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PREFACE This report brings together many of the available economic indicators in convenient form for analysis and interpretation. The presentation and classification of series 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. In addition 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.

About 90 principal series and over 300 components are included in preparing the report. 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 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 are collected, assembled, and published and the arrangement of the series for business cycle studies. Publication is scheduled for around the 22d of the month following the month of data.

BUSINESS CYCLE DEVELOPMENTS

October 1965
DATA THROUGH SEPTEMBER
Series ESI No. 65-10

CONTENTS

ABOUT THE COVER—

Series in this publication are grouped according to their usual timing and shown against the background of contractions and expansions in general business activity. The cover design illustrates this concept. The black vertical bar represents a contraction; the top curve, the Leading Series which usually fall before a contraction has begun and rise before it has ended; the middle curve, the Coincident Series which usually fall with the contraction period; the bottom curve, the Lagging Series which fall after a contraction has begun and rise after it ends.

CONTINUED

Cyclical Comparisons

BCD Technical Paper

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The cyclical comparisons section and appendixes A to E have been dropped from this issue in order to present the BCD Technical Paper: Summary of the X-11 Variant of the Census Method II Seasonal Adjustment Program.

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.

Changes in this issue are as follows:

1. The series on labor cost per unit of output (series 62 and 68) and price per unit of labor cost (series 17) have been revised for the period 1948 to date to reflect recent revisions in the national income accounts.

2. A paper, "Summary of the X-11 Variant of the Census Method II Seasonal Adjustment Program," is included in this report. The cyclical comparisons section usually shown monthly in BUSINESS CYCLE DEVELOPMENTS has been omitted from this issue to make room for this paper. The section will be reinstated in the November issue.

A full description of X-11 will appear in Census Technical Paper No. 15, "The X-11 Variant of the Census Method II Seasonal Adjustment Program." Copies of this paper will be available from the U.S. Government Printing Office in about 3 weeks. Information concerning the purchase of a Fortran deck for X-11 can be obtained by writing to the Bureau of the Census.

3. Appendix F includes historical data for series 17, 62, and 68.

The November issue of BUSINESS CYCLE DEVELOPMENTS is scheduled for release on November 23.

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 September 1963 issue). A new version (X-11) is described in No. 7, below.

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).

No. 7.—*Summary Description of the X-11 Variant of the Census Method II Seasonal Adjustment Program* by Julius Shiskin, Allan H. Young, and John C. Musgrave (published in October 1965 issue).

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

Reports in the BUREAU OF THE CENSUS TECHNICAL PAPER SERIES are also useful to BCD readers. Two reports of particular interest are—

Tests and Revisions of Bureau of the Census Methods of Seasonal Adjustments, Bureau of the Census Technical Paper No. 5, by Julius Shiskin (1961), available from the Bureau of the Census at $1 per copy;

Estimating Trading-Day Variation in Monthly Economic Time Series, Bureau of the Census Technical Paper No. 12, by Allan Young (1965), available from Superintendent of Documents, Government Printing Office, Washington D.C., 20402, at 30 cents per copy.

The X-11 Variant of the Census Method II Seasonal Adjustment Program, Bureau of the Census Technical Paper No. 15, by Julius Shiskin, Allan H. Young, and John C. Musgrave (1965), available from Superintendent of Documents, Government Printing Office, Washington D.C. 20402.

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 long-term commitments, and holdings of inventories and of debts.

Although this pattern has been characteristic of American economic history, today many economists do not consider it inevitable.

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 activity. 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.

The list of series covered and sources of the basic data are shown on the back cover of this report. Series numbers are for identification only and do not reflect series relationships or order.

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* (charts 3, 4; 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

Adjustments for normal seasonal fluctuations are often necessary to bring out the underlying cyclical trends of a series. Such adjustments allow for periodic intra-year variations resulting chiefly from normal differences in weather conditions during the year and from various institutional arrangements. Some series contain considerable variation attributable to the number of working or trading days in each month. An additional adjustment is necessary in such cases to reduce this variation. Variations due to holidays are usually accounted for by the seasonal adjustment process; however, there are some cases in which a separate holiday adjustment is necessary for holidays with variable dates. Such a case is retail sales of apparel which is affected strongly by the date of Easter and, to a lesser degree, by the dates of Labor Day and Thanksgiving.

In general, the seasonal adjustment process is designed to adjust for *average* weather conditions but not for the dispersion about that average. Thus, some seasonally adjusted series, such as housing starts, will tend to be low in months of unusually bad weather and high during unusually good weather. At the Bureau of the Census, studies have been started on some series to determine the effects of abnormal weather. Although it eventually may be possible, Census methods do not at present make any adjustments for such variations.

Most of the series contained in this report are presented in seasonally adjusted form. Unadjusted data are used only for those series which appear to have no pattern of seasonal variation. (Unadjusted series are identified in table 2.) In most cases, the seasonally adjusted data used for a series are the official figures released by the source agency; therefore, several different methods of seasonal adjustment are involved. In addition, 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. For these series, seasonal adjustments have been developed by either the NBER or the Census Bureau. The adjustment factors for these series, derived by Census Method II, are shown in appendix D. Factors for series which are the sums of seasonally adjusted components or which are based on unpublished source data are not shown.

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 month-to-month 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.

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 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 leading and roughly coincident 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 aggregate series, the percent of the series components

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

which have 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 and widespread declines with sharp reductions in aggregate activity.

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.

COMPARISIONS 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 the expansion) are compared with the 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, data for a like period (same number of months from the trough of the expansion) are compared with the level at the 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. In many cases, therefore, the earlier comparisons cover fewer months than those for the current expansion.

Nearly all series have undergone changes in definition, coverage, or estimation procedure since 1919; therefore, the historical comparisons are to be considered only approximate. Furthermore, it is sometimes necessary to use data for a closely related series for cycles prior to the period covered by the series used currently. The principal substitutions of this type are as follows:

7. New private nonfarm dwelling units started (prior to 1948: Residential building contracts, floor space, by F. W. Dodge Corp.)

41. Number of employees in nonagricultural establishments (prior to 1929: Factory employment)

52. Personal income (prior to 1929: Quarterly data as published by Barger and Klein)

54. Sales of retail stores (prior to 1929: Department store sales)

62. Index of labor cost per unit of output, total manufacturing (prior to 1948: 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 (charts 3 and 4)

These charts compare 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 chart 3) and specific trough (see chart 4). 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. Chart 3 compares the pattern of the current *reference cycle* (the cycle for aggregate economic activity) with movements over the corresponding phases of previous reference cycles. Chart 4 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 charts, the trough dates are alined. In chart 3, the levels of the preceding peaks are also alined while in chart 4, the levels of the troughs are alined. See the section, "Comparisons of Cyclical Patterns", for more detailed descriptions of these comparisons.

Peak (P) of cycle indicates end of expansion and beginning of Recession (shaded areas) as designated by NBER.

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

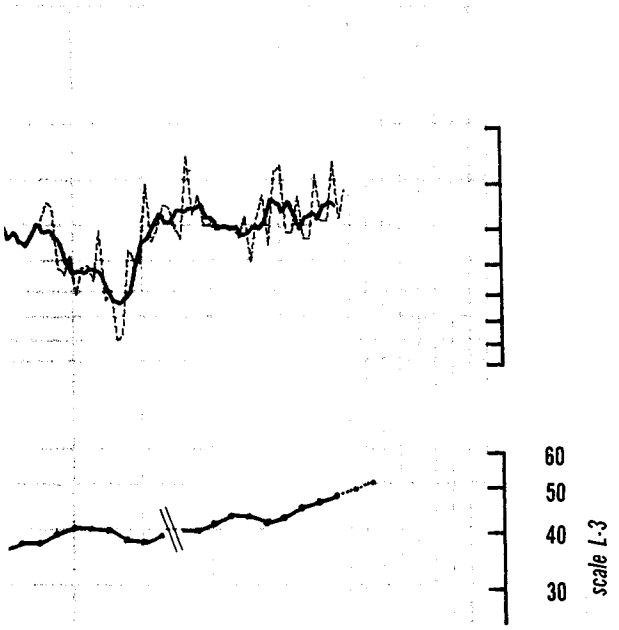
Solid line indicates monthly data. (Data may be actual monthly figures or MCD moving averages.*)

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

Parallel lines indicate a break in continuity (data not available, changes in series definitions, extreme values, etc.)

Solid line with plotting points indicates quarterly data.

CHART 1 — Business Cycle Series



Trough (T) of cycle indicates end of recession and beginning of Expansion (white areas) as designated by NBER.

Arabic number indicates latest month for which data are plotted. ("12" = December)

Roman number indicates latest quarter for which data are plotted. ("II" = second quarter)

Dotted line indicates anticipated data.

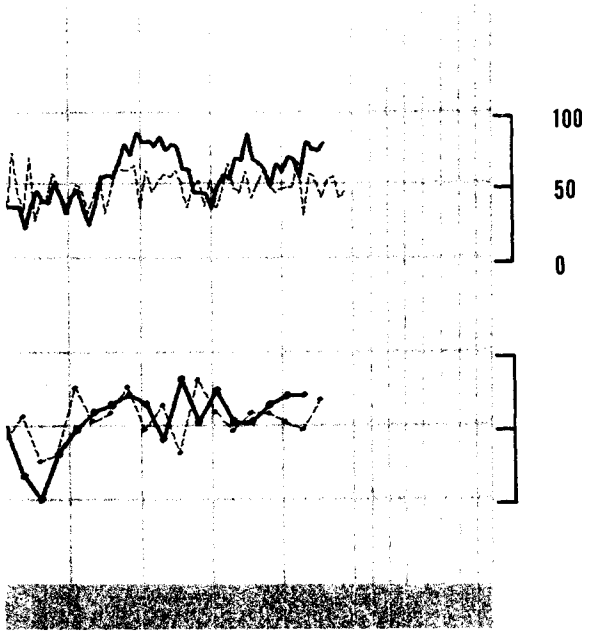
Various scales are used to highlight the patterns of the individual series. Series plotted to different scales are not directly comparable. "Scale A" is an arithmetic scale, "scale L-1" is a logarithmic scale with 1 cycle in a given distance, "scale L-2" is a logarithmic scale with 2 cycles in that distance,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

CHART 2 — Diffusion Indexes

Solid line indicates monthly data over 6- or 9-month spans.

Broken line indicates monthly data over 1-month spans.

Solid line with plotting points indicates quarterly data over various spans.



Scale shows percent of components rising.

Arabic number indicates latest month for which data are used in computing the indexes. ("12" = December)

Roman number indicates latest quarter for which data are used in computing the indexes. ("III" = third quarter)

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

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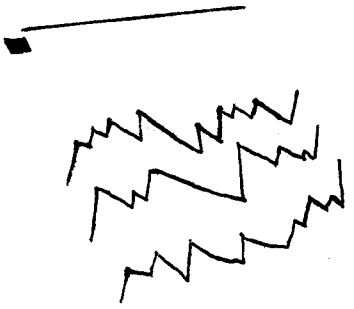
* Many of the more irregular series are shown in terms of their MCD moving averages as well as their actual monthly data. In such cases, the 4-, 5-, or 6-term moving averages are plotted 1½, 2, or 2½ months, respectively, behind the actual data. See page 2 for a description of MCD moving averages.

Section ONE



charts and tables

BASIC DATA

CHANGES OVER 4 LATEST MONTHS

Series (See complete titles and sources on back cover)	Unit of measure	Basic data[1] June 1965	July 1965	Aug. 1965	Sept. 1965	Average percent change[2] 1953 to 1963 (without sign)[3]	Sept. '64 to date (without sign)[4]	Sept. '64 to date (with sign)[5]	Current percent change[2] June to July 1965	July to Aug. 1965	Aug. to Sept. 1965
NBER LEADING INDICATORS											
1. Avg. workweek, prod. workers, mfg	Hours	41.0	40.9	40.9	p40.9	0.5	0.4	+0.1	-0.2	0.0	0.0
2. Accession rate, manufacturing	Per 100 empl.	4.5	r4.1	p4.0	(NA)	4.8	4.8	+0.6	-8.9	-2.4	(NA)
30. Nonagri. placements, all industries	Thous.	549	541	530	528	1.8	2.5	+0.2	-1.5	-2.0	-0.4
3. Layoff rate, manufacturing	Per 100 empl.	1.4	r1.7	p1.5	(NA)	9.4	9.7	-0.6	-21.4	+11.8	(NA)
4. Temporary layoff, all industries	Thous.	140	121	110	84	17.8	20.7	+0.2	+13.6	+9.1	+23.6
5. Avg. weekly initial claims, State unemployment insurance	do.	224	231	248	218	5.3	4.1	+0.8	-3.1	-7.4	+12.1
6. New orders, durable goods indus	Bil. dol.	21.31	22.20	r21.46	p21.75	3.8	2.6	+0.8	+4.2	-3.3	+1.4
24. New orders, mach. and equip. indus	do.	4.09	4.35	r4.16	p4.10	4.5	2.6	+0.9	+6.4	-4.4	-1.4
9. Construction contracts, commercial and industrial	Mil. sq. ft. floor space	55.28	55.90	49.60	(NA)	9.7	9.3	+0.2	+1.1	-11.3	(NA)
10. Contracts and orders, plant, equip	Bil. dol.	4.81	5.16	p4.90	(NA)	4.9	3.5	+0.8	+7.3	-5.0	(NA)
11. New capital appropriations, mfg[6]	do.	...	...	(NA)		11.4	12.3	+5.9	...	(NA)	
7. Private nonfarm housing starts	Ann. rate, thous.	1,539	r1,447	r1,404	p1,407	7.3	3.7	0.0	-6.0	-3.0	+0.2
29. New bldg. permits, private housing	1957-59=100	110.6	109.7	r107.4	p102.2	3.8	3.5	-0.5	-0.8	-2.1	-4.8
38. Index of net business formation	do.	105.4	105.3	104.2	(NA)	1.0	0.9	-0.1	-0.1	-1.0	(NA)
13. New business incorporations	Number	16,671	16,369	16,957	(NA)	2.7	2.1	+0.2	-1.8	+3.6	(NA)
14. Liabilities of business failures	Mil. dol.	135.66	120.64	128.98	108.56	16.9	24.8	-3.9	+11.1	-6.9	+15.8
15. Large business failures	No. per week	47	39	45	43	13.1	11.4	-1.4	+17.0	-15.4	+4.4
16. Corporate profits after taxes[6]	Ann. rate, bil. dol.	...	...	(NA)		r5.7	6.0	+6.0	...	(NA)	
17. Ratio, price to unit labor cost, mfg	1957-59=100	r103.3	r104.0	r103.4	p102.1	r0.6	0.6	+0.1	+0.7	-0.6	-1.3
18. Profits per dol. of sales, mfg[6]	Cents	...	...	(NA)		6.8	7.0	+1.4	...	(NA)	
22. Ratio, profits to income originating, corporate, all industries[6]	Percent	...	...	(NA)		r4.4	4.2	+3.7	...	(NA)	
19. Stock prices, 500 common stocks*	1941-43=10	85.04	84.91	86.49	89.38	2.6	1.7	+0.6	-0.2	+1.9	+3.3
21. Change in business inventories, all industries[6,7]	Ann. rate, bil. dol.	...	...	+6.1		r2.3	1.9	+0.6	...	-0.6	
31. Change in book value, manufacturing and trade inventories[7]	do.	+6.1	r+11.6	p+7.7	(NA)	3.5	5.6	-0.3	+5.5	-3.9	(NA)
20. Change in book value, mfrs.' inventories of materials and supplies[7]	do.	-0.5	r+0.7	p+1.5	(NA)	1.5	1.7	-0.1	+1.2	+0.8	(NA)
37. Purchased materials, percent reporting higher inventories	Percent	58	57	60	58	6.8	3.7	-0.2	-1.7	+5.3	-3.3
26. Buying policy, prod. mtls., commitments 60 days or longer*	do.	62	62	63	61	5.8	2.4	0.0	0.0	+1.6	-3.2
32. Vendor performance, percent reporting slower deliveries*	do.	66	62	64	62	7.7	4.9	-1.3	-6.1	+3.2	-3.1
25. Change in unfilled orders, durable goods industries[7]	Bil. dol.	+0.58	r+0.38	r+0.27	p+0.76	0.49	0.33	0.00	-0.20	-0.11	+0.49
23. Industrial materials prices*	1957-59=100	115.3	114.6	115.2	114.8	1.3	1.3	+0.5	-0.6	+0.5	-0.3
NBER ROUGHLY COINCIDENT INDICATORS											
41. Employees in nonagri. establishments	Thous.	60,382	r60,602	r60,680	p60,806	0.3	0.4	+0.3	+0.4	+0.1	+0.2
42. Total nonagricultural employment	do.	67,459	68,092	67,821	67,777	0.4	0.4	+0.3	+0.9	-0.4	-0.1
43. Unemployment rate, total	Percent	4.7	4.5	4.5	4.4	3.9	3.6	+1.1	+4.3	0.0	+2.2
40. Unemployment rate, married males	do.	2.4	2.3	2.6	2.2	5.6	6.4	+1.6	+4.2	-13.0	+15.4
45. Avg. weekly insured unemploy. rate, State	do.	2.9	3.0	3.0	2.9	4.8	2.8	+1.3	-3.4	0.0	+3.3
46. Help-wanted advertising	1957-59=100	146	145	152	p160	3.1	2.7	+2.0	-0.7	+4.8	+5.3
47. Industrial production	do.	142.7	144.2	r144.3	p142.8	1.1	1.0	+0.5	+1.1	+0.1	-1.0
50. GNP in 1958 dollars[6]	Ann. rate, bil. dol.	...	...	p609.1		r1.2	1.1	+1.1	...	+1.3	
49. GNP in current dollars[6]	do.	...	...	p676.9		1.5	1.6	+1.6	...	+1.7	
57. Final sales[6]	do.	...	...	p670.8		1.3	1.5	+1.5	...	+1.8	
51. Bank debits, all SMSA's except N.Y.	do.	3,019.4	3,021.0	3,018.8	p3,022.6	1.5	1.6	+0.8	+0.1	-0.1	+0.1
52. Personal income	do.	528.8	530.5	r532.0	p545.3	0.5	0.7	+0.7	+0.3	+0.3	+2.5
53. Labor income in mining, mfg., constr.	do.	141.5	142.5	r143.3	p143.6	0.8	0.8	+0.6	+0.7	+0.6	+0.2
54. Sales of retail stores	Mil. dol.	23,331	r23,743	r23,653	p23,344	0.8	1.7	+0.4	+1.8	-0.4	-1.3
55. Wholesale prices, except farm products and foods	1957-59=100	102.6	102.6	r102.8	p102.9	0.2	0.1	+0.1	0.0	+0.2	+0.1

BASIC DATA

TABLE 1

CHANGES OVER 4 LATEST MONTHS—Continued

Series (See complete titles and sources on back cover)	Unit of measure	Basic data[1] June 1965	July 1965	Aug. 1965	Sept. 1965	Average percent change[2] 1953 to 1963 (without sign)[3]	Sept.'64 to date (without sign)[4]	Sept '64 to date (with sign)[5]	Current percent change[2] June to July 1965	July to Aug. 1965	Aug. to Sept. 1965
NBER LAGGING INDICATORS											
61. Business expenditures, new plant and equipment[6]	Ann. rate, bil. dol.....	...	...	a51.15		3.2	2.9	+2.9	...	+1.6	
62. Labor cost per unit of output, mfg	1957-59=100 ..	r99.6	r98.8	r99.8	p101.0	0.6	0.7	+0.1	-0.8	+1.0	+1.2
68. Labor cost per dollar of real corporate GNP[6].....	.....do.....	...	...	(NA)		r0.8	1.0	+0.4	...	(NA)	
64. Book value of mfrs.' inventories	Bil. dol.....	64.6	r65.4	p65.8	(NA)	0.5	0.7	+0.7	+1.2	+0.6	(NA)
65. Book value of mfrs.' inventories of finished goods	.....do.....	22.3	22.5	p22.5	(NA)	0.8	0.6	+0.4	+0.9	0.0	(NA)
66. Consumer installment debt	Mil. dol.....	62,256	62,922	63,531	(NA)	0.8	1.0	+1.0	+1.1	+1.0	(NA)
67. Bank rates on short-term business loans*[8].....	Percent.....	4.99	...	...	5.00	2.3	0.4	+0.1	...	...	+0.2
OTHER SELECTED U.S. SERIES											
82. Federal cash payments to public	Ann. rate, bil. dol.....	133.0	r120.2	r129.5	137.7	3.7	5.1	+1.5	-9.6	+7.7	+6.3
83. Federal cash receipts from public	.....do.....	119.4	r122.1	r121.9	121.4	4.1	5.0	+1.0	+2.3	-0.2	-0.4
84. Federal cash surplus or deficit[7].....	.....do.....	-13.6	+1.9	-7.6	-16.3	4.4	11.4	-1.0	+15.5	-9.5	-8.7
95. Balance, Federal income and product account[6,7].....	.....do.....	...	...	(NA)		r2.4	2.1	+2.1	...	(NA)	
90. Defense Dept. oblig., procurement.....	Mil.dol	r1,140	954	1,893	(NA)	26.9	49.3	+19.9	-16.3	+98.4	(NA)
91. Defense Dept. obligations, total	.....do.....	r4,520	4,258	5,223	(NA)	15.1	12.3	+2.6	-5.8	+22.7	(NA)
92. Military contract awards in U.S	.....do.....	2,438	2,699	2,770	(NA)	26.2	17.4	+4.4	+10.7	+2.6	(NA)
99. New orders, defense products	Bil. dol.....	2.58	r2.62	r2.80	p3.15	23.0	13.7	+5.4	+1.6	+6.9	+12.5
93. Free reserves*[7].....	Mil. dol.....	r-184	-175	r-136	p-154	104	65	-20	+9	+39	-18
85. Change in money supply[7].....	Ann. rate, percent.....	+13.44	+5.16	+1.44	p+11.76	3.06	6.80	+0.28	-8.28	-3.72	+10.32
98. Change in money supply and time deposits[7].....	.....do.....	+12.60	+9.72	+10.80	p+12.24	2.51	3.03	+0.23	-2.88	+1.08	+1.44
110. Total private borrowing[6].....	Ann. rate, mil. dol.....	...	...	(NA)		11.6	8.7	+8.7	...	(NA)	
111. Corporate gross savings[6].....	.....do.....	...	...	(NA)		4.3	3.6	+2.7	...	(NA)	
112. Change, business loans[7].....	Ann. rate, bil. dol.....	+11.38	+10.00	+5.53	p+4.00	1.22	3.00	-0.02	-1.38	-4.47	-1.53
113. Change, consumer installment debt[7]...	.....do.....	+7.22	+7.99	+7.31	(NA)	0.85	1.08	+0.10	+0.77	-0.68	(NA)
114. Treasury bill rate*.....	Percent.....	3.81	3.83	3.84	3.91	7.3	1.6	+0.9	+0.5	+0.3	+1.8
115. Treasury bond yields *.....	.....do.....	4.14	4.15	4.19	4.25	1.8	0.4	+0.2	+0.2	+1.0	+1.4
116. Corporate bond yields*.....	.....do.....	4.57	4.57	4.66	4.71	1.7	0.6	+0.4	0.0	+2.0	+1.1
117. Municipal bond yields*.....	.....do.....	3.24	3.27	3.24	3.35	2.6	1.6	+0.3	+0.9	-0.9	+3.4
118. Mortgage yields *.....	.....do.....	5.44	5.44	5.45	5.46	0.6	0.1	0.0	0.0	+0.2	+0.2
86. Exports, excluding military aid	Mil. dol.....	2,184.8	2,262.8	2,345.7	(NA)	4.6	18.1	+4.4	+3.6	+3.7	(NA)
87. General imports	.....do.....	1,834.8	1,669.8	1,725.4	(NA)	3.6	9.7	+2.0	-9.0	+3.3	(NA)
88. Merchandise trade balance[7].....	.....do.....	+350.0	+593.0	+620.3	(NA)	59.0	270.0	-6.2	+243.0	+27.3	(NA)
89. U.S. balance of payments[6,7].....	.....do.....	...	...	(NA)		267	796	+281	...	(NA)	
81. Consumer prices.....	1957-59=100 ..	110.2	110.0	110.0	(NA)	0.2	0.2	+0.1	-0.2	0.0	(NA)
94. Construction contracts, value	.....do.....	139	149	139	(NA)	7.0	5.5	+0.7	+7.2	-6.7	(NA)
96. Unfilled orders, dur. goods indus	Bil. dol.....	57.45	r57.83	r58.10	p58.87	1.5	1.0	+1.0	+0.7	+0.5	+1.3
97. Backlog of capital appro., mfg [8].....	.....do.....	p17.06	...	...	(NA)	6.6	5.5	+5.5	...	...	(NA)

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

[1]Series 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.

[2]To facilitate interpretations of cyclical movements, those series that usually fall when general business activity rises and rise when business falls are inverted so that rises are shown as declines and declines as rises (see series 3, 4, 5, 14, 15, 40, 43, and 45). Percent changes are calculated in the usual way but the signs are reversed. See footnote 7 for other "change" qualifications.

[3]This average is based on month-to-month (or quarter-to-quarter) changes without regard to sign. The period varies among the series, covering 1953-63 for most series.

[4]Average computed without regard to sign.

[5]Average computed with regard to sign.

[6]Quarterly series. Figures are placed in the middle month of quarter.

[7]Since 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.

[8]Figures are placed in the last month of quarter.

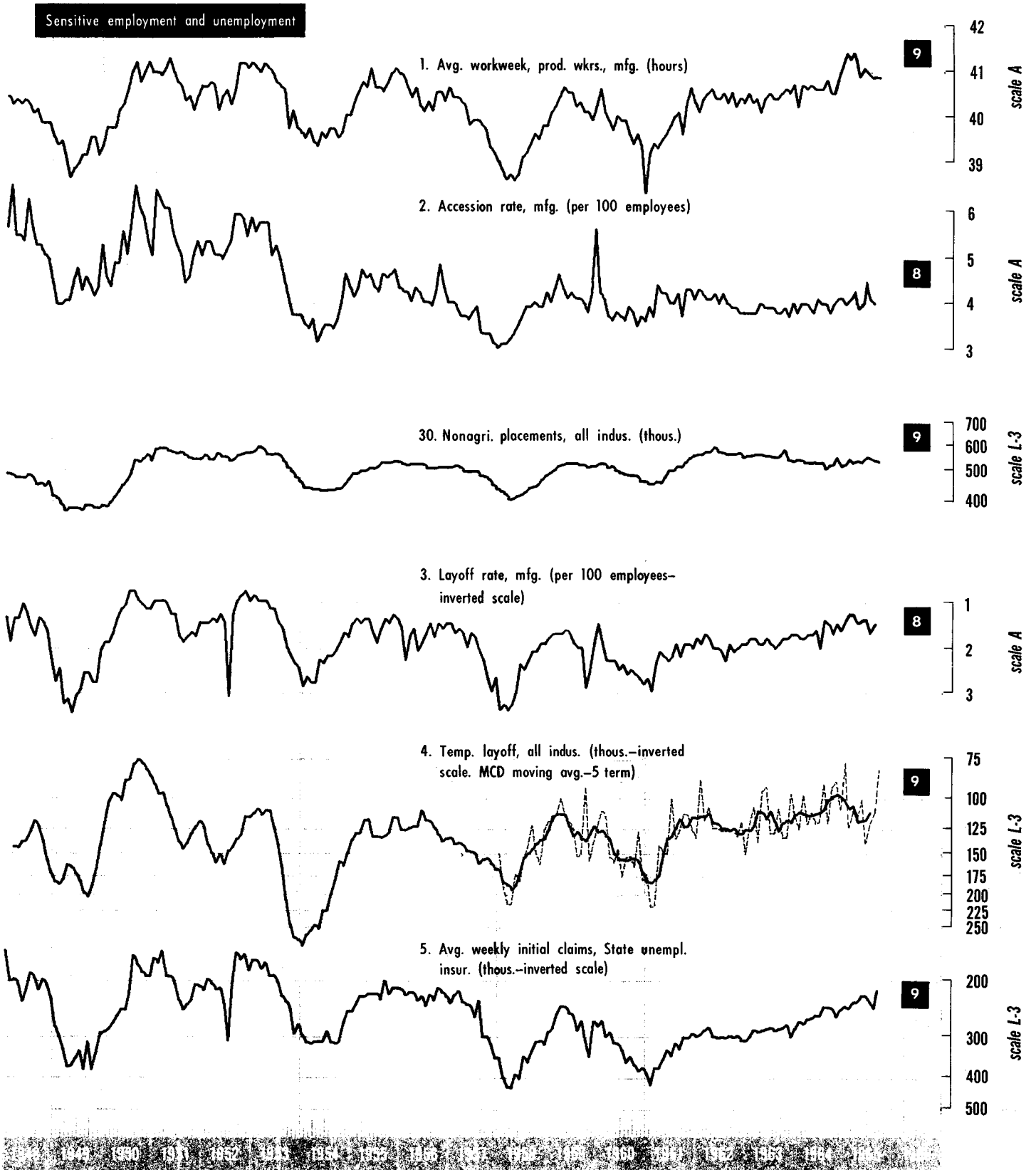
CHART 1 A

BASIC DATA

OCTOBER 1965 **bcd**

BUSINESS CYCLE SERIES FROM 1948 TO PRESENT

NBER Leading Indicators

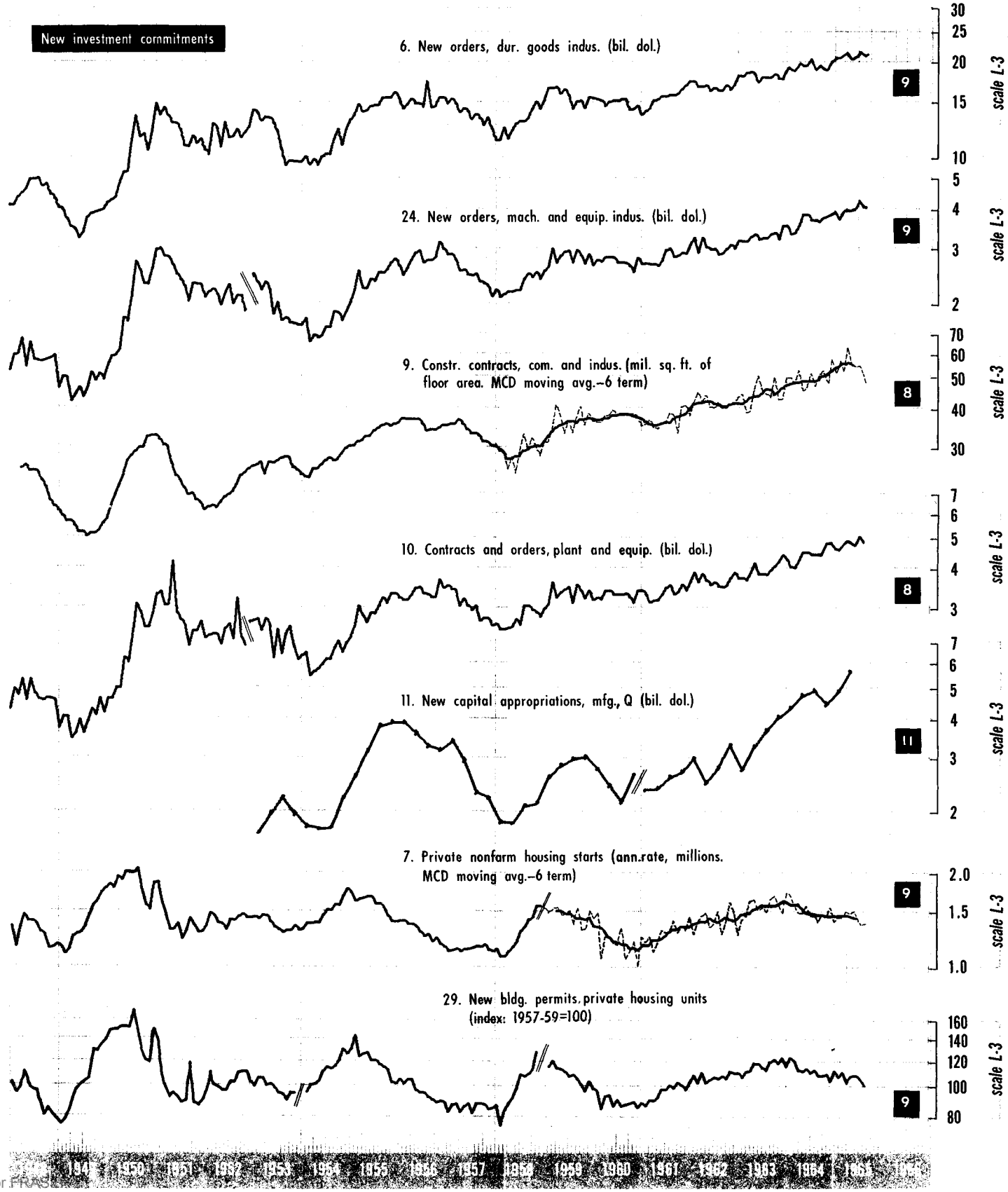


BASIC DATA

CHART 1 A

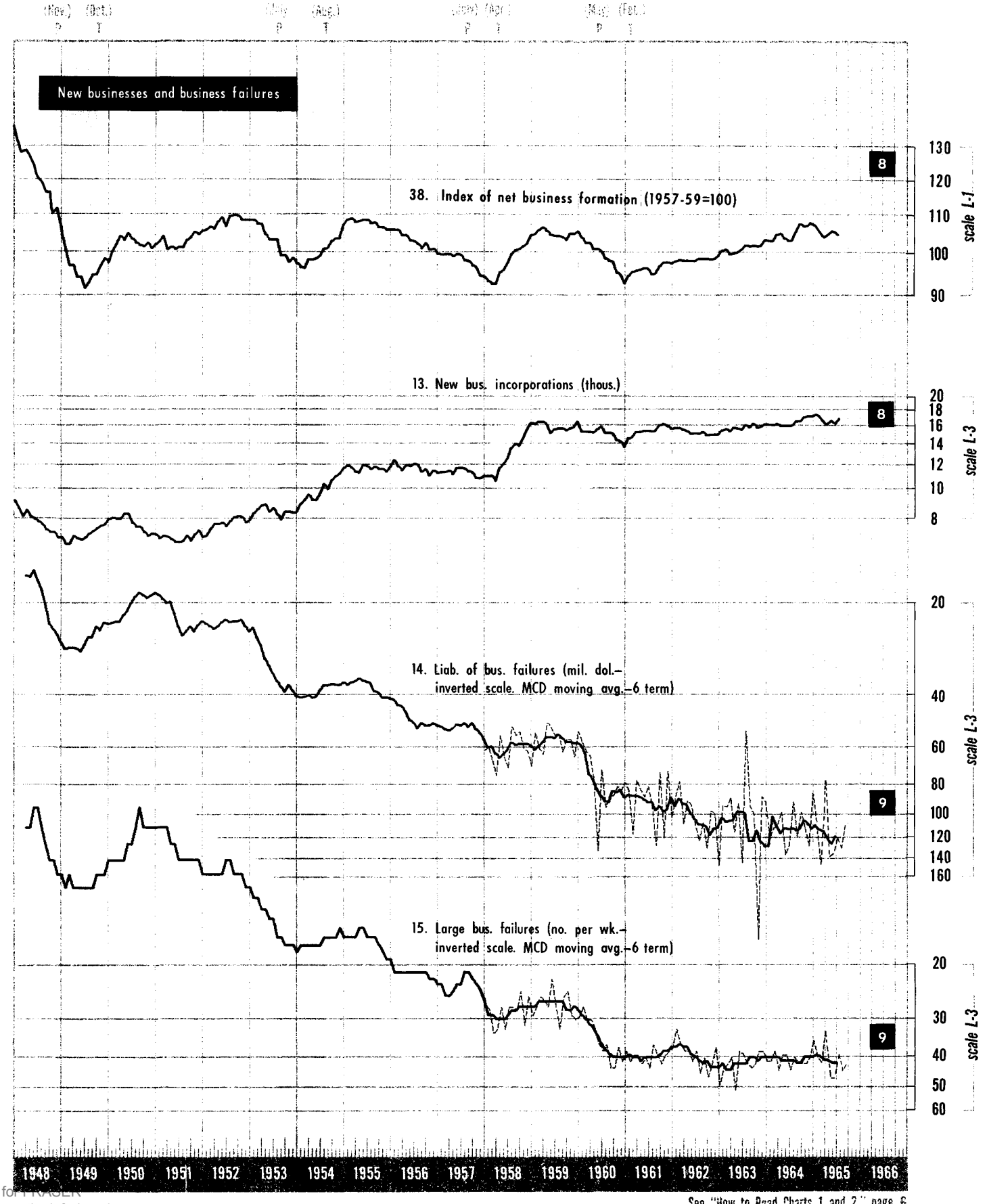
BUSINESS CYCLE SERIES FROM 1948 TO PRESENT—CONTINUED

NBER Leading Indicators—Continued



BUSINESS CYCLE SERIES FROM 1948 TO PRESENT—Continued

NBER Leading Indicators—Continued



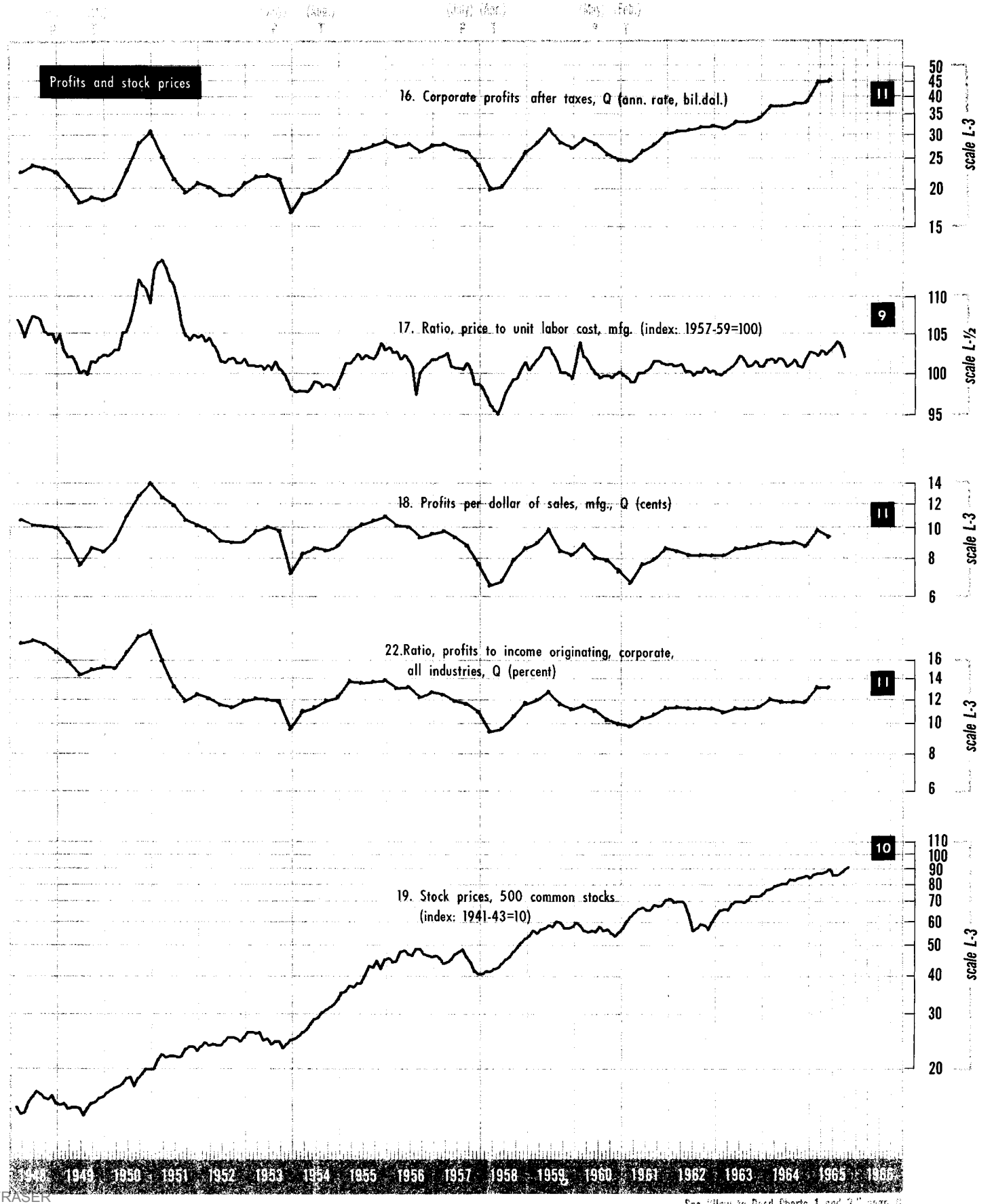
See "How to Read Charts 1 and 2," page 6

BASIC DATA

CHART 1 A

BUSINESS CYCLE SERIES FROM 1948 TO PRESENT—Continued

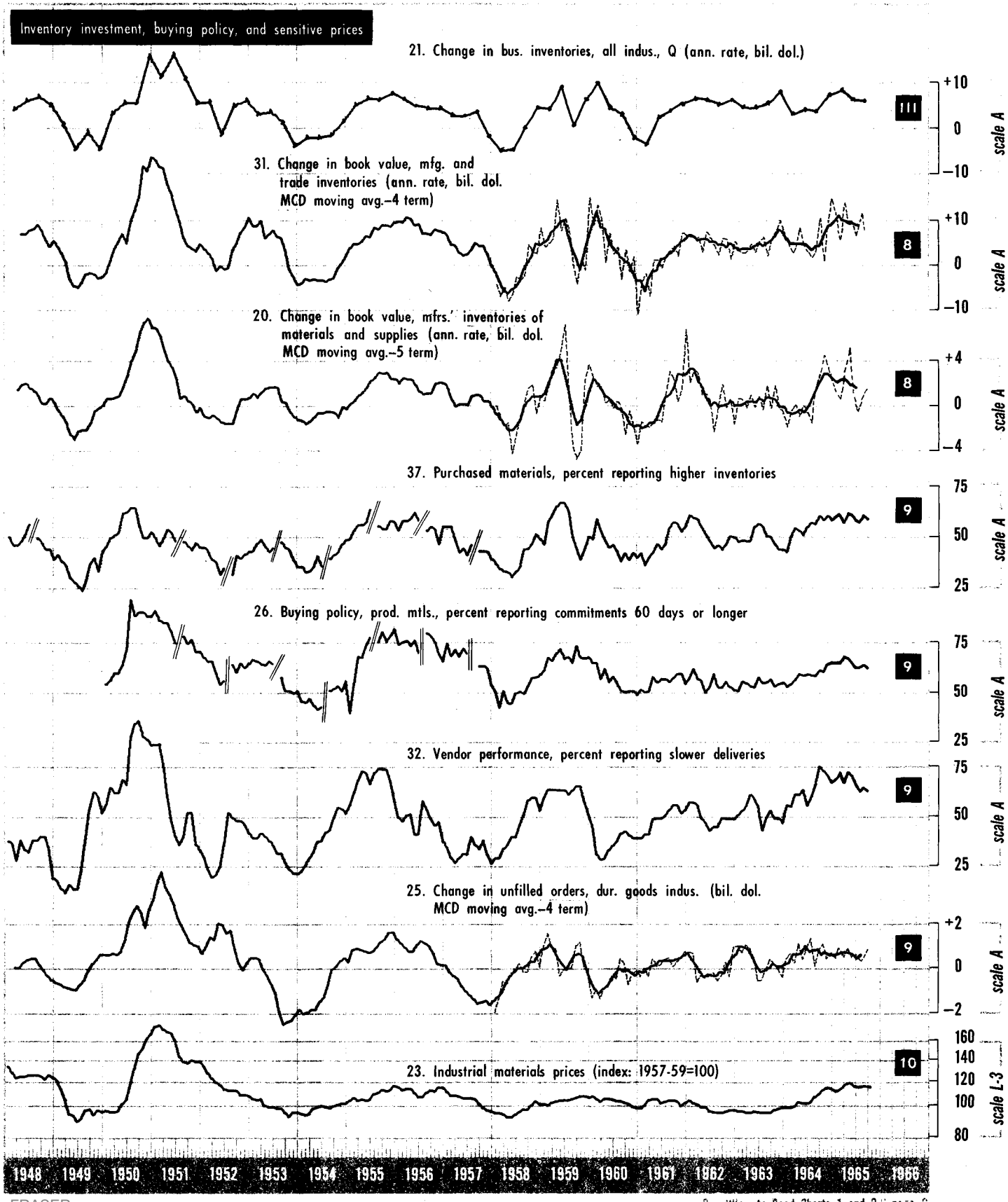
NBER Leading Indicators—Continued



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

BUSINESS CYCLE SERIES FROM 1948 TO PRESENT —Continued

NBER Leading Indicators—Continued



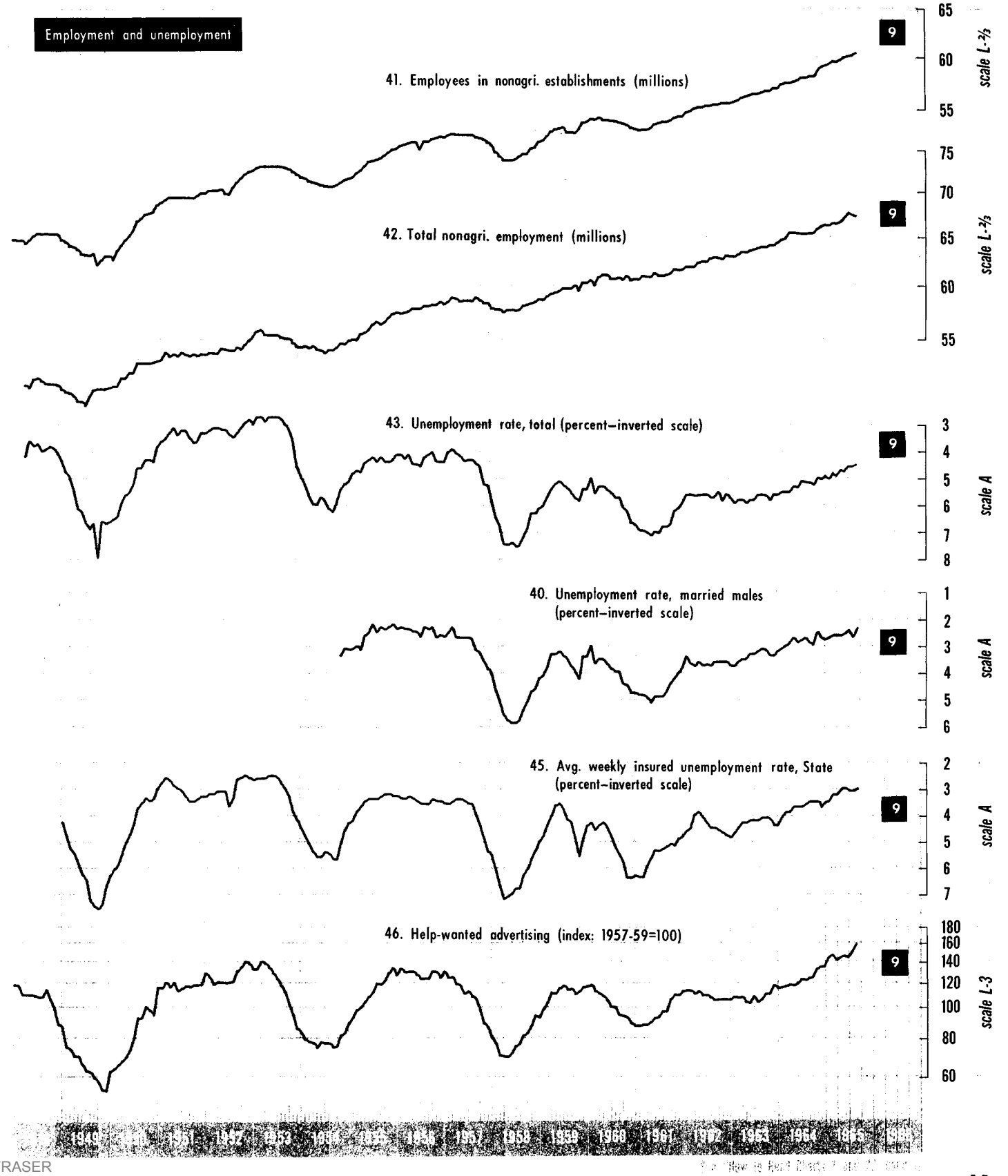
See "How to Read Charts 1 and 2," page 6

BASIC DATA

CHART 1 B

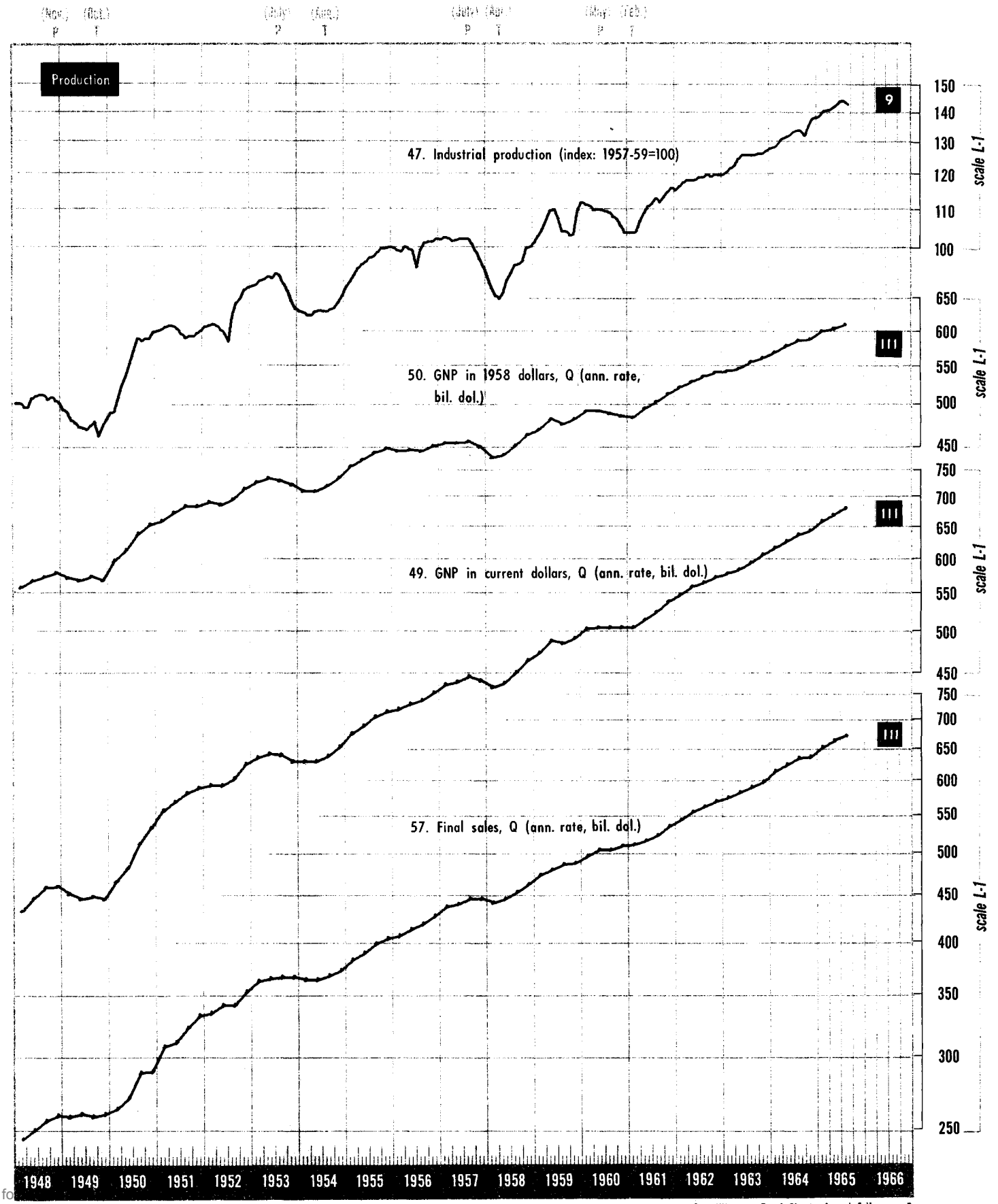
BUSINESS CYCLE SERIES FROM 1948 TO PRESENT—Continued

NBER Roughly Coincident Indicators



BUSINESS CYCLE SERIES FROM 1948 TO PRESENT—CONTINUED

NBER Roughly Coincident Indicators—Continued



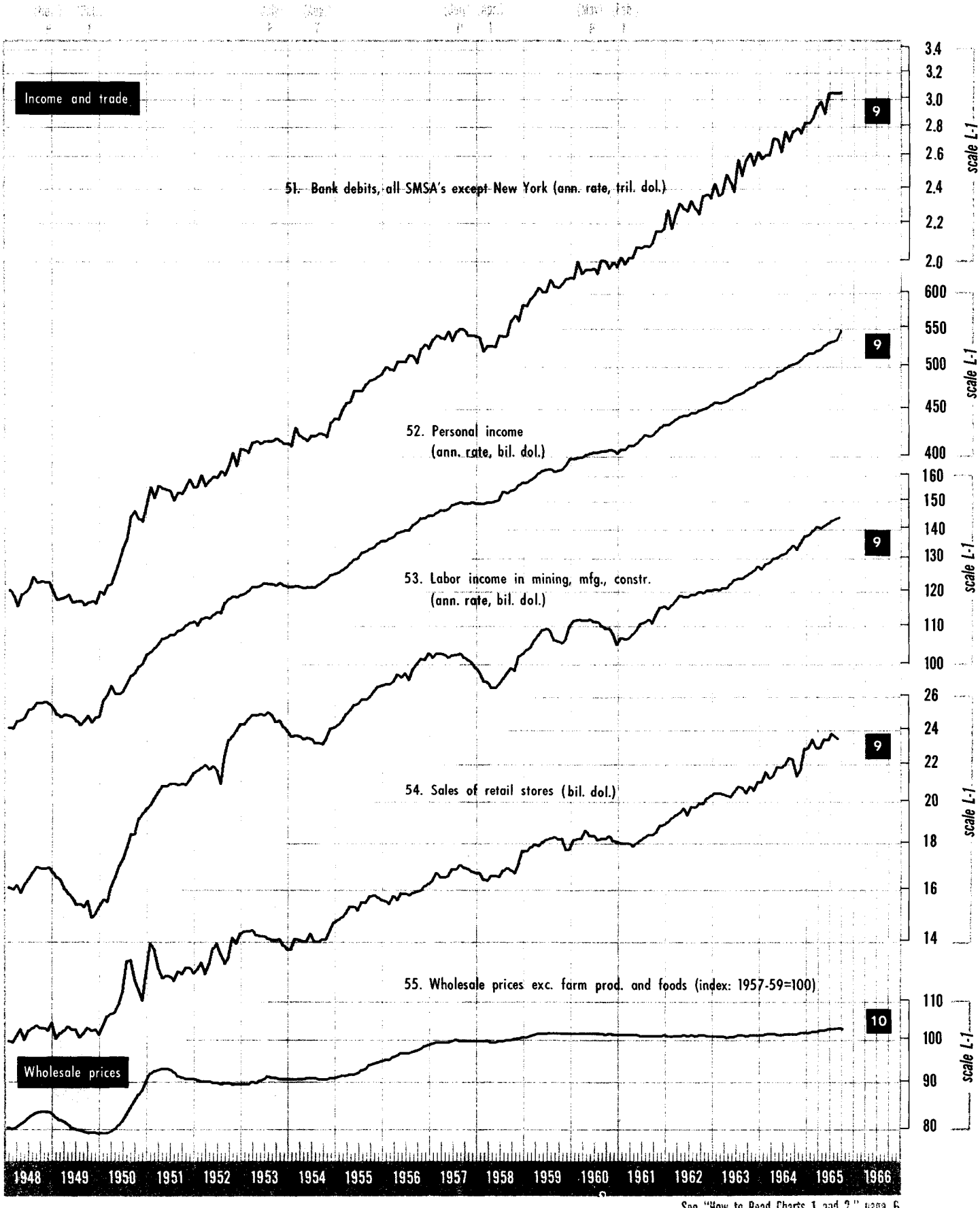
See "How to Read Charts 1 and 2," page C

BASIC DATA

CHART 1 B

BUSINESS CYCLE SERIES FROM 1948 TO PRESENT —Continued

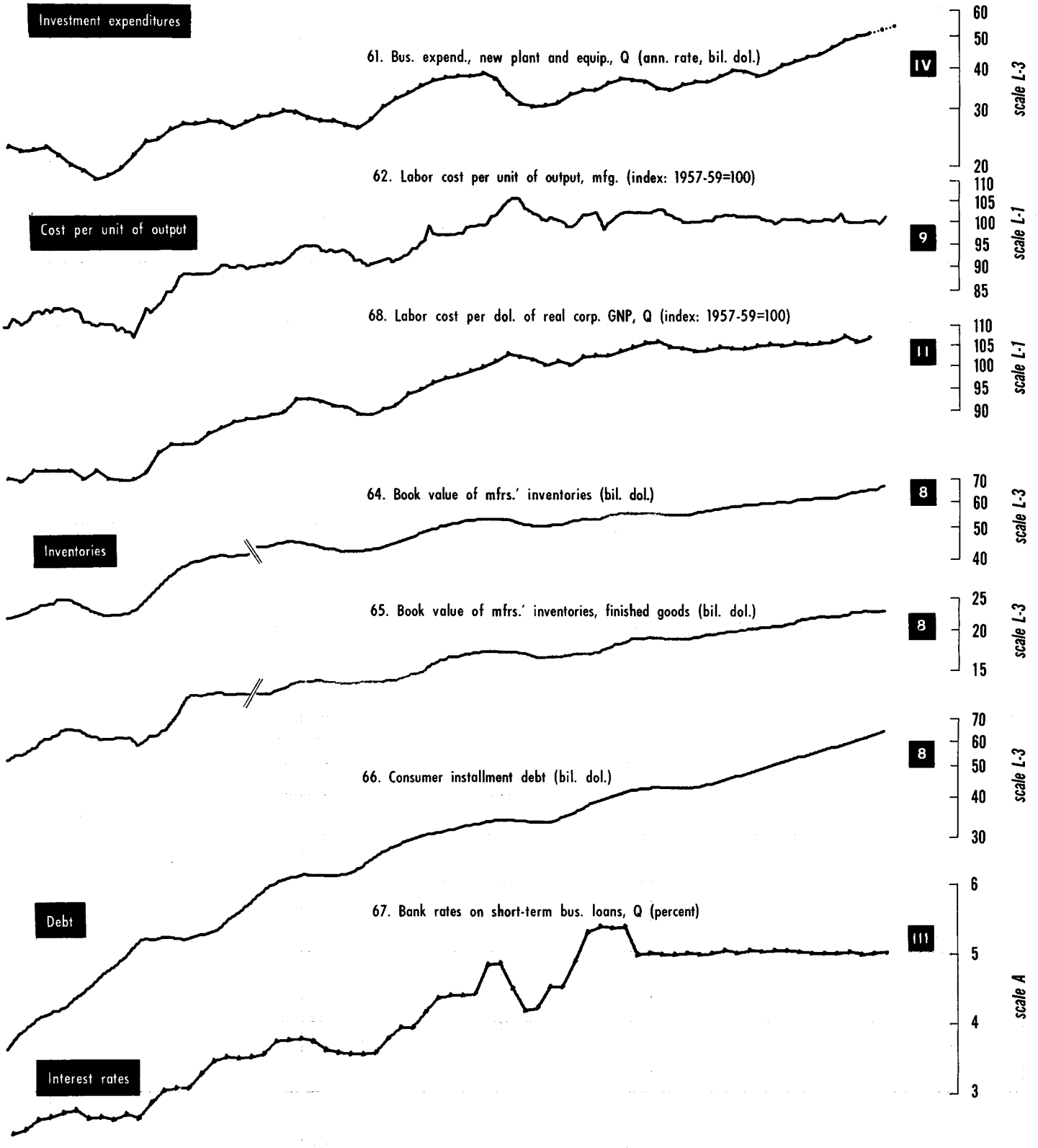
NBER Roughly Coincident Indicators—Continued



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

BUSINESS CYCLE SERIES FROM 1948 TO PRESENT —Continued

NBER Lagging Indicators

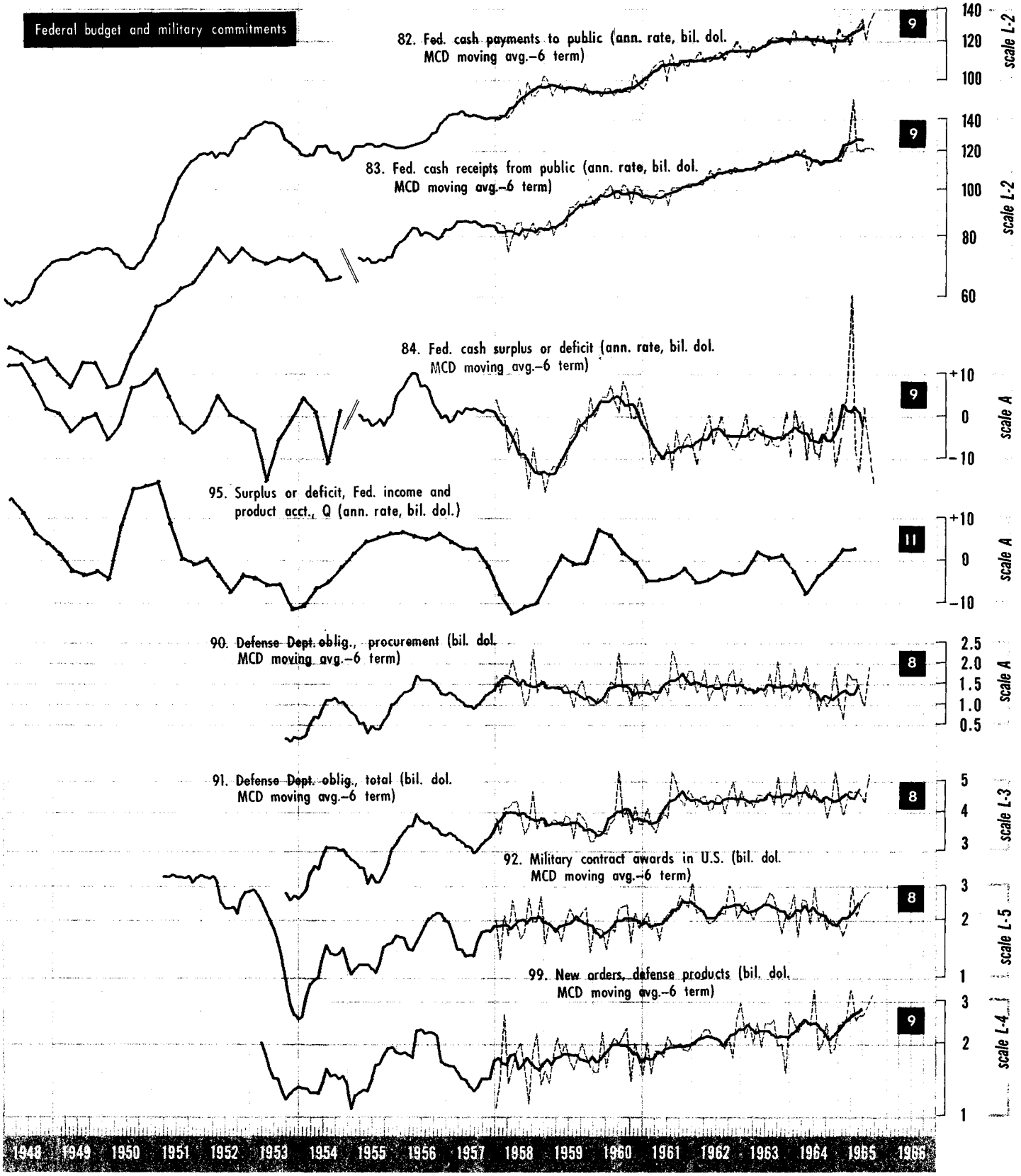


BASIC DATA

CHART 1 D

BUSINESS CYCLE SERIES FROM 1948 TO PRESENT—Continued

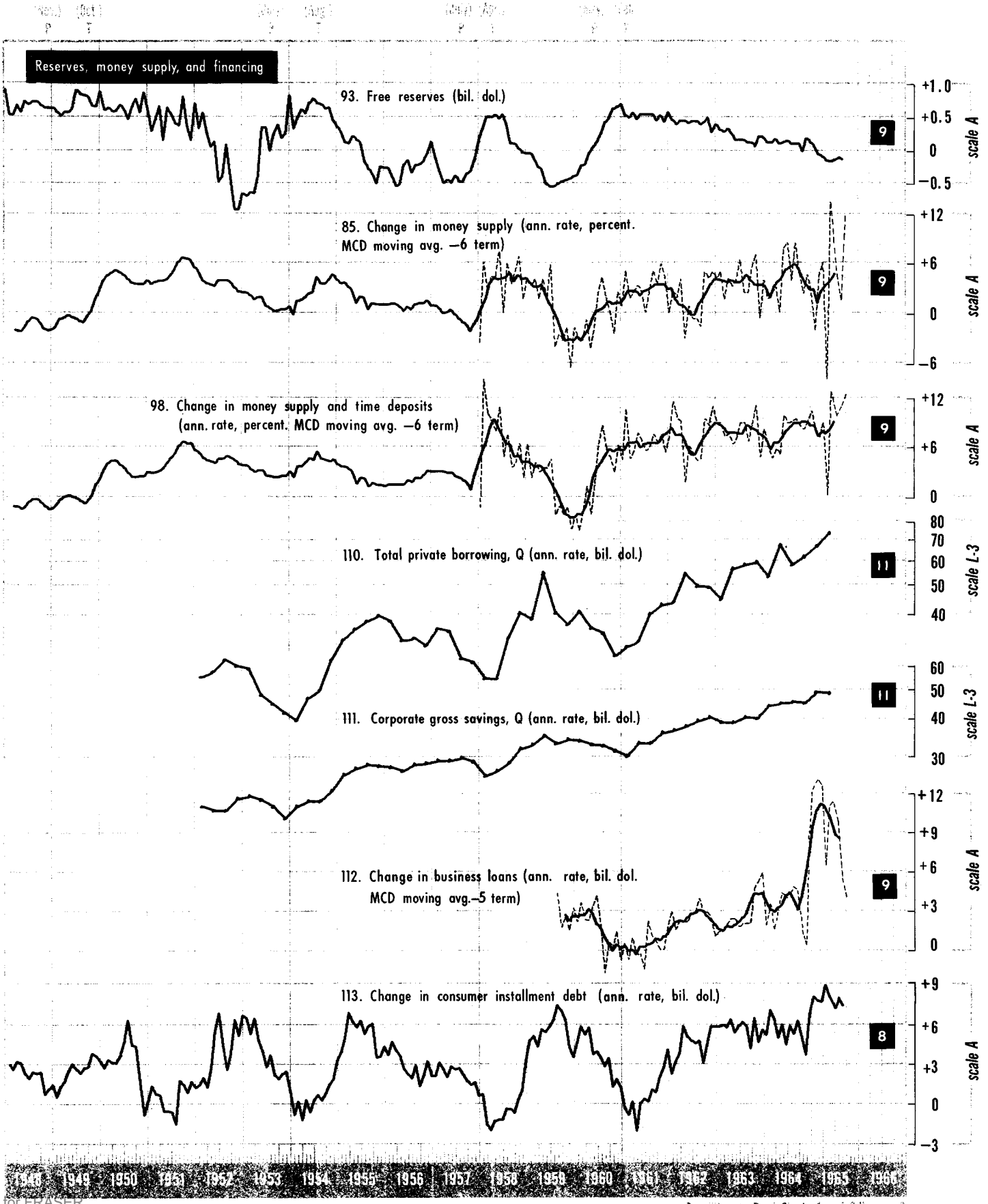
Other Selected U.S. Series



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

BUSINESS CYCLE SERIES FROM 1948 TO PRESENT—Continued

Other Selected U.S. Series—Continued



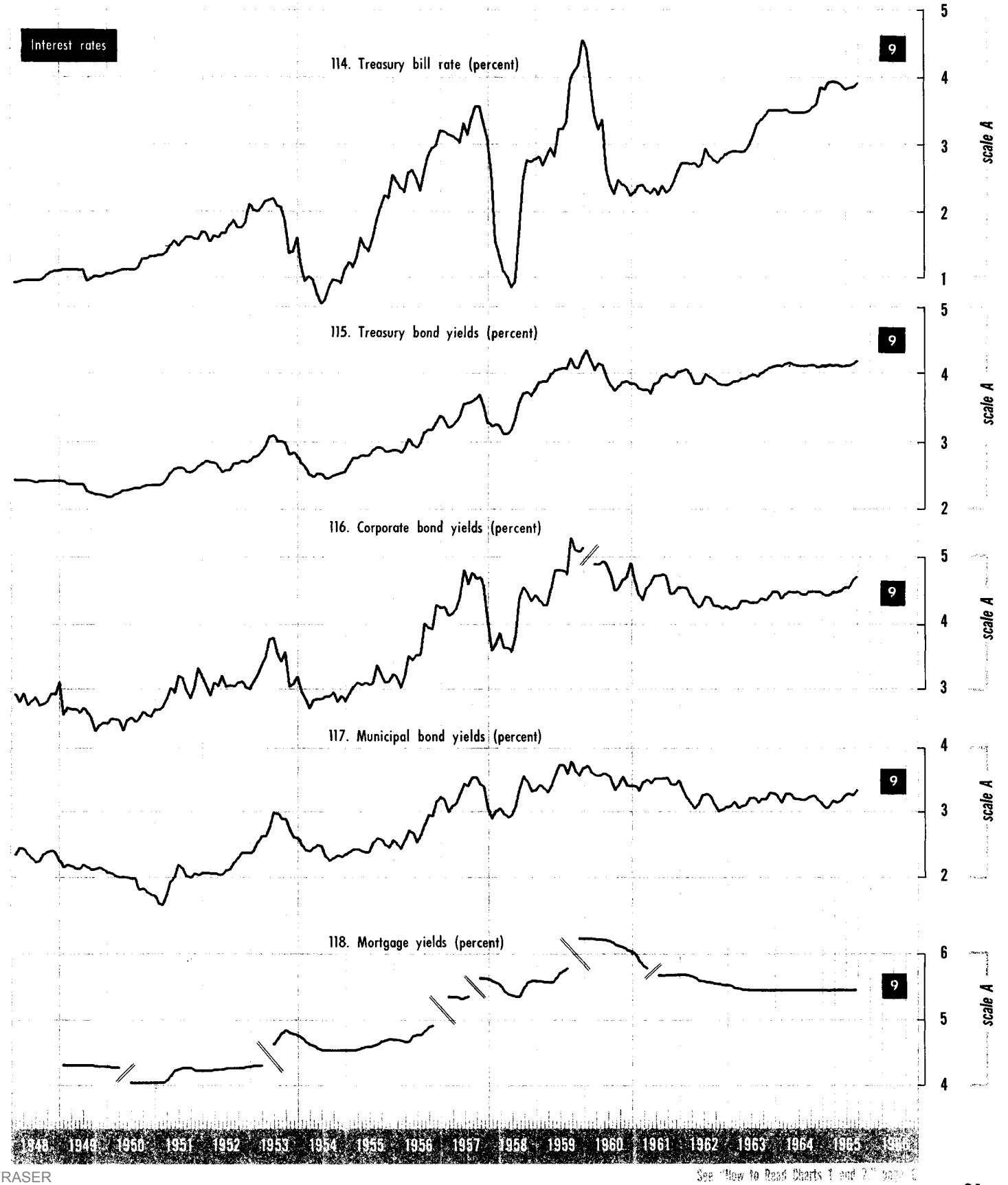
See "How to Read Charts 1 and 2" page 5

BASIC DATA

CHART 1 D

BUSINESS CYCLE SERIES FROM 1948 TO PRESENT—Continued

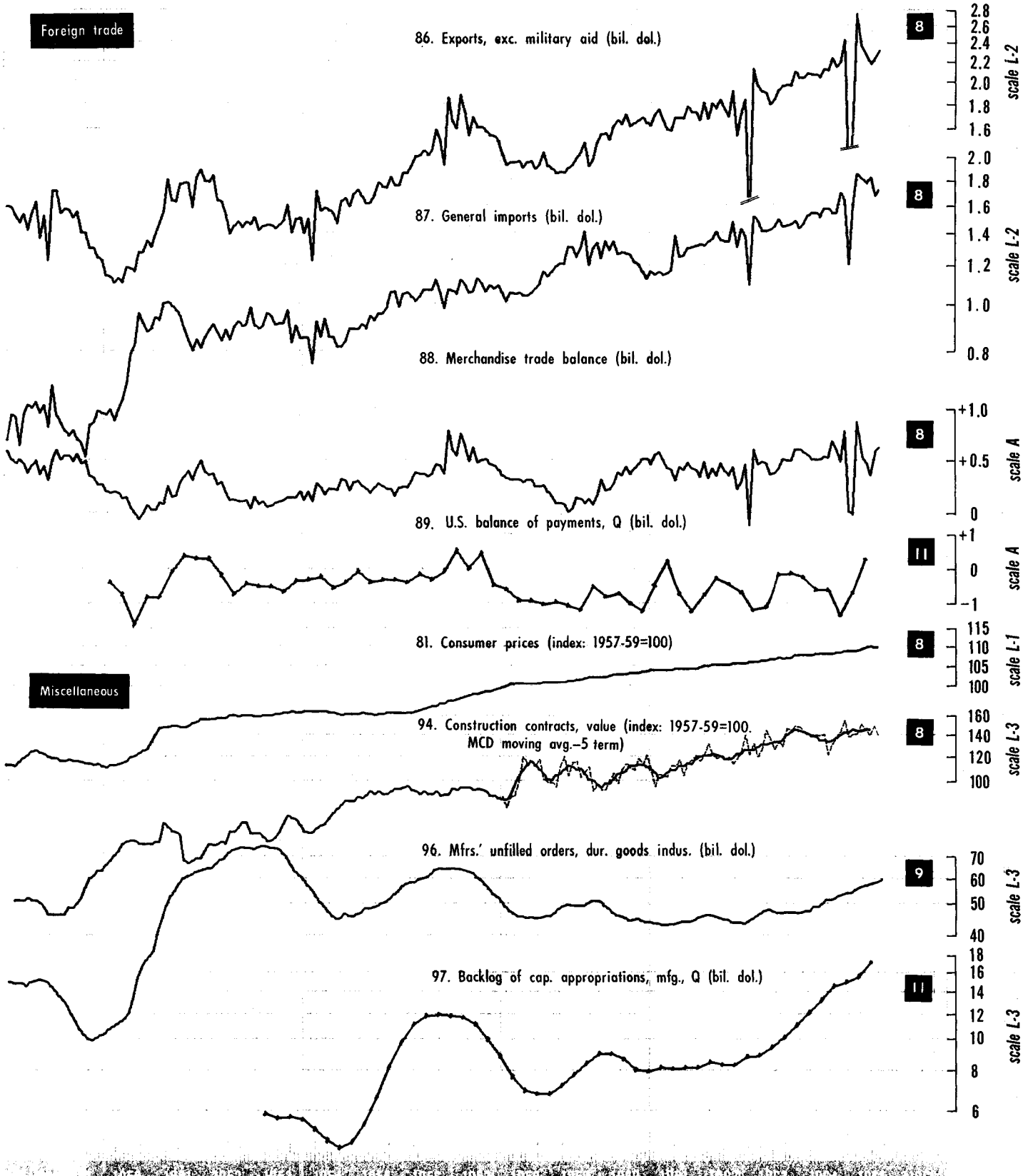
Other Selected U.S. Series—Continued



See "How to Read Charts 1 and 2" page 5

BUSINESS CYCLE SERIES FROM 1948 TO PRESENT—Continued

Other Selected U.S. Series—Continued



BASIC DATA

CHART 1 E

BUSINESS CYCLE SERIES FROM 1948 TO PRESENT—Continued

International Comparisons

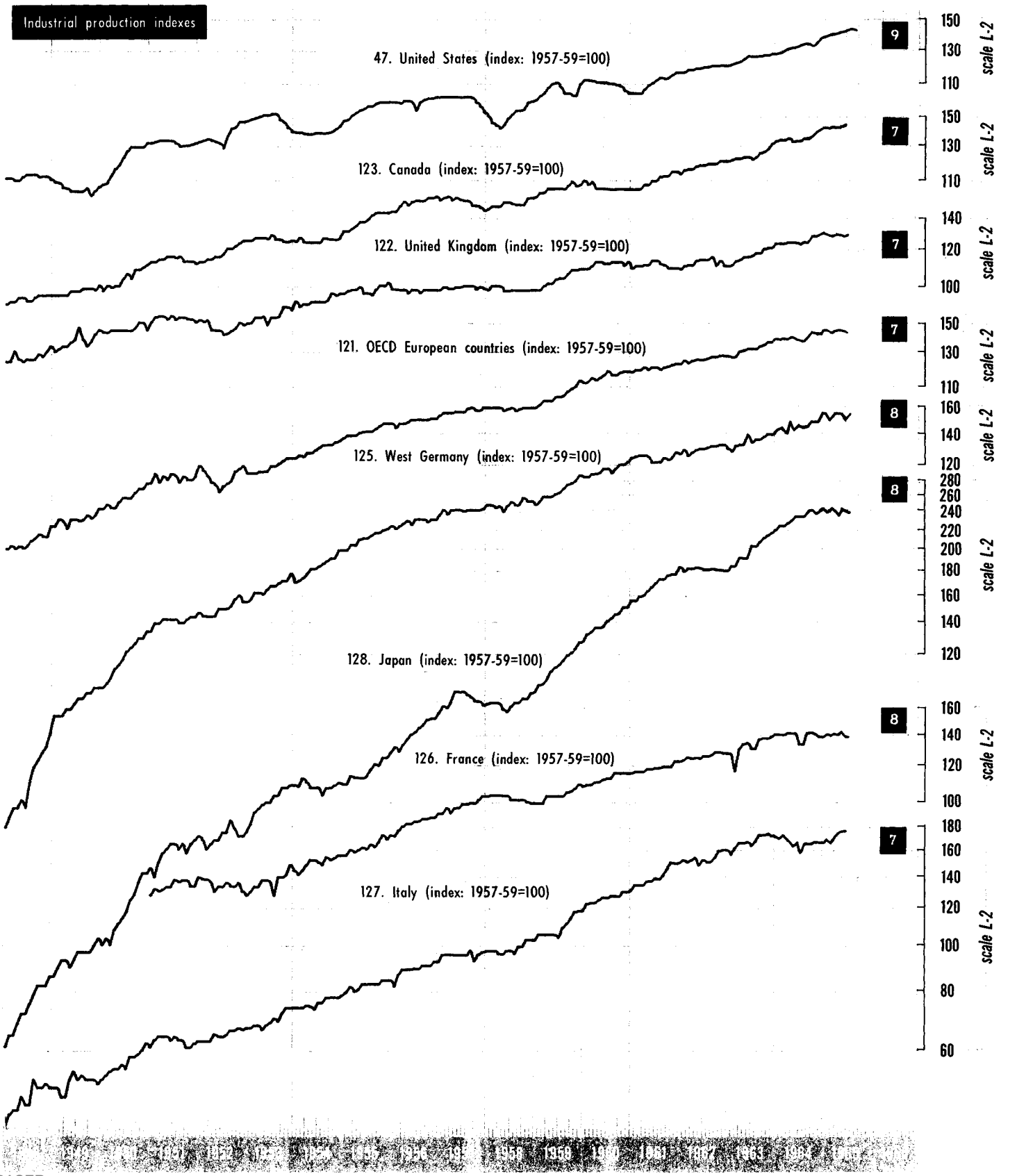


TABLE 2 A

BASIC DATA

LATEST DATA FOR BUSINESS CYCLE SERIES

NBER Leading Indicators

Year and month	1. Average workweek of production workers, manufacturing	2. Accession rate, manufacturing	30. Nonagricultural placements, all industries	3. Layoff rate, manufacturing	4. Number of persons on temporary layoff, all industries [1]	5. Average weekly initial claims for unemployment insurance, State programs [2]	6. Value of manufacturers' new orders, durable goods industries	24. Value of manufacturers' new orders, machinery and equipment industries
	(Hours)	(Per 100 employees)	(Thous.)	(Per 100 employees)	(Thous.)	(Thous.)	(Bil. dol.)	(Bil. dol.)
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	[H]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	4.0	519	1.7	92	249	19.62	3.79
November	40.9	4.1	549	1.5	89	262	19.45	3.88
December	41.2	4.1	518	1.6	109	251	20.72	3.92
1965								
January	41.4	4.0	520	1.4	[H]79	243	21.27	3.96
February	41.3	4.1	548	1.3	124	248	21.13	3.80
March	[H]41.4	4.3	527	[H]1.3	110	237	21.71	4.02
April	40.9	3.9	531	1.5	117	237	22.04	4.08
May	41.1	4.0	529	1.4	102	224	20.99	4.07
June	41.0	[H]4.5	549	1.4	140	224	21.31	4.09
July	40.9	r4.1	541	r1.7	121	231	[H]22.20	[H]4.35
August	40.9	p4.0	530	p1.5	110	248	r21.46	r4.16
September	p40.9	(NA)	528	(NA)	84	[H]218	p21.75	p4.10
October								
November								
December								

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]; for series that move counter to movements in general business activity (series 3, 4, 5, 14, 15, 40, 43, and 45), current low values are indicated by [H]. 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.

[1] Beginning with April 1962, the 1960 Census is used as the benchmark for computing this series. Prior to April 1962, the 1950 Census is used as the benchmark. [2] Data exclude Puerto Rico which is included in figures published by source agency.

BASIC DATA

TABLE 2 A

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 for plant and equipment	11. Newly approved capital appropriations, 1,000 manufacturing corporations [1]	7. New private nonfarm dwelling units started	29. Index of new private housing units authorized by local building permits	38. Index of net business formation	13. Number of new business incorporations	14. Current liabilities of business failures
	(Mil. sq. ft. floor space)	(Bil. dol.)	(Bil. dol.)	(Ann. rate, thous.)	(1957-59=100)	(1957-59=100)	(Number)	(Mil. dol.)
1962								
January	38.70	3.71	...	1,470	103.8	97.2	15,599	101.53
February	42.75	3.98	3.03	1,296	109.1	97.8	15,758	86.03
March	45.90	3.71	...	1,422	104.0	98.1	15,670	77.40
April	42.72	3.96	...	1,494	111.9	97.8	15,372	107.15
May	44.64	3.76	2.53	1,515	103.8	97.8	15,245	89.80
June	41.16	3.66	...	1,365	106.1	97.6	14,947	93.15
July	40.56	3.72	...	1,409	108.7	97.7	15,171	107.98
August	42.69	3.61	2.81	1,531	107.1	98.4	15,056	121.85
September	40.96	3.56	...	1,300	109.1	98.5	15,249	106.02
October	41.08	3.66	...	1,410	107.2	98.5	14,892	129.87
November	42.20	3.82	3.35	1,634	113.0	98.0	14,951	96.62
December	41.89	3.99	...	1,521	112.0	98.3	14,985	99.61
1963								
January	44.61	3.84	...	1,285	111.8	98.9	14,924	146.46
February	45.11	3.82	2.80	1,438	108.2	100.2	15,390	93.05
March	39.42	3.75	...	1,486	112.9	100.5	15,563	94.12
April	40.23	3.98	...	1,652	113.6	99.2	15,305	88.15
May	47.00	4.28	3.30	1,676	120.0	99.6	15,682	115.05
June	51.39	3.96	...	1,550	119.3	100.0	15,536	91.07
July	45.78	3.94	...	1,574	116.5	100.7	15,431	144.50
August	44.93	3.91	3.72	1,522	113.5	101.7	16,093	H52.86
September	43.88	4.08	...	1,676	121.0	101.4	15,689	94.52
October	50.81	4.17	...	1,706	123.6	101.7	16,275	99.92
November	43.73	4.32	4.10	1,592	119.9	101.4	15,759	255.72
December	45.43	4.56	...	1,522	123.7	101.8	15,867	87.17
1964								
January	51.07	4.38	...	H1,753	116.8	103.1	16,250	91.69
February	51.05	4.14	4.39	1,706	H124.6	102.8	16,018	119.29
March	48.41	4.11	...	1,571	121.7	102.9	15,992	110.67
April	53.48	4.36	...	1,506	113.6	104.4	16,180	107.10
May	46.22	4.63	4.81	1,496	112.9	104.7	15,917	97.92
June	47.82	4.64	...	1,593	115.1	103.2	15,919	136.19
July	52.62	4.52	...	1,475	111.5	102.5	15,979	125.14
August	47.72	4.53	5.00	1,489	113.4	102.9	16,074	90.99
September	51.41	4.51	...	1,422	109.7	105.0	16,605	118.59
October	53.75	4.56	...	1,495	109.1	107.0	16,493	97.98
November	49.61	4.92	4.52	1,480	110.8	106.4	17,103	111.00
December	58.88	4.94	...	r1,575	105.4	106.6	17,154	126.49
1965								
January	53.20	4.72	...	1,417	112.9	H107.3	17,275	84.54
February	58.12	4.67	4.99	1,468	108.0	106.6	H17,367	107.57
March	54.04	4.84	...	1,465	112.0	105.0	17,112	146.29
April	H64.26	4.98	...	1,532	104.7	103.6	16,504	79.51
May	56.13	5.02	H p5.84	1,501	109.4	104.3	16,043	139.09
June	55.28	4.81	...	1,539	110.6	105.4	16,671	135.66
July	55.90	H5.16	...	r1,447	109.7	105.3	16,369	120.64
August	49.60	p4.90	(NA)	r1,404	r107.4	104.2	16,957	128.98
September	(NA)	(NA)		p1,407	p102.2	(NA)	(NA)	108.56
October								
November								
December								

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[1] Data prior to 1961 not comparable because of "a change in asset accounting basis in machinery, except electrical, and a recalculation of the seasonal pattern for petroleum and coal products." (See NICB publication Investment Statistics - Capital Appropriations: First Quarter 1965.)

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

NBER Leading Indicators—Continued

Year and month	15. Number of 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 dollar of sales, all manufacturing corporations	22. Ratio of profits to income originating, corporate, all industries	19. Index of stock prices, 500 common stocks*	21. Change in business inventories after valuation adjustment, all industries
	(Number per week)	(Ann. rate, bil. dol.)	(1957-59=100) Revised [1]	(Cents)	(Percent)	(1941-43=10)	(Ann. rate, bil. dol.)
1962							
January	37	...	100.9	...	...	69.07	...
February	[H]32	30.7	101.0	8.4	11.3	70.22	+6.7
March	36	...	101.2	...	...	70.29	...
April	38	...	100.1	...	...	68.05	...
May	38	30.9	100.1	8.1	11.1	62.99	+6.1
June	41	...	99.7	...	...	55.63	...
July	38	...	100.2	...	...	56.97	...
August	45	31.5	100.0	8.1	11.2	58.52	+5.2
September	40	...	100.7	...	...	58.00	...
October	46	...	100.2	...	...	56.17	...
November	42	31.8	100.4	8.1	11.1	60.04	+6.4
December	37	...	99.9	...	...	62.64	...
1963							
January	49	...	99.7	...	...	65.06	...
February	43	31.2	100.1	8.1	10.8	65.92	+4.5
March	42	...	100.5	...	...	65.67	...
April	40	...	100.8	...	...	68.76	...
May	51	32.6	101.3	8.5	11.2	70.14	+4.7
June	38	...	102.2	...	...	70.11	...
July	39	...	101.7	...	...	69.07	...
August	42	32.8	100.9	8.6	11.2	70.98	+5.8
September	43	...	101.0	...	...	72.85	...
October	42	...	101.5	...	...	73.03	...
November	38	33.8	100.8	8.8	11.3	72.62	+8.1
December	38	...	100.8	...	...	74.17	...
1964							
January	41	...	101.6	...	...	76.45	...
February	41	36.7	101.9	9.0	11.9	77.39	+3.3
March	38	...	101.3	...	...	78.80	...
April	44	...	101.9	...	...	79.94	...
May	39	37.0	101.7	8.9	11.7	80.72	+4.1
June	39	...	100.8	...	...	80.24	...
July	44	...	101.2	...	...	83.22	...
August	40	37.5	101.6	9.0	11.7	82.00	+3.8
September	42	...	100.8	...	...	83.41	...
October	42	...	100.6	...	...	84.85	...
November	42	37.8	101.8	8.7	11.7	85.44	+7.5
December	40	...	102.6	...	...	83.96	...
1965							
January	35	...	102.5	...	...	86.12	...
February	40	44.0	102.2	[H]9.8	[H]13.1	86.75	[H]+8.7
March	42	...	102.8	...	...	86.83	...
April	33	...	102.5	...	...	87.97	...
May	47	[H]44.4	102.8	9.3	13.0	89.28	+6.7
June	47	...	103.3	...	...	85.04	...
July	39	...	[H]104.0	...	...	84.91	...
August	45	(NA)	103.4	(NA)	(NA)	86.49	+6.1
September	43		p102.1			[H]89.38	
October						[2]91.62	
November							
December							

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]; for series that move counter to movements in general business activity (series 3, 4, 5, 14, 15, 40, 43, and 45), current low values are indicated by [H]. 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.

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

[2] Average for October 15, 18, and 19.

BASIC DATA

TABLE 2 A

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

NBER Leading Indicators—Continued

Year and month	31. Change in book value of manufacturing and trade inventories, total	20. Change in book value of manufacturers' inventories of materials and supplies [1]	37. Purchased materials, percent reporting higher inventories	26. Production materials, percent reporting commitments 60 days or longer*	32. Vendor performance, percent reporting slower deliveries*	25. Change in unfilled orders, durable goods industries	23. Index of industrial materials prices*
	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Percent reporting)	(Percent reporting)	(Percent reporting)	(Bil. dol.)	(1957-59=100)
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	+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	+5.1	-1.9	42	53	55	+0.40	98.5
February	+2.3	-0.5	50	54	54	+0.57	98.5
March	+3.7	0.0	54	56	60	+0.16	98.9
April	+8.0	-1.0	53	59	60	+1.04	102.4
May	+4.3	-0.1	51	58	63	+0.38	100.9
June	+2.2	-0.7	55	59	55	+0.81	101.4
July	+1.2	-1.6	57	58	59	[H]+1.26	102.5
August	+2.9	+1.3	56	58	65	+0.06	105.7
September	+10.7	+2.6	60	61	[H]74	+0.77	108.2
October	+0.4	+4.3	58	60	72	+1.00	112.0
November	+9.4	+3.5	60	64	70	+0.27	113.2
December	[H]+14.6	+2.0	58	65	66	+0.55	112.5
1965							
January	+11.2	+1.0	60	65	68	+0.32	110.6
February	+5.0	+0.4	61	65	72	+0.81	110.7
March	+13.8	+2.5	57	[H]68	66	+0.44	113.2
April	+8.7	+5.3	[H]61	67	72	+0.84	116.7
May	+9.4	+1.5	60	65	70	+0.50	[H]116.9
June	+6.1	-0.5	58	62	66	+0.58	115.3
July	r+11.6	r+0.7	57	62	62	r+0.38	114.6
August	p+7.7	p+1.5	60	63	64	r+0.27	115.2
September	(NA)	(NA)	58	61	62	p+0.76	114.8
October							[2]114.4
November							
December							

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[1] [H] = December 1961. [2] Average for October 14, 15, and 18.

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

NBER Roughly Coincident Indicators

Year and month	41. Number of employees, in nonagricultural establishments	42. Total nonagricultural employment, labor force survey[1]	43. Unemployment rate, total[1]	40. Unemployment rate, married males[1]	45. Average weekly insured unemployment rate, State programs[2]	46. Index of help-wanted advertising in newspapers	47. Index of industrial production
	(Thous.)	(Thous.)	(Percent)	(Percent)	(Percent)	(1957-59=100)	(1957-59=100)
1962							
January	54,695	61,948	5.8	3.7	4.7	114	115.0
February	55,003	62,162	5.5	3.3	4.5	115	116.4
March	55,162	62,234	5.5	3.6	4.4	115	117.5
April	55,411	62,167	5.6	3.7	3.9	112	118.0
May	55,502	62,565	5.5	3.5	3.8	114	118.2
June	55,565	62,693	5.5	3.7	4.0	109	118.1
July	55,657	62,623	5.5	3.6	4.2	110	119.0
August	55,673	63,015	5.7	3.7	4.4	108	119.0
September	55,767	63,147	5.6	3.5	4.4	107	119.7
October	55,802	63,070	5.4	3.5	4.5	107	119.1
November	55,874	62,921	5.8	3.5	4.6	107	119.8
December	55,881	63,336	5.5	3.5	4.7	e107	119.4
1963							
January	55,900	63,133	5.7	3.7	4.8	e107	119.8
February	56,044	63,230	5.9	3.7	4.6	e109	120.6
March	56,187	63,487	5.7	3.5	4.4	e108	121.9
April	56,368	63,708	5.7	3.4	4.2	109	122.7
May	56,511	63,613	5.9	3.4	4.2	105	124.4
June	56,601	63,825	5.7	3.2	4.1	104	125.6
July	56,763	64,055	5.7	3.2	4.1	109	125.6
August	56,768	64,089	5.5	3.1	4.1	105	125.4
September	56,868	64,253	5.5	3.0	4.0	107	125.7
October	57,070	64,205	5.6	3.1	4.0	111	126.1
November	57,101	64,371	5.8	3.3	4.1	112	126.1
December	57,291	64,449	5.5	3.3	4.3	118	127.0
1964							
January	57,334	64,685	5.5	3.1	4.3	116	127.9
February	57,684	65,051	5.4	3.0	4.0	117	128.4
March	57,754	65,175	5.4	2.9	3.8	118	129.3
April	57,827	65,695	5.4	2.8	3.8	120	130.8
May	57,931	65,790	5.2	2.6	3.6	118	131.8
June	58,104	65,519	5.3	2.8	3.6	121	132.0
July	58,256	65,632	5.0	2.7	3.6	124	133.3
August	58,301	65,641	5.1	2.6	3.5	123	134.0
September	58,458	65,650	5.1	2.8	3.4	126	134.0
October	58,382	65,658	5.2	2.9	3.4	127	131.6
November	58,878	66,084	4.9	2.4	3.4	134	135.4
December	59,206	66,463	5.0	2.6	3.6	137	138.1
1965							
January	59,334	66,771	4.8	2.7	3.4	137	138.6
February	59,676	66,709	5.0	2.6	3.3	145	139.2
March	59,992	66,890	4.7	2.5	3.1	148	140.7
April	59,913	66,874	4.9	2.5	3.1	143	140.9
May	60,110	66,979	4.6	2.5	2.9	145	141.6
June	60,382	67,459	4.7	2.4	2.9	146	142.7
July	r60,602	[H]68,092	4.5	2.3	3.0	145	144.2
August	r60,680	67,821	4.5	2.6	3.0	152	[H]r144.3
September	[H]p60,806	67,777	[H]4.4	[H]2.2	[H]2.9	[H]p160	p142.8
October							
November							
December							

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[1] Beginning with April 1962, the 1960 Census is used as the benckmark for computing this series. Prior to April 1962, the 1950 Census is used as the benchmark. [2] Data exclude Puerto Rico which is included in figures published by source agency.

BASIC DATA

TABLE 2 B

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

NBER Roughly Coincident Indicators—Continued

Year and month	50. Gross national product in 1958 dollars	49. Gross national product in current dollars	57. Final sales (series 49 minus series 21)	51. Bank debits, all SMSA's except New York (224 SMSA's)	52. Personal income	53. Labor income in mining, manufacturing, and construction	54. Sales of retail stores	55. Index of wholesale prices except farm products and foods
	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Mil. dol.)	(1957-59=100)
1962								
January	...	...	...	2,260.6	430.7	114.3	18,990	100.8
February	519.7	547.8	541.1	2,155.9	433.7	115.5	19,139	100.7
March	...	...	...	2,233.1	437.2	116.7	19,320	100.7
April	...	...	...	2,299.6	439.8	118.3	19,389	100.7
May	527.9	557.2	551.1	2,266.6	440.8	118.0	19,585	100.9
June	...	...	...	2,249.9	441.8	118.0	19,311	100.8
July	...	...	...	2,311.3	443.4	118.8	19,658	100.9
August	533.6	564.4	559.2	2,268.8	444.6	118.7	19,671	100.8
September	...	...	...	2,236.7	447.0	119.5	19,844	100.9
October	...	...	...	2,340.7	447.9	118.9	19,837	100.9
November	538.5	572.0	565.6	2,351.5	450.4	119.7	20,112	100.8
December	...	...	...	2,324.9	452.6	119.7	20,253	100.7
1963								
January	...	...	...	2,416.2	456.6	120.1	20,387	100.5
February	541.2	577.0	572.5	2,345.9	454.9	120.0	20,374	100.5
March	...	...	...	2,357.2	456.7	120.8	20,350	100.5
April	...	...	...	2,472.5	457.2	120.7	20,276	100.4
May	544.9	583.1	578.4	2,419.2	460.0	122.0	20,200	100.5
June	...	...	...	2,368.2	463.1	123.0	20,486	100.8
July	...	...	...	2,561.0	464.8	123.3	20,719	100.9
August	553.7	593.1	587.3	2,463.1	467.1	123.4	20,666	100.9
September	...	...	...	2,559.0	469.3	124.4	20,426	100.8
October	...	...	...	2,605.5	473.2	125.1	20,716	100.9
November	560.0	603.6	595.5	2,527.4	474.7	125.7	20,558	100.9
December	...	...	...	2,610.2	478.9	127.1	21,019	101.1
1964								
January	...	...	...	2,571.5	481.2	126.5	21,000	101.1
February	567.1	614.0	610.7	2,590.3	483.2	127.9	21,533	101.2
March	...	...	...	2,597.3	484.5	128.3	21,223	101.2
April	...	...	...	2,693.8	487.7	129.5	21,392	101.2
May	575.9	624.2	620.1	2,688.4	491.2	130.3	21,777	101.1
June	...	...	...	2,607.4	492.8	130.9	21,773	101.0
July	...	...	...	2,746.7	496.1	131.5	21,935	101.2
August	582.6	634.8	631.0	2,681.7	499.5	132.6	22,266	101.2
September	...	...	...	2,755.9	501.7	133.8	22,254	101.3
October	...	...	...	2,771.5	502.8	132.6	21,383	101.5
November	584.7	641.1	633.6	2,730.3	506.6	135.1	21,661	101.6
December	...	...	...	2,803.5	512.0	137.3	22,781	101.7
1965								
January	...	...	...	2,803.3	515.8	137.8	22,900	101.7
February	597.5	656.4	647.6	2,845.1	515.7	139.0	23,317	101.9
March	...	...	...	2,923.8	518.4	140.4	22,805	102.1
April	...	...	...	2,962.0	520.7	139.7	22,865	102.2
May	601.4	665.9	659.2	2,871.5	525.3	140.6	23,352	102.3
June	...	...	...	3,019.4	528.8	141.5	23,331	102.6
July	...	...	...	3,021.0	530.5	142.5	[H] r23,743	102.6
August	[H] p609.1	[H] p676.9	[H] p670.8	3,018.8	r532.0	r143.3	r23,653	r102.8
September				[H] p3,022.6	[H] p545.3	[H] p143.6	p23,344	[H] p102.9
October								[1] 102.7
November								
December								

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[1] Week ended October 12.

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

NBER Lagging Indicators

Year and month	61. Business expenditures on new plant and equipment, total	62. Index of labor cost per unit of output, manufacturing	68. Index of labor cost per dollar of real corporate GNP	64. Book value of manufacturers' inventories	65. Book value of manufacturers' 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) Revised [1]	(Bil. dol.)	(Bil. dol.)	(Mil. dol.)	(Percent)
1962							
January	...	99.7	...	55.4	19.0	42,960	...
February	35.70	99.7	103.0	55.7	19.1	43,220	...
March	...	99.5	...	56.0	19.1	43,532	4.98
April	...	100.7	...	56.1	19.2	44,017	...
May	36.95	100.8	103.7	56.4	19.3	44,437	...
June	...	101.1	...	56.3	19.4	44,826	5.01
July	...	100.7	...	56.9	19.5	45,200	...
August	38.35	100.9	103.3	57.0	19.5	45,588	...
September	...	100.4	...	57.3	19.7	45,838	4.99
October	...	100.6	...	57.4	19.7	46,206	...
November	37.95	100.3	103.3	57.6	19.8	46,689	...
December	...	100.7	...	57.8	19.8	47,174	H5.02
1963							
January	...	100.6	...	57.9	19.9	47,659	...
February	36.95	100.2	104.0	58.0	20.0	48,154	...
March	...	99.7	...	58.1	20.0	48,631	5.00
April	...	99.5	...	58.3	20.0	49,152	...
May	38.05	99.3	104.2	58.5	20.1	49,593	...
June	...	98.7	...	58.7	20.3	50,079	5.01
July	...	99.3	...	58.9	20.3	50,588	...
August	40.00	100.1	103.9	58.9	20.4	51,069	...
September	...	99.7	...	59.1	20.6	51,410	5.01
October	...	99.8	...	59.3	20.6	51,941	...
November	41.20	100.0	104.7	59.8	21.0	52,324	...
December	...	100.0	...	60.1	21.2	52,784	5.00
1964							
January	...	99.3	...	60.0	21.2	53,212	...
February	42.55	99.1	104.2	60.1	21.4	53,791	...
March	...	99.7	...	60.3	21.4	54,315	4.99
April	...	99.3	...	60.5	21.6	54,727	...
May	43.50	99.3	104.6	60.5	21.6	55,220	...
June	...	100.0	...	60.4	21.5	55,590	4.99
July	...	99.7	...	60.5	21.6	56,073	...
August	45.65	99.5	105.1	60.8	21.6	56,508	...
September	...	100.3	...	61.0	21.6	57,021	4.98
October	...	H101.2	...	61.8	21.8	57,431	...
November	47.75	99.5	H106.3	62.4	21.9	57,732	...
December	...	98.9	...	62.9	22.2	58,292	5.00
1965							
January	...	98.9	...	63.2	22.4	58,962	...
February	49.00	99.5	105.2	63.4	22.4	59,603	...
March	...	99.1	...	63.7	22.5	60,240	4.97
April	...	99.8	...	64.0	22.3	60,984	...
May	H50.35	99.8	106.2	64.3	22.4	61,654	...
June	...	99.6	...	64.6	22.3	62,256	4.99
July	...	98.8	...	r65.4	22.5	62,922	...
August	a51.15	99.8	(NA)	Hp65.8	Hp22.5	H63,531	...
September	...	p101.0		(NA)	(NA)	(NA)	5.00
October	...						
November	a52.95						
December							

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

BASIC DATA

TABLE 2 D

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

Other Selected U.S. Series

Year and month	82. Federal cash payments to the public	83. Federal cash receipts from the public	84. Federal cash surplus (+) or deficit (-)	95. Surplus (+) or deficit (-), Federal income and product 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.)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1962							
January	109.9	102.2	-7.7	...	1,758	4,434	3,073
February	113.5	101.8	-11.7	-5.0	1,228	4,086	2,135
March	107.8	101.1	-6.7	...	1,410	4,421	2,225
April	108.3	105.2	-3.1	...	1,791	4,477	2,062
May	108.6	108.6	0.0	-4.6	1,039	3,999	1,887
June	111.5	104.5	-7.0	...	1,311	4,082	1,930
July	113.5	110.4	-3.1	...	1,657	4,517	2,017
August	108.1	107.7	-0.4	-2.6	1,395	4,385	2,149
September	113.4	108.4	-5.0	...	1,040	3,892	2,111
October	113.7	107.1	-6.6	...	1,675	4,535	2,983
November	118.6	110.1	-8.5	-3.2	1,787	4,920	2,734
December	114.9	108.4	-6.5	...	1,205	4,140	1,984
1963							
January	112.4	108.6	-3.8	...	1,586	4,632	2,198
February	109.6	109.9	+0.3	-2.5	1,206	4,137	2,435
March	116.6	110.5	-6.1	...	1,366	4,233	2,154
April	113.5	108.0	-5.5	...	1,215	4,078	1,966
May	116.3	114.0	-2.3	+1.8	1,358	4,507	2,240
June	115.3	112.7	-2.6	...	1,363	4,481	2,334
July	120.5	112.9	-7.6	...	1,132	4,349	2,419
August	121.9	116.5	-5.4	+0.6	1,700	4,580	2,733
September	119.9	112.6	-7.3	...	1,207	4,160	2,578
October	122.0	114.7	-7.3	...	2,010	5,112	2,086
November	119.3	114.9	-4.4	+1.2	1,094	4,093	1,681
December	117.2	118.1	+0.9	...	1,273	4,371	2,079
1964							
January	125.9	115.9	-10.0	...	1,075	4,351	2,149
February	119.2	120.5	+1.3	-2.6	1,843	5,317	2,689
March	120.4	117.1	-3.3	...	1,237	4,133	1,598
April	122.6	121.4	-1.2	...	1,389	4,544	2,508
May	119.1	108.7	-10.4	-7.6	1,910	4,818	2,454
June	116.7	113.8	-2.9	...	1,079	4,349	1,879
July	r122.8	r114.0	-8.8	...	1,494	4,677	2,904
August	121.6	111.7	-9.9	-3.6	803	4,237	1,926
September	117.9	113.0	-4.9	...	1,141	4,405	2,191
October	118.4	115.1	-3.3	...	889	3,773	1,745
November	112.9	114.9	+2.0	-1.1	1,089	4,228	2,008
December	126.5	114.5	-12.0	...	1,870	5,325	1,883
1965							
January	121.8	114.0	-7.8	...	966	4,278	1,830
February	121.8	120.1	-1.7	+2.5	603	3,839	1,628
March	117.4	124.5	+7.1	...	1,735	4,624	1,874
April	125.2	153.5	+28.3	...	1,557	4,593	2,926
May	128.8	119.9	-8.9	+2.8	1,567	4,630	2,025
June	133.0	119.4	-13.6	...	r1,140	r4,520	2,438
July	r120.2	r122.1	+1.9	...	954	4,258	2,699
August	r129.5	r121.9	-7.6	(NA)	1,893	5,223	2,770
September	137.7	121.4	-16.3		(NA)	(NA)	(NA)
October							
November							
December							

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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 in business loans
	(Bil. dol.)	(Mil. dol.)	(Ann. rate, percent)	(Ann. rate, percent)	(Ann. rate, mil. dol.)	(Ann. rate, mil. dol.)	(Ann. rate, bil. dol.)
1962							
January	1.99	+555	0.00	+7.32	...	...	+2.90
February	2.05	+434	+2.52	+11.52	43,480	36,664	+1.51
March	2.11	+382	+1.68	+9.36	...	...	+2.23
April	2.24	+441	+4.08	+8.76	...	...	+2.09
May	2.24	+440	-3.24	+1.56	53,388	37,780	+2.09
June	2.08	+391	+0.84	+6.12	...	...	+2.77
July	2.07	+440	-0.84	+5.04	...	...	+2.66
August	1.94	+439	-0.84	+4.08	48,972	39,040	+3.85
September	1.88	+375	-1.68	+4.56	...	...	+2.82
October	2.09	+419	+4.92	+9.48	...	...	+2.82
November	1.70	+473	+4.08	+8.40	48,536	40,296	+2.28
December	2.53	+268	+4.92	+10.80	...	...	+0.95
1963							
January	2.89	+375	+4.08	+8.76	...	...	+1.43
February	2.09	+301	+4.92	+8.76	44,628	38,692	+1.42
March	2.42	+269	+1.56	+7.20	...	...	+1.85
April	1.97	+313	+4.08	+7.68	...	...	+2.40
May	2.40	+247	+3.24	+6.24	55,916	38,652	+2.35
June	1.90	+138	+3.96	+7.08	...	...	+1.74
July	2.40	+161	+6.36	+9.00	...	...	+1.97
August	2.36	+133	+2.40	+8.88	57,348	40,372	+2.04
September	2.47	+91	+2.40	+6.48	...	...	+2.08
October	1.92	+94	+5.52	+8.76	...	...	+4.66
November	1.97	+33	+7.08	+11.04	58,772	39,892	+5.22
December	1.48	+209	-0.84	+4.56	...	...	+5.78
1964							
January	2.67	+175	+3.96	+8.16	...	...	+1.79
February	2.40	+89	+1.56	+5.88	52,448	44,200	+3.48
March	2.18	+99	+2.40	+4.44	...	...	+1.42
April	2.37	+167	+3.12	+5.76	...	...	+3.17
May	2.48	+82	0.00	+4.92	66,524	45,064	+4.25
June	2.34	+120	+7.80	+9.72	...	...	+3.89
July	3.29	+135	+8.52	+8.76	...	...	+4.31
August	1.86	+83	+3.84	+9.12	57,548	45,468	+4.78
September	1.98	+89	+8.40	+9.48	...	...	+4.28
October	2.41	+106	+4.56	+8.52	...	...	+1.43
November	1.79	-34	+2.28	+8.04	61,204	44,876	+0.32
December	1.87	+168	+4.56	+8.88	...	...	+8.62
1965							
January	2.37	+103	+2.28	+10.44	...	...	+12.35
February	2.44	+32	-2.28	+7.92	65,236	49,124	+13.14
March	2.46	-76	+4.56	+6.96	...	...	+12.46
April	3.24	-112	+6.00	+9.00	...	...	+6.32
May	2.46	-178	-8.16	0.00	73,740	49,040	+11.04
June	2.58	r-184	+13.44	+12.60	...	...	+11.38
July	r2.62	-175	+5.16	+9.72	...	...	+10.00
August	r2.80	r-136	+1.44	+10.80	(NA)	(NA)	+5.53
September	p3.15	p-154	p+11.76	p+12.24			p+4.00
October							
November							
December							

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BASIC DATA

TABLE 2 D

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

Other Selected U.S. Series—Continued

Year and month	113. Net change in 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
	(Ann. rate, bil. dol.)	(Percent)	(Percent)	(Percent)	(Percent)	(Percent)	(Mil. dol.)
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	985.7
February	+5.94	2.92	3.92	4.25	3.15	5.48	2,123.6
March	+5.72	2.90	3.93	4.26	3.05	5.47	1,957.8
April	+6.25	2.91	3.97	4.35	3.10	5.46	1,913.7
May	+5.29	2.92	3.97	4.35	3.11	5.45	1,895.2
June	+5.83	3.00	4.00	4.32	3.21	5.45	1,803.1
July	+6.11	3.14	4.01	4.34	3.22	5.45	1,840.8
August	+5.77	3.32	3.99	4.33	3.13	5.45	1,922.1
September	+4.09	3.38	4.04	4.40	3.20	5.45	1,958.2
October	+6.37	3.45	4.07	4.36	3.20	5.45	1,967.5
November	+4.60	3.52	4.11	4.42	3.30	5.45	1,965.6
December	+5.52	3.52	4.14	4.49	3.27	5.45	2,090.8
1964							
January	+5.14	3.53	4.15	4.49	3.22	5.45	2,042.9
February	+6.95	3.53	4.14	4.38	3.14	5.45	2,046.2
March	+6.29	3.55	4.18	4.45	3.28	5.45	2,074.0
April	+4.94	3.48	4.20	4.49	3.28	5.45	2,061.1
May	+5.92	3.48	4.16	4.48	3.20	5.45	2.061.8
June	+4.44	3.48	4.13	4.49	3.20	5.45	2,034.2
July	+5.80	3.48	4.13	4.43	3.18	5.46	2,122.9
August	+5.22	3.51	4.14	4.43	3.19	5.46	2,108.8
September	+6.16	3.53	4.16	4.49	3.23	5.46	2,235.3
October	+4.92	3.58	4.16	4.49	3.25	5.45	2,154.8
November	+3.61	3.62	4.12	4.47	3.18	5.45	2,196.8
December	+6.72	3.86	4.14	4.47	3.13	5.45	2,430.4
1965							
January	+8.04	3.83	4.14	4.44	3.06	5.45	1,217.3
February	+7.69	3.93	4.16	4.44	3.09	5.45	1,592.7
March	+7.64	3.94	4.15	4.49	3.18	5.45	2,752.7
April	+8.93	3.93	4.15	4.48	3.15	5.45	2,380.3
May	+8.04	3.90	4.14	4.52	3.17	5.45	2,277.7
June	+7.22	3.81	4.14	4.57	3.24	5.44	2,184.8
July	+7.99	3.83	4.15	4.57	3.27	5.44	2,262.8
August	+7.31	3.84	4.19	4.66	3.24	5.45	2,345.7
September	(NA)	3.91	4.25	4.71	3.35	5.46	(NA)
October							
November							
December							

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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 of receipts (+) or payments (-) in U.S. balance of payments	81. Index of consumer prices	94. Index of construction contracts, value	96. Manufacturers' unfilled orders, durable goods industries	97. Backlog of capital appropriations, manufacturing[1]
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(1957-59=100)	(1957-59=100)	(Bil. dol.)	(Bil. dol.)
1962							
January	1,326.5	+341.8	...	104.7	115	45.80	...
February	1,319.8	+489.5	-792	104.9	119	46.42	...
March	1,341.7	+330.3	...	105.1	131	45.75	8.44
April	1,365.0	+430.4	...	105.3	121	45.41	...
May	1,404.1	+357.6	-267	105.4	117	44.95	...
June	1,350.7	+484.9	...	105.4	120	44.58	8.32
July	1,346.6	+401.7	...	105.3	117	44.33	...
August	1,345.9	+356.6	-433	105.5	118	43.73	...
September	1,471.4	+436.5	...	105.9	113	43.37	8.26
October	1,312.1	+230.7	...	105.8	117	43.58	...
November	1,424.9	+299.7	-711	105.8	123	43.18	...
December	1,376.5	+462.2	...	105.9	138	44.09	8.81
1963							
January	1,099.9	-114.2	...	106.1	121	45.06	...
February	1,510.4	+613.2	-1,199	106.1	130	45.74	...
March	1,484.8	+473.0	...	106.2	118	46.68	8.88
April	1,414.6	+499.1	...	106.3	125	47.53	...
May	1,416.3	+478.9	-1,108	106.4	144	47.86	...
June	1,430.9	+372.2	...	106.7	135	47.28	9.38
July	1,449.5	+391.3	...	106.9	126	46.74	...
August	1,497.3	+424.8	-210	107.1	132	46.70	...
September	1,443.3	+514.9	...	106.9	128	47.07	10.05
October	1,455.4	+512.1	...	107.0	146	47.17	...
November	1,465.5	+500.1	-153	107.2	144	47.08	...
December	1,479.8	+611.0	...	107.7	148	46.68	11.02
1964							
January	1,434.4	+608.5	...	107.8	147	47.07	...
February	1,460.3	+585.9	-257	107.7	143	47.64	...
March	1,519.5	+554.5	...	107.8	140	47.80	12.08
April	1,540.6	+520.5	...	108.0	138	48.84	...
May	1,539.4	+522.4	-582	108.1	138	49.22	...
June	1,518.4	+515.8	...	108.1	138	50.04	13.23
July	1,578.1	+544.8	...	108.1	140	51.30	...
August	1,574.9	+533.9	-593	108.2	121	51.37	...
September	1,546.4	+688.9	...	108.3	131	52.14	14.54
October	1,547.7	+607.1	...	108.4	136	53.14	...
November	1,697.7	+499.1	-1,366	108.6	143	53.41	...
December	1,642.2	+788.2	...	108.9	154	53.96	14.97
1965							
January	1,206.4	+10.9	...	109.0	137	54.28	...
February	1,600.5	-7.8	-701	109.0	140	55.09	...
March	1,869.0	+883.7	...	109.1	141	55.53	15.66
April	1,834.7	+545.6	...	109.5	152	56.37	...
May	1,798.9	+478.8	+249	109.9	145	56.88	...
June	1,834.8	+350.0	...	110.2	139	57.45	p17.06
July	1,669.8	+593.0	...	110.0	149	r57.83	...
August	1,725.4	+620.3	(NA)	110.0	139	r58.10	...
September	(NA)	(NA)		(NA)	(NA)	p58.87	(NA)
October							
November							
December							

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.

[1]Data prior to 1961 not comparable because of "a change in asset accounting basis in machinery, except electrical, and a recalculation of the seasonal pattern for petroleum and coal products." (See NICB publication Investment Statistics - Capital Appropriations: First Quarter 1965.)

BASIC DATA

TABLE 2 E

LATEST DATA FOR BUSINESS CYCLE SERIES—Continued

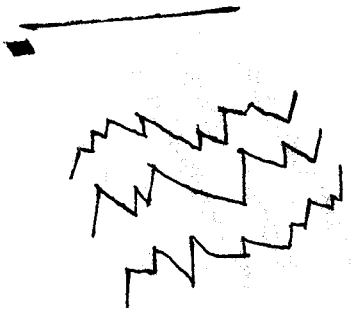
International Comparisons

Year and month	47. United States, index of industrial production	123. Canada, index of industrial production	122. United Kingdom, index of industrial production	121. OECD,[1] European countries, index of industrial production	125. West Germany, index of industrial production	126. France, index of industrial production	127. Italy, index of industrial production	128. Japan, index of industrial production
	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)	(1957-59=100)
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	131	135	124	139	140	141	168	226
May	132	133	123	141	150	140	166	228
June	132	133	123	139	143	141	164	233
July	133	134	122	138	147	132	166	232
August	134	135	123	137	145	132	156	232
September	134	135	123	140	145	141	165	239
October	132	136	127	144	149	142	164	241
November	135	139	128	143	149	142	166	237
December	138	140	129	143	149	139	166	242
1965								
January	139	142	131	146	156	138	166	243
February	139	141	129	146	155	140	169	237
March	141	143	128	143	150	139	165	242
April	141	142	129	145	154	141	169	240
May	142	142	129	146	r154	140	r174	234
June	143	143	r128	145	r154	142	175	r243
July	144	p144	p129	p144	r150	138	p175	241
August	144	(NA)	(NA)	(NA)	p154	p138	(NA)	p239
September	p143				(NA)	(NA)		(NA)
October								
November								
December								

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.

[1]Organization for Economic Cooperation and Development.

Section TWO



charts and tables

ANALYTICAL MEASURES

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			
	June 1965	July 1965	Aug. 1965	Sept. 1965	Nov. 1948	July 1953	July 1957	May 1960
NBER LEADING INDICATORS								
8 months or more	7	7	8	7	15	9	24	16
7 months	...	1	2	...	...	1	...	2
6 months	1	2	1	2	...	5	...	1
5 months	2	1	3	1	4	1	...	2
4 months	1	3	2	1	...	2	...	3
3 months	3	2	2	...	1	...	...	...
2 months	3	2	2	3	...	2	...	...
1 month	3	2	4	...	...	...	...	...
Benchmark month	4	4	...	2	...	1	...	...
Number of series used	24	24	24	16	[1]20	[2]21	24	24
Percent of series high on benchmark date	17	17	0	12	0	5	0	0
NBER ROUGHLY COINCIDENT INDICATORS								
8 months or more	...	...	...	...	2	1	2	1
7 months	...	...	...	...	...	...	...	...
6 months	...	...	...	...	...	...	...	...
5 months	...	...	...	...	1	...	1	...
4 months	...	1	...	...	1	3	3	2
3 months	1	...	...	...	3	1	...	3
2 months	...	...	1	2	4	...	...	...
1 month	2	1	3	1	...	3	1	2
Benchmark month	8	9	7	8	...	3	4	3
Number of series used	11	11	11	11	11	11	11	11
Percent of series high on benchmark date	73	82	64	73	0	27	36	27

Number of months before benchmark date that high was reached	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	13	4	21	13	9	1	18	6
7 months	2	4	...	2	1	1	...	7
6 months	...	...	1	...	...	1	1	3
5 months	...	2	2	1	5	1	2	2
4 months	...	2	...	2	2	4	...	2
3 months	...	5	...	1	...	1	1	...
2 months	4	1	...	2	...	2	2	1
1 month	...	2	...	3	...	3	...	2
Benchmark month	1	1	...	...	3	7	...	1
Number of series used	[1]20	[2]21	24	24	[1]20	[2]21	24	24
Percent of series high on benchmark date	5	5	0	0	15	33	0	4
NBER ROUGHLY COINCIDENT INDICATORS								
8 months or more	2	1	2	1	1	1	2	...
7 months	...	...	...	...	...	...	...	...
6 months	...	...	...	1	...	...	...	...
5 months	...	1	...	...	1	...	...	4
4 months	...	...	1	...	...	...	...	2
3 months	...	...	...	...	...	...	1	1
2 months	1	...	3	...	1	1	...	...
1 month	2	5	3	4	3	3	4	1
Benchmark month	6	4	2	5	5	6	4	3
Number of series used	11	11	11	11	11	11	11	11
Percent of series high on benchmark date	55	36	18	45	45	55	36	27

NOTE: All quarterly series and 2 monthly series (series 15, a leading indicator, and series 40, a roughly coincident indicator) are omitted from the distribution.

[1]4 series were not available.

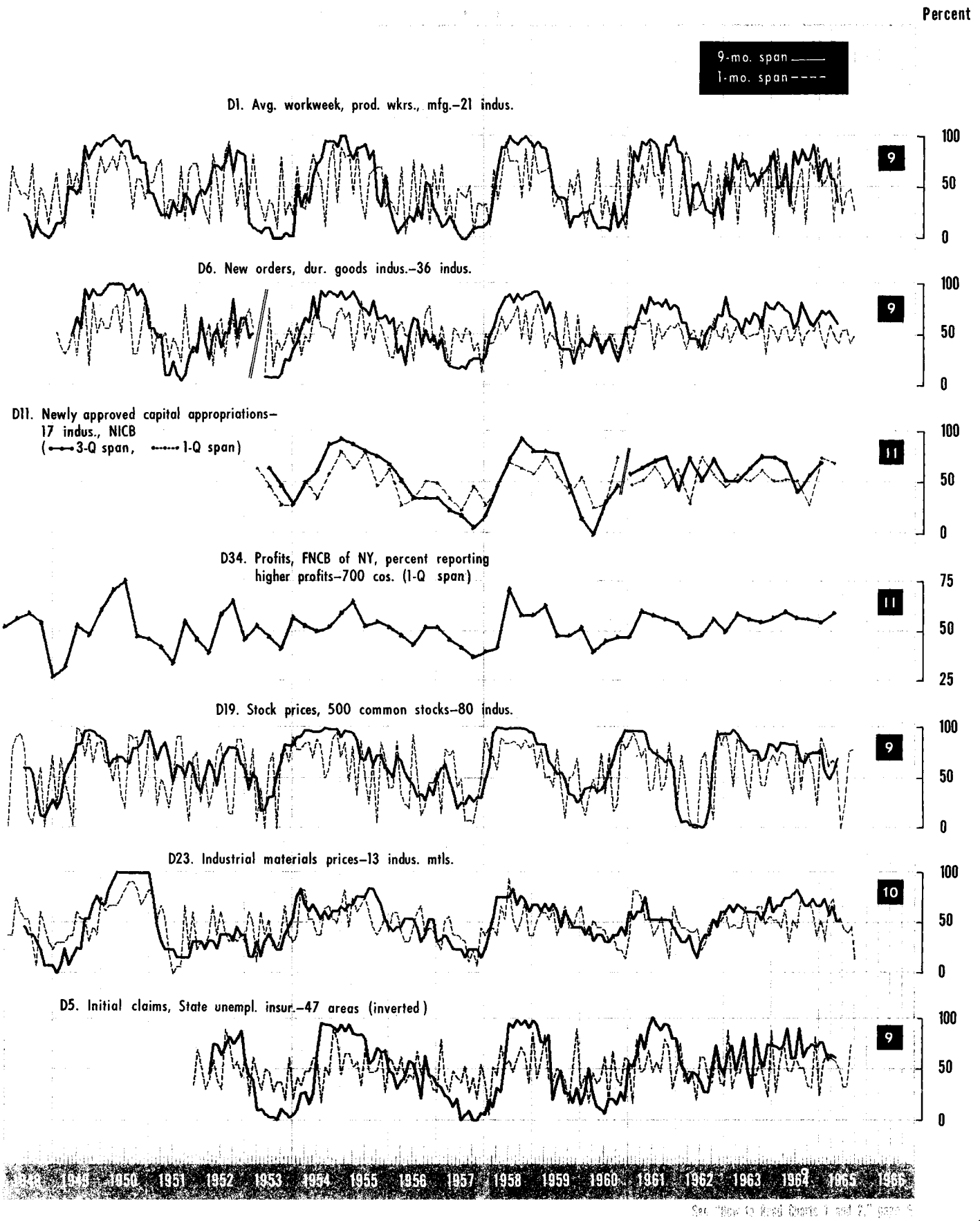
[2]1 series was not available and 2 series were omitted because their peaks were reached during the Korean War and such peaks were disregarded in this distribution.

ANALYTICAL MEASURES

DIFFUSION INDEXES FROM 1948 TO PRESENT

NBER Leading Indicators

CHART 2 A



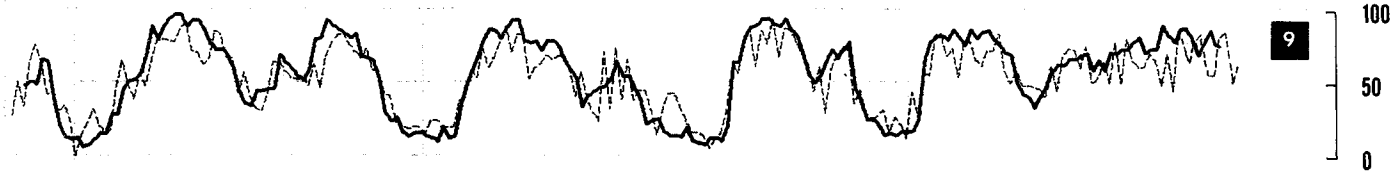
See "How to Read Charts 1 and 2," page 5

DIFFUSION INDEXES FROM 1948 TO PRESENT—Continued

NBER Roughly Coincident Indicators

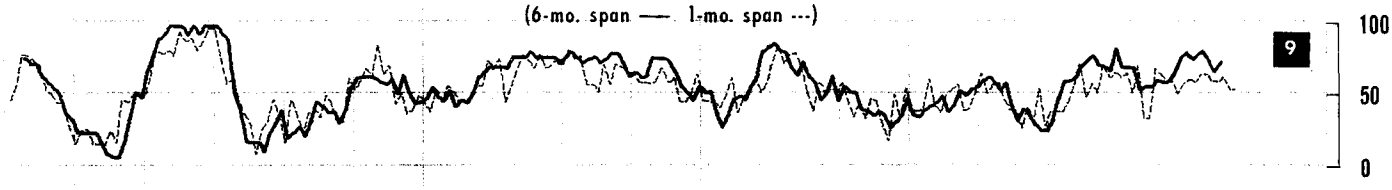
Percent

D41. Employees in nonagr. establishments–30 indus.
(6-mo. span —— 1-mo. span ---)

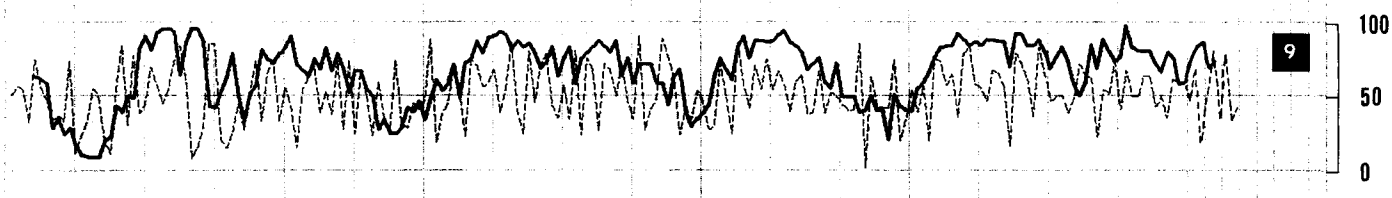


D47. Industrial production–24 indus.
(6-mo. span —— 1-mo. span ---)

D58. Wholesale prices, mfrd. goods–23 indus.
(6-mo. span —— 1-mo. span ---)



D54. Sales of retail stores–24 types of stores
(9-mo. span —— 1-mo. span ---)

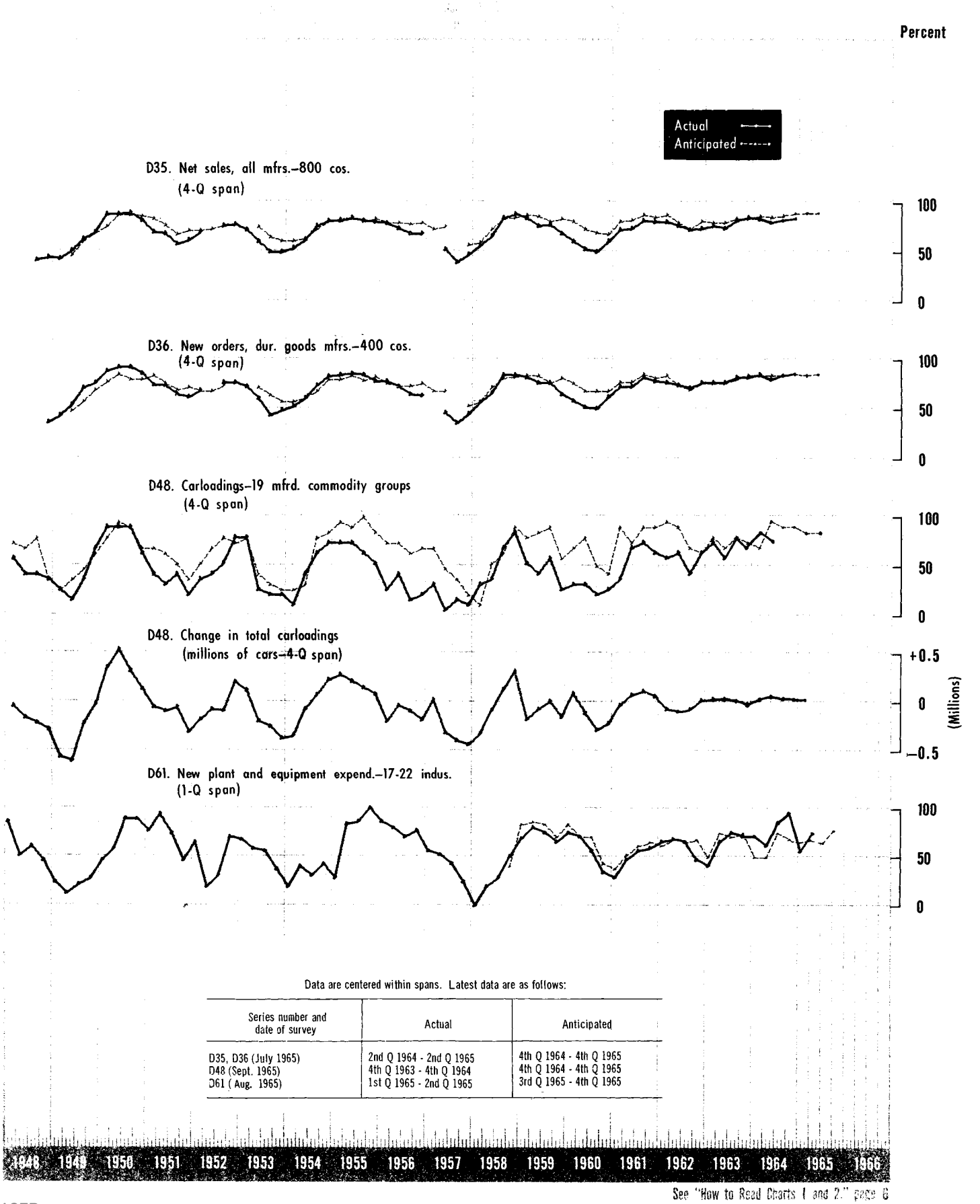


See "How to Read Charts 1 and 2," page 6

ANALYTICAL MEASURES

CHART 2 C

DIFFUSION INDEXES FROM 1948 TO PRESENT—Continued
Actual and Anticipated Indexes



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

Series number and date of survey	Actual	Anticipated
D35, D36 (July 1965)	2nd Q 1964 - 2nd Q 1965	4th Q 1964 - 4th Q 1965
D48 (Sept. 1965)	4th Q 1963 - 4th Q 1964	4th Q 1964 - 4th Q 1965
D61 (Aug. 1965)	1st Q 1965 - 2nd Q 1965	3rd Q 1965 - 4th Q 1965

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

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]	
	1-month span	9-month span	1-month span	9-month span	1-quarter span	3-quarter span
1962						
January	21.4	85.7	63.9	77.8	65	47
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	29	76
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	76	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	53	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	65	76
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	53	76
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	56	71
May	42.9	33.3	44.4	72.2	...	...
June	26.2	85.7	50.0	58.3	...	...
July	54.8	73.8	63.9	63.9	53	44
August	71.4	88.1	40.3	83.3	...	...
September	14.3	78.6	54.2	72.2	...	...
October	76.2	78.6	58.3	63.9	32	59
November	64.3	95.2	55.6	61.1	...	...
December	92.9	59.5	68.1	68.1	...	...
1965						
January	52.4	76.2	48.6	77.8	r76	p71
February	59.5	81.0	38.9	75.0	...	
March	76.2	r59.5	63.9	77.8	...	
April	19.0	r59.5	50.0	69.4	p71	
May	83.3	p35.7	44.4	p63.9		
June	23.8		58.3			
July	r47.6		r59.7			
August	r57.1		r44.4			
September	p28.6		p51.4			
October						
November						
December						

NOTE: Figures are the percent of series components rising and are centered within spans: 1-month indexes are placed on latest month and 9-month indexes are placed on the 6th month of span; 1-quarter indexes are placed on the 1st month of the 2d quarter and 3-quarter indexes are placed on the 1st month of the 3d quarter. 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.

[1] Data prior to 1961 not comparable because of "a change in asset accounting basis in machinery, except electrical, and a recalculation of the seasonal pattern for petroleum and coal products." (See NICB publication Investment Statistics - Capital Appropriations: First Quarter 1965.)

ANALYTICAL MEASURES

TABLE 4 A

LATEST DATA FOR DIFFUSION INDEXES—Continued

NBER Leading Indicators—Continued

Year and month	D34. Profits, manufacturing, FNCB (around 700 corporations)	D19. Index of stock prices, 500 common stocks (80 industries) [1]		D23. Index of industrial materials prices (13 industrial materials)		D5. Initial claims for unemployment insurance, State programs, week ended nearest the 22d (47 areas)	
	1-quarter span	1-month span	9-month span	1-month span	9-month span	1-month span	9-month span
1962							
January	54	25.6	17.5	53.8	38.5	46.8	80.9
February	...	75.0	6.2	46.2	30.8	76.6	55.3
March	...	47.5	7.5	46.2	30.8	38.3	48.9
April	47	8.7	3.1	42.3	38.5	48.9	36.2
May	...	1.2	3.7	42.3	23.1	46.8	46.8
June	...	1.2	2.5	46.2	15.4	19.1	44.7
July	48	69.4	1.2	23.1	30.8	63.8	38.3
August	...	78.1	3.7	30.8	38.5	61.7	27.7
September	...	36.2	18.7	50.0	38.5	42.6	27.7
October	56	8.1	67.5	53.8	53.8	36.2	53.2
November	...	98.7	93.7	53.8	46.2	72.3	74.5
December	...	84.4	95.0	53.8	61.5	36.2	53.2
1963							
January	50	97.5	95.0	61.5	61.5	34.0	44.7
February	...	78.7	95.0	46.2	69.2	89.4	66.0
March	...	43.7	98.7	50.0	61.5	31.9	72.3
April	59	91.2	95.0	46.2	69.2	47.9	48.9
May	...	85.0	89.1	46.2	65.4	46.8	63.8
June	...	51.9	84.6	69.2	61.5	68.1	80.9
July	56	29.4	78.2	46.2	61.5	44.7	46.8
August	...	75.0	79.5	38.5	61.5	44.7	31.9
September	...	76.9	77.6	69.2	61.5	44.7	85.1
October	55	44.9	69.2	69.2	53.8	59.6	60.6
November	...	44.9	71.2	50.0	61.5	40.4	53.2
December	...	68.4	84.4	57.7	76.9	23.4	73.4
1964							
January	57	74.7	83.1	53.8	61.5	89.4	73.4
February	...	65.2	78.2	53.8	69.2	27.7	72.3
March	...	78.5	86.5	46.2	69.2	57.4	70.2
April	60	75.6	85.9	65.4	76.9	77.7	74.5
May	...	52.6	84.6	30.8	76.9	48.9	89.4
June	...	35.3	84.6	53.8	80.8	48.9	60.6
July	57	89.7	81.8	46.2	84.6	63.8	61.7
August	...	41.0	68.8	76.9	76.9	51.1	89.4
September	...	76.3	65.6	69.2	69.2	53.2	61.7
October	56	73.1	75.3	73.1	69.2	34.0	70.2
November	...	59.6	76.6	61.5	76.9	31.9	74.5
December	...	24.0	76.6	38.5	69.2	83.0	72.3
1965							
January	55	92.2	80.5	53.8	69.2	24.5	78.7
February	...	81.8	58.4	30.8	76.9	57.4	78.7
March	...	64.3	51.9	69.2	61.5	66.0	59.6
April	59	70.8	58.4	76.9	69.2	61.7	66.0
May	...	66.9	72.7	53.8	53.8	59.6	61.7
June	...	0.0		57.7	[2]53.8	51.1	
July	(NA)	24.7		46.2		34.0	
August		79.9		42.3		38.3	
September		81.2		50.0		78.7	
October				[2]15.4			
November							
December							

NOTE: Figures are the percent of series components rising and are centered within spans: 1-month indexes are placed on latest month and 9-month indexes are placed on the 6th month of span; 1-quarter indexes 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.

[1] The diffusion index is based on 82 components through February 1963; on 80 components, March 1963 to August 1963; on 79 components, September 1963 to March 1964; on 78 components, April 1964 to November 1964; and on 77 components thereafter.

[2] Average for October 14, 15, and 18.

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
1962								
January	65.0	86.7	25.0	83.3	58.3	87.5	67.4	60.9
February	75.0	88.3	87.5	79.2	50.0	91.7	52.2	63.0
March	75.0	81.7	87.5	70.8	70.8	91.7	58.7	58.7
April	86.7	78.3	75.0	91.7	68.8	89.6	60.9	54.3
May	60.0	73.3	64.6	77.1	58.3	89.6	47.8	58.7
June	53.3	71.7	66.7	83.3	18.8	72.9	41.3	43.5
July	61.7	51.7	52.1	66.7	83.3	95.8	41.3	32.6
August	51.7	45.0	58.3	77.1	75.0	95.8	28.3	41.3
September	51.7	41.7	83.3	60.4	64.6	87.5	43.5	37.0
October	50.0	35.0	29.2	47.9	39.6	87.5	32.6	30.4
November	48.3	43.3	68.8	72.9	87.5	91.7	56.5	26.1
December	43.3	50.0	35.4	62.5	66.7	83.3	30.4	26.1
1963								
January	65.0	60.0	79.2	83.3	50.0	70.8	41.3	32.6
February	46.7	65.0	66.7	91.7	54.2	79.2	41.3	47.8
March	71.7	65.0	83.3	95.8	52.1	85.4	41.3	58.7
April	76.7	68.3	54.2	91.7	41.7	77.1	47.8	60.9
May	75.0	68.3	83.3	91.7	52.1	60.4	58.7	63.0
June	63.3	71.7	75.0	83.3	75.0	52.1	73.9	69.6
July	78.3	73.3	72.9	91.7	66.7	62.5	50.0	71.7
August	53.3	60.0	68.8	77.1	64.6	87.5	58.7	78.3
September	56.7	66.7	58.3	79.2	25.0	70.8	52.2	71.7
October	66.7	60.0	64.6	77.1	58.3	91.7	69.6	69.6
November	53.3	73.3	50.0	83.3	54.2	83.3	63.0	67.4
December	80.0	73.3	77.1	85.4	77.1	77.1	67.4	82.6
1964								
January	53.3	75.0	62.5	91.7	43.8	79.2	63.0	69.6
February	83.3	75.0	75.0	95.8	70.8	100.0	67.4	69.6
March	66.7	80.0	75.0	87.5	52.1	85.4	52.2	69.6
April	63.3	83.3	87.5	91.7	52.1	83.3	71.7	54.3
May	65.0	73.3	66.7	87.5	66.7	83.3	34.8	56.5
June	73.3	75.0	62.5	89.6	66.7	83.3	34.8	56.5
July	66.7	75.0	83.3	70.8	45.8	75.0	69.6	60.9
August	51.7	91.7	64.6	70.8	52.1	68.8	65.2	58.7
September	73.3	86.7	45.8	87.5	37.5	83.3	60.9	60.9
October	46.7	80.0	68.8	79.2	64.6	81.2	60.9	69.6
November	88.3	90.0	79.2	91.7	62.5	60.4	52.2	78.3
December	78.3	90.0	81.2	91.7	62.5	62.5	60.9	82.6
1965								
January	66.7	83.3	66.7	83.3	50.0	75.0	63.0	76.1
February	81.7	71.7	66.7	85.4	72.9	87.5	60.9	80.4
March	86.7	76.7	79.2	83.3	20.8	r91.7	67.4	r82.6
April	58.3	90.0	58.3	r83.3	62.5	r70.8	r67.4	76.1
May	58.3	r80.0	70.8	r79.2	83.3	p79.2	60.9	r67.4
June	85.0	p76.7	r81.2	p77.1	39.6		60.9	p76.1
July	86.7		81.2		r81.2		r63.0	
August	r50.0		r54.2		r37.5		r54.3	
September	p65.0		p37.5		p45.8		p54.3	
October								
November								
December								

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

ANALYTICAL MEASURES

TABLE 4 C

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
1962									
January	...	...	...	...	...	...	...	65.6	62.5
February	80	88	76	84	57.9	94.7	-68	...	...
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	+21	...	...
September	...	...	...	...	...	...	...	...	...
October	...	...	...	...	...	...	...	71.9	75.0
November	84	85	82	84	68.4	73.7	-39	...	...
December	...	...	...	...	...	...	...	...	...
1964									
January	...	...	...	...	...	...	...	71.9	50.0
February	83	87	84	84	84.2	68.4	r+11	...	...
March	...	...	...	...	...	...	...	...	...
April	...	...	...	...	...	...	...	62.5	50.0
May	82	86	81	84	73.7	94.7	+68	...	...
June	...	...	...	...	...	...	...	...	...
July	...	...	...	...	...	...	...	84.4	75.0
August	83	87	84	84	(NA)	89.5	+51	...	...
September	...	...	...	...		...	...	...	...
October	...	...	...	...		...	...	96.9	68.8
November	84	88	84	85		89.5	+49	...	...
December	...	...	...	...		...	...	...	...
1965									
January	...	...	...	...		...	...	56.2	65.6
February	(NA)	88	(NA)	84		84.2	r+23	...	...
March		...		...		...		...	...
April		...		...		...		75.0	68.8
May		88		84		84.2		...	...
June								...	...
July								(NA)	65.6
August									...
September									...
October									78.1
November									
December									

NOTE: Figures are the percent of series components rising and are centered within spans: 4-quarter indexes are centered in the middle quarter; 1-quarter indexes are placed in the 1st month of the 2d quarter. Seasonally adjusted components are used for series D61; other indexes, based on 4-quarter spans (same quarter a year ago), require no seasonal adjustment. The "r" indicates revised; "p", preliminary; and "NA", not available.

TABLE 5 A

ANALYTICAL MEASURES

OCTOBER 1965 bcd

SELECTED DIFFUSION INDEXES AND COMPONENTS

Basic Data

Diffusion index title and components	1964					1965				
	Aug.	Sept.	Oct.	Nov.	Dec.	May	June	July[r]	Aug.	Sept.[p]
	Average weekly hours									
D1. AVERAGE WORKWEEK OF PRODUCTION WORKERS, MANUFACTURING[1] (21 industry components)										
All manufacturing industries	40.8	40.5	40.5	40.9	41.2	41.1	41.0	40.9	40.9	40.9
Durable goods industries:										
Ordnance and accessories	40.4	40.0	40.6	40.4	40.6	41.7	41.8	42.6	r41.7	41.6
Lumber and wood products	40.4	39.4	39.7	39.9	40.2	40.8	39.7	40.3	r40.7	40.4
Furniture and fixtures	41.2	40.5	41.2	41.5	41.8	41.7	41.4	41.1	r41.3	41.0
Stone, clay, and glass products	41.3	41.1	41.5	41.5	42.2	41.8	41.5	41.6	r41.5	41.4
Primary metal industries	42.2	42.8	41.9	42.2	42.2	42.0	42.1	42.2	r42.2	42.0
Fabricated metal products	41.7	41.3	41.4	42.0	42.3	42.2	41.9	41.7	r41.7	41.5
Machinery, except electrical	42.5	42.0	42.0	42.8	43.1	43.0	42.9	42.9	r42.8	42.7
Electrical machinery	40.6	40.3	40.7	40.9	41.1	41.1	40.9	40.6	40.7	40.6
Transportation equipment	42.6	42.3	40.5	41.5	42.9	42.9	43.0	42.1	r42.2	43.0
Instruments and related products	41.0	40.9	40.9	41.1	41.3	41.7	41.5	41.4	r41.2	41.3
Miscellaneous manufacturing industries	40.0	39.1	39.7	39.7	40.0	39.8	39.6	39.8	r40.1	40.0
Nondurable goods industries:										
Food and kindred products	40.8	40.7	41.0	41.0	41.3	40.9	40.9	41.2	r41.0	40.2
Tobacco manufactures	38.4	37.0	39.3	38.5	39.6	37.6	37.2	38.3	r37.4	36.8
Textile mill products	41.2	40.0	41.4	41.5	41.8	41.5	41.4	41.3	r41.8	41.8
Apparel and related products	35.9	34.9	36.2	36.4	36.5	36.6	36.4	36.2	r36.1	36.1
Paper and allied products	43.0	42.7	42.9	42.4	42.9	43.1	42.9	42.9	r43.0	42.8
Printing and publishing	38.6	38.5	38.6	38.4	38.6	38.5	38.5	38.4	r38.6	38.5
Chemicals and allied products	41.3	42.1	41.6	41.7	41.6	42.0	41.7	41.5	r41.7	42.6
Petroleum and related products	42.1	42.5	41.6	41.7	42.0	42.3	41.9	42.1	r42.7	42.8
Rubber and plastic products	41.8	41.3	41.6	41.3	41.6	41.6	41.7	41.6	r42.2	41.5
Leather and leather products	37.9	37.7	38.5	38.1	38.2	38.4	37.7	37.9	37.6	38.3
	Millions of dollars									
D6. VALUE OF MANUFACTURERS' NEW ORDERS, DURABLE GOODS INDUSTRIES[1] (36 industry components)										
All durable goods industries	19,342	19,907	19,623	19,454	20,720	20,992	21,310	22,195	r21,461	21,751
Primary metals	3,280	3,847	3,767	3,663	3,821	3,286	3,454	3,493	r3,090	2,874
Blast furnaces, steel mills	1,825	2,296	2,203	2,072	2,243	1,632	1,816	1,851	p1,448	(NA)
Nonferrous metals	...	...	...	...	...	...	...	...	...	...
Iron and steel foundries	...	...	...	...	...	...	...	...	...	...
Other primary metals	...	...	...	...	...	...	...	...	...	...
Fabricated metal products	1,946	2,045	1,991	2,011	2,089	2,027	2,042	2,058	p1,968	(NA)
Metal cans, barrels, and drums	...	...	...	...	...	...	...	...	...	...
Hardware, structural metal and wire products	...	...	...	...	...	...	...	...	...	...
Other fabricated metal products	...	...	...	...	...	...	...	...	...	...
Machinery, except electrical	2,952	2,923	2,994	2,971	3,098	3,108	3,189	3,140	p3,299	(NA)
Steam engines and turbines*	} 281	219	175	175	175	142	226	149	p283	(NA)
Internal combustion engines *										
Farm machinery and equipment	...	...	...	...	...	...	...	...	...	...
Construction, mining, and material handling*	528	520	566	592	526	601	560	603	p604	(NA)
Metalworking machinery *	205	183	221	201	239	208	204	242	p290	(NA)
Miscellaneous equipment *	...	...	...	...	...	...	...	...	...	...
Machine shops	...	...	...	...	...	...	...	...	...	...
Special industry machinery *	...	...	...	...	...	...	...	...	...	...
General industrial machinery*	211	211	202	233	237	258	230	248	p247	(NA)
Office and store machines*	...	...	...	...	...	...	...	...	...	...
Service industry machinery *	...	...	...	...	...	...	...	...	...	...

NOTE: Data are not shown when held confidential by the source agency. *Denotes machinery and equipment industries that comprise series 24. r = revised; p = preliminary; NA = not available.

[1]Data are seasonally adjusted by source agency.

ANALYTICAL MEASURES

TABLE 5 B

SELECTED DIFFUSION INDEXES AND COMPONENTS—Continued

Directions of Change

Diffusion index title and components	1-month spans										9-month spans									
	1964	1965									1964	1965								
	Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Mar-Dec	Apr-Jan	May-Feb	Jun-Mar	Jul-Apr	Aug-May	Sep-Jun	Oct-Jul	Nov-Aug	Dec-Sep
D1. AVERAGE WORKWEEK OF PRODUCTION WORKERS, MANUFACTURING (21 industry components)																				
Percent rising	93	52	60	76	19	83	24	48	57	29	88	79	79	95	60	76	81	60	60	36
All manufacturing industries	+	+	−	+	−	+	−	−	o	o	+	+	+	+	+	+	+	+	o	−
Durable goods industries:																				
Ordnance and accessories	+	+	o	+	−	+	+	+	−	−	+	+	+	+	+	+	+	+	+	+
Lumber and wood products	+	+	−	+	−	+	−	+	+	−	−	+	−	+	+	+	+	+	+	+
Furniture and fixtures	+	−	+	o	−	+	−	−	+	−	+	+	+	+	+	+	+	−	−	−
Stone, clay, and glass products	+	−	o	o	−	+	−	+	−	−	+	o	+	+	−	+	+	+	o	−
Primary metal industries	o	+	o	+	+	−	+	+	o	−	+	+	+	+	+	−	−	+	o	−
Fabricated metal products	+	o	+	+	−	+	−	−	o	−	+	+	+	+	o	+	+	+	−	−
Machinery, except electrical	+	−	+	+	−	+	−	o	−	−	+	+	+	+	−	+	+	+	o	−
Electrical machinery	+	o	+	+	−	+	−	−	+	−	+	+	+	+	−	+	+	−	−	−
Transportation equipment	+	+	−	+	−	+	+	−	+	+	+	+	+	+	+	+	+	+	+	+
Instruments and related products	+	o	+	+	−	+	−	−	−	+	+	+	+	+	−	+	+	+	+	o
Miscellaneous manufacturing industries	+	−	o	+	−	+	−	+	+	−	+	+	+	+	−	−	+	+	+	o
Nondurable goods industries:																				
Food and kindred products	+	o	−	o	−	+	o	+	−	−	+	+	o	+	+	+	+	+	o	−
Tobacco manufactures	+	−	+	−	−	+	−	+	−	−	+	−	−	−	−	−	+	−	−	−
Textile mill products	+	+	−	o	−	+	−	−	+	o	+	+	+	+	+	+	+	−	+	o
Apparel and related products	+	+	−	+	−	+	−	−	−	o	+	+	+	+	−	+	+	o	−	−
Paper and allied products	+	+	−	+	−	+	−	o	+	−	+	+	+	+	−	+	+	o	+	−
Printing and publishing	+	−	o	o	o	o	o	−	+	−	+	−	o	+	+	−	o	−	+	−
Chemicals and allied products	−	+	+	−	+	−	−	−	+	+	o	+	+	+	+	+	−	−	o	+
Petroleum and related products	+	−	+	+	+	−	−	+	+	+	−	−	−	+	+	+	−	+	+	+
Rubber and plastic products	+	+	+	o	−	+	+	−	+	−	+	+	+	+	+	−	+	o	+	−
Leather and leather products	+	−	+	+	o	+	−	+	−	+	+	−	o	+	+	+	o	−	−	+
D6. VALUE OF MANUFACTURERS' NEW ORDERS, DURABLE GOODS INDUSTRIES (36 industry components)																				
Percent rising	68	49	39	64	50	44	58	60	44	51	83	72	64	61	68	78	75	78	69	64
All durable goods industries	+	+	−	+	+	−	+	+	−	+	+	+	+	+	+	+	+	+	+	+
Primary metals:																				
Blast furnaces, steel mills	+	−	+	−	−	−	+	+	−	−	+	+	+	+	−	−	−	−	−	−
Nonferrous metals	−	−	+	+	+	+	+	−	−	−	+	−	+	+	+	+	+	+	+	+
Iron and steel foundries	−	−	−	+	−	+	−	+	+	+	+	−	−	−	−	+	−	−	−	+
Other primary metals	−	−	−	+	−	+	+	o	−	−	−	+	−	−	−	+	+	+	+	o
Fabricated metal products:																				
Metal cans, barrels, and drums	+	−	+	−	+	−	+	+	−	+	+	−	+	+	+	+	+	+	−	−
Hardware, structural metal and wire products	+	+	−	−	+	+	−	−	−	+	+	+	+	−	−	+	−	−	−	−
Other fabricated metal products	+	−	+	+	−	−	+	+	−	+	+	−	+	+	−	−	−	+	+	−
Machinery, except electrical:																				
Steam engines and turbines*	+	+	+	−	−	+	+	−	+	−	−	+	−	−	−	−	−	−	+	+
Internal combustion engines *	−	+	−	o	+	−	+	−	+	−	+	+	+	−	o	−	+	+	+	+
Farm machinery and equipment	+	−	+	−	−	+	+	−	+	+	+	+	+	−	+	+	+	+	+	+
Construction, mining, and material handling *	−	−	+	+	−	+	−	+	+	+	+	−	+	+	+	+	+	+	+	+
Metalworking machinery*	+	−	+	−	+	−	−	+	+	−	+	−	+	−	+	+	+	+	+	−
Miscellaneous equipment *	+	+	−	+	+	−	+	−	+	+	+	+	+	+	+	+	+	+	+	+
Machine shops	+	−	−	+	−	+	−	−	+	−	+	−	−	−	−	−	−	−	−	−
Special industry machinery *	−	+	−	+	+	−	+	−	+	−	+	+	−	+	+	+	+	+	+	+
General industrial machinery*	+	o	−	+	+	−	−	+	−	−	+	+	+	+	+	+	+	+	+	+
Office and store machines*	+	+	−	−	+	+	−	+	−	+	+	+	−	+	+	+	+	+	+	+
Service industry machinery *	+	−	−	+	−	−	+	+	−	+	+	+	+	+	+	+	+	+	−	−

+ = rising; o = unchanged; − = falling. Directions of change are computed even though data are held confidential. *Denotes machinery and equipment industries that comprise series 24.

SELECTED DIFFUSION INDEXES AND COMPONENTS—Continued

Basic Data—Continued

Diffusion index title and components	1964					1965					
	Aug.	Sept.	Oct.	Nov.	Dec.	May	June	July	Aug.	Sept.	Oct.[1]
	Millions of dollars										
D6. VALUE OF MANUFACTURERS' NEW ORDERS, DURABLE GOODS INDUSTRIES[2] – Continued											
Electrical machinery	2,694	2,581	2,542	2,763	2,637	2,801	2,874	r3,099	p2,978	(NA)	
Electrical transmission, distr. equipment*	638	557	585	620	604	603	668	r672	p683	(NA)	
Electrical industrial apparatus*											
Household appliances	...	...	...	...	...	...	...	...	...	...	
Radio and TV	...	...	...	...	...	...	...	...	...	...	
Communication equipment	609	618	549	655	484	659	691	r752	p629	(NA)	
Electronic components	...	...	...	...	...	...	...	...	...	...	
Other electrical machinery*	...	...	...	...	...	...	...	...	...	...	
Transportation equipment	4,771	4,760	4,544	4,283	5,172	5,878	5,870	r6,363	r6,153	p6,734	
Motor vehicle parts	...	...	...	...	...	...	...	...	...	...	
Motor vehicle assembly operations	...	...	...	...	...	...	...	...	...	...	
Complete aircraft	...	...	...	...	...	...	...	...	...	...	
Aircraft parts	...	...	...	...	...	...	...	...	...	...	
Shipbuilding and railroad equipment*	...	...	...	...	...	...	...	...	...	...	
Other transportation equipment	...	...	...	...	...	...	...	...	...	...	
Instruments, total	...	...	...	...	...	...	...	...	...	...	
Lumber, total	...	...	...	...	...	...	...	...	...	...	
Furniture, total	...	...	...	...	...	...	...	...	...	...	
Stone, clay, and glass, total	...	...	...	...	...	...	...	...	...	...	
Other durable goods, total	...	...	...	...	...	...	...	...	...	...	
D23. INDEX OF INDUSTRIAL MATERIALS PRICES[3] (13 industrial materials components)	Index: 1957-59 = 100										
Industrial materials price index	105.7	108.2	112.0	113.2	112.5	116.9	115.3	114.6	115.2	r114.8	114.4
	Dollars										
Copper scrap (lb.)	.339	.362	.402	.417	.393	.414	.426	.418	.444	r.466	.498
Lead scrap (lb.)	.056	.061	.062	.065	.073	.073	.076	.075	.074	.072	.071
Steel scrap (ton)	40.157	35.933	38.322	41.534	39.824	38.600	36.055	35.677	31.469	r29.918	29.774
Tin (lb.)	1.660	1.866	2.075	1.889	1.629	1.910	1.894	1.867	1.911	r1.930	1.827
Zinc (lb.)	.140	.140	.145	.149	.148	.151	.152	.150	.149	.150	.150
Burlap (yd.)	.124	.125	.125	.125	.125	.147	.146	.145	.148	r.160	.156
Cotton (lb.), 15-market average	.315	.311	.310	.309	.308	.303	.303	.304	.303	.302	.301
Print cloth (yd.), average	.183	.186	.190	.191	.194	.206	.207	.212	.211	.211	.210
Wool tops (lb.)	1.732	1.727	1.746	1.691	1.667	1.642	1.643	1.695	1.712	r1.743	1.746
Hides (lb.)	.146	.147	.142	.138	.137	.158	.162	.164	.186	r.167	.157
Rosin (100 lb.)	11.946	11.874	11.826	11.838	12.018	11.629	11.733	11.919	11.581	11.523	11.488
Rubber (lb.)	.250	.260	.264	.270	.258	.272	.265	.260	.254	.250	.239
Tallow (lb.)	.066	.073	.073	.074	.082	.079	.079	.080	.074	.074	.073
D54. SALES OF RETAIL STORES[2] (24 retail store components)	Millions of dollars										
All retail sales	22,266	22,254	21,383	21,661	22,781	23,352	23,331	r23,743	r23,653	p23,344	
Grocery stores	4,743	4,755	4,736	4,774	4,913	4,904	4,978	r5,015	p5,012	(NA)	
Other food stores	...	...	...	...	...	...	...	...	...	...	
Eating and drinking places	1,633	1,600	1,637	1,609	1,653	1,767	1,749	r1,814	p1,801	(NA)	
Department stores	1,630	1,516	1,568	1,580	1,600	1,753	1,666	r1,757	p1,732	(NA)	
Mail order houses (department store merchandise)	205	192	198	191	196	210	205	216	p207	(NA)	
Variety stores	439	427	429	466	442	472	462	r467	p469	(NA)	
Other general merchandise stores	...	...	...	...	...	...	...	...	...	...	
Men's and boys' wear stores	269	261	259	261	257	263	254	r260	p266	(NA)	

NOTE: Data are not shown when held confidential by the source agency. * Denotes machinery and equipment industries that comprise series 24. r = revised; p = preliminary; NA = not available.

[1]Average for October 14, 15, and 18.
[2]Data are seasonally adjusted by the source agency.
[3]Series components are seasonally adjusted by the Bureau of the Census. (See "Seasonal and Related Statistical Adjustments", page 2.) Industrial materials price index is not seasonally adjusted.

ANALYTICAL MEASURES

TABLE 5 B

SELECTED DIFFUSION INDEXES AND COMPONENTS—Continued

Directions of Change—Continued

Diffusion index title and components	1-month spans											9-month spans										
	1964	1965										1964	1965									
	Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Sep-Oct[1]	Mar-Dec	Apr-Jan	May-Feb	Jun-Mar	Jul-Apr	Aug-May	Sep-Jun	Oct-Jul	Nov-Aug	Dec-Sep	Jan-Oct[1]
D6. VALUE OF MANUFACTURERS' NEW ORDERS, DURABLE GOODS INDUSTRIES — Continued																						
Electrical machinery:																						
Electrical transmission, distr. equipment *	+	+	−	o	−	−	+	+	+	−		+	+	+	+	+	−	+	+	+	−	
Electrical industrial apparatus*	−	+	−	+	+	+	+	−	−	−		+	+	−	−	+	+	+	+	−	+	
Household appliances	+	−	+	−	+	−	−	+	−	−		+	+	+	+	+	+	+	+	+	−	
Radio and TV	+	+	−	+	+	−	+	−	+	−		+	+	−	+	−	+	+	+	+	+	
Communication equipment	−	+	−	+	+	−	+	+	−	+		−	+	−	−	−	+	+	+	−	+	
Electronic components	−	+	+	+	+	−	−	+	−	−		−	−	+	+	+	+	+	+	+	+	
Other electrical machinery*	+	−	−	+	−	−	+	+	−	+		+	+	+	+	+	+	−	+	+	+	
Transportation equipment:																						
Motor vehicle parts	+	+	−	+	−	+	−	+	−	+		+	+	+	+	+	+	+	+	+	+	
Motor vehicle assembly operations	+	+	+	+	−	−	+	+	−	+		+	−	+	+	+	+	+	+	+	+	
Complete aircraft	+	+	+	−	+	−	+	−	+	−		−	−	−	−	+	+	+	−	+	+	
Aircraft parts	+	+	−	+	−	+	−	+	+	+		−	+	+	+	−	+	−	+	+	+	
Shipbuilding and railroad equipment*	−	−	−	+	+	+	−	+	−	+		+	+	−	−	+	+	+	+	−	o	
Other transportation equipment	o	−	−	+	−	+	+	−	+	−		+	+	−	−	−	−	−	−	−	−	
Instruments, total	+	−	+	+	−	−	+	+	+	−		+	+	+	+	+	−	+	+	+	+	
Lumber, total	−	+	−	−	+	+	−	+	−	+		+	+	+	+	+	+	+	+	+	+	
Furniture, total	+	−	−	+	−	+	−	−	+	o		+	+	−	+	+	+	+	+	+	−	
Stone, clay, and glass, total	+	+	−	−	−	−	+	−	−	+		+	+	+	+	+	+	+	−	−	−	
Other durable goods, total	+	−	+	−	+	−	−	+	−	+		+	+	+	−	+	+	+	+	+	+	
D23. INDEX OF INDUSTRIAL MATERIALS PRICES[2] (13 industrial materials components)																						
Percent rising	38	54	31	69	77	54	58	46	42	50	15	77	69	69	77	69	69	77	62	69	54	54
Industrial materials price index	−	−	+	+	+	+	−	−	+	−	−	+	+	+	+	+	+	+	+	+	+	+
Copper scrap (lb.)	−	−	+	+	+	+	+	−	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lead scrap (lb.)	+	+	−	+	+	−	+	−	−	−	−	+	+	+	+	+	+	+	+	+	−	−
Steel scrap (ton)	−	−	−	+	−	+	−	−	−	−	−	+	+	+	+	−	−	+	−	−	−	−
Tin (lb.)	−	−	−	+	+	+	−	−	+	+	−	+	+	+	+	+	+	+	−	+	+	+
Zinc (lb.)	−	+	+	+	+	−	+	−	−	+	−	+	+	+	+	+	+	+	+	+	+	+
Burlap (yd.)	+	+	+	+	+	+	−	−	+	+	−	+	+	+	+	+	+	+	+	+	+	+
Cotton (lb.), 15-market average	−	−	−	−	−	−	o	+	−	−	−	−	−	−	−	−	−	−	−	−	−	−
Print cloth (yd.), average	+	+	−	+	+	+	+	+	o	o	−	+	+	+	+	+	+	+	+	+	+	+
Wool tops (lb.)	−	−	−	−	+	−	+	+	+	+	+	−	−	−	−	−	−	−	−	+	+	+
Hides (lb.)	−	+	−	+	+	+	+	+	+	−	−	+	−	−	+	+	+	+	+	+	+	+
Rosin (100 lb.)	+	+	−	+	−	−	+	+	−	−	−	−	−	−	−	−	−	−	+	−	−	−
Rubber (lb.)	−	+	−	−	+	+	−	−	−	−	−	+	+	+	+	+	+	+	−	−	−	−
Tallow (lb.)	+	−	+	−	+	−	−	+	−	+	−	+	+	+	+	+	+	+	+	+	−	−
D54. SALES OF RETAIL STORES (24 retail store components)																						
Percent rising	62	50	73	21	62	83	40	81	38	46		69	83	81	60	62	75	88	92	71	79	
All retail sales	+	+	+	−	+	+	−	+	−	−		+	+	+	+	+	+	+	+	+	+	
Grocery stores	+	−	+	−	+	−	+	+	−	+		+	+	+	+	+	+	+	+	+	+	
Other food stores	+	−	+	−	−	+	+	+	−	−		−	−	+	−	−	+	+	+	+	+	
Eating and drinking places	+	+	+	−	+	+	−	+	−	−		+	+	+	+	+	+	+	+	+	+	
Department stores	+	+	−	−	+	+	−	+	−	−		+	+	+	+	+	+	+	+	+	+	
Mail order houses (department store merchandise)	+	−	+	+	−	+	−	+	−	+		+	+	+	+	+	+	+	+	+	+	
Variety stores	−	−	+	−	−	+	−	+	+	−		+	+	+	+	−	+	+	+	+	+	
Other general merchandise stores	+	−	−	−	+	+	−	+	+	−		+	+	+	+	+	+	+	+	−	−	
Men's and boys' wear stores	−	+	+	−	+	+	−	+	+	−		+	+	+	+	−	−	−	+	+	+	

+ = rising; o = unchanged; − = falling. Directions of change are computed even though data are held confidential. *Denotes machinery and equipment industries that comprise series 24.

[1]Average for October 14, 15, and 18.
[2]Directions of change are computed before figures are rounded.

SELECTED DIFFUSION INDEXES AND COMPONENTS—Continued

Basic Data—Continued

Diffusion index title and components	1964					1965				
	Aug.	Sept.	Oct.	Nov.	Dec.	May	June	July[r]	Aug.[p]	Sept.
	Millions of dollars									
D54. SALES OF RETAIL STORES[1]– Continued										
Women's apparel, accessory stores	519	504	512	517	518	519	517	527	516	(NA)
Family and other apparel stores	...	...	...	...	...	...	...	...	...	...
Shoe stores	224	206	210	229	226	224	216	213	212	(NA)
Furniture, home furnishings stores	719	679	703	701	702	720	742	765	747	(NA)
Household appliance, TV, radio stores	375	388	385	397	411	365	365	370	384	(NA)
Lumber yards, building materials dealers	711	729	741	721	742	791	808	804	778	(NA)
Hardware stores	227	237	242	261	262	239	234	245	242	(NA)
Farm equipment dealers	...	...	...	...	...	...	...	...	...	...
Passenger car and other automotive dealers	5,025	4,301	3,265	3,428	4,344	4,279	4,341	4,474	4,429	(NA)
Tire, battery, accessory dealers	234	230	230	257	244	259	243	246	256	(NA)
Gasoline service stations	1,690	1,695	1,722	1,738	1,755	1,818	1,829	1,835	1,839	(NA)
Drug and proprietary stores	722	734	739	724	731	749	758	776	774	(NA)
Jewelry stores	...	...	...	...	...	...	...	...	...	...
Liquor stores	494	499	503	509	508	525	521	522	504	(NA)
Other durable-goods stores	...	...	...	...	...	...	...	...	...	...
Other nondurable-goods stores	...	...	...	...	...	...	...	...	...	...
	1964		1965			1965				
	Nov.	Dec.	Jan.	Feb.	Mar.	May	June	July[r]	Aug.[r]	Sept.[p]
	Thousands of employees									
D41. NUMBER OF EMPLOYEES IN NONAGRICULTURAL ESTABLISHMENTS[1] (30 industry components)										
All nonagricultural establishments	58,878	59,206	59,334	59,676	59,992	60,110	60,382	60,602	60,680	60,806
Ordnance and accessories	102	100	100	101	100	101	103	104	106	111
Lumber and wood products	532	536	533	540	544	531	529	534	532	533
Furniture and fixtures	340	344	345	348	352	352	352	354	352	353
Stone, clay, and glass products	500	501	503	503	508	500	500	506	505	506
Primary metal industries	1,038	1,041	1,044	1,046	1,047	1,037	1,068	1,090	1,073	1,070
Fabricated metal products	933	951	964	979	957	981	987	998	993	992
Machinery	1,145	1,165	1,166	1,168	1,179	1,186	1,200	1,217	1,218	1,228
Electrical equipment	1,065	1,078	1,086	1,099	1,113	1,130	1,145	1,155	1,150	1,156
Transportation equipment	1,156	1,181	1,207	1,212	1,237	1,251	1,265	1,268	1,305	1,298
Instruments and related products	235	237	238	240	241	240	246	252	249	250
Miscellaneous manufacturing industries	330	333	332	334	337	335	336	336	345	343
Food and kindred products	1,151	1,154	1,150	1,144	1,147	1,131	1,121	1,129	1,126	1,127
Tobacco manufactures	80	76	74	73	72	73	73	74	66	64
Textile mill products	808	812	817	820	824	822	824	826	826	829
Apparel and related products	1,181	1,186	1,196	1,192	1,199	1,211	1,233	1,207	1,206	1,216
Paper and allied products	496	495	495	498	500	499	501	507	505	505
Printing and publishing	605	610	611	615	616	618	619	624	625	625
Chemicals and allied products	530	532	536	637	539	539	542	549	550	547
Petroleum and related products	114	113	113	112	114	111	113	115	114	114
Rubber and plastic products	337	339	343	350	354	354	355	358	363	361
Leather and leather products	315	315	315	316	318	319	316	315	315	318
Mining	639	637	633	635	633	629	630	638	631	619
Contract construction	3,162	3,244	3,235	3,281	3,304	3,207	3,220	3,178	3,211	3,191
Transportation and public utilities	3,997	4,020	3,939	3,997	4,042	4,057	4,068	4,074	4,092	4,112
Wholesale trade	3,246	3,259	3,270	3,288	3,303	3,329	3,352	3,362	3,355	3,358
Retail trade	9,065	9,103	9,177	9,244	9,319	9,307	9,321	9,348	9,353	9,366

NOTE: Data are not shown when held confidential by the source agency. r = revised; p = preliminary; NA = not available.

[1]Data are seasonally adjusted by the source agency.

ANALYTICAL MEASURES

TABLE 5 B

SELECTED DIFFUSION INDEXES AND COMPONENTS—Continued

Directions of Change—Continued

Diffusion index title and components	1-month spans										9-month spans									
	1964	1965									1964	1965								
	Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Mar-Dec	Apr-Jan	May-Feb	Jun-Mar	Jul-Apr	Aug-May	Sep-Jun	Oct-Jul	Nov-Aug	Dec-Sep
D54. SALES OF RETAIL STORES – Continued																				
Women's apparel, accessory stores	+	+	o	–	–	+	–	+	–	+	+	+	+	–	–	o	+	+	–	–
Family and other apparel stores	–	+	+	–	+	+	–	+	–	+	+	+	o	–	–	–	+	+	+	+
Shoe stores	–	–	–	–	–	+	–	–	–	+	o	+	–	–	–	o	+	+	–	+
Furniture, home furnishings stores	+	+	–	+	–	+	+	+	–	–	–	+	+	–	–	+	+	+	+	+
Household appliance, TV, radio stores	+	–	+	+	+	–	o	+	+	+	+	–	–	+	–	–	–	–	–	–
Lumber yards, building materials dealers	+	+	–	–	–	+	+	–	–	–	+	+	+	–	+	+	+	+	+	+
Hardware stores	+	–	–	–	+	+	–	+	–	–	+	+	+	–	+	+	–	+	–	–
Farm equipment dealers	+	+	+	–	+	+	–	-	+	–	–	–	–	–	+	+	+	+	+	+
Passenger car and other automotive dealers	+	+	+	–	–	+	+	+	–	–	+	+	+	+	+	+	+	+	+	–
Tire, battery, accessory dealers	–	–	+	–	+	+	–	+	+	+	–	+	+	o	+	+	+	+	–	+
Gasoline service stations	+	–	+	–	+	+	+	+	+	–	+	+	+	+	+	+	+	+	+	+
Drug and proprietary stores	+	+	+	+	+	–	+	+	–	+	+	+	+	+	+	+	+	+	+	+
Jewelry stores	–	+	+	–	–	+	+	+	–	–	–	+	+	+	–	–	+	+	+	+
Liquor stores	–	–	+	–	+	+	–	+	–	+	+	+	+	+	+	+	+	+	–	+
Other durable-goods stores	–	+	+	+	+	–	+	o	+	+	–	+	+	+	+	–	+	+	+	+
Other nondurable-goods stores	–	–	+	–	+	+	–	–	+	+	–	–	–	–	+	+	+	–	+	+

	1-month spans										6-month spans									
	1964	1965									1964	1965								
	Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Jun-Dec	Jul-Jan	Aug-Feb	Sep-Mar	Oct-Apr	Nov-May	Dec-Jun	Jan-Jul	Feb-Aug	Mar-Sep
D41. NUMBER OF EMPLOYEES IN NONAGRICULTURAL ESTABLISHMENTS (30 industry components)																				
Percent rising	78	67	82	87	58	58	85	87	50	65	87	80	90	90	83	72	77	90	80	77
All nonagricultural establishments	+	+	+	+	–	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Ordnance and accessories	–	o	+	–	–	+	+	+	+	+	–	–	–	–	–	–	+	+	+	+
Lumber and wood products	+	–	+	+	–	–	–	+	–	+	+	–	+	+	+	–	–	+	–	–
Furniture and fixtures	+	+	+	+	+	–	o	+	–	+	+	+	+	+	+	+	+	+	+	+
Stone, clay, and glass products	+	+	o	+	–	–	o	+	–	+	+	+	+	+	+	o	–	+	+	–
Primary metal industries	+	+	+	+	–	–	+	+	–	–	+	+	+	+	+	–	+	+	+	+
Fabricated metal products	+	+	+	–	+	–	+	+	–	–	+	+	+	+	+	+	+	+	+	+
Machinery	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Electrical equipment	+	+	+	+	+	+	+	+	–	+	+	+	+	+	+	+	+	+	+	+
Transportation equipment	+	+	+	+	+	+	+	+	+	–	+	+	+	+	+	+	+	+	+	+
Instruments and related products	+	+	+	+	+	–	+	+	–	+	+	+	+	+	+	+	+	+	+	+
Miscellaneous manufacturing industries	+	–	+	+	+	–	+	o	+	–	+	+	+	+	+	+	+	+	+	+
Food and kindred products	+	–	–	+	–	+	–	+	–	+	+	+	+	+	–	–	–	–	–	–
Tobacco manufactures	–	–	–	–	+	o	o	+	–	–	–	–	+	+	–	–	–	o	–	–
Textile mill products	+	+	+	+	o	–	+	+	o	+	+	+	+	+	+	+	+	+	+	+
Apparel and related products	+	+	–	+	+	+	+	–	–	+	+	+	+	+	+	+	+	+	+	+
Paper and allied products	–	o	+	+	+	–	+	+	–	o	+	+	+	+	+	+	+	+	+	+
Printing and publishing	+	+	+	+	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+
Chemicals and allied products	+	+	+	+	–	+	+	+	+	–	+	+	+	+	+	+	+	+	+	+
Petroleum and related products	–	o	–	+	–	–	+	+	–	o	–	–	–	–	–	–	o	+	+	o
Rubber and plastic products	+	+	+	+	+	–	+	+	+	–	+	+	+	+	+	+	+	+	+	+
Leather and leather products	o	o	+	+	–	+	–	–	o	+	+	+	+	+	+	+	+	o	–	o
Mining	–	–	+	–	–	o	+	+	–	–	–	–	+	–	–	–	–	+	–	–
Contract construction	+	–	+	+	–	+	+	–	+	–	+	+	+	+	+	+	–	–	–	–
Transportation and public utilities	+	–	+	+	o	+	+	+	+	+	+	–	–	+	+	+	+	+	+	+
Wholesale trade	+	+	+	+	+	+	+	+	–	+	+	+	+	+	+	+	+	+	+	+
Retail trade	+	+	+	+	–	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

+ = rising; o = unchanged; – = falling. Directions of change are computed even though data are held confidential.

SELECTED DIFFUSION INDEXES AND COMPONENTS—Continued

Basic Data—Continued

Diffusion index title and components	1964		1965			1965				
	Nov.	Dec.	Jan.	Feb.	Mar.	May	June	July	Aug.r	Sept.p
	Thousands of employees									
D41. NUMBER OF EMPLOYEES IN NONAGRICULTURAL ESTABLISHMENTS[1]—Con.										
Finance, insurance, real estate	2,970	2,975	2,979	2,987	2,997	3,005	3,013	3,018	3,024	3,026
Service and miscellaneous	8,634	8,654	8,689	8,730	8,754	8,797	8,814	r8,886	8,897	8,917
Federal government	2,354	2,352	2,342	2,335	2,340	2,345	2,352	2,374	2,379	2,385
State and local government	7,306	7,340	7,365	7,407	7,451	7,519	7,567	r7,568	7,579	7,640
D47. INDEX OF INDUSTRIAL PRODUCTION[1] (24 industry components)	Index: 1957-59 = 100									
All industrial production	135.4	138.1	138.6	139.2	140.7	141.6	142.7	144.2	144.3	142.8
Durable goods:										
Primary and fabricated metals	...	...	...	...	...	...	...	...	...	...
Primary metal products	136.1	138.6	139.6	136.9	140.4	140.2	143.0	r148.7	144.2	130
Fabricated metal products	136.9	139.7	140.6	145.0	145.2	146.0	r146.4	r148.1	148.2	146
Machinery and related products	...	...	...	...	...	...	...	...	...	...
Machinery, except electrical	148.1	150.7	151.3	152.7	153.8	157.0	159.4	r162.0	162.0	162
Electrical machinery	147.2	149.2	150.0	152.3	154.1	156.8	158.4	r158.6	158.9	161
Transportation equipment	129.2	140.3	141.4	139.7	144.4	147.3	149.5	149.8	151.3	148
Instruments and related products	140.2	142.0	142.7	145.3	146.9	147.0	149.8	152.1	151.5	154
Clay, glass, and lumber	...	...	...	...	...	...	...	...	...	126
Clay, glass, and stone products	127.7	130.2	132.4	131.8	129.2	130.3	131.6	132.6	133.1	133
Lumber and products	109.2	105.5	111.9	115.6	120.5	117.1	112.8	r115.4	114.5	(NA)
Furniture and miscellaneous	...	...	...	...	...	...	...	...	...	...
Furniture and fixtures	149.3	151.5	150.6	154.3	154.3	156.5	156.8	r155.8	157.2	157
Miscellaneous	137.4	139.1	139.6	140.8	142.4	143.6	143.6	r142.1	146.2	147
Nondurable goods:										
Textiles, apparel, and leather	...	...	...	...	...	...	...	...	134.7	135
Textile mill products	128.7	130.3	131.7	132.0	131.5	131.6	r132.2	r133.8	133.9	(NA)
Apparel products	139.1	140.6	142.2	143.7	144.0	145.3	r145.4	p114.8	(NA)	(NA)
Leather and products	105.4	105.6	108.7	106.6	106.1	110.9	r105.1	p107.7	(NA)	(NA)
Paper and printing	...	...	...	...	...	...	...	...	...	135
Paper and products	133.8	140.2	139.1	137.5	139.0	140.9	139.4	r142.3	141.6	(NA)
Printing and publishing	124.2	126.2	126.8	127.7	128.5	129.3	130.0	r131.3	132.9	130
Chemicals, petroleum, and rubber	...	...	...	...	...	...	...	...	164.7	166
Chemicals and products	163.2	166.4	166.7	167.8	169.5	169.3	169.9	r172.8	174.4	(NA)
Petroleum products	121.7	120.9	119.0	121.5	122.2	122.9	121.8	r126.3	125.2	(NA)
Rubber and plastics products	163.7	165.7	164.7	171.1	172.6	168.2	r169.1	p169.4	(NA)	(NA)
Foods, beverages, and tobacco	...	...	...	...	...	...	...	...	122.6	123
Foods and beverages	123.5	123.8	124.3	123.4	123.4	121.9	122.3	r123.1	122.8	(NA)
Tobacco products	121.0	125.4	122.2	123.5	127.2	116.5	121.8	p119.9	(NA)	(NA)
Minerals:										
Coal	109.6	110.1	107.7	103.2	103.1	113.0	r117.1	117.1	115.2	107
Crude oil and natural gas	110.4	110.4	109.8	110.6	111.4	111.9	r112.5	r112.6	114.5	112
Metal, stone, and earth minerals	...	...	...	...	...	...	...	...	...	127
Metal mining	126.6	121.8	126.7	123.4	124.6	121.6	123.7	r126.4	127.4	(NA)
Stone and earth minerals	123.9	123.4	120.8	122.9	124.1	123.9	125.8	r127.3	128.4	(NA)
D58. INDEX OF WHOLESALE PRICES, ALL MANUFACTURING[2] (23 manufacturing industries)										
All manufacturing industries	101.4	101.5	101.6	101.8	102.0	102.6	103.1	103.0	103.3	103.2
Durable goods:										
Lumber and wood products	100.3	100.6	102.1	101.7	100.9	99.6	99.3	99.5	101.0	101.4
Furniture and other household durables	98.6	98.5	98.3	98.2	98.3	98.0	98.0	97.8	97.7	97.7
Nonmetallic mineral products	101.8	101.5	101.8	101.7	101.8	101.8	102.1	102.1	101.7	101.9
Iron and steel	100.8	100.9	101.1	101.1	101.4	101.3	101.3	101.6	101.3	101.4

NOTE: Data are not shown when held confidential by the source agency. r = revised; p = preliminary; NA = not available.

[1]Data are seasonally adjusted by the source agency.

[2]Data are seasonally adjusted by the Bureau of the Census. (See "Seasonal and Related Statistical Adjustments", page 2.)

ANALYTICAL MEASURES

TABLE 5 B

SELECTED DIFFUSION INDEXES AND COMPONENTS—Continued

Directions of Change—Continued

Diffusion index title and components	1-month spans										6-month spans									
	1964	1965									1964	1965								
	Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Jun-Dec	Jul-Jan	Aug-Feb	Sep-Mar	Oct-Apr	Nov-May	Dec-Jun	Jan-Jul	Feb-Aug	Mar-Sep
D41. NUMBER OF EMPLOYEES IN NONAGRICULTURAL ESTABLISHMENTS–Con.																				
Finance, insurance, real estate	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Service and miscellaneous	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Federal government	-	-	-	+	+	o	+	+	+	+	+	+	+	+	+	-	o	+	+	+
State and local government	+	+	+	+	+	+	+	o	+	+	+	+	+	+	+	+	+	+	+	+
D47. INDEX OF INDUSTRIAL PRODUCTION (24 industry components)																				
Percent rising[1]	81	67	67	79	58	71	81	81	54	38	88	79	92	92	83	85	83	83	79	77
All industrial production	+	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+
Durable goods:																				
Primary and fabricated metals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Primary metal products	+	+	-	+	+	-	+	+	-	-	+	+	+	+	+	+	+	+	+	-
Fabricated metal products	+	+	+	+	+	-	+	+	+	-	+	+	+	+	+	+	+	+	+	+
Machinery and related products	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Machinery, except electrical	+	+	+	+	+	+	+	+	o	-	+	+	+	+	+	+	+	+	+	+
Electrical machinery	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Transportation equipment	+	+	-	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+
Instruments and related products	+	+	+	+	-	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+
Clay, glass, and lumber	..	..	..	..	..	..	..	..	..	-	..	..	..	..	..	..	..	..	..	-
Clay, glass, and stone products	+	+	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lumber and products	-	+	+	+	-	+	-	+	-	NA	-	-	+	+	+	+	+	+	-	NA
Furniture and miscellaneous	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Furniture and fixtures	+	-	+	o	+	+	+	-	+	-	+	+	+	+	+	+	+	+	+	+
Miscellaneous	+	+	+	+	+	+	o	-	+	+	+	+	+	+	+	+	+	+	+	+
Nondurable goods:																				
Textiles, apparel, and leather	..	..	..	..	..	..	..	..	-	+	..	..	..	..	..	..	..	..	+	+
Textile mill products	+	+	+	-	+	-	+	+	+	NA	+	+	+	+	+	+	+	+	+	NA
Apparel products	+	+	+	+	+	+	+	-	NA	NA	+	+	+	+	+	+	+	+	NA	NA
Leather and products	+	+	-	-	-	+	-	+	NA	NA	+	+	+	+	+	+	-	-	NA	NA
Paper and printing	..	..	..	..	..	..	..	..	..	-	..	..	..	..	..	..	..	..	..	+
Paper and products	+	-	-	+	+	+	-	+	-	NA	+	+	+	+	+	+	-	+	+	NA
Printing and publishing	+	+	+	+	-	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+
Chemicals, petroleum, and rubber	..	..	..	..	..	..	..	..	+	+	..	..	..	..	..	..	..	..	+	+
Chemicals and products	+	+	+	+	-	+	+	+	+	NA	+	+	+	+	+	+	+	+	+	NA
Petroleum products	-	-	+	+	-	+	-	+	-	NA	-	-	+	+	-	+	+	+	+	NA
Rubber and plastics products	+	-	+	+	-	+	+	+	NA	NA	+	+	+	+	+	+	+	+	NA	NA
Foods, beverages, and tobacco	..	..	..	..	..	..	..	..	-	o	..	..	..	..	..	..	..	..	-	-
Foods and beverages	+	+	-	o	-	-	+	+	-	NA	+	+	+	+	+	-	-	-	-	NA
Tobacco products	+	-	+	+	-	-	+	-	NA	NA	+	-	+	+	-	-	-	-	NA	NA
Minerals:																				
Coal	+	-	-	-	+	+	+	o	-	-	+	-	-	-	-	+	+	+	+	+
Crude oil and natural gas	o	-	+	+	+	-	+	+	+	-	-	-	-	-	+	+	+	+	+	+
Metal, stone, and earth minerals	..	..	..	..	..	..	..	..	..	-	..	..	..	..	..	..	..	..	..	+
Metal mining	-	+	-	+	+	-	+	+	+	NA	+	+	+	+	+	-	+	-	+	NA
Stone and earth minerals	-	-	+	+	-	+	+	+	+	NA	+	+	+	+	-	o	+	+	+	NA
D58. INDEX OF WHOLESALE PRICES, ALL MANUFACTURING (23 manufacturing industries)																				
Percent rising	61	63	61	67	67	61	61	63	54	54	61	70	78	83	76	80	83	76	67	76
All manufacturing industries	+	+	+	+	+	+	+	-	+	-	+	+	+	+	+	+	+	+	+	+
Durable goods:																				
Lumber and wood products	+	+	-	-	-	-	-	+	+	+	+	+	+	+	-	-	-	-	-	+
Furniture and other household durables	-	-	-	+	-	o	o	-	-	o	o	-	-	-	-	-	-	-	-	-
Nonmetallic mineral products	-	+	-	+	-	+	+	o	-	+	o	+	-	-	-	o	+	+	o	+
Iron and steel	+	+	o	+	+	-	o	+	-	+	+	+	o	+	+	+	+	+	+	o

+ = rising; o = unchanged; - = falling. NA Not available.

[1]The percent rising is based on 24 industry components. Where actual data for separate industries are not available, estimates are used to compute the percent rising. Directions of change for the most recent spans are computed before figures for the current month are rounded.

SELECTED DIFFUSION INDEXES AND COMPONENTS—Continued

Basic Data—Continued

Diffusion index title and components	1964		1965			1965				
	Nov.	Dec.	Jan.	Feb.	Mar.	May	June	July	Aug.r	Sept.p
	Index: 1957-59 = 100									
D58. INDEX OF WHOLESALE PRICES, ALL MANUFACTURING[1]-Continued										
Durable goods–Continued										
Nonferrous metals	112.3	113.2	111.6	112.1	112.3	114.9	116.2	115.8	116.6	117.2
Fabricated structural metal products	99.7	99.9	100.1	100.1	100.4	101.4	101.2	101.4	101.7	101.7
Fabricated nonstructural metal products	108.3	108.0	107.8	108.6	109.0	109.5	109.0	109.3	110.2	110.1
General purpose machinery and equipment	r104.4	r104.7	r103.9	104.3	104.4	104.7	104.8	104.7	105.7	105.5
Miscellaneous machinery	104.9	104.1	105.2	105.1	105.0	105.6	105.6	105.2	105.2	105.0
Electrical machinery and equipment	96.3	95.8	96.8	96.9	97.3	96.6	97.2	97.3	96.7	96.6
Motor vehicles	100.6	100.8	100.8	101.0	100.7	100.5	100.7	100.5	100.7	100.7
Miscellaneous products	108.7	109.4	107.9	108.4	109.1	110.8	113.0	113.3	112.2	110.9
Nondurable goods:										
Processed foods	100.4	101.1	101.3	102.2	102.0	104.1	106.2	106.3	107.0	106.1
Tobacco products and bottled beverages	107.3	107.4	107.4	108.0	108.0	108.4	107.7	107.2	107.1	107.4
Cotton products	98.8	98.9	99.1	99.2	99.3	100.1	100.7	100.9	100.8	100.9
Wool products	103.4	102.5	103.0	102.9	102.7	103.8	103.9	104.7	105.1	105.4
Manmade fiber textile products	96.5	96.9	97.0	96.4	96.2	95.8	95.7	95.6	94.8	94.3
Apparel	103.1	103.1	103.3	103.3	103.4	103.4	103.6	103.6	103.7	103.8
Pulp, paper, and allied products	99.0	98.9	98.6	98.7	99.3	100.1	100.1	100.2	100.3	100.4
Chemicals and allied products	97.0	97.3	97.0	97.4	97.3	97.5	97.4	97.5	97.3	97.4
Petroleum products, refined	93.6	93.3	94.1	94.0	94.5	95.5	95.4	95.5	97.4	96.7
Rubber and rubber products	91.8	91.8	92.0	92.0	92.1	93.2	93.5	r93.5	93.4	93.5
Hides, skins, leather, and leather products	105.0	105.1	105.1	105.9	106.7	107.3	107.6	108.4	112.0	111.2

r = revised; p = preliminary.

[1]Data are seasonally adjusted by the Bureau of the Census. (See "Seasonal and Related Statistical Adjustments", page 2.)

Basic data for components of diffusion index D19, Index of stock prices, 500 common stocks, and of diffusion index D5, Initial claims for unemployment insurance, State programs, are not available from the Census Bureau.

ANALYTICAL MEASURES

TABLE 5 B

SELECTED DIFFUSION INDEXES AND COMPONENTS—Continued

Directions of Change—Continued

Diffusion index title and components	1-month spans										6-month spans									
	1964	1965									1964	1965								
	Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Jun-Dec	Jul-Jan	Aug-Feb	Sep-Mar	Oct-Apr	Nov-May	Dec-Jun	Jan-Jul	Feb-Aug	Mar-Sep
D58. INDEX OF WHOLESALE PRICES, ALL MANUFACTURING—Continued																				
Durable goods—Continued																				
Nonferrous metals	+	−	+	+	+	+	+	−	+	+	+	+	+	+	+	+	+	+	+	+
Fabricated structural metal products	+	+	o	+	+	+	−	+	+	o	+	+	+	+	+	+	+	+	+	+
Fabricated nonstructural metal products	−	−	+	+	+	+	−	+	+	−	−	−	+	+	+	+	+	+	+	+
General purpose machinery and equipment	+	−	+	+	−	+	+	−	+	−	+	−	+	+	o	+	+	+	+	+
Miscellaneous machinery	−	+	−	−	+	+	o	−	o	−	−	+	+	+	+	+	+	o	+	o
Electrical machinery and equipment	−	+	+	+	o	−	+	+	−	−	−	o	+	+	+	+	+	+	−	−
Motor vehicles	+	o	+	−	+	−	+	−	+	o	−	+	+	o	+	−	−	−	−	o
Miscellaneous products	+	−	+	+	+	−	+	+	−	−	+	−	+	+	+	+	+	+	+	+
Nondurable goods:																				
Processed foods	+	+	+	−	+	+	+	+	+	−	+	+	+	+	+	+	+	+	+	+
Tobacco products and bottled beverages	+	o	+	o	+	−	−	−	−	+	−	+	+	+	+	+	+	−	−	−
Cotton products	+	+	+	+	+	+	+	+	−	+	−	+	+	+	+	+	+	+	+	+
Wool products	−	+	−	−	+	+	+	+	+	+	−	+	−	−	−	+	+	+	+	+
Manmade fiber textile products	+	+	−	−	−	−	−	−	−	−	+	+	+	+	−	−	−	−	−	−
Apparel	o	+	o	+	+	−	+	o	+	+	+	+	+	+	+	+	+	+	+	+
Pulp, paper, and allied products	−	−	+	+	+	+	o	+	+	+	+	−	−	+	+	+	+	+	+	+
Chemicals and allied products	+	−	+	−	+	o	−	+	−	+	+	+	+	+	+	+	+	+	−	+
Petroleum products, refined	−	+	−	+	−	+	−	+	+	−	+	+	+	+	+	+	+	+	+	+
Rubber and rubber products	o	+	o	+	+	+	+	o	−	+	−	−	o	o	+	+	+	+	+	+
Hides, skins, leather, and leather products	+	o	+	+	−	+	+	+	+	−	+	o	+	+	+	+	+	+	+	+

D19. INDEX OF STOCK PRICES, 500 COMMON STOCKS[1] (23 industry components)[2]	1-month spans										9-month spans									
	1964	1965									1964	1965								
	Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Mar-Dec	Apr-Jan	May-Feb	Jun-Mar	Jul-Apr	Aug-May	Sep-Jun	Oct-Jul	Nov-Aug	Dec-Sep
Percent rising[3]	24	92	82	64	71	67	0	25	80	81	69	66	75	77	77	80	58	52	58	73
Index of 500 stock prices	−	+	+	+	+	+	−	−	+	+	+	+	+	+	+	+	+	+	+	+
Coal, bituminous	−	+	+	−	−	−	−	−	+	+	−	o	+	+	+	+	−	−	−	−
Food composite	−	+	+	−	+	+	−	−	+	o	+	+	+	+	+	+	o	−	−	+
Tobacco (cigarette manufacturers)	−	+	−	+	+	+	−	+	+	+	+	−	−	−	+	+	−	−	+	+
Textile products	+	+	+	−	+	+	−	+	+	+	+	+	+	+	+	+	+	+	+	+
Paper	−	+	−	+	+	+	−	−	+	+	−	−	−	+	+	+	−	−	−	−
Publishing	−	+	+	+	+	+	−	+	+	+	+	+	+	+	+	+	+	+	+	+
Chemicals	−	+	+	−	−	+	−	−	+	+	+	+	+	+	+	+	+	+	−	+
Drugs	+	+	+	+	o	−	−	+	+	+	+	+	+	+	+	+	+	+	+	+
Oil composite	−	+	−	−	−	+	−	+	+	+	+	+	+	+	−	−	−	−	−	−
Building materials composite	−	+	+	+	+	o	−	−	−	+	−	−	−	−	−	+	−	−	−	−
Steel	−	+	o	+	+	−	−	−	+	+	−	−	−	−	−	−	−	−	−	+
Metal fabricating	o	+	+	+	+	+	−	−	+	+	+	+	+	+	+	+	+	+	+	+
Machinery composite	−	+	+	+	+	+	−	−	+	+	+	+	+	+	+	+	+	+	+	+
Office and business equipment	−	+	+	+	+	+	−	+	+	+	−	−	−	−	+	+	+	+	+	+
Electric household appliances	−	+	+	+	−	+	−	−	−	+	+	+	+	+	+	+	+	+	+	+
Electronics	+	+	+	+	−	+	−	−	+	+	+	+	+	+	+	+	+	+	+	+
Automobiles	−	+	−	+	+	−	−	−	+	+	+	+	+	+	+	+	−	−	−	+
Radio and television broadcasters	−	+	+	−	−	−	−	−	+	+	+	+	+	−	−	−	−	−	−	−
Telephone companies	−	+	−	−	+	+	−	−	o	+	−	−	−	−	−	+	−	−	−	+
Electric companies	−	+	+	−	+	+	−	−	−	+	+	+	+	+	+	+	+	−	−	+
Natural gas distributors	+	+	+	+	−	−	−	+	+	−	+	+	+	+	+	+	+	+	+	−
Retail stores composite	−	+	+	+	+	+	−	−	+	−	+	+	+	+	+	+	+	+	+	+
Life insurance	−	+	+	−	+	−	−	−	−	+	−	−	−	−	−	−	−	−	−	−

+ = rising; o = unchanged; − = falling.

[1]Data are not seasonally adjusted.

[2]The 23 components shown here include 18 of the more important industries and 5 composites representing an additional 23 of the industries used in computing the diffusion index in table 4.

[3]Based on 78 components to November 1964 and on 77 components thereafter.

SELECTED DIFFUSION INDEXES AND COMPONENTS—Continued

Directions of Change—Continued

Diffusion index title and components	1-month spans										9-month spans									
	1964	1965									1964	1965								
	Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Mar-Dec	Apr-Jan	May-Feb	Jun-Mar	Jul-Apr	Aug-May	Sep-Jun	Oct-Jul	Nov-Aug	Dec-Sep
D5. INITIAL CLAIMS FOR UNEMPLOYMENT INSURANCE, STATE PROGRAMS[1] (26 area components)																				
Percent rising	83	24	57	66	62	60	51	34	38	79	89	62	70	74	72	79	79	60	66	62
47 labor market areas	+	-	-	+	-	+	+	-	-	+	+	+	+	+	+	+	+	+	+	+
Northeast region:																				
Boston (7)	+	-	+	+	-	-	+	-	-	+	+	+	+	+	+	-	+	-	-	+
Buffalo (19)	+	-	-	-	+	+	+	+	-	+	+	+	+	-	+	-	-	+	-	+
Newark (11)	+	-	-	+	-	+	+	-	-	+	+	-	-	+	+	+	+	+	+	-
New York (1)	+	-	+	+	-	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+
Paterson (20)	+	-	-	+	-	+	-	-	+	-	+	+	+	+	-	+	+	-	+	-
Philadelphia (4)	+	-	+	+	+	+	+	-	+	-	+	+	+	+	+	+	+	+	+	+
Pittsburgh (9)	+	-	+	-	+	-	-	+	+	-	+	+	+	-	+	+	+	+	+	-
Providence (25)	-	-	+	-	-	+	+	-	-	+	+	+	+	+	+	+	+	+	-	+
North Central region:																				
Chicago (2)	+	-	-	-	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+
Cincinnati (21)	+	-	+	+	+	+	-	+	-	+	-	-	-	-	+	+	-	+	-	+
Cleveland (10)	+	-	+	+	+	+	-	+	-	+	+	-	+	+	+	+	+	+	-	+
Columbus (26)	-	-	+	-	+	-	+	-	-	+	+	-	+	+	+	+	+	+	+	+
Detroit (5)	+	+	+	+	-	+	-	-	-	+	+	+	+	+	+	+	+	-	+	+
Indianapolis (23)	+	-	+	-	+	+	-	+	-	+	+	-	+	+	+	+	+	+	-	-
Kansas City (18)	+	+	-	+	-	-	-	+	-	+	-	+	-	+	-	+	-	+	-	+
Milwaukee (15)	-	+	-	+	+	+	-	-	+	+	+	+	-	+	-	+	-	+	+	+
Minneapolis (13)	+	+	-	+	-	+	-	-	+	-	+	+	+	+	-	+	+	-	+	+
St. Louis (8)	+	+	-	-	+	-	+	-	-	+	+	+	-	-	+	+	+	-	+	+
South region:																				
Atlanta (17)	+	-	-	+	-	-	-	+	-	+	+	-	+	+	+	+	-	+	-	-
Baltimore (12)	+	-	+	+	-	+	+	+	-	+	+	+	-	+	-	+	+	+	-	-
Dallas (16)	+	+	-	+	-	-	+	-	-	+	+	+	+	+	+	-	+	+	+	+
Houston (14)	-	+	-	+	+	-	-	-	+	+	+	+	+	+	+	+	+	-	-	+
West region:																				
Los Angeles (3)	+	+	+	-	+	+	+	-	-	+	+	+	+	+	+	+	+	+	+	+
Portland (24)	+	+	-	+	-	+	-	+	-	+	-	+	-	+	+	+	+	+	+	+
San Francisco (6)	+	-	+	-	-	+	-	-	-	+	+	-	+	+	-	+	-	-	+	+
Seattle (22)	-	+	-	+	-	+	+	-	+	+	+	+	+	+	-	+	+	+	+	+

- = rising; o = unchanged; + = falling. The signs are reversed because this series usually rises when general business activity falls and falls when business rises. Data used are for the week ending nearest the 22d of the month.

[1]Series components are seasonally adjusted by the Bureau of the Census before the direction of change is determined. (See "Seasonal and Related Statistical Adjustments", page 2.) The percent rising is based on 47 labor market areas. Directions of change are shown separately for only the 26 largest areas. The number in parentheses indicates the size rank for each labor market area.

BCD Technical Paper

SUMMARY OF THE X-11 VARIANT OF THE CENSUS METHOD II SEASONAL ADJUSTMENT PROGRAM

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I. HISTORY OF CENSUS SEASONAL ADJUSTMENT METHODS

There are various and sundry methods for seasonally adjusting economic time series, all of which are based on the premise that seasonal fluctuations can be measured in an original series (O) and separated from trend, cyclical, trading-day, and irregular fluctuations. The seasonal component (S) is defined as the intrayear pattern of variation which is repeated constantly or in an evolving fashion from year to year. The trend-cycle component (C) includes the long-term trend and the business cycle. The trading-day component (TD) consists of variations which are attributed to the composition of the calendar. The irregular component (I) is composed of residual variations, such as the sudden impact of some political events, the effect of strikes, unseasonable weather conditions, reporting and sampling errors, etc. The seasonally adjusted series (CI) consists of the trend-cycle and irregular components. Experience has indicated that the seasonal, trend-cycle, trading-day, and irregular components are related in a multiplicative fashion (O = S x C x TD x I) for most national economic time series.

The seasonal-adjustment method in the most widespread use today is the ratio-to-moving-average method, which was developed during the 1920's by Frederick R. Macaulay at the National Bureau of Economic Research (NBER). It has the advantages of relatively precise measurement of the components and flexibility concerning the types of series which may be well adjusted by it.

In 1954, the Bureau of the Census introduced the first electronic computer program for seasonally adjusting economic time series, making the application of the ratio-to-moving-average method on a large-scale basis possible for the first time. Variants of the Census Method are now in widespread use throughout the world for adjusting series at the company, industry, and national-aggregate levels.

In 1955, the original Census Bureau program was replaced with a revised procedure called Census Method II. Since that time, the Census Bureau has conducted an extensive research program designed to improve seasonal adjustment methods. This program has moved forward on two fronts. First, there has been a major effort to improve the ratio-to-moving-average method. This effort has been directed primarily to methods of improving the moving averages used to compute seasonal-factor and trend-cycle curves, the moving-average weights used for computing the ends of these curves, the estimation of trading-day variation from monthly data, and the handling of extreme values. In addition, research intended to exploit parametric methods using multiple regression techniques has been undertaken. Regression analysis allows for explicit functional specifications of the seasonal and trend-cycle components which lend themselves to conventional statistical analysis more readily than the estimates provided by the ratio-to-moving-average method. However, such techniques are presently not as desirable as the moving-average methods in practice, since no regression models have yet been demonstrated empirically to provide sufficiently accurate estimates of the trend-cycle and the seasonal, particularly in the current period.

From time to time, experimental variants of Method II which incorporate the results of this research are introduced. They are identified with the letter "X" and a sequence number. The first such variant to be made available to the public (1960) was X-3. It differed from the original Method II in the method of replacing extreme values and the method of computing the seasonal factors for the most recent years. The latest variants to be introduced (1961) were X-9, which was used as the standard program, and X-10, which was used to adjust more erratic series. X-10 contains a variable seasonal-factor curve routine, which selects a seasonal-factor moving average whose length depends on the relative amplitudes of the irregular and seasonal fluctuations in a given month. Thus, it is able to fit more stable seasonal curves to highly irregular series than previous variants of Method II.

In October 1965, the X-11 version of Method II replaced the X-9 and X-10 versions as the standard program at the Bureau of the Census and is now available to other users. It includes several improvements over earlier versions. The new features in X-11 provide additional tools for the time series analyst. While the computations in the standard program are sufficient for most applications, the analyst can select optional features peculiar to his own needs. For example, he may choose between the additive and multiplicative versions and between the full seasonal-adjustment routine and one limited to the calculation of summary measures computed from seasonally adjusted data obtained from other sources; the σ limit for identifying extreme values may be varied, providing for contingencies such as strikes; and he may specify the moving averages to be used in estimating the trend-cycle and seasonal components. Another possibility is to take into account both the absolute and relative relations among the seasonal, trend-cycle, and irregular components

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A full description of X-11 will appear in Bureau of the Census Technical Paper No. 15, The X-11 Variant of the Census Method II Seasonal Adjustment Program. A Fortran deck for X-11 will also be available from the Bureau of the Census at cost.

Morton Somer programed the monthly versions of X-11 and Norman E. Bakka programed the quarterly versions.

of time series by making additive and multiplicative adjustments sequentially. As a result of the availability of these options, X-11 is an instrument, not only for the massive seasonal adjustment of time series, but also for seasonally adjusting unusual series, for research into new techniques of time series analysis, and for studies of the relations among different types of fluctuations.[1]

The major improvements in X-11 are summarized in section II and described in sections III to VI. X-11 is compared with earlier versions of Method II in section VII.

II. SUMMARY OF IMPROVEMENTS IN X-11

Quarterly Program

In addition to the monthly seasonal adjustment program, a program (X-11Q) is now available to adjust quarterly series. The operations in the quarterly program are analogous to those in the monthly program.

Additive Programs

Both X-11 and X-11Q contain options which enable the user to make additive as well as multiplicative adjustments. As in earlier versions of Method II, an option is available to compute summary measures of the trend-cycle and irregular components from seasonally adjusted input data.

Fortran Coding

The X-11 and X-11Q programs are available in Fortran IV, a simplified programming language which can be used on many different computers. The selection of Fortran makes X-11 readily available for use on many medium- and large-scale electronic computers. Program modifications can easily be made to adapt the computations or selection of output tables to specific uses.

Trading-Day Routine

A technique for estimating trading-day variation from information contained in the monthly data is included in X-11. The monthly irregular values are regressed upon a calendar that contains the number of times each day of the week occurs in each particular month in order to estimate seven daily weights. The user has the choice of basing a trading-day adjustment solely on the internally computed estimates, combining the internal estimates with a priori information that may be available or basing the adjustment solely on a priori information as in earlier versions of Method II. More information concerning the new trading-day routine is given in section III.

Variable Trend-Cycle Moving-Average Routine

A choice of several moving averages is available in X-11 for estimating the trend-cycle component. The appropriate moving average of the seasonally adjusted series is chosen on the basis of a preliminary estimate of the $\bar{I}/\bar{C}$ ratio, which relates the average absolute month-to-month percent change in the irregular to that in the trend-cycle. While the trend-cycle moving average selected for most series will be about the same as that in previous versions of the program, where a weighted 15-term average was applied regardless of the $\bar{I}/\bar{C}$ ratio, more appropriate moving averages will be selected for highly irregular and very smooth series. In this manner, the range of series which can be adequately adjusted by Method II is extended. For special purposes, the user can specify the moving average to be applied rather than accept the selection provided by the program. More details are given in section IV.

Graduated Treatment of Extremes

An improved treatment of extreme values is introduced. Rather than designating values in the irregular component that fall more than 2 standard deviations (σ's) from 100 as "extreme" and assigning them a "weight" of zero as was done in earlier variants, a graduated scheme is used. Values outside 2.5 σ are considered definitely extreme and receive zero weight. Weights for values between 1.5 and 2.5 σ are graduated linearly from full weight at 1.5 σ to zero weight at 2.5 σ. Values within 1.5 σ receive full weight. Iteration, based upon a modified original series where irregular values beyond 1.5 σ are modified with the graduated weights, is used to reduce the effect of large irregular values upon the final estimates of the seasonal and trend-cycle components. More details are given in section V.

Additional Tests and Summary Measures

New tests and summary measures have been added as analytical aids. Included are the following:

1. New summary measures.—Estimates of the percent contributions of S, C, I, TD, and P (prior adjustment factors, such as holiday adjustments) to the variation in O are given as additional summary measures. These measures give the user a better appreciation of the importance of each component than did the previous technique of presenting ratios of average absolute month-to-month percent changes ($\bar{I}/\bar{C}$, $\bar{I}/\bar{S}$, $\bar{S}/\bar{O}$, etc.). I/C is now shown for 1- to 12-month spans instead of the previous 1- to 5-month spans, although MCD (months for cyclical dominance) is still shown as "6" when $\bar{I}/\bar{C} \geq 1.0$ over the 5-month span. Also, other summary measures such as $\bar{I}$, $\overline{CI}$, etc., are computed over spans other than 1 month. In addition to measures of average percent change without regard to sign ($\bar{I}$, $\bar{C}$, etc.), the average percent change with regard to sign and the standard deviations of the percent changes in O, I, C, S, CI and MCD (the MCD-span moving average of CI) over several monthly spans are shown.

2. X-11 test for stable seasonality.—This consists of an analysis-of-variance F-test for stable seasonality. The F-test is applied to the S-I ratios to determine whether seasonality is present in the unadjusted series.

3. Test for the existence of trading-day variation.—An analysis-of-variance F-test may be applied to determine whether trading-day variation is present in the unadjusted series. Since this method also tests the significance of the daily weights which may be computed internally from the data, the F-ratio may be used to decide whether or not to apply the computed daily weights.

4. Standard errors.—Estimates of standard errors of the trading-day weights and monthly adjustment factors are included to aid the user in assessing the significance of trading-day variation in the series.

More details on these tests and summary measures are given in section VI.

[1] For the advantages of time series analysis with the types of adjustments made by this program, see Electronic Computers and Business Indicators by Julius Shiskin, National Bureau of Economic Research, Occasional Paper No. 57, New York, 1957.

III. TRADING-DAY ADJUSTMENT

An option in X-11 provides for a trading-day adjustment based upon the actual variations in the data. Seven daily weights are estimated by regressing the irregular series upon the number of times each day of the week occurs in each particular month. From these seven weights, monthly factors are constructed and divided into the data to remove trading-day variation. A trading-day adjustment based upon the information contained in the data rather than upon a priori information concerning the daily pattern of activity has the following advantages:

1. It is less expensive than attempting to establish independently the pattern of daily activity for each individual series.

2. It often provides a better adjustment because allowance is made for the net effect of several factors related to the calendar, some of which (such as the effect of bookkeeping practices) may not be possible to determine a priori.

In general, when the irregular component of the series has an average absolute month-to-month change ($\bar{I}$) of less than about 8 percent, the estimates provided from the data are adequate for the removal of trading-day variation. When the data are more irregular, the routine will not provide useful estimates. Standard tests of significance are provided to help appraise the reliability of the estimates for a given series and to determine whether trading-day variation (or residual trading-day variation if a prior adjustment has been made) is present in the original series.

In addition to the option of estimating seven daily weights from the data, two other options are available:

1. Rather than basing an adjustment upon estimates made from the data, seven daily weights from which the computer constructs monthly adjustment factors can be supplied by the user. This option is useful when there is reliable a priori information concerning trading-day variation or when the user wants to apply the same weights as those used in another adjustment.

2. Seven daily weights can be supplied by the user; and, if they do not entirely explain the trading-day variation found in the data, they can be corrected on the basis of the internal evidence and the modified weights can be used to make the trading-day adjustment.

In addition to these new techniques which use seven daily weights, an option of supplying a set of monthly adjustment factors which the computer divides into the unadjusted data is available. This option can be used in place of the new techniques to adjust for trading-day variation; or it can be used with or without the new techniques to adjust for holidays, strikes, etc.

In computing monthly trading-day adjustment factors from a set of seven daily weights (a priori or those computed by X-11), an option is available to include a length-of-month adjustment in the monthly adjustment factors.[2] The seasonally adjusted series will be virtually the same whether or not this option is used, since length-of-month variation will be included in the seasonal factors if allowance is not made for it in the trading-day factors.

[2] "Length-of-month variation" is defined as variation attributable to the number of days in a particular month, while "trading-day variation" is defined as variation attributable to the number of Mondays, Tuesdays, etc., in a particular month.

IV. MOVING AVERAGES

Variable Trend-Cycle Curve Routine

In X-11, the moving average used to estimate the trend-cycle component is selected on the basis of the amplitude of irregular variations in the data relative to the amplitude of long-term systematic variations. This routine selects a moving average that provides a suitable compromise between the need to smooth the irregular with a long-term inflexible moving average and the need to accurately reproduce the systematic element with a short-term flexible moving average. For many series, the average chosen in X-11 has about the same smoothing power as those used in earlier versions of Method II. For highly irregular or very smooth series, a more appropriate average is chosen, thereby extending the range of series which can be well adjusted by Method II.

The selection of the appropriate moving average for estimating the trend-cycle component is made on the basis of a preliminary estimate of the $\bar{I}/\bar{C}$ ratio (the ratio of the average absolute month-to-month change in the irregular to that in the trend-cycle). A 13-term Henderson average of the preliminary seasonally adjusted series is used as the preliminary estimate of the trend-cycle, and the ratio of the preliminary seasonally adjusted series to the 13-term average is used as the preliminary estimate of the irregular. The appropriate average selected for a given value of $\bar{I}/\bar{C}$ is given in the following table:

$\bar{I}/\bar{C}$	Length of moving average selected
0.00-0.99	9-term Henderson
1.00-3.49	13-term Henderson
3.50 and over	23-term Henderson

The three new weighted moving averages in the variable trend-cycle routine replace the weighted 15-term Spencer average used in earlier versions of Method II. The new averages meet the same criterion of smoothness as the 15-term Spencer average; i.e., they minimize the sum of squares of the third differences of the curve. The distinctive feature in X-11 is the introduction of a 9-term moving average for smooth series and a 23-term moving average for highly irregular series. (A 5-term Henderson average is used for all quarterly series.)

Seasonal-Factor Curve Routine

The S-I ratios for each month are smoothed by a 3x5-term moving average (a 3-term average of a 5-term average) to estimate final seasonal factors. In the X-9 version, S-I ratios were smoothed with a 3x3- or a 3x5-term average depending on the value of $\bar{I}$. The weights for extending the 3x5 average at the ends of series in X-11 are the same as those used in X-9.

Optionally, the user may specify any of the following seasonal factor curves to compute final seasonal factors for any particular month: 3-, 3x3-, 3x5-, 3x9-, n-term, where "n" is the number of years of data in a particular month (i.e., a stable seasonal).

V. GRADUATED TREATMENT OF EXTREMES

Many economic series contain extreme values which must be modified or removed before adequate estimates of the seasonal, trading-day, and trend-cycle components can be made. These extremes may reflect economic developments, such as strikes; reactions to unexpected political events; unseasonable weather; errors of measurement; etc. In many instances, allowance for extremes can be made by the user before the data are submitted for seasonal adjustment. However, it is generally more feasible to rely upon the computerized statistical tests provided in Method II to detect and remove extremes.

Previous versions of Method II computed preliminary estimates of S and the standard deviation of I and designated as extreme those S-I ratios which fell 2 or more σ's beyond the estimates of S. The σ's were computed separately for each month. Values designated as extreme were replaced in the original version of Method II with an average of the extreme value and the ratios for that month in the preceding and following years. In X-3, X-9, and X-10, the extremes were replaced with an average of the two nearest nonextreme S-I ratios on either side of the extreme for that month.

The previous techniques are replaced in X-11 with a new scheme that tests each value of a preliminary irregular component against a standard deviation computed over a moving 5-year period (60 months or 20 quarters). For example, the irregulars in 1952 are tested for extremeness by comparing them with a σ computed from 1950 to 1954. A preliminary σ is computed, values beyond 2.5 σ are removed, and σ is recomputed. Values outside 2.5 σ are considered extreme and are assigned a zero (0.0) weight. Values inside 1.5 σ receive full weight (1.0). Values between 2.5 and 1.5 σ receive partial weight, graduated linearly from zero at 2.5 σ to full weight at 1.5 σ.

The choice of 1.5 and 2.5 as σ limits is optional. For some purposes other limits may be desirable. Lower limits are sometimes better for highly irregular series or series substantially affected by strikes, where a greater portion of the series may be regarded as extreme. Likewise, higher limits are sometimes better for very smooth series.

Iteration is used in the following ways to improve the designation of extremes:

1. The computation of σ is iterated by computing a preliminary σ, removing extremes beyond 2.5 σ and recomputing σ.

2. The process of developing a preliminary irregular component in which extremes are identified involves iteration by (a) modifying values in the original series corresponding to months where less than full weight was assigned to an irregular, (b) reestimating the trend-cycle and seasonal components and deriving a new preliminary irregular component, and (c) reidentifying extremes and modifying the original series again. After modifying the original series for the second time, final estimates of the trend-cycle and seasonal are developed.

This new technique of identifying extremes results in the following improvements:

1. It modifies the original series rather than the S-I ratios, thereby taking account of the effect of extremes upon the trend-cycle.

2. Assigning a graduated weight pattern to near-extreme values removes the all-or-nothing decision in earlier versions of Method II, where a value might receive full weight in one adjustment and zero weight in a subsequent adjustment containing additional data. This phenomenon had, at times, contributed to substantial revisions in the seasonal factors.

3. Computing the σ limits over all 12 months makes it possible to identify more extremes in a single month.

4. Computing the σ limits over moving 5-year periods substantially abates the effect of additional data upon revisions in the seasonal factors for the early years of the series.

In estimating trading-day variation, a less complex technique is used to identify extremes than that described above. A "trading-day standard deviation" is computed, extremes beyond 2.5 σ are removed, and σ is recomputed. For the entire period included in the trading-day regression, irregular values beyond 2.5 σ limits are excluded from the regression.

The X-11 treatment is an adaptation of that introduced in 1964 by the Bureau of Labor Statistics (BLS). It combines the iterative procedure with the variable trend-cycle moving average and trading-day routines. Also, the Census Bureau procedure of developing a modified original series allows for the contigency that several consecutive values may be regarded as extreme, as in the case of a prolonged strike. The limits of 1.5 and 2.5 σ are optional in X-11, whereas the BLS procedure uses fixed limits of 1.0 and 2.8 σ.

VI. NEW TESTS AND SUMMARY MEASURES

X-11 Test for the Existence of Stable Seasonality

A test for the existence of stable seasonality (available optionally in X-9 and X-10) is performed on the final unmodified S-I ratios in X-11. It consists of computing the ratio of the "between months" variance to the residual variance. If this F-ratio is above a given tabled value, a message is printed that stable seasonality is present.

Some caveats in interpreting the results of the X-11 test are given below:

1. The test may not be completely reliable when the variance of the irregular is very large or very small relative to the variance of the seasonal. In such cases, the user may find it necessary to examine $\bar{I}$ and $\bar{S}$ before making a decision.

2. When the variance of the seasonal is sufficiently small in absolute value or small relative to the variance in the other systematic components (trend-cycle and trading-day), there may be a case for not making a seasonal adjustment even though the tests show that the seasonal is significant relative to the irregular.

3. The existence of moving seasonality may reduce the "between months" variance in the stable seasonality test so that the test may find no evidence of stable seasonality when in fact a pronounced seasonal pattern is present.

4. Special problems arise when a series contains discontinuities in the seasonal pattern or when parts of a series contain no seasonal pattern. These conditions may be ascertained by an inspection of the seasonal factors and their charts. When a series contains an abrupt change in the seasonal pattern, it is best to break the series at the change and test and adjust the two parts of the series separately. When the amount of seasonal variation in a series has been declining over time, it would be well to analyze only the most recent years and to base decisions concerning adjustment of current data on this analysis.

Tests for the Existence of Trading-Day Variation

As part of the trading-day routine in X-11, tests for the existence of trading-day variation are provided as follows:

An F-test is performed to test for the significance of the trading-day regression. If prior daily weights (or monthly factors) are applied to the original series, this test determines the adequacy of the prior adjustment. If not, this test determines the existence of trading-day variation in the unadjusted data. In addition, t-tests are provided to determine whether each of seven computed daily weights is significantly different from the corresponding prior weight and/or 1.0 (no trading-day variation is represented by all seven weights equal to 1.0). As an option, the user may make the decision as to whether to apply the estimated weights according to the value of the F-ratio.

Also, standard errors of the daily weights and monthly adjustment factors are supplied to aid the user in assessing the significance of trading-day variation.

New Summary Measures

As a set of new summary measures, estimates of the percent contributions of S, C, I, TD and P to the variation in O are given. For example, the percent contribution of S would be

$$\frac{\overline{S}^2}{\overline{S}^2+\overline{C}^2+\overline{I}^2+\overline{TD}^2+\overline{P}^2},$$

where $\overline{S}$, $\overline{C}$, $\overline{I}$, $\overline{TD}$ and $\overline{P}$ are as defined in sections I and II.

The measures of average percent change without regard to sign ($\overline{I}$, $\overline{C}$, etc.), which are computed over 1-month spans in earlier versions of Method II, are now computed over longer spans. $\overline{O}$, $\overline{CI}$, $\overline{I}$, $\overline{C}$, $\overline{S}$, $\overline{P}$ and $\overline{TD}$ are computed and printed out over 1- to 6- and 7-, 9-, 11-, 12-month spans. Also, measures of the average percent changes with regard to sign and the standard deviations of the percent changes for O, I, C, S, CI and MCD over the same spans are given to facilitate applications of statistical tests to the components. The $\overline{I}/\overline{C}$ ratio is now printed out for 1- to 12-month spans, although months for cyclical dominance (MCD) is still designated as "6" when $\overline{I}/\overline{C} \geq 1.0$ over the 5-month span as in earlier versions of Method II.

VII. COMPARISON OF X-11 WITH EARLIER VARIANTS OF METHOD II

The sample printout in section IX illustrates some of the improvements introduced in X-11. The trading-day routine and the new tests and summary measures are shown for U.S. General Imports.

It is to be noted that only a few of the innovations in X-11 apply to the seasonal adjustment process itself. Most concern prior adjustments of the data and add further measures for analyzing and interpreting the seasonally adjusted series. Experience in developing X-11 (and earlier variants of Census Method II) has demonstrated that we find it difficult to make improvements in our method of seasonal adjustment. We feel that while X-11 has much to contribute to time series analysis in the broad sense, it represents only a small step forward so far as seasonal adjustment is concerned.

Highly irregular series may be more adequately adjusted by X-11 because of the graduated treatment of extremes and the choice of several moving averages to estimate the trend-cycle. Revisions between preliminary and final seasonal-factor estimates for early years of a series have been virtually eliminated in X-11. Limited evidence indicates that current-year revisions in X-11 are about the same as those in X-9 and X-10. When widespread experience with this variant is acquired by our staff and other users, a systematic evaluation of these changes will be made.

VIII. DESCRIPTION OF THE COMPUTER PRINTOUT

The computer program is divided into seven main parts, as follows:

Part A - Adjustments for trading-day variation, holiday variation, etc., (when supplied by the user) are applied prior to the seasonal computations.

Part B - Preliminary estimates of internally computed trading-day factors (when applicable) and weights for the irregular component are estimated.

Part C - Final estimates of trading-day factors (when applicable) and weights for the irregular component are computed.

Part D - Final estimates of the seasonal factors, seasonally adjusted series, and trend-cycle and irregular components are developed.

Part E - For analytical purposes, the original and seasonally adjusted series and the irregular component are modified for extreme values. Also, the ratios (differences) of annual totals and the month-to-month percent changes (differences) in the original and seasonally adjusted series are computed.

Part F - The MCD moving average of the seasonally adjusted series and the X-11 summary measures are calculated.

Part G - Point charts of the trend-cycle, seasonally adjusted series, seasonal factors, and S-I ratios are developed.

The sample printout shown in section IX is the standard X-11 printout. Although all the computations described above are performed (except part A, which is not applicable), only the final estimates of the components and the analytical tables are printed out.

IX. SAMPLE PRINTOUT

Shown below is the monthly X-11 multiplicative adjustment of U.S. General Imports, 1953 to 1964, with the standard printout. Trading-day weights are computed internally. This series is shown for purposes of illustration only. It is not directly comparable to the official published series because of the difference in the time periods of the adjustments and because of prior strike adjustments which have been applied to the official series.

To conserve space, only part of the trend-cycle and seasonal-factor charts (G1 and G2) are shown. The complete charts appear in the actual computer printout.

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                    X-11 SEASONAL ADJUSTMENT PROGRAM
                       U.S. BUREAU OF THE CENSUS
                  ECONOMIC RESEARCH AND ANALYSIS DIVISION
                          SEPTEMBER 28, 1965

THE X-11 PROGRAM IS DIVIDED INTO SEVEN MAJOR PARTS:
     PART       DESCRIPTION
      A. PRIOR ADJUSTMENTS, IF ANY
      B. PRELIMINARY ESTIMATES OF IRREGULAR COMPONENT WEIGHTS
            AND REGRESSION TRADING DAY FACTORS
      C. FINAL ESTIMATES OF ABOVE
      D. FINAL ESTIMATES OF SEASONAL, TREND-CYCLE AND IRREGULAR COMPONENTS
      E. ANALYTICAL TABLES
      F. SUMMARY MEASURES
      G. CHARTS
TABLES ARE IDENTIFIED BY THEIR PART LETTER AND SEQUENCE WITHIN THE PART. A GIVEN TABLE HAS THE SAME
IDENTIFICATION IN THE STANDARD, LONG AND FULL PRINTOUTS. THE SAME NUMBER IS GIVEN TO CORRESPONDING
TABLES IN PARTS B, C AND D. THUS, TABLES B10., C10. AND D10. ARE ALL TABLES OF SEASONAL FACTORS.
WHERE NO CORRESPONDING TABLE EXISTS THE SEQUENCE NO. IS NOT USED IN THE PART. THUS, B8. AND D8. ARE
TABLES OF UNMODIFIED SI RATIOS BUT THERE IS NO C8.


                              THIS SERIES RUN  AUG 1965
SERIES TITLE- U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS                  SERIES NO.   X746
                              PERIOD COVERED-  1/53 TO 12/64

                    TYPE OF RUN - MULTIPLICATIVE SEASONAL ADJUSTMENT
                          STANDARD PRINTOUT. STANDARD CHARTS.
TRADING DAY REGRESSION COMPUTED STARTING 1953 EXCLUDING IRREGULAR VALUES OUTSIDE 2.5-SIGMA LIMITS.
                TRADING DAY REGRESSION ESTIMATES APPLIED STARTING 1953 IF SIGNIFICANT.
                  SIGMA LIMITS FOR GRADUATING EXTREME VALUES ARE 1.5 AND 2.5
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AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P. 1, SERIES X746

B 1. ORIGINAL SERIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1953	922.4	855.9	1004.2	1013.1	901.9	933.0	908.1	839.8	925.7	813.4	849.2	906.6	10873.3
1954	832.8	808.8	864.6	957.2	829.2	946.9	821.8	824.8	780.4	766.6	839.7	942.6	10215.4
1955	871.2	849.9	1019.3	871.1	959.3	936.8	885.3	960.6	947.1	1010.9	1064.9	1008.0	11384.4
1956	1073.3	1051.2	1102.1	991.3	1094.8	1033.8	1051.6	1055.3	995.2	1121.0	986.7	1058.6	12614.9
1957	1114.8	992.9	1132.6	1118.7	1105.8	986.0	1147.8	1042.7	1007.4	1148.1	1043.2	1142.4	12982.4
1958	1095.9	955.9	1071.7	1056.9	1060.9	1031.1	1049.1	950.1	1073.4	1150.4	1085.6	1253.5	12834.5
1959	1154.1	1118.6	1295.1	1220.9	1264.2	1369.8	1250.0	1187.8	1395.3	1201.5	1283.0	1466.9	15207.2
1960	1174.1	1329.4	1409.7	1293.8	1289.4	1332.0	1182.7	1258.5	1192.7	1184.0	1196.7	1174.5	15017.5
1961	1149.7	1067.7	1255.3	1063.0	1222.9	1232.1	1287.0	1252.1	1197.2	1357.6	1335.0	1294.2	14713.8
1962	1367.6	1213.0	1380.8	1334.0	1453.1	1348.7	1333.6	1356.8	1341.5	1442.1	1449.2	1359.4	16379.8
1963	1116.2	1385.4	1462.5	1454.2	1458.9	1355.9	1502.1	1459.7	1398.3	1591.3	1425.0	1528.5	17138.0
1964	1444.5	1336.8	1590.2	1560.6	1455.7	1593.7	1610.7	1491.0	1561.8	1613.0	1671.7	1755.0	18684.7
AVGE	1109.7	1080.5	1215.7	1161.2	1174.7	1175.0	1169.1	1139.9	1151.3	1200.0	1185.8	1240.8	

TABLE TOTAL: 168045.8 MEAN: 1167.0 STD. DEVIATION: 223.6

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P. 2, SERIES X746

C14. EXTREME IRREGULAR VALUES EXCLUDED FROM TRADING DAY REGRESSION
(OUTSIDE 2.5-SIGMA LIMIT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVGE
1953	*******	*******	*******	*******	*******	*******	*******	*******	109.7	*******	*******	*******	********
1954	*******	*******	93.4	*******	*******	109.4	*******	*******	*******	*******	*******	*******	********
1955	*******	*******	*******	91.4	*******	*******	*******	*******	*******	*******	*******	91.1	********
1956	*******	*******	*******	91.9	*******	*******	*******	*******	*******	*******	*******	*******	********
1957	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	********
1958	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	********
1959	*******	*******	*******	*******	*******	*******	*******	*******	111.4	89.4	*******	*******	********
1960	88.5	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	********
1961	*******	*******	*******	*******	*******	*******	106.8	*******	*******	*******	*******	*******	********
1962	*******	*******	*******	*******	*******	*******	*******	*******	102.3	*******	*******	*******	********
1963	82.4	109.0	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	********
1964	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	********

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P. 3, SERIES X746

C15. FINAL TRADING DAY REGRESSION

	COMBINED WEIGHT	PRIOR WEIGHT	REGRESSION COEFF.	ST.ERROR (COMB.WT.)	T (1)	T (PRIOR WT.)
MONDAY	1.565	1.000	.565	.135	4.170*	4.170**
TUESDAY	1.402	1.000	.402	.132	3.049*	3.049**
WEDNESDAY	1.156	1.000	.156	.133	1.175	1.175
THURSDAY	1.317	1.000	.317	.136	2.327	2.327
FRIDAY	1.178	1.000	.178	.141	1.259	1.259
SATURDAY	.100	1.000	-.900	.137	-6.574*	-6.574**
SUNDAY	.283	1.000	-.717	.140	-5.114*	-5.114**

* COMBINED WT. SIGNIFICANTLY DIFFERENT FROM 1 AT 1% LEVEL
** COMBINED WT. SIGNIFICANTLY DIFFERENT FROM PRIOR WEIGHT AT 1% LEVEL

SOURCE OF VARIANCE	SUM OF SQUARES	DGRS.OF FREEDOM	MEAN SQUARE	F
REGRESSION	92.808	6.	15.468	45.811***
ERROR	42.206	125.	.338	
TOTAL	135.014	131.		

*** RESIDUAL TRADING DAY VARIATION PRESENT AT THE 1% LEVEL

STANDARD ERRORS OF TRADING DAY ADJUSTMENT FACTORS DERIVED FROM REGRESSION COEFFICIENTS

31-DAY MONTHS:	.42
30-DAY MONTHS:	.43
29-DAY MONTHS:	.47
28-DAY MONTHS:	.00

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P. 4, SERIES X746

C16. TRADING DAY ADJUSTMENT FACTORS DERIVED FROM REGRESSION COEFFICIENTS

C16A. REGRESSION COEFFICIENTS -	MON	TUE	WED	THUR	FRI	SAT	SUN
	1.565	1.402	1.156	1.317	1.178	.100	.283

C16B. REGRESSION TRADING DAY ADJUSTMENT FACTORS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVGE
1953	98.7	99.1	100.8	101.6	95.4	103.2	102.1	96.6	101.9	98.7	99.5	102.8	100.0
1954	95.4	99.1	103.6	101.6	96.6	101.9	98.7	100.8	101.6	95.4	103.2	102.1	100.0
1955	96.6	99.1	102.8	97.6	100.8	101.6	95.4	103.6	101.6	96.6	101.9	98.7	99.7
1956	100.8	103.2	98.7	99.5	102.8	97.6	100.8	102.1	94.6	103.6	101.6	96.6	100.2
1957	102.8	99.1	95.4	103.2	102.1	94.6	103.6	98.7	99.5	102.8	97.6	100.8	100.0
1958	102.1	99.1	96.6	101.9	98.7	99.5	102.8	95.4	103.2	102.1	94.6	103.6	100.0
1959	98.7	99.1	100.8	101.6	95.4	103.2	102.1	96.6	101.9	98.7	99.5	102.8	100.0
1960	95.4	104.7	102.8	97.6	100.8	101.6	95.4	103.6	101.6	96.6	101.9	98.7	100.0
1961	100.8	99.1	102.1	94.6	103.6	101.6	96.6	102.8	97.6	100.8	101.6	95.4	99.7
1962	103.6	99.1	98.7	99.5	102.8	97.6	100.8	102.1	94.6	103.6	101.6	96.6	100.1
1963	102.8	99.1	95.4	103.2	102.1	94.6	103.6	98.7	99.5	102.8	97.6	100.8	100.0
1964	102.1	99.5	100.8	101.6	95.4	103.2	102.1	96.6	101.9	98.7	99.5	102.8	100.3

TABLE TOTAL: 14401.1

C16C. REGRESSION TRADING DAY ADJUSTMENT FACTORS, ONE YEAR AHEAD

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVGE
1965	95.4	99.1	103.6	101.6	96.6	101.9	98.7	100.8	101.6	95.4	103.2	102.1	100.0

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P. 5, SERIES X746

C17. FINAL WEIGHTS FOR IRREGULAR COMPONENT
GRADUATION RANGE FROM 1.5 TO 2.5 SIGMA

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	S.D.
1953	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	.0	93.8	100.0	100.0	2.8
1954	100.0	100.0	.0	100.0	100.0	.0	100.0	100.0	100.0	100.0	100.0	100.0	2.8
1955	100.0	100.0	100.0	21.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	.0	2.8
1956	100.0	100.0	100.0	.0	100.0	100.0	100.0	100.0	78.5	100.0	.0	100.0	2.2
1957	100.0	100.0	76.3	100.0	100.0	29.0	14.0	100.0	100.0	100.0	100.0	100.0	2.1
1958	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1.9
1959	100.0	100.0	100.0	100.0	67.7	100.0	100.0	100.0	.0	.0	100.0	70.9	1.8
1960	.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1.9
1961	100.0	100.0	100.0	100.0	100.0	100.0	.0	100.0	100.0	100.0	100.0	100.0	2.0
1962	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	.0	100.0	60.7	100.0	1.8
1963	.0	.0	46.2	100.0	100.0	100.0	100.0	87.9	100.0	100.0	100.0	100.0	1.8
1964	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1.8

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P. 6, SERIES X746

C18. TRADING DAY ADJUSTMENT FACTORS FROM COMBINED DAILY WEIGHTS
(SAME AS TABLE C16.)

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P. 7, SERIES X746

C19. ADJUSTED* ORIGINAL SERIES
*ADJUSTED BY...TRADING DAY ADJUSTMENT FACTORS DERIVED FROM REGRESSION COEFFICIENTS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1953	934.6	863.5	996.2	997.4	945.8	903.9	889.4	869.3	908.8	824.2	853.5	881.7	10868.4
1954	873.3	816.0	834.4	941.7	858.3	929.6	832.7	818.2	768.3	803.9	813.5	923.2	10213.2
1955	901.8	857.5	991.3	892.6	951.7	922.3	928.4	927.1	931.7	1046.4	1045.5	1021.3	11417.5
1956	1064.7	1018.5	1116.7	996.4	1064.8	1059.3	1043.2	1033.6	1051.9	1081.8	970.7	1095.8	12597.4
1957	1084.2	1001.8	1187.7	1083.8	1083.1	1042.2	1107.7	1056.5	1012.5	1116.6	1068.9	1133.3	12978.3
1958	1073.4	964.4	1109.3	1037.6	1074.9	1036.4	1020.3	996.3	1039.9	1126.8	1147.4	1209.7	12836.6
1959	1169.4	1128.6	1284.8	1202.0	1325.7	1327.1	1224.3	1229.5	1369.9	1217.4	1289.6	1426.7	15194.8
1960	1231.2	1270.3	1371.0	1325.7	1279.1	1311.3	1240.3	1214.5	1173.4	1225.6	1174.9	1190.0	15007.4
1961	1140.5	1077.2	1229.5	1123.5	1180.2	1212.1	1332.2	1217.8	1226.7	1346.8	1314.3	1357.2	14758.1
1962	1319.8	1223.8	1399.1	1340.8	1413.3	1381.9	1323.0	1328.9	1417.9	1391.7	1425.7	1407.1	16373.1
1963	1085.6	1397.8	1533.7	1408.8	1428.9	1433.1	1449.6	1479.0	1405.4	1547.7	1460.1	1516.3	17146.1
1964	1414.8	1343.9	1577.5	1536.4	1526.5	1544.0	1577.6	1543.4	1533.3	1634.3	1680.2	1706.9	18618.9
AVGE	1107.8	1080.3	1219.3	1157.2	1177.7	1175.3	1164.1	1142.8	1153.3	1196.9	1187.0	1239.1	

TABLE TOTAL: 168009.8 MEAN: 1166.7 STD. DEVIATION: 220.3

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P. 8, SERIES X746

D 8. FINAL UNMODIFIED SI RATIOS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVGE
1953	102.4	94.2	108.4	108.3	102.6	98.4	97.5	96.4	102.2	94.0	98.6	102.9	100.5
1954	102.4	95.6	97.3	109.3	99.5	108.2	97.9	97.2	91.8	95.9	96.0	107.3	99.9
1955	102.9	96.1	109.5	97.5	102.8	98.2	97.0	94.6	92.8	102.0	100.3	97.1	99.2
1956	101.0	96.7	106.2	94.5	100.4	99.1	97.1	96.0	98.1	101.6	91.6	103.6	98.8
1957	102.3	94.0	110.7	100.3	99.8	95.9	101.9	97.3	93.4	103.5	99.8	106.7	100.5
1958	101.8	92.1	106.5	99.9	103.6	99.6	97.3	93.8	96.3	102.1	101.8	105.2	100.0
1959	99.8	94.5	105.5	97.0	105.3	104.1	95.4	95.3	105.6	93.3	98.1	107.7	100.1
1960	92.5	95.6	103.7	101.1	98.7	102.5	98.4	98.0	96.5	102.8	100.2	102.8	99.4
1961	99.2	93.9	106.8	96.9	100.6	101.7	109.6	98.1	96.9	104.5	100.8	103.1	101.0
1962	99.4	91.5	103.8	98.9	104.0	101.8	97.7	98.4	105.0	102.7	104.4	102.1	100.8
1963	78.2	100.0	109.1	99.6	100.3	99.7	100.0	101.4	96.0	105.6	99.7	103.5	99.4
1964	96.3	90.8	105.6	101.7	100.0	100.2	101.5	98.4	96.7	101.8	103.4	103.9	100.0
AVGE	98.2	94.6	106.1	100.4	101.5	100.8	99.3	97.1	97.6	100.8	99.6	103.8	

TABLE TOTAL: 14396.4

STABLE SEASONALITY TEST

	SUM OF SQUARES	DGRS.OF FREEDOM	MEAN SQUARE	F
BETWEEN MONTHS	1235.000	11	112.273	7.652**
RESIDUAL	1936.703	132	14.672	
TOTAL	3171.703	143		

**STABLE SEASONALITY PRESENT AT THE 1% LEVEL

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P. 9, SERIES X746

D 9. FINAL REPLACEMENT VALUES FOR EXTREME SI RATIOS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVGE
1953	*******	*******	*******	*******	*******	*******	*******	*******	94.8	94.3	*******	*******	********
1954	*******	*******	107.9	*******	*******	100.8	*******	*******	*******	*******	*******	*******	********
1955	*******	*******	*******	102.7	*******	*******	*******	*******	*******	*******	*******	105.2	********
1956	*******	*******	*******	102.3	*******	*******	*******	*******	97.3	*******	97.8	*******	********
1957	*******	*******	109.8	*******	*******	99.1	97.9	*******	*******	*******	*******	*******	********
1958	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	********
1959	*******	*******	*******	*******	104.2	*******	*******	*******	96.6	103.0	*******	106.7	********
1960	99.7	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	********
1961	*******	*******	*******	*******	*******	*******	99.1	*******	*******	*******	*******	*******	********
1962	*******	*******	*******	*******	*******	*******	*******	*******	97.1	*******	103.1	*******	********
1963	97.6	90.9	107.0	*******	*******	*******	*******	101.0	*******	*******	*******	*******	********
1964	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	********

D 9A. YEAR TO YEAR CHANGE IN IRREGULAR AND SEASONAL COMPONENTS AND MOVING SEASONALITY RATIO

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
I	.859	1.636	2.250	2.395	2.504	1.373	1.181	1.626	1.578	2.059	2.521	1.844
S	.395	.429	.313	.698	.263	.286	.269	.365	.310	.544	.337	.242
RATIO	2.18	3.81	7.20	3.43	9.53	4.80	4.40	4.45	5.09	3.79	7.49	7.63

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P.10, SERIES X746

D10. FINAL SEASONAL FACTORS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVGE
1953	102.2	95.4	108.1	106.0	101.4	99.0	97.3	96.0	93.7	97.9	98.2	104.8	100.0
1954	102.3	95.5	108.2	105.5	101.2	99.0	97.3	96.1	93.9	98.5	98.3	104.9	100.1
1955	102.2	95.4	108.2	104.4	101.1	99.1	97.3	96.0	94.2	99.7	98.7	105.3	100.1
1956	101.9	95.0	108.0	102.6	101.4	99.4	97.2	95.8	94.5	101.0	99.2	105.5	100.1
1957	101.6	94.8	107.3	101.1	101.5	100.0	97.1	95.7	95.2	102.1	99.5	105.4	100.1
1958	101.1	94.5	106.8	99.8	101.5	100.7	97.2	96.0	95.8	102.8	99.8	105.2	100.1
1959	100.5	94.0	106.0	99.3	101.6	101.3	97.4	96.4	96.3	103.0	100.2	104.7	100.1
1960	100.0	93.6	105.7	98.8	101.6	101.7	97.7	97.1	96.5	103.4	100.5	104.3	100.1
1961	99.3	93.1	105.3	99.0	101.4	101.6	98.3	97.9	96.7	103.4	100.9	103.6	100.0
1962	98.7	92.6	105.5	99.2	101.1	101.3	99.0	98.7	96.7	103.7	101.2	103.4	100.1
1963	98.1	91.8	105.5	99.5	101.0	100.8	99.5	99.0	96.6	103.6	101.7	103.1	100.0
1964	97.9	91.4	105.6	99.5	101.2	100.7	99.6	99.0	96.6	103.5	101.8	103.1	100.0

TABLE TOTAL: 14408.8 MEAN: 100.1 STD. DEVIATION: 3.7

D10A. SEASONAL FACTORS, ONE YEAR AHEAD

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVGE
1965	97.8	91.2	105.6	99.5	101.3	100.6	99.6	99.1	96.5	103.5	101.8	103.1	100.0

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P.11, SERIES X746

D11. FINAL SEASONALLY ADJUSTED SERIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1953	914.3	904.9	921.3	941.1	933.1	912.6	914.0	905.7	970.0	841.7	869.6	841.2	10869.6
1954	853.9	854.5	771.0	893.0	848.1	938.6	855.6	851.8	818.6	816.1	827.6	879.8	10208.6
1955	882.2	899.1	916.6	855.2	941.1	930.5	954.0	965.8	989.6	1049.9	1059.1	970.3	11413.4
1956	1044.4	1072.2	1034.4	971.1	1050.4	1065.7	1073.8	1079.4	1112.9	1071.1	978.9	1038.8	12593.2
1957	1067.4	1057.0	1107.0	1071.8	1067.3	1042.2	1140.9	1103.8	1063.6	1094.0	1074.2	1074.8	12963.9
1958	1062.0	1021.1	1039.2	1039.5	1058.7	1029.3	1050.1	1038.2	1085.9	1095.9	1149.4	1149.9	12819.1
1959	1163.2	1200.3	1212.4	1211.0	1305.3	1309.6	1256.8	1274.9	1423.2	1181.8	1286.6	1362.6	15187.6
1960	1231.8	1357.3	1297.6	1342.0	1258.6	1289.6	1269.1	1250.2	1216.4	1185.5	1169.2	1141.5	15008.9
1961	1149.1	1157.2	1167.7	1135.0	1163.8	1192.9	1355.0	1243.8	1269.1	1302.3	1303.1	1310.2	14749.2
1962	1337.5	1322.3	1325.9	1351.8	1397.9	1364.8	1336.7	1347.0	1466.7	1342.5	1408.7	1361.4	16363.2
1963	1106.2	1522.1	1453.2	1415.7	1414.6	1421.4	1457.1	1494.6	1454.4	1494.5	1435.8	1470.0	17139.6
1964	1444.9	1469.9	1493.8	1543.6	1508.1	1533.9	1584.1	1558.4	1587.9	1579.3	1650.7	1655.6	18610.2
AVGE	1104.8	1153.2	1145.0	1147.6	1162.3	1169.3	1187.2	1176.1	1204.9	1171.2	1184.4	1188.0	

TABLE TOTAL: 167926.3 MEAN: 1166.2 STD. DEVIATION: 216.4

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P.12, SERIES X746

D12. FINAL TREND CYCLE - HENDERSON CURVE
13-TERM MOVING AVERAGE SELECTED. I/C RATIO IS 1.92

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1953	916.3	919.9	922.9	925.2	925.7	922.3	913.4	899.7	884.5	869.9	859.0	853.0	10811.7
1954	852.6	856.6	862.5	867.0	867.2	861.6	851.0	839.8	832.7	833.9	843.4	859.1	10227.4
1955	877.9	895.1	908.5	917.6	926.0	938.1	956.1	978.5	1003.2	1026.4	1044.0	1053.9	11525.3
1956	1056.0	1053.8	1050.9	1051.6	1057.6	1066.5	1074.3	1078.2	1076.0	1069.1	1062.3	1058.8	12755.1
1957	1059.4	1063.6	1070.5	1076.9	1081.2	1083.8	1085.7	1087.5	1087.4	1083.6	1075.0	1064.4	12918.9
1958	1054.4	1046.4	1040.4	1037.1	1036.8	1039.8	1047.6	1060.5	1079.0	1102.7	1127.4	1150.1	12822.2
1959	1172.0	1195.1	1218.5	1241.0	1260.8	1275.0	1283.2	1288.2	1294.2	1302.4	1314.4	1326.5	15171.2
1960	1332.8	1331.3	1324.1	1312.2	1297.0	1280.2	1261.7	1239.7	1215.3	1191.2	1171.3	1156.5	15113.3
1961	1148.6	1146.4	1149.6	1158.0	1172.3	1192.8	1217.7	1244.6	1270.1	1290.6	1304.4	1314.6	14609.7
1962	1324.3	1334.7	1345.1	1354.1	1359.0	1359.4	1357.0	1354.4	1353.0	1355.9	1363.6	1374.2	16234.5
1963	1384.2	1393.3	1403.0	1413.6	1426.3	1440.1	1452.8	1462.7	1467.4	1466.1	1462.0	1460.5	17232.0
1964	1464.7	1476.0	1492.5	1511.3	1528.8	1543.2	1556.7	1571.0	1588.7	1607.3	1626.0	1641.3	18607.4
AVGE	1136.9	1142.7	1149.0	1155.5	1161.6	1166.9	1171.4	1175.4	1179.3	1183.3	1187.7	1192.7	

TABLE TOTAL: 168028.7 MEAN: 1166.9 STD. DEVIATION: 211.2

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P.13, SERIES X746

D13. FINAL IRREGULAR SERIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	S.D.
1953	99.8	98.4	99.8	101.7	100.8	99.0	100.1	100.7	109.7	96.8	101.2	98.6	3.1
1954	100.2	99.8	89.4	103.0	97.8	108.9	100.5	101.4	98.3	97.9	98.1	102.4	4.3
1955	100.5	100.4	100.9	93.2	101.6	99.2	99.8	98.7	98.6	102.3	101.5	92.1	3.2
1956	98.9	101.7	98.4	92.3	99.3	99.9	99.9	100.1	103.4	100.2	92.1	98.1	3.4
1957	100.8	99.4	103.4	99.5	98.7	96.2	105.1	101.5	97.8	101.0	99.9	101.0	2.3
1958	100.7	97.6	99.9	100.2	102.1	99.0	100.2	97.9	100.6	99.4	102.0	100.0	1.3
1959	99.2	100.4	99.5	97.6	103.5	102.7	97.9	99.0	110.0	90.7	97.9	102.7	4.4
1960	92.4	102.0	98.0	102.3	97.0	100.7	100.6	100.8	100.1	99.5	99.8	98.7	2.6
1961	100.0	100.9	101.6	98.0	99.3	100.0	111.3	99.9	99.9	100.9	99.9	99.7	3.4
1962	101.0	99.1	98.6	99.8	102.9	100.4	98.5	99.5	108.4	99.0	103.3	99.1	2.9
1963	79.9	109.2	103.6	100.2	99.2	98.7	100.3	102.2	99.1	101.9	98.2	100.7	6.6
1964	98.7	99.6	100.1	102.1	98.6	99.4	101.8	99.2	99.9	98.3	101.5	100.9	1.2
S.D.	6.2	2.9	3.5	3.4	2.0	3.0	3.7	1.2	4.9	3.1	2.8	2.7	

TABLE TOTAL: 14388.8 MEAN: 99.9 STD. DEVIATION: 3.5

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P.14, SERIES X746

E 1. ORIGINAL SERIES MODIFIED FOR EXTREMES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1953	922.4	855.9	1004.2	1013.1	901.9	933.0	908.1	839.8	844.0	813.4	849.2	906.6	10791.6
1954	832.8	808.8	967.2	957.2	829.2	869.2	821.8	824.8	780.4	766.6	839.7	942.6	10240.3
1955	871.2	849.9	1019.3	871.1	959.3	936.8	885.3	960.6	947.1	1010.9	1064.9	1094.9	11471.3
1956	1073.3	1051.2	1102.1	1073.5	1094.8	1033.8	1051.6	1055.3	995.2	1121.0	1070.8	1058.6	12781.1
1957	1114.8	992.9	1132.6	1118.7	1105.8	986.0	1147.8	1042.7	1007.4	1148.1	1043.2	1142.4	12982.4
1958	1095.9	955.9	1071.7	1056.9	1060.9	1031.1	1049.1	950.1	1073.4	1150.4	1085.6	1253.5	12834.5
1959	1154.1	1118.6	1295.1	1220.9	1264.2	1369.8	1250.0	1187.8	1268.8	1324.1	1283.0	1466.9	15203.3
1960	1270.3	1329.4	1409.7	1293.8	1289.4	1332.0	1182.7	1258.5	1192.7	1184.0	1196.7	1174.5	15113.7
1961	1149.7	1067.7	1255.3	1063.0	1222.9	1232.1	1156.5	1252.1	1197.2	1357.6	1335.0	1294.2	14583.3
1962	1367.6	1213.0	1380.8	1334.0	1453.1	1348.7	1333.6	1356.8	1237.5	1442.1	1449.2	1359.4	16275.8
1963	1396.7	1268.2	1462.5	1454.2	1458.9	1355.9	1502.1	1459.7	1398.3	1591.3	1425.0	1528.5	17301.3
1964	1444.5	1336.8	1590.2	1560.6	1455.7	1593.7	1610.7	1491.0	1561.8	1613.0	1671.7	1755.0	18684.7
AVGE	1141.1	1070.7	1224.2	1168.1	1174.7	1168.5	1158.3	1139.9	1125.3	1210.2	1192.8	1248.1	

TABLE TOTAL: 168263.3 MEAN: 1168.5 STD. DEVIATION: 222.6

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P.15, SERIES X746

E 2. MODIFIED SEASONALLY ADJUSTED SERIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1953	914.3	904.9	921.3	941.1	933.1	912.6	914.0	905.7	884.5	841.7	869.6	841.2	10784.1
1954	853.9	854.5	862.5	893.0	848.1	861.6	855.6	851.8	818.6	816.1	827.6	879.8	10223.1
1955	882.2	899.1	916.6	855.2	941.1	930.5	954.0	965.8	989.6	1049.9	1059.1	1053.9	11497.0
1956	1044.4	1072.2	1034.4	1051.6	1050.4	1065.7	1073.8	1079.4	1112.9	1071.1	1062.3	1038.8	12757.1
1957	1067.4	1057.0	1107.0	1071.8	1067.3	1042.2	1140.9	1103.8	1063.6	1094.0	1074.2	1074.8	12963.9
1958	1062.0	1021.1	1039.2	1039.5	1058.7	1029.3	1050.1	1038.2	1085.9	1095.9	1149.4	1149.9	12819.1
1959	1163.2	1200.3	1212.4	1211.0	1305.3	1309.6	1256.8	1274.9	1294.2	1302.4	1286.6	1362.6	15179.1
1960	1332.8	1357.3	1297.6	1342.0	1258.6	1289.6	1269.1	1250.2	1216.4	1185.5	1169.2	1141.5	15109.9
1961	1149.1	1157.2	1167.7	1135.0	1163.8	1192.9	1217.7	1243.8	1269.1	1302.3	1303.1	1310.2	14611.8
1962	1337.5	1322.3	1325.9	1351.8	1397.9	1364.8	1336.7	1347.0	1353.0	1342.5	1408.7	1361.4	16249.5
1963	1384.2	1393.3	1453.2	1415.7	1414.6	1421.4	1457.1	1494.6	1454.4	1494.5	1435.8	1470.0	17288.8
1964	1444.9	1469.9	1493.8	1543.6	1508.1	1533.9	1584.1	1558.4	1587.9	1579.3	1650.7	1655.6	18610.2
AVGE	1136.3	1142.4	1152.6	1154.3	1162.3	1162.8	1175.8	1176.1	1177.5	1181.3	1191.4	1195.0	

TABLE TOTAL: 168093.4 MEAN: 1167.3 STD. DEVIATION: 213.5

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P.16, SERIES X746

E 3. MODIFIED IRREGULAR SERIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	S.D.
1953	99.8	98.4	99.8	101.7	100.8	99.0	100.1	100.7	100.0	96.8	101.2	98.6	1.3
1954	100.2	99.8	100.0	103.0	97.8	100.0	100.5	101.4	98.3	97.9	98.1	102.4	1.7
1955	100.5	100.4	100.9	93.2	101.6	99.2	99.8	98.7	98.6	102.3	101.5	100.0	2.3
1956	98.9	101.7	98.4	100.0	99.3	99.9	99.9	100.1	103.4	100.2	100.0	98.1	1.4
1957	100.8	99.4	103.4	99.5	98.7	96.2	105.1	101.5	97.8	101.0	99.9	101.0	2.3
1958	100.7	97.6	99.9	100.2	102.1	99.0	100.2	97.9	100.6	99.4	102.0	100.0	1.3
1959	99.2	100.4	99.5	97.6	103.5	102.7	97.9	99.0	100.0	100.0	97.9	102.7	1.9
1960	100.0	102.0	98.0	102.3	97.0	100.7	100.6	100.8	100.1	99.5	99.8	98.7	1.5
1961	100.0	100.9	101.6	98.0	99.3	100.0	100.0	99.9	99.9	100.9	99.9	99.7	.9
1962	101.0	99.1	98.6	99.8	102.9	100.4	98.5	99.5	100.0	99.0	103.3	99.1	1.5
1963	100.0	100.0	103.6	100.2	99.2	98.7	100.3	102.2	99.1	101.9	98.2	100.7	1.5
1964	98.7	99.6	100.1	102.1	98.6	99.4	101.8	99.2	99.9	98.3	101.5	100.9	1.2
S.D.	.7	1.2	1.7	2.5	2.0	1.5	1.7	1.2	1.4	1.6	1.6	1.4	

TABLE TOTAL: 14402.2 MEAN: 100.0 STD. DEVIATION: 1.6

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P.17, SERIES X746

E 4. RATIOS OF ANNUAL TOTALS, ORIGINAL AND ADJUSTED SERIES

YEAR	UNMODIFIED	MODIFIED
1953	100.0	100.1
1954	100.1	100.2
1955	99.7	99.8
1956	100.2	100.2
1957	100.1	100.1
1958	100.1	100.1
1959	100.1	100.2
1960	100.1	100.0
1961	99.8	99.8
1962	100.1	100.2
1963	100.0	100.1
1964	100.4	100.4

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P.18, SERIES X746

E 5. MONTH-TO-MONTH CHANGES IN ORIGINAL SERIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVGE
1953	*******	-7.2	17.3	.9	-11.0	3.4	-2.7	-7.5	10.2	-12.1	4.4	6.8	.2
1954	-8.1	-2.9	6.9	10.7	-13.4	14.2	-13.2	.4	-5.4	-1.8	9.5	12.3	.8
1955	-7.6	-2.4	19.9	-14.5	10.1	-2.3	-5.5	8.5	-1.4	6.7	5.3	-5.3	1.0
1956	6.5	-2.1	4.8	-10.1	10.4	-5.6	1.7	.4	-5.7	12.6	-12.0	7.3	.7
1957	5.3	-10.9	14.1	-1.2	-1.2	-10.8	16.4	-9.2	-3.4	14.0	-9.1	9.5	1.1
1958	-4.1	-12.8	12.1	-1.4	.4	-2.8	1.7	-9.4	13.0	7.2	-5.6	15.5	1.1
1959	-7.9	-3.1	15.8	-5.7	3.5	8.4	-8.7	-5.0	17.5	-13.9	6.8	14.3	1.8
1960	-20.0	13.2	6.0	-8.2	-.3	3.3	-11.2	6.4	-5.2	-.7	1.1	-1.9	-1.5
1961	-2.1	-7.1	17.6	-15.3	15.0	.8	4.5	-2.7	-4.4	13.4	-1.7	-3.1	1.2
1962	5.7	-11.3	13.8	-3.4	8.9	-7.2	-1.1	1.7	-1.1	7.5	.5	-6.2	.7
1963	-17.9	24.1	5.6	-.6	.3	-7.1	10.8	-2.8	-4.2	13.8	-10.5	7.3	1.6
1964	-5.5	-7.5	19.0	-1.9	-6.7	9.5	1.1	-7.4	4.7	3.3	3.6	5.0	1.4
AVGE	-5.1	-2.5	12.7	-4.2	1.4	.3	-.5	-2.2	1.2	4.2	-.6	5.1	

TABLE TOTAL: 122.0

AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P.19, SERIES X746

E 6. MONTH-TO-MONTH CHANGES IN FINAL SEASONALLY ADJUSTED SERIES (D11.)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVGE
1953	*******	-1.0	1.8	2.1	-.8	-2.2	.2	-.9	7.1	-13.2	3.3	-3.3	-.6
1954	1.5	.1	-9.8	15.8	-5.0	10.7	-8.8	-.4	-3.9	-.3	1.4	6.3	.6
1955	.3	1.9	1.9	-6.7	10.0	-1.1	2.5	1.2	2.5	6.1	.9	-8.4	.9
1956	7.6	2.7	-3.5	-6.1	8.2	1.5	.8	.5	3.1	-3.8	-8.6	6.1	.7
1957	2.7	-1.0	4.7	-3.2	-.4	-2.4	9.5	-3.3	-3.6	2.9	-1.8	.1	.4
1958	-1.2	-3.9	1.8	.0	1.8	-2.8	2.0	-1.1	4.6	.9	4.9	.0	.6
1959	1.2	3.2	1.0	-.1	7.8	.3	-4.0	1.4	11.6	-17.0	8.9	5.9	1.7
1960	-9.6	10.2	-4.4	3.4	-6.2	2.5	-1.6	-1.5	-2.7	-2.5	-1.4	-2.4	-1.4
1961	.7	.7	.9	-2.8	2.5	2.5	13.6	-8.2	2.0	2.6	.1	.5	1.3
1962	2.1	-1.1	.3	2.0	3.4	-2.4	-2.1	.8	8.9	-8.5	4.9	-3.4	.4
1963	-18.7	37.6	-4.5	-2.6	-.1	.5	2.5	2.6	-2.7	2.8	-3.9	2.4	1.3
1964	-1.7	1.7	1.6	3.3	-2.3	1.7	3.3	-1.6	1.9	-.5	4.5	5.0	1.4
AVGE	-1.4	4.3	-.7	.4	1.6	.7	1.5	-.9	2.4	-2.5	1.1	.7	

TABLE TOTAL: 88.3

F 1. MCD MOVING AVERAGE
MCD IS 4

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1953	*******	*******	920.4	925.1	927.0	925.2	916.4	925.6	907.9	896.8	880.6	851.6	9076.6
1954	854.8	830.2	843.1	841.6	862.7	883.8	873.5	866.1	835.5	828.5	835.5	851.4	10206.9
1955	872.2	894.4	888.3	903.0	910.9	920.2	947.8	960.0	989.8	1016.1	1017.2	1030.9	11350.8
1956	1036.5	1030.3	1030.5	1032.0	1030.4	1040.3	1067.3	1083.0	1084.3	1060.6	1050.4	1039.1	12584.7
1957	1035.5	1067.6	1075.8	1075.8	1072.1	1080.5	1088.6	1087.6	1100.6	1083.9	1076.6	1076.2	12920.8
1958	1058.0	1049.2	1040.4	1039.6	1041.7	1044.4	1044.1	1050.9	1067.5	1092.3	1120.3	1139.6	12788.0
1959	1165.7	1181.4	1196.7	1232.2	1259.6	1270.7	1286.6	1316.1	1284.2	1291.6	1313.6	1265.7	15064.1
1960	1309.6	1312.3	1307.2	1313.9	1297.0	1289.8	1266.9	1256.3	1230.3	1205.3	1178.2	1161.3	15128.1
1961	1154.3	1153.9	1152.2	1155.9	1164.8	1211.7	1238.9	1265.2	1292.6	1279.6	1296.2	1313.3	14678.5
1962	1318.3	1324.0	1334.4	1349.5	1360.1	1362.8	1361.6	1378.8	1373.2	1391.2	1394.8	1304.7	16253.3
1963	1349.6	1360.7	1374.3	1451.4	1426.2	1427.2	1446.9	1456.9	1475.1	1469.8	1463.7	1461.3	17163.2
1964	1455.2	1469.7	1488.1	1503.9	1519.8	1542.4	1546.1	1566.1	1577.4	1594.0	1618.4	*******	16881.0
AVGE	1146.3	1152.2	1137.6	1152.0	1156.0	1166.6	1173.7	1184.4	1184.9	1184.2	1187.1	1135.9	
	TABLE TOTAL:		164096.0										

F 2. SUMMARY MEASURES

AVERAGE PER CENT CHANGE WITHOUT REGARD TO SIGN OVER INDICATED SPAN

SPAN IN MONTHS	B1 0	D11 CI	D13 I	D12 C	D10 S	A2 P	C18 TD*	F1 MCD	E1 MOD.O	E2 MOD.CI	E3 MOD.I
1	7.46	3.84	3.62	.91	4.21	.00	4.14	1.30	6.73	2.25	1.96
2	6.90	4.26	3.49	1.80	4.66	.00	3.71	2.17	6.68	2.80	1.87
3	6.32	4.81	3.47	2.64	4.63	.00	2.07	3.00	6.32	3.60	1.99
4	8.09	5.25	3.17	3.45	5.10	.00	4.21	3.82	7.70	4.05	1.64
5	7.55	5.90	3.35	4.19	3.97	.00	3.23	4.43	7.22	4.77	1.80
6	7.71	6.32	3.35	4.90	4.48	.00	2.40	5.01	7.89	5.36	1.73
7	8.97	6.81	3.26	5.57	3.99	.00	4.16	5.53	8.65	6.00	1.73
9	8.79	7.93	3.33	6.84	4.57	.00	2.00	6.72	8.91	7.22	1.72
11	9.86	8.73	3.16	8.01	4.11	.00	2.89	7.86	10.23	8.33	1.55
12	9.89	9.47	3.73	8.55	.36	.00	2.71	8.36	9.51	9.00	2.04

RELATIVE CONTRIBUTIONS OF COMPONENTS TO VARIANCE IN ORIGINAL SERIES

SPAN IN MONTHS	D13 I	D12 C	D10 S	A2 P	C18 TD*	TOTAL	RATIO (X100)
1	26.83	1.68	36.28	.00	35.21	100.00	87.71
2	23.89	6.36	42.71	.00	27.04	100.00	106.93
3	26.88	15.62	47.93	.00	9.57	100.00	111.96
4	15.34	18.09	39.59	.00	26.99	100.00	100.26
5	20.43	31.96	28.66	.00	18.94	100.00	96.69
6	18.39	39.34	32.85	.00	9.42	100.00	102.61
7	14.18	41.47	21.23	.00	23.12	100.00	93.03
9	13.40	56.58	25.19	.00	4.83	100.00	107.11
11	10.06	64.54	16.99	.00	8.41	100.00	102.42
12	14.71	77.38	.14	.00	7.77	100.00	96.58

AVERAGE DURATION OF RUN

CI	I	C	MCD
1.79	1.51	8.41	2.98

I/C RATIO FOR MONTHS SPAN

1	2	3	4	5	6	7	8	9	10	11	12
4.00	1.94	1.31	.92	.80	.68	.58	.57	.49	.46	.39	.44

MONTHS FOR CYCLICAL DOMINANCE 4

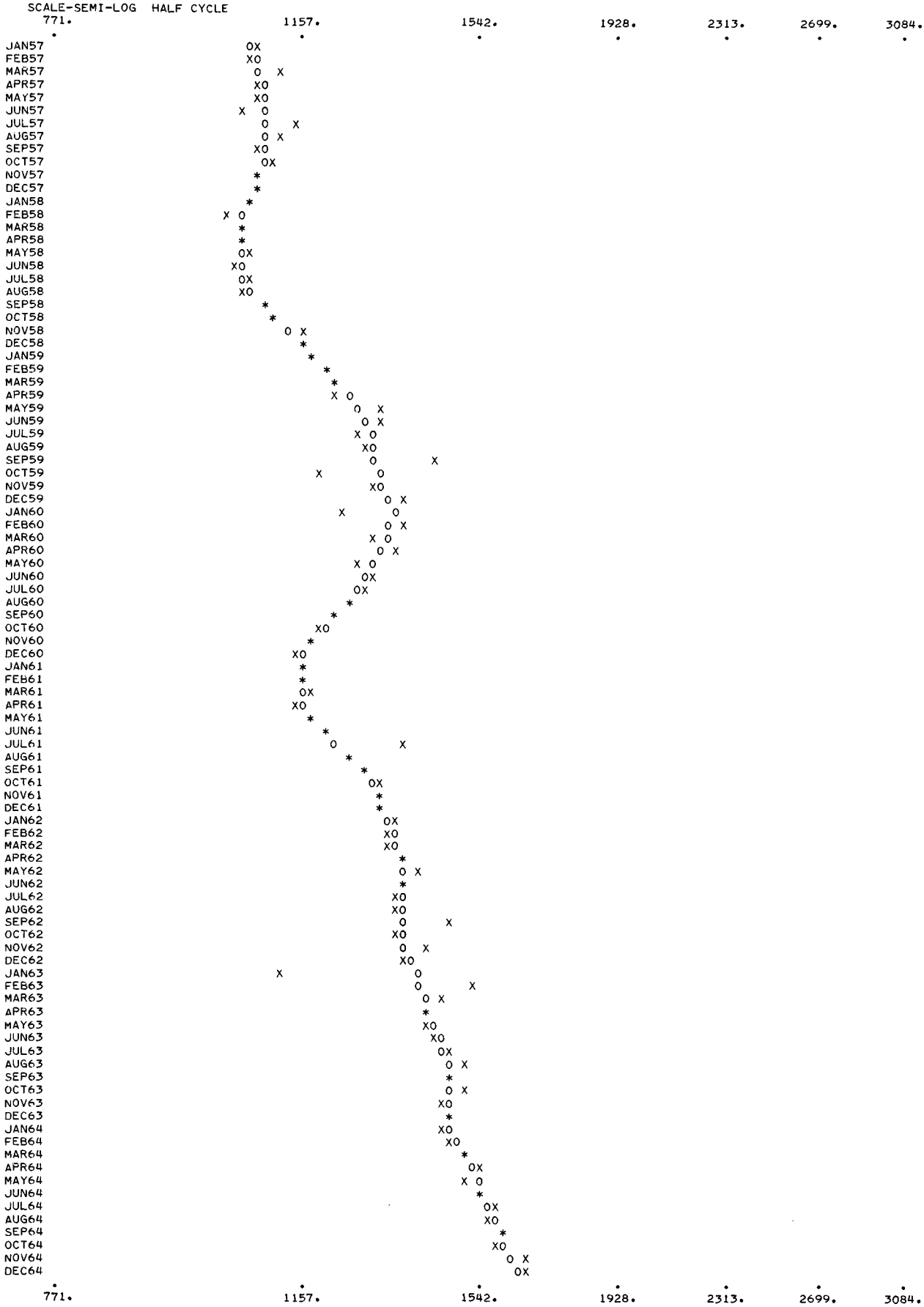
AVERAGE PER CENT CHANGE WITH REGARD TO SIGN AND STANDARD DEVIATION OVER INDICATED SPAN

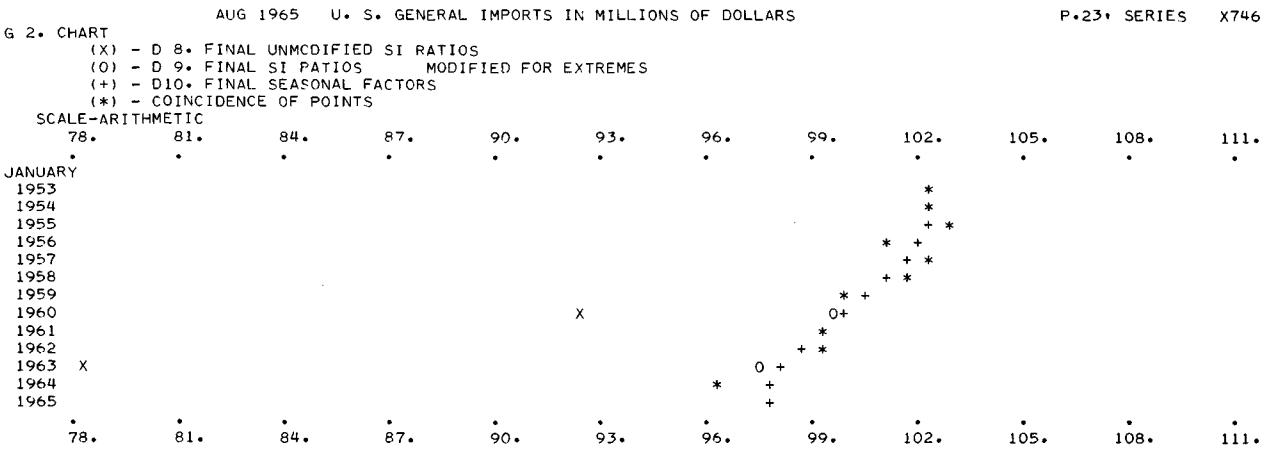
SPAN IN	B1 0		D13 I		D12 C		D10 S		D11 CI		F1 MCD	
MONTHS	AVGE	S.D.	AVGE	S.D.	AVGE	S.D.	AVGE	S.D.	AVGE	S.D.	AVGE	S.D.
1	.85	9.03	.17	5.79	.41	1.03	.15	5.53	.58	5.93	.42	1.64
2	1.30	8.75	.18	5.47	.84	2.03	.20	5.36	1.02	5.95	.83	2.55
3	1.59	8.06	.15	5.23	1.26	2.99	.17	5.42	1.42	6.15	1.25	3.43
4	2.09	10.02	.15	5.23	1.69	3.89	.14	6.00	1.85	6.69	1.69	4.30
5	2.39	9.20	.12	5.05	2.13	4.72	.06	5.01	2.25	7.04	2.12	4.92
6	2.84	9.61	.15	5.23	2.57	5.49	.10	5.73	2.72	7.66	2.55	5.58
7	3.38	10.63	.14	5.15	3.02	6.21	.09	5.03	3.16	8.10	3.00	6.20
9	4.24	10.76	.08	5.24	3.96	7.49	.19	5.30	4.03	9.13	3.93	7.32
11	5.25	11.39	.08	5.11	4.94	8.55	.19	5.16	5.01	9.86	4.91	8.21
12	5.62	11.01	.10	5.34	5.44	9.00	.00	.47	5.52	10.31	5.44	8.58

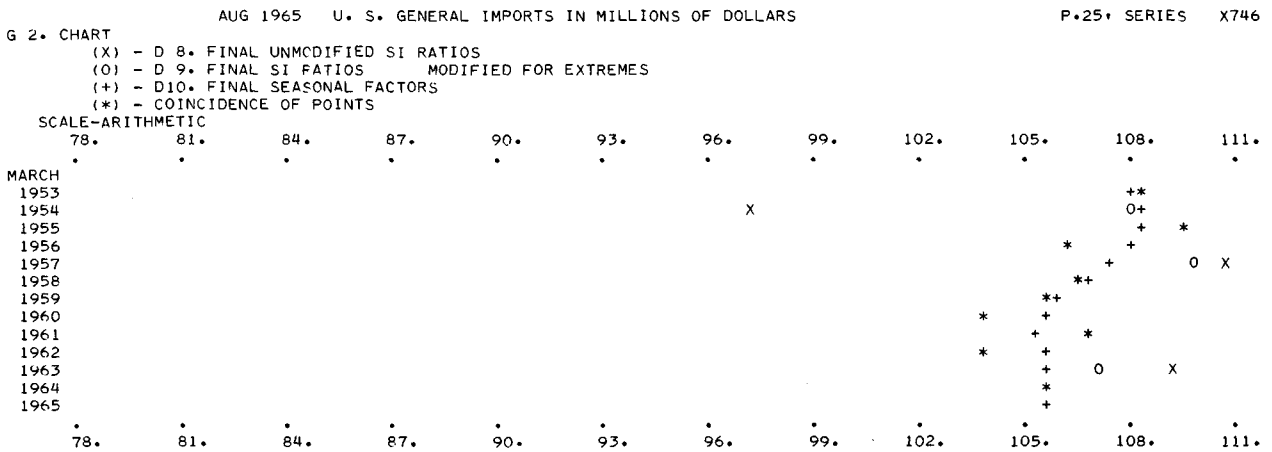
*(TRADING DAY ADJUSTMENT FACTORS WITHOUT LENGTH OF MONTH ADJUSTMENT)

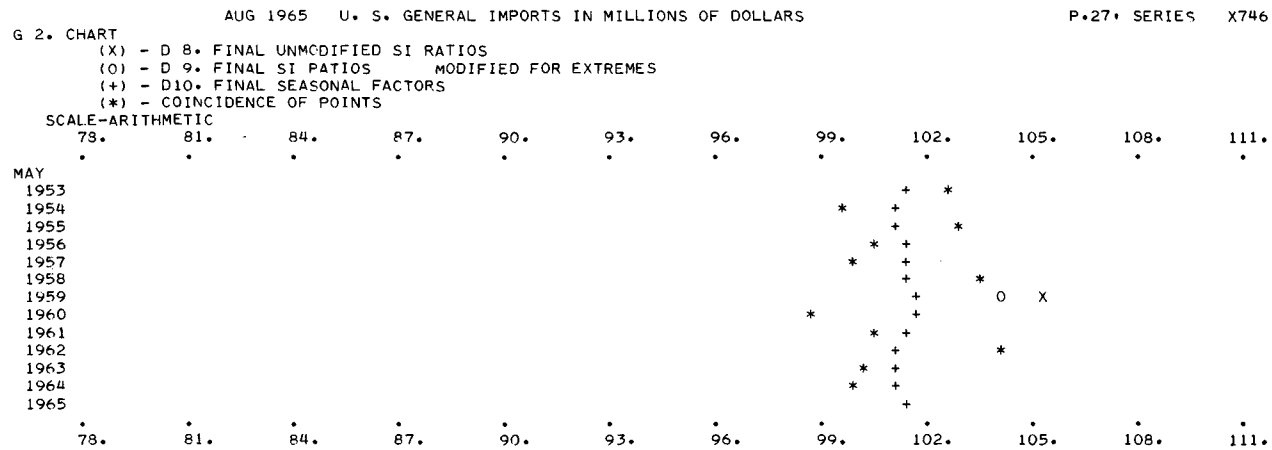
AUG 1965 U. S. GENERAL IMPORTS IN MILLIONS OF DOLLARS P.22. SERIES X746

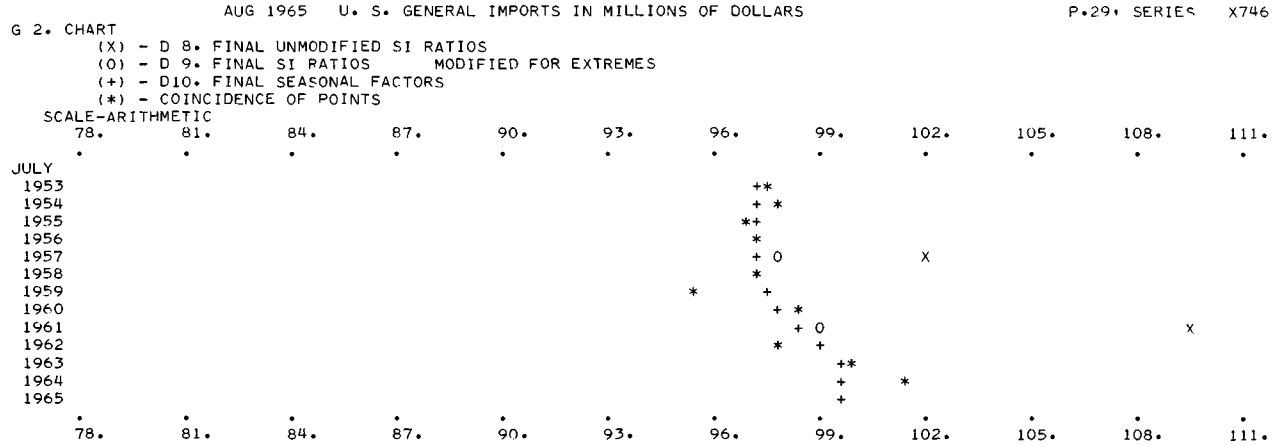
G 1. CHART
(X) - D11. FINAL SEASONALLY ADJUSTED SERIES
(O) - D12. FINAL TREND CYCLE
(*) - COINCIDENCE OF POINTS
SCALE-SEMI-LOG HALF CYCLE

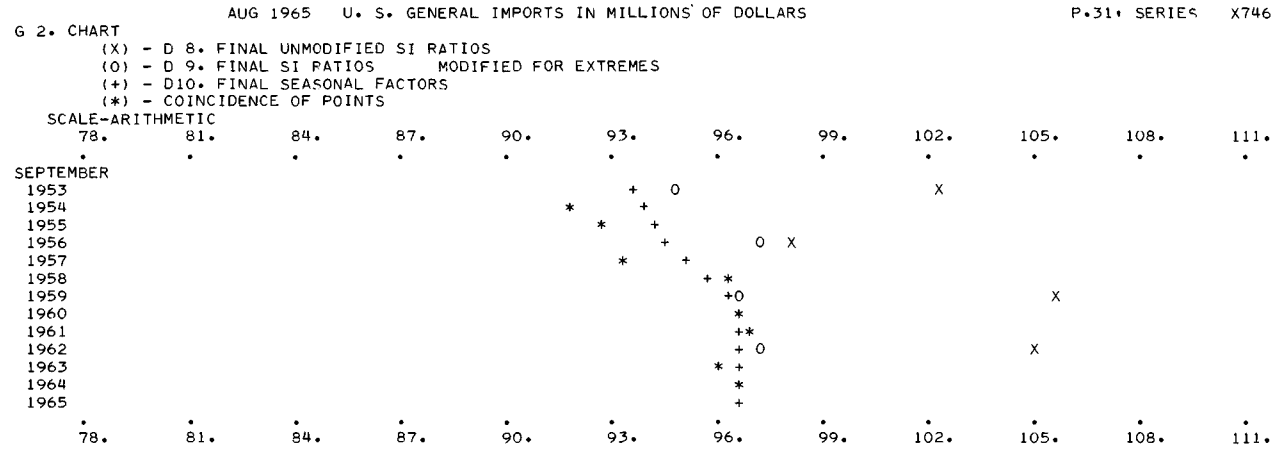


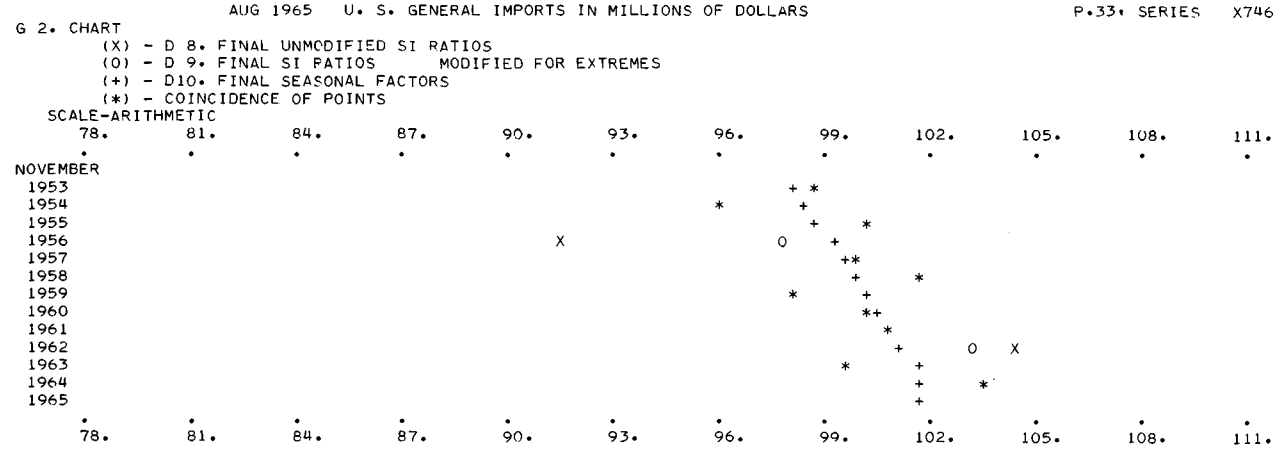












X. REFERENCES

The references cited below indicate sources for further reading on time series analysis in general and the work which forms the basis for X-11 in particular. References which deal with the problem of seasonal adjustment as it relates to the analysis of current economic conditions are 9, 14, and 15. Early works on seasonality and seasonal adjustment methods are 1, 6, and 7. Works dealing with the history of Census seasonal adjustment methods are 8, 11, 15, 17, and 18. Alternative methods of adjustment are described in 3, 5, 10, and 12.

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APPENDIXES

Appendixes A through E have been omitted from this issue. (See September issue.) They will be reinstated in the November issue.

Appendix F.—HISTORICAL DATA FOR SELECTED SERIES

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

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	17. Price per unit of labor cost index (1957-59=100)[1]											
1948	106.8	106.0	104.3	105.9	107.1	106.9	106.7	105.0	104.7	104.9	103.7	104.8
1949	102.6	101.8	102.0	101.2	99.9	100.1	99.7	101.3	101.2	101.8	102.1	102.0
1950	102.3	102.8	102.9	105.1	105.2	106.6	108.7	112.2	111.3	110.7	108.9	113.5
1951	114.7	115.1	113.9	112.0	111.2	109.1	105.9	104.6	104.1	104.8	104.4	104.7
1952	103.9	104.4	103.4	102.7	101.3	101.1	101.7	101.8	101.1	101.2	101.7	100.9
1953	100.8	100.7	100.9	100.4	100.9	100.3	101.3	100.3	99.9	99.0	97.9	97.6
1954	97.7	97.7	97.5	98.1	98.9	98.7	98.2	98.6	98.3	97.8	98.7	99.8
1955	101.2	101.1	101.7	102.3	101.7	102.1	101.8	101.7	102.3	103.6	102.9	103.1
1956	102.5	102.6	101.7	102.2	101.5	100.7	97.3	100.0	100.6	101.1	101.6	101.6
1957	102.0	102.2	102.5	100.7	100.5	100.5	100.4	101.2	100.3	98.6	98.6	98.0
1958	97.4	96.0	95.3	94.9	96.2	97.5	98.4	99.0	99.4	100.4	100.9	100.1
1959	101.0	101.7	102.1	103.2	103.2	102.4	101.4	100.0	100.0	99.7	99.2	101.1
1960	103.8	102.0	101.5	100.5	99.8	99.4	99.6	99.7	99.4	99.9	100.1	99.7
1961	99.3	98.8	98.8	100.0	100.0	100.3	100.7	101.5	101.5	101.2	101.0	101.2
	62. Index of labor cost per unit of output, total manufacturing (1957-59=100)[2]											
1948	77.3	77.3	78.9	78.4	77.8	78.4	78.9	80.2	80.5	80.0	80.7	80.2
1949	81.0	81.0	80.6	80.7	81.0	80.5	80.1	78.5	78.4	78.0	77.7	78.1
1950	77.8	78.0	77.9	76.8	77.3	76.6	76.6	75.5	77.3	78.8	81.0	80.1
1951	80.9	81.7	82.5	84.2	84.4	85.5	87.4	88.0	88.0	87.7	88.0	87.9
1952	88.0	87.9	88.3	88.7	89.7	89.8	89.0	89.0	89.7	89.4	88.8	89.3
1953	89.3	89.6	89.5	89.9	89.7	90.3	89.9	90.6	91.1	92.0	93.1	93.6
1954	93.8	93.6	93.8	93.5	92.7	92.5	92.9	92.5	92.6	93.1	92.5	91.8
1955	90.5	90.8	90.0	89.5	90.1	90.2	90.5	91.0	91.1	90.3	91.0	91.2
1956	91.9	92.2	93.2	93.4	94.5	95.2	98.3	96.4	96.2	96.3	96.2	96.4
1957	96.5	96.7	96.4	98.0	98.3	98.5	98.8	98.3	99.1	100.6	101.0	101.9
1958	102.9	104.1	105.0	105.2	103.9	102.5	101.6	101.2	100.7	99.7	99.6	100.5
1959	99.6	99.2	98.9	97.9	98.2	98.7	99.7	101.0	101.0	101.2	101.7	99.6
1960	97.3	99.0	99.7	100.7	101.3	101.7	101.6	101.5	101.6	101.2	101.2	101.4
1961	101.9	102.4	102.4	101.0	100.7	100.1	99.8	99.0	99.0	99.3	99.5	99.5
	68. Index of labor cost per dollar of real corporate GNP (1957-59=100)[3]											
1948	...	76.2	...	...	75.6	...	...	77.7	...	...	77.6	...
1949	...	77.5	...	...	77.5	...	...	76.1	...	...	77.5	...
1950	...	76.1	...	...	75.8	...	...	76.0	...	...	77.4	...
1951	...	80.9	...	...	82.6	...	...	82.6	...	...	83.0	...
1952	...	84.9	...	...	85.9	...	...	87.2	...	...	87.7	...
1953	...	88.0	...	...	88.5	...	...	89.2	...	...	91.9	...
1954	...	91.8	...	...	91.2	...	...	90.3	...	...	89.9	...
1955	...	88.5	...	...	88.6	...	...	89.6	...	...	90.6	...
1956	...	93.0	...	...	93.9	...	...	95.4	...	...	96.6	...
1957	...	97.2	...	...	98.1	...	...	98.9	...	...	100.4	...
1958	...	102.1	...	...	101.2	...	...	100.5	...	...	99.4	...
1959	...	100.3	...	...	99.5	...	...	101.3	...	...	101.7	...
1960	...	101.7	...	...	102.8	...	...	103.8	...	...	104.6	...
1961	...	104.9	...	...	103.7	...	...	103.4	...	...	102.8	...

[1] Ratio of index of wholesale prices of manufactured goods to index of labor cost per unit of output (series 62).

[2] Ratio, index of compensation of employees in manufacturing (sum of wages and salaries plus supplements to wages and salaries) to index of industrial production, manufacturing.

[3] Ratio of compensation of employees in corporate enterprises, in current dollars, to value of corporate product in constant (1958) dollars.

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65	18	..	..	..	9	30	..	..	..	..	..	..	..	..	69	..	..	66	June '64	..	..
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67	18	..	58	61	9	30	..	..	..	64	65	66	..	68	70	..	..	70	Aug. '64	..	..
68	18	..	..	..	9	30	..	..	..	..	..	..	..	..	70	..	..	73	Oct. '65	..	..

*Appendix G.
[1]See back cover for series titles and sources.
[2]Page number shown is for September issue.

SERIES INDEX TO CHARTS, TABLES, AND APPENDIXES–Continued

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84.....	19	..	..	..	9	31	..	..	..	..	..	..	..	..	71	..	..	73	Aug. '65	..	..
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90.....	19	..	..	..	9	31	..	..	..	..	..	..	..	..	69	72	..	70	Sept. '64	..	..
91.....	19	..	..	..	9	31	..	..	..	..	..	..	..	..	69	72	..	70	Sept. '64	..	..
92.....	19	..	..	..	9	31	..	..	..	..	..	..	..	..	69	72	..	70	Sept. '64	..	..
93.....	20	..	..	..	9	32	..	..	..	..	..	..	..	..	71	..	..	66	Oct. '64	..	..
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97.....	22	..	..	..	9	34	..	..	..	..	..	..	..	..	70	..	..	68	Nov. '64	..	..
98.....	20	..	..	..	9	32	..	..	..	..	..	..	..	..	71	..	..	74	Aug. '65	..	..
99.....	19	..	..	..	9	32	..	..	..	..	..	..	..	..	69	..	..	66	Oct. '64	..	..
110.....	20	..	..	..	9	32	..	..	..	..	..	..	..	..	70	..	..	72	Mar. '65	73	July '64
111.....	20	..	..	..	9	32	..	..	..	..	..	..	..	..	70	..	..	72	Feb. '65	73	July '64
112.....	20	..	..	..	9	32	..	..	..	..	..	..	..	..	71	72	..	71	July '64	73	July '64
113.....	20	..	..	..	9	33	..	..	..	..	..	..	..	..	71	..	..	71	July '64	73	July '64
114.....	21	..	..	..	9	33	..	..	..	..	..	..	..	..	69	..	..	71	July '64	74	July '64
115.....	21	..	..	..	9	33	..	..	..	..	..	..	..	..	69	..	..	72	July '64	74	July '64
116.....	21	..	..	..	9	33	..	..	..	..	..	..	..	..	69	..	..	72	July '64	74	July '64
117.....	21	..	..	..	9	33	..	..	..	..	..	..	..	..	69	..	..	72	July '64	74	July '64
118.....	21	..	..	..	9	33	..	..	..	..	..	..	..	..	69	..	..	72	July '64	74	July '64
121.....	23	..	..	..	..	35	..	..	..	..	..	..	..	..	70	..	..	66	Oct. '64	..	..
122.....	23	..	..	..	..	35	..	..	..	..	..	..	..	..	70	..	..	67	Oct. '64	..	..
123.....	23	..	..	..	..	35	..	..	..	..	..	..	..	..	70	..	..	67	Oct. '64	..	..
125.....	23	..	..	..	..	35	..	..	..	..	..	..	..	..	70	..	..	67	Oct. '64	..	..
126.....	23	..	..	..	..	35	..	..	..	..	..	..	..	..	70	..	..	67	Oct. '64	..	..
127.....	23	..	..	..	..	35	..	..	..	..	..	..	..	..	70	..	..	68	Oct. '64	..	..
128.....	23	..	..	..	..	35	..	..	..	..	..	..	..	..	70	72	..	68	Oct. '64	..	..
D1, 1 mo...	..	39	..	..	..	..	..	42	46-7	..	..	..	..	..	..	..	..	72	Mar. '65	..	..
9 mo...	..	39	..	..	..	..	..	42	46-7	..	..	..	..	..	..	..	..	68	Oct. '64	..	..
D5.....	..	39	..	..	..	..	..	43	56	..	..	..	..	..	..	..	..	73	May '65	..	..
D6, 1 mo...	..	39	..	..	..	..	..	42	46-9	..	..	..	..	..	..	..	..	72	Apr. '65	..	..
9 mo...	..	39	..	..	..	..	..	42	46-9	..	..	..	..	..	..	..	..	69	Oct. '64	..	..
D11.....	..	39	..	..	..	..	..	42	..	..	..	..	..	..	..	..	..	73	Feb. '65	..	..
D19, 1 mo..	..	39	..	..	..	..	..	43	55	..	..	..	..	..	..	..	..	72	Apr. '65	..	..
9 mo..	..	39	..	..	..	..	..	43	55	..	..	..	..	..	..	..	..	69	Oct. '64	..	..
D23, 1 mo..	..	39	..	..	..	..	..	43	48-9	..	..	..	..	..	..	..	..	72	Apr. '65	..	..
9 mo..	..	39	..	..	..	..	..	43	48-9	..	..	..	..	..	..	..	..	73	Feb. '65	..	..
D34.....	..	39	..	..	..	..	..	43	..	..	..	..	..	..	..	..	..	69	Oct. '64	..	..
D35.....	..	41	..	..	..	..	..	45	..	..	..	..	..	..	..	..	..	70	Nov. '64	..	..
D36.....	..	41	..	..	..	..	..	45	..	..	..	..	..	..	..	..	..	70	Nov. '64	..	..
D41, 1 mo..	..	40	..	..	..	..	..	44	50-3	..	..	..	..	..	..	..	..	72	Apr. '65	..	..
6 mo..	..	40	..	..	..	..	..	44	50-3	..	..	..	..	..	..	..	..	70	Oct. '64	..	..
D47, 1 mo..	..	40	..	..	..	..	..	44	52-3	..	..	..	..	..	..	..	..	73	Apr. '65	..	..
6 mo..	..	40	..	..	..	..	..	44	52-3	..	..	..	..	..	..	..	..	70	Oct. '64	..	..
D48.....	..	41	..	..	..	..	..	45	..	..	..	..	..	..	..	..	..	68-9	Nov. '64	..	..
D54, 1 mo..	..	40	..	..	..	..	..	44	48-51	..	..	..	..	..	..	..	..	73	Apr. '65	..	..
9 mo..	..	40	..	..	..	..	..	44	48-51	..	..	..	..	..	..	..	..	70	Oct. '64	..	..
D58, 1 mo..	..	40	..	..	..	..	..	44	52-5	..	..	..	..	..	..	..	..	73	Apr. '65	..	..
6 mo..	..	40	..	..	..	..	..	44	52-5	..	..	..	..	..	..	..	..	73	Feb. '65	..	..
D61.....	..	41	..	..	..	..	..	45	..	..	..	..	..	..	..	..	..	69	Nov. '64	..	..

[1]See back cover for series titles and sources.
[2]Page number shown is for September 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 "EOQ". "EOM" indicates that data are for the end of the month and "EOQ" 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

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

*38. Index of net business formation (M).--Dun and Bradstreet, Inc., and Department of Commerce, Bureau of the Census; seasonal adjustment by Bureau of the Census and National Bureau of Economic Research, Inc.

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 1958 dollars (Q).--Department of Commerce, Office of Business Economics

*51. Bank debits, all standard metropolitan statistical areas except New York (224 SMSA's) (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 (EOQ).--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 1958 dollars) (Q).--Department of Commerce, Office of Business Economics, National Income Division

Continued on reverse

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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, and Executive Office of the President, Bureau of the Budget; seasonal adjustment by the Bureau of the Census

83. Federal cash receipts from the public (Q, M).--Treasury Department, Bureau of Accounts, and Executive Office of the President, Bureau of the Budget; seasonal adjustment by the Bureau of the Census

84. Federal cash surplus or deficit (Q, M).--Treasury Department, Bureau of Accounts, and Executive Office of the President, Bureau of the Budget; seasonal adjustment by the Bureau of the Census

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