	Data revised back to--	Series number	Program	Data revised back to--
4.....	X-9	Jan. 1964	55.....	X-9	Dec. 1963
5.....	X-9	Jan. 1962	62.....	X-9	Jan. 1963
9.....	X-9	Nov. 1963	81.....	X-9	Jan. 1964
10.....	X-10	Dec. 1963	82.....	X-9	Jan. 1964
13.....	X-9	Jan. 1964	83.....	X-9	Jan. 1964
14.....	X-10	Jan. 1964	84.....	X-9	Jan. 1964
15.....	X-10	Dec. 1963	90.....	X-10	Jan. 1962
17.....	X-9	Jan. 1963	91.....	X-10	Jan. 1962
18 (Q)..	X-9	4th Q '61	92.....	X-10	Jan. 1963
30.....	X-9	Jan. 1962	112.....	X-9	Jan. 1963
37.....	X-9	Jan. 1962	128.....	X-9	Jan. 1964

2. Seasonal factors for series specially adjusted for this report are shown for the period May 1964 to June 1965 in appendix D.

3. Series 110 and 111 (total private borrowing and corporate gross savings, respectively) have been revised by the source agency because of revisions in the series components. These changes affect the period from the first quarter 1962 to date.

4. The diffusion indexes for average workweek (series D1) and nonagricultural employment, manufacturing (D41) have been revised in chart 2 for the period 1948 to 1960 to reflect new seasonal adjustments of the series components by the source agency. Revised indexes for the period since 1960 were shown in the December issue.

5. A paper, "The Current Expansion in Historical Perspective," by Julius Shiskin, is included in this report. This paper was presented at the 12th Annual Conference on the Economic Outlook sponsored by the University of Michigan (November 19, 1964). The cyclical comparisons charts usually shown monthly in BUSINESS CYCLE DEVELOPMENTS have been omitted from this issue since many of them are included in the above-mentioned paper. They will be reinstated in the February issue.

6. A new month-color identification begins with this issue of BUSINESS CYCLE DEVELOPMENTS. The color of the cover stock will change each month of a quarter. For example, the January, April, July, and October covers will be printed on white stock; the February, May, August, and November covers, on blue; and the March, June, September, and December covers, on gray stock.

The February issue of BUSINESS CYCLE DEVELOPMENTS is scheduled for release on February 24.

NEW
FEATURES
AND
CHANGES
for this
issue

Data Bank of Business Cycle Indicators

A punch card file containing data for the business cycle indicators included in table 2, the diffusion indexes in table 4 and the component series (listed in table 5) used to compute 14 of the diffusion indexes in table 4, is maintained at the Bureau of the Census. Duplicate cards for 85 of the 87 indicators, the 30 diffusion indexes, and 145 of the component series are available at cost. (The other series can be obtained only from the sponsoring agencies.) The cost for these cards ranges from \$58 for 500 cards to \$137 for 5,000 cards. One card is required per series year. Thus, for the 85 principal indicators, from 1948 to date, the cost would be about \$70. For these principal indicators plus the 30 diffusion indexes and 145 component series, the cost would be about \$135 for the same period.

At present, the Bureau of the Census cannot keep customers' files current. However, the figures for the principal indicators and diffusion indexes required for this purpose are published in BUSINESS CYCLE DEVELOPMENTS each month.

BCD Technical Papers

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. A limited number of copies of these articles are available, free of charge. 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).
- No. 3.—*Census Trading-Day Adjustment Method* by Allan H. Young (published in May 1964 issue).
- No. 4.—*Eight Series on Manufacturers' Orders and Inventories: Descriptions and Procedures* by John Musgrave and John Kuntz (published in July 1964 issue).
- No. 5.—*Series 54, Sales of Retail Stores: Descriptions and Procedures* by Max Shor and Allan Young (published in September 1964 issue).
- No. 6.—*The Current Expansion in Historical Perspective* by Julius Shiskin (published in January 1965 issue).

Please send requests for the material described above to Julius Shiskin, Chief Economic Statistician, Bureau of the Census, Washington, D.C. 20233.

DESCRIPTIONS AND PROCEDURES

INTRODUCTION

Students of economic conditions describe the business cycle as consisting of alternating periods of expansion and contraction in production, employment, income, money flows, prices, and other economic processes. The fluctuations take place in a concerted manner, but not simultaneously. Once an expansion gets underway, it spreads from firm to firm, from industry to industry, from area to area, and from process to process, cumulating until a cyclical peak in aggregate activity is reached. Even while expansion is widespread during the upward phase of the business cycle, some activities continue to move in the opposite direction. Declines begin to spread as the expansion nears its peak and continue to spread even faster after the peak has been passed. But some activities continue to expand during the general contraction. Before long these expansions become stronger and more widespread. When they begin to dominate the situation, the upturn in aggregate activity has arrived and a new expansion is underway. This sequence is recurrent, but not periodic.

The causal relations among these various economic processes are primarily responsible for the cumulative nature of cyclical forces, and explain why expansion eventually turns into recession and recession into expansion. Cyclical fluctuations in production and employment are preceded by fluctuations in measures which relate to future rather than to current production—measures such as new orders for durable goods, the formation of new business enterprises, and accessions to payrolls. They are followed by fluctuations in various types of economic costs, such as labor costs, interest rates, fulfillment of commitments that take a long time to consummate, and holdings of inventories and of debts.

Intensive research by the National Bureau of Economic Research (NBER) over many years has provided a list of those significant series that usually lead, those that usually move with, and those that usually lag behind cyclical movements in aggregate economic ac-

tivity. The series have been grouped and classified by the NBER as “leading”, “roughly coincident”, or “lagging” indicators. These indicators are defined as follows:

NBER Leading Indicators.—Series that usually reach peaks or troughs before those in aggregate economic activity as measured by the roughly coincident series (see below). One group of these series pertains to activities in the labor market, another to orders and contracts, and so on.

NBER Roughly Coincident Indicators.—Series that are direct measures of aggregate economic activity or move roughly together with it; for example, nonagricultural employment, industrial production, and retail sales.

NBER Lagging Indicators.—Series, such as new plant and equipment expenditures and manufacturers' inventories, that usually reach turning points after they are reached in aggregate economic activity.

Other U.S. series with business cycle significance are included in this report. 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 for a broad picture of international economy.

METHOD OF PRESENTATION

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

Basic Data (chart 1 and tables 1 and 2).—Data are shown for business cycle indicators, additional

U.S. series with business cycle significance, and industrial production indexes for selected countries. 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 (chart 2 and tables 3 to 5).— These are measures that aid in forming a judgment of the imminence of a turning point in the business cycle, determining the extent of current changes in different parts of the economy, and pointing to developments in particular industries and places.

Cyclical Patterns (chart 3 and tables 6 to 8).— Current cyclical levels are compared with levels 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 business cycle turning dates used in this report are those designated by the NBER. They mark the approximate dates when aggregate economic activity reached its cyclical high or low levels. As a matter of general practice, a business cycle turning date will not be designated until at least 6 months after it has occurred.

Monthly business cycle peaks and troughs have been dated by the NBER for the period 1854-1961. Over this span, expansion has prevailed 61 percent of the time and contraction, 39 percent. If war periods are disregarded, expansion has prevailed 56 percent of the time and contraction, 44 percent.

SEASONAL AND RELATED STATISTICAL ADJUSTMENTS

Official seasonally adjusted data are used in this report, if 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. Seasonal adjustments for these series were developed by either the NBER or the Bureau of the Census using Census Method II. The adjustment factors are shown in

appendix D, except for those series which are the sums of seasonally adjusted components, and those series which are based on unpublished source data. Seasonally adjusted data prepared by the source agency will be substituted whenever they are published.

Adjustments, for changes in average climatic conditions and institutional arrangements during the year are also made by Census Method II. In addition, series such as new building permits are adjusted for variations in the number of trading or working days and series such as retail sales of apparel are adjusted for variable holidays (for example, Easter).

Studies of the effect 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 span of months for which the average change for 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 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. 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 be borne in mind when making use of this measure.¹

ANALYTICAL MEASURES OF CURRENT CHANGE

Three kinds of analytical measures are presented—timing distributions, diffusion indexes, and directions of change. These measures aid in forming a judgment of the 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.

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. This timing distribution shows the number of series reaching new highs and the percent currently high for each of several recent months (see table

¹For 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).

3). Similar distributions of "lows" will be presented 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 date of the high value for each series is recorded. (For inverted series—that is, series with negative conformity to the business cycle—dates of low values are taken.) 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 may be disregarded, although it is, of course, difficult to identify an erratic value, particularly for the current month.

The letter "H" is used in table 2 to identify and highlight the current high values during the expansion. The highs designated during the current cyclical phase will not necessarily be the specific cycle peaks. (See appendix B.) As new high levels are reached during the expansion, the current highs will be moved ahead. Comparisons of the current timing distributions with those for periods around earlier business cycle 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 simply reflect a short reversal in the upward movement.

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 spans 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 spans (January-February, February-March, etc.) and generally for either 6- or 9-month spans, depending upon the irregularity of the series. The indexes based on 1-month spans are more "current" but they are also more irregular than the 6- or 9-month indexes. (See chart 2.) Quarterly series are compared over 1-quarter spans, 3-quarter spans, and 4-quarter spans.

Recent research has shown that the longer-span diffusion indexes are not only smoother, but have systematically larger amplitudes than the 1-month indexes. The 1-month indexes generally have large irregular fluctuations, but the movements may be significant when important changes are taking place, particularly around cyclical turning points. Since the longer-span diffusion indexes are centered, there is an apparent loss in currency equal to one-half the span; for example, 3 months in the case of a 6-month diffusion index. However, the most recent figure for a 6-month or longer-span index does provide the latest available information on changes *over that span*. If a significant reversal has taken place *within that span*, the 1-month indexes are likely to reveal it. Presentation of both 1-month and longer-span diffusion indexes provides an opportunity for the user to take advantage of the best features of each in interpreting current changes.

Series numbers preceded by the letter "D" designate diffusion indexes. When one of these numbers corresponds to the number of a basic indicator series, 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 6. Diffusion indexes not computed from basic series components are assigned new numbers.

Diffusion indexes that are based on business expectations 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.

Direction-of-Change Table

The direction-of-change table (table 5) shows directions of change ("+" for rising, "o" for unchanged,

and "-" for falling) in the components used for the diffusion indexes. This table provides a convenient view of changing business conditions and is helpful in making an economic interpretation of the movements in the more highly aggregated statistical measures. That is, it shows which economic activities went up, which went down, and how long such movements have persisted. The table also helps to show how a recession or recovery spreads from one sector of the economy to another.

Directions of change for most diffusion index components are shown for consecutive months and, depending upon the irregularity of the series, for either 6- or 9-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 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 whether the current cyclical phase is an expansion or contraction.

Expansions are compared in one way by measuring changes from the immediately preceding peak levels. In table 6 of this report, data for the latest month in the current expansion (shown by number of months from the February 1961 trough) are compared with the May 1960 reference peak. For each earlier expansion, data for a like period (same number of months from the trough of its expansion) are compared with its preceding reference peak. This type of comparison is designated as changes computed *from reference peak levels and from reference trough dates*. This type of comparison shows whether, and by how much, the current level of activity exceeds or falls short of the level at the preceding business cycle peak, and how the current situation compares, in this respect, with earlier expansions. For those earlier periods of expansion that were shorter than the current one, the comparisons reflect the status at a point after a new contraction had set in.

Expansions are also compared by computing changes *from reference trough levels and from reference trough dates* (table 7). For the current expansion, this type of comparison measures the extent of the rise from the trough level (February 1961) to the level at the current month. For each earlier expansion

sion, data for a like period (same number of months from the trough of its expansion) are compared with the level at its trough. The same situation exists here as for the comparisons shown in table 6: 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 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 for the index of industrial production is January 1960 (corresponding to the May 1960 reference peak); the specific peak for stock prices is July 1959. (See appendix B.) Specific cycle comparisons are shown in table 8. For earlier expansions, these comparisons differ from those shown for reference cycles in that they show only the period up to the next specific peak date and do not include any part of the contraction that followed. For some series, therefore, the earlier comparisons cover 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 procedure since 1919. The principal cases of this sort are as follows:

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

CHARTS

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

Historical Time Series (charts 1 and 2)

These charts show cyclical fluctuations against the background of expansions and contractions in general business activity from 1948 to the current month. Shaded areas on the charts indicate periods of business cycle contractions between business cycle peak dates (beginnings of shaded areas) and business cycle trough dates (ends of shaded areas). The shading for a new contraction 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 6, for additional help in using these charts.

Cyclical Comparisons (chart 3)

This chart compares the performance of selected indicators during the current expansion with their performance during the expansion phase of previous business cycles. The usual date sequence followed in charts is disregarded, and instead the data are alined at the strategic point of the business cycle: For expansions, the reference trough (see part A) and specific trough (see part B). Thus, these comparisons facilitate judgments on the vigor of the current expansion relative to cyclical movements during the expansions of previous cycles.

Two types of cyclical comparisons are made. Part A compares the pattern of the current *reference cycle* (the cycle for aggregate economic activity) with movements over the corresponding phases of previous reference cycles. Part B compares the pattern of the current *specific cycle* (the cycle for a particular series) with the movements over the corresponding phases of previous specific cycles in that series. In both parts, the trough dates are alined. In part A, the levels of the preceding peaks are also alined while in part B, the levels of the preceding troughs are alined. See the section, "Comparisons of Cyclical Patterns", for more detailed descriptions of these comparisons.

HOW TO READ CHARTS 1 AND 2

Solid line indicates monthly data. (Data may be actual monthly figures or MCD moving averages.*)

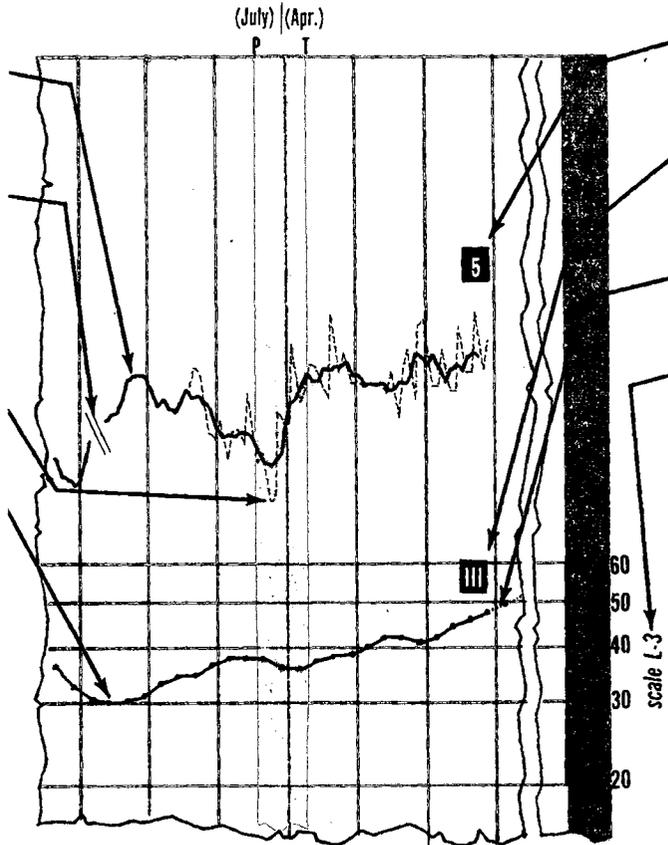
Parallel lines indicate a break in continuity (e.g., data not available, change in series definition, etc.).

See **back cover** for complete titles and sources of series.

Broken line indicates actual monthly data for series where an MCD moving average* is plotted.

Solid line with plotting points indicates quarterly data.

* Many of the more irregular series are shown in terms of their MCD moving averages as well as their actual monthly data. In such cases, the 4-, 5-, or 6-term moving averages are plotted 1½, 2, or 2½ months, respectively, behind the actual data. See page 2 for a description of MCD moving averages.



Arabic number indicates latest month for which data are plotted. ("5"=May)

Roman number indicates latest quarter for which data are plotted. ("III"=third quarter)

Dotted line indicates anticipated data.

Various scales are used to highlight the patterns of the individual series. Series plotted to different scales are not directly comparable. "Scale A" is an arithmetic scale, "scale L-1" is a logarithmic scale with 1 cycle in a given distance, "scale L-2" is a logarithmic scale with 2 cycles in that distance, etc.

Solid line indicates monthly diffusion index data for 6- or 9-month intervals.

Broken line indicates monthly diffusion index data for 1-month intervals.

Solid line with plotting points indicates quarterly diffusion index data for various intervals.

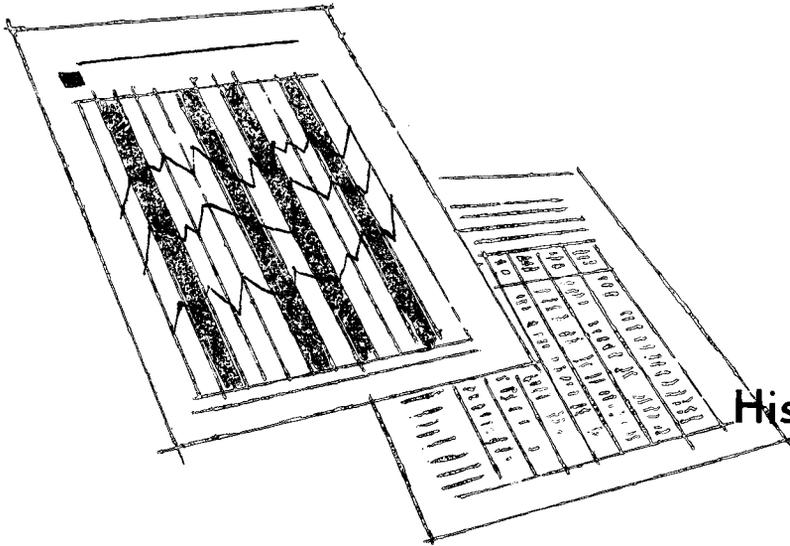


Scale shows percent of diffusion index components rising.

Arabic number indicates latest month for which data are used in computing the diffusion indexes. ("6"=June)

Roman number indicates latest quarter for which data are used in computing the diffusion indexes. ("II"=second quarter)

Broken line with plotting points indicates quarterly diffusion index data for various intervals. This line is also used to indicate anticipated quarterly diffusion index data.



BASIC DATA

Historical charts and tables

LEADING INDICATORS

Sensitive employment and unemployment

New investment commitments

New businesses and business failures

Profits and stock prices

Inventory investment, buying policy, and sensitive prices

ROUGHLY COINCIDENT INDICATORS

Employment and unemployment

Production

Income and trade

Wholesale prices

LAGGING INDICATORS

Investment expenditures

Cost per unit of output

Inventories

Debt

Interest rates

OTHER U.S. SERIES

Federal budget and military commitments

Reserves, money supply, and financing

Interest rates

Foreign trade

INTERNATIONAL COMPARISONS

Industrial production indexes for selected foreign countries

CHANGES OVER 4 LATEST MONTHS

Series (See complete titles and sources on back cover)	Unit of measure	Basic data ¹				Percent change ²			
		Sept. 1964	Oct. 1964	Nov. 1964	Dec. 1964	Average change, 1953- 1963 ³	Sept. to Oct. 1964	Oct. to Nov. 1964	Nov. to Dec. 1964
NBER LEADING INDICATORS									
1. Avg. workweek, prod. workers, mfg.	Hours	40.5	40.5	40.9	p41.1	0.5	0.0	+1.0	+0.5
2. Accession rate, manufacturing	Per 100 empl.	3.8	r4.0	p3.9	(NA)	4.8	+5.3	-2.5	(NA)
30. Nonagri. placements, all industries	Thous.	r516	r519	r549	518	1.8	+0.6	+5.8	-5.6
3. Layoff rate, manufacturing	Per 100 empl.	1.5	r1.7	p1.5	(NA)	9.4	-13.3	+11.8	(NA)
4. Temporary layoff, all industries	Thous.	r121	92	r89	109	17.8	+24.0	+3.3	-22.5
5. Avg. weekly initial claims, State unemployment insurance	.....do	r245	r249	r262	251	5.3	-1.6	-5.2	+4.2
6. New orders, durable goods indus.	Bil. dol.	19.91	r19.62	r19.42	p20.31	3.8	-1.5	-1.0	+4.6
24. New orders, mach. and equip. indus.	.....do	3.69	r3.79	r3.90	p3.87	4.5	+2.7	+2.9	-0.8
9. Construction contracts, commercial and industrial	Mil. sq. ft. floor space	r51.41	r53.75	r49.61	(NA)	9.7	+4.6	-7.7	(NA)
10. Contracts and orders, plant, equip.	Bil. dol.	r4.51	r4.56	p4.93	(NA)	4.9	+1.1	+8.1	(NA)
11. New capital appropriations, mfg. ⁴	.....do	...	...	(NA)	(NA)	11.4	...	(NA)	(NA)
7. Private nonfarm housing starts	Ann. rate, thous.	1,433	r1,559	r1,404	p1,502	7.3	+8.8	-9.9	+7.0
29. New bldg. permits, private housing	1957-59=100	107.8	107.6	r111.0	p101.8	3.8	-0.2	+3.2	-8.3
12. Net change, number of businesses ^{4, 5}	Thous.	...	...	(NA)	(NA)	2	...	(NA)	(NA)
13. New business incorporations	Number	r16,605	r16,493	17,103	(NA)	2.7	-0.7	+3.7	(NA)
14. Liabilities of business failures	Mil. dol.	r118.59	r97.98	r111.00	126.49	16.9	+17.4	-13.3	-14.0
15. Large business failures	No. per week	42	42	42	40	13.1	0.0	0.0	+4.8
16. Corporate profits after taxes ⁴	Ann. rate, bil. dol.	...	...	(NA)	(NA)	6.3	...	(NA)	(NA)
17. Ratio, price to unit labor cost, mfg.	1957-59=100	r103.0	r102.6	r103.4	p104.5	0.7	-0.4	+0.8	+1.1
18. Profits per dol. of sales, mfg. ⁴	Cents	...	...	(NA)	(NA)	6.8	...	(NA)	(NA)
22. Ratio, profits to income originating, corporate, all industries ⁴	Percent	...	...	(NA)	(NA)	5.1	...	(NA)	(NA)
19. Stock prices, 500 common stocks*	1941-43=10	83.41	84.85	85.44	83.96	2.6	+1.7	+0.7	-1.7
21. Change in business inventories, all industries ^{4, 5}	Ann. rate, bil. dol.	...	...	p+6.0	(NA)	2.5	...	+3.2	(NA)
31. Change in book value, manufacturing and trade inventories ⁵	.....do	+7.3	r0.0	p+8.1	(NA)	3.5	-7.3	+8.1	(NA)
20. Change in book value, mfrs.' inventories of materials and supplies ⁵	.....do	+2.6	r+4.3	p+2.5	(NA)	1.5	+1.7	-1.8	(NA)
37. Purchased materials, percent reporting higher inventories	Percent	60	r58	r60	58	6.8	-3.3	+3.4	-3.3
26. Buying policy, prod. mtl., commitments 60 days or longer*	.....do	61	60	64	65	5.8	-1.6	+6.7	+1.6
32. Vendor performance, percent reporting slower deliveries*	.....do	74	72	70	66	7.7	-2.7	-2.8	-5.7
25. Change in unfilled orders, durable goods industries ⁵	Bil. dol.	+0.77	+1.00	r+0.19	p+0.20	0.49	+0.23	-0.81	+0.01
23. Industrial materials prices*	1957-59=100	108.2	112.0	113.2	112.5	1.3	+3.5	+1.1	-0.6
NBER ROUGHLY COINCIDENT INDICATORS									
41. Employees in nonagri. establishments	Thous.	58,458	r58,382	r58,871	p59,097	0.3	-0.1	+0.8	+0.4
42. Total nonagricultural employment	.....do	65,534	65,580	66,029	66,322	0.4	+0.1	+0.7	+0.4
43. Unemployment rate, total	Percent	5.2	5.2	5.0	4.9	4.2	0.0	+3.8	+2.0
40. Unemployment rate, married males	.....do	2.9	2.8	2.5	2.7	6.0	+3.4	+10.7	-8.0
45. Avg. weekly insured unemploy., State	.....do	3.4	3.4	3.4	3.6	4.8	0.0	0.0	-5.9
46. Help-wanted advertising	1957-59=100	126	127	r134	p137	3.1	+0.8	+5.5	+2.2
47. Industrial production	.....do	134.0	r131.4	r134.8	p137.0	1.1	-1.9	+2.6	+1.6
50. GNP in 1954 dollars ⁴	Ann. rate, bil. dol.	...	...	p521.5	(NA)	1.3	...	+0.4	(NA)
49. GNP in current dollars ⁴	.....do	...	...	p633.5	(NA)	1.5	...	+0.8	(NA)
57. Final sales ⁴	.....do	...	...	p627.5	(NA)	1.3	...	+0.3	(NA)
51. Bank debits outside NYC	.....do	2,424.8	2,454.0	2,470.2	p2,495.8	1.5	+1.2	+0.7	+1.0
52. Personal income	.....do	497.9	498.7	r502.3	p505.7	0.5	+0.2	+0.7	+0.7
53. Labor income in mining, mfg., constr.	.....do	129.2	127.7	r130.4	p131.8	0.8	-1.2	+2.1	+1.1
54. Sales of retail stores	Mil. dol.	22,254	r21,383	r21,631	p22,808	0.8	-3.9	+1.2	+5.4
55. Wholesale prices, except farm products and foods	1957-59=100	r101.3	r101.5	101.6	p101.7	0.2	+0.2	+0.1	+0.1

CHANGES OVER 4 LATEST MONTHS—Continued

Series (See complete titles and sources on back cover)	Basic data ¹				Percent change ²				
	Unit of measure	Sept. 1964	Oct. 1964	Nov. 1964	Dec. 1964	Average change, 1953- 1963 ³	Sept. to Oct. 1964	Oct. to Nov. 1964	Nov. to Dec. 1964
NBER LAGGING INDICATORS									
61. Business expenditures, new plant and equipment ⁴	Ann. rate, bil. dol. ....	...	...	a46.70		3.2	...	+2.3	
62. Labor cost per unit of output, mfg.	1957-59=100	r98.2	r98.6	r98.0	p97.0	0.6	+0.4	-0.6	-1.0
68. Labor cost per dollar of real corporate GNP ⁴ .....	.....do.....	...	...	(NA)		0.9	...	(NA)	
64. Book value of mfrs.' inventories	Bil. dol.	61.0	r61.8	p62.3	(NA)	0.5	+1.3	+0.8	(NA)
65. Book value of mfrs.' inventories of finished goods .....	.....do.....	21.6	21.8	p21.9	(NA)	0.8	+0.9	+0.5	(NA)
66. Consumer installment debt	Mil. dol.	57,021	57,431	57,732	(NA)	0.8	+0.7	+0.5	(NA)
67. Bank rates on short-term business loans* ⁴	Percent .....	...	...	5.00		2.3	...	+0.4	
OTHER SELECTED U.S. SERIES									
82. Federal cash payments to public	Ann. rate, bil. dol.	r122.7	r117.8	r111.0	135.5	5.7	-4.0	-5.8	+22.1
83. Federal cash receipts from public .....	.....do.....	r113.7	r112.8	114.3	115.7	5.4	-0.8	+1.3	+1.2
84. Federal cash surplus or deficit ⁵ .....	.....do.....	r-9.0	r-5.0	r+3.3	-19.8	5.6	+4.0	+8.3	-23.1
95. Balance, Federal income and product account ^{4, 5} .....	.....do.....	...	...	(NA)		2.5	...	(NA)	
90. Defense Dept. oblig., procurement	Mil. dol.	r1,141	r889	1,089	(NA)	26.9	-22.1	+22.5	(NA)
91. Defense Dept. obligations, total .....	.....do.....	r4,405	r3,773	4,228	(NA)	15.1	-14.3	+12.1	(NA)
92. Military contract awards in U.S. ....	.....do.....	r2,191	r1,745	2,008	(NA)	26.2	-20.4	+15.1	(NA)
99. New orders, defense products	Bil. dol.	1.98	r2.41	r1.78	p1.57	23.0	+21.7	-26.1	-11.8
93. Free reserves* ⁵	Mil. dol.	+90	+103	-34	p+171	104.2	+13	-137	+205
85. Change in money supply ⁵	Ann. rate, percent	+6.12	+4.56	+3.84	p+2.28	2.78	-1.56	-0.72	-1.56
98. Change in money supply and time deposits ⁵ .....	.....do.....	+8.16	+8.64	+10.68	p+7.20	2.52	+0.48	+2.04	-3.48
110. Total private borrowing ⁴	Ann. rate, mil. dol. ....	...	...	(NA)		11.6	...	(NA)	
111. Corporate gross savings ⁴ .....	.....do.....	...	...	(NA)		4.3	...	(NA)	
112. Change, business loans ⁵	Ann. rate, bil. dol.	r+4.28	r+1.43	r+0.32	+8.62	1.22	-2.85	-1.11	+8.30
113. Change, consumer installment debt ⁵ .....	.....do.....	+6.16	+4.92	+3.61	(NA)	0.85	-1.24	-1.31	(NA)
114. Treasury bill rate*	Percent	3.53	3.58	3.62	3.86	7.3	+1.4	+1.1	+6.6
115. Treasury bond yields* .....	.....do.....	4.16	4.16	4.12	4.14	1.8	0.0	-1.0	+0.5
116. Corporate bond yields* .....	.....do.....	4.49	4.49	4.47	4.47	1.7	0.0	-0.4	0.0
117. Municipal bond yields* .....	.....do.....	3.23	3.25	3.18	3.13	2.6	+0.6	-2.2	-1.6
118. Mortgage yields* .....	.....do.....	5.46	5.45	5.45	5.45	0.58	-0.2	0.0	0.0
86. Exports, excluding military aid	Mil. dol.	2,271.2	2,134.3	2,184.1	(NA)	4.6	-6.0	+2.3	(NA)
87. General imports .....	.....do.....	1,557.5	1,550.7	1,697.7	(NA)	3.6	-0.4	+9.5	(NA)
88. Merchandise trade balance ⁵ .....	.....do.....	+713.7	+583.6	+486.4	(NA)	59.0	-130.1	-97.2	(NA)
89. U.S. balance of payments ^{4, 5} .....	.....do.....	...	...	(NA)		286	...	(NA)	
81. Consumer prices	1957-59=100	r108.3	r108.4	r108.6	(NA)	0.2	+0.1	+0.2	(NA)
94. Construction contracts, value .....	.....do.....	131	136	143	(NA)	7.0	+3.8	+5.1	(NA)
96. Unfilled orders, dur. goods indus.	Bil. dol.	52.14	53.14	r53.32	p53.52	1.5	+1.9	+0.3	+0.4
97. Backlog of capital appro., mfg. ⁶ .....	.....do.....	14.95	...	...	(NA)	6.6	...	...	(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.

1
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BUSINESS CYCLE SERIES SINCE 1948

NBER Leading Indicators

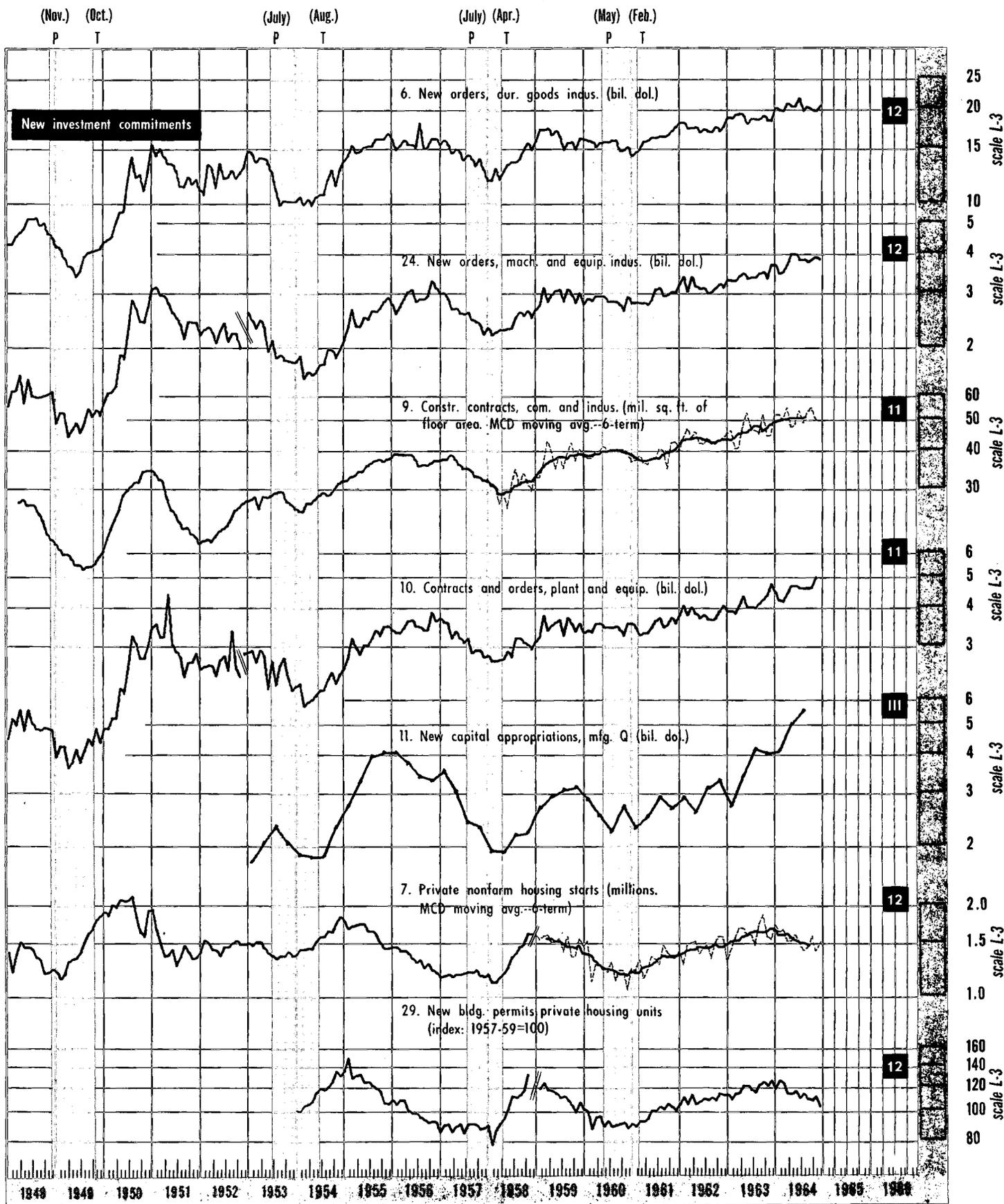
(Nov.) (Oct.) (July) (Aug.) (July) (Apr.) (May) (Feb.)
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Sensitive employment and unemployment indicators



BUSINESS CYCLE SERIES SINCE 1948—Continued

NBER Leading Indicators—Continued



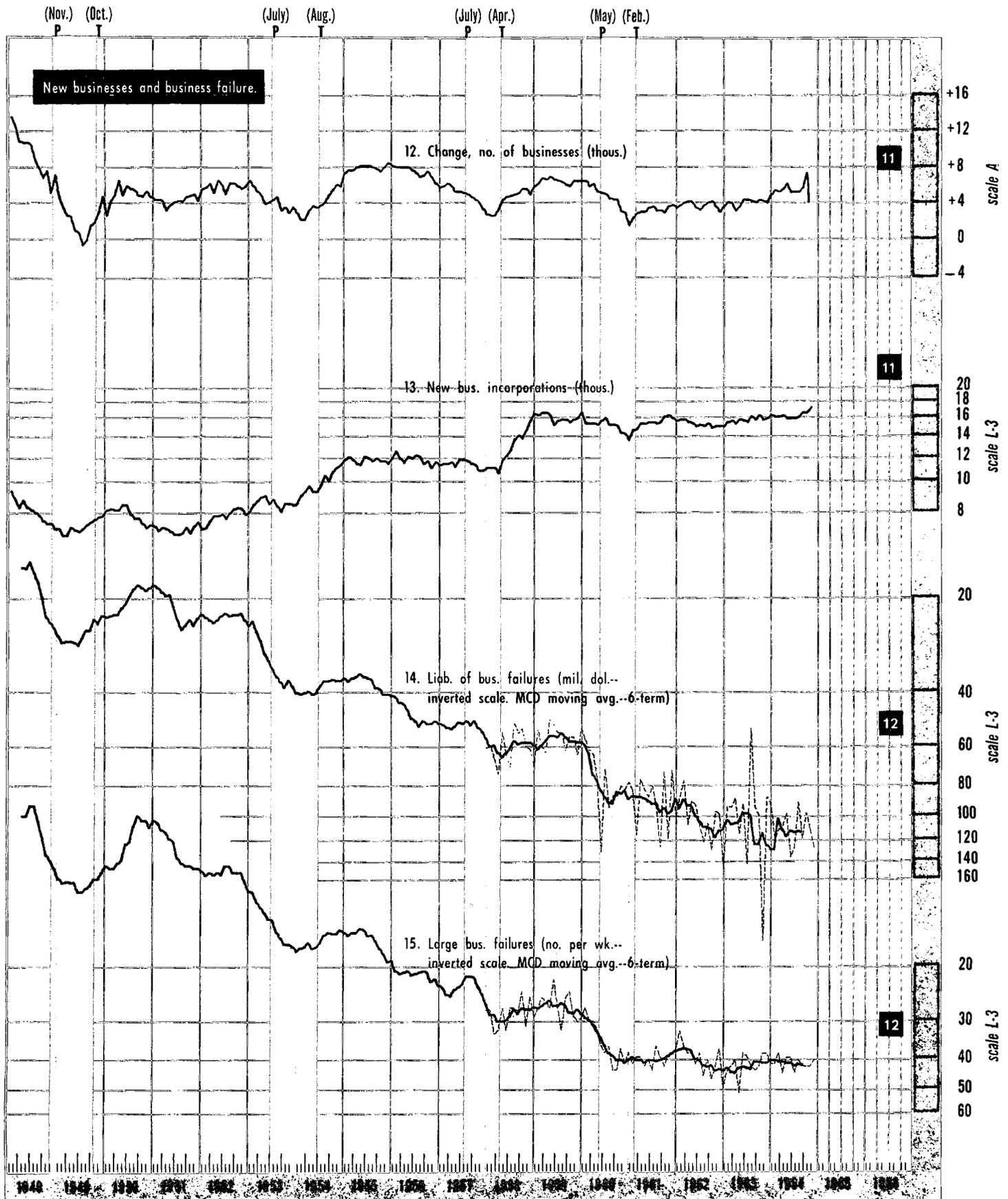
See "How to Read Charts 1 and 2," page 6.

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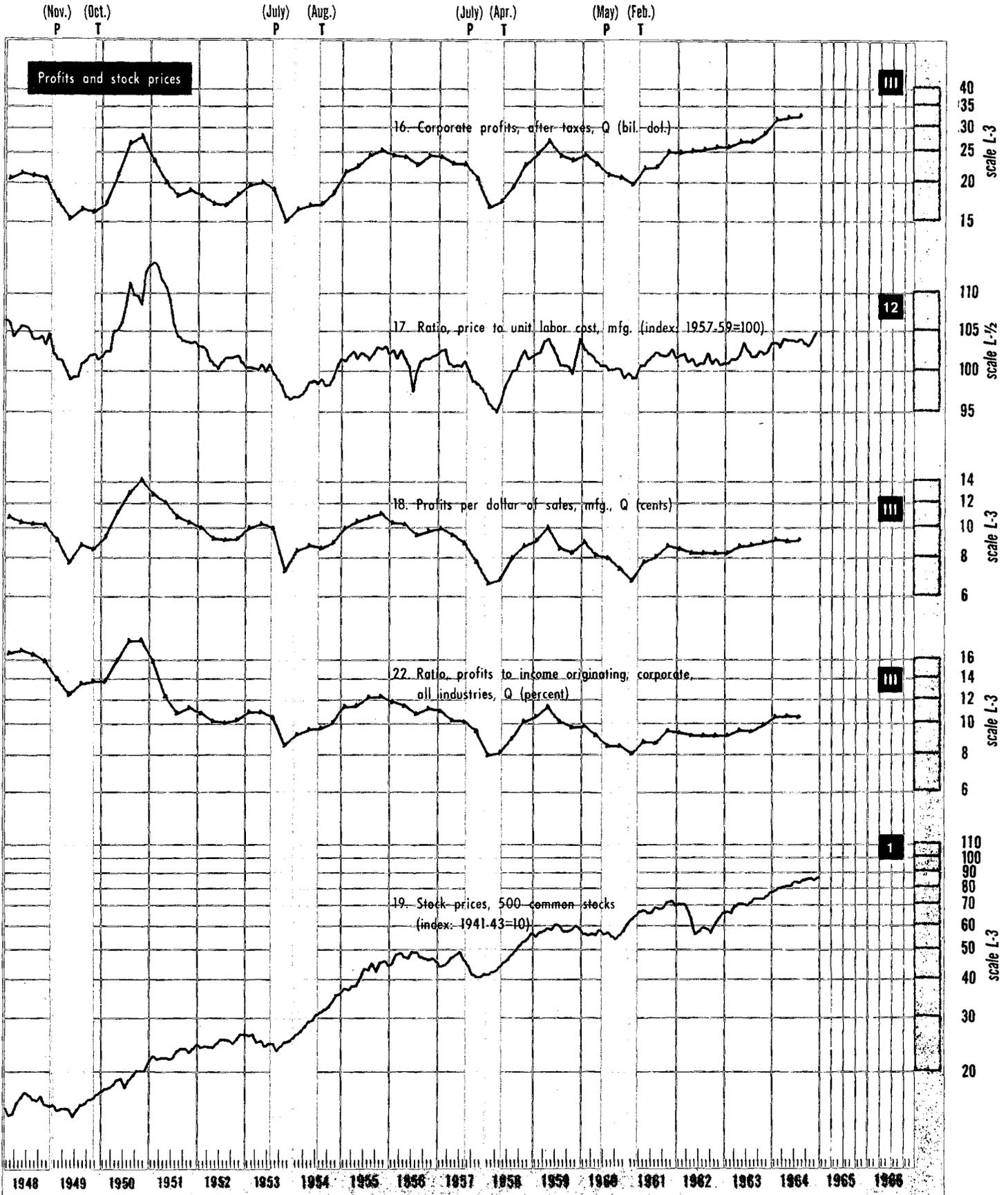
BUSINESS CYCLE SERIES SINCE 1948—Continued

NBER Leading Indicators—Continued



BUSINESS CYCLE SERIES SINCE 1948—Continued

NBER Leading Indicators—Continued

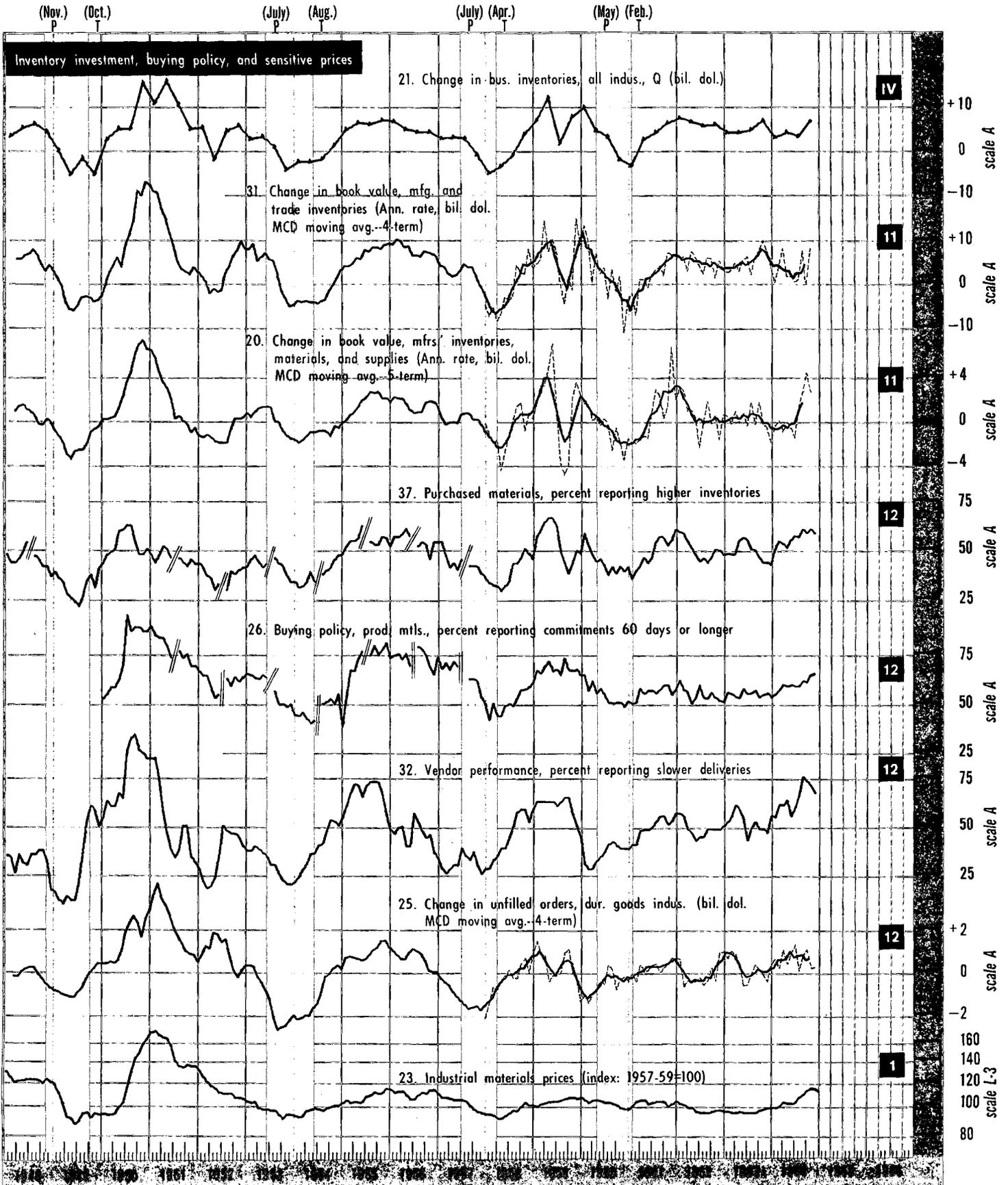


See "How to Read Charts 1 and 2," page 6

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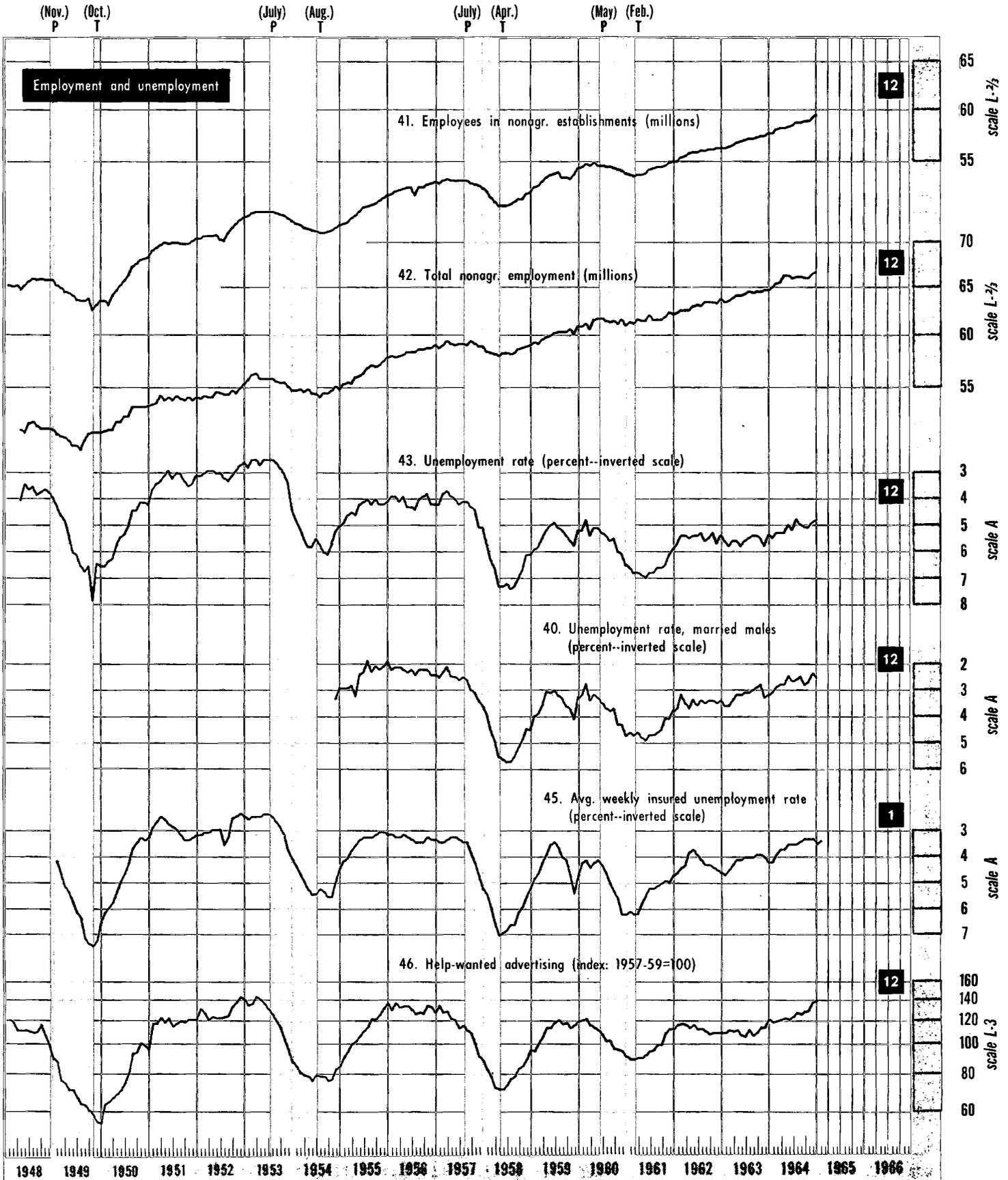
BUSINESS CYCLE SERIES SINCE 1948—Continued

NBER Leading Indicators—Continued



BUSINESS CYCLE SERIES SINCE 1948—Continued

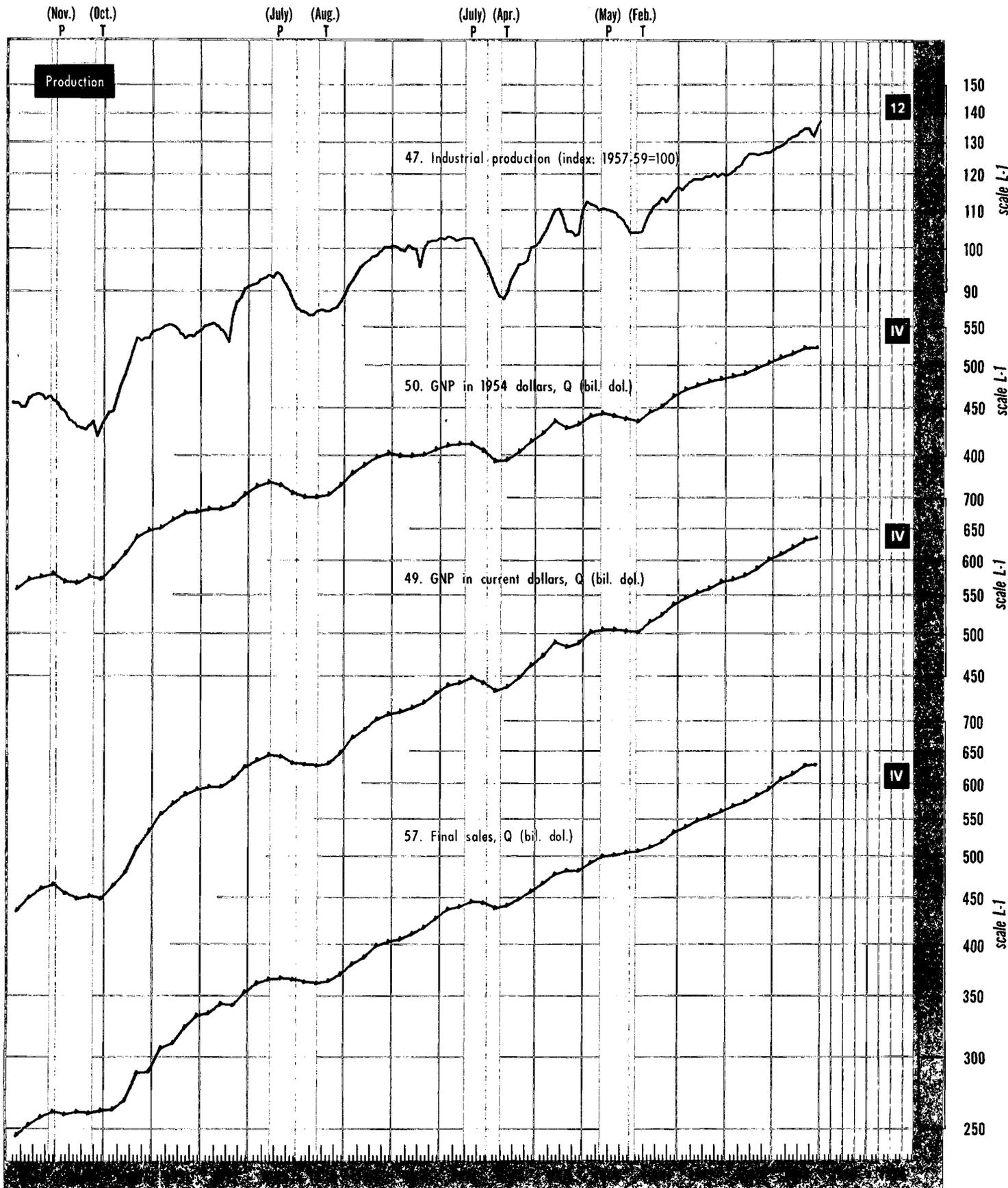
NBER Roughly Coincident Indicators



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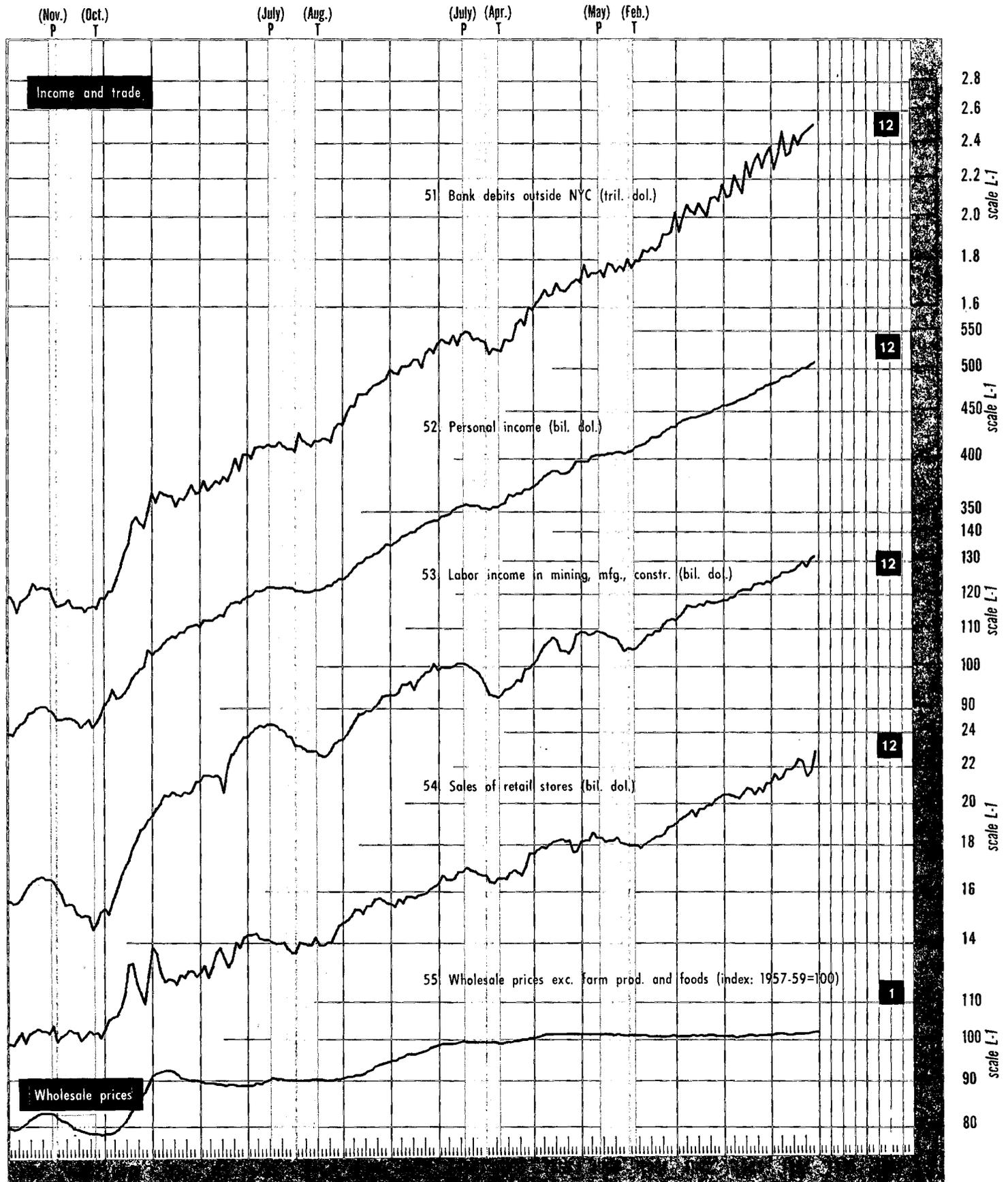
BUSINESS CYCLE SERIES SINCE 1948—Continued

NBER Roughly Coincident Indicators—Continued



BUSINESS CYCLE SERIES SINCE 1948—Continued

NBER Roughly Coincident Indicators—Continued

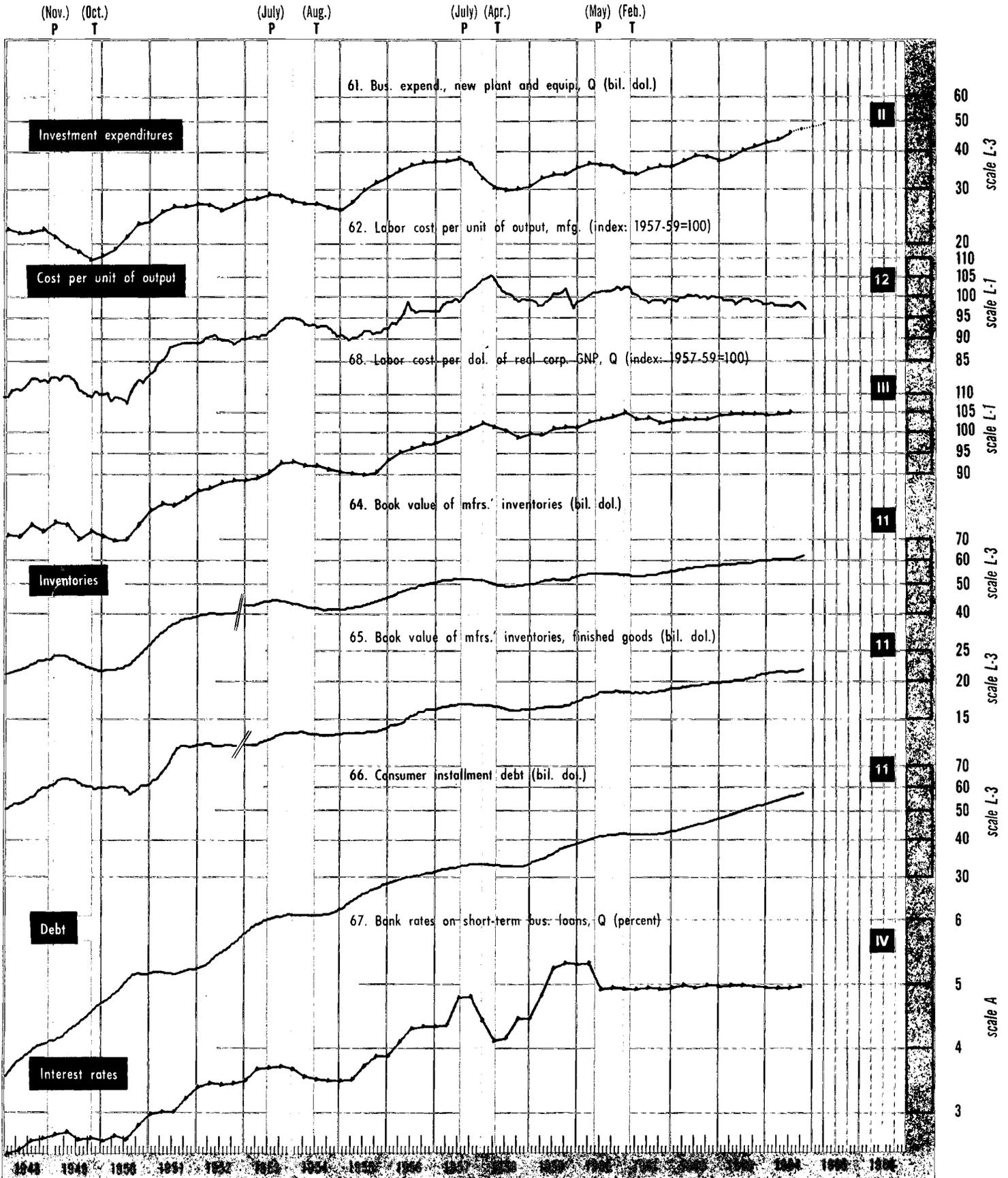


See "How to Read Charts 1 and 2," page 6.

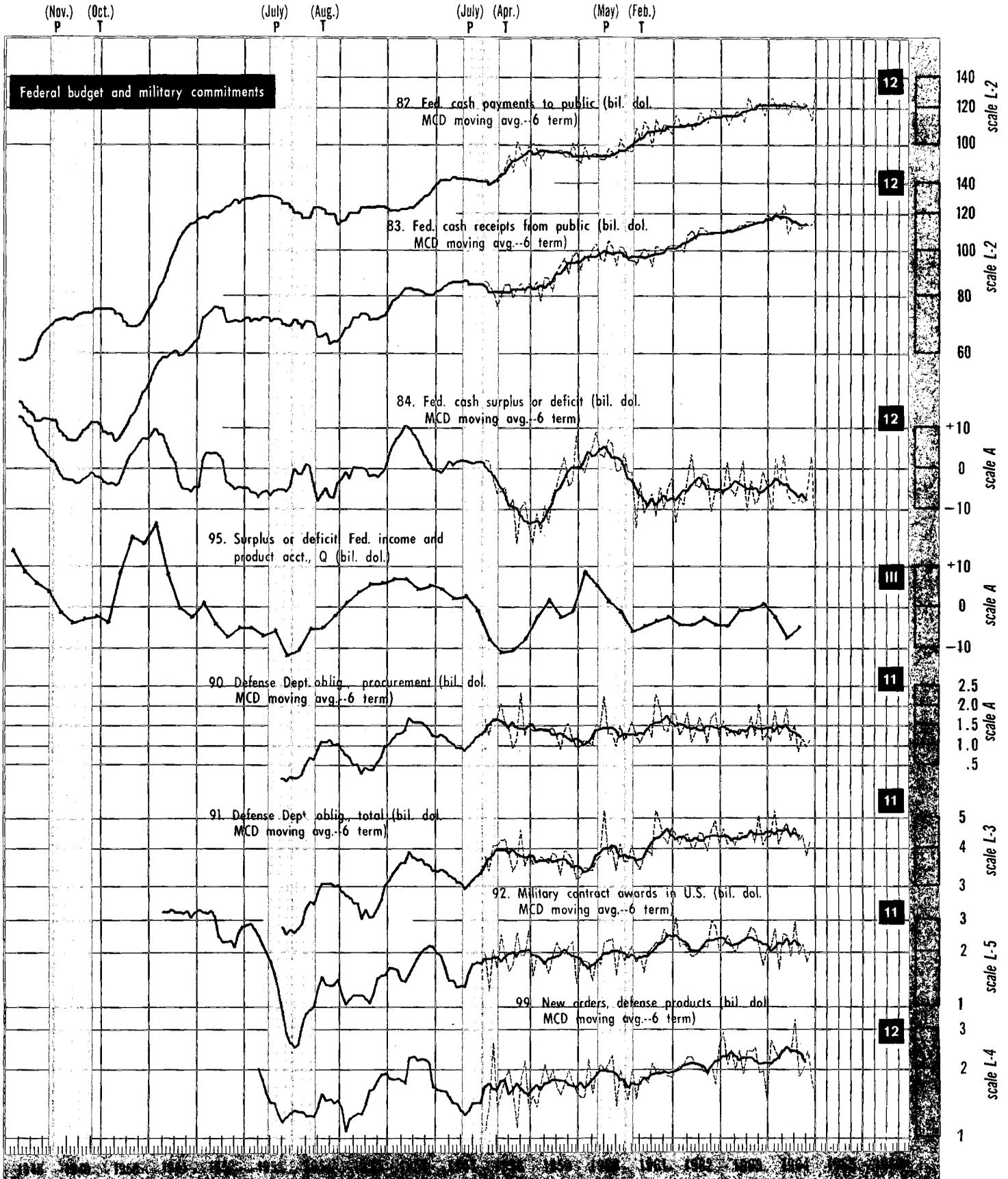
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BUSINESS CYCLE SERIES SINCE 1948—Continued

NBER Lagging Indicators



BUSINESS CYCLE SERIES SINCE 1948—Continued
Other Selected U.S. Series

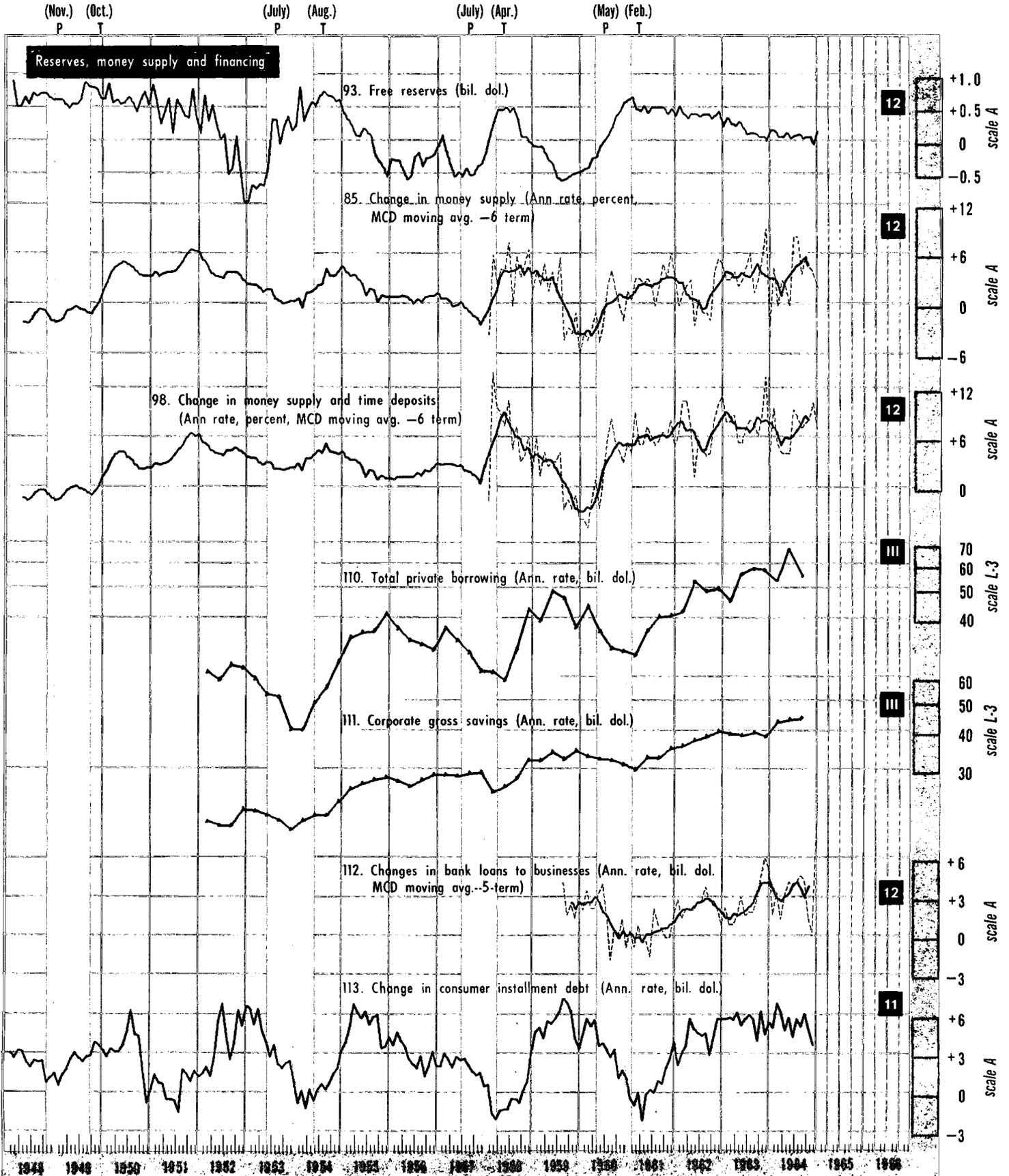


See "How to Read Charts 1 and 2," page 6.

1
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BUSINESS CYCLE SERIES SINCE 1948—Continued

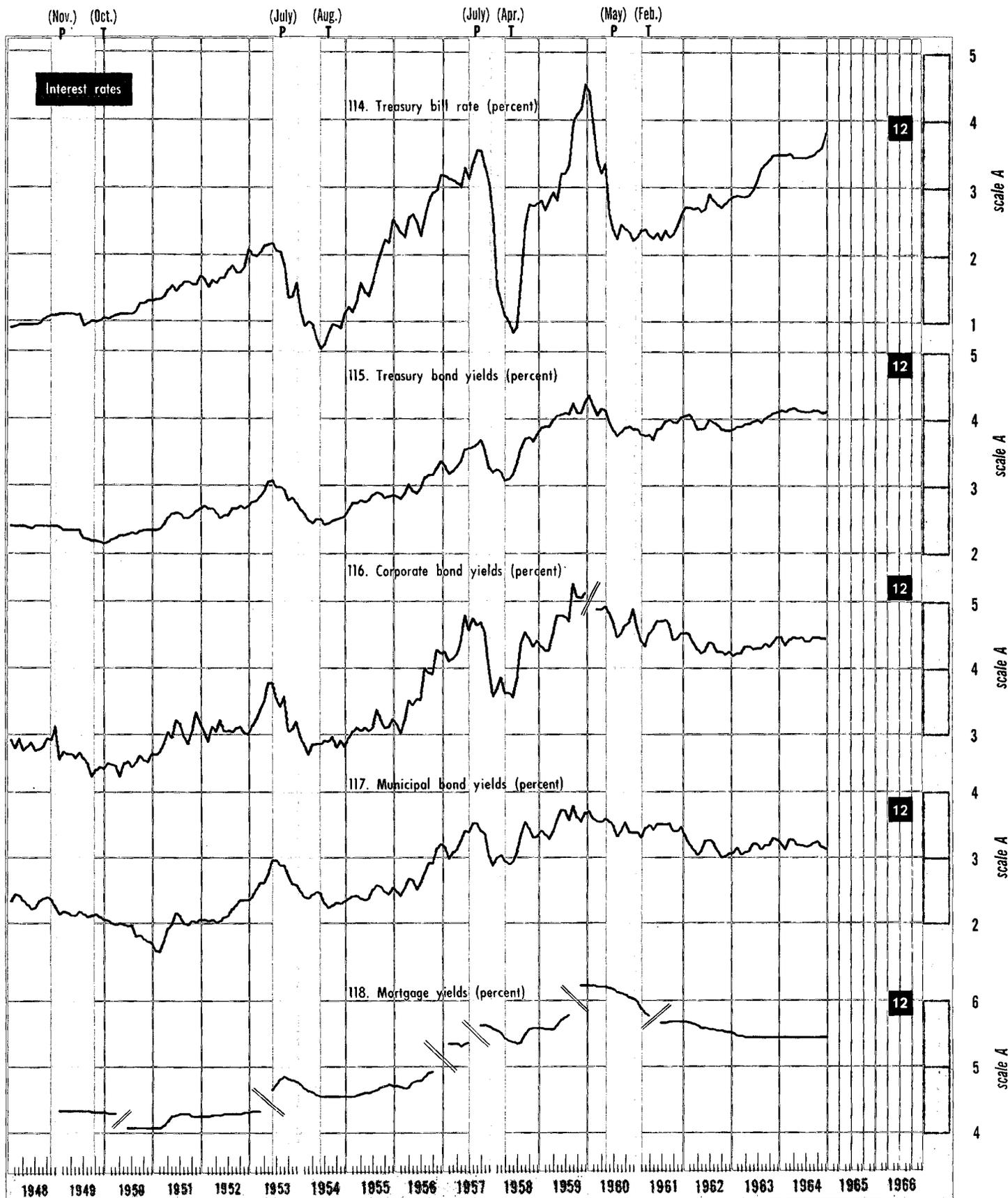
Other Selected U.S. Series—Continued



See "How to Read Charts 1 and 2," page 6

BUSINESS CYCLE SERIES SINCE 1948—Continued

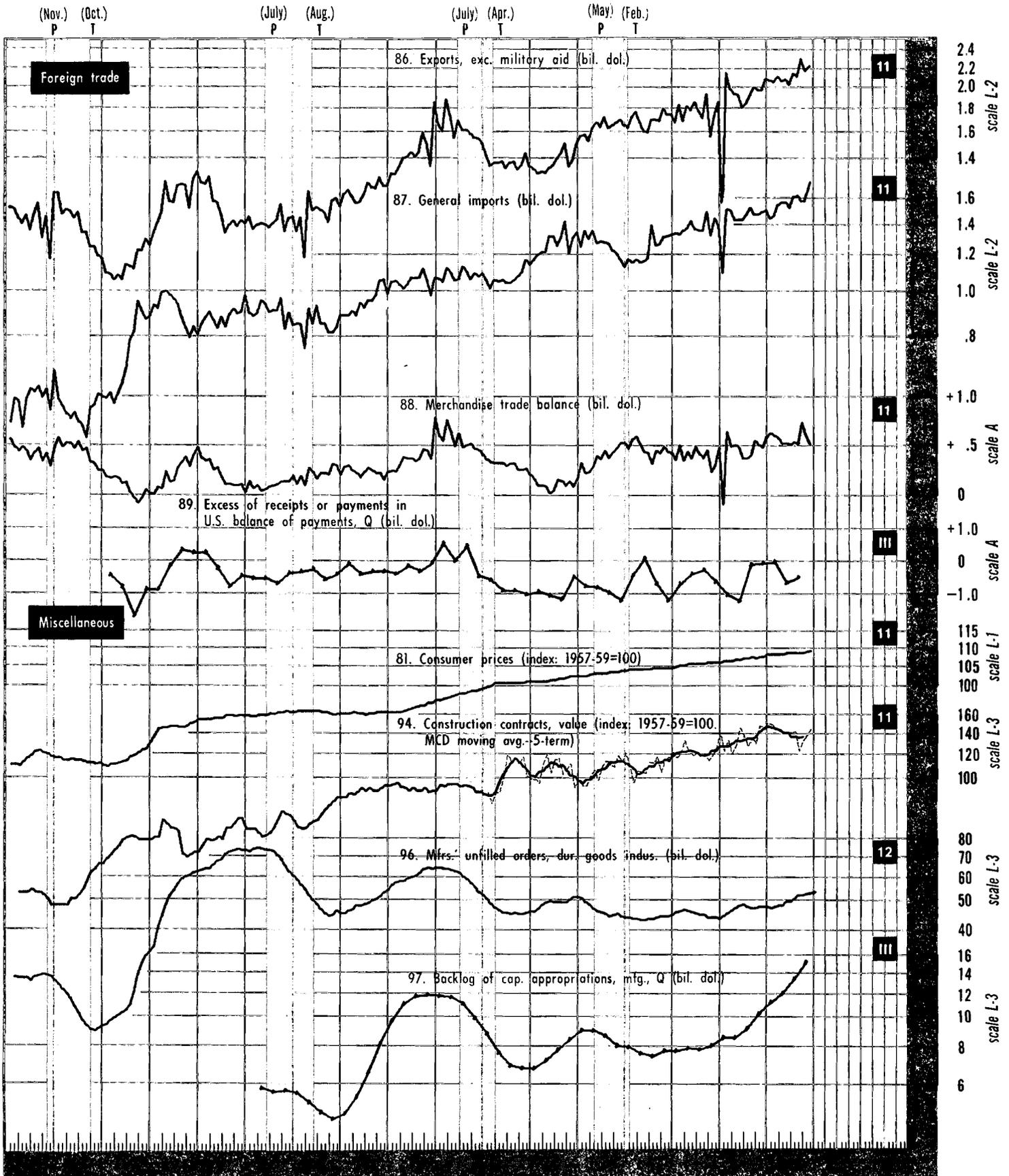
Other Selected U.S. Series—Continued



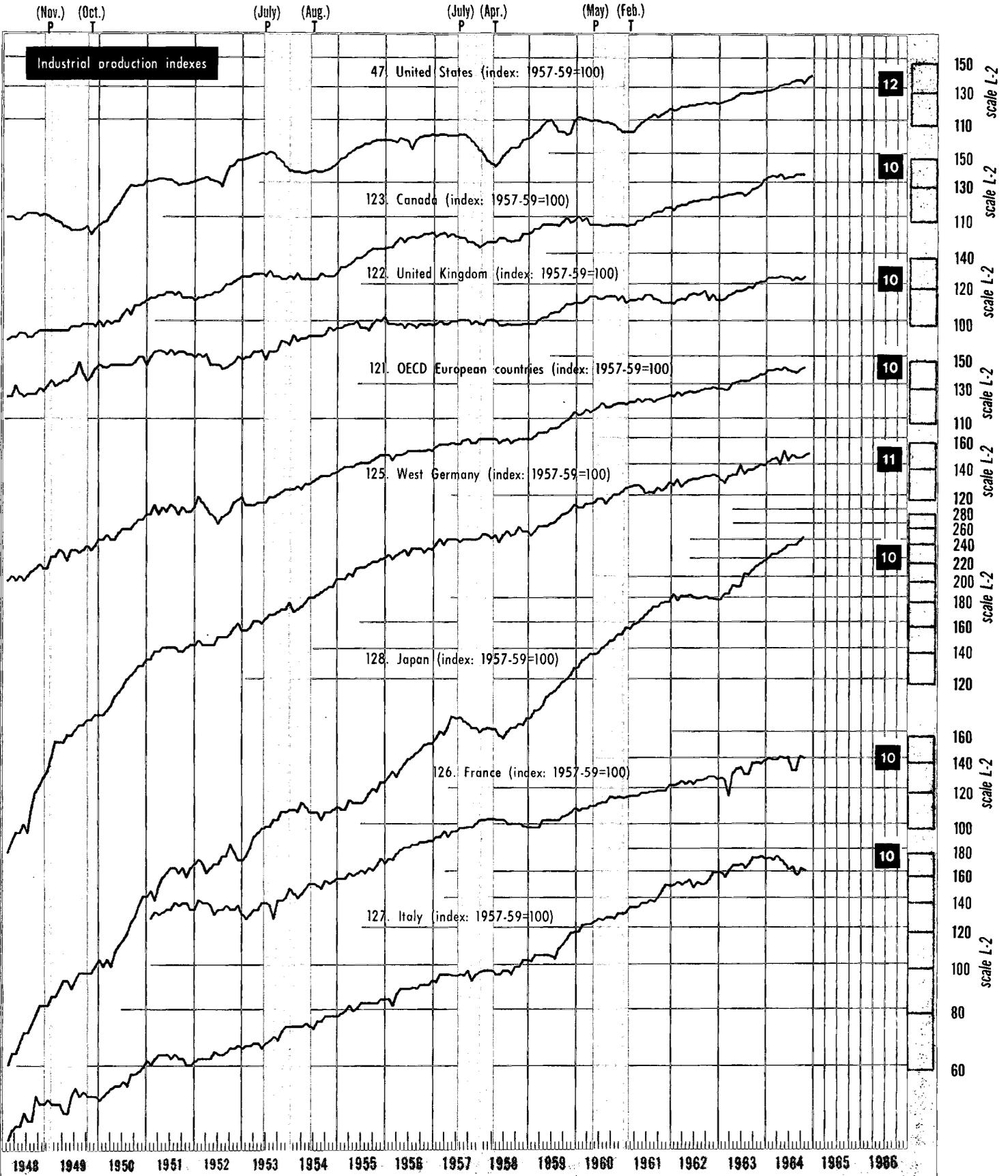
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BUSINESS CYCLE SERIES SINCE 1948—Continued

Other Selected U.S. Series—Continued



BUSINESS CYCLE SERIES SINCE 1948—Continued
International Comparisons



See "How to Read Charts 1 and 2," page 6.

2

A

LATEST DATA FOR BUSINESS CYCLE SERIES

NBER Leading Indicators

Year and month	1. Average workweek, production workers, manufacturing	2. Accession rate, manufacturing	30. Nonagricultural placements, all industries	3. Layoff rate, manufacturing	4. Persons on temporary layoff, all industries ¹	5. Average weekly initial claims, State unemployment insurance ²	6. New orders, durable goods industries	24. New orders, machinery and equipment industries
	(Hours)	(Per 100 employees)	(Thous.) Revised ³	(Per 100 employees)	(Thous.) Revised ³	(Thous.) Revised ³	(Bil. dol.)	(Bil. dol.)
1961								
July.....	40.0	4.0	493	2.2	101	348	15.92	3.03
August.....	40.1	4.2	512	1.9	136	316	16.12	3.07
September.....	39.6	3.7	507	2.2	127	329	15.97	2.88
October.....	40.3	4.3	524	1.9	113	304	16.26	2.91
November.....	40.6	4.3	540	1.9	115	305	16.74	2.98
December.....	40.3	4.1	551	2.0	127	296	17.26	2.96
1962								
January.....	40.1	4.3	557	1.8	135	301	17.70	3.15
February.....	40.4	4.2	557	1.9	88	295	17.70	3.30
March.....	40.5	4.1	569	1.7	118	287	17.15	2.97
April.....	40.6	4.1	569	1.8	107	283	17.02	3.31
May.....	40.4	4.2	586	2.0	126	301	17.22	3.10
June.....	40.4	4.0	561	2.0	124	304	16.65	3.02
July.....	40.5	4.2	557	2.1	128	303	16.91	3.07
August.....	40.3	4.0	553	2.3	127	305	16.59	2.94
September.....	40.5	3.9	551	1.9	127	300	16.55	2.98
October.....	40.2	3.9	557	2.1	125	304	17.29	3.05
November.....	40.4	3.8	565	2.0	133	299	16.73	3.16
December.....	40.3	3.8	543	1.9	120	310	17.33	3.07
1963								
January.....	40.5	3.8	552	1.9	152	310	18.47	3.25
February.....	40.3	3.8	554	1.8	121	301	18.23	3.21
March.....	40.4	3.8	555	1.8	107	288	18.78	3.22
April.....	40.1	4.0	557	1.9	138	293	19.04	3.35
May.....	40.4	3.9	546	1.9	95	288	18.74	3.42
June.....	40.5	3.9	545	1.8	92	284	17.68	3.29
July.....	40.4	3.9	541	1.9	131	281	18.28	3.33
August.....	40.4	3.8	543	2.0	130	290	18.06	3.31
September.....	40.5	3.8	553	1.9	108	285	18.24	3.42
October.....	40.6	3.9	575	1.8	135	282	18.62	3.44
November.....	40.5	3.7	533	1.8	134	276	18.11	3.27
December.....	40.7	4.0	525	1.7	97	301	17.97	3.61
1964								
January.....	40.2	3.8	534	1.7	116	284	19.74	3.62
February.....	40.7	4.0	532	1.8	125	270	19.50	3.41
March.....	40.6	4.0	522	1.8	98	277	19.26	3.46
April.....	40.7	3.9	519	1.7	122	265	20.46	3.61
May.....	40.6	3.8	526	1.7	111	262	19.94	3.93
June.....	40.6	4.1	520	1.6	121	257	20.02	3.92
July.....	40.6	4.0	523	2.0	118	260	21.25	3.77
August.....	40.8	4.0	502	1.4	91	244	19.34	3.77
September.....	40.5	3.8	516	1.5	121	245	19.91	3.69
October.....	40.5	r4.0	519	r1.7	92	249	r19.62	r3.79
November.....	40.9	p3.9	549	p1.5	89	262	r19.42	r3.90
December.....	p41.1	(NA)	518	(NA)	109	251	p20.31	p3.87
1965								
January.....						4267		
February.....								
March.....								
April.....								
May.....								
June.....								

NOTE: Series are seasonally adjusted except those that appear to contain no seasonal movement. Unadjusted series are indicated by an asterisk (*). Current high values are indicated 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.

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. ²Data exclude Puerto Rico which is included in figures published by source agency.

³See "New Features and Changes for This Issue," page iii. ⁴Week ended January 9.

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

NBER Leading Indicators—Continued

Year and month	9. Construction contracts, commercial and industrial buildings	10. Contracts and orders, plant and equipment	11. Newly approved capital appropriations, 1,000 manufacturing corporations	7. New private nonfarm dwelling units started	29. New private housing units authorized by local building permits	12. Net change in business population, operating businesses	13. New business incorporations	14. Current liabilities of business failures
	(Mil. sq. ft. floor space)	(Bil. dol.)	(Bil. dol.)	(Ann. rate, thous.)	(1957-59=100)	(Thous.)	(Number)	(Mil. dol.)
	Revised ¹	Revised ¹					Revised ¹	Revised ¹
1961								
July.....	36.57	3.57	...	1,305	98.9	...	15,492	80.15
August.....	39.32	3.66	2.85	1,252	101.9	+9	15,277	94.47
September.....	38.73	3.40	...	1,453	100.2	...	15,402	126.12
October.....	33.88	3.48	...	1,381	104.2	...	16,035	72.28
November.....	41.61	3.66	2.62	1,319	101.8	+11	16,149	119.93
December.....	41.69	3.50	...	1,324	99.0	...	15,881	71.81
1962								
January.....	38.70	3.71	...	1,392	103.8	...	15,599	101.53
February.....	42.75	3.98	2.86	1,253	109.1	+11	15,758	86.03
March.....	45.90	3.71	...	1,460	104.0	...	15,670	77.40
April.....	42.72	3.96	...	1,489	111.9	...	15,372	107.15
May.....	44.64	3.76	2.56	1,501	103.8	+12	15,245	89.80
June.....	41.16	3.66	...	1,366	106.1	...	14,947	93.15
July.....	40.56	3.72	...	1,423	108.7	...	15,171	107.98
August.....	42.69	3.61	3.04	1,459	107.1	+11	15,056	121.85
September.....	40.96	3.56	...	1,328	109.1	...	15,249	106.02
October.....	41.08	3.66	...	1,491	107.2	...	14,892	129.87
November.....	42.20	3.82	3.25	1,564	113.0	+11	14,951	96.62
December.....	41.89	3.99	...	1,541	112.0	...	14,985	99.61
1963								
January.....	44.61	3.84	...	1,287	111.8	...	14,924	146.46
February.....	45.11	3.82	2.68	1,418	108.2	+11	15,390	93.05
March.....	39.42	3.75	...	1,551	112.9	...	15,563	94.12
April.....	40.23	3.98	...	1,656	113.6	...	15,305	88.15
May.....	47.00	4.28	3.35	1,651	120.0	+11	15,682	115.05
June.....	51.39	3.96	...	1,558	119.3	...	15,536	91.07
July.....	45.78	3.94	...	1,584	116.5	...	15,431	144.50
August.....	44.93	3.91	4.07	1,454	113.5	+13	16,093	152.86
September.....	43.88	4.08	...	1,712	121.0	...	15,689	94.52
October.....	50.81	4.17	...	1,824	123.6	...	16,275	99.92
November.....	43.73	4.32	3.93	1,544	119.9	+12	15,759	255.72
December.....	45.43	4.56	...	1,524	123.7	...	15,867	87.17
1964								
January.....	51.07	4.38	...	1,688	117.6	...	16,250	91.69
February.....	51.05	4.14	4.01	1,613	123.9	+16	16,018	119.29
March.....	48.41	4.11	...	1,638	121.5	...	15,992	110.67
April.....	53.48	4.36	...	1,501	112.9	...	16,180	107.10
May.....	46.22	4.63	4.88	1,507	112.1	+17	15,917	97.92
June.....	47.82	4.64	...	1,585	115.2	...	15,919	136.19
July.....	52.62	4.52	...	1,483	109.6	...	15,979	125.14
August.....	47.72	4.53	5.41	1,408	113.0	+16	16,074	90.99
September.....	51.41	4.51	...	1,433	107.8	...	16,605	118.59
October.....	53.75	4.56	...	1,559	107.6	...	16,493	97.98
November.....	49.61	4.93	(NA)	1,404	111.0	(NA)	17,103	111.00
December.....	(NA)	(NA)	...	1,502	101.8	...	(NA)	126.49
1965								
January.....								
February.....								
March.....								
April.....								
May.....								
June.....								

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

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

NBER Leading Indicators—Continued

Year and month	15. Business failures with liabilities of \$100,000 and over	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*	21. Change in business inventories after valuation adjustment, all indus.
	(Number per week) Revised ¹	(Ann. rate, bil. dol.)	(1957-59=100) Revised ¹	(Cents) Revised ¹	(Percent)	(1941-43=10)	(Ann. rate, bil. dol.)
1961							
July.....	43	...	101.4	...	...	65.44	...
August.....	36	22.0	102.0	7.9	8.5	67.79	+3.7
September.....	39	...	101.6	...	...	67.26	...
October.....	42	...	101.5	...	...	68.00	...
November.....	39	24.5	101.7	8.5	9.3	71.08	+5.6
December.....	38	...	102.3	...	...	71.74	...
1962							
January.....	37	...	101.3	...	...	69.07	...
February.....	<u>H</u> 32	24.5	101.7	8.4	9.2	70.22	<u>H</u> +6.9
March.....	36	...	101.8	...	...	70.29	...
April.....	38	...	100.9	...	...	68.05	...
May.....	38	24.9	101.1	8.1	9.1	62.99	+6.1
June.....	41	...	100.4	...	...	55.63	...
July.....	38	...	100.7	...	...	56.97	...
August.....	45	25.0	100.7	8.1	9.1	58.52	+5.1
September.....	40	...	101.9	...	...	58.00	...
October.....	46	...	100.7	...	...	56.17	...
November.....	42	25.7	101.1	8.1	9.1	60.04	+5.4
December.....	37	...	100.5	...	...	62.64	...
1963							
January.....	49	...	100.6	...	...	65.06	...
February.....	43	25.5	100.7	8.1	9.1	65.92	+3.6
March.....	42	...	101.2	...	...	65.67	...
April.....	40	...	101.3	...	...	68.76	...
May.....	51	26.6	101.7	8.5	9.4	70.14	+3.6
June.....	38	...	103.2	...	...	70.11	...
July.....	39	...	102.2	...	...	69.07	...
August.....	42	26.7	101.5	8.6	9.3	70.98	+4.2
September.....	43	...	101.6	...	...	72.85	...
October.....	42	...	102.2	...	...	73.03	...
November.....	38	28.3	101.9	8.8	9.8	72.62	+6.4
December.....	38	...	102.2	...	...	74.17	...
1964							
January.....	41	...	103.2	...	...	76.45	...
February.....	41	31.2	103.2	9.0	10.4	77.39	+2.5
March.....	38	...	102.7	...	...	78.80	...
April.....	44	...	103.7	...	...	79.94	...
May.....	39	31.9	103.5	8.9	<u>H</u> 10.5	80.72	+3.7
June.....	39	...	103.5	...	...	80.24	...
July.....	44	...	103.4	...	...	83.22	...
August.....	40	<u>H</u> 32.0	103.6	<u>H</u> 9.0	10.4	82.00	+2.8
September.....	42	...	103.0	...	...	83.41	...
October.....	42	...	102.6	...	...	84.85	...
November.....	42	(NA)	103.4	(NA)	(NA)	<u>H</u> 85.44	p+6.0
December.....	40	...	<u>H</u> p104.5	83.96	...
1965							
January.....						² 85.76	
February.....							
March.....							
April.....							
May.....							
June.....							

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

²Average for January 12, 13, and 14.

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

NBER Leading Indicators—Continued

Year and month	31. Change in book value, manufacturing and trade inventories, total	20. Change in book value, mfrs.' inventories of materials and supplies	37. Purchased materials, percent reporting higher inventories	26. Production matls., percent reporting commitments 60 days or longer*	32. Vendor performance, percent reporting slower deliveries*	25. Change in unfilled orders, durable goods industries	23. Industrial materials prices*
	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Percent reporting) Revised ¹	(Percent reporting)	(Percent reporting)	(Bil. dol.)	(1957-59=100)
1961							
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	60	57	56	+0.63	102.9
February.....	+5.7	+3.0	59	61	56	+0.62	100.6
March.....	+6.0	+2.7	58	56	55	-0.67	100.4
April.....	+2.6	+0.8	54	55	48	-0.34	98.3
May.....	+7.1	+1.0	51	49	46	-0.46	97.8
June.....	+5.6	+0.2	47	52	42	-0.37	95.4
July.....	+3.9	-2.4	44	58	44	-0.25	94.2
August.....	+2.0	-0.3	45	52	44	-0.60	94.5
September.....	+5.6	+1.8	43	52	48	-0.36	94.0
October.....	+5.5	-0.2	46	55	48	+0.21	94.9
November.....	+1.2	+0.5	50	52	48	-0.40	96.4
December.....	+5.1	-1.7	49	51	48	+0.91	95.8
1963							
January.....	+3.1	+0.6	47	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	48	53	60	+0.85	94.5
May.....	+2.7	-0.3	55	52	58	+0.33	95.2
June.....	+5.1	+0.7	56	57	54	-0.58	93.9
July.....	+6.0	-0.5	55	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	43	54	48	-0.09	97.3
December.....	+7.2	-0.7	43	55	46	-0.40	97.7
1964							
January.....	+3.5	-1.9	42	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	53	59	60	+1.04	102.4
May.....	+1.6	-0.1	51	58	63	+0.38	100.9
June.....	+1.4	-0.7	55	59	55	+0.81	101.4
July.....	+0.2	-1.6	57	58	59	H+1.26	102.5
August.....	+1.0	+1.3	56	58	65	+0.06	105.7
September.....	+7.3	+2.6	60	61	H74	+0.77	108.2
October.....	r0.0	r+4.3	58	60	72	+1.00	112.0
November.....	p+8.1	p+2.5	H60	64	70	r+0.19	H113.2
December.....	(NA)	(NA)	58	H65	66	p+0.20	112.5
1965							
January.....							² 110.5
February.....							
March.....							
April.....							
May.....							
June.....							

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

²Average for January 12, 13, and 14.

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

NBER Roughly Coincident Indicators

Year and month	41. Employees in nonagricultural establishments	42. Total non-agricultural employment, labor force survey ¹	43. Unemployment rate, total ¹	40. Unemployment rate, married males ¹	45. Average weekly insured unemployment rate, State programs ²	46. Help-wanted advertising in newspapers	47. Industrial production
	(Thous.)	(Thous.)	(Percent)	(Percent)	(Percent)	(1957-59=100)	(1957-59=100)
1961							
July.....	54,061	61,259	6.9	4.8	5.3	94	111.5
August.....	54,206	51,274	6.7	4.7	5.2	98	112.9
September.....	54,220	61,299	6.7	4.6	5.1	98	111.6
October.....	54,330	61,463	6.6	4.2	5.0	107	113.4
November.....	54,597	61,896	6.2	4.2	5.1	110	114.9
December.....	54,723	61,747	6.0	3.9	4.8	110	115.8
1962							
January.....	54,695	61,899	5.8	3.8	4.7	114	115.0
February.....	55,003	62,179	5.5	3.3	4.5	115	116.4
March.....	55,162	62,253	5.5	3.6	4.4	115	117.5
April.....	55,411	62,247	5.6	3.8	3.9	112	118.0
May.....	55,502	62,663	5.5	3.5	3.8	114	118.2
June.....	55,565	62,752	5.5	3.7	4.0	109	118.1
July.....	55,657	62,620	5.4	3.5	4.2	110	119.0
August.....	55,673	63,021	5.7	3.6	4.4	108	119.0
September.....	55,767	63,039	5.6	3.5	4.4	107	119.7
October.....	55,802	63,007	5.4	3.5	4.5	107	119.1
November.....	55,874	62,870	5.8	3.6	4.6	107	119.8
December.....	55,881	63,240	5.5	3.5	4.7	e107	119.4
1963							
January.....	55,900	63,090	5.7	3.7	4.8	e107	119.8
February.....	56,044	63,227	5.9	3.7	4.6	e109	120.6
March.....	56,187	63,478	5.7	3.5	4.4	e108	121.9
April.....	56,368	63,770	5.7	3.3	4.2	109	122.7
May.....	56,511	63,690	5.9	3.3	4.2	105	124.4
June.....	56,601	63,843	5.7	3.2	4.1	104	125.6
July.....	56,763	64,092	5.6	3.2	4.1	109	125.6
August.....	56,768	64,069	5.5	3.1	4.1	105	125.4
September.....	56,868	64,167	5.5	3.0	4.0	107	125.7
October.....	57,070	64,128	5.6	2.9	4.0	111	126.1
November.....	57,101	64,319	5.9	3.4	4.1	112	126.1
December.....	57,291	64,315	5.5	3.3	4.3	118	127.0
1964							
January.....	57,334	64,631	5.6	3.2	4.3	116	127.7
February.....	57,684	65,035	5.4	3.0	4.0	117	128.2
March.....	57,754	65,207	5.4	2.9	3.8	118	129.0
April.....	57,827	65,811	5.4	2.9	3.8	120	130.5
May.....	57,931	65,889	5.1	2.6	3.6	118	131.3
June.....	58,104	65,549	5.3	2.8	3.6	121	131.6
July.....	58,256	65,706	4.9	2.7	3.6	124	132.9
August.....	58,301	65,678	5.1	2.6	3.5	123	133.8
September.....	58,458	65,534	5.2	2.9	3.4	126	134.0
October.....	r58,382	65,580	5.2	2.8	3.4	127	r131.4
November.....	r58,871	66,029	5.0	H2.5	H3.4	r134	r134.8
December.....	Hp59,097	H66,322	H4.9	2.7	3.6	Hpl37	Hpl37.0
1965							
January.....					^a 3.5		
February.....							
March.....							
April.....							
May.....							
June.....							

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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. ²Data exclude Puerto Rico which is included in figures published by the source agency.

³Week ended January 2.

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

NBER Roughly Coincident Indicators—Continued

Year and month	50. Gross national product in 1954 dollars	49. Gross national product in current dollars	57. Final sales (series 49 minus series 21)	51. Bank debits outside NYC, 343 centers	52. Personal income	53. Labor income in mining, manufacturing, and construction	54. Sales of retail stores	55. 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.)	(Ann. rate, bil. dol.)	(Mil. dol.)	(1957-59=100)
1961								
July.....	...	...	...	1,839.9	420.0	108.0	18,234	100.7
August.....	450.6	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.....	462.5	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.....	469.1	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.....	475.1	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.....	478.3	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.....	483.0	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.....	485.4	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	100.4
May.....	487.9	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.....	494.8	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.....	502.0	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	101.1
1964								
January.....	...	...	...	2,354.9	479.4	122.7	21,000	101.1
February.....	508.0	608.8	606.4	2,239.6	480.5	124.2	21,533	101.2
March.....	...	...	...	2,322.3	482.9	124.6	21,223	101.2
April.....	...	...	...	2,451.1	486.6	125.9	21,392	101.2
May.....	513.5	618.6	614.9	2,312.8	487.8	125.8	21,777	101.1
June.....	...	...	...	2,328.7	489.3	126.4	21,773	101.0
July.....	...	...	...	2,430.5	491.4	126.9	21,935	101.2
August.....	519.6	628.4	625.7	2,372.6	494.9	127.9	22,266	101.2
September.....	...	...	...	2,424.8	497.9	129.2	22,254	101.3
October.....	...	...	...	2,454.0	498.7	127.7	r21,383	101.5
November.....	Ⓜp521.5	Ⓜp633.5	Ⓜp627.5	2,470.2	r502.3	r130.4	r21,631	101.6
December.....	Ⓜp2,495.8	Ⓜp505.7	Ⓜp131.8	Ⓜp22,808	Ⓜp101.7
1965								
January.....	² 101.6
February.....	
March.....	
April.....	
May.....	
June.....	

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

²Week ended January 12.

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

NBER Lagging Indicators

Year and month	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							
July.....	...	99.1	...	53.6	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	102.3	54.7	18.7	42,442	4.96
December.....	...	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.....	...	H100.4	...	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	H5.02
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.....	...	99.1	...	58.1	20.0	48,631	...
April.....	...	98.9	...	58.3	20.0	49,152	...
May.....	38.05	98.9	104.8	58.5	20.1	49,593	5.01
June.....	...	97.9	...	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.....	...	99.1	...	59.1	20.6	51,410	...
October.....	...	98.6	...	59.3	20.6	51,941	...
November.....	41.20	99.0	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	97.9	104.2	60.1	21.4	53,791	4.99
March.....	...	98.4	...	60.3	21.4	54,315	...
April.....	...	97.6	...	60.5	21.6	54,727	...
May.....	43.50	97.6	104.8	60.5	21.6	55,220	4.99
June.....	...	97.7	...	60.4	21.5	55,590	...
July.....	...	97.8	...	60.5	21.6	56,073	...
August.....	H45.65	97.5	H105.2	60.8	21.6	56,508	4.98
September.....	...	98.2	...	61.0	21.6	57,021	...
October.....	...	98.6	...	r61.8	21.8	57,431	...
November.....	a46.70	98.0	(NA)	Hp62.3	Hp21.9	H57,732	5.00
December.....	...	p97.0	...	(NA)	(NA)	(NA)	...
1965							
January.....
February.....	a47.90
March.....
April.....
May.....	a48.70
June.....

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

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

Other Selected U.S. Series

Year and month	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
	(Ann. rate, bil. dol.) Revised ¹	(Ann. rate, bil. dol.) Revised ¹	(Ann. rate, bil. dol.) Revised ¹	(Ann. rate, bil. dol.)	(Mil. dol.) Revised ¹	(Mil. dol.) Revised ¹	(Mil. dol.) Revised ¹
1961							
July.....	97.7	91.2	-6.5	...	1,181	3,784	2,087
August.....	112.7	101.0	-11.7	-3.4	2,278	5,344	2,232
September.....	104.1	99.2	-4.9	...	1,933	4,874	2,158
October.....	109.8	99.5	-10.3	...	1,354	4,296	2,651
November.....	106.5	101.3	-5.2	-2.6	1,286	4,121	2,379
December.....	104.3	101.7	-2.6	...	1,773	4,653	2,281
1962							
January.....	115.1	101.7	-13.4	...	1,758	4,434	3,073
February.....	108.8	101.3	-7.5	-4.4	1,228	4,086	2,135
March.....	107.4	98.1	-9.3	...	1,410	4,421	2,225
April.....	110.1	107.8	-2.3	...	1,791	4,477	2,062
May.....	106.8	109.9	+3.1	-4.6	1,039	3,999	1,887
June.....	108.9	104.4	-4.5	...	1,311	4,082	1,930
July.....	116.3	111.2	-5.1	...	1,657	4,517	2,017
August.....	111.6	110.1	-1.5	-2.9	1,395	4,385	2,149
September.....	109.9	107.6	-2.3	...	1,040	3,892	2,111
October.....	118.6	107.8	-10.8	...	1,675	4,535	2,983
November.....	114.7	109.0	-5.7	-4.5	1,787	4,920	2,734
December.....	115.2	109.0	-6.2	...	1,205	4,140	1,984
1963							
January.....	115.3	108.6	-6.7	...	1,586	4,632	2,198
February.....	109.2	110.6	+1.4	-4.8	1,206	4,137	2,435
March.....	114.5	108.9	-5.6	...	1,366	4,233	2,154
April.....	117.2	110.2	-7.0	...	1,215	4,078	1,966
May.....	115.8	112.2	-3.6	-1.0	1,358	4,507	2,240
June.....	110.2	111.9	+1.7	...	1,363	4,481	2,334
July.....	125.7	114.9	-10.8	...	1,132	4,349	2,419
August.....	118.0	114.7	-3.3	-0.7	1,700	4,580	2,733
September.....	121.9	113.1	-8.8	...	1,207	4,160	2,578
October.....	122.3	115.1	-7.2	...	2,010	5,112	2,086
November.....	114.2	113.3	-0.9	+0.6	1,094	4,093	1,681
December.....	122.7	118.5	-4.2	...	1,273	4,371	2,079
1964							
January.....	124.7	114.9	-9.8	...	1,075	4,351	2,149
February.....	119.0	121.4	+2.4	-2.4	1,843	5,317	2,689
March.....	120.8	116.4	-4.4	...	1,237	4,133	1,598
April.....	122.3	125.8	+3.5	...	1,389	4,544	2,508
May.....	113.7	107.2	-6.5	-7.8	1,910	4,818	2,454
June.....	123.4	114.9	-8.5	...	1,079	4,349	1,879
July.....	122.8	114.1	-8.7	...	1,494	4,677	2,904
August.....	118.2	110.7	-7.5	-5.2	803	4,237	1,926
September.....	122.7	113.7	-9.0	...	1,141	4,405	2,191
October.....	117.8	112.8	-5.0	...	889	3,773	1,745
November.....	111.0	114.3	+3.3	(NA)	1,089	4,228	2,008
December.....	135.5	115.7	-19.8	...	(NA)	(NA)	(NA)
1965							
January.....							
February.....							
March.....							
April.....							
May.....							
June.....							

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

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

Other Selected U.S. Series—Continued

Year and month	99. New orders, defense products	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
	(Bil. dol.)	(Mil. dol.)	(Annual rate, percent)	(Annual rate, percent)	(Annual rate, mil. dol.) Revised ¹	(Annual rate, mil. dol.) Revised ¹	(Annual rate, bil. dol.) Revised ¹
1961							
July.....	2.11	+530	0.00	+5.40	...	...	+2.18
August.....	1.96	+537	+2.52	+6.00	40,928	33,084	+1.00
September.....	1.92	+547	+5.04	+6.96	...	...	+0.56
October.....	1.97	+442	+3.36	+6.36	...	...	+0.01
November.....	1.86	+517	+6.60	+8.52	41,464	35,528	-0.01
December.....	1.82	+419	+3.36	+5.28	...	...	+1.72
1962							
January.....	1.99	+555	0.00	+6.84	...	...	+2.90
February.....	2.05	+434	+1.68	+10.92	42,476	36,664	+1.51
March.....	2.11	+382	+2.52	+10.92	...	...	+2.23
April.....	2.24	+441	+3.24	+7.68	...	...	+2.09
May.....	2.24	+440	-2.40	+1.56	53,476	37,780	+2.09
June.....	2.08	+391	+0.84	+6.12	...	...	+2.77
July.....	2.07	+440	-0.84	+4.56	...	...	+2.66
August.....	1.94	+439	-0.84	+4.08	49,112	39,040	+3.85
September.....	1.88	+375	-1.68	+4.56	...	...	+2.82
October.....	2.09	+419	+4.08	+9.52	...	...	+2.82
November.....	1.70	+473	+5.76	+10.44	49,332	40,296	+2.28
December.....	2.53	+268	+4.92	+11.40	...	...	+0.95
1963							
January.....	2.89	+375	+3.24	+8.28	...	...	+1.43
February.....	2.09	+301	+3.24	+8.28	45,240	39,444	+1.42
March.....	2.42	+269	+4.08	+9.12	...	...	+1.85
April.....	1.97	+313	+2.40	+5.76	...	...	+2.40
May.....	2.40	+247	+3.24	+5.76	56,344	39,008	+2.35
June.....	1.90	+138	+4.80	+7.56	...	...	+1.74
July.....	2.40	+161	+6.36	+8.52	...	...	+1.97
August.....	2.36	+133	+1.56	+7.92	57,872	40,012	+2.04
September.....	2.47	+91	+3.12	+6.48	...	...	+2.08
October.....	1.92	+94	+5.52	+8.76	...	...	+4.66
November.....	1.97	+33	+9.48	+13.80	57,216	39,056	+5.22
December.....	1.48	+209	-2.40	+4.08	...	...	+5.78
1964							
January.....	2.67	+171	+4.68	+9.96	...	...	+1.79
February.....	2.40	+91	0.00	+5.40	52,284	43,156	+3.48
March.....	2.18	+98	+3.12	+4.44	...	...	+1.42
April.....	2.37	+162	+2.28	+4.44	...	...	+3.17
May.....	2.48	+78	0.00	+4.44	67,504	44,172	+4.25
June.....	2.34	+118	+8.52	+9.72	...	...	+3.89
July.....	3.29	+132	+8.52	+8.76	...	...	+4.31
August.....	1.86	+79	+3.84	+7.44	55,384	44,748	+4.78
September.....	1.98	+90	+6.12	+8.16	...	...	+4.28
October.....	r2.41	+103	+4.56	+8.64	...	...	+1.43
November.....	r1.78	-34	+3.84	+10.68	(NA)	(NA)	+0.32
December.....	p1.57	p+171	p+2.28	p+7.20	+8.62
1965							
January.....							
February.....							
March.....							
April.....							
May.....							
June.....							

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

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

Other Selected U.S. Series—Continued

Year and month	113. Change, consumer installment debt	114. Treasury bill rate*	115. Treasury bond yields*	116. Corporate bond yields*	117. Municipal bond yields*	118. Mortgage yields*	86. Exports excluding military aid shipments, total
	(Annual rate, bil. dol.)	(Percent)	(Percent)	(Percent)	(Percent)	(Percent)	(Mil. dol.)
1961							
July.....	+0.10	2.27	3.90	4.74	3.52	5.68	1,688.5
August.....	+1.01	2.40	4.00	4.75	3.52	5.68	1,688.9
September.....	+0.78	2.30	4.02	4.69	3.53	5.69	1,678.4
October.....	+2.03	2.35	3.98	4.45	3.42	5.70	1,779.8
November.....	+2.65	2.46	3.98	4.48	3.41	5.70	1,733.1
December.....	+3.98	2.62	4.06	4.56	3.47	5.69	1,724.8
1962							
January.....	+2.23	2.75	4.08	4.55	3.34	5.69	1,668.3
February.....	+3.12	2.75	4.09	4.54	3.21	5.68	1,809.3
March.....	+3.74	2.72	4.01	4.42	3.14	5.65	1,672.0
April.....	+5.82	2.74	3.89	4.31	3.06	5.64	1,795.4
May.....	+5.04	2.69	3.88	4.26	3.11	5.60	1,761.7
June.....	+4.67	2.72	3.90	4.30	3.26	5.59	1,835.6
July.....	+4.49	2.94	4.02	4.41	3.28	5.58	1,748.3
August.....	+4.66	2.84	3.98	4.39	3.23	5.57	1,702.5
September.....	+3.00	2.79	3.94	4.28	3.11	5.56	1,907.9
October.....	+4.42	2.75	3.89	4.27	3.02	5.55	1,542.8
November.....	+5.80	2.80	3.87	4.23	3.04	5.54	1,724.6
December.....	+5.82	2.86	3.87	4.28	3.07	5.53	1,838.7
1963							
January.....	+5.82	2.91	3.89	4.22	3.10	5.52	984.8
February.....	+5.94	2.92	3.92	4.25	3.15	5.48	2,117.5
March.....	+5.72	2.90	3.93	4.26	3.05	5.47	1,960.4
April.....	+6.25	2.91	3.97	4.35	3.10	5.46	1,912.7
May.....	+5.29	2.92	3.97	4.35	3.11	5.45	1,892.6
June.....	+5.83	3.00	4.00	4.32	3.21	5.45	1,784.7
July.....	+6.11	3.14	4.01	4.34	3.22	5.45	1,823.0
August.....	+5.77	3.32	3.99	4.33	3.13	5.45	1,894.6
September.....	+4.09	3.38	4.04	4.40	3.20	5.45	1,979.6
October.....	+6.37	3.45	4.07	4.36	3.20	5.45	1,946.4
November.....	+4.60	3.52	4.11	4.42	3.30	5.45	1,944.6
December.....	+5.52	3.52	4.14	4.49	3.27	5.45	2,049.4
1964							
January.....	+5.14	3.53	4.15	4.49	3.22	5.45	2,037.3
February.....	+6.95	3.53	4.14	4.38	3.14	5.45	2,028.7
March.....	+6.29	3.55	4.18	4.45	3.28	5.45	2,077.5
April.....	+4.94	3.48	4.20	4.49	3.28	5.45	2,046.0
May.....	+5.92	3.48	4.16	4.48	3.20	5.45	2,052.1
June.....	+4.44	3.48	4.13	4.49	3.20	5.45	2,004.3
July.....	+5.80	3.48	4.13	4.43	3.18	5.46	2,111.4
August.....	+5.22	3.51	4.14	4.43	3.19	5.46	2,084.9
September.....	+6.16	3.53	4.16	4.49	3.23	5.46	2,271.2
October.....	+4.92	3.58	4.16	4.49	3.25	5.45	2,134.3
November.....	+3.61	3.62	4.12	4.47	3.18	5.45	2,184.1
December.....	(NA)	3.86	4.14	4.47	3.13	5.45	(NA)
1965							
January.....							
February.....							
March.....							
April.....							
May.....							
June.....							

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LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

Other Selected U.S. Series—Continued

Year and month	87. General imports, total	88. Merchandise trade balance (series 86 minus series 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.)	(1957-59=100) Revised ¹	(1957-59=100)	(Bil. dol.)	(Bil. dol.)
1961							
July.....	1,379.3	+309.2	...	104.4	110	43.43	...
August.....	1,253.6	+435.3	-700	104.4	116	43.85	...
September.....	1,262.0	+416.4	...	104.5	103	43.86	7.66
October.....	1,300.1	+479.7	...	104.5	114	44.11	...
November.....	1,308.5	+424.6	-1,231	104.5	116	44.52	...
December.....	1,314.5	+410.3	...	104.5	119	45.17	7.63
1962							
January.....	1,326.5	+341.8	...	104.7	115	45.80	...
February.....	1,319.8	+489.5	-748	104.9	119	46.42	...
March.....	1,341.7	+330.3	...	105.1	131	45.75	7.82
April.....	1,365.0	+430.4	...	105.3	121	45.41	...
May.....	1,404.1	+357.6	-440	105.4	117	44.95	...
June.....	1,350.7	+484.9	...	105.4	120	44.58	7.77
July.....	1,346.6	+401.7	...	105.3	117	44.33	...
August.....	1,345.9	+356.6	-334	105.5	118	43.73	...
September.....	1,471.4	+436.5	...	105.9	113	43.37	7.99
October.....	1,312.1	+230.7	...	105.8	117	43.58	...
November.....	1,424.9	+299.7	-681	105.8	123	43.18	...
December.....	1,376.5	+462.2	...	105.9	138	44.09	8.48
1963							
January.....	1,091.6	-106.8	...	106.1	121	45.06	...
February.....	1,497.4	+620.1	-1,062	106.1	130	45.74	...
March.....	1,486.7	+473.7	...	106.2	118	46.68	8.46
April.....	1,417.2	+495.5	...	106.3	125	47.53	...
May.....	1,420.2	+472.4	-1,295	106.4	144	47.86	...
June.....	1,420.5	+364.2	...	106.7	135	47.28	9.07
July.....	1,457.5	+365.5	...	106.9	126	46.74	...
August.....	1,508.3	+386.3	-153	107.1	132	46.70	...
September.....	1,450.4	+529.2	...	106.9	128	47.07	10.15
October.....	1,458.8	+487.6	...	107.0	146	47.17	...
November.....	1,471.9	+472.7	-134	107.2	144	47.08	...
December.....	1,480.0	+569.4	...	107.7	148	46.68	11.02
1964							
January.....	1,421.8	+615.5	...	107.8	147	47.07	...
February.....	1,445.3	+583.4	-94	107.7	143	47.64	...
March.....	1,522.9	+554.6	...	107.8	140	47.80	11.78
April.....	1,542.1	+503.9	...	108.0	138	48.84	...
May.....	1,548.1	+504.0	-730	108.1	138	49.22	...
June.....	1,505.5	+498.8	...	108.1	138	50.04	13.14
July.....	1,589.6	+521.8	...	108.1	140	51.30	...
August.....	1,592.2	+492.7	-562	108.2	121	51.37	...
September.....	1,557.5	+713.7	...	108.3	131	52.14	14.95
October.....	1,550.7	+583.6	...	108.4	136	53.14	...
November.....	1,697.7	+486.4	(NA)	108.6	143	r53.32	...
December.....	(NA)	(NA)	...	(NA)	(NA)	p53.52	(NA)
1965							
January.....							
February.....							
March.....							
April.....							
May.....							
June.....							

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

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

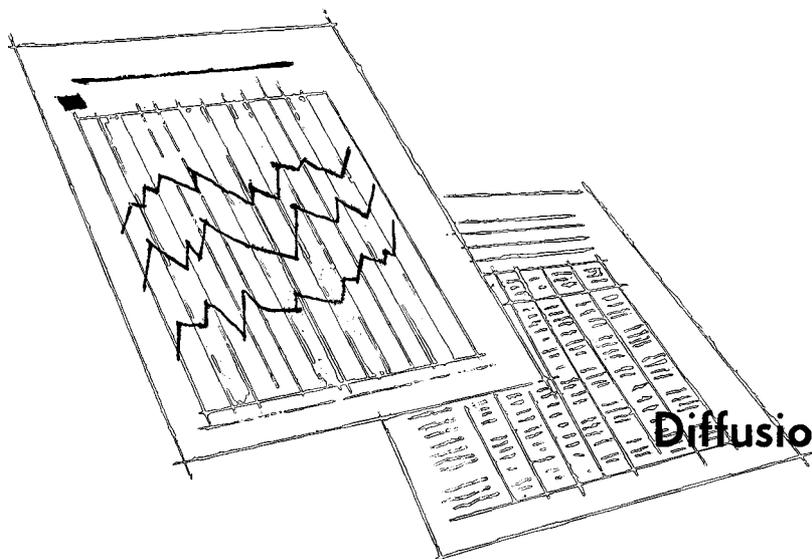
International Comparisons

Year and month	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)	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)
Revised ²								
1961								
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	134	129	163	203
August.....	125	123	118	132	136	129	166	202
September.....	126	125	117	134	136	136	171	207
October.....	126	126	120	135	138	137	171	211
November.....	126	128	121	136	140	136	173	214
December.....	127	131	121	136	139	138	170	217
1964								
January.....	128	133	123	139	142	140	172	219
February.....	128	134	123	139	144	139	169	224
March.....	129	133	123	140	145	139	173	224
April.....	130	135	124	139	140	141	169	226
May.....	131	132	123	141	150	140	166	229
June.....	132	133	123	139	143	141	162	234
July.....	133	133	122	138	147	132	164	234
August.....	134	135	123	137	145	132	156	234
September.....	134	135	122	r140	r145	141	163	239
October.....	r131	p135	p125	p141	149	p140	p162	243
November.....	135	(NA)	(NA)	(NA)	p150	(NA)	(NA)	(NA)
December.....	p137				(NA)			
1965								
January.....								
February.....								
March.....								
April.....								
May.....								
June.....								

NOTE: Series are seasonally adjusted except those that appear to contain no seasonal movement. Unadjusted series are indicated by an asterisk (*). 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.

¹Organization for Economic Cooperation and Development.

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



○
ANALYTICAL
MEASURES

Diffusion index charts and tables

DISTRIBUTIONS OF 'HIGHS' FOR CURRENT AND COMPARATIVE PERIODS

DIFFUSION INDEXES BASED ON HUNDREDS OF COMPONENTS

Average workweek—21 industries

New orders—36 industries

Capital appropriations—17 industries

Profits—700 companies

Stock prices—80 industries

Industrial materials prices—13 materials

State unemployment claims—47 areas

Production—24 industries

Wholesale prices—23 industries

Retail sales—24 types of stores

Net sales—800 companies

New orders—400 companies

Carloadings—19 commodity groups

Plant and equipment expenditures—22 industries

Nonagricultural employment—30 industries

DIRECTIONS OF CHANGE FOR COMPONENTS OF DIFFUSION INDEXES

DISTRIBUTION OF "HIGHS" FOR CURRENT and COMPARATIVE PERIODS

Number of months before benchmark date that high was reached	Number of series that reached a high before benchmark dates—							
	Current expansion				Business cycle peak			
	Sept. 1964	Oct. 1964	Nov. 1964	Dec. 1964	Nov. 1948	July 1953	July 1957	May 1960
	NBER LEADING INDICATORS							
8 months or more.....	7	8	8	5	12	7	22	14
7 months.....	1	...	1	1	1	1	...	2
6 months.....	...	1	1	...	...	3	1	1
5 months.....	2	1	...	2	4	1	...	3
4 months.....	1	1	2	1	1	...	...	2
3 months.....	1	2	2	1	...	2	...	1
2 months.....	2	3	1	...	...	2	...	...
1 month.....	3	4	1	3	...	...	...	...
Benchmark month.....	6	3	7	3	...	3	...	...
Number of series used.....	23	23	23	16	¹ 18	² 19	23	23
Percent of series high on benchmark date.....	26	13	30	19	0	16	0	0
	NBER ROUGHLY COINCIDENT INDICATORS							
8 months or more.....	...	...	...	...	3	1	2	1
7 months.....	...	...	...	...	...	...	...	...
6 months.....	...	...	...	...	...	...	...	...
5 months.....	1	1	...	...	...	1	1	...
4 months.....	1	...	1	...	4	1	3	2
3 months.....	...	1	1	...	1	...	...	3
2 months.....	1	1	...	...	2	2	...	...
1 month.....	1	3	...	1	...	3	...	2
Benchmark month.....	7	5	9	10	1	3	5	3
Number of series used.....	11	11	11	11	11	11	11	11
Percent of series high on benchmark date.....	64	45	82	91	9	27	45	27
	3d month before business cycle peak				6th month before business cycle peak			
	Aug. 1948	Apr. 1953	Apr. 1957	Feb. 1960	May 1948	Jan. 1953	Jan. 1957	Nov. 1959
	NBER LEADING INDICATORS							
8 months or more.....	11	3	20	12	6	2	17	4
7 months.....	1	4	...	1	1	1	1	4
6 months.....	...	...	1	...	...	2	1	4
5 months.....	...	2	1	1	4	1	1	2
4 months.....	1	2	...	2	2	4	...	4
3 months.....	...	3	1	1	...	1	1	...
2 months.....	4	1	...	3	2	2	1	1
1 month.....	1	...	...	2	2	3	...	2
Benchmark month.....	...	4	...	1	1	3	1	2
Number of series used.....	¹ 18	² 19	23	23	¹ 18	² 19	23	23
Percent of series high on benchmark date.....	0	21	0	4	6	16	4	9
	NBER ROUGHLY COINCIDENT INDICATORS							
8 months or more.....	1	...	1	1	1	...	1	...
7 months.....	2	...	...	...	...	...	...	...
6 months.....	...	...	1	...	...	...	...	...
5 months.....	...	2	...	...	...	...	...	4
4 months.....	...	...	1	1	4	...	...	2
3 months.....	...	...	...	...	...	...	2	...
2 months.....	...	1	2	...	...	2	...	...
1 month.....	4	4	3	3	1	3	5	2
Benchmark month.....	4	4	3	6	5	6	3	3
Number of series used.....	11	11	11	11	11	11	11	11
Percent of series high on benchmark date.....	36	36	27	55	45	55	27	27

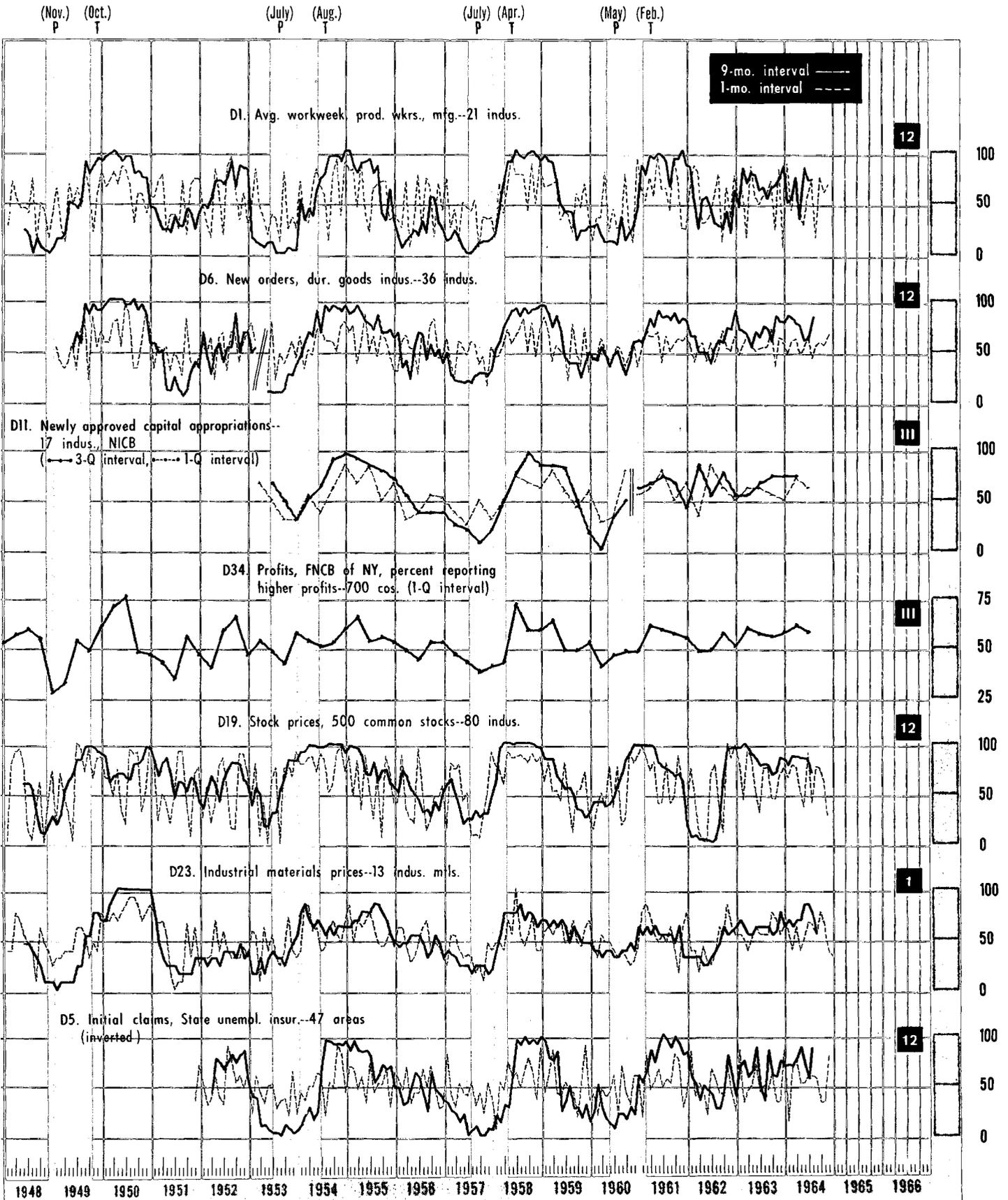
All quarterly series, 1 leading monthly series (series 15), and 1 roughly coincident series (series 40) are omitted from the distribution.

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.

DIFFUSION INDEXES SINCE 1948

NBER Leading Indicators

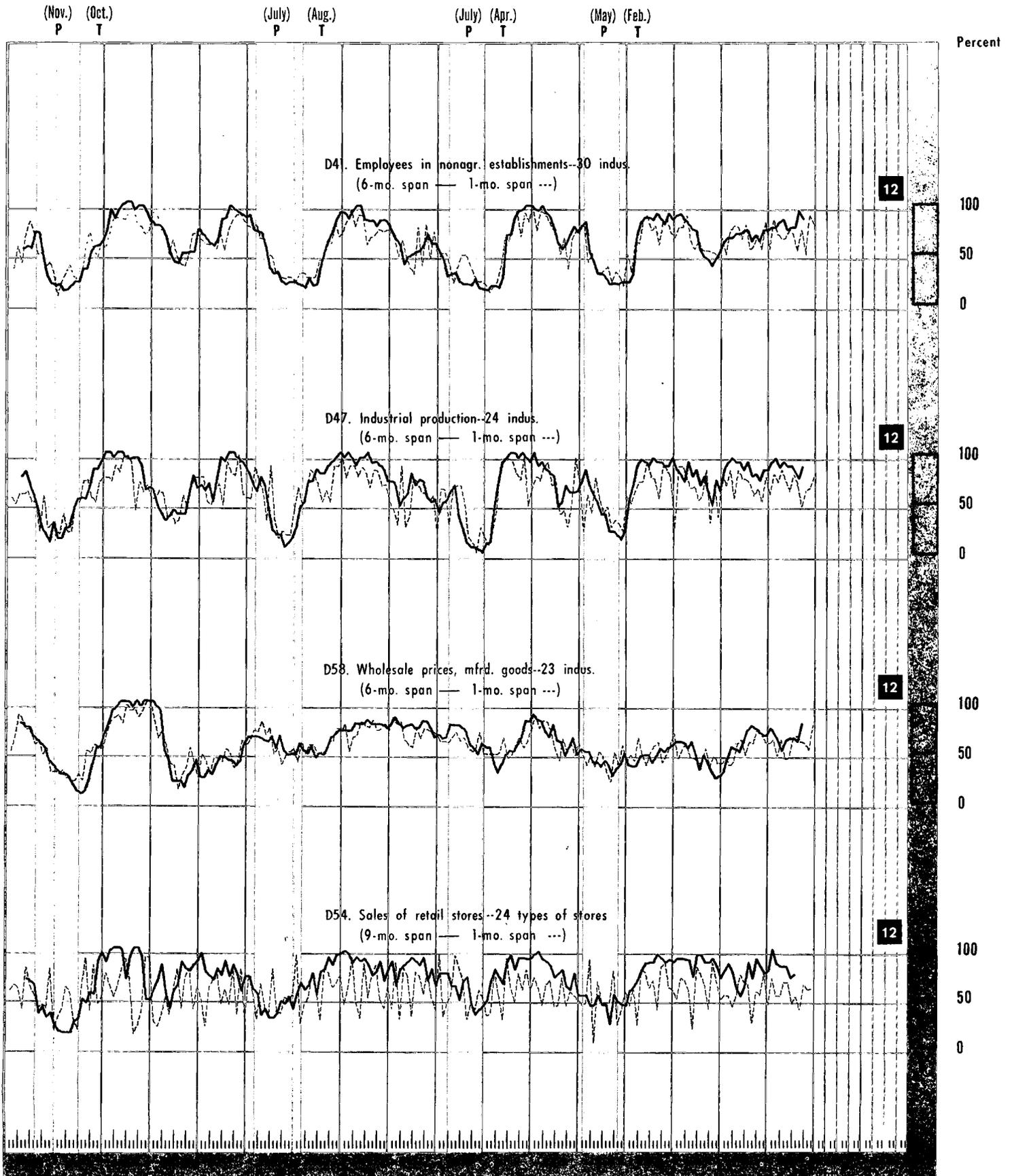


See "How to Read Charts 1 and 2," page 6.

2
B

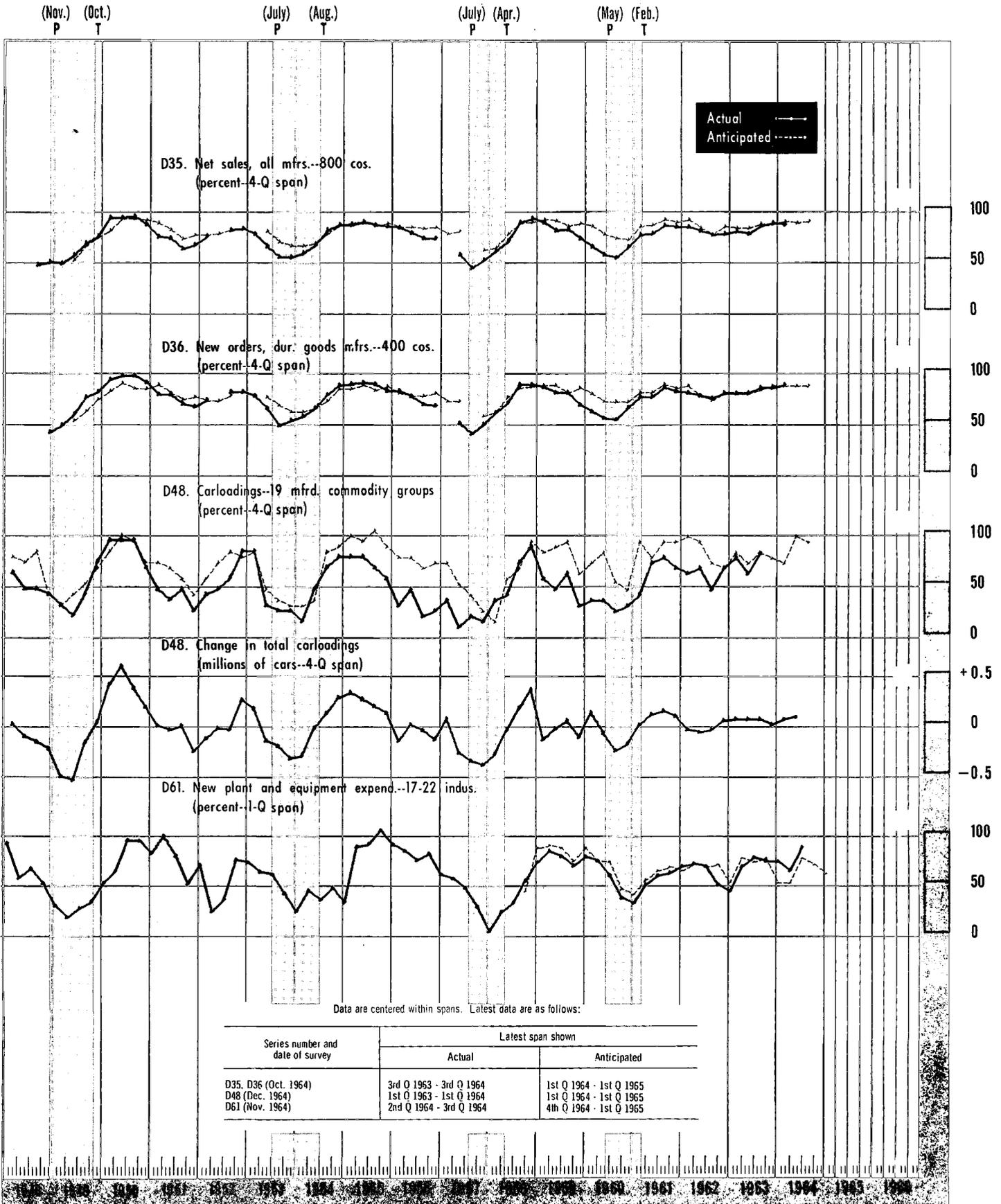
DIFFUSION INDEXES SINCE 1948—Continued

NBER Roughly Coincident Indicators



DIFFUSION INDEXES SINCE 1948—Continued

Actual and Anticipated Indexes



4

A

LATEST DATA FOR DIFFUSION INDEXES

NBER Leading Indicators

Year and month	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 span	9-month span	1-month span	9-month span	1-quarter span	3-quarter span
1961						
July.....	61.9	95.2	36.1	81.9	76	71
August.....	64.3	90.5	63.9	83.3	...	...
September.....	40.5	64.3	47.2	79.2	...	...
October.....	92.9	92.9	55.6	86.1	47	65
November.....	71.4	92.9	61.1	76.4	...	...
December.....	23.8	100.0	58.3	80.6	...	...
1962						
January.....	21.4	85.7	63.9	77.8	65	41
February.....	61.9	83.3	52.8	63.9	...	...
March.....	85.7	50.0	36.1	63.9	...	...
April.....	76.2	23.8	51.4	47.2	32	82
May.....	28.6	52.4	56.9	47.2	...	...
June.....	31.0	54.8	37.5	45.8	...	...
July.....	38.1	42.9	56.9	36.1	82	53
August.....	54.8	28.6	36.1	52.8	...	...
September.....	78.6	26.2	48.6	59.7	...	...
October.....	9.5	23.8	68.1	56.9	59	74
November.....	64.3	40.5	50.0	70.8	...	...
December.....	35.7	19.0	47.2	69.4	...	...
1963						
January.....	76.2	61.9	63.9	88.9	47	53
February.....	50.0	45.2	43.1	69.4	...	...
March.....	61.9	83.3	54.2	66.7	...	...
April.....	14.3	69.0	63.9	63.9	59	53
May.....	85.7	78.6	52.8	52.8	...	...
June.....	54.8	76.2	47.2	66.7	...	...
July.....	47.6	61.9	51.4	62.5	59	65
August.....	57.1	64.3	52.8	72.2	...	...
September.....	59.5	52.4	52.8	69.4	...	...
October.....	71.4	64.3	69.4	58.3	53	71
November.....	21.4	66.7	33.3	83.3	...	...
December.....	83.3	73.8	62.5	77.8	...	...
1964						
January.....	4.8	85.7	55.6	76.4	47	71
February.....	88.1	50.0	44.4	83.3	...	...
March.....	40.5	52.4	58.3	80.6	...	...
April.....	66.7	73.8	61.1	75.0	68	71
May.....	42.9	33.3	44.4	72.2	...	...
June.....	26.2	r85.7	50.0	r58.3	...	...
July.....	54.8	r71.4	63.9	r61.1	59	(NA)
August.....	71.4	p73.8	40.3	p83.3	...	...
September.....	14.3	...	54.2	...	...	...
October.....	r76.2	...	r58.3	...	(NA)	...
November.....	r59.5	...	r52.8	...	...	...
December.....	p69.0	...	p68.1	...	...	...
1965						
January.....	...	...	...	...	...	...
February.....	...	...	...	...	...	...
March.....	...	...	...	...	...	...
April.....	...	...	...	...	...	...
May.....	...	...	...	...	...	...
June.....	...	...	...	...	...	...

NOTE: Percent of series components rising. Numbers are centered within spans: 1-month figures are placed on latest month and 9-month figures are placed on the 6th month of span; 1-quarter figures are placed on the 1st month of the 2d quarter and 3-quarter figures are placed on the 1st month of the 3d quarter. Table 5 identifies the components for most of the indexes shown. The "r" indicates revised; "p", preliminary; and "NA", not available.

LATEST DATA FOR DIFFUSION INDEXES—Continued

NBER Leading Indicators—Continued

Year and month	D34. Profits, mfg., FNGB (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 span	1-month span	9-month span	1-month span	9-month span	1-month span	9-month span	
1961								
July.....	58	42.5	76.2	53.8	53.8	46.8	100.0	
August.....	...	81.2	73.7	46.2	53.8	55.3	95.7	
September.....	...	40.0	71.2	61.5	53.8	51.1	87.2	
October.....	56	46.9	67.5	38.5	46.2	80.9	97.9	
November.....	...	87.5	70.0	15.4	61.5	74.5	91.5	
December.....	...	55.0	62.5	61.5	30.8	27.7	80.9	
1962								
January.....	54	25.6	17.5	76.9	30.8	42.6	83.0	
February.....	...	75.0	6.2	38.5	30.8	83.0	57.4	
March.....	...	47.5	7.5	38.5	30.8	38.3	51.1	
April.....	47	8.7	3.1	15.4	30.8	51.1	34.0	
May.....	...	1.2	3.7	42.3	23.1	42.6	48.9	
June.....	...	1.2	2.5	26.9	23.1	19.1	44.7	
July.....	48	69.4	1.2	23.1	30.8	66.0	40.4	
August.....	...	78.1	3.7	34.6	38.5	55.3	25.5	
September.....	...	36.2	18.7	61.5	46.2	42.6	25.5	
October.....	56	8.1	67.5	53.8	61.5	39.4	42.6	
November.....	...	98.7	93.7	84.6	53.8	69.1	79.8	
December.....	...	84.4	95.0	61.5	57.7	40.4	59.6	
1963								
January.....	50	97.5	95.0	53.8	61.5	23.4	38.3	
February.....	...	78.7	95.0	53.8	69.2	85.1	68.1	
March.....	...	43.7	98.7	50.0	61.5	31.9	74.5	
April.....	59	91.2	95.0	38.5	53.8	44.7	57.4	
May.....	...	85.0	89.1	50.0	53.8	48.9	63.8	
June.....	...	51.9	84.6	61.5	61.5	70.2	87.2	
July.....	56	29.4	78.2	53.8	61.5	42.6	48.9	
August.....	...	75.0	79.5	53.8	61.5	48.9	34.0	
September.....	...	76.9	77.6	53.8	61.5	44.7	85.1	
October.....	55	44.9	69.2	76.9	53.8	61.7	59.6	
November.....	...	44.9	71.2	69.2	57.7	31.9	57.4	
December.....	...	68.4	84.4	53.8	76.9	34.0	74.5	
1964								
January.....	57	74.7	83.1	61.5	61.5	85.1	69.1	
February.....	...	65.2	78.2	57.7	69.2	12.8	70.2	
March.....	...	78.5	86.5	38.5	61.5	66.0	69.1	
April.....	60	75.6	85.9	61.5	69.2	75.5	76.6	
May.....	...	52.6	84.6	38.5	69.2	51.1	87.2	
June.....	...	35.3	84.6	50.0	84.6	51.1	70.2	
July.....	57	89.7	81.8	65.4	84.6	59.6	55.3	
August.....	...	41.0	68.8	61.5	76.9	57.4	87.2	
September.....	...	76.3	...	53.8	^a 53.8	55.3	...	
October.....	(NA)	73.1	...	76.9	...	31.9	...	
November.....	...	59.6	...	61.5	...	34.0	...	
December.....	...	24.0	...	38.5	...	78.7	...	
1965								
January.....	...	...	...	^a 30.8	...	...	...
February.....	...	...	...	...	...	...	...
March.....	...	...	...	...	...	...	...
April.....	...	...	...	...	...	...	...
May.....	...	...	...	...	...	...	...
June.....	...	...	...	...	...	...	...

NOTE: Percent of series components rising. Numbers are centered within spans: 1-month figures are placed on latest month, 6-month figures are placed on the 4th month, and 9-month figures are placed on the 6th month of span; 1-quarter figures are placed on 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 5 identifies the components for most of the indexes shown. The "r" indicates revised; "p", preliminary; and "NA", not available.

¹The diffusion index is based on 82 components, July 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. ²Average for January 12, 13, and 14.

LATEST DATA FOR DIFFUSION INDEXES—Continued

NBER Roughly Coincident Indicators

Year and month	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 span	6-month span	1-month span	6-month span	1-month span	9-month span	1-month span	6-month span
1961								
July.....	71.7	81.7	77.1	95.8	60.4	87.5	50.0	39.1
August.....	76.7	88.3	72.9	91.7	68.8	87.5	56.5	45.7
September.....	56.7	83.3	54.2	91.7	39.6	95.8	60.9	52.2
October.....	80.0	78.3	87.5	87.5	83.3	91.7	39.1	50.0
November.....	81.7	88.3	83.3	87.5	87.5	87.5	47.8	54.3
December.....	68.3	83.3	75.0	95.8	60.4	89.6	56.5	56.5
1962								
January.....	65.0	86.7	25.0	83.3	58.3	87.5	69.6	60.9
February.....	75.0	88.3	87.5	79.2	50.0	91.7	43.5	60.9
March.....	75.0	81.7	87.5	70.8	70.8	91.7	52.2	58.7
April.....	86.7	78.3	75.0	91.7	68.8	89.6	58.7	54.3
May.....	60.0	73.3	64.6	77.1	58.3	89.6	45.7	60.9
June.....	53.3	71.7	66.7	83.3	18.8	72.9	43.5	47.8
July.....	61.7	51.7	52.1	66.7	83.3	95.8	39.1	32.6
August.....	51.7	45.0	58.3	77.1	75.0	95.8	41.3	45.7
September.....	51.7	41.7	83.3	60.4	64.6	87.5	54.3	39.1
October.....	50.0	35.0	29.2	47.9	39.6	87.5	34.8	30.4
November.....	r48.3	43.3	68.8	72.9	87.5	91.7	45.7	23.9
December.....	r43.3	50.0	35.4	62.5	66.7	83.3	39.1	26.1
1963								
January.....	65.0	60.0	79.2	83.3	50.0	70.8	39.1	30.4
February.....	46.7	65.0	66.7	91.7	54.2	79.2	43.5	45.7
March.....	71.7	65.0	83.3	95.8	52.1	85.4	37.0	54.3
April.....	76.7	68.3	54.2	91.7	41.7	77.1	41.3	52.2
May.....	75.0	68.3	83.3	91.7	52.1	60.4	58.7	50.0
June.....	63.3	71.7	75.0	83.3	75.0	52.1	63.0	58.7
July.....	78.3	73.3	72.9	91.7	66.7	62.5	47.8	71.7
August.....	53.3	60.0	68.8	77.1	64.6	87.5	60.9	76.1
September.....	56.7	66.7	58.3	79.2	25.0	70.8	58.7	73.9
October.....	66.7	60.0	64.6	72.9	58.3	91.7	73.9	69.6
November.....	53.3	73.3	50.0	83.3	54.2	83.3	69.6	67.4
December.....	80.0	73.3	77.1	83.3	77.1	77.1	60.9	67.4
1964								
January.....	53.3	75.0	58.3	91.7	43.8	79.2	58.7	73.9
February.....	83.3	75.0	79.2	95.8	70.8	100.0	63.0	67.4
March.....	66.7	80.0	70.8	85.4	52.1	85.4	45.7	60.9
April.....	63.3	83.3	83.3	91.7	52.1	83.3	63.0	50.0
May.....	65.0	73.3	70.8	87.5	66.7	83.3	43.5	60.9
June.....	73.3	75.0	62.5	87.5	66.7	83.3	45.7	63.0
July.....	66.7	r75.0	79.2	79.2	45.8	r70.8	65.2	63.0
August.....	51.7	r93.3	68.8	r72.9	52.1	p75.0	67.4	r58.7
September.....	73.3	p85.0	r43.8	p87.5	37.5		60.9	p78.3
October.....	r46.7		r62.5		r64.6		58.7	
November.....	86.7		r64.6		r58.3		r50.0	
December.....	p78.3		p77.1		p60.4		p78.3	
1965								
January.....								
February.....								
March.....								
April.....								
May.....								
June.....								

NOTE: Percent of series components rising. Numbers are centered within spans: 1-month figures are placed on latest month, 6-month figures are placed on the 4th month, and 9-month figures are placed on the 6th month of span. Seasonally adjusted components are used. Table 5 identifies the components for most of the indexes shown. The "r" indicates revised; "p", preliminary; and "NA", not available.

LATEST DATA FOR DIFFUSION INDEXES—Continued

Actual and Anticipated Indexes

Year and month	D35. Net sales, manufactures (800 companies) 4-quarter span		D36. New orders, durable manufactures (400 companies) 4-quarter span		D48. Freight carloadings (19 manufactured commodity groups) 4-quarter span			D61. New plant and equipment expenditures (16 industries) 1-quarter span	
	Actual	Anticipated	Actual	Anticipated	Actual	Anticipated	Change in total (000)	Actual	Anticipated
1961									
July.....	...	...	...	...	...	...	...	56.2	62.5
August.....	82	88	82	86	73.7	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	-66	...	...
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	-67	...	...
September.....	...	...	...	...	...	...	...	...	...
October.....	...	...	...	...	...	...	...	46.9	68.8
November.....	74	82	76	76	63.2	63.2	+29	...	...
December.....	...	...	...	...	...	...	...	...	...
1963									
January.....	...	...	...	...	...	...	...	40.6	50.0
February.....	76	80	77	76	73.7	78.9	+39	...	...
March.....	...	...	...	...	...	...	...	...	...
April.....	...	...	...	...	...	...	...	65.6	75.0
May.....	74	80	76	76	57.9	68.4	+44	...	...
June.....	...	...	...	...	...	...	...	...	...
July.....	...	...	...	...	...	...	...	75.0	71.9
August.....	82	84	82	80	78.9	78.9	+40	...	...
September.....	...	...	...	...	...	...	...	...	...
October.....	...	...	...	...	...	...	...	71.9	75.0
November.....	84	85	82	84	(NA)	73.7	-13	...	...
December.....	...	...	...	...	...	...	...	...	...
1964									
January.....	...	...	...	...	...	...	...	71.9	50.0
February.....	83	87	84	84	...	68.4	+34	...	...
March.....	...	...	...	...	...	...	...	...	...
April.....	...	...	...	...	...	...	...	62.5	50.0
May.....	...	86	...	84	...	94.7	+68	...	...
June.....	...	...	...	...	...	...	...	...	...
July.....	...	...	...	...	...	...	...	84.4	75.0
August.....	...	87	...	84	...	89.5	...	...	...
September.....	...	...	...	...	...	...	...	...	...
October.....	...	...	...	...	...	...	...	...	68.8
November.....	...	...	...	...	...	...	...	...	...
December.....	...	...	...	...	...	...	...	...	...
1965									
January.....	...	...	...	...	...	...	...	...	59.4
February.....	...	...	...	...	...	...	...	...	...
March.....	...	...	...	...	...	...	...	...	...
April.....	...	...	...	...	...	...	...	...	...
May.....	...	...	...	...	...	...	...	...	...
June.....	...	...	...	...	...	...	...	...	...

NOTE: Percent of series components rising. Numbers are centered within spans: 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.

TABLE

5 D

DIRECTIONS OF CHANGE FOR COMPONENTS OF SELECTED DIFFUSION INDEXES—Continued
D23. Index of Industrial Materials Prices

13 industrial materials components	1-month spans												9-month spans												
	1964						1965						1964						1965						
	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Dec-Jan ¹	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Apr-Jan ¹	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Sep-Oct	Oct-Nov	Nov-Dec	
Percent rising.....	62	58	38	62	38	50	62	38	62	38	31	62	38	31	-	-	-	-	-	-	-	-	-	-	-
All industrial materials.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Copper scrap (lb.).....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lead scrap (lb.).....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Steel scrap (ton).....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Tin (lb.).....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Zinc (lb.).....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Burlap (yd.).....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cotton (lb.), 15-market average.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Print cloth (yd.), average.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Wool tops (lb.).....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hides (lb.).....	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Rosin (100 lb.).....	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Rubber (lb.).....	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Tallow (lb.).....	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

+ = rising; 0 = unchanged; - = falling. Series components are seasonally adjusted by the Bureau of the Census before the direction of change is determined. All-industry totals are not seasonally adjusted.
¹Average for January 12, 13, and 14.

THE CURRENT EXPANSION IN HISTORICAL PERSPECTIVE

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INTRODUCTION

Everyone who follows business conditions knows that the current expansion is one of the longest and strongest in American history. There are some weak spots: Notably, the total unemployment rate has been running at a higher level than is generally acceptable and the persistent balance of payments gap has not been closed. All things considered, however, it is difficult to point to a previous expansion which made a better record.

Why has this latest expansion done so well? An intensive search for an answer to this question is called for, because each business cycle adds to our knowledge about systematic economic fluctuations. In addition, the lessons of this expansion are more likely, than those of others, to contribute to developing policy programs and techniques for sustaining this and future expansions.

The approach, in this paper, is to compare the cyclical behavior of the current expansion with that of its predecessors. First, comparisons are made of the duration, amplitude, and patterns of aggregate economic activity. These comparisons provide the basis for making an overall appraisal of the performance of this expansion. Next, similar comparisons are made for leading and lagging indicators, and finally, for three processes where the recent cyclical behavior was unusual; e.g., prices, the cash budget, and various financial indicators. These comparisons provide insights into the factors which account for the exceptional performance. Most comparisons cover 9 business cycles from 1920 to 1964, but one, that for industrial production, covers the 18 business cycles from 1890 to 1964.

This investigation shows that the steady rate of advance in aggregate economic activity since February 1961, the trough of the previous recession, has not been very different, in a broad sense, from that of the three earlier post-World War II expansions. There have been significant differences, however, in the patterns of leading and lagging series—in prices, the cash budget, and various financial indicators. In addition, the current expansion was marked by a short retardation in aggregate economic activity about a year and a half after the upswing began. This investigation also brings into clear focus the dramatic improvement in economic stability during the post-World War II period, especially as compared to the whole interwar period or the 1920's or 1930's taken separately. In this light, the improvement shown by the current expansion reflects a further extension of a post-World War II pattern of mild declines followed by moderate but sustained expansions—a pattern substantially different from that of earlier periods of our economic history.

An examination of the current expansion in comparison with earlier expansions may be premature because the current advance has not yet come to an end. However, since this expansion has already lasted longer than nearly all of its predecessors, some instructive historical comparisons can be made. Eventually, weaknesses which could have serious consequences for later developments and which are not now evident may be found in its performance. On the other hand, extended continuation of the expansion may later show it to be even better than it appears now. For such reasons, this paper must be considered an interim, rather than a final report.

AGGREGATE ECONOMIC ACTIVITY

Relative Duration

The latest monthly statistics available on a broad front for October, show a continuation of the expansion which began in February 1961. October, therefore, marks the 44th month of the current expansion. In terms of duration, this is now the second best peacetime expansion in history. The only peacetime expansion that lasted longer was that from March 1933 to May 1937—50 months. But the 1933-37 expansion started from the great abyss in 1933, and it takes a long time just to regain the lost ground. For this reason, it does not seem appropriate to compare the current expansion with that earlier one. Furthermore, the 1933-37 expansion was also marred by a major interruption in 1934. No other peacetime expansion lasted as long as 44 months. The closest was the 1945-48 expansion which lasted 37 months. The expansion which began in October 1949 lasted 45 months, but covered the Korean War period from June 1950 to July 1953. The three other wartime expansions (June 1861 to April 1865, December 1914 to August 1918, and June 1938 to February 1945) also lasted 44 months or longer.

We are now well beyond the average duration of the 22 recorded peacetime expansions from 1854 to 1960, 26 months; the 8 peacetime expansions since World War I, 28 months; and the 3 peacetime expansions since World War II, 32 months. The three expansions in the 1920's averaged only 23 months.

This paper was presented at the 12th Annual Conference on the Economic Outlook, University of Michigan, Ann Arbor, Mich., November 19, 1964. The writer is under obligation to A. Ross Eckler, Murray D. Dessel, Geoffrey H. Moore, and Lorman C. Trueblood for helpful comments on an earlier draft of this paper and to Feliks Tamm, Betty F. Tunstall, and Barry Beckman for invaluable assistance. However, the views expressed in this paper are the author's and not necessarily those of the Bureau of the Census or any person listed above.

Table 1.—BUSINESS CYCLE REFERENCE DATES AND DURATION OF EXPANSIONS AND CONTRACTIONS
IN THE UNITED STATES: 1854 TO 1961

Business cycle reference dates		Duration in months			
		Contraction (trough from previous peak)	Expansion (trough to peak)	Cycle	
				Trough from previous trough	Peak from previous peak
Trough	Peak				
December 1854.....	June 1857.....	(X)	30	(X)	(X)
December 1858.....	October 1860.....	18	22	48	40
June 1861.....	April 1865.....	8	<u>46</u>	30	<u>54</u>
December 1867.....	June 1869.....	<u>32</u>	18	78	50
December 1870.....	October 1873.....	18	34	<u>36</u>	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	<u>44</u>	35	<u>67</u>
March 1919.....	January 1920.....	<u>7</u>	10	<u>51</u>	17
July 1921.....	May 1923.....	18	22	28	40
July 1924.....	October 1926.....	14	27	36	41
November 1927.....	August 1929.....	13	21	40	34
March 1933.....	May 1937.....	43	50	64	93
June 1938.....	February 1945.....	13	<u>80</u>	63	<u>93</u>
October 1945.....	November 1948.....	<u>8</u>	37	<u>88</u>	45
October 1949.....	July 1953.....	11	<u>45</u>	48	<u>56</u>
August 1954.....	July 1957.....	<u>13</u>	35	<u>58</u>	48
April 1958.....	May 1960.....	9	25	44	34
February 1961.....		9	(X)	34	(X)
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.

⁷7 cycles, 1920-1960.

²9 cycles, 1920-1960.

⁴21 cycles, 1857-1960.

⁶3 cycles, 1945-1960.

Source: National Bureau of Economic Research.

The record of this expansion refutes the view, widely expressed at its onset, that expansions are getting shorter. Indeed, the averages cited above suggest that they had been getting longer even before the long duration of the current expansion became evident.

The full record of the durations of the 26 business cycles from 1854 to date is shown in table 1.

Total Amplitude

The current expansion is also well above the average for other peacetime expansions in terms of total amplitude, the

change from one business cycle to the next. This is one measure of the growth that takes place over the course of a business cycle. Thus, the relative advance, compared to the previous business cycle peaks, is the strongest since World War I for most economic processes. This fact is revealed in table 2 which shows the ranking of the amplitude of the current expansion and the eight previous expansions for the principal leading, coincident, and lagging business cycle indicators. A rank of "1" is assigned to the expansion of the lowest relative amplitude and the rank of "9" to that with the highest relative amplitude. The amplitude is measured from the previous specific peak levels. Comparisons of the patterns of expansions in terms of their previous

Table 2.—INTENSITY RANKINGS OF RECENT EXPANSIONS

(Measured from specific peak levels and specific trough dates. Rank of "9" indicates best relative performance; "1" indicates poorest. Where data for all cycles are not available, the expansion with the best relative performance is given a rank of "9", that with the second best, a rank of "8", etc.)

Series	Months after specific trough ¹	Reference expansions beginning—								
		July 1921	July 1924	Nov. 1927	Mar. 1933	June 1938 ²	Oct. 1949 ²	Aug. 1954	Apr. 1958	Feb. 1961
Composite index of 8 leaders.....	45	*3	*7	*8	2	(NA)	*9	*4	*5	6
Average workweek.....	45	(NA)	*4	*8.5	3	6	(NSC)	*7	*5	8.5
New orders, durable goods industries.....	44	(NA)	*4	(NSC)	(NSC)	8	*9	*7	*5	6
Construction contracts ³	39	*3	*7	*6	2	9	4	(NSC)	5	8
Stock prices.....	47	*4	8	(NSC)	2	3	*7	*9	*5	6
Composite index of 6 coinciders.....	43	*3	*4	*6	2	(NA)	9	*7	*5	8
Nonagricultural employment.....	43	*1	*3	*6	2	9	8	*5	*4	7
Industrial production.....	43	*5	*2	*6	1	9	8	*4	*3	7
GNP, current dollars.....	42	(NA)	(NSC)	(NSC)	4	9	8	*6	*5	7
GNP, 1954 dollars.....	42	(NA)	(NSC)	(NSC)	5	(NA)	9	*7	*6	8
Labor income.....	45	(NA)	(NA)	(NA)	4	9	*8	*6	*5	7
Retail sales.....	41	5	(NSC)	(NSC)	4	9	(NSC)	7	*6	8
Composite index of 3 laggards.....	36	(NA)	(NA)	(NA)	5	(NA)	9	8	*6	7
Business expenditures (actual).....	36	*3	*5	*6	2	(NA)	8	*9	*4	7
Labor cost per unit of output.....	33	*4	(NSC)	(NSC)	5	(NA)	9	8	*7	6
Bank rates on business loans.....	33	*2	*4	*7	*3	(NA)	8	9	*6	5

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 measurement is based on the change to the specific peak and the period is shorter than that for the current expansion.

¹Based on the period of the current specific expansion for each series. The number of months is the same for each expansion except those marked with an asterisk (*).

²War-time expansions.

³Except for the expansion beginning in 1961, these measures are based on a 3-term moving average of the seasonally adjusted series.

Table 3.—AVERAGE MONTHLY PERCENTAGE CHANGES DURING THE 9 EXPANSIONS SINCE WORLD WAR I

(Expansion is defined as the period beginning 1 year after reference trough and ending at the following specific peak. The percent is based on the average of 3 values centered at specific peak and the average of the 3 values centered at the 12th value after preceding reference trough)

Series	1921-23	1924-26	1927-29	1933-37	1938-40 ¹	1949-53	1954-57	1958-60	1961-present
Composite index of 6 coincident series.....	+2.59	+0.55	+0.64	+1.55	+1.13	+0.83	+0.53	+0.46	+0.69
Nonagricultural employment, establishments ² ...	+1.47	+0.53	+0.58	+0.51	+0.44	+0.25	+0.21	+0.21	+0.23
Industrial production.....	+2.39	+0.44	+1.04	+1.40	+1.50	+0.52	+0.23	+0.38	+0.49
GNP in 1954 dollars.....	(NA)	³ +0.26	+0.29	+0.98	+0.48	+0.42	+0.14	+0.16	+0.35
Wholesale prices.....	+0.59	³ -0.15	³ -0.05	+0.25	+0.21	+1.12	+0.31	+0.03	0.00

¹For 1938-40, expansion is defined as the period beginning 1 year after the reference trough and ending 1 year later.

²Only factory employment, which fluctuates more than nonagricultural employment, is included for the period 1921-29.

³No specific cycle comparison could be made for this period; the entry, therefore, covers the period starting 1 year after the reference trough and ending at the reference peak.

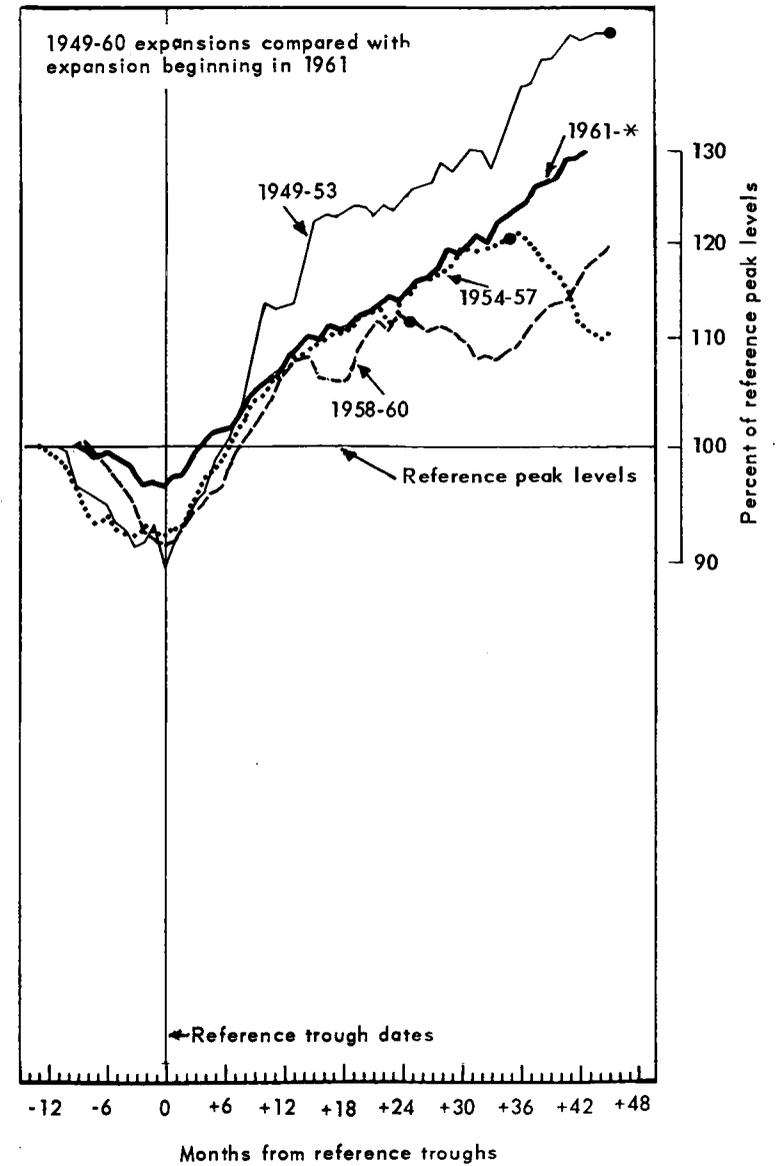
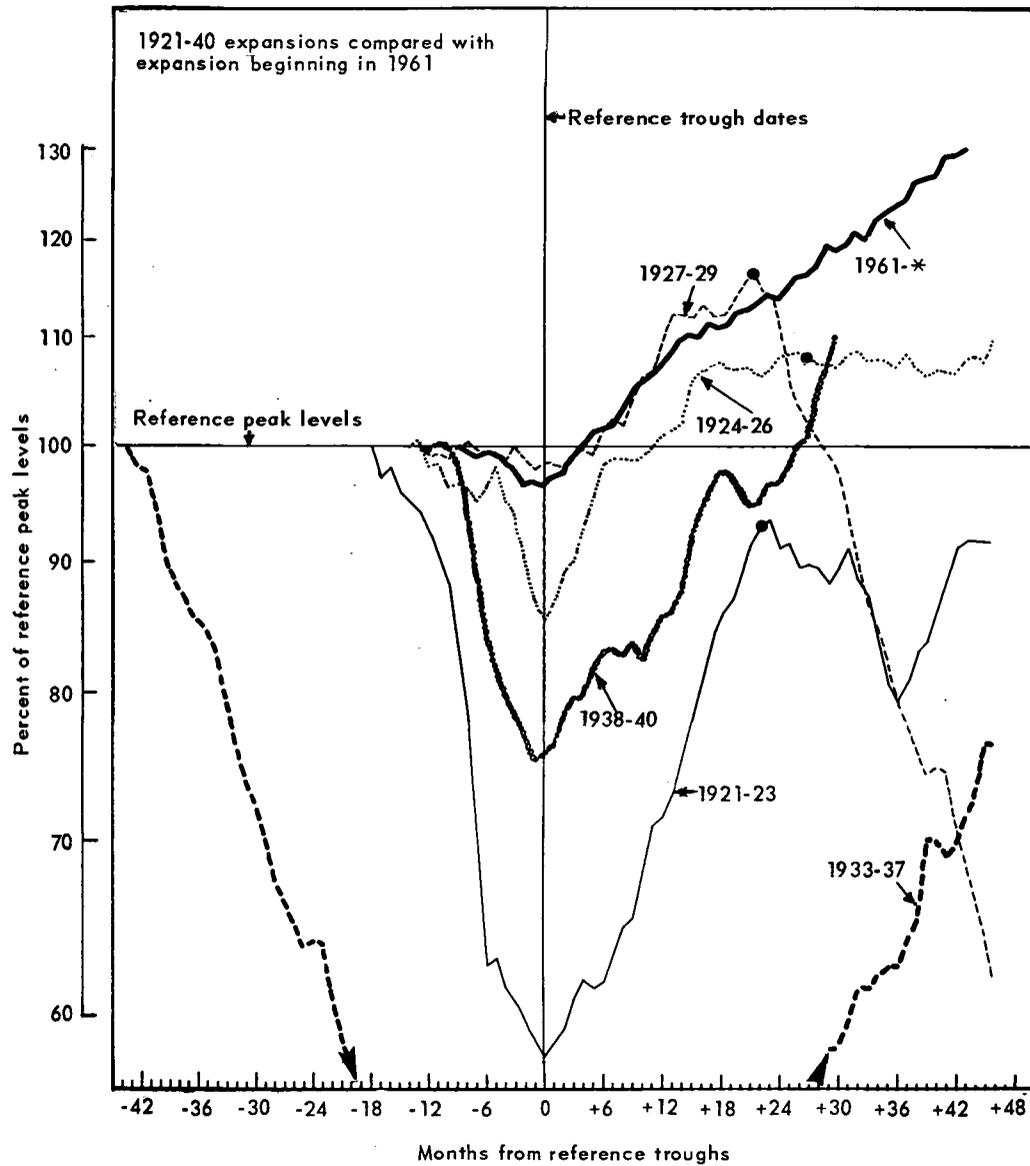
peak levels appear to be superior to other alternatives. The advantage stems from the observation that the rise during the early stages of an expansion appears to be related typically to the magnitude of the decline during the previous recession—the more severe the decline, the more vigorous the rebound. Meaningful comparisons of the patterns of expansion, therefore, are more likely only after expansions have attained previous peak levels. Several other ways of comparing cyclical patterns are shown each month in Business Cycle Developments, a monthly publication of the Bureau of the Census, and many of the observations made in

this paper can be checked against them.

Note that, in terms of relative amplitude, the current expansion has already exceeded all other peacetime expansions in this group. Two expansions included among these nine must be considered wartime expansions—that beginning in 1939 and that beginning in 1949. Thus the total amplitude of the current expansion is relatively highest in measures of aggregate economic activity—nonagricultural employment, industrial production, GNP, and retail sales; these activities all have a rank of "7" or "8" and were surpassed only in wartime expansions.

Chart 1.--COMPOSITE INDEX OF COINCIDENT SERIES--Comparisons of Reference Cycle Patterns for 9 Most Recent Expansions

(Measured from reference peak levels and reference trough dates. ● Indicates reference peak date for the expansion)



* Latest data plotted--September 1964

Table 4.—BUSINESS CYCLES IN INDUSTRIAL PRODUCTION SINCE 1892

(Average per-month rates of change and variation about these averages. This table is based upon specific cycles in industrial production, measured from peak to peak. Since no specific cycle was marked off to correspond to the reference cycle from July 1890 to January 1893, this table has 1 less cycle than chart 3, which is based upon reference cycles. In computing the percentage changes, the average of all the values in a business cycle (measured peak to peak) are used as the base to avoid the usual upward bias in the common method of computing percentage changes)

Business cycles	Average per-month change			Standard deviation		
	Contraction	Expansion	Contraction and expansion (without regard to sign)	Contraction	Expansion	Contraction and expansion (without regard to sign)
17 cycles, 1892 to date.....	-1.33	+1.10	1.17	0.68	0.43	0.44
3 cycles, 1892 to 1903.....	-1.45	+0.89	1.03	0.17	0.12	0.18
5 cycles, 1903 to 1920.....	-1.13	+1.20	1.18	0.69	0.45	0.30
5 cycles, 1920 to 1943.....	-1.84	+1.41	1.53	0.58	0.38	0.42
4 cycles, 1948 to date ¹	-0.70	+0.73	0.72	0.26	0.18	0.16

¹In order to complete this table, it was necessary to assume that a cyclical peak occurred in September 1964, the latest month for which data were available when this table was prepared.

Patterns

The similarities and the differences in the patterns of the current expansion and those which preceded it can be seen in chart 1 which shows a composite index of six coincident series—nonagricultural employment, the total unemployment rate, industrial production, bank debts, personal income, and retail sales. The technique of constructing this index involves standardizing the rates of change in the component series so that they can be combined in a meaningful way. They are weighted by their historical business cycle performance. Consequently, this index measures a complex of activities which experience similar cyclical timing.¹

During the current expansion, this index (shown in chart 1) has, through most of its course, moved very much as it did from 1954 to 1957; the movements in both of these expansions have been fairly similar to those during the 1949-53 and 1958-60 expansions. This similarity is in sharp contrast to the wide fluctuations in cyclical behavior during the five business cycles experienced between World Wars I

¹For a description of the method of constructing the composite indexes, see appendix A of "Signals of Recession and Recovery", Occasional Paper 77 by Julius Shiskin (National Bureau of Economic Research, Inc., New York, 1961.)

and II. The contrast can also be seen in chart 2, comparing the cyclical patterns of gross national production (GNP) in constant dollars. The post-World War II record of economic stability is also substantially better than that of the nine business cycles from 1890 to 1920 as can be seen, in chart 3, for industrial production. It is interesting to note that even extending 1958-60 expansion curve to include the 1960-61 recession does not affect substantially the similarities of the four most recent expansions compared to those which preceded it.

The relative similarity of the 1948-64 expansions compared with the 1921-38 expansions is brought out in another way in table 3. There, the average rates of advance, after 1 year of expansion in general business, to subsequent peak levels are shown for each of the expansions since 1921 for several different measures of aggregate economic activity. The first year of expansion is omitted from the calculations for the same reason the cyclical comparison charts are alined at the peak levels of the previous expansion rather than at the previous trough levels: The rate of advance during the first year or so is related to the severity of the previous recession. This table shows a relatively small range in the rates of advance during the post-World War II cycles compared to the interwar cycles. Thus, for the

EXPLANATION OF CYCLICAL COMPARISON CHARTS

The usual chronological timing sequence followed in charts is disregarded in charts 1-11. Instead, the data are alined at a strategic point in the business cycle. The common point in timing for each cycle is the business cycle trough date, so that the values for February 1961, April 1958, August 1954, and October 1949 are all plotted at the same point along the time scale (horizontal). As a result of this arrangement, a comparison of the pattern of the current expansion with patterns of previous expansions can be made.

In charts 1-10 (except chart 5) the levels are alined at different points--those of the previous peaks. This arrangement is preferable to one in which the data are alined at previous trough levels because the rapidity of the rise just after a business cycle trough has depended upon the severity of the preceding decline, large declines usually being followed by vigorous rises. It is only after the previous peak levels are again attained that differ-

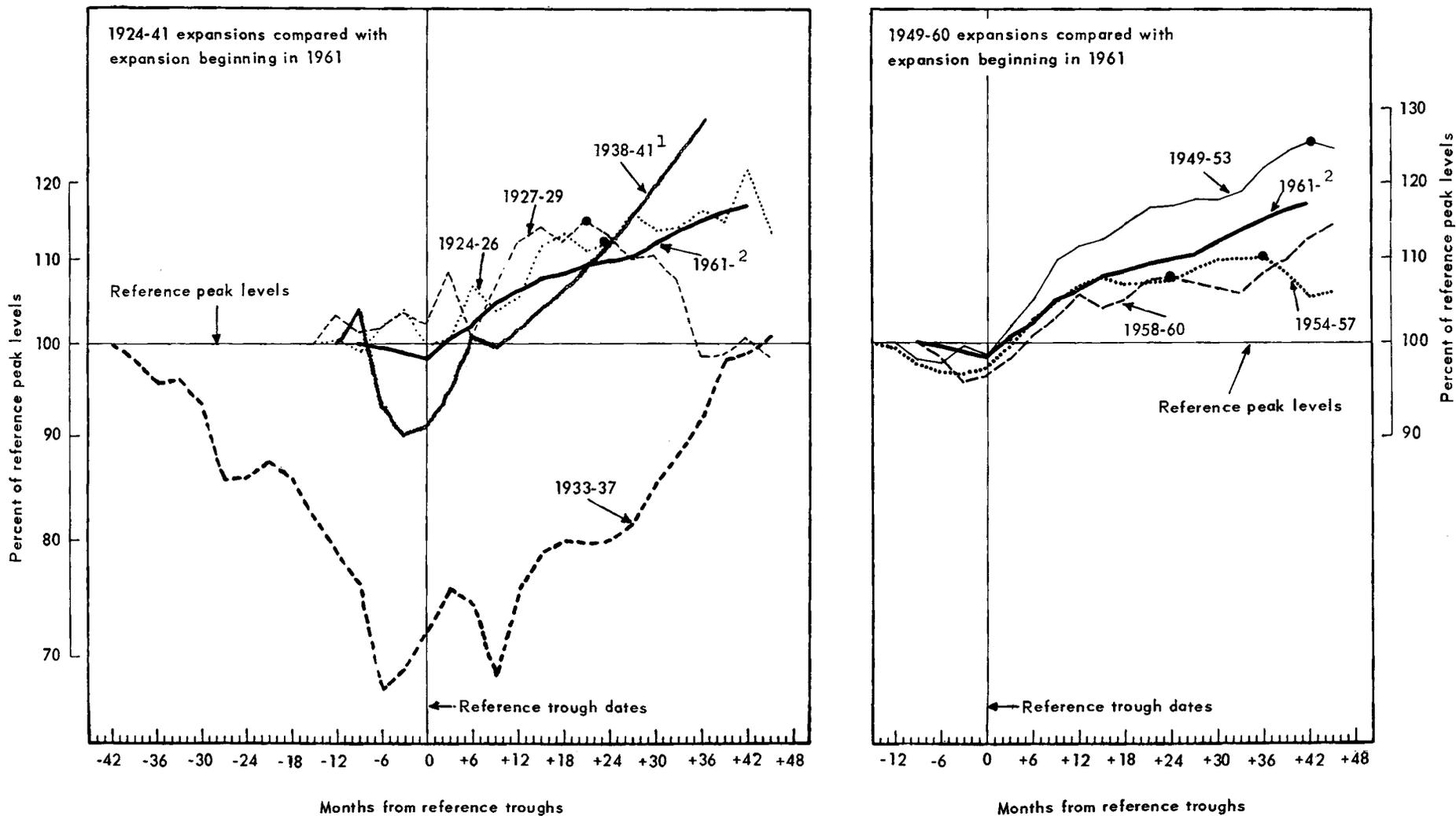
ences in cyclical patterns are significant. Up to this point they reflect mainly the severity of the preceding recessions.

In chart 11, showing the Federal cash surplus or deficit and the change in the money supply, the data are alined at previous trough dates, but plotted to absolute vertical scales because they include negative as well as positive numbers.

The patterns of recession are each shown twice, once during the recession periods on the left side of each chart, and then again after the cyclical peaks on the right side of each chart. Thus the 1960-61 recession is shown just before the 1961-64 expansion (heavy solid line), and also after the 1958-60 expansion (dashed line).

The date of the end of each business cycle expansion is marked by a small solid circle (●) on each expansion curve.

Chart 2.--GNP IN CONSTANT DOLLARS--Comparisons of Reference Cycle Patterns for 8 Most Recent Expansions
 (Measured from reference peak levels and reference trough dates. ● Indicates reference peak date for the expansion)



¹Annual data used for 1940 and 1941. See sources of data at end of paper.

²Latest data plotted--3rd quarter 1964

Table 5.—17 CYCLES IN INDUSTRIAL PRODUCTION SINCE 1892

(Durations and average per-month rates of change. The cycles from March 1892 to January 1920 are based on the Babson index of physical volume of business activity; the cycles from February 1920 to the present are based on the Federal Reserve Board's index of industrial production. The cycle between November 1943 and July 1948 has been omitted from this table)

Specific cycle dates		Contraction (trough from previous peak)		Expansion (trough to peak)		Contraction and expansion (peak from previous peak)	
		Duration (months)	Average per-month change	Duration (months)	Average per-month change	Duration (months)	Average per-month change ¹
Trough	Peak						
	March 1892						
October 1893.....	November 1895.....	19	-1.53	25	+1.08	44	1.27
September 1896.....	June 1900.....	10	-1.21	45	+0.77	55	0.85
October 1900.....	July 1903.....	4	-1.67	33	+0.92	37	1.00
December 1903.....	May 1907.....	5	-2.42	41	+0.88	46	1.05
May 1908.....	March 1910.....	12	-2.32	22	+1.45	34	1.76
January 1911.....	January 1913.....	10	-0.74	24	+0.82	34	0.80
November 1914.....	May 1917.....	22	-0.69	30	+1.36	52	1.08
March 1919.....	January 1920.....	22	-0.80	10	+2.44	32	1.31
	February 1920						
April 1921.....	May 1923.....	14	-2.59	25	+2.01	39	2.21
July 1924.....	March 1927.....	14	-1.16	32	+0.75	46	0.87
November 1927.....	July 1929.....	8	-0.64	20	+1.09	28	0.96
July 1932.....	May 1937.....	36	-1.97	58	+1.35	94	1.59
May 1938.....	November 1943.....	12	-2.14	66	+1.65	78	1.72
	July 1948						
October 1949.....	July 1953.....	15	-0.48	45	+0.85	60	0.75
April 1954.....	February 1957.....	9	-1.01	34	+0.55	43	0.64
April 1958.....	January 1960.....	14	-0.98	21	+1.05	35	1.02
February 1961.....	September 1964 ²	13	-0.45	43	+0.59	56	0.56

¹Computed without regard to sign.

²Most recent business cycle high; not a specific peak.

composite index of six coincident series, the average rates ranged from 0.46 to 0.83 since 1948 and from 0.55 to 2.59 for 1921-38; for industrial production, the corresponding ranges were 0.23 to 0.52 and 0.44 to 2.39.

Further data on the cyclical stability and uniformity of industrial production are provided in tables 4 and 5. Table 4 shows the average per-month rates of change, and the variation about them, for all the cycles since 1892, and separately for the three specific cycles from 1892 to 1903; the five from 1903 to 1920; the five from 1920 to 1943; and the four from 1948 to date. The average rates of change for each cycle in industrial production are provided in table 5. The averages for contractions and expansions combined are computed without regard to sign. The method for computing all these percentages utilizes the average of the values of the production index for each business cycle as a base, to avoid the upward bias in the common method of computing percentage changes. Where the business cycle is treated as a unit in time, the measures are computed from peak to peak. This is necessary so that the current expansion can be included. For the purpose of these computations, September 1964 is taken as the peak.

These data suggest the following points:

1. There has been a dramatic improvement in economic stability during the post-World War II period. The figures in table 4 show that there has been a substantial decrease in the average monthly changes during recessions and expansions. Thus, the average monthly decline during all contractions covered was -1.33 percent compared to -0.70 percent in the four contractions since 1948, while

the average monthly rises during the corresponding expansions were +1.10 percent and +0.73 percent, respectively. Note, also, that the average for the recent expansions has been very similar to that for the recent contractions. As can be seen in table 5, there have been other business cycles in which the average rates of contraction or expansion were about the same as those since 1948, but the recorded history of business cycles does not show an earlier sequence of four or even three business cycles with such small average monthly changes.

2. The four business cycles since 1948 have also been more similar to each other than the five cycles from 1920 to 1943 and the five cycles from 1903 to 1920, as can be seen in the "standard deviation" columns of table 4. Furthermore, the rates of advance during expansions have been consistently more nearly uniform than the rates of decline during contractions. Note, however, that while the four business cycles since 1948 have not been more similar than the three cycles from 1892 to 1903, the average monthly changes in the early period, especially during contractions, were larger.

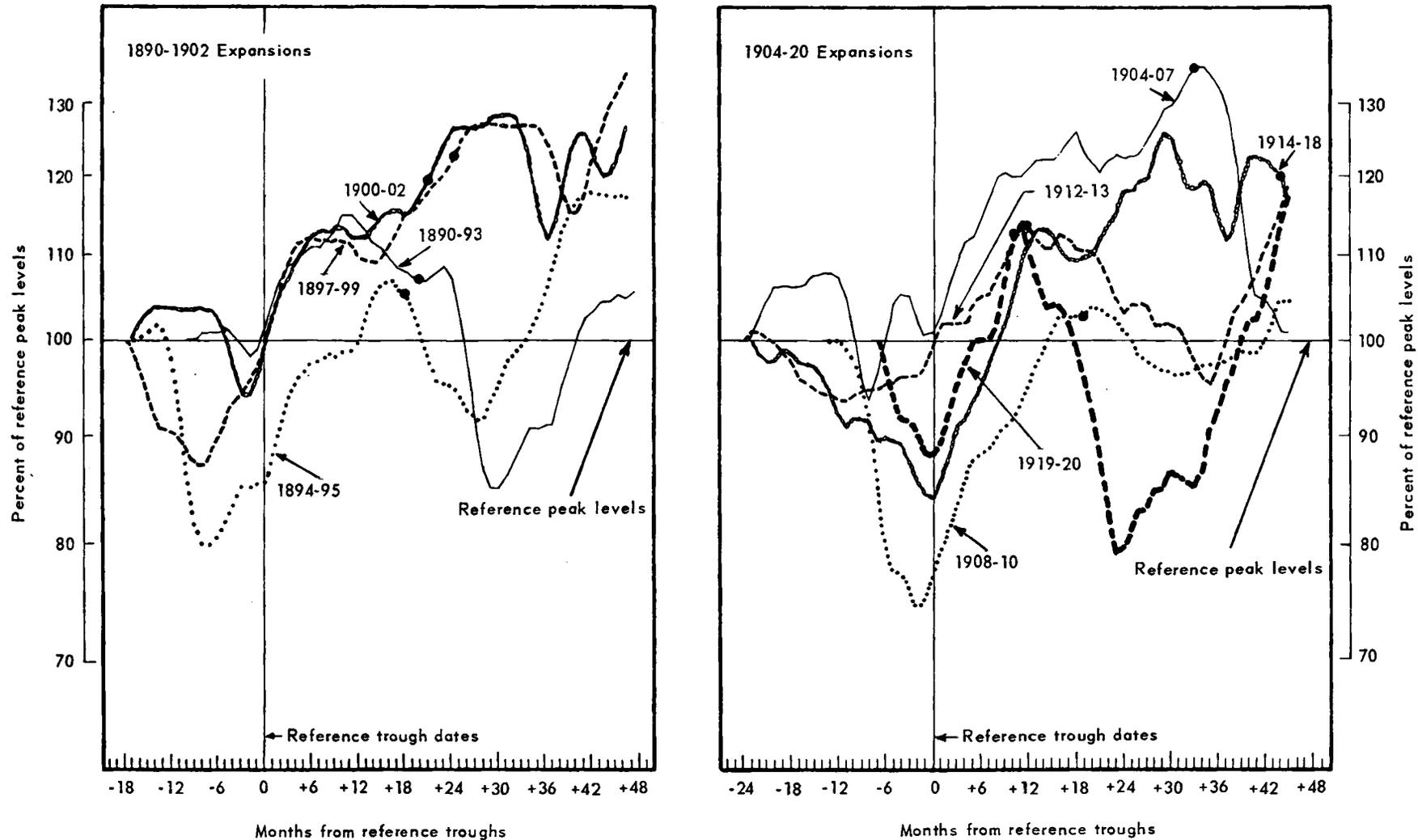
3. The average rate of decline during the 1960-61 recession was the smallest on record and the average rate of advance during the current expansion, next to the smallest. These rates can be seen in table 5 which shows the figures for each business cycle since 1892.

An incidental advantage of the greater stability and uniformity is that it has been easier to make good forecasts of short-term changes. Also, in view of the greater uniformity of expansions, better estimates could be made during expansions than contractions.

Chart 3.--INDUSTRIAL PRODUCTION--Comparisons of Reference Cycle Patterns for 18 Business Cycles Since 1890

A.--Physical Volume of Business Activity: 1890-1920

(Measured from reference peak levels and reference trough dates. ● Indicates reference peak date for the expansion)

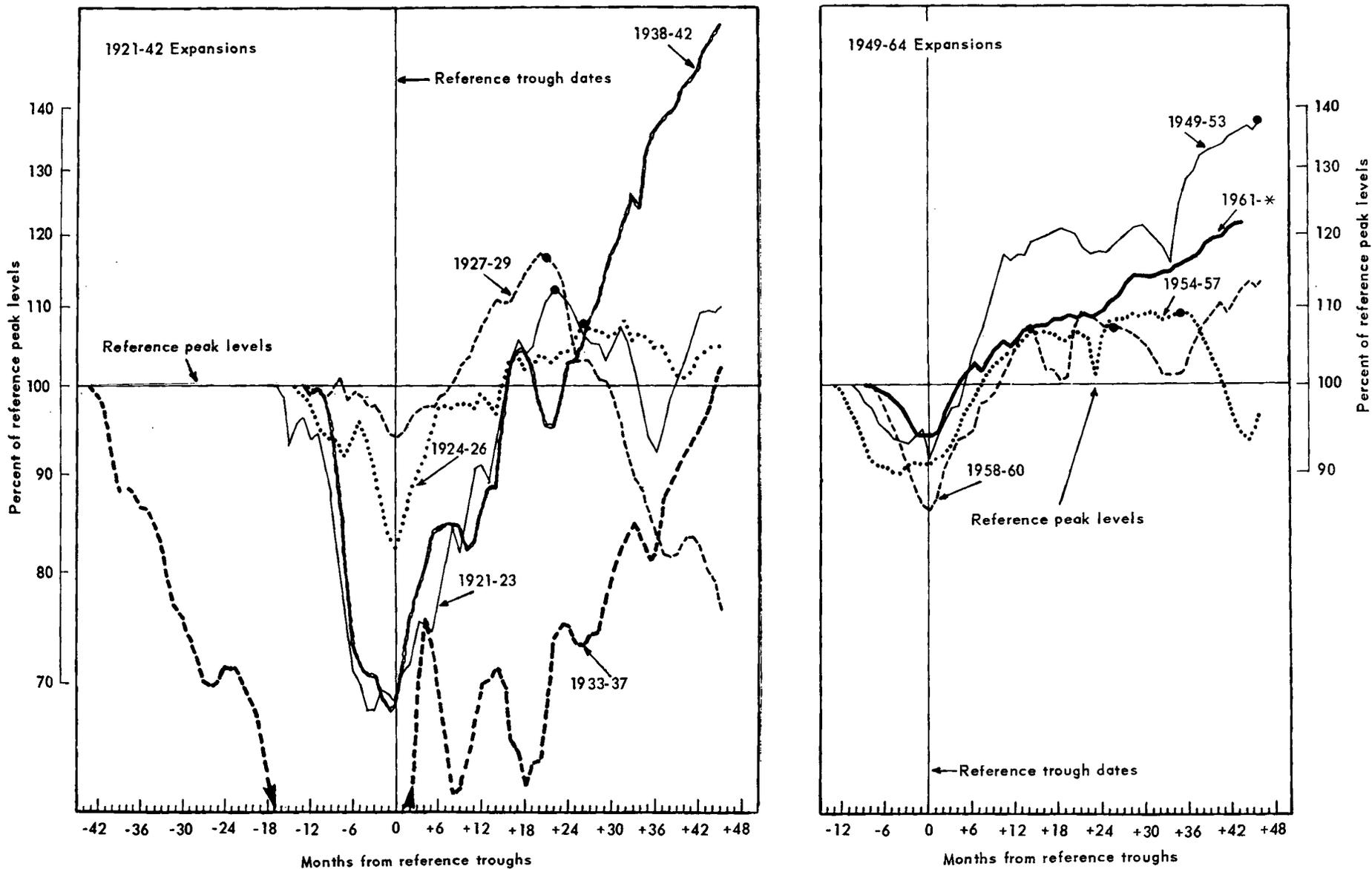


Source: The Babson index of physical volume of business activity. The Babson index is based on a broader concept of production than the Federal Reserve index (see chart 3B), but its movements match those of the Federal Reserve index closely. The Babson index includes agricultural marketing, building and construction contracts, railway freight revenue ton miles, and foreign trade (with the total weight of 22 percent), in addition to mining, manufacturing, and utilities to which the Federal Reserve index is limited. In September 1957, the Babson index was discontinued because it so closely approximated the Federal Reserve index. The figures plotted above are 3-month moving averages of the seasonally adjusted series.

Chart 3--INDUSTRIAL PRODUCTION--Comparisons of Reference Cycle Patterns for 18 Business Cycles Since 1890--Continued

B.--Total Industrial Production: 1921-64

(Measured from reference peak levels and reference trough dates. • Indicates reference peak date for the expansion)



Source: The Federal Reserve Board index of industrial production. See chart 3A for comparison with the Babson index.

* Latest data plotted--September 1964

A few observations on the relations between cyclical stability and long-term economic growth may be added. How does the rate of economic growth since 1948 compare with that in earlier periods? This question is complex and controversial and we can expect, at best, to throw only a little light on it here.

The measures of cyclical change shown in the tables can also be used to calculate a rough measure of long-term growth. The method was to compute the average annual rate of change over each business cycle with sign taken into account—equivalent to computing the average annual change from peak to peak. Such measures have the following advantages: They deal with full business cycles, they are consistent with the cyclical measures shown in the other tables, and they can be computed with the war cycles omitted. There are, however, reasonable questions about the validity of periods selected, the method and formula used to measure growth, the comparability of the coverage of the production indexes, and changes in the relative importance of industrial production over the period covered. For these reasons, only rough judgments can be made on the basis of these figures.

As can be seen in table 6, these measures show a slightly lower rate of growth for the last four cycles, 4.25 percent compared to 4.65 for the full period. However, if the war cycles are omitted, the rates are virtually identical; i.e., 3.35 and 3.36, respectively. It is also interesting to note that the growth rate during the current business cycle, 4.20, is substantially higher than during the two preceding business cycles, 2.64 and 2.88, and above the average for the whole period.

Thus, these data suggest that we have experienced a substantial improvement in economic stability in recent years with, at worst, no change in the rate of long-term economic growth, and that the best performance during this recent period has taken place in the current business cycle. These data have implications for economic policy actions as well as methods of forecasting.

THE LEADING SERIES

As our economy is organized, certain activities frequently foreshadow changes in the aggregate economic activities which define the business cycle. For the most part, these are measures of activities which reflect future production and employment; for example, new orders are placed, particularly for machinery and other types of equipment; contracts are let for the construction of new plants; investments in materials inventories are made and new businesses are started. Also, hours of work are adjusted and profit margins altered. Statistical measures of activities which foreshadow turning points in the business cycle are, for convenience, referred to as "leading series." They often provide early warning signals of changes in production, employment, income, and expenditures.

As a group, the leading series came to an early, relatively low, peak in this current expansion after 17 months, dropped sharply for a few months, and then started a new rise. This pattern is brought out in chart 4 which shows cyclical comparisons of a composite index of leading indicators for the nine business cycles since 1921. The level reached in the initial rise was not as high, relatively, as that of earlier post-World War II expansions, and the decline was quickly arrested. The second rise has been slower but has sustained itself considerably longer than the earlier one. As a result, it has brought the leading series composite index to about the same high relative level as its peaks in the previous post-

Table 6.—GROWTH IN INDUSTRIAL PRODUCTION SINCE 1891

A. Average Annual Rates of Growth for Each Business Cycle

Specific cycle dates		Average annual rates of change with regard to sign ¹
Trough	Peak	
	March 1892	
October 1893.....	November 1895.....	-0.60
September 1896.....	June 1900.....	+4.92
October 1900.....	July 1903.....	+7.68
December 1903.....	May 1907.....	+6.24
May 1908.....	March 1910.....	+1.44
January 1911.....	January 1913.....	+4.32
November 1914.....	May 1917.....	+5.88
March 1919.....	January 1920.....	+2.52
	February 1920	
April 1921.....	May 1923.....	+4.32
July 1924.....	March 1927.....	+2.04
November 1927.....	July 1929.....	+7.20
July 1932.....	May 1937.....	+0.96
May 1938.....	November 1943.....	+12.84
	July 1948	
October 1949.....	July 1953.....	+6.24
April 1954.....	February 1957.....	+2.64
April 1958.....	January 1960.....	+2.88
February 1961.....	September 1964 ²	+4.20

¹Measured from peak to peak.

²Latest high available.

B. Average Annual Rates of Growth for Groups of Business Cycles

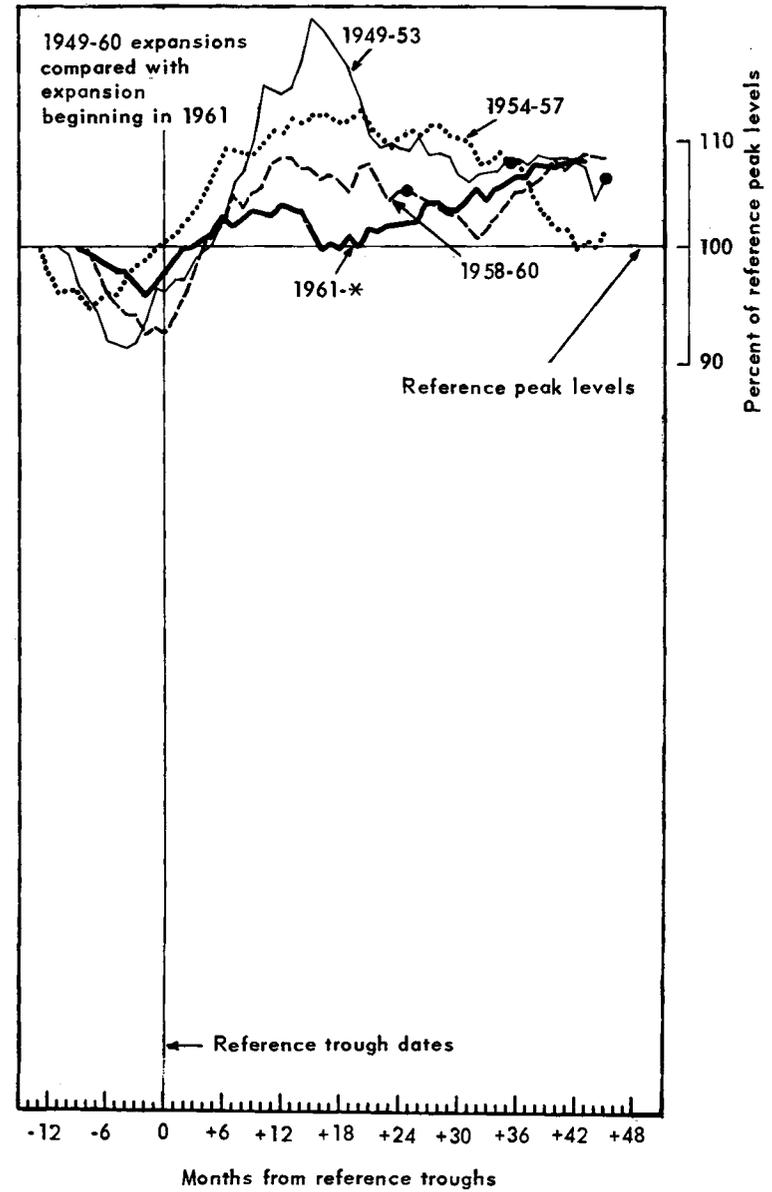
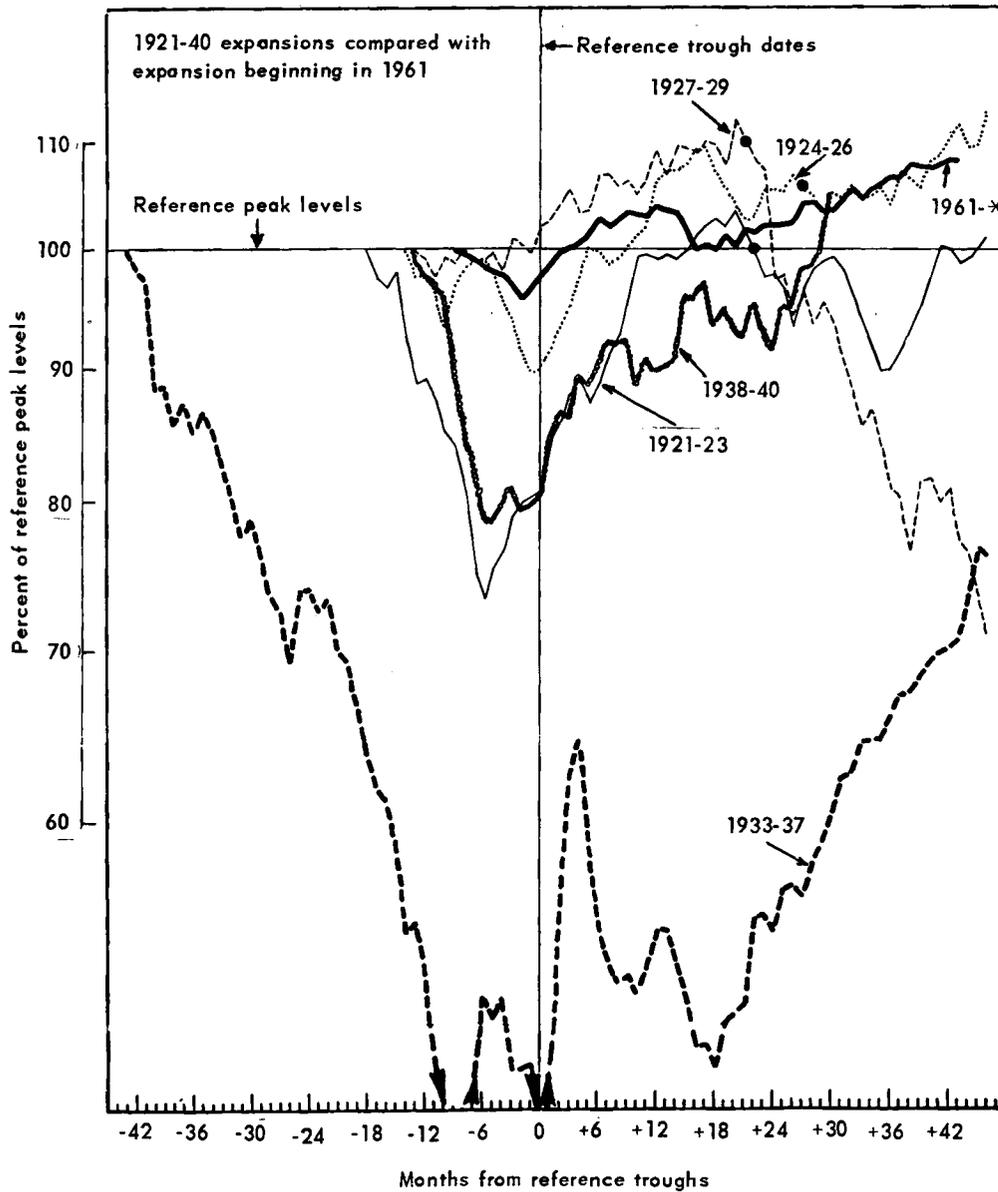
Business cycle groups	Average change with regard to sign (annual rates)	
	All cycles	War cycles omitted ¹
17 cycles (1892-1964).....	+4.65	+3.36
3 cycles (1892-1903).....	+3.88	+3.88
5 cycles (1903-1920).....	+4.39	+3.86
5 cycles (1920-1943).....	+5.46	+2.68
4 cycles (1948-1964).....	+4.25	+3.35

¹Excludes war-time cycles: 1913-17; 1937-43; 1948-53.

World War II expansions. This renewed advance of the leading indicators, which began in August 1962 and has now lasted 26 months, has been at a slower rate, compared to the advances in the postwar expansions and compared to the initial advance of the current expansion. While peak levels were typically attained in only about 12 months in the previous post-World War II expansions and about 18 months in the interwar expansions, the rise in the current expansion has already lasted much longer.

Among the individual leading series, new orders, profits, stock prices, and hours worked, as well as materials prices, were all, in October, at about the highest levels of this expansion. (See chart 5 on corporate profits after taxes.) The rate of inventory change rose during the recovery period, and has been maintained at a fairly steady pace and moderate level for the past 2 years. In September more longer-term commitments for production materials were being made and deliveries were slower than at any previous time in this expansion. These movements are in contrast with the behavior of these series in most earlier expansions when peak levels were reached quickly and followed by protracted declines.

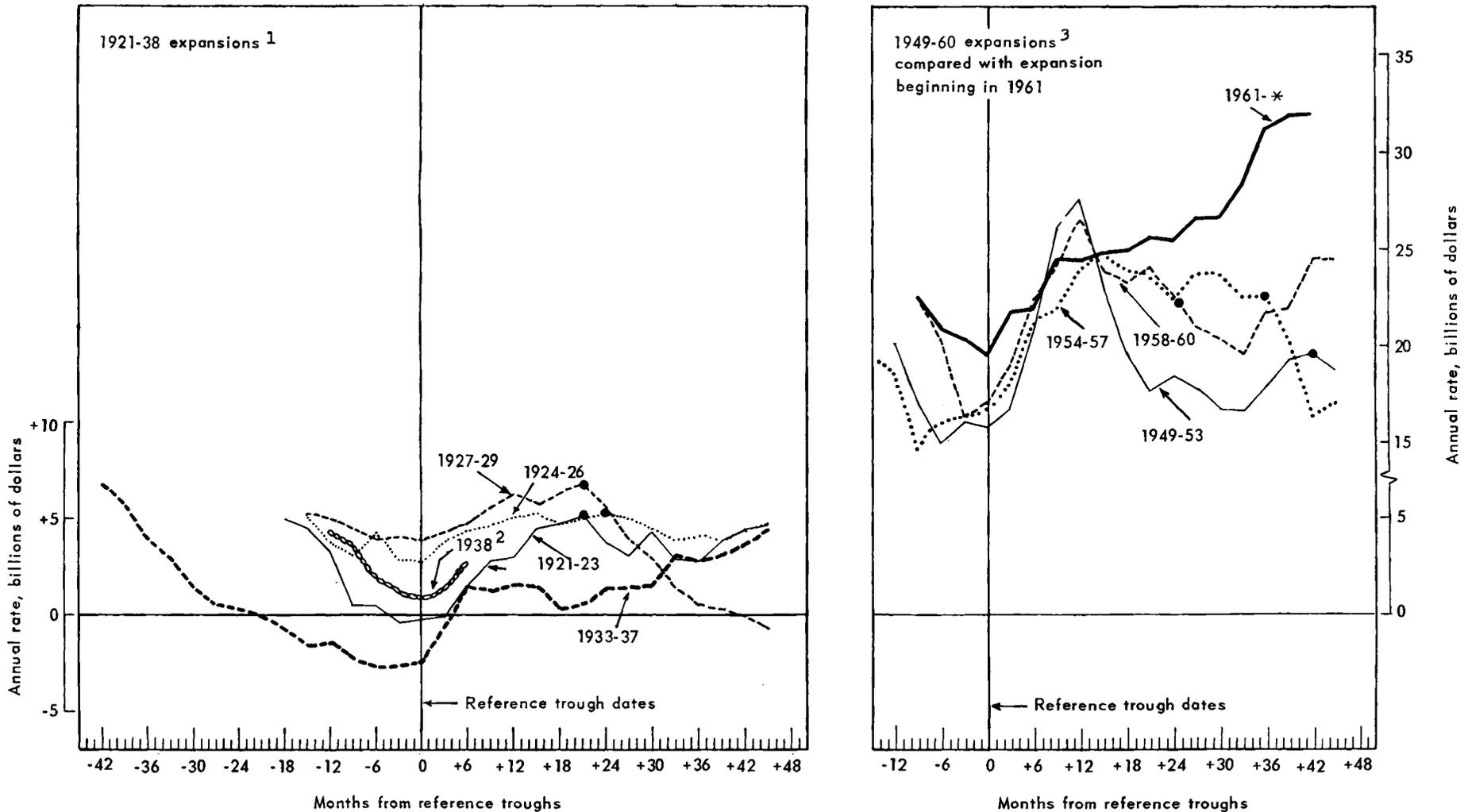
Chart 4.--COMPOSITE INDEX OF LEADING SERIES--Comparisons of Reference Cycle Patterns for 9 Most Recent Expansions
 (Measured from reference peak levels and reference trough dates. ● Indicates reference peak date for the expansion)



* Latest data plotted--September 1964

Chart 5.--CORPORATE PROFITS AFTER TAXES--Comparisons of Reference Cycle Patterns for 9 Most Recent Expansions

(Aligned at reference trough dates; first values plotted are for previous peak dates. Data in this chart are plotted to absolute vertical scales in contrast to other charts where the data are shown as percentages of previous peak levels. ● Indicates reference peak dates of expansions)



*Latest data plotted—3rd quarter 1964.

¹ Source: Harold Barger, *Outlay and Income in the U.S., 1921-1938*, table 28, appendix B.

² Data for latest years of 1938-43 expansion are not available.

³ Source: Office of Business Economics, Department of Commerce.

Thus, a distinguishing feature of the current expansion has been the unusual behavior of the leading indicators.

In comparing the leading and coincident series, note that during the post-World War II period, most leading series had more or less horizontal trends, whereas most coincident series had strong upward secular trends. The combination of modest rises and sharp declines in the leading series, as compared to the coincident series, may be attributable, to some extent, to secular rather than cyclical forces.

LAGGING SERIES

The causal role of the lagging indicators in business fluctuations is sometimes overlooked because of their sluggish reaction to economic change, but they are significant in the cyclical process.

Several of the lagging series measure business costs, such as labor cost per unit of output and the cost of money. Other laggings, such as consumer installment debt and inventories, also measure costs in part, though they reflect business risks and other factors as well.

Business costs have, in the past, typically continued to decline after a recession ended; they have turned up only when production and employment have already been rising for some months. Similarly, costs have continued to rise for a while after production and employment have reached their expansion peaks. Such costs play an important causal role in the cumulative process of expansion and its reversal, with their principal immediate effects upon the leading, rather than the coinciding series. Thus, we may look to the lagging series for early warning signals of changes in the movements of the leading indicators. For example, during advanced stages of expansion the encroachment of costs upon prices usually results in diminished profit margins. Somewhat later, as rates of profits decline, there is a resultant deterioration in incentives to invest. Hence, one of the "pre-conditions" for a general decline in business activity has usually been a significant rise in these lagging indicators. This phenomenon is merely a more technical version of the familiar observation that the creation of "excesses" during expansions tends to bring them to an early end.

The composite index of the lagging series presented in chart 6 has risen only modestly, but evenly, in the current expansion. In comparison with the other post-World War II expansions, the index of the lagging series has risen more relatively during the current expansion than during that of only 1958-60; if the comparison is made for the period corresponding to the closing stages of the 1958-60 expansion, the current expansion rose relatively less than even that one.

Labor costs per unit of output in manufacturing (chart 7), declined during the first 6 months of the current expansion rose modestly during the next year of expansion, declined unevenly until May 1964, and rose a little since. They are, however, still well below the level of the previous business cycle peak in May 1960. Interest rates are also below their previous peak levels. The bank rate on short-term business loans has not risen appreciably above the low level reached during the 1960 recession (chart 8). Mortgage yields continued to decline during the first 26 months of the current expansion and have remained more or less constant during the last 17 months.

While other lagging series, consumer debt (chart 9) and inventories (not shown here), have risen in the current expansion, their rate of rise has been less rapid than that of most previous expansions.

Thus, a second striking feature of the current expansion is the slow response of the lagging indicators, and especially the maintenance of relatively low-level business costs. The excesses generally common during the advanced stages of previous postwar expansions have not yet appeared.

PRICES

A third distinguishing feature of this expansion has been the behavior of prices. Materials prices usually begin to rise before a recession ends, other wholesale prices at about the time recession ends, and consumer prices a little later. In the current expansion, the index of industrial materials prices was below the previous peak level until recently while the index of wholesale prices, excluding farm products and foods (chart 10), has remained almost constant, just slightly below the previous peak level. Consumer prices have also risen, but very slowly, and not yet as much, relatively, as during the 45 months of general business expansion from 1949 to 1953 and the 35 months from 1954 to 1957. However, they have risen more than during the 25 months from 1958 to 1960.

During the 1950's prices rose significantly. With one exception, 1927-29, wholesale prices also rose during the 1920's, though the rises were brief. Thus, another outstanding feature of this expansion has been the unusual stability of prices. It is noteworthy, however, that wholesale prices also remained below previous peak levels during the expansions of the 1920's and 1930's.

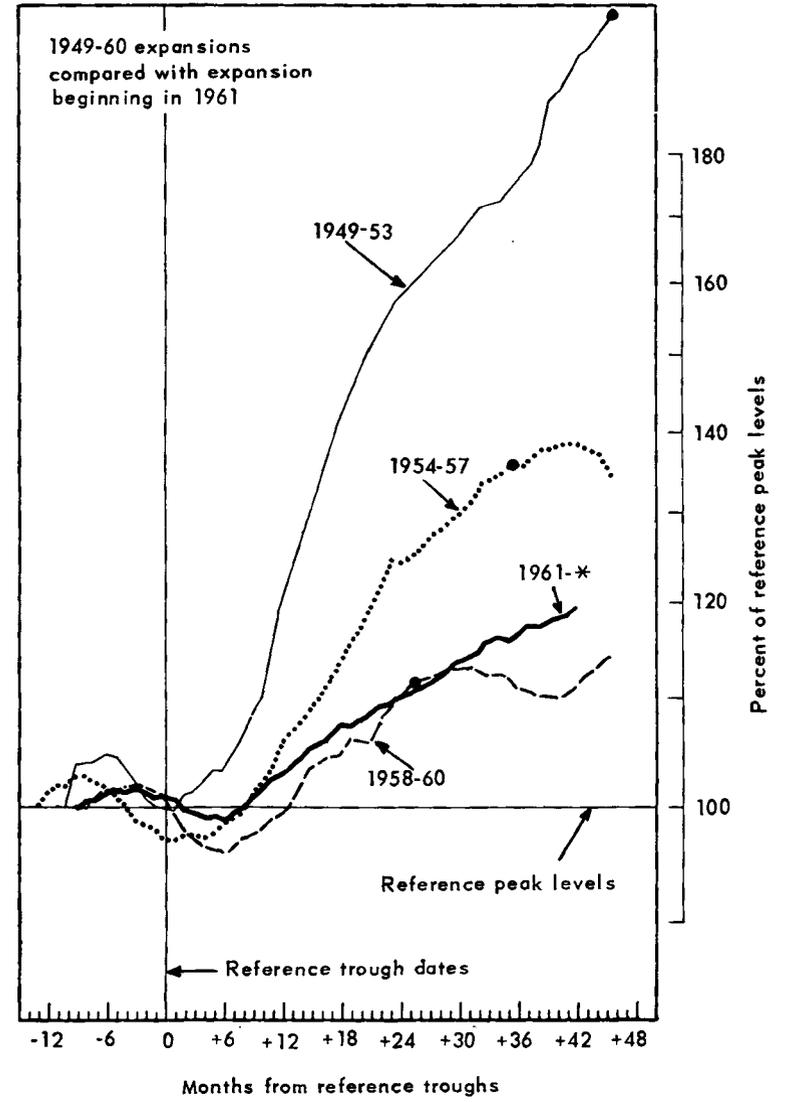
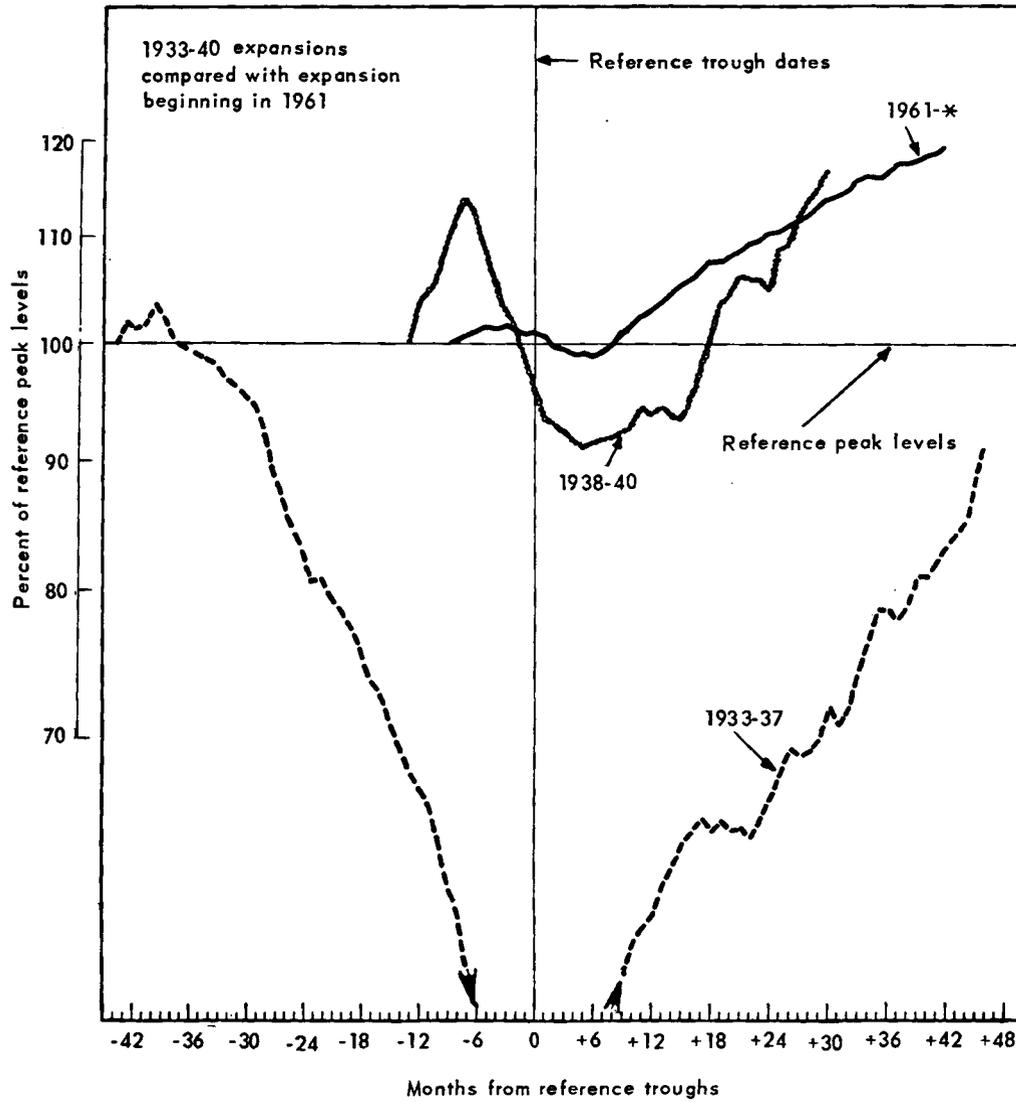
THE FEDERAL CASH BUDGET

There has also been a significant difference in the behavior of the Federal cash surplus or deficit series in this expansion compared to earlier post-World War II expansions (chart 11). In this expansion, the deficit has been maintained at the fairly constant level of an annual rate of about -5 billion. This level compares with substantial fluctuations from deficit to surplus in the preceding expansions. There were sharp movements from deficit to surplus positions in 1950-51 and again in 1952. From 1954 to 1956, there was a steady rise from deficit to a fairly large surplus with the peak coming in the spring of 1956. A sharp decline in the surplus then took place and the budget was virtually in balance during the first half of 1957 just before the recession got underway. During the 1958-60 expansion, the deficit increased steadily until the beginning of 1959 when a rapid decrease in the deficit began, resulting in a surplus early in 1960. Finally, a new decline in the surplus began just about the time the 1960-61 recession got underway. Thus, the current expansion is the only one during the post-World War II period in which an uninterrupted deficit position prevailed.

MONEY SUPPLY AND OTHER FINANCIAL INDICATORS

Another important difference appears in the behavior of the rate of change in the money supply during this expansion, as compared to the earlier post-World War II expansions (chart 11). In two of the previous post-World War II expansions (1954-57 and 1958-60), the rate of change in the money supply began to drop fairly early—within 6 months after the previous recession came to an end. Both declines continued until just before or after a new recession began. In the current expansion, a decline did indeed start at the beginning of 1962—about a year after the expansion started—and it continued until the late summer of that year. The decline was followed, however, by a rise to a level slightly above that from which the decline had begun, and the rate of change has remained at about this level with some minor fluctuations for about a year and a half. It is interesting to

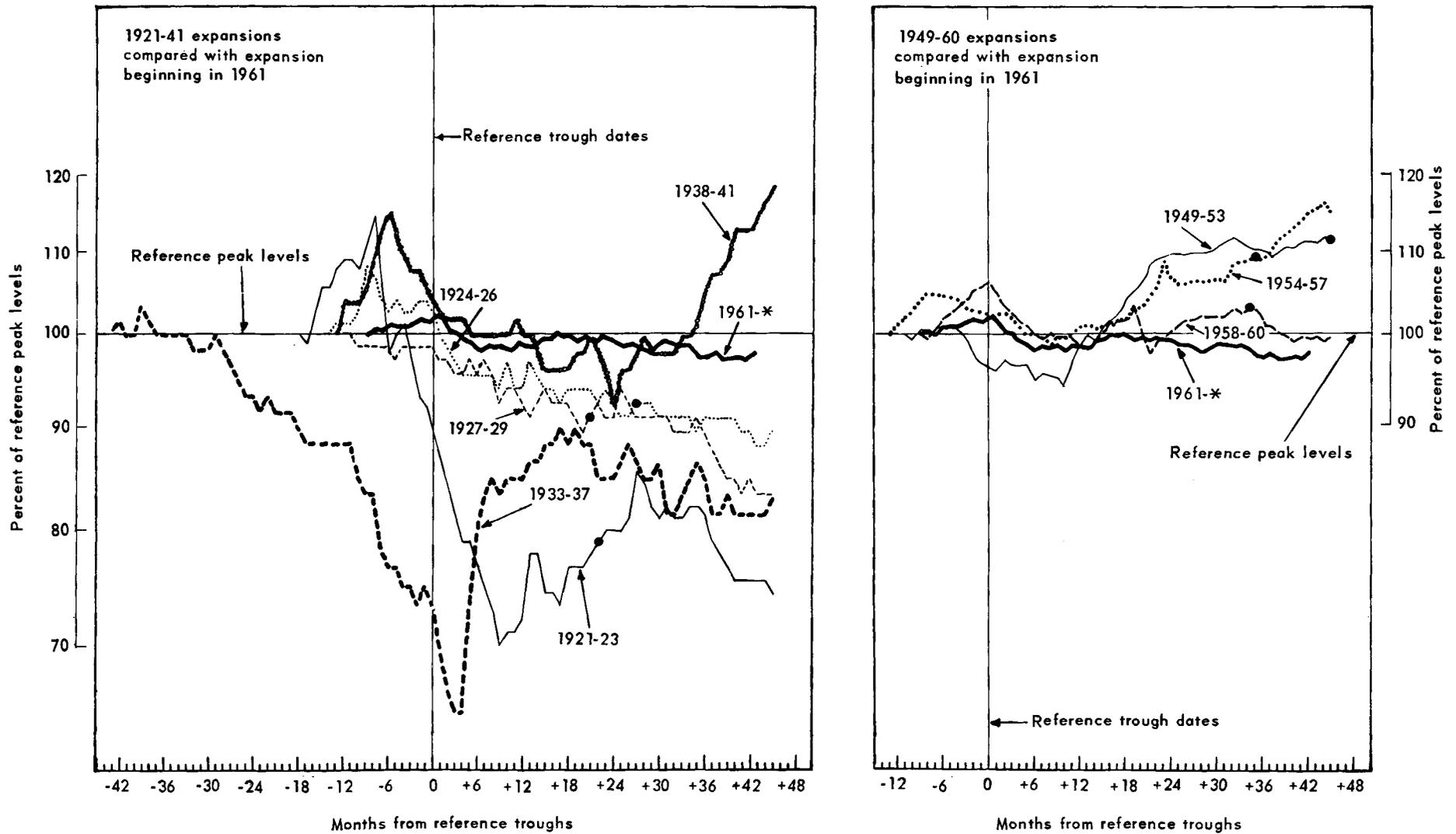
Chart 6.--COMPOSITE INDEX OF LAGGING SERIES--Comparisons of Reference Cycle Patterns for 6 Most Recent Expansions
 (Measured from reference peak levels and reference trough dates. ● Indicates reference peak date for the expansion)



* Latest data plotted--August 1964

Chart 7.--LABOR COST PER UNIT OF OUTPUT, MANUFACTURING--Comparisons of Reference Cycle Patterns for 9 Most Recent Expansions

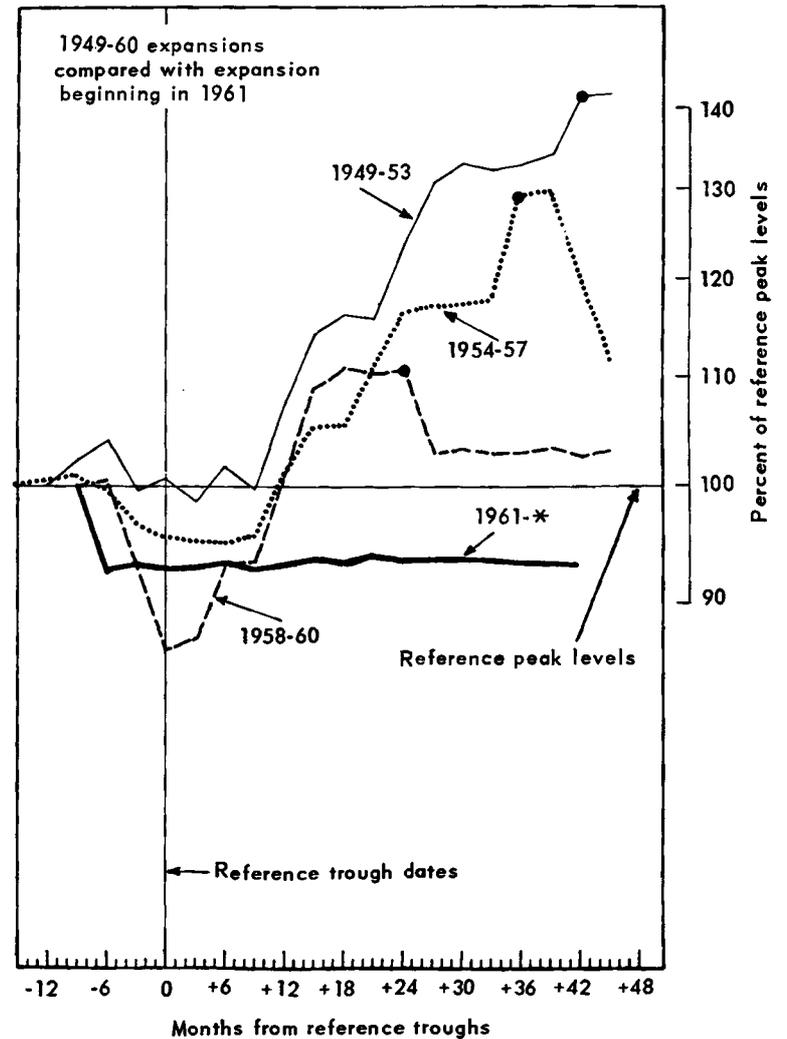
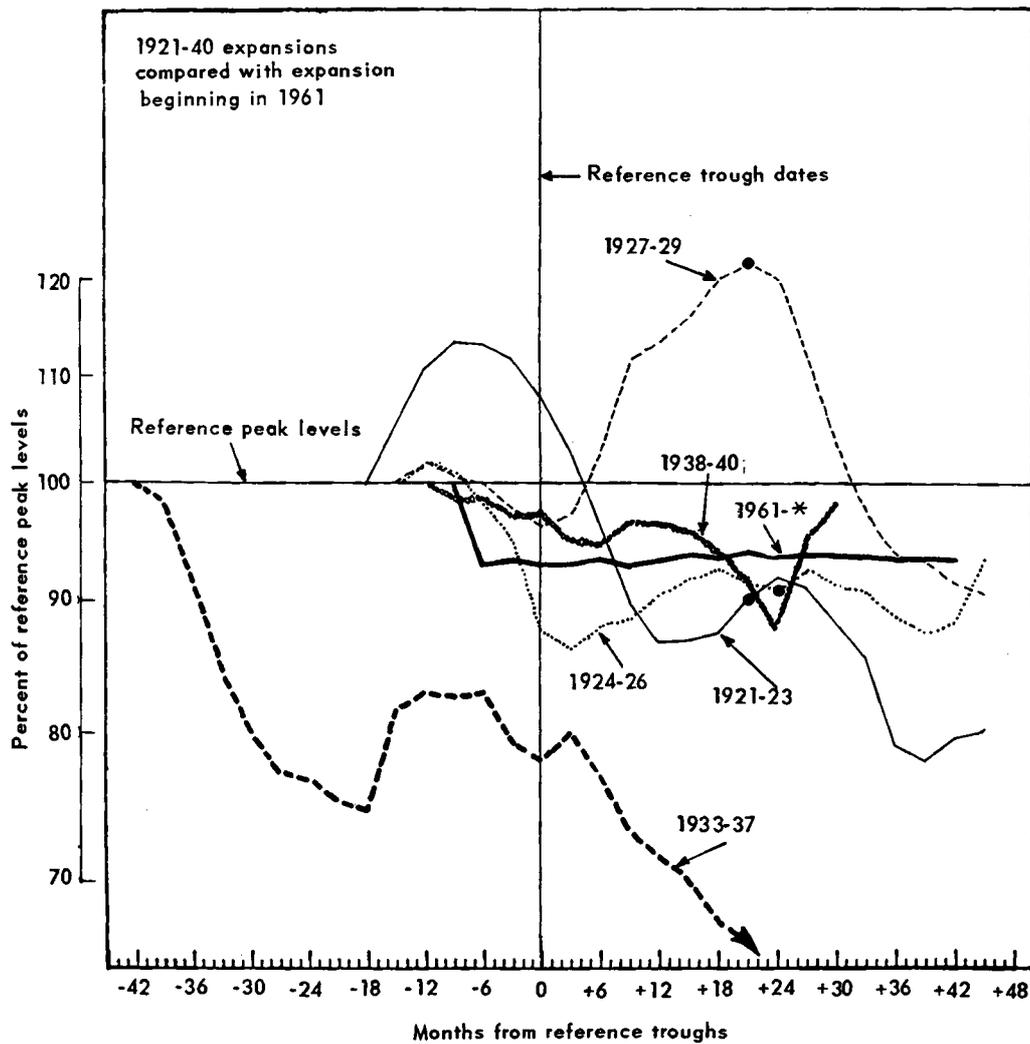
(Measured from reference peak levels and reference trough dates. ● Indicates reference peak date for the expansion)



* Latest data plotted--September 1964

Chart 8.--BANK RATES ON SHORT-TERM BUSINESS LOANS--Comparisons of Reference Cycle Patterns for 9 Most Recent Expansions

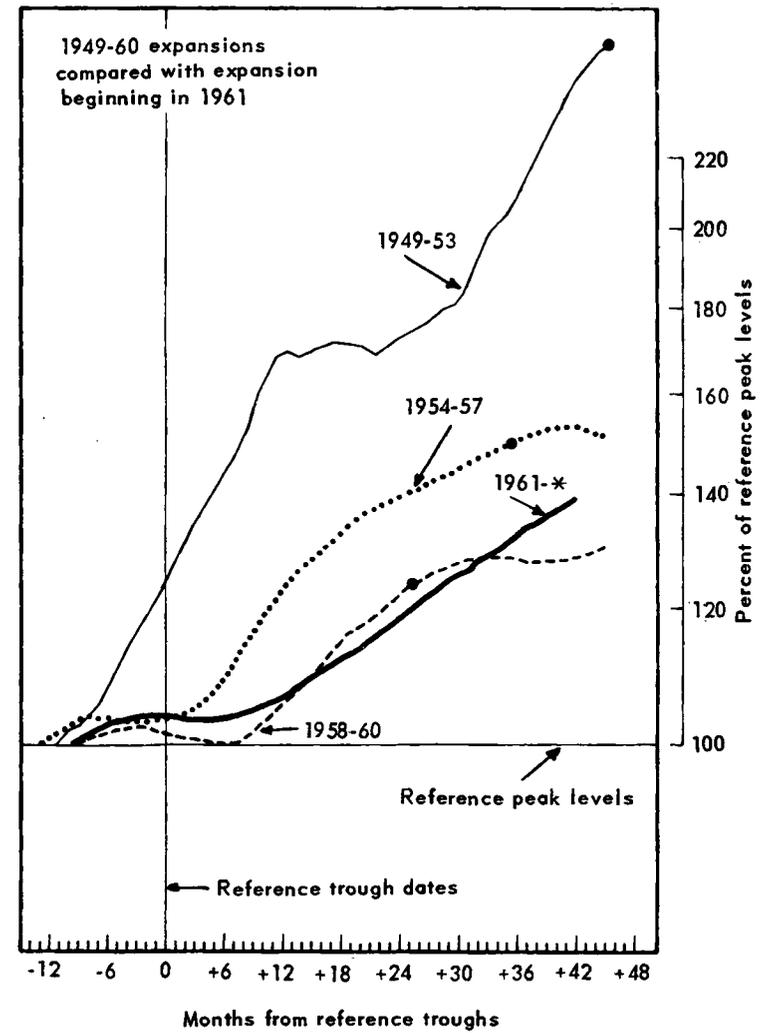
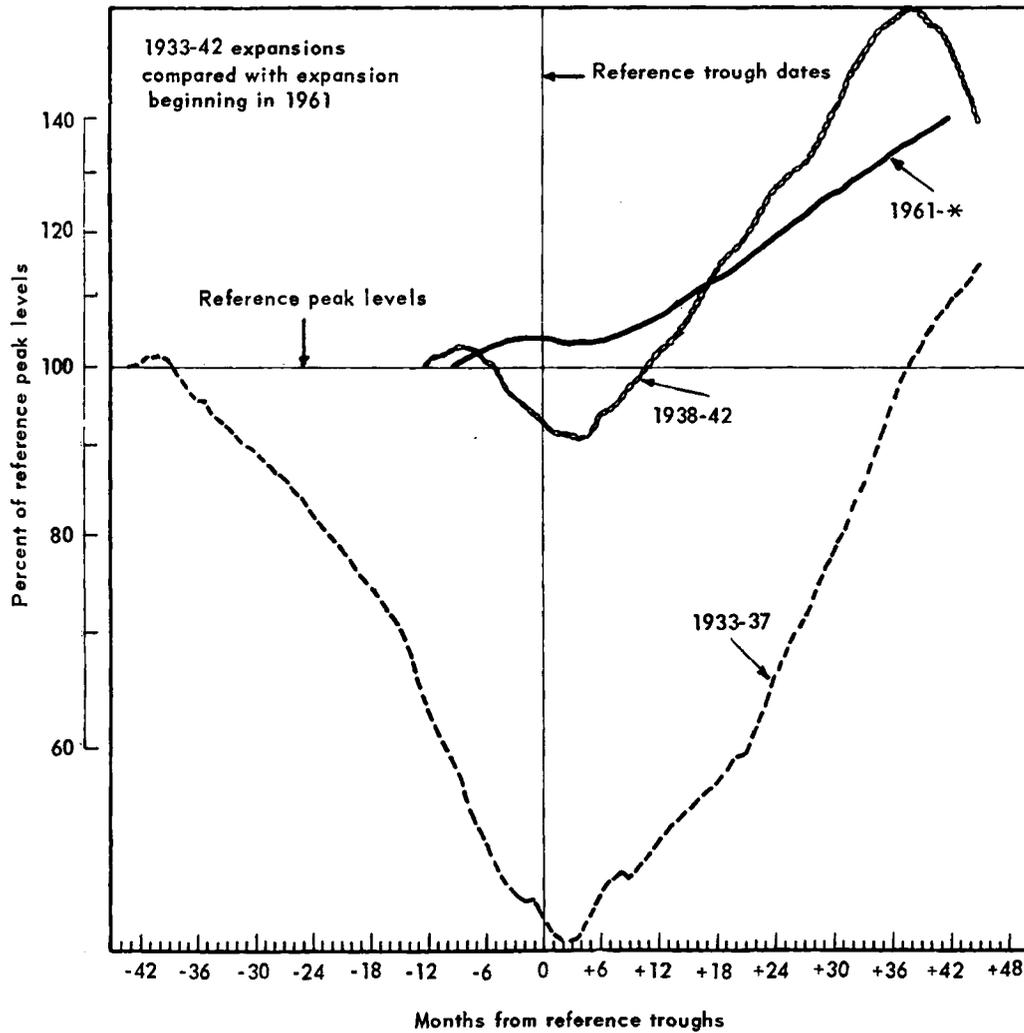
(Measured from reference peak levels and reference trough dates. ● Indicates reference peak date for the expansion)



*Latest data plotted--3rd quarter 1964

Chart 9.--CONSUMER INSTALLMENT DEBT--Comparisons of Reference Cycle Patterns for 6 Most Recent Expansions

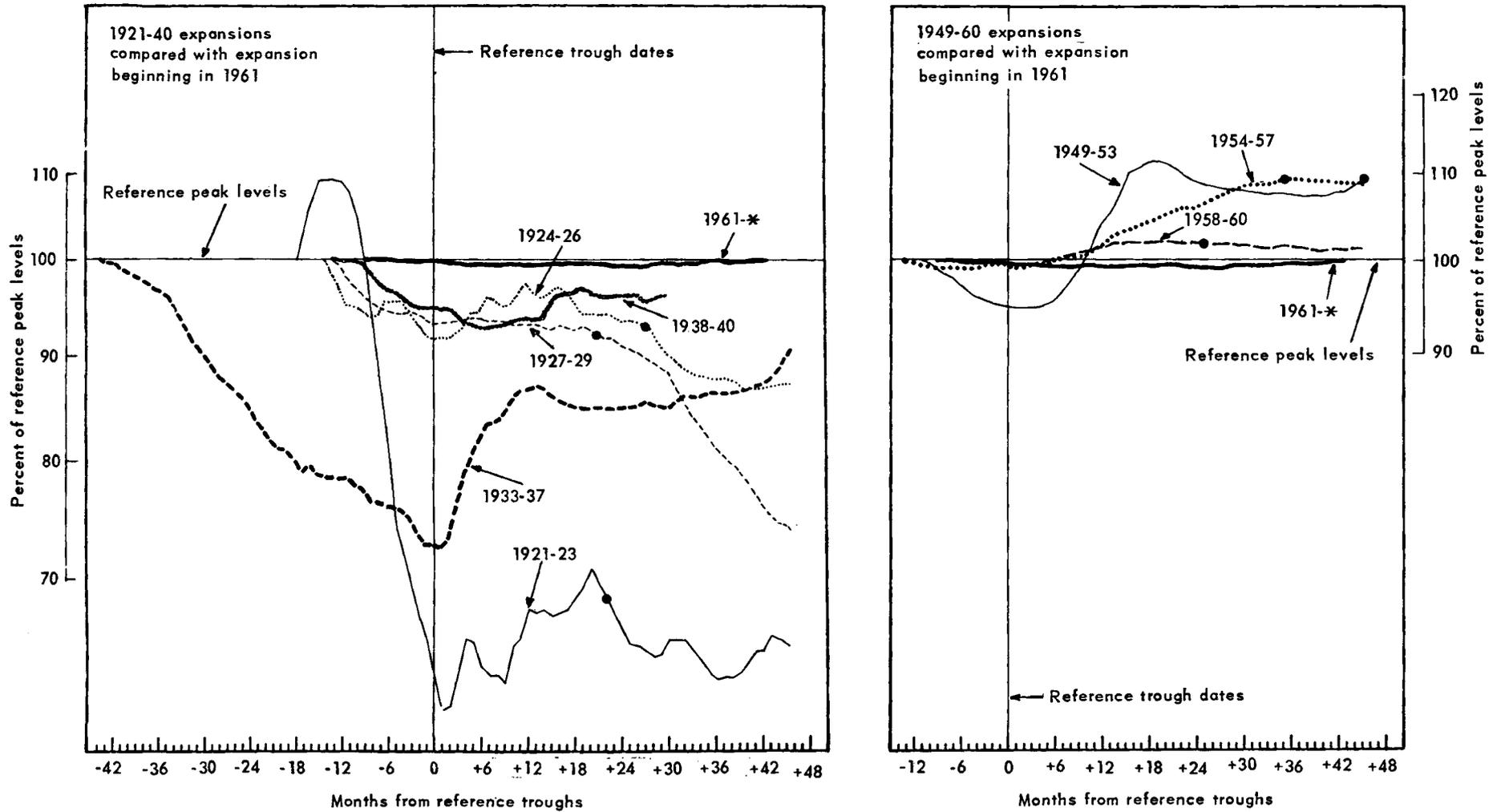
(Measured from reference peak levels and reference trough dates. ● Indicates reference peak date for the expansion)



* Latest data plotted--August 1964

Chart 10.--WHOLESALE PRICES EXCEPT FARM PRODUCTS AND FOODS--Comparisons of Reference Cycle Patterns for 9 Most Recent Expansions

(Measured from reference peak levels and reference trough dates. ● Indicates reference peak date for the expansion)



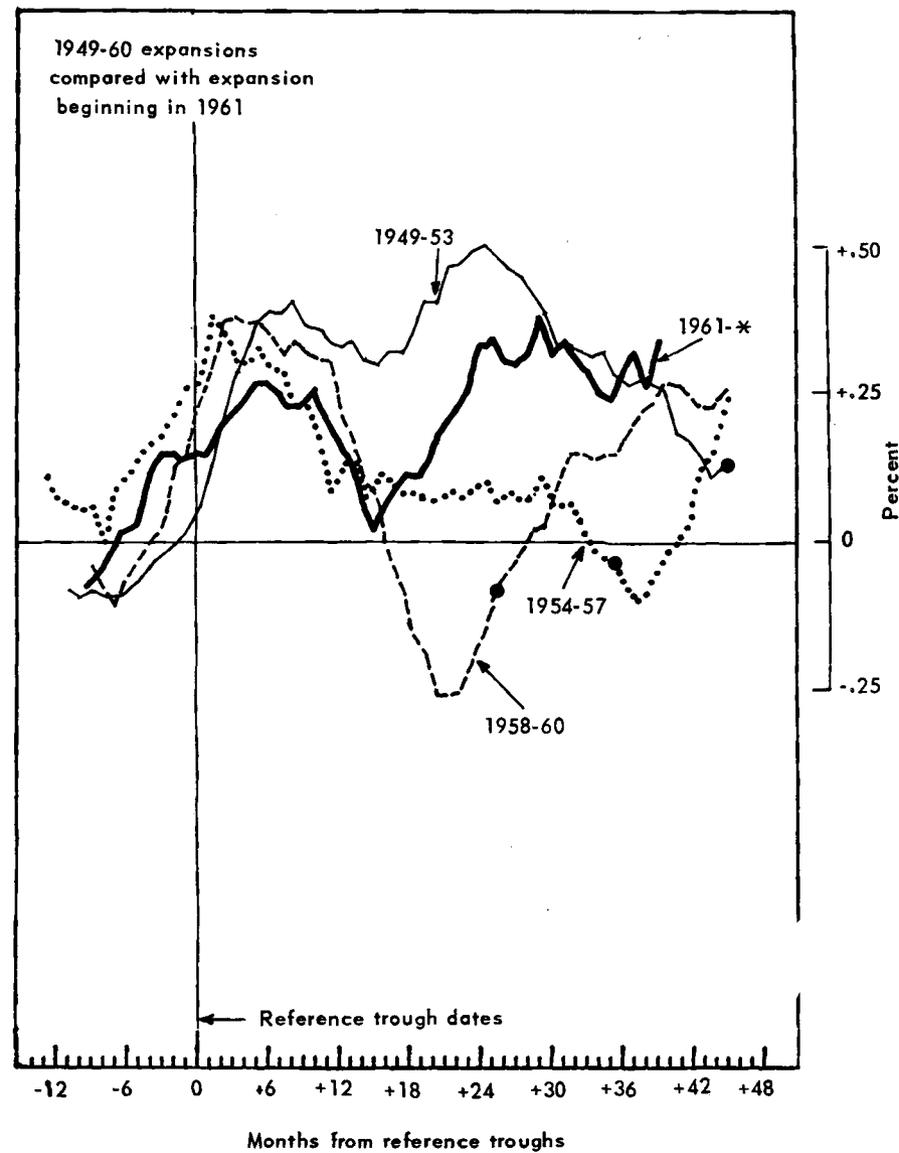
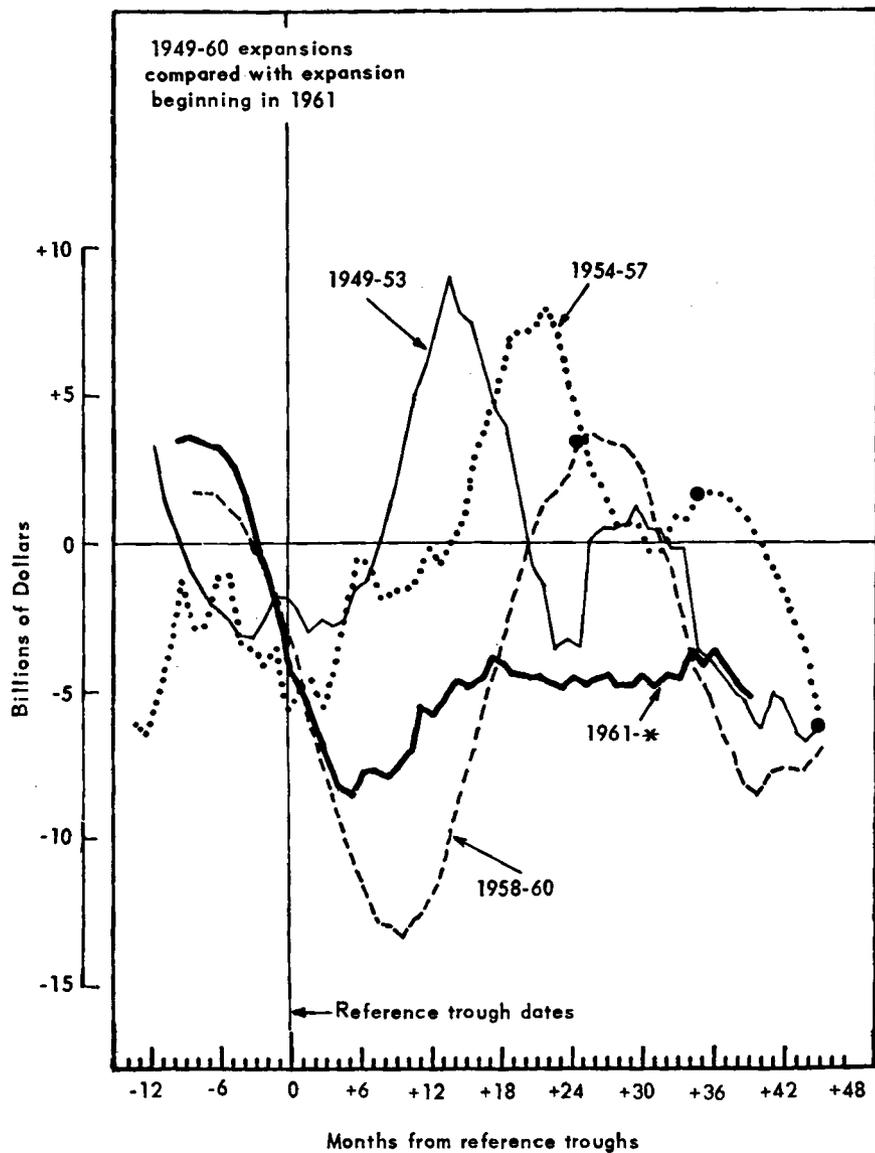
* Latest data plotted--September 1964

Chart 11.--TWO FINANCIAL INDICATORS--Comparisons of Reference Cycle Patterns for 4 Most Recent Expansions

(Aligned at reference trough dates; first values plotted are for previous peak dates. Data in this chart are plotted to absolute vertical scales in contrast to other charts where the data are shown as percentages of previous peak levels. ● Indicates reference peak dates of expansions)

A.--Federal Cash Surplus or Deficit (9-month moving average)

B.--Change in Total U.S. Money Supply (9-month moving average)



note that the decline in the money-supply rate of change in 1962 was more or less coincident with the decline of the leading indicators as a group and, hence, preceded the 1962 retardation in aggregate coincident activity. Thus, with the exception of the dip in 1962, the rate of change in the money supply has been maintained at a high level for a longer period in this than in the preceding expansions, except perhaps that for 1949-53.

It has already been pointed out that the interest rate on short-term business loans declined during the 1960-61 recession and has since remained constant at a level well below the previous peak. Other interest rates also declined during the recession, but the usual rises during the recovery stage did not take place or were short lived. Mortgage yields and municipal bond yields are still below the levels at the 1961 trough, corporate bond yields are at about the same level, and Treasury bond yields only slightly above. Only the Treasury bill rate has risen appreciably above the previous trough level. In contrast interest rates rose substantially during all the other expansions since 1949.

Free reserves have been declining slowly since the current expansion began, but remain positive. They were negative during the advanced stages of the previous post-World War II expansions.

Although the consumer debt has risen only moderately relative to most previous expansions, total private borrowings have risen relatively more as a result of sharp rises in business loans.

THE 1962 RETARDATION

The current expansion experienced a retardation in aggregate economic activity which took place after 17 months and lasted 6 months, from July 1962 to January 1963. This retardation was preceded by a sharp decline in the leading indicators.

The behavior of the leading indicators in 1962 raises the question: Why was the decline then followed by a retardation in the coincident series rather than a recession? A great deal of attention was given to this decline at the time it developed and the use of indicators in business cycle forecasting has been criticized because a recession did not follow. It is well worth asking what circumstances led up to the 1962 development, partly to aid in understanding the course of this expansion and partly to see whether it points to a serious limitation on the use of the indicators.

Declines in the leading series are often followed by recession, but sometimes they are followed by minor setbacks or only retardations of expansion. This was recognized on the basis of the earlier experience, before the 1962 episode occurred. For example, in 1957, Frank A. Morris wrote, "There is no questioning the fact that the sensitivity of the leading series to a leveling-off period in the economy places the burden on the user of the indicators of distinguishing between modest adjustment periods and major cyclical movements."²

The leading series represent decisions that affect future production and employment. Thus, declines in new orders and new business formation reflect decisions that may re-

sult in reductions in employment and production some months later. On the other hand, coinciders represent decisions that pertain more immediately to current production, sales, prices, employment, and income.

There is a feedback from decisions involving future production to decisions involving current production, and vice versa. During the interval when a cyclical decline in the leading series is evident but the coincident series are still rising, unfavorable decisions with respect to future activity may, to some extent, be offset by the favorable decisions with respect to current production. Thus as long as there are widespread rises in production, sales, prices, incomes, and employment, business sentiment will tend to remain relatively favorable. Once aggregate economic activity begins to decline, however, the backlog of unfavorable decisions with respect to future activity is supplemented by the practical and psychological effects of declines in production, sales, employment, incomes, and prices. The result is an acceleration of the cumulative forces of the business cycle.

Consequently, the period immediately after the leading indicators shows a clearly defined downward trend is critical for business cycle policy actions. This is the most opportune time to neutralize the effects of adverse decisions regarding future activity. If appropriate actions are taken then, relatively few may be required. If they are not taken at that time, massive action to reverse the prevailing trends may be necessary later.

A review of the sequence in which the leading indicators declined in 1962 shows that some declines got under way in advance of the steel price controversy in April and the sharp drop in the stock market in May (table 7). Thus profit margins, investment in materials inventories, new incorporations, sensitive materials prices, and stock prices began to decline during the winter of 1961-62. The sensitive employment indicators, new orders for machinery and equipment, and commercial and industrial construction contracts reached highs mainly in March or April. Some indicators, such as corporate profits, did not decline at all. As a group, the complex of leading activities appear to have reached a peak in February.

It should be noted, however, that the typical pattern in the leading indicators, during periods of expansion, consists of some declines along with many rises. It may very well have been the case that the declines in the leading indicators before April were random and that the difficulties which developed in 1962 were, in fact, brought on by the steel price controversy and the stock market decline the next month.

The 1962 decline in the leaders was also of about the same magnitude as those which occurred in advance of the post-World War II recessions. The widespread nature of this decline and its magnitude suggested that it was cyclical. The fact that it was not accompanied by a simultaneous decline in the coincident indicators and lagging indicators, which is to be expected when the cause is an irregular event, supported this view. In the absence of countervailing forces, a decline in aggregate economic activity might have been expected to follow. One may appropriately ask, therefore, why a recession did not take place.

In contrast to the performance of the leading indicators around recessions, the 1962 decline was short lived; it was arrested after only about 6 months. The low may be dated in August, though during the period from July to November 1962, most of the leading indicators fluctuated about a horizontal or slightly rising level. In December, the in-

²Frank A. Morris, "The Predictive Value of the National Bureau's Leading Indicators," Ch. 4, *Business Cycle Indicators*, Geoffrey H. Moore, Editor, National Bureau of Economic Research, New York, 1961. See also p.79, *ibid*.

Table 7.-CHRONOLOGICAL DATES OF 1962 HIGHS FOR 30 LEADING SERIES

Series number and title	High points
	1961
2. Accession rate, manufacturing.....	October
3. Layoff rate, manufacturing (inverted).....	October
18. Profits (before taxes) per dollar of sale, manufacturing corporations.....	4th Quarter
22. Ratio, profits (after taxes) to income originating, corporate, all industries.....	4th Quarter
13. Number of new business incorporations.....	November
31. Change in book value, manufacturing and trade inventories, total.....	November
14. Liabilities of business failures (inverted).....	December
17. Price per unit of labor cost index, manufacturing.....	December
19. Index of stock prices, 500 stocks.....	December
25. Change in manufacturers' unfilled orders, durable goods industries.....	December
20. Change in book value, manufacturers' inventories of purchased materials.....	December
	1962
23. Index of industrial materials prices.....	January
37. Percent reporting higher inventories of purchased materials, NAPA.....	January
21. Change in business inventories, after valuation adjustment, all industries.....	1st Quarter
4. Persons on temporary layoff, all industries (inverted).....	February
6. Value of manufacturers' new orders, durable goods industries.....	February
10. Contracts and orders for plant and equipment.....	February
15. Number of business failures with liabilities of \$100,000 and over (inverted).....	February
26. Buying policy, production materials, percent reporting commitments 60 days or more.....	February
32. Vendor performance, percent reporting slower deliveries.....	February
5. Average weekly initial claims for State unemployment insurance (inverted).....	March
9. Construction contracts awarded for commercial and industrial buildings.....	March
1. Average workweek of production workers, manufacturing.....	April
24. Value of manufacturers' new orders, machinery and equipment industries.....	April
30. Nonagricultural placements, all industries.....	May
7. New private nonfarm housing starts.....	nsc
11. Newly approved capital appropriations, 1,000 manufacturing corporations.....	nsc
12. Net change in number of operating businesses.....	nsc
16. Corporate profits after taxes.....	nsc
29. Index of new private housing units authorized by local building permits.....	nsc

nsc No subcycle.

creases were more vigorous and they continued through 1963 and beyond. Earlier periods are in sharp contrast; declines of the leaders not only took place in advance of recession, but then continued for many months. Nevertheless, until the late autumn of 1962 the behavior was similar to that which preceded earlier recessions.

The principal factors which can be advanced to explain the arrest of the decline and the subsequent rise in the leading indicators are (1) the threat of a steel strike in 1963, (2) Government counter-cyclical policy actions, (3) the Cuban crisis, and (4) the continuing strength of consumer demand.

First, the prospect of a steel strike in the background was favorable to expansion.

Second, various Government measures were helpful. They consisted of the accelerated issuance of the Government depreciation guidelines, the passage of the tax credit for plant and equipment investment, the acceleration in Government spending (as shown by the Federal cash budget) in the fourth quarter of 1962, the increase in the money supply and, finally, the maintenance of interest rates at relatively low levels. The frequent assurances in the summer and autumn of 1962, by the President and other Government officials, of sympathetic treatment for the business community and the announced plan for seeking a tax reduction also were helpful.

Third, the Cuban crisis at the end of October contributed to the forces of expansion at a critical period. The slight

rise in prices that resulted and the change in public sentiment provided additional stimulants.

Finally, the continued rise in consumer expenditures was favorable to continued expansion. Typically, consumer expenditures rise until output reaches a peak and they sometimes continue to rise for a short period after the peak in output. In the light of this record, one should ask whether the continued rise in consumer expenditures was an independent factor promoting expansion in 1962, or whether it merely reflected the Government actions. Automobiles may, however, be on a separate footing from other consumer expenditures. The sharp increase in automobile sales starting in the first 10 days of October suggests that it may have been an autonomous factor.

These factors may have contributed enough in a delicate situation to shift the balance from recession to expansion. The appropriate timing of these actions was probably more significant in this instance than their magnitude.

The behavior of the lagging indicators during this period is also noteworthy. The moderation of the increases in these series, to which attention has been drawn earlier, formed part of the background in which the decline in the leading indicators took place. Unit labor costs, inventories, the consumer debt, and mortgage yields rose earlier in the expansion, but the increases were modest and in most cases the previous high levels had not been exceeded.

Chart 12.--SENSITIVE COINCIDENT INDICATORS IN THE 1962 RETARDATION

(Area within shaded bars represents retardation in aggregate economic activity. Latest data plotted are for September)

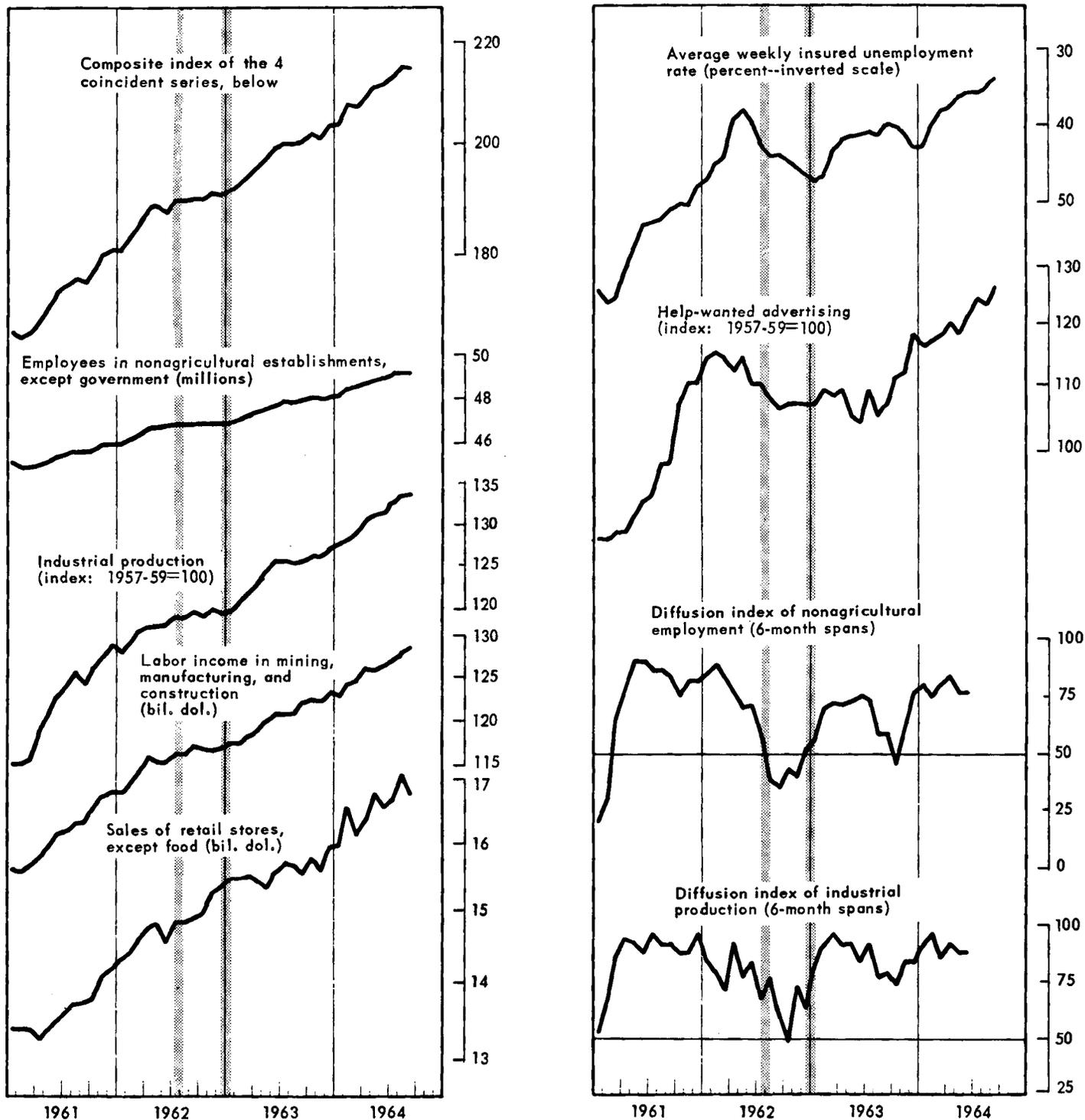


Table 8.—CHRONOLOGICAL DATES OF 1962 LOWS FOR 30 LEADING SERIES

Series number and title	Low points
	1962
25. Change in manufacturers' unfilled orders, durable goods industries.....	March
26. Buying policy, production materials, percent reporting commitments 60 days or more.....	May
17. Price per unit of labor cost index, manufacturing.....	June
19. Index of stock prices, 500 stocks.....	June
32. Vendor performance, percent reporting slower deliveries.....	June
9. Construction contracts awarded for commercial and industrial buildings.....	July
20. Change in book value, manufacturers' inventories of purchased materials.....	July
1. Average workweek of production workers, manufacturing.....	August
3. Layoff rate, manufacturing (inverted).....	August
24. Value of manufacturers' new orders, machinery and equipment industries.....	August
6. Value of manufacturers' new orders, durable goods industries.....	September
10. Contracts and orders for plant and equipment.....	September
23. Index of industrial materials prices.....	September
37. Percent reporting higher inventories of purchased materials, NAPA.....	September
14. Liabilities of business failures (inverted).....	October
31. Change in book value, manufacturing and trade inventories, total.....	November
5. Average weekly initial claims for State unemployment insurance (inverted).....	December
30. Nonagricultural placements, all industries.....	December
	1963
2. Accession rate, manufacturing.....	January
4. Persons on temporary layoff, all industries (inverted).....	January
13. Number of new business incorporations.....	January
15. Number of business failures with liabilities of \$100,000 and over (inverted).....	January
18. Profits (before taxes) per dollar of sales, manufacturing corporations.....	1st Quarter
22. Ratio, profits (after taxes) to income originating, corporate, all industries.....	1st Quarter
21. Change in business inventories after value adjustment, all industries.....	2nd Quarter
7. New private nonfarm housing starts.....	nsc
11. Newly approved capital appropriations, 1,000 manufacturing corporations.....	nsc
12. Net change in number of operating business.....	nsc
16. Corporate profits after taxes.....	nsc
29. Index of new private housing units authorized by local building permits.....	nsc

nsc No subcycle.

Although the broadest indicators of aggregate economic activity—GNP in current dollars, employment in non-agricultural establishments, and retail sales—all rose throughout 1962, other coincident series reflected, in the second half of the year, the earlier decline in the leading indicators. As can be seen in chart 12, industrial production, nonagricultural employment (excluding government), and labor income all leveled off from July to December. The total unemployment rate, the unemployment rate of married men, and the insured unemployment rate all showed some rises; these rises were especially significant because they occurred before the normal recovery declines in unemployment had taken place.

It is clear from this statistical record that there was no recession in 1962; i.e., there was no decline in the complex of activities which have in the past been used to define the business cycle. For this reason no recession will be dated then. But some important coincident activities leveled off and others showed some actual declines. The net effect was a retardation in aggregate economic activity which lasted about 6 months, from July 1962 to January 1963.

There have been retardations in other expansions. Indeed such movements seem to be more or less typical of expansions since the latter half of the 19th century. For example, there were retardations in the expansions of 1888-90, 1894-95, 1897-99, 1924-26, and 1933-37. There also were retardations during other recent expansions, specifically those of 1949-53 and 1954-57. Indeed this pattern has been so common that

Wesley C. Mitchell concluded that the typical course of an expansion is a vigorous rise during the first stage, a pause during the middle stage, and another advance (but at a slower rate than in the first stage) at the end.

As shown in table 1, the 1949-53 expansion lasted 45 months and the 1954-57 expansion, 35 months. It is suggestive that the retardation during the 1949-53 expansion was of longer duration than that which occurred in the 1954-57 expansion. It may be true that each such retardation had a role in prolonging the period of advance. Indeed there are some who argue that the recession of 1960-61 was so mild and of such brief duration that it differed little from a retardation, and that the present expansion can be dated as beginning in April 1958. Under the NBER method of identifying business cycle turning points, however, the movement from May 1960 to February 1961 is classified as a recession because there was an absolute, extended, and widespread decline in economic activity, at least as large in magnitude as in some other instances recognized as recessions. While movements during which aggregate activity advances less rapidly but does not decline are classified as retardations, the same kinds of forces of revival may be present in all these situations though to different degrees. Such developments appear to have favorable effects upon the duration of the expansions.

Another question raised about developments in 1962 is whether the leading indicators foreshadowed the subsequent rise in aggregate economic activity. Taken as a group, the

leading indicators showed significant rises in the fall of 1962 and these rises continued during the first half of 1963. Although these rises were small, it became clearer each month after November 1962 that an advance in aggregate economic activity, rather than a contraction, was likely (table 8). The diffusion indexes, particularly those for the leading indicators, began to rise much earlier. The trough in the diffusion indexes for the leading indicators, taken as a group, came in July 1962. And they reached a significantly higher level by October. The comprehensive diffusion indexes of the coincident series rose sharply during the first half of 1963 after falling to a trough at the end of 1962. However, these indexes had to be interpreted with caution, partly because of their usual erratic behavior (similar rises have occurred before recession periods only to be followed by declines, for example, 1956-57) and partly because these improvements were dominated by stock prices and materials prices. Both of these series have had very good records of leading the business cycle in the past. Nevertheless, the rise in stock prices was at first viewed suspiciously as a rebound from the very drastic decline earlier in the year; i.e., as a response to an overly extreme movement earlier. The rise in materials prices might also have proved temporary because to some extent it was associated with the Cuban crisis, an exogenous event.

In alerting the Government to the needs of the times, it may eventually be concluded that in 1962 the early warning signals provided by the leading indicators played the role that their originators intended them for—to signal recessionary tendencies sufficiently in advance so that appropriate actions can be taken to avert a substantial decline in aggregate economic activity.

CONCLUDING REMARKS

There can be no doubt from this review of the record of the current expansion that it has differed in several important respects from its predecessors. First, the economic processes which reflect excesses, such as costs and inventories, have held to a relatively favorable level throughout. Similarly, wholesale prices have been stable. The principal fiscal and monetary series—the deficit in the budget, interest rates, and the rate of change in the money supply—have all held steady. Finally, a threatened recession in 1962 was averted partly by fortuitous events and partly by Government counter-cyclical policy. The retardation which did occur had favorable effects upon the later expansion in the whole economy. These factors no doubt had an important role in sustaining the advance over such a long period.

Business, labor, and Government policy all influenced the movements of the current expansion shown by the statistical series. Thus, business has been cautious in making short-term commitments, as reflected by the rate of change in inventories, which has been more or less constant at a moderate level over the past year and a half or so. Similarly, longer-term commitments have, again until recently, been conservative. Business has also shown some constraint in holding prices steady, particularly prices of manufactured goods. Restraint on the part of labor in seeking wage increases is also indicated by the fact that labor costs per unit of output have not risen much. Both labor and business management contributed to the rises in productivity which have played a large part in these favorable developments. Of course, business and labor attitudes were influenced by the existence of ample industrial capacity, relatively high unemployment levels, and vigorous foreign competition. The contribution of Government monetary and fiscal policy can be seen in the levels maintained by various financial indicators.

The decrease in the amplitude of the post-World War II cycles and the increase in the duration of the expansions, compared to the interwar cycles, has been attributed to many factors: Built-in Government stabilizers (the increase in income taxes and the pay-as-you-go method of paying them, unemployment insurance, and old-age and survivors' insurance), the spread of private pension programs, the relative growth of the service and trade industries, stabilization of corporate dividends, and so on. At least to some extent, however, the further improvement in the cyclical performance during the current expansion is widely believed to be due to informed business, labor, and Government policy.

Cyclical fluctuations reflect many complex forces; some are endogenous and others exogenous to the national economy. Some we understand fairly well, others we understand partially, and still others we do not understand at all. Certain key factors that affect cyclical behavior have been examined, but not all; for example, the role of the long (Kuznets) cycle in recent cyclical behavior has not been considered. But the data shown in this paper do add to the factual knowledge about this expansion in relation to its predecessors. I hope that the presentation also adds to our understanding of the cyclical process, and in this way to our powers of forecasting future economic trends.

SUMMARY

Everyone who follows business conditions knows that the current expansion is one of the longest and strongest in American history. At 44 months in October, the current expansion is the second longest peacetime expansion. The rise relative to previous peak levels was the largest since World War I for most measures of aggregate economic activity. There are some weak spots: Notably, the total unemployment rate has been running at a higher level than is generally acceptable, and the persistent balance of payments gap has not been closed. All things considered, however, it is difficult to point to a previous expansion which represents a better performance.

Why has this latest expansion done so well? An intensive search for an answer to this question is called for. While each business cycle adds to our knowledge about systematic economic fluctuations, the lessons of this expansion are especially likely to contribute to developing policy programs and techniques for sustaining this and future expansions.

This paper represents the beginning of a study of this question. The approach is to compare the cyclical patterns of this expansion with those of its predecessors, as revealed by strategic cyclical indicators with different timing—leading, coincident, and lagging. Although primarily concerned with the period from 1921 to date, this study also considers the nine business cycles in industrial production from 1891 to 1921.

This investigation also brings into clear focus the dramatic improvement in economic stability since 1948, especially as compared to the period of the 1920's and 1930's. Thus the improvement shown by the current expansion reflects a further extension of a post-World War II pattern of mild declines followed by moderate but sustained expansions, a pattern substantially different from that of earlier periods of our economic history. The increasing cyclical stability appears to have been accompanied by about an equal rate of long-term economic growth.

This investigation also shows that the steady rate of advance in aggregate economic activity since February 1961 (the trough of the previous recession) has not been very

different, in a broad sense, from that of the three earlier post-World War II expansions. There have been very significant differences, however, in the patterns of leading and lagging series. First, the economic processes which reflect excesses, such as costs and inventories, have held to a relatively favorable level throughout. Similarly, wholesale prices have been stable. The principal fiscal and monetary series—the deficit in the budget, interest rates, and the rate of change in the money supply—have all held relatively steady. In addition, a threatened recession in 1962 was averted, partly by Government counter-cyclical policy and partly by fortuitous events. The retardation which did occur had favorable effects upon the later expansion in the whole economy. These factors, no doubt, had an important role in sustaining the advance over such a long period.

The decrease in the amplitude of the post-World War II cycles and the increase in the duration of the expansions, compared to the interwar cycles, has been attributed to many factors: Built-in Government stabilizers (the increase in income taxes and the pay-as-you-go method of paying them, unemployment insurance, and old-age and survivors' insurance), the spread of private pension programs, the relative growth of the service and trade industries, stabilization of corporate dividends, and so on. The further improvement in the cyclical performance during the current expansion is generally believed to be due, at least in part, to informed business, labor, and Government policy.

SOURCES OF DATA FOR COMPOSITE INDEXES

For a description of the methods of computing composite indexes and the adjusted rates of change on which they are based, see appendix A of *Signals of Recession and Recovery*, Occasional Paper 77, by Julius Shiskin, (National Bureau of Economic Research, Inc., New York, 1961).

The following series are included:

Leading series. — For 1919-40, 6 series: 1. Average work-week; 6. New orders, durable manufactures; 7. Nonfarm housing starts; 9. Commercial and industrial construction contracts; 13. New business incorporations; and 19. Standard and Poor's index of stock prices. For 1948-64, 8 series: Series 1, 9, 13, and 19, as above; 24. New orders for machinery and equipment industries; 29. New private housing units authorized by local building permits; 17. Price-labor cost index; and 23. Spot market prices of industrial materials.

Coincident series.—For 1919-28, 5 series: 41. Employment in nonagricultural establishments; 47. Index of industrial production; 51. Bank debits outside NYC; 52. Personal income; and 54. Retail sales. For 1929-40, 6 series: Series 4, 47, 51, 52, 54 (as for 1919-28) and 55. Index of wholesale prices. For 1948-64, series 4, 47, 51, 52, 54, and the inverted series 43. Unemployment rate.

Lagging series.—For 1929-40 and 1948-64, 3 series: 62. Labor cost per unit of output; 64. Manufacturers' inventories, total; and 66. Consumer installment debt.

For sources of individual series, see *Business Cycle Developments*. In addition to the sources cited there, the Babson index of the physical volume of business activity from 1891 to 1920 used in table 3 and chart 3 is published in *Babson's Reports, Inc.*; the early retail sales data come from the Board of Governors of the Federal Reserve System and the Office of Business Economics of the Department of Commerce; and the data on GNP in constant dollars for the period prior to 1940 are Barger and Klein data on GNP in 1939 dollars.

APPENDIXES

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

Selected series	Specific trough dates for reference expansions beginning in—								
	Feb. 1961	Apr. 1958	Aug. 1954	Oct. 1949	June 1938	Mar. 1933	Nov. 1927	July 1924	July 1921
NBER LEADING INDICATORS									
1. Avg. workweek, prod. workers, mfg.	Dec. '60	Apr. '58	Apr. '54	Apr. '49	Jan. '38	Jun. '32	Apr. '28	Jul. '24	Feb. '21
9. Construction contracts, commercial and industrial.....	May '61	Jun. '58	NSC	Aug. '49	Sep. '38	Oct. '32	Sep. '27	Jul. '24	Mar. '21
13. New business incorporations.....	Jan. '61	Nov. '57	NSC	Feb. '49	Sep. '39	Dec. '34	Dec. '26	Jun. '24	Jan. '21
17. Ratio, price to unit labor cost, mfg..	Feb. '61	Apr. '58	Dec. '53	May '49	NA	NA	NA	NA	NA
19. Stock prices, 500 common stocks.....	Oct. '60	Dec. '57	Sep. '53	Jun. '49	Apr. '38	Jun. '32	NSC	Oct. '23	Aug. '21
23. Industrial materials prices.....	Dec. '60	Apr. '58	Feb. '54	Jun. '49	Jun. '38	Jul. '32	Aug. '28	Jun. '24	Jul. '21
24. New orders, mach. and equip. indus....	Nov. '60	Feb. '58	Mar. '54	Apr. '49	NA	NA	NA	NA	NA
29. New bldg. permits, private housing....	Dec. '60	Feb. '58	NA	NA	NA	NA	NA	NA	NA
NBER ROUGHLY COINCIDENT INDICATORS									
41. Employees in nonagri. establishments..	Feb. '61	May '58	Aug. '54	Oct. '49	Jun. '38	Mar. '33	Jan. '28	Jul. '24	Jul. '21
43. Unemployment rate, total.....	May '61	Jul. '58	Sep. '54	Oct. '49	Jun. '38	May '33	NA	NA	NA
47. Industrial production.....	Feb. '61	Apr. '58	Apr. '54	Oct. '49	May '38	Jul. '32	Nov. '27	Jul. '24	Apr. '21
49. GNP in current dollars (Q).....	1stQ'61	1stQ'58	2ndQ'54	2ndQ'49	2ndQ'38	1stQ'33	NSC	NSC	4thQ'21
50. GNP in 1954 dollars (Q).....	1stQ'61	1stQ'58	2ndQ'54	2ndQ'49	1stQ'38	3rdQ'32	NSC	NSC	NA
52. Personal income.....	NSC	Feb. '58	Mar. '54	Oct. '49	May '38	Mar. '33	4thQ'26	2ndQ'24	2ndQ'21
53. Labor income in mining, mfg., constr..	Dec. '60	Apr. '58	Aug. '54	Oct. '49	Jun. '38	Mar. '33	NA	NA	NA
54. Sales of retail stores.....	Apr. '61	Mar. '58	Jan. '54	NSC	May '38	Mar. '33	NSC	NSC	Mar. '22
Selected series	Specific peak dates for reference contractions beginning in—								
	May 1960	July 1957	July 1953	Nov. 1948	May 1937	Aug. 1929	Oct. 1926	May 1923	Jan. 1920
NBER LEADING INDICATORS									
1. Avg. workweek, prod. workers, mfg.	Apr. '59	Nov. '55	Mar. '53	NSC	Dec. '36	Oct. '29	Nov. '25	Nov. '22	NA
9. Construction contracts, commercial and industrial.....	Jun. '60	Mar. '56	NSC	Mar. '46	Jul. '37	Jan. '29	Sep. '25	Aug. '22	Dec. '19
13. New business incorporations.....	Apr. '59	Feb. '56	NSC	Jul. '46	Dec. '36	Jan. '29	Oct. '25	Apr. '23	Dec. '19
17. Ratio, price to unit labor cost, mfg..	May '59	Dec. '55	Feb. '51	Jan. '48	NA	NA	NA	NA	NA
19. Stock prices, 500 common stocks.....	Jul. '59	Jul. '56	Jan. '53	Jun. '48	Feb. '37	Sep. '29	NSC	Mar. '23	Jul. '19
23. Industrial materials prices.....	Nov. '59	Dec. '55	Feb. '51	Jan. '48	Mar. '37	Mar. '29	Nov. '25	Mar. '23	Apr. '20
24. New orders, mach. and equip. indus....	Jul. '59	Nov. '56	Feb. '51	Apr. '48	NA	NA	NA	NA	NA
29. New bldg. permits, private housing....	Nov. '58	Feb. '55	NA	NA	NA	NA	NA	NA	NA
NBER ROUGHLY COINCIDENT INDICATORS									
41. Employees in nonagri. establishments..	Apr. '60	Mar. '57	Jun. '53	Sep. '48	Jul. '37	Aug. '29	Jan. '26	Jun. '23	Jan. '20
43. Unemployment rate, total.....	Feb. '60	Mar. '57	Jun. '53	Jan. '48	Jul. '37	NA	NA	NA	NA
47. Industrial production.....	Jan. '60	Feb. '57	Jul. '53	Jul. '48	May '37	Jul. '29	Mar. '27	May '23	Feb. '20
49. GNP in current dollars (Q).....	2ndQ'60	3rdQ'57	2ndQ'53	4thQ'48	3rdQ'37	3rdQ'29	NSC	NSC	NA
50. GNP in 1954 dollars (Q).....	2ndQ'60	3rdQ'57	2ndQ'53	4thQ'48	3rdQ'37	3rdQ'29	NSC	NSC	NA
52. Personal income.....	NSC	Aug. '57	Oct. '53	Oct. '48	Jun. '37	Aug. '29	2ndQ'26	1stQ'24	NA
53. Labor income in mining, mfg., constr..	May '60	Jul. '57	Jul. '53	Sep. '48	May '37	Sep. '29	NA	NA	NA
54. Sales of retail stores.....	Apr. '60	Aug. '57	Mar. '53	NSC	Sep. '37	Sep. '29	NSC	NSC	Jul. '20

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

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

**Appendix D.—CURRENT SEASONAL ADJUSTMENT FACTORS FOR BUSINESS CYCLE SERIES ADJUSTED BY BUREAU OF THE CENSUS OR NBER
(MAY 1964 TO JUNE 1965)**

Series	1964									1965					
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	
4. Temporary layoff, all industries.....	78.4	74.4	107.5	140.0	87.0	90.2	89.0	94.6	157.0	105.5	91.6	87.4	77.6	73.8	
5. Avg. weekly initial claims, State unemployment insurance.....	82.3	83.8	105.2	84.0	77.4	88.7	104.5	137.4	144.9	107.2	92.7	91.8	82.3	83.8	
13. New business incorporations ¹	103.0	105.9	107.3	90.5	93.1	99.4	82.4	101.8	105.2	91.9	115.6	107.3	103.1	105.8	
14. Liabilities of business failures.....	95.4	106.1	100.4	104.6	96.6	95.7	107.5	77.7	105.6	104.1	100.2	104.7	95.7	106.6	
15. Large business failures.....	99.5	102.6	86.1	95.7	91.2	93.8	94.8	86.0	112.9	114.1	112.0	113.3	99.5	102.3	
17. Ratio, price to unit labor cost, mfg..	101.0	101.7	96.3	99.1	101.9	103.1	101.1	97.8	98.1	99.5	100.0	100.4	101.1	101.7	
18. Profits per dol. of sales, mfg. ²	106.3	...	...	96.9	...	...	101.4	...	...	95.2	...	...	106.3	...
30. Nonagri. placements, all industries ¹ ..	108.7	110.1	105.0	110.5	123.7	111.6	92.5	83.6	80.1	76.9	93.1	104.4	108.2	111.1	
37. Purchased materials, percent reporting higher inventories.....	106.8	98.9	94.8	92.9	92.9	90.3	93.1	95.1	104.9	108.6	108.2	113.4	107.1	99.0	
55. Wholesale prices, except farm products and foods.....	100.0	99.9	99.9	99.9	99.8	100.0	100.0	100.1	100.2	100.0	99.9	99.9	100.0	99.9	
62. Labor cost per unit of output, mfg....	98.9	98.0	103.8	100.8	98.2	97.2	99.0	102.4	102.3	100.5	99.8	99.3	98.9	98.0	
81. Consumer prices.....	99.7	99.9	100.2	100.0	100.1	100.1	100.1	99.9	99.9	99.9	99.9	99.8	99.7	99.9	
82. Federal cash payments to public.....	100.6	102.1	99.8	113.9	94.9	107.1	100.3	98.4	95.2	94.4	93.3	99.8	100.4	101.9	
83. Federal cash receipts from public.....	119.2	150.1	49.9	114.4	123.9	46.2	102.0	106.4	69.2	113.9	125.0	79.6	119.3	150.0	
90. Defense Dept. oblig., procurement....	83.0	197.5	101.4	79.6	99.1	97.9	96.0	93.3	86.3	97.5	78.6	87.9	83.9	197.9	
91. Defense Dept. obligations, total.....	88.4	143.4	114.0	92.3	99.6	105.8	91.5	91.8	92.8	88.6	96.3	95.8	88.6	143.1	
92. Military contract awards in U.S.....	90.0	175.2	72.6	87.5	103.5	101.1	79.4	92.1	100.6	88.9	125.1	84.7	90.2	171.9	
112. Change, business loans ³	100.0	99.6	98.9	98.5	99.3	99.9	101.2	102.0	100.6	99.7	100.3	100.3	100.0	99.6	
128. Japan, industrial production index....	100.1	99.8	99.9	96.5	99.3	99.6	99.2	102.1	94.0	102.1	108.1	99.5	100.1	99.8	

NOTE: 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.

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51...	17	..	53	..	8	29	58	59	63	..	67	69	8-64
52...	17	..	53	56	8	29	58	59	60	..	81	63	..	67	69	8-64
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111..	20	9	32	64	68	11-64	73	7-64	
112..	20	9	32	65	82	..	71	7-64	73	7-64	
113..	20	9	33	65	71	7-64	73	7-64	
114..	21	9	33	63	71	7-64	74	7-64	
115..	21	9	33	63	72	7-64	74	7-64	
116..	21	9	33	63	72	7-64	74	7-64	
117..	21	9	33	63	72	7-64	74	7-64	
118..	21	9	33	63	72	7-64	74	7-64	
121..	23	35	64	66	10-64	
122..	23	35	64	67	10-64	
123..	23	35	64	67	10-64	
125..	23	35	64	67	10-64	
126..	23	35	64	67	10-64	
127..	23	35	64	68	10-64	
128..	23	35	64	82	..	68	10-64	
D1...	..	39	42	46	68	10-64	
D5...	..	39	43	50	68	10-64	
D6...	..	39	42	47	69	10-64	
D11..	..	39	42	
D19..	..	39	43	48	69	10-64	
D23..	..	39	43	49	69	10-64	
D34..	..	39	43	69	10-64	
D35..	..	41	45	70	11-64	
D36..	..	41	45	70	11-64	
D41..	..	40	44	51	70	10-64	
D47..	..	40	44	52	70	10-64	
D48..	..	41	45	69	11-64	
D54..	..	40	44	53	70	10-64	
D58..	..	40	44	54	70	10-64	
D61..	..	41	45	69	11-64	

¹See back cover for series titles and sources.

²Page number shown is for December 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 "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 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
- *9. Construction contracts awarded for commercial and industrial buildings, floor space (M)--F. W. Dodge Corporation; seasonal adjustment by Bureau of the Census and National Bureau of Economic Research, Inc.
10. Contracts and orders for plant and equipment (M)--Department of Commerce, 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, 1,000 manufacturing corporations (Q)--National Industrial Conference Board; component industries are seasonally adjusted and added to obtain seasonally adjusted total
- *12. Net change in the business population, operating businesses (Q)--Department of Commerce, Office of Business Economics
13. Number of new business incorporations (M)--Dun and Bradstreet, Inc.; seasonal adjustment by Bureau of the Census and National Bureau of Economic Research, Inc.
- *14. Current liabilities of business failures (M)--Dun and Bradstreet, Inc.; seasonal adjustment by Bureau of the Census and National Bureau of Economic Research, Inc.
15. Number of business failures with liabilities of \$100,000 and over (M)--Dun and Bradstreet, Inc.; seasonal adjustment by Bureau of the Census and National Bureau of Economic Research, Inc.
- *16. Corporate profits after taxes (Q)--Department of Commerce, Office of Business Economics
17. Price per unit of labor cost index--ratio, wholesale prices of manufactured goods index to index of compensation of employees (sum of wages, salaries, and supplements to wages and salaries) per unit of output (M)--Department of Commerce, Office of Business Economics; Department of Labor, Bureau of Labor Statistics; and Board of Governors of the Federal Reserve System; seasonal adjustment by Bureau of the Census
18. Profits (before taxes) per dollar of sales, all manufacturing corporations (Q)--Federal Trade Commission and Securities and Exchange Commission; seasonal adjustment by Bureau of the Census
- *19. Index of stock prices, 500 common stocks (M)--Standard and Poor's Corporation; no seasonal adjustment
20. Change in book value of manufacturers' inventories of materials and supplies (M)--Department of Commerce, Bureau of the Census
- *21. Change in business inventories, farm and nonfarm, after valuation adjustment (GNP component) (Q)--Department of Commerce, Office of Business Economics
22. Ratio of profits (after taxes) to income originating, corporate, all industries (Q)--Department of Commerce, Office of Business Economics
- *23. Index of industrial materials prices (M)--Department of Labor, Bureau of Labor Statistics; no seasonal adjustment
24. Value of manufacturers' new orders, machinery and equipment industries (M)--Department of Commerce, Bureau of the Census
25. Change in manufacturers' unfilled orders, durable goods industries (M)--Department of Commerce, Bureau of the Census
26. Buying policy--production materials, percent reporting commitments 60 days or longer (M)--National Association of Purchasing Agents; no seasonal adjustment
29. Index of new private housing units authorized by local building permits (M)--Department of Commerce, Bureau of the Census

30. Nonagricultural placements, all industries (M)--Department of Labor, Bureau of Employment Security; seasonal adjustment by Bureau of the Census
31. Change in book value of manufacturing and trade inventories, total (M)--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
- *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 SELECTED U.S. SERIES

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 (EOQ).--National Industrial Conference Board; component industries are seasonally adjusted 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 (M).--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

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 series 47.

DIFFUSION INDEXES

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

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