

## BUSINESS CYCLE DEVELOPMENTS

October 1968
DATA THROUGH SEPTEMBER


This report was prepared in the Statistical Analysis Division under the direction of Julius Shiskin, Chief. Technical staff and their responsibilities for the publication are-

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

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#### Abstract

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 center panel illustrates this concept. The 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 isually fall with the contraction petiod: the bottom curve, the Lagging Series which tall after a conlraction has begun and rise atter it ends. Series are also classified by economic process within each liming group. Processes are indicated in the squares bordering the panel.




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愫 A limited number of changes are made from time to time to reflect new findings of business cycle research and newly available economic series and to report recent changes made by producing agencies in concept, composition, comparability, coverage, seasonal adjustment methods, benchmark data, etc. Such changes may involve additions or deletions of series used, changes in placement of series in relation to other series, changes in components of indexes, etc.

Changes in this issue are as follows:

1. Data on retail sales (series 54) have been revised throughout the report for the period beginning August 1967 (except chart 2 and table 3 where revisions are shown for l-month spans only and begin in February 1968).

For the period beginning January 1968, the data are based on a new sample of retailers. Both the old and the new samples are based on probability designs and both provide a substantially similar measure of the total volume of retail trade. However, there are important differences in the design of the two samples and in the distribution of retail trade within the various kind-ofbusiness categories.

The new sample is designed to be more closely tied to the kind-of-business classifications of the quinquennial censuses of business than was the old sample. As a result, there has been a significant shift to the general merchandise group of "nonstore" firms--mail-order houses, merchandise machine operators, and direct selling firms-which in the old sample were assigned to the kind of business appropriate for conventional (store-type) retailers handling the same merchandise lines.

Continued on page iv.

## SPECIAL ANNOUNCEMENT

This publication will undergo a major expansion and revision next month. Most of the present content will be retained, but additional data reflecting the emphasis of other approaches to analysis of current business conditions and prospects will be added. An order form will appear in the November issue at which time the price will be announced.

Because of the expansion and changes involved, the November issue will not be available until December 2. However, the summary table (table 1) will be mailed to subscribers in advance of the report itself.

There also has been an increase in the department store category, primarily as a result of a refinement in the procedures relating to the classification of stores of large multiunit firms. Other factors, including sampling error, also have contributed to differences in the kind-of-business distribution provided by the old and new samples.

For the period August through December 1967, data from the old sample have been modified to approximate what would have been obtained from the new sample. No changes have been made prior to August 1967 but, as indicated above, for total retail trade the differences between the two samples are small.

For more complete information concerning the new sample, see the Monthly Retail Trade Report, August 1968 (series BR-68-8), issued by the Business Division, Bureau of the Census.
2. The series on manufacturing and trade sales and inventories (series 31, 71, and 816) are affected by both the revisions in data on manufacturers' shipments and inventories (see last month's issue) and the revisions of the retail trade series (see item 1, above). Revised manufacturers' shipments and inventories data have been included in the figures for July and August for series 71 and 816 and in the August figure only for series 31. Revised retail trade data have been included only in the July and August figures for series 816. Further revisions will appear in a subsequent issue. The revisions described above also affect the ratio of manufacturing and trade inventories to sales (series 851 ) which will also be revised later.
3. The diffusion indexes for value of manufacturers' new orders, durable goods industries (series D6), have been revised from 1953 to date to reflect recent revisions in data on manufacturers' shipments, inventories, and orders.
4. Appendix $F$ includes historical data for series D6.

## Cross-Classification of Business Indicators by Economic Process and Cyclical Timing

|  | Ledong micitors <br> (35 series) | Rovahty colmcident INDICATORS (25 stries) | LagGing indichtors (11 series) | SERES UMELISSIFIED <br> of crclicil timing ( 15 series) |
| :---: | :---: | :---: | :---: | :---: |
| I. EMPLOYMENT AND UNEMPLOYMENT (14 series) | Marginat employment adjustments ( 5 series) | Job vacancies $(2$ series Comprehersive employment ( 3 series) Comprehensive unemployment (3 series) | Long-duration unemployment ( 1 series) |  |
| II. PRODUCTION, INCOME, CONSUMPTION, AND TRADE ( 8 series) |  | Comprehensive production (3 series) Comprehensive income (2 series) <br> Compretensive consumption and trade (3 series) |  |  |
| III. FIXED CAPITAL INVESTMENT (14 series) | Formation of business enterprises (2 series) <br> New investment commitments (8 series) | Backlog of investment commitments (2 series) | Investment expenditures ( 2 series) |  |
| IV. INVENTORIES AND INVENTORY investment (9 series) | Inventory investment and purchasing ( 1 series) |  | Inventories (2 series) |  |
| V. PRICES, COSTS, AND PROFITS (11 series) | Sensitive commodity prices (1 series) Stock prices (1 series) Profits and proft margins (4 series) | Comprehensive wholesale prices (2 series) | Unit labor cosis (2 series) | Comprehensive retail prices ( 1 series) |
| VI. MONEY AND CREDIT (17 series) | Flows of money and credit ( 6 series) Credit difficulties (2 series) | Bank reserves <br> (1 seties) <br> Money market interest rates <br> (4 series) | Outstanding debt (2 series) Interest rates on business loans and mortgages ( 2 series) |  |
| VII. FOREIGN TRADE AND PAYMENTS ( 6 series) |  |  |  | Foreigh trade and payments (6 series) |
| VIII. federal GOVERNMENT ACTIVITIES (8 series) |  |  |  | Federal Government activities (8 series) |

## 4 CENSUS

## PROIECTS

## on economic

fluctuations

## DESCRIPTIONS AND PROCEDURES

## INTRODUCTION

The business cycle is generally described as consisting of alternating periods of expansion and contraction in aggregate economic activity-that is, the complex of activities represented by such concepts as total production, employment, income, consumption, trade, and the flow of funds. Although a recurrent pattern has been characteristic of American economic history, many economists do not consider it inevitable.

The causal relations among various economic processes are primarily responsible for the cumulative nature of cyclical forces and explain why expansions have eventually turned into recessions and recessions into expansions. Cyclical fluctuations in production and employment are preceded by fluctuations in measures which relate to future rather than current produc-tion-measures such as new orders for durable goods, formation of new business enterprises, and accessions to payrolls. They are followed by fluctuations in various economic costs, such as labor costs, interest rates, fulfillment of long-term commitments, and holdings of inventories and debts.

## BACKGROUND

The National Bureau of Economic Research, Inc. (NBER) has, since 1938, maintained a list of indicators of aggregate economic activity, and has periodically subjected that list to extensive review. The third revision of the original list was published in March 1967 and in the following month became the basis for the presentation of U.S. series in BUSINESS CYCLE DEVELOPMENTS. Previous issues of BCD were based on the 1960 NBER list.

The revised list of indicators includes some new series, discontinues some of those on the previous list,
and assigns timing classifications to some series formerly unclassified by timing. The method of preparing the new list, the reasons for adding or dropping series, and an explanation of the classification system are described in Indicators of Business Expansions and Contractions. (See reference 8, page 3.) The three major features of the new list are the classification of series by cyclical timing, the classification by economic process, and the short list of indicators.

## TIMING CLASSIFICATION

Cyclical timing is the major principle of classification employed in the new list. Timing at both peaks and troughs is taken into account in grouping the series into leading, roughly coincident, and lagging indicators. These three groups are described as follows:

Leading Indicators- 36 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 orders and contracts, another to inventory investment, and so on.

Roughly Coincident Indicators- $\mathbf{2 5}$ series that are direct measures of aggregate economic activity or move roughly together with it; for example, nonagricultural employment, industrial production, and retail sales.

Lagging Indicators-11 series, such as new plant and equipment expenditures and manufacturers' inventories, that usually reach turning points after they are reached in aggregate economic activity.

In addition, the new list contains a group of 15 series unclassified by cyclical timing. These are series
which have an important role in business cycles but do not display a consistent timing relation to them.

Also included in BCD, but not on the NBER list, are (1) a group of series which, although they measure significant economic relationships, remain unclassified by cyclical timing and economic process; and (2) indexes of industrial production, consumer prices, and stock prices for several countries which have important trade relations with the United States.

The historical business cycle turning dates used in this report are those designated by the NBER. They mark the approximate dates when, according to the NBER, aggregate economic activity reached its cyclical high or low levels. As a matter of general practice, neither new reference turning dates nor the shading for recessions will be entered in BCD until after both the new reference peak and the new reference trough bounding the shaded area have been designated. This policy is followed because of the conceptual and empirical difficulties of designating a current recession and the practical difficulties of terminating the shading for a current recession without including part of a new expansion. (See appendix A for historical peak and trough dates.)

## ECONOMIC PROCESS CLASSIFICATION

A secondary principle of classification, economic process, supplements the timing classification. Series are cross-classified according to both principles. Eight major economic process categories are used: (I) Employment and Unemployment, 14 series; (II) Production, Income, Consumption, and Trade, 8 series; (III) Fixed Capital Investment, 14 series; (IV) Inventories and Inventory Investment, 9 series; (V) Prices, Costs, and Profits, 11 series; (VI) Money and Credit, 17 series; (VII) Foreign Trade and Payments, 6 series; and (VIII) Federal Government Activities, 8 series. Most of these major categories are subdivided into minor economic processes that exhibit rather distinct differences in cyclical timing.

## SHORT LIST OF INDICATORS

A short, substantially unduplicated list of principal indicators provides a convenient way to summarize the current situation and outlook. Thus, a short list of 25 indicators, taken from the full list, has been designated by the NBER. This list includes 12 leading, seven roughly coincident, and six lagging indicators;

21 series are monthly and four are quarterly. These series are identified by asterisks throughout the report.

## METHOD OF PRESENTATION

This report consists of two major sections:
Basic Data (chart 1, tables 1and 2).-Data for all series are shown for the current and prior periods in both graphic and tabular form. Thus, a broad view of past and current business cycle fluctuations is provided.

Analytical Measures (chart 2, tables 3 and 4).Measures are presented which help to determine the magnitude and scope of current changes in different processes, industries, and areas, and aid in evaluating the prospects of a turning point in the business cycle.

A list of titles and sources for all series is shown on the back cover of this report. The series numbers are for identification only; they do not reflect series relationships or order. The index (Series Finding Guide), which appears at the end of this report, is helpful for locating specific series throughout the various charts, tables, and appendixes.

## CONCEPTS AND PROCEDURES

Several other concepts and procedures used in this report are summarized below:

Adjustments for average seasonal fluctuations are often necessary to bring out the underlying cyclical trends of a series. In most cases, the seasonally adjusted data used for a series are the official figures released by the source agency. 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. The seasonal adjustment process usually accounts for variations due to holidays; however, there are some cases in which a separate holiday adjustment is needed for holidays with variable dates.

Months for cyclical dominance ( $M C D$ ) is an estimate of the appropriate span over which to observe the cyclical movements in a monthly series. MCD moving averages are shown in chart 1 for series with an MCD of " 5 " or more; however, to pro.ide an indication of the variation about these moving averages, monthly data are also plotted.

Diffusion indexes are simple summary measures which express the percentage of the components of an aggregate series rising over given time spans. Their turning points tend to lead those of the aggregate. Series numbers preceded by "D" designate diffusion indexes. Many of the component series used to make up the diffusion indexes are shown in table 4.

During the current expansion, high values for the indicators are identified in table 2. These values are not necessarily cyclical peak values, but are simply the highest values reached to date.

Certain appendix materials are presented regularly in this report. These materials include historical data, adjustment factors, peak and trough dates, and other information helpful in interpreting trends in the indicators.

## REFERENCES

More comprehensive explanations of the use of indicators of aggregate economic activity in analyzing current business conditions and prospects may be found in the following references:
(1) Alexander, Sidney S. "Rate of Change Approaches to Forecasting-Diffusion Indexes and First Differences," The Economic Journal, June 1958, pp. 288-301.
(2) Broida, Arthur L. "Diffusion Indexes," American Statistician, vol. IX, No. 2 (June 1955), pp. 7-16.
(3) Burns, Arthur F. and Mitchell, Wesley C. Measuring Business Cycles. New York: National Bureau of Economic Research, Inc., 1946.
(4) Daly, D. J. and White, D. A. "Economic Indicators in the 1960's," Proceedings of the Business and Economics Statistics Section, American Statistical Association, August 1966, pt. V, pp. 64-75.
(5) Gordon, R. A. "Alternative Approaches to Forecasting: The Recent Work of the National Bureau," The Review of Economics and Statistics, vol. XLIV, No. 3 (August 1962), pp. 284-291.
(6) Lempert, Leonard H. "Leading Indicators," How Business Economists Forecast (William F. Butler and Robert A. Kavesh, Ed.) pt. I, ch. 2, pp. 31-47. Englewood Cliffs, N.J.: Prentice-Hall, 1966.
(7) Moore, Geoffrey H., Editor, Business Cycle Indicators. New York: National Bureau of Economic Research, Inc., 1961.
(8) Moore, Geoffrey H. and Shiskin, Julius. Indicators of Business Expansions and Contractions, Occasional Paper 103. New York: National Bureau of Economic Research, Inc., 1967.
(9) Morris, Frank E. "The Predictive Value of the National Bureau's Leading Indicators," Business Cycle Indicators, vol. I, ch. 4, pp. 110-119. New York: National Bureau of Economic Research, Inc., 1961.
(10) Okun, Arthur M. "On the Appraisal of Cyclical Turning Point Predictors," Journal of Business, April 1960, pp. 101-120.
(11) Shiskin, Julius. Business Cycle Indicators: The Known and the Unknown. Paper presented at the 34th session of the International Statistical Institute, Ottawa, Canada, August 24, 1963. Washington: Bureau of the Census, 1963.
(12) Shiskin, Julius. Signals of Recession and Recovery, Occasional Paper 77. New York: National Bureau of Economic Research, Inc., 1961.

## HOW TO READ CHARTS

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

Series numbers are for identification only and do not reflect series relationships or order. Series are arranged in charts and tables according to their classification by timing and economic process.

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 as designated by NBER.

Arabic number indicates latest month for which data are plotted. (" 3 " = March)

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. "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. The scales should be carefully noted because they show whether or not the plotted lines for various series are directly comparable.

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.

* 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 $11 / 2,2$, or $21 / 2$ months, respectively, behind the actual data. See appendix C for a description of MCD moving averages.

Scale shows percent of components rising.

Arabic number indicates latest month for which data are used in computing the indexes. (" 2 " = February)

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

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

## HOW TO LOCATE A SERIES

To locate a series in BCD, consult the Index-Series Finding Guide in the back of the book where series are arranged into eight groups by economic process and cross referenced by timing classification in the first column. The back cover, which lists series titles followed by a Roman numeral denoting economic process group) and sources in numerical order within each timing group, may also be helpful to some readers.

## Section ONE



## BASIC

## DATA

## charts and tables

LEADING INDICATORS
Employment and unemployment
Fixed capital investment Inventories and inventory investment

Prices, costs, and profits
Money and credit

## ROUGHLY COINCIDENT INDICATORS

## Employment and Unemployment

Production, income, consumption, and trade
Fixed capital investment
Prices, costs, and profits Money and credit

## LAGGING INDICATORS

> Employment and unemployment fixed capital investment
> Inventories and inventory investment Prices, costs, and profits

Money and credit

## SERIES UNCLASSIFIED BY CYCLICAL TIMING

Prices, costs, and profits
Foreign trode and payments
Federal Government activities

Also SERIES UNCLASSIFIED BY CYCUICAL TIMING AND ECONOMIC PROCESS and INTERNATIONAL COMPARISONS lindexes of industrial production, consumer prices, and stock prices
for selected foreign countries)

| Series <br> (See complete titles and sources on back cover) | COMPARATIVE MEASURES |  |  |  |  | CURRENT PERFORMANCE |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average percent change ${ }^{12}$ |  |  | Duration (months) |  | Basic data ${ }^{8}$ |  |  |  | Percent change ${ }^{2}$ |  |  |  |
|  | Sept. '67 to date (with sign) ${ }^{3}$ | Sept. '67 to date (without sign $)^{4}$ | $\begin{gathered} 1953 \text { to } \\ 1967 \\ \left(\begin{array}{c} \text { without } \\ \text { sign })^{4} \end{array}\right. \\ \hline \end{gathered}$ | $\left\|\begin{array}{c} \text { Aver- } \\ \text { age }^{6} \end{array}\right\|$ | Current direction ${ }^{7}$ | Unit of measure | July 1968 | Aug. 1968 | Sept. 1968 | $\begin{gathered} \text { June } \\ \text { to } \\ \text { July } \\ 1968 \end{gathered}$ | $\begin{gathered} \text { July } \\ \text { to } \\ \text { Aug. } \\ 1968 \end{gathered}$ | Aug. to Sept. 1968 |  |
| LEADING INDICATORS <br> 1. EMPLOYMENT AND UNEMPLOYMENT |  |  |  |  |  |  | $4$ |  |  |  |  |  |  |
| Marginal Employment Adjustments: <br> *1. Avg workweek, production workers, mig.. . . . . <br> *30. Nonagri. placements, all industries $\qquad$ <br> 2. Accession rate, manufacturing. <br> 5. Avg, weekly initial claims, State unemployment insurance (inverted ${ }^{2}$ ) $\qquad$ <br> 3. Layoff rate, manufacturing (inverted ${ }^{2}$ ) $\qquad$ | 0.0 | 0.7 | 0.5 | 2.2 | 1 | Hours | 40.9 | r40.6 | p40.9 | 0.0 | $-0.7$ | 40.7 | ${ }^{*} 1$ |
|  | +0.1 | 3.8 | 2.1 | 2.0 | 2 | Thousands | 512 | 482 | p480 | +1.6 | -5.9 | -0.4 | *30 |
|  | +0.3 | 3.5 | 4.6 | 2.2 | 1 | Per 100 employ... | r4.6 | p4. 5 | (Na) | +2.2 | -2.2 | (NA) | 2 |
|  | +0.8 | 4.7 | 5.3 | 1.7 | 2 | Thousands...... | 224 | Y 201 | $186$ | -12.6 | +6.1 | $+7.5$ |  |
|  | -2.1 | 10.4 | 8.8 | 2.4 | 2 | Per 100 employ. . | 1.2 | p1.5 | (NA) | $-9.1$ | $-25.0$ | (MA) | 3 |
| III. FIXED CAPITAL INVESTMENT |  |  |  |  |  |  |  | $4$ |  |  |  |  |  |
| Formation of Business Enterprises: *38. Index of net business formatio | +0.8 | 1.0 | 0.8 | 2.9 | 5 | -59 | 11 | 120.2 |  | +2.8 | +0.6 |  |  |
| 13. New business incorporations. | +1.0 | 2.3 | 2.5 | 1.8 | 5 | Number | 19,530 | 20,053 | (Na) | 41.7 | +2,7 | (VA) | 13 |
| New Investment Commitments: | +1.0 | 2.5 | 3.5 | 1.8 | 3 | Bil. dollars | r26.81 | r27.21. | p28.09 | 10.4 | 11.5 | +3.2 | 6 |
| 94. Construction contracts, value . | +1.2 | 7.5 | 6.4 | 1.6 | 1 | 1957-59=100 ... | 187 | - 192 | 183 | +16.9 | +2.7 | $-4.7$ | 94 |
| *10. Contracts and orders, plant and equipment | +1.2 | 4.7 | 4.6 | 1.8 | 1 | Bil. dollars . . . . | 6.96 | r7.85 | p7. 29 | -3.3. | +12.8 | -7.1 | * 10 |
| 11. New capital appropriations, manufacluring ${ }^{9}$ | -0.3 | 3.3 | 9.3 | 9.2 | 3 | ..... do | $\cdots$ | (NA) |  |  | (NA) |  | 11 |
| 24. New orders, mach. and equip. industries. . | +1.0 | 2.4 | 4.0 | 1.9 | 1 | do | 5.71 | 7r6.03 | p6.00 | -4.4 | +5.6 | $-0.5$ | 24 |
| 9. Construction contracts, commercial and industrial buildings. | +1.3 | 10.2 | 8.5 | 1.5 | 2 | Mil. sq. ft. floor space | 71.65 | 66.15 | 61.59 | +8.0 | $-7.7$ | -6.9 | 9 |
| 7. Private nonfarm housing starts. . . . . . . . . . . | +1.4 | 7.6 | 7.2 | 1.6 | 1 | Ann, rate, thous... | r1,507 | r1,492 | p1,576 | $+11.8$ | -1.0 | +5.6 | $\begin{array}{r}7 \\ \\ \hline\end{array}$ |
| *29. New building permits, private housing | +1.7 | 7.1 | 3.9 | 1.9 | 4 | 1957-59=100... | 109.3 | r109.3 | p119.1 | +0.6 | 0.0 | +9.0 | *29 |
| IV. INVENTORIES AND INVENTORY INVESTMENT |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inventory Investment and Purchasing: 21. Change in business inventories, all industries ${ }^{9}$ |  |  |  |  |  |  |  | $\sum_{1}$ |  |  |  |  |  |
|  | +0.6 | 5.2 | 2.7 | 5.2 | 3 | Ann. rate, bil. dol. . | U . . | +7.7 |  | $\cdots$ | -3.1 |  | 21 |
| *31. Change in book value, manufacturing and trade inventories ${ }^{10}$ | +0.8 | 6.0 | 3.8 | 1.5 | 1 | - | p+7.2 | p+7.8 | (NA) | +0.9 | (NA) | (NA) | *31 |
| 37. Purchased materials, percent reporting higher inventories. | -0.2 | 6.7 | 6.5 | 2.4 | 2 | Percent . . . . . . . | - 59 | - ${ }^{1}$ | 40 | 0.0 | -6.8 | -27.3 | 37 |
| 20. Change in book value, mfrs.' inventories of materials and supplies ${ }^{10}$. . . . . . . | +0.4 | 1.4 | 1.4 | 1.6 | 1 | Ann. rate, bil. dol. . | +3.5 | 2 $1+2.0$ | - (NA) | +1.8 | -1.5 | (vis) | 20 |
| 26. Buying policy, prod. 60 days or longer (u) | 0.0 | 3.7 | 5.0 | 1.8 | 2 | Percent . . . . . . . | H\%68 | 4 | +60 | +1.5 | -2.9 | -9.1 | 26 |
| 32. Vendor performance, percent repor slower deliveries ( ロ).......... | +0.7 | 5.6 | 7.4 | 3.1 | 2 |  | 56 | + 4.46 | - 4.46 | +7.7 | -17.9 | 0.0 | 32 |
| 25. Change in unfilled orders, durable goods industries ${ }^{10}$. | +0.02 | 0.82 | 0.48 | 1.7 | 1 | Bil. dollars | . 29 | r+0.49 | p+0. 20 | -0.36 | +1.78 | -0.29 | 25 |
| V. PRICES, COSTS, AND PROFITS |  |  |  |  |  |  | $\because$ |  | $1$ | $2$ |  |  |  |
| Sensitive Commodity Prices: <br> *23. Industrial materials prices | -0.1 | 0.9 | 1.3 | 2.6 | 2 | 1957-59=100 ... | 94.4 | 94.8 | 96.1 | -1.3 | $\pm 0.4$ | +1.4 | *23 |
| Stock Prices: <br> *19. Stock prices, 500 common stocks @ | +0.5 | 2.6 | 2.5 | 2.4 | 1 | 1941-43=10.... | 100.30 | 98.11 | 101.34 | -0.2 | $-2.2$ | $+3.3$ | *19 |
| Profits and Profit Margins: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{*} 16$. Corporate profits after taxes ${ }^{9}$. | +2.2 | 3.8 | 5.2 | 9.0 | 3 | Ann. rate, bil. dol. . |  | (NA) |  | $\cdots$ | (NA) |  | *16 |
| 22. Ratio, profits to income originating, corporate, all industries.. | -0.2 | 2.5 | 4.2 | 7.2 | 6 | Percent |  | (NA) |  |  | (va) |  | 22 |
| 18. Profits per dollar of sales, manufacturing ${ }^{9}$. | +2.8 | 2.8 | 5.6 | 7.9 | 9 | Cents |  | (NA) |  |  | (NA) |  | 18 |
| *17. Ratio, price to unit labor cost, manufacturing.. | -0.1 | 0.4 | 0.6 | 2.5 | 3 | 1957-59=100 | r99.4 | r97.9 | p97.5 | -0.2 | -1.5 | $-0.4$ | *17 |
| VI. MONEY AND CREDIT |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Flows of Money and Credit: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 98. Change in money supply and time deposits ${ }^{10}$. . | -0.15 | 2.29 | 2.42 | 1.5 | 2 | Ann. rate, percent. | $\mathrm{r}+13.44$ | +13.32 | p+6. 24 | +7.32 | -0.12 | -7.08 | 98 |
| 85. Change in U.S. money supply ${ }^{10}$. . . . . . . . . . . | -0.58 | 4.60 | 2.85 | 1.4 | 2 | ..... do ...... | r+12.84 | $+5.04$ | p-5.64 | +4.4.4 | -7.80 | $-10.68$ | 85 |
| 33. Change in mortgage debt ${ }^{10}$. . . . . . i io | -0.13 | 1.80 | 1.34 | 1.5 | 2 | Ann.rate, bil. dol. . | $r+18.28$ | $p+19.31$ | (va) | +1, 14 | 41.03 | (NA) | + $\begin{array}{r}33 \\ * 113\end{array}$ |
| *113. Change in consumer instaliment debt ${ }^{10} \ldots \ldots$. | +0.62 | 0.75 9.37 | 0.86 | 1.6 | 4 | . . . . do do | +8.18 | +10.24 | (NA) | +0.60 | +2.06 | (Na) | ${ }^{*} 113$ |
| 112. Change in business loans ${ }^{10}$. . . . . . . . . . . | +0.52 +2.5 | 9.37 | 2.77 | 1.6 | 1 | Ann do...... | $+13.81$ | $4.33$ | $\mathrm{p}+4.13$ | $+7.40$ | -18.14 | 48.46 | 112 |
| 110. Total private borrowing ${ }^{9}$. . . . . . . . . . . . . . . | +2.5 | 13.1 | 11.0 | 6.7 | 3 | Ann. rate, mil. dol.. |  | (NA) |  |  | (NA) |  | 110 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Credit Difficulties: 14. Liabilities of business failures (inverted ${ }^{2}$ ) . . . | -4.0 | 30.4 | 19.6 | 1.5 | 1 | Mil. dollars . . . . | 96.96 | 54.58 | 56.72 | $-55.6$ | +43.7 | $-3.9$ | 14 |
| 39. Delinquency rate, instalment loans, 30 days and over (inverted ${ }^{2}$ ) | +1.01 | 5.0 | $2.7$ | $5.2$ |  | Percent . . . . . . . |  | $1.56$ |  |  | +0.6 |  | 39 |



## CHANGES OVER 4 LATEST MONTHS-Continued



[^0]
## I. EMPLOYMENT AND UNEMPLOYMENT



BUSINESS CYCLE SERIES FROM 1948 to PRESENT-Continued
Leading Indicators - Continued
III. FIXED CAPITAL INVESTMENT


See 'How to Read Charts 1 and 2,' page '4. Asterisk (*) identifies series on 'short list'. Current data for these series are shown on pages 33 and 34
III. FIXED CAPITAL INVESTMENT - Continued

IV. INVENTORIES AND INVENTORY INVESTMENT


See 'How to Read Charts 1 and 2,' page 4. Asterisk \{') identifies series on 'short list'. Current data for these series are shown on page 35

## IV. INVENTORIES AND INVENTORY INVESTMENT-Continued



ㅍ. PRICES, COSTS, AND PROFTTS


See 'How to Read Charts 1 and 2,' page 4. Asterisk (*) identifies series on 'short list'. Current data for these series are shown on pages 35 and 36.

## BUSINESS CYCLE SERIES FROM 1948 to PRESENT-Continued

 Leading Indicators-Continued
## Z. PRICES, COSTS, AND PROFITS-Continued



See 'How to Read Charts 1 and 2,' page 4. Asterisk (") identifies series on 'short list'. Current data for these series are shown on page 36.

II . MONEY AND CREDIT

| (Nov.) [0ct.) | (July) | (Aug.) | (July) [Apr.] | (May) (Feb.) |
| :---: | :---: | :---: | :---: | :---: |
| P T | P | T | P T | P T |



## BUSINESS CYCLE SERIES FROM 1948 to PRESENT-Continued

Leading Indicators-Continued


BUSINESS CYCLE SERIES FROM 1948 to PRESENT -Continued Roughly Coincident Indicators
I. EMPLOYMENT AND UNEMPLOYMENT


See 'How to Read Charts 1 and 2,' page 4. Asterisk ['] identifies series on 'short list'. Current data for these series are shown on page 38

## I EMPLOYMENT AND UNEMPLOYMENT-Continued


II. PRODUCTION, INCOME, CONSUMPTION, AND TRADE


See 'How to Read Charts 1 and 2,' page 4. Asterisk (') identifies series on 'short list'. Current data for these series are shown on pages 38 and 39.

Roughly Coincident Indicators-Continued
II. PRODUCTION, INCOME, CONSUMPTION, AND TRADE -Continued


BUSINESS CYCLE SERIES FROM 1948 to PRESENT-Continued
Roughly Coincident Indicators-Continued
III. FIXED CAPITAL INVESTMENT




## BUSINESS CYCLE SERIES FROM 1948 to PRESENT -Continued <br> Lagging Indicators

## I. EMPLOYMENT AND UNEMPLOYMENT


III. FIXED CAPITAL INVESTMENT

IV. INVENTORIES AND INVENTORY INVESTMENT



Series Unclassified by Cyclical Timing ㅍ.PRICES, COSTS, AND PROFITS

VII. FOREIGN TRADE AND PAYMENTS-Continued


BASIC DATA

## BUSINESS CYCLE SERIES FROM 1948 to PRESENT-Continued <br> Series Unclassified by Cyclical Timing-Continued

 VIII. FEDERAL GOVERNMENT ACTIVITIES
VIII. FEDERAL GOVERNMENT ACTIVITIES-Continued


BUSINESS CYCLE SERIES FROM 1948 to PRESENT-Continued
Series Unclassified by Cyclical Timing and Economic Process



## sernis for nitenantonal compankons

 FROM 1948 to PRESENT


[^1]
## SERIES FOR INTERNATIONAL COMPARISONS FROM 1948 to PRESENT-Continued




NOTE: Series are seasonally adjusted except those series that appear to contain no seasonal movement. Unadjusted series are indicated by ( $\square)$. Current high values are indicated by $\mathbb{H}>$ : for series that move counter to movements in general business activity (series $3,5,14,39,40,43,45,93$, and 502 ), current low values are indicated by - - . Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. Series preceded by an asterisk ( ${ }^{*}$ ) are included in the 1966 NBER "short list" of indicators. The " r " indicates revised; " p ", preliminary; " e ", estimated; " z ", anticipated; and "NA" not available.
${ }^{1}$ Data exclude Puerto Rico which is included in figures published by source agency.

| Major <br> Economic Process | FIXED CAPITAL INVESTMENT--Con. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Minor Economic Process | New Investment Commitments |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Year } \\ & \text { and } \\ & \text { month } \end{aligned}$ | *6. Value of manufacturers' new orders, durable goods industries <br> (Bil. dol.) | 94. Index of construction contracts, total value $(1957-59=100)$ | *10. Contracts and orders for plant and equipment <br> (Bil. dol.) | 11. Newly approved capital appropriations, 1,000 manufacturing corporations <br> (Bil. dol.) | 24. Value of manufacturers' new orders, machinery and equipment industries <br> (Bil. dol.) | 9. Construction contracts, commercial and industrial buildings (Mil. sq. ft. floor space) | 7. New private nonfarm housing units started ${ }^{1}$ <br> (Ann. rate, thous.) | *29. Index of new private housing units authorized by local building permits ${ }^{2}$ $(1957-59=100)$ |
| 1966 <br> January <br> February $\qquad$ <br> March. $\qquad$ $\qquad$ <br> April <br> May $\qquad$ <br> June. $\qquad$ $\qquad$ <br> July <br> August. $\qquad$ <br> September $\qquad$ <br> October $\qquad$ <br> November <br> December $\qquad$ $\qquad$ <br> 1967 <br> January $\qquad$ <br> February . <br> March. $\qquad$ <br> April $\qquad$ <br> May <br> June. $\qquad$ $\qquad$ <br> July <br> August. $\qquad$ <br> September $\qquad$ <br> October $\qquad$ <br> November $\qquad$ 1968 <br> January. $\qquad$ February $\qquad$ <br> April <br> May. $\qquad$ <br> June. $\qquad$ <br> July <br> August. <br> September $\qquad$ <br> October $\qquad$ <br> November December $\qquad$ |  |  |  |  |  |  | $\begin{gathered} 1,303 \\ 1,381 \\ 1,300 \\ 1,236 \\ 1,161 \\ 1,061 \\ 1,088 \\ 1,020 \\ 1,824 \\ 1,956 \\ 1,079 \\ 1,132 \\ 1,067 \\ 1,099 \\ 1,2514 \\ 1,356 \\ 1,381 \\ 1,415 \\ 1,4,478 \end{gathered}$ |  |

NOTE: Series are seasonally adjusted except those series that appear to contain no seasonal movement. Unadjusted series are indicated by (u). Current high values are indicated by $\mathbb{H}>$; for series that move counter to movements in general business activity (series $3,5,14,39,40,43,45$. 93 , and 502 ), current low values are indicated by H ${ }^{-1}$. Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. Series preceded by

${ }_{2}{ }^{1}$ High value ( 1,833 ) was reached in October 1963.
${ }^{2}$ High value (124.6) was reached in February 1964.

| Major <br> Economic Process | INVENTORIES AND INVENTORY INVESTMENT |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Minor <br> Economic Process | Inventory Investment and Purchasing |  |  |  |  |  |  |
| Year and month | 21. Change in business inventories after valuation adjustment, all industries <br> (Ann. rate, bil.dol.) | *31. Change in book value of manufacturing and trade inventories, total <br> (Ann.rate,bil.dol.) | 37. Purchased materials, percent of companies reporting higher inventories ${ }^{1}$ <br> (Percent reporting) | 20. Change in book value of manufacturers' inventories of materials and supplies ${ }^{2}$ <br> (Ann. rate, bil. dol.) | 26. Production materials, percent of companies reporting commitments 60 days or longer () (Percent reporting) | 32. Vendor performance, percent of companies reporting slower deliveries (1) <br> (Percent reporting) | 25. Change in unfilled orders, durable goods industries (Bil. dol.) |
| 1966 <br> January............. <br> February <br> March. $\qquad$ <br> April <br> May $\qquad$ <br> June. $\qquad$ <br> July <br> August. $\qquad$ <br> September $\qquad$ <br> October. $\qquad$ <br> November $\qquad$ <br> December <br> 1967 <br> January <br> February $\qquad$ <br> March. $\qquad$ <br> April $\qquad$ <br> May $\qquad$ <br> July . <br> August. <br> September.......... <br> October $\qquad$ <br> November <br> December <br> 1968 <br> January <br> February $\qquad$ <br> March. <br> April <br> May $\qquad$ $\qquad$ <br> July <br> August. <br> September........... <br> October $\qquad$ <br> November <br> December $\qquad$ |  | $\begin{array}{r} +8.4 \\ +11.6 \\ +13.2 \\ +13.0 \\ +18.1 \\ +16.5 \\ +13.3 \\ +15.5 \\ +9.6 \\ +18.2 \\ +1.4 \\ +19.8 \\ +12.9 \\ +3.9 \\ +3.2 \\ +1.3 \\ -4.6 \\ +3.7 \\ +8.9 \\ -0.7 \\ +5.7 \\ +12.8 \\ +16.9 \\ 4 \end{array}$ |  | $\begin{aligned} & +1.2 \\ & +2.5 \\ & +1.9 \\ & +2.8 \\ & +4.7 \\ & +4.7 \\ & +3.2 \\ & +5.7 \\ & +1.5 \\ & +2.6 \\ & +2.2 \\ & +2.8 \\ & \text { +2.6 } \\ & +0.4 \\ & +0.6 \\ & -1.6 \\ & -0.4 \\ & -0.9 \\ & +1.4 \\ & +0.2 \\ & -2.2 \\ & +0.1 \\ & +0.6 \\ & +0.3 \end{aligned}$ |  |  |  |

NOTE: Series are seasonally adjusted except those series that appear to contain no seasonal movement. Unadjusted series are indicated by ( $@$. Current high values are indicated by $\mathbb{H}$; for series that move counter to movements in general business activity (series $3,5,14,39,40,43,45,93$, and 502 ), current low values are indicated by BD. Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. Series preceded by an asterisk (*) are included in the 1966 NBER "short list" of indicators. The " $r$ " indicates revised; " $p$ ", preliminary; " $e$ ", estimated; " $\mathrm{a}^{\prime \prime}$, anticipated; and "NA", not available.
${ }^{1}$ High value (63) was reached in November 1964.
${ }^{2}$ The August 1968 figure is not strictly comparable with earlier figures. See "New Features and Changes for This Issue," page iii.

BASIC DATA
LATEST DATA FOR BUSINESS CYCLE SERIES-Continued

## Leading Indicators-Continued

| Major Economic Process | PRICES, COSTS, AND PROFITS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Minor Economic Process | Sensitive Commodity Prices | Stock Prices | Profits and Profit Margins |  |  |  |
|  | *23. Index of industrial materials prices(l) $(1957-59=100)$ | *19. Index of stock prices, 500 common stocks (1) $(1941-43=10)$ | *16. Corporate profits after taxes <br> (Ann. rate, bil. dol.) | 22. Ratio of profits to income originating, corporate, all industries <br> (Percent) | 18. Profits (before taxes) per dollar of sales, all manufacturing corporations <br> (Cents) | *17. Ratio, price to unit labor cost index, manufacturing $(1957-59=100)$ |
| 1966 <br> January <br> February <br> March. <br> April <br> May $\qquad$ $\qquad$ <br> June. $\qquad$ <br> July <br> August. $\qquad$ <br> September $\qquad$ <br> October $\qquad$ <br> November $\qquad$ <br> December <br> 1967 <br> January $\qquad$ <br> February <br> March. $\qquad$ <br> April $\qquad$ <br> May $\qquad$ <br> July. $\qquad$ <br> August. <br> September $\qquad$ <br> October <br> November . $\qquad$ $\qquad$ <br> 1968 <br> January <br> February $\qquad$ <br> March. $\qquad$ <br> April <br> May $\qquad$ <br> June. $\qquad$ <br> July. <br> August. <br> September. <br> October <br> November December |  |  |  |  |  |  |

NOTE: Series are seasonally adjusted except those series that appear to contain no seasonal movement. Unadjusted series are indicated by (u). Current high values are indicated by $\mathbb{H}$; for series that move counter to movements in general business activity (series $3,5,14,39,40,43,45$, 93 , and 502), current low values are indicated by H5. Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. Series preceded by an asterisk (*) are included in the 1966 NBER "short list" of indicators. The "r" indicates revised; " p ", preliminary; " e ", estimated; " $\mathrm{a}^{*}$ ", anticipated; and "NA", not available.
${ }^{1}$ Average for October 21, 22, and 23.
${ }^{2}$ Average for October 21, 22, and 24.


NOTE: Series are seasonally adjusted except those series that appear to contain no seasonal movement. Unadjusted series are indicated by (al). Current high values are indicated by $\mathbb{H}$; for series that move counter to movements in general business activity (series $3,5,14,39,40,43,45,93$, and 502 ), current low values are indicated by $\mathbb{H}$. Series numbers are for identification only and do not reflect series relationships or order. Complete tittes and sources are shown on the back cover. Series preceded by an asterisk (*) are included in the 1966 NBER "short list" of indicators. The " r " indicates revised; " p ", preliminary; " e ", estimated; " $\mathrm{a}^{*}$, anticipated; and "NA", not available.
${ }^{1}$ High value (24.02) was reached in October 1963.
${ }^{2}$ High value (52.86) was reached in August 1963.

Roughly Coincident Indicators


NOTE: Series are seasonally adjusted except those series that appear to contain no seasonal movement. Unadjusted series are indicated by (u). Current high values are indicated by $\mathbb{H}$; for series that move counter to movements in general business activity (series $3,5,14,39,40,43,45,93$, and 502 ), current low values are indicated by (1) Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. Series preceded by


[^2]| Major Economic Process | PRODUCTION, INCOME, CONSUMPTION, AND TRADE |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Minor Economic Process | Comprehensive Production |  |  | Comprehensive Income |  | Comprehensive Consumption and Trade |  |  |
| Year and month | 49. Gross national product in current dollars <br> (Ann. rate, bil. dol.) | *50. Gross national product in 1958 dollars <br> (Ann. rate, bil. dol.) | *47. Index of industrial production $(1957-59=100)$ | *52. Personal income <br> (Ann. rate, bil. dol.) | 53. Wages and salaries in mining, manufacturing, and construction <br> (Ann. rate, bil. dol.) | *816. Manufacturing and trade sales <br> (Mil. dol.) | 57. Final sales (series 49 minus series 21) <br> (Ann. rate, bil. dol.) | *54. Sales of retail stores <br> (Mil. dol.) |
| January <br> February <br> March. <br> April $\qquad$ <br> May $\qquad$ <br> June. $\qquad$ <br> July. <br> August. <br> September $\qquad$ <br> October $\qquad$ <br> November $\qquad$ <br> December $\qquad$ $1967$ <br> January $\qquad$ <br> February $\qquad$ <br> March. $\qquad$ <br> April $\qquad$ <br> May <br> June. $\qquad$ <br> July $\qquad$ <br> August. <br> September $\qquad$ <br> October $\qquad$ <br> November $\qquad$ <br> December $\qquad$ <br> 1968 <br> January <br> February $\qquad$ <br> March. <br> April $\qquad$ <br> May <br> June. $\qquad$ $\qquad$ <br> July <br> August. <br> September $\qquad$ <br> October $\qquad$ <br> November $\qquad$ December | 728.4 <br> 740.4 <br> " ${ }^{2}$ ? <br> 753.3 <br> 768.? $\qquad$ <br> The:? <br> 780. 2 <br> 5i+3* <br> 7954 <br> 4: <br> 8112 <br> 2tret <br> $831 \cdot{ }^{2} \cdot{ }^{2}$ $\qquad$ <br> 852.9 $\text { TS } 2870.6$ |  |  |  |  |  <br> (NA) |  |  |

NOTE: Series are seasonally adjusted except those series that appear to contain no seasonal movement. Unadjusted series are indicated by (1). Current high values are indicated by $\boldsymbol{H}$ - for series that move counter to movements in general business activity (series $3,5,14,39,40,43,45,93$, and 502 ), current low values are indicated by $\mathbb{H}$. Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. Series preceded by an asterisk (*) are included in the 1966 NBER "short list" of indicatorṣ. 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.
${ }^{2}$ Beginning with July 1968, data are not strictiy comparable with earlier figures. See "New Features and Changes for This Issue," page iii.

## Roughly Coincident Indicators-Continued

| Major Economic Process | FIXED CAPITAL INVESTMENT |  | PRICES, COSTS, AND PROFITS |  | MONEY AND CREDIT |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Minor Economic Process | Backlog of Investment Commitments |  | Comprehensive Wholesale Prices |  | Bank Reserves | Money Market Interest Rates |  |  |  |
|  | 96. Manufacturers' unfilled orders, durable goods industries <br> (Bil. dol.) | 97. Backlog of capital appropriations, manufacturing <br> (Bil. dol.) | 55. Index of wholesale prices, indus- trial commod- ities (1) $(1957-59=100)$ | 58. Index of wholesale prices, manufactured goods (1) $(1957-59=100)$ | 93. Free reserves (1) <br> (Mil. dol.) | 114. Treasury bill rate (1) <br> (Percent) | 116. Corporate bond yields (1) <br> (Percent) | 115. Treasury bond yields(4) <br> (Percent) | 117. Municipal bond yields(1) <br> (Percent) |
| 1966 <br> January <br> February <br> March. <br> April <br> May $\qquad$ <br> June. $\qquad$ <br> July. <br> August. <br> September $\qquad$ <br> October $\qquad$ <br> November . <br> December $\qquad$ <br> 1967 <br> January $\qquad$ <br> February <br> March. $\qquad$ <br> April <br> May $\qquad$ <br> June. $\qquad$ $\qquad$ <br> July <br> August. <br> September <br> October <br> November <br> December $\qquad$ <br> 1968 <br> January $\qquad$ <br> February <br> March. $\qquad$ <br> April $\qquad$ <br> May $\qquad$ <br> July <br> August. <br> September $\qquad$ <br> October <br> November December |  |  | r <br> 103.5 <br> 103.8 <br> 104.0 <br> 104.3 <br> 104.7 <br> 104.9 <br> 1105.2 <br> 105.2 <br> 105.2 <br> 105.3 <br> 105.5 <br> 105.5 <br> 105.8 <br> 106.0 <br> 106.0 <br> 106.0 <br> 106.0 <br> 106.0 <br> 106.9 <br> 106.3 <br> 106.5 <br> 106.8 |  |  |  |  |  | $\begin{array}{r} 13.52 \\ 3.64 \\ \hline 3.72 \\ \hline 3.56 \\ \hline 3.65 \\ \hline 3.77 \\ \hline 3.95 \\ 4.12 \\ 4.12 \\ 3.94 \\ 3.86 \\ 3.86 \\ 3.54 \\ 3.52 \\ 3.55 \\ 3.60 \\ 3.89 \\ 3.96 \\ 4.02 \\ 3.99 \\ 4.12 \end{array}$ |

NOTE: Series are seasonally adjusted except those series that appear to contain no seasonal movement. Unadjusted series are indicated by (1). Current high values are indicated by $\mathbb{H}>$; for series that move counter to movements in general business activity (series $3,5,14,39,40,43,45,93$, and 502 ), current low values are indicated by (1) Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. Series preceded by an asterisk (*) are included in the 1966 NBER "short list" of indicators. The " $r$ " indicates revised; " p ", preliminary; " e ", estimated; " a ", anticipated; and "NA". not available.

| $\begin{gathered} \text { Major } \\ \text { Economic Process } \end{gathered}$ | EMPLOYMENT AND UNEMPLOYMENT | FIXED CAPITAL INVESTMENT |  | INVENTORIES AND INVENTORY INVESTMENT |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Minor Economic Process | Long-Duration Unemployment | Investment Expenditures |  | Inventories |  |
| Year and <br> month | *502. Unemployment rate, persons unemployed 15 weeks and over <br> (Percent) | *61. Business expenditures on new plant and equipment, total <br> (Ann. rate, bil. dol.) | 505. Machinery and equipment sales and business construction expenditures <br> (Ann. rate, bil. dol.) | *71. Manufacturing and trade inventories, book value <br> (Bil. dol.) | 65. Manufacturers' inventories of finished goods, book value <br> (Bil. dol.) |
| 1966 <br> January............ <br> February <br> March. <br> April <br> May <br> June. <br> July. <br> August. <br> September $\qquad$ <br> October $\qquad$ <br> November <br> December $\qquad$ <br> 1967 <br> January <br> February <br> March. <br> April <br> May $\qquad$ <br> June. $\qquad$ $\qquad$ <br> July <br> August. <br> September <br> October <br> November <br> December <br> 1968 <br> January $\qquad$ <br> February. <br> March. $\qquad$ <br> April <br> May <br> June. $\qquad$ <br> July. <br> August. <br> September <br> October. $\qquad$ <br> November $\qquad$ | 0.8 0.8 0.8 0.8 0.7 0.6 0.6 0.6 0.6 0.7 0.6 0.6 0.8 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 30.5 0.5 0.5 0.6 0.5 0.5 |  |  |  | 22,65 <br> 22, 78 <br> 22.94 <br> 23.04 <br> 23.33 <br> 23.58 <br> 23.82 <br> 24.01 <br> 24.28 <br> 24.47 <br> 24.83 <br> 25.14 <br> 25.43 <br> 25.68 <br> 25.82 <br> 26.22 <br> 26.41 <br> 26.36 <br> 26. 43 <br> 26.61 <br> 26.64 <br> 26,63 <br> 26.70 <br> 26. 81 <br> 26.97 <br> 27.09 <br> 27.21 <br> 27.35 <br> 27.59 <br> 27.64 <br> 27.79 <br> 28.15 <br> (MA) |

NOTE: Series are seasonally adjusted except those series that appear to contain no seasonal movement. Unadjusted series are indicated by (a). Current high values are inJicated by $\mathbb{H}>$ : for series that move counter to movements in general business activity (series $3,5,14,39,40,43,45,93$, and 502), current low values are indicated by $\mathbb{1}-$. Series numbers are for identification only and do not reflect series relationships or order. Complete titles and sources are shown on the back cover. Series preceded by - $n$ asterisk (*) are included in the 1966 NBER "short list" of indicators. The " $r$ " indicates revised; " $p$ ", preliminary; " $e$ ", estimated; " ${ }^{*}$ ", anticipated; and " $N A^{*}$ not available.
${ }^{1}$ Beginning with July 1968, data are not strictly comparable with earlier figures. See "New Features and Changes
for This Issue," page iii.

Lagging Indicators-Continued

| Major Economic Process | PRICES, COSTS, AND PROFITS |  | MONEY AND CREDIT |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Minor Economic Process | Unit Labor Costs |  | Outstanding Debt |  | Interest Rates on Business Loans and Mortgages |  |
|  | 68. Labor cost (cur. dol.) per unit of gross product (1958 dol.), nonfinancial corporations <br> (Dollars) | *62. Index of labor cost per unit of output, manufacturing $(1957-59=100)$ | 66. Consumer installment debt <br> (Mil. dol.) | *72. Commercial and industrial loans outstanding, weekly reporting large commercial banks <br> (Mil. dol.) | *67. Bank rates on short-term business loans, 35 cities ( $\mathbf{u}^{1}{ }^{1}$ <br> (Percent) | 118. Mortgage yields, residential (ii) <br> (Percent) |
| 1966 <br> January. <br> February <br> March. <br> April $\qquad$ <br> May <br> June. . $\qquad$ <br> July. <br> August. $\qquad$ <br> September $\qquad$ <br> October <br> November $\qquad$ <br> December $\qquad$ <br> 1967 <br> January $\qquad$ <br> February $\qquad$ <br> March. $\qquad$ <br> April $\qquad$ May $\qquad$ <br> June. $\qquad$ <br> July. <br> August. <br> September <br> October <br> November $\qquad$ <br> December $1968$ <br> January February $\qquad$ March. <br> April May $\qquad$ $\qquad$ <br> July <br> August. <br> September <br> October <br> November December |  |  |  |  | $5.55$ $5$ $5.82$ $3 \times$ $6.30$ $4$ $6.31$ <br> 6.13 $\qquad$ <br> 5.95 <br> 5. 95 <br> 5.96 $\qquad$ <br> tuex. 6.36 <br> 6.84 $\text { F } 5.89$ | 5.70 <br> (INA) <br> 6.00 <br> (MA) <br> 6. 32 <br> 6.45 <br> 6.51 <br> 6.58 <br> 6.63 <br> (MA) <br> 6.81 <br> 6.77 <br> 6.62 <br> 6.46 <br> 6.35 <br> 6.29 <br> 6.44 <br> 6,51 <br> 6.53 <br> 6.60 <br> 6.63 <br> 6.65 <br> 6.77 <br> 6.81 <br>  |

NOTE: Series are seasonally adjusted except those series that appear to contain no seasonal movement. Unadjusted series are indicated by (a). Current high values are indicated by $\mathbb{H}$ : for series that move counter to movements in general business activity (series $3,5,14,39,40,43,45,93$, and 502 ), current low values are indicated by $\mathbb{T}$. Series numbers are for identification only and do not reflect series relationships or order. Complete tittes and sources are shown on the back cover. Series preceded by an asterisk (*) are included in the 1966 NBER "short list" of indicators. The " $r$ " indicates revised; " $p$ ", preliminary; " $e$ ", estimated; " $\mathrm{a}^{\prime \prime}$, anticipated; and " $N \mathrm{~A}^{\text {", not available. }}$
${ }^{1}$ Prior to 1967, data are based on 19 cities and refer to the last month of the quarter.

OCTOBER 1968


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

| Major <br> Economic Process | FEDERAL GOVERNMENT ACTIVITIES |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Minor Economic Process | Federal Government Activities |  |  |  |  |  |  |  |
| Year and month | 95. Federal surplus (+) or deficit ( - ), national income and product accounts <br> (Ann. rate, bil. dol.) | 951. Federal receipts, national income and product accounts <br> (Ann. rate, bil. dol.) | 952. Federal expenditures, national income and product accounts <br> (Ann. rate, bil. dol.) | 101. National defense purchases, current dollars <br> (Ann, rate, bil. dol.) | 91. Defense Department obligations, total <br> (Mil, dol.) | 90. Defense Department obligations, procurement <br> (Mil. dol.) | 99. New orders, defense products industries (Bil. dol.) | 92. Military prime contract awards to U.S. business firms and institutions <br> (Mil. dol.) |
| 1966 <br> January. February <br> March. <br> April <br> May $\qquad$ <br> June. $\qquad$ <br> July. <br> August. <br> September <br> October <br> November <br> December <br> 1967 <br> January. . <br> February $\qquad$ <br> March. $\qquad$ <br> April <br> May $\qquad$ <br> June. <br> July. <br> August. <br> September <br> October <br> November <br> December <br> 1968 <br> January. <br> February <br> March. <br> April <br> May $\qquad$ $\qquad$ <br> July. <br> August. <br> September.......... <br> October <br> November <br> December |  |  |  |  |  |  |  |  |

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


NOTE: Series are seasonally adjusted except those that appear to contain no seasonal movement. Unadjusted series are indicated by @l. 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 " $N A^{\text {" }}$, not available.

| Major Economic Process | INDUSTRIAL PRODUCTION INDEXES |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Minor Economic Process | Industrial Production Indexes |  |  |  |  |  |  |  |
| Year and month | 47. United States, index of industrial production $(1957-59=100)$ | 123. Canada, index of industrial production $(1957-59=100)$ | 122. United Kingdom, index of industrial production $(1957-59=100)$ | 121. OECD, ${ }^{1}$ European countries, index of industrial production $(1957-59=100)$ | 126. France, index of industrial production $(1957-59=100)$ | 125. West Germany, index of industrial production $(1957-59=100)$ | 128. Japan, index of industrial production $(1957-59=100)$ | 127. Italy, index of industrial production $(1957-59=100)$ |
| 1966 <br> January February $\qquad$ March. <br> April <br> May $\qquad$ <br> June. $\qquad$ $\qquad$ <br> July. <br> August. $\qquad$ <br> September $\qquad$ <br> October <br> November <br> December <br> 1967 <br> January . <br> February . $\qquad$ <br> March. $\qquad$ $\qquad$ <br> April <br> May $\qquad$ $\qquad$ <br> June. $\qquad$ <br> July <br> August. <br> September $\qquad$ <br> October. $\qquad$ <br> November $\qquad$ <br> December <br> January . <br> February. <br> March. <br> April $\qquad$ <br> May . $\qquad$ <br> July. <br> August. <br> September <br> October <br> November $\qquad$ December |  |  |  |  |  |  |  |  |

NOTE: Series are seasonally adjusted except those that appear to contain no seasonal movement. Unadjusted series are indicated by @. 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.
${ }^{2}$ Organization for Economic Cooperation and Development.


NOTE: Series are seasonally adjusted except those that appear to contain no seasonal movement. Unadjusted series are indicated by @l. 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 " $\mathrm{NA}^{\prime}$, not available.

| Major Economic Process | STOCK PRICE INDEXES |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Minor Economic Process | Stock Price Indexes |  |  |  |  |  |  |
| Year and month | 19. United States, index of stock prices, 500 common stocks (1) $(1957-59=100)$ | 143. Canada, index of stock prices (1) $(1957-59=100)$ | 142. United King dom, index of stock prices (1) $(1957-59=100)$ | 146. France, index of stock prices (a) $(1957-59=100)$ | 145. West Germany, index of stock prices (1) $(1957-59=100)$ | 148. Japan, index of stock prices (a) $(1957-59=100)$ | 147. Italy, index of stock prices (a) $(1957-59=100)$ |
| 1966 <br> January <br> February <br> March. $\qquad$ <br> April $\qquad$ <br> May $\qquad$ <br> June. $\qquad$ <br> July <br> August. <br> September $\qquad$ <br> October $\qquad$ <br> November $\qquad$ <br> December <br> 1967 <br> January . $\qquad$ <br> February........... <br> March. $\qquad$ <br> April $\qquad$ <br> May $\qquad$ <br> June. $\qquad$ <br> July. $\qquad$ <br> August. <br> September $\qquad$ <br> October $\qquad$ <br> November $\qquad$ <br> December $\qquad$ <br> 1968 <br> January $\qquad$ <br> February. $\qquad$ <br> March. $\qquad$ <br> April $\qquad$ <br> May $\qquad$ <br> June. $\qquad$ <br> July. $\qquad$ <br> August. ............. <br> September <br> October $\qquad$ <br> November $\qquad$ <br> December |  |  |  | 127 <br> 123 <br> 118 <br> 114 <br> 110 <br> 110 <br> 108 <br> 108 <br> 102 <br> 101 <br> 107 <br> 103 <br> 19 <br> 199 <br> 103 <br> 98 <br> 96 <br> 99 <br> 98 <br> 94 <br> 107 <br> $1 p 107$ <br> 103 <br> 110 |  |  |  |

NOTE: Series are seasonally adjusted except those that appear to contain no seasonal movement. Unadjusted series are indicated by (1). 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.

charts and tables

> DIFFUSION INDEXES BASED ON HUNDREDS OF COMPONENTS
> Average workweek-21 industries
> New orders- 36 industries
> Capital appropriations-17 industries
> Profits-1,000 corporations
> Stock prices- 77 industries
> Industrial materials prices- 13 materials
> State unemployment claims-47 areas
> Nonagricultural employment-30 industries
> Production-24 industries
> Wholesale prices-22 industries
> Retail sales-23 types of stores
> Net sales-800 companies
> New orders-400 companies
> Carloadings-19 commodity groups
> Plant and equipment expenditures-18 industries


See 'How to Read Charts 1 and 2,' page 4. Current data for these series are shown on pages 54 and 55

## DIFFUSION INDEXES FROM 1948 to PRESENT-Continued

 Roughly Coincident Indexes

Digitized for FRA See 'how to Read Charts 1 and 2,' page 4. Current data for these series are shown on page 57.


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 6 th month of span; 1-quarter indexes are placed on the 1st month of the 2 d quarter and 3 -quarter indexes are placed on the 1 st month of the 3 d quarter. Seasonally adjusted components are used. Table 4 identifies the components for most of the indexes shown. The " r " indicates revised; " p ", preliminary; and " $\mathrm{A} \mathrm{A}^{3}$, not available.
${ }^{1}$ See "New Features and Changes for This Issue," page iii.

| Year and month | D34. Profits, manufacturing, FNCB (about 1,000 corpora tions) | D19. Index of stock prices, 500 common stocks (77 industries) © ${ }^{1}$ |  | D23. Index of industrial materials prices (13 industrial materials) |  | D5. Initial claims for unemployment insurance, State programs, week including the 12th (47 areas) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1-quarter span | 1-month span | 9-month span | 1-month span | 9-month sp | 1-month span | 9-month span |
| 1966 <br> January $\qquad$ <br> February. <br> March. $\qquad$ <br> April $\qquad$ <br> May $\qquad$ <br> June. $\qquad$ <br> July <br> August. <br> September $\qquad$ <br> October $\qquad$ <br> November $\qquad$ <br> December <br> January $\qquad$ <br> February $\qquad$ <br> March. $\qquad$ <br> April $\qquad$ <br> May $\qquad$ <br> June. $\qquad$ <br> July $\qquad$ <br> August. $\qquad$ <br> September. $\qquad$ <br> October. $\qquad$ <br> November $\qquad$ <br> December $\qquad$ <br> 1968 <br> January <br> February <br> March. $\qquad$ <br> April $\qquad$ <br> May <br> June. $\qquad$ $\qquad$ <br> July $\qquad$ <br> August.............. <br> September $\qquad$ <br> October. $\qquad$ <br> November $\qquad$ <br> December |  | 74.0 <br> 48.7 <br> 14.3 <br> 63.6 <br> 3.9 <br> 23.4 <br> 38. 3 <br> 6.5 <br> 3.9 <br> 25.3 <br> 88.3 <br> 59.7 <br> 90.9 <br> 92.2 <br> 61.0 <br> 76.0 <br> 74.0 <br> 51. 3 <br> 81.6 <br> 77.6 <br> 57.2 <br> 32.2 <br> 7.9 <br> 71.1 <br> 64.5 <br> 10.5 <br> 21.1 <br> 94.7 <br> 83.6 <br> 80.3 <br> 48.7 <br> 17.8 <br> 86.7 | $\begin{aligned} & 51.9 \\ & 43.5 \\ & 37.7 \\ & 22.1 \\ & 11.7 \\ & 6.5 \\ & 9.7 \\ & 22.1 \\ & 20.1 \\ & 47.4 \\ & 58.4 \\ & 66.2 \end{aligned}$ <br> 85.7 <br> 90.3 <br> 97.4 <br> 93.4 <br> 92.1 <br> 86.2 <br> 68.4 <br> 65.8 <br> 71.1 <br> 52.6 <br> 46.1 <br> 50.0 <br> 61.8 <br> 63.2 <br> 71.1 <br> 76.3 <br> 82.7 | $\begin{aligned} & 61.5 \\ & 76.9 \\ & 46.2 \\ & 30.8 \\ & 42.3 \\ & 46.2 \\ & 61.5 \\ & 26.9 \\ & 0.0 \\ & 19.2 \\ & 30.8 \\ & 57.7 \end{aligned}$ <br> 46.2 <br> 53.8 <br> 23.1 <br> 23.1 <br> 61.5 <br> 69.2 <br> 30.8 <br> 53.8 <br> 19.2 <br> 46.2 <br> 46.2 <br> 61.5 <br> 46.2 <br> 46.2 <br> 53.8 <br> 46.2 <br> 53.8 <br> 50.0 <br> 46.2 <br> 65.4 <br> 57.7 <br> ${ }^{2} 69.2$ | 53.8 <br> 61.5 <br> 61.5 <br> 53.8 <br> 30.8 <br> 15.4 <br> 7.7 <br> 7.7 <br> 7.7 <br> 0.0 <br> 0.0 <br> 0.0 <br> 0.0 <br> 15.4 <br> 26.9 <br> 30.8 <br> 23.1 <br> 23.1 <br> 23.1 <br> 30.8 <br> 46.2 <br> 38.5 <br> 30.8 <br> 30.8 <br> 30.8 <br> 46.2 <br> 46.2 <br> 53.8 <br> 61.5 <br> 269.2 | 38.3 <br> 44.7 <br> 83.0 <br> 53.2 <br> $45 \cdot 7$ <br> 57.4 <br> 17.0 <br> 72.3 <br> 80.9 <br> 36.2 <br> 46.8 <br> 27.7 <br> 55.3 <br> 17.0 <br> 46.8 <br> 55.3 <br> 54.3 <br> 55.3 <br> 34.0 <br> 72.3 <br> 60.6 <br> 38.3 <br> 74.5 <br> 46.8 <br> 25.5 <br> 80.9 <br> 25.5 <br> 63.8 <br> 51.1 <br> 53.2 <br> 57.4 <br> 40.4 <br> 63.8 | $\begin{aligned} & 91.5 \\ & 74.5 \\ & 44.7 \\ & 68.1 \\ & 76.6 \\ & 78.7 \\ & 80.9 \\ & 34.0 \\ & 34.0 \\ & 23.4 \\ & 17.0 \\ & 46.8 \end{aligned}$ <br> 27.7 <br> 8.5 <br> 8.5 <br> 31.9 <br> 44.7 <br> 29.8 <br> 78.7 <br> 78.7 <br> 66.0 <br> 80.9 <br> 70.2 <br> 78.7 <br> 57.4 <br> 51.1 <br> 61.7 <br> 38.3 <br> 51.1 |

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 1 st month of the 2nd quarter. Seasonally adjusted components are used except in index D19 which requires no adjustment and index D34 which is adjusted only for the index. Table 4 identifies the components for most of the indexes shown. The " $r$ " indicates revised; " $p$ ", preliminary; and "NA". not available. Unadjusted series are indicated by (u).
${ }^{1}$ Based on 77 components through June 1967; on 76 components, July 1967 through August 1968; and on 75 components thereafter.
${ }^{2}$ Average for October 21,22 , and 23 .

Table 3


NOTE: Figures are the percent of series components rising andare centered within spans: 1 -month indexes are placed on latest month, 6 -month indexes are placed on the 4 th month, and 9 -month indexes are placed on the 6 th month of span. Seasonally adjusted components are used except in index D58 which requires no adjustment. Table 4 identifies the components for the indexes shown. The " r " indicates revised; " p ", preliminary; and "NA", not available. Unadjusted series are indicated by @.
${ }^{1}$ See "New Features and Changes for This Issue," page iii.

| $\begin{aligned} & \text { Year } \\ & \text { and } \\ & \text { month } \end{aligned}$ | D35. Net sales, manufactures (800 companies) (@) <br> 4-quarter span |  | D36. New orders, durable manufactures (400 companies) @ <br> 4-quarter span |  | D48. Freight carloadings ( 19 manufactured commodity groups) <br> 4-quarter span |  |  | D61. New plant and equipment expenditures ( 18 industries) <br> 1-quarter span |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Actual | Anticipated | Actual | Anticipated | Actual | Anticipated | Change in total (000) | Actual | Anticipated |
| 1966 |  |  |  |  |  |  |  |  |  |
| January........... |  |  |  |  |  |  |  | 83.3 | 62.5 |
| February.......... | 87 | 91 | 85 | 89 | 57.9 | 84.2 | +21 | $\cdots$ | $\cdots$ |
| march............. | ... | $\cdots$ | $\cdots$ | $\cdots$ | ... | $\cdots$ | ... | $\cdots$ | $\ldots$ |
| April ............. |  |  | $\cdots$ |  |  |  | $\cdots$ | 83.3 | 71.9 |
| May ............... | 84 | 88 | 82 | 83 | 52.6 | 78.9 | +1 | ... | $\ldots$ |
| June.............. | .. | ... | .. | ... | ... | ... | ... | ... |  |
| July.............. |  |  |  |  |  |  |  | 55.6 | 37.5 |
| August............. | 72 | 84 | 68 | 82 | 42.1 | 78.9 | -51 | ... |  |
| September......... | -•• | ... | . ${ }^{\text {a }}$ | ... | $\cdots$ | $\cdots$ | $\cdots$ | ... |  |
| October.......... November | $\cdots 72$ | $\ddot{84}$ | $\% 7$ | - 80 | 31.6 | 52.6 | -88 | 75.0 $\ldots .0$ | 65.6 |
| December ........... | ... | .. | ... | ... | ... | $\ldots$ | ... | $\ldots$ | $\ldots$ |
| 1967 |  |  |  |  |  |  |  |  |  |
| January ........... |  | $\cdots$ |  |  |  | $\cdots$ |  | 55.6 | 50.0 |
| February........... | 70 | 82 | 65 | 78 | r10.5 | 78.9 | r-130 | , | - ... |
| March............. |  | $\ldots$ | $\cdots$ | ... | ... | ... | ... | ... |  |
| April ............. |  |  |  |  |  |  | $\ldots$ | 30.6 | 41.7 |
| May ............... | 74 | 81 | 70 | 78 | 42.1 | 73.7 | -91 | ... | ... |
| June............... | $\cdots$ |  | ... | . $\cdot$ | ... | ... | $\cdots$ | $\cdots$ | $\cdots$ |
| July.............. |  |  |  |  |  |  |  | 33.3 | 44.4 |
| August.............. | 73 | 82 | 76 | 80 | (NA) | 73.7 | -21 | $\cdots$ |  |
| September.......... |  | , . |  | . |  | $\cdots$ | $\cdots$ | ... |  |
| 0 October............ | $\bigcirc 2$ |  |  |  |  |  | +26 | 61.1 | 50.0 |
| November December | 82 |  | 76 | 84 |  | 63.2 $\ldots$. | $+26$ | $\ldots$ | $\cdots$ |
| 1968 |  |  |  |  |  |  |  |  |  |
| January........... | ( $\underset{\mathrm{NA}}{ } \mathrm{I}^{\text {a }}$ |  |  | $\because$ |  | 73.7 | r+52 | 66.7 | 63.9 |
| February........... |  | 86 |  | 78 |  | 73.7 | r+52 | $\cdots$ |  |
| march............. |  | $\cdots$ |  | $\cdots$ |  |  |  | ... |  |
| April .............. |  |  |  |  |  | 68 |  | 38.9 | 55.6 |
| May .............. |  | 84 |  | 80 |  |  |  | ... | $\cdots$ |
| June............... |  |  |  |  |  |  |  | $\cdots$ | ... |
| July.............. |  |  |  |  |  |  |  | (NA) | 69.4 |
| August............. |  |  |  |  |  |  |  |  |  |
| September.......... |  |  |  |  |  |  |  |  |  |
| Octaber............ |  |  |  |  |  |  |  |  | p55.6 |
| November $\qquad$ December |  |  |  |  |  |  |  |  |  |
| 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 2 d quarter. Seasonally adjusted components are used for series D 61 . The " r " indicates revised; " p ", preliminary; and " NA ", not available. Unadiusted series are indicated by @.

## SELECTED DIFFUSION INDEXES AND COMPONENTS

Basic Data and Direction of Change

| ffusion index components | 1968 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Februa | March | Apri |  | May |  | June |  | July |  | Augus |  | mber ${ }^{p}$ |
| D1. AVERAGE WORKWEEK OF PRODUCTION WORKERS, MANUFACTURING ${ }^{1}$ (Average weekly hours) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All manufacturing industries $\qquad$ <br> Percent rising of 21 components $\qquad$ <br> Durable goods industries: <br> Ordnance and accessories. $\qquad$ <br> Lumber and wood products. <br> Furniture and fixtures. <br> Stone, clay, and glass products <br> Primary metal industries. <br> Fabricated metal products. <br> Machiner y, except electrical $\qquad$ <br> Electrical machinery $\qquad$ Transportation equipment. . Instruments and related products Miscellaneous manufacturing industries $\qquad$ <br> Nondurable goods industries: <br> Food and kindred products. <br> Tobacco manufactures. $\qquad$ <br> Textile mill products. . Apparel and related products Paper and allied products $\qquad$ <br> Printing and publishing. Chemicals and allied products Petroleum and related products Rubber and plastic products. Leather and leather products. |  |  |  |  |  |  |  |  |  |  |  |  |  |
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D6. VALUE OF MANUFACTURERS' NEW ORDERS, DURABLE GOODS INDUSTRIES¹
(Millions of dollars)

| All durable goods industries... Percent rising of 35 components | 26,814 $4(56)$ | [ | 28,005 <br> 150$)$ |  | r $\begin{array}{r}27,373 \\ \sim(40)\end{array}$ |  | $\left(\begin{array}{c}27,172 \\ (54)\end{array}\right.$ | - | 26,701 $-(51)$ |  | $\left\lvert\, \begin{aligned} & 26,508 \\ & (51)\end{aligned}\right.$ | $+$ | -27, 212 |  | 8,091 $(n)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | r4, 244 |  | r4,244 |  | r3,900 |  | r3,867 |  | 3,859 |  | 23,491 |  | 4,095 |
| Blast furnaces, st | 72,401 | 4 | r2, 262 | $+$ | 22,396 | - | r2,014 | - | 51,75 | + | 1,791 | - | 1,400 | + | (MA) |
| Nonferrous metals. |  | 4 |  | - | , | $+$ | , | , | - ${ }^{\text {a }}$ |  |  | t |  | + |  |
| lron and steel foundries |  | - |  | - |  | - |  | $\bigcirc$ | -s.... |  |  |  |  | 4 |  |
| Other primary metals. |  | 4 |  | + |  | $+$ |  | 4 | 4 | - |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | 55 |  |  |  | (na) |
| Fabricated metal products . . . . <br> Metal cans, barrels, and drums | r2,79 | + | 12,175 | $-$ | r2,819 |  | 72,941 |  | 72,824 |  |  |  |  |  |  |
| Hardware, structural metal and w |  | + |  | 7 |  | + |  |  | $\underline{3}$ | + |  | + |  |  | +2. |
| Other fabricated metal products |  | - |  | 4 |  |  |  | 5 |  | $+$ |  | + |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Machinery, except electrical | r4, 541 |  | r4, 464 |  | 74,658 |  | r4,665 |  | 14,810 |  | 4,923 |  | 4,766 |  | (NA) |
| Steam engines and turbines*. |  | - |  | $+7$ |  | - |  | + |  | + |  |  |  |  | (NA) |
| Internal combustion engines* |  | + |  | , |  | +1 |  | - |  | + |  | 0 |  | + |  |
| Farm machinery and equipment. |  | + |  | S |  | $\stackrel{+}{+}$ |  | + |  | + |  | - |  | $+$ |  |
| Construction, mining, and materia | r 571 | + | $r 575$ | $+$ |  | + | r698 |  | r636 |  |  |  |  | $+$ | (NA) |
| Metalworking machinery** | r284 | 3 | r263 | $+$ | r339 | + | r340 | $\underline{2}$ | r294 | $+$ | 374 |  | 257 |  | (NA) |
| Miscellaneous equipment* |  | + |  |  |  | $-1$ |  | $t$ |  |  |  |  |  |  |  |
| Machine shops. |  | - |  | - |  | - |  | $+$ |  | + |  |  |  |  |  |
| Special industry machinery ${ }^{*}$ |  | $\pm$ |  | 4 |  |  |  | $t$ |  | 4 |  | 4 |  | + |  |
| General industrial machinery** | r438 | + | 243 |  | 8393 | $+$ | r493 | $\underline{2}$ | 5476 |  | 431 | $+$ | 453 | + | (NA) |
| Office and store machines* |  | - |  | $+$ |  | $+$ | 5 \% \% | $+$ |  | $\sim$ |  | 7 |  | - | .. |
| Service industry machinery* |  | $151$ |  | $\pm 1$ | Exis.. | 2 | 123. | $-1$ | - | + |  | $21$ |  | $+1$ |  |

NOTE: To facilitate interpretation, the month-to-month directions of change are shown along with the numbers: $(+)=$ rising, ( 0 ) = unchanged, and $(-)=$ falling. Only the directions of change are shown when numbers are held confidential by the source agency. NA = not available. $p=$ preliminary. $r=$ revised
*Denotes machinery and equipment industries that comprise series 24.
${ }^{1}$ Data are seasonally adjusted by source agency.

Basic Data and Direction of Change-Continued



D19. INDEX OF STOCK PRICES, 500 COMMON STOCKS ${ }^{2}$
( $1941-43=10$ )


NOTE: To facilitate interpretation, the month-to-month directions of change are shown along with the numbers: $(+)=$ rising, $(0)=$ unchanged, and $(-)=$ falling. Only the directions of change are shown when numbers are held confidential by the source agency. $N A=$ not available. $p=$ preliminary. $r=$ revised.

[^3]
## SELECTED DIFFUSION INDEXES AND COMPONENTS—Continued

Basic Data and Direction of Change-Continued

| Diffusion index components | 1968 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | February | March | April | May | June | July | August | September | October ${ }^{1}$ |
| D23. INDEX OF INDUSTRIAL MATERIALS PRICES ${ }^{2}$ |  |  |  |  |  |  |  |  |  |
| Industrial materials price index (1957-59=100). . . . . . . | 999.5 | + 1100.1 | - 198.3 | 96.1 | $-1.95 .6$ | - 94.4 | 194.8 |  | 1.97 .9 |
|  | (Dollars) |  |  |  |  |  |  |  |  |
| Percent rising of 13 components | (46) | (54) | (46) | (54) | (50) | (46) | (65) | (58) | (69) |
| Copper scrap (lb.) ............... | . 514 | + + .520 | - | . 388 | . 396 | + . 403 | . 393 | + 214 | $-4.40$ |
| Lead scrap (lb.)................. | + . . 061 | + . 062 | $t$. 063 | . 056 | $\bigcirc$. 056 | - 0.054 | - . 052 | - . 052 | + ${ }^{\text {d }}$. 055 |
| Steel scrap (ton) .................. | $+30.087$ | - 26.136 | - 25.471 | - 24.802 | - 22.562 | - 21.202 | - 20.548 | $+22.307$ | $+22.460$ |
| Tin (b.) . . . . . . . . . . . . . . . . . . . . | - 1.469 | $+1.500$ | - 1.462 | - 1.428 | - 1.419 | - 1.141 | 11.415 | $\pm 1.452$ | + 1.468 |
| Zinc (lb.) ..................... | + . 139 | - . 139 | + . 140 | $+\quad .141$ | + | O . 14 | - . 141 | - . 141 | - . 140 |
| Burlap (yd.).................... | .127 | .125 | $+. .125$ | . 126 | $+\quad .131$ | .139 | + . 145 | $=\quad .143$ | + . 150 |
| Cotton (lb.), 15-market average. . . . | . 254 | - 249 | - 244 | . 241 | - . 240 | + . 298 | + . 310 | + ${ }^{\text {a }}$. 312 | - . 303 |
| Print cloth (yd.), average . . . . . . . . . | + . 199 | - . 198 | $+\quad .198$ | $+\quad .202$ | $\pm \quad .204$ | $\bigcirc$ - 204 | - . . 202 | + ${ }^{202}$ | $\pm$. 204 |
| Wool tops (lb.)................... | + 1.591 | $+1.640$ | - 1.619 | $+1.631$ | $\bigcirc 1.632$ | - 1.573 | $+1.576$ | + 1.597 | $+1.642$ |
| Hides (lb.) . . . . . . . . . . . . . . . . . | - 1.154 | $+. .159$ | - $\quad .157$ | $-\quad .151$ | - . 139 | - . 137 | + 1.144 | + . 160 | + . 168 |
| Rosin (100 lb.) | - 10.796 | $-10.743$ | $-10.711$ | $+10.775$ | - 10.764 | + 10.894 | $+10.971$ | 0 10.971 | - 10.949 |
| Rubber (lb.)..................... | - 1.167 | + . 174 | + . 174 | . 186 | + . 208 | + . 208 | + . 212 | - 211 | $+\quad .224$ |
| Tallow (lb.)..................... | -1.042 | $+1.046$ | $+1.047$ | $+1.047$ | 01.047 | -1.044 | $+1.046$ | $-15.044$ | . 046 |

D5. INITIAL CLAIMS FOR UNEMPLOYMENT INSURANCE, STATE PROGRAMS ${ }^{3}$
(Thousands)


[^4] the directions of change are shown when numbers are held confidential by the source agency. $N A=$ not available. $p=$ preliminary. $r=$ revised.
${ }^{1}$ Average for October 21, 22, and 23.
${ }^{2}$ Series components are seasonally adjusted by the Bureau of the Census. The industrial materials price index is not seasonally adjusted. Directions of change are computed before figures are rounded.
${ }^{3}$ The signs are reversed because this series usually rises when general business activity falls and falls when business rises: $(-)$ rising, $(0)=$ unchanged, and $(+)=$ falling. Series components are seasonally adjusted by the Bureau of the Census before the direction of change is determined. Data used are for the week including the 12 th of the month. Directions of change are shown separately for only the 26 largest labor market areas. The number following the area designation indicates its size rank.

Basic Data and Direction of Change-Continued

| Diffusion index components | 1968 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | February | March | April | May | June | July ${ }^{\text {r }}$ | August | September ${ }^{p}$ |

D41. NUMBER OF EMPLOYEES ON NONAGRICULTURAL PAYROLLS ${ }^{1}$
(Thousands of employees)


D47. INDEX OF INDUSTRIAL PRODUCTION ${ }^{1}$
(1957-59=100)


NOTE: To facilitate interpretation, the month-to-month directions of change are shown along with the numbers: $(+)=$ rising, $(0)=$ unchanged, and $(-)=$ falling. Only the directions of change are shown when numbers are held confidential by the source agency. $N A=$ not available. $p=$ preliminary. $r=$ revised.
${ }^{1}$ Data are seasonally adjusted by the source agency.
${ }^{2}$ 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 and Direction of Change-Continued

| Diffusion index components | 1968 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | February | March | April | May | June | July | August | September |

D47. INDEX OF INDUSTRIAL PRODUCTION ${ }^{2}$-Continued
(1957-59=100)


D58. INDEX OF WHOLESALE PRICES, MANUFACTURING INDUSTRIES²
(1957-59=100)


NOTE: To facilitate interpretation, the month-to-month directions of change are shown along with the numbers: $(+)=$ rising, ( 0 ) $=$ unchanged, and $(-)=$ falling. Only the directions of change are shown when numbers are held confidential by the source agency. $N A=$ not available. $p=$ preliminary. $r=r e v i s e d$.

[^5]

NOTE: To facilitate interpretation, the month-to-month directions of change are shown along with the numbers: $(+)=$ rising, $(0)=$ unchanged, and $(-)=$ falling. Only the directions of change are shown when numbers are held confidential by the source agency. $N A=$ not available. $p=$ preliminary. $r=$ revised.
${ }^{1}$ Data are seasonally adjusted by the source agency.

## APPENDIXES

A. Business Cycle Expansions and Contractions in the United States: 1854 to 1961


NOTE: Underscored figures are the wartime expansions (Civil War, World Wars I and II, and Korean War), the postwar contractions, and the full cycles that include the wartime expansions.
${ }^{1} 25$ cycles, 1857-1960.
${ }^{3} 4$ cycles, 1945-1960.
57 cycles, 1920-1960.
${ }^{2} 9$ cycles, $1920-1960$.
${ }^{4} 21$ cycles, 1857-1960.
63 cycles, 1945-1960.

Source: National Bureau of Economic Research, Inc.
B. Specific Trough and Peak Dates for Selected Business Indicators

| Selected series | Specific trough dates for reference expansions beginning in- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Feb. 1961 | $\begin{aligned} & \text { Apr. } \\ & 1958 \end{aligned}$ | Aug. 1954 | Oct. 1949 | $\begin{aligned} & \text { June } \\ & 1938 \end{aligned}$ | Mar. 1933 | $\begin{aligned} & \text { Nov. } \\ & 1927 \end{aligned}$ | $\begin{aligned} & \text { July } \\ & 1924 \end{aligned}$ | $\begin{aligned} & \text { July } \\ & 1921 \end{aligned}$ |
| LEADING INDICATORS |  |  |  |  |  |  |  |  |  |
| I. Average workweek, production workers, manufacturing. | Dec. '60 | May 158 | Apr. ${ }^{\text {' }} 54$ | Apr. '49 | Jan. ${ }^{1} 38$ | June ' 32 | Apr. ${ }^{1} 28$ | July ' 24 | Feb. '21 |
| 30. Nonagricultural placements, all industries... | Jan. '61 | Mar. 158 | May ${ }^{1} 54$ | July ' 49 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 38. Index of net business formation. . . . . . . . | Jan. '61 | Apr. 158 | Mar. 154 | July : 49 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 6. New orders, durable goods industries . . . . . | Jan. '61 | Jan. '58 | Sep. ${ }^{\text {' }} 53$ | June ' 49 | Apr. ${ }^{1} 38$ | Mar. ' 33 | (NSC) | May ${ }^{1} 24$ | Jan. '21 |
| 10. Contracts and orders, plant and equipment... | Mar. '61 | Mar. ${ }^{1} 58$ | Mar. ${ }^{1} 54$ | Apr. '49 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 29. New building permits, private housing units. . | Dec. 160 | Feb. ${ }^{158}$ | Sep. ' 53 | Jan. '49 | Dec. ' 37 | Dec. ' 32 | May ${ }^{1} 27$ | July ' 24 | Dec. ${ }^{120}$ |
| 31. Change in book value, manufacturing and trade inventories. | Dec. ${ }^{160}$ | Apr. ${ }^{158}$ | Nov. ' 53 | Apr. ' 49 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 23. Industrial materials prices . . . . . . . . . | Dec. 160 | Apr. ${ }^{158}$ | Feb. ' 54 | June ' 49 | June '38 | July ' 32 | Aug. ${ }^{1} 28$ | June '24 | July '2l |
| 19. Stock prices, 500 common stocks | Oct. 160 | Dec. ${ }^{157}$ | Sep. ' 53 | June ' 49 | Apr. '38 | June ' 32 | (NSC) | Oct. ' 23 | Aug. ' 21 |
| 16. Corporate profits after taxes (Q). | 1stQ 161 | 1stQ ' 58 | 4thQ 153 | 2ndQ '49 | 2ndQ 138 | 3rdQ 132 | 4thQ 127 | 3rdQ 124 | 2ndQ '21 |
| 17. Ratio, price to unit labor cost, manufacturing | Jan. 161 | Mar. 158 | Mar. ${ }^{154}$ | May ' 49 | Dec. ' 37 | Apr. '32 | $\text { Aug. } 127$ | $\text { June ' } 24$ | Mar. ' 21 |
| 113. Change in consumer instaliment debt. | Apr. ${ }^{161}$ | Mar. ${ }^{158}$ | Mar. ${ }^{154}$ | Jan. ' 49 | Feb. '38 | Feb. ' 32 | (NA) | (NA) | (NA) |
| ROUGHLY COINCIDENT INDICATORS |  |  |  |  |  |  |  |  |  |
| 41. Employees on nonagricultural payrolls. | Feb. '61 | May ${ }^{\prime} 58$ | Aug. 154 | Oct. '49 | June '38 | Mar. '33 | Jan. ${ }^{1} 28$ | July '24 |  |
| 43. Unemployment rate, total (inverted) . . . . . . | May 161 | July '58 | Sep. ${ }^{154}$ | Oct. ' 49 | June '38 | May 133 | (NA) | (NA) | (NA) |
| 50. GNP in 1958 dollars (Q) . . . . . . . | 1ste '61 | lstQ 158 | 2ndQ '54 | 2ndQ ' 49 | 1stQ '38 | 3rdQ 132 | (NSC) | (NSC) | $4 \mathrm{thQ}{ }^{1} 21$ |
| 47. Industrial production | Feb. '61 | Apr. ${ }^{1} 58$ | Apr. ${ }^{154}$ | Oct. 149 | May 138 | July ' 32 | Nov. ${ }^{1} 27$ | July '24 | $\text { Apr. } 121$ |
| 52. Personal income | (NSC) | Feb. 158 | Apr. 154 | July : 49 | May 138 | Mar. 133 | 4thQ , 26 | 2ndQ 124 | $2 \mathrm{ndQ} \quad 121$ |
| 816. Manufacturing and trade sales | Jan. 161 | Mar. 158 | Aug. 154 | Oct. ' 49 | May (NA) | Mar. (NA) | 4 thQ (NA) | 2 ndQ (NA) | $(\mathrm{NA})$ |
| 54. Sales of retail stores . . . . . | Apr. ${ }^{161}$ | Mar. ${ }^{1} 58$ | Jan. '54 | (NSC) | May 138 | Mar. ${ }^{\prime} 33$ | (NSC) | (NSC) | Mar. ${ }^{1} 22$ |
| LAGGING INDICATORS |  |  |  |  |  |  |  |  |  |
| 502. Unemployment rate, persons unemployed 15 weeks and over (inverted) | July '6l | Aug. ${ }^{158}$ | Oct. ' 54 | Nov. '49 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 61. Business expenditures, new plant and equipment (Q) | 2ndQ ${ }^{61}$ | 3rdQ 58 | 1stQ ' 55 | $4 \operatorname{thQ}$ ' 49 | 3rdQ 38 | IstQ '33 | $4 \mathrm{thQ}{ }^{1} 27$ | 3rdQ '24 | 4the '21 |
| 71. Book value, manufacturing and trade inventories | Mar. ${ }^{161}$ | Aug. 158 | Oct. '54 | Dec. 149 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 62. Labor cost per unit of output, manufacturing | Sep. ${ }^{61}$ | June ' 59 | Sep. ' 55 | July '50 | June ' 40 | July ' 33 | (NSC) | (NSC) | Apr. '22 |
| 72. Commercial and industrial loans outstanding. | (NSC) | July '58 | Oct. 154 | Aug. 149 | Dec. 138 | (NA) | (NA) | (NA) | (NA) |
| 67. Bank rates on short-term business loans (Q). | 4thQ 61 | 2ndQ 158 | 1stQ '55 | 1stQ ' 50 | 3rdQ ' 41 | (NSC) | Feb. ${ }^{\prime} 28$ | Nov. ${ }^{2} 24$ | Sep. '22 |

NOTE: Specific trough dates are the actual dates when individual series reached a trough as distinguished from the reference dates which are those dates designated as the trough of business activity as a whole. This table shows, for the 25 indicators on the NBER "short list," the specific dates corresponding to reference dates in 9 recent business cycles.
$N A=$ Not available. $\quad$ NSC $=$ No specific cycle corresponding to reference date.
B. Specific Trough and Peak Dates for Selected Business Indicators--Continued

| Selected series | Specific peak dates for reference contractions beginning in- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { May } \\ & 1960 \end{aligned}$ | $\begin{aligned} & \text { July } \\ & 1957 \end{aligned}$ | $\begin{aligned} & \text { July } \\ & 1953 \end{aligned}$ | $\begin{aligned} & \text { Nov. } \\ & 1948 \end{aligned}$ | $\begin{gathered} \text { May } \\ 1937 \end{gathered}$ | Aug. <br> 1929 | $\begin{aligned} & 0 \mathrm{ct} . \\ & 1926 \end{aligned}$ | $\begin{gathered} \text { May } \\ 1923 \end{gathered}$ | $\begin{aligned} & \text { Jan. } \end{aligned}$ |
| LEADING INDICATORS |  |  |  |  |  |  |  |  |  |
| 1. Average workweek, production workers, manufacturing $\qquad$ | Apr. July ' P9 |  | Mar. ${ }^{\text {P }} 53$ <br> Feb. | (NSC) | Dec. $\begin{array}{r}\text { ' } \\ \text { (NA) } \\ \text { ( }\end{array}$ | Oct. $\begin{array}{r}\text { '29 } \\ \text { (NA) } \\ \text { ( }\end{array}$ | Nov. $\begin{gathered}125 \\ (N A) \\ \end{gathered}$ | Nov. $\begin{gathered}122 \\ (N A)\end{gathered}$ | (NA) (NA) |
| 38. Index of net business formation. | Apr. 159 | Mar. 155 | Sep. 152 | Apr. 146 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 6. New orders, durable goods industries | Apr. 159 | Dec. ${ }^{5} 5$ | Jan. 153 | Aug. ${ }^{4} 48$ | Dec. ${ }^{136}$ | (NSC) | Nov. ${ }^{2} 25$ | Jan. ${ }^{123}$ | (NA) |
| 10. Contracts and orders, plant and equipment. | Sep. '59 | Nov. 156 | May 515 | June '48 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 29. New building permits, private housing units. . | Nov. ${ }^{58}$ | Feb. 155 | Nov. 152 | Oct. 147 | Feb. ${ }^{1} 37$ | Feb. ' 28 | July '25 | Jan. ${ }^{24}$ | July '19 |
| 31. Change in book value, manufacturing and trade inventories. | Dec. ${ }^{159}$ | Apr. ${ }^{56}$ | Jan. ${ }^{53}$ | July '46 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 23. Industrial materials prices . . . . . . . . . . | Nov. ${ }^{\text {d }} 59$ | Dec. ${ }^{55}$ | Feb. ${ }^{51}$ | Jan. ' 48 | Mar. 137 | Mar. '29 | Nov. 125 | Mar. ${ }^{123}$ | Apr. 220 |
| 19. Stock prices, 500 common stocks | July '59 | July 156 | Jan. '53 | June ' 48 | Feb. ${ }^{137}$ | Sep. '29 | (NSC) | Mar. '23 | July '19 |
| 16. Corporate profits after taxes (Q). | 2ndQ 159 | 4 thQ 155 | 2ndQ 53 | 2ndQ ' 48 | 4the ' 36 | 3rdQ '29 | 3rdQ '26 | 2ndQ '23 | (NA) |
| 17. Ratio, price to unit labor cost, manufacturing | June 159 | Oct. 155 | Jan. ' 51 | June ' 48 | Mar. 137 | July '29 | Sep. '26 | June '22 | Feb. '20 |
| 113. Change in consumer installment debt. ...... | Aug. 59 | Mar. 155 | Dec. ${ }^{52}$ | Mar. 148 | Mar. 36 | May ${ }^{\text {' } 29}$ | (NA) | (NA) | (NA) |
| ROUGHLY COINCIDENT INDICATORS |  |  |  |  |  |  |  |  |  |
| 41. Employees on nonagricultural payrolls. | Apr. 160 | Mar. 157 | June 153 | Sep. 148 | July '37 | Aug. ' 29 | $\text { Jan. ' } 26$ | $\text { June ' } 23$ | $\text { Jan. } 120$ |
| 43. Unemployment rate, total (inverted). | Feb. 160 | Mar. 515 | June 153 | Jan. 148 | $\text { July } 137$ | (NA) | (NA) <br> (NSC) | $\begin{gathered} \text { (NA) } \end{gathered}$ | (NA) <br> (NA) |
| 50. GNP in 1958 dollars (0). | lstQ 160 | 3rdQ 157 | 2ndQ 153 | 4 the 148 | 3rdQ ' 37 | 3rdQ '29 |  |  |  |
| 47. Industrial production | Jan. 160 | Feb. 157 | July '53 | July 148 | May 137 | July '29 | Mar. ${ }^{27}$ | May 123 | Feb. ' 20 |
| 52. Personal income | (NSC) | Aug. ${ }^{57}$ | Oct. '53 | Oct. 148 | June ' 37 | Aug. '29 | 2ndQ '26 | 1stQ '24 |  |
| 816. Manufacturing and trade sales | Jan. 160 | Feb. '57 | July '53 | Aug. ' 48 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 54. Sales of retail stores....... | Apr. '60 | Aug. ' 57 | Mar. ${ }^{53}$ | (NSC) | Sep. '37 | Sep. '29 | (NSC) | (NSC) | July '20 |
| LAGGING INDICATORS |  |  |  |  |  |  |  |  |  |
| 502. Unemployment rate, persons unemployed 15 weeks and over (inverted). | May 160 | Sep. ${ }^{57}$ | Oct. ' 53 | Jan. '49 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 61. Business expenditures, new plant and equipment ( Q ) | 2ndQ 160 | 3rdQ '57 | 3rdQ 153 | 4 thQ 48 | 3 rdQ 137 | 2ndQ '29 | 4thQ 126 | 2ndQ '23 | 2ndQ '20 |
| 71. Book value, manufacturing and trade inventories. | July '60 | Sep. ${ }^{57}$ | Sep. ' 53 | Feb. '49 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 62. Labor cost per unit of output, manufacturing. | Jan. '61 | Mar. ${ }^{58}$ | Mar. ${ }^{54}$ | Nov. 148 | Dec. ${ }^{37}$ | (NSC) | (NSC) | Oct. '23 | Nov. '20 |
| 72. Commercial and industrial loans outstanding | (NSC) | Sep. ' 57 | July ' 53 | Aug. 148 | Sep. 137 | (NA) | (NA) | (NA) | (NA) |
| 67. Bank rates on short-term business loans (Q) | 4th2 ' 59 | 4thQ 157 | 4thQ 153 | 2ndQ 149 | (NSC) | Oct. 129 | Oct. ' 26 | Oct. 123 | Feb. '21 |

NOTE: Specific peak dates are the actual dates when individual series reached a peak as distinguished from the reference dates which are those dates designated as the peak of business activity as a whole. This table shows, for the 25 indicators on the NBER "short list," the specific dates corresponding to reference dates in 9 recent business cycles.
$N A=$ Not available $. \quad N S C=$ No specific cycle corresponding to reference date.

## C. MCD and Related Measures of Variability

Part 1. Average Percentage Changes

| Monthly series | Period covered | $\overline{\mathrm{Cl}}$ | $T$ | $\overline{\mathbf{C}}$ | T/C | MCD | T/C <br> for <br> MCD <br> span | Average duration of run (ADR) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Cl | I | $C$ | MCD |
|  | MONTHLY SERIES |  |  |  |  |  |  |  |  |  |  |
| LEADING INDICATORS |  |  |  |  |  |  |  |  |  |  |  |
| *1. Average workweek of production workers, mfg .... | Jan. '53-Sep. '67. . | . 46 | . 40 | . 19 | 2.14 | 3 | .73 | 2.20 | 1.49 | 9.78 | 4.05 |
| *30. Nonagricultural placements, all industries... | Jan. '53-Sep. '67.. | 2.08 | 1.66 | 1.00 | 1.66 | 2 | . 95 | 2.00 | 1.57 | 9.78 | 3.65 |
| 2. Accession rate, manufacturing. . . . . . . . . . . . . . | Jan. '53-Sep. '67.. | 4.61 | 4.37 | 1.41 | 3.11 | 4 | . 80 | 2.17 | 1.53 | 11.73 | 3.53 |
| 5. Average weekiy initial claims, State unemployment insurance. | Jan. '53-Sep. '67. . | 5.32 | 4.71 | 2.16 | 2.17 | 3 | .75 | 1.73 | 1.48 | 12.57 | 3.95 |
| 3. Layoff rate, manufacturing | Jan. '53-May '68.. | 8.80 | 8.08 | 3.21 | 2.52 | 3 | . 87 | 2.45 | 1.57 | 7.67 | 5.06 |
| *38. Index of net business formation | Jan. '53-Sep. '67. . | . 81 | . 60 | . 55 | 1.09 | 2 | . 62 | 2.89 | 1.57 | 7.33 | 4.61 |
| 13. New business incorporations. | Jan. '53-Sep. '67.. | 2.54 | 2.24 | . 95 | 2.35 | 3 | . 83 | 1.85 | 1.56 | 8.38 | 3.16 |
| *6. New orders, durable goods industries | Jan. '53-June '68. . | 3.48 | 3.08 | 1.37 | 2.24 | 3 | . 68 | 1.83 | 1.53 | 9.74 | 3.89 |
| 94. Construction contracts, value . . . . . | Jan. '53-Sep. '67. . | 6.42 | 6.13 | 1.61 | 3.81 | 5 | . 79 | 1.57 | 1.45 | 9.26 | 3.44 |
| *10. Contracts and orders, plant and equipment . . . . . . . | Jan. '53-June '68. . | 4.55 | 4.23 | 1.37 | 3.09 | 4 | . 84 | 1.80 | 1.53 | 10.28 | 3.25 |
| 24. New orders, machinery and equipment industries . . <br> 9. Construction contracts, commercial | Jan. '53-June '68. . | 4.01 | 3.66 | 1.45 | 2.53 | 3 | . 86 | 1.93 | 1.57 | 13.21 | 3.16 |
| and industrial, floor space . . . . . . . . . . . . . . . | Jan. '53-Sep. '67. . | 8.47 | 8.38 | 1.05 | 7.96 | 6 | ( ${ }^{1}$ ) | 1.52 | 1.47 | 13.54 | 3.00 |
| 7. Private nonfarm housing starts . . . . . . . . . . . . . | Jan. '59-Sep. '67. . | 7.24 | 6.97 | 1.48 | 4.71 | 5 | . 92 | 1.63 | 1.51 | 8.67 | 2.78 |
| *29. New building permits, private housing. . . . . . . . . . <br> 37. Purchased materials, percent reporting | Jan. '53-Sep. '67. . | 3.90 | 3.34 | 1.66 | 2.02 | 3 | . 66 | 1.93 | 1.56 | 12.57 | 3.28 |
| higher inventories ........................ | Jan. '53-Sep. '67 . . | 6.46 | 5.38 | 2.83 | 1.90 | 3 | .75 | 2.35 | 1.61 | 7.65 | 3.70 |
| 32. Vendor performance, percent reporting | Jan. '53-Sep. '67. . | 4.99 | 4.53 | 1.88 | 2.41 | 3 | . 75 | 1.85 | 1.61 | 10.35 | 3.87 |
| slower deliveries. . . . . . . . . . . . | Jan. '53-Sep. '67.. | 7.42 | 5.73 | 4.04 | 1.42 | 2 | . 92 | 3.09 | 1.83 | 8.00 | 3.89 |
| *23. Industrial materials prices | Jan. '53-Sep. '67. . | 1.32 | 1.04 | .79 | 1.30 | 2 | . 92 | 2.55 | 2.15 | 11.73 | 3.80 |
| *19. Stock prices, 500 common stocks | Jan. '53-Sep. '67. . | 2.46 | 1.65 | 1.64 | 1.01 | 2 | . 56 | 2.44 | 1.60 | 9.78 | 4.38 |
| *17. Ratio, price to unit labor cost, manufacturing. . . . | Jan. '53-Sep. '67. . | . 63 | . 51 | . 28 | 1.84 | 3 | . 85 | 2.48 | 1.71 | 6.07 | 4.24 |
| 14. Liabilities of business failures. . . . . . . . . | Jan. '53-Sep. '67. . | 19.62 | 19.11 | 1.92 | 9.95 | 6 | ${ }^{1}$ ) | 1.53 | 1.44 | 8.80 | 2.37 |
| 39. Delinquency rate, installment credit loans ${ }^{2} \ldots . .$. . | Jan. '53-0ct. '67. . | 2.67 | 2.05 | 1.41 | 1.46 | 2 | . 91 | 2.59 | 1.57 | 6.29 | 3.11 |
| ROUGHLY COINCIDENT INDICATORS |  |  |  |  |  |  |  |  |  |  |  |
| 301. Nonagricultural job openings unfilled | Jan. '53-Sep. '67. . | 3.09 | 1.71 | 2.34 | . 73 | 1 | . 73 | 3.74 | 1.74 | 12.57 | 3.74 |
| 46. Help-wanted advertising. . . . . . . . . . . . . . . . . | Jan. '53-Sep. '67. . | 2.96 | 1.79 | 2.22 | . 80 | 1 | . 80 | 2.98 | 1.48 | 7.65 | 2.98 |
| 511. Man-hours in nonagricultural establishments . . . . . | Jan. '53-Sep. '67. . | . 43 | . 31 | . 30 | 1.03 | 2 | . 52 | 2.75 | 1.54 | 11.73 | 5.00 |
| *41. Employees on nonagricultural payrolls . . . . . . . . | Jan. '53 May '68. . | . 31 | . 14 | . 27 | . 52 | 1 | . 52 | 4.72 | 1.51 | 20.44 | 4.72 |
| 42. Persons engaged in nonagri. activities | Jan. '53-Sep. '67. . | . 35 | . 28 | . 20 | 1.39 | 2 | . 74 | 2.17 | 1.53 | 29.33 | 3.89 |
| *43. Unemployment rate, total $\qquad$ <br> 45. Average weekly insured unemployment | Jan. '53-Sep. '67 . | 3.77 | 3.00 | 2.08 | 1.45 | 2 | .75 | 2.67 | 1.52 | 8.00 | 3.98 |
| rate, State programs. | Jan. '53-Sep. '67. . | 4.18 | 2.34 | 3.13 | . 75 | 1 | .75 | 5.03 | 1.81 | 8.38 | 5.03 |
| 40. Unemployment rate, married males. . . . . . . . . . . . | Jan. '54-Sep. '67. . | 5.89 | 4.91 | 3.14 | 1.56 | 2 | .87 | 3.35 | 1.52 | 6.56 | 3.98 |
| *47. Industrial production . . . . . . . . . . . . . . . . . . . | Jan. '53-Sep. '67. . | . 97 | . 51 | . 73 | . 70 | 1 | .70 | 3.52 | 1.64 | 11.73 | 3.52 |
| *52. Personal income <br> 53. Wage and salary income in mining, manufacturing, | Jan. '53-Dec. '67. . | . 54 | . 26 | .48 | . 53 | 1 | . 53 | 5.42 | 1.58 | 25.57 | 5.42 |
| and construction | Jan. '53-Dec. '67. . | . 83 | . 50 | . 63 | . 79 | 1 | . 79 | 2.84 | 1.53 | 13.77 | 2.84 |
| *816. Manufacturing and trade sales. . . . . . . . . . . . . . . | Jan. '53-Sep. '67. . | 1.00 | . 77 | . 57 | 1.35 | 2 | .76 | 2.32 | 1.63 | 16.00 | 3.65 |
| *54. Sales of retail stores . . . . . . . . . . . . . . . . . . . . | Jan. '53-Sep. '67. . | . 89 | .76 | . 47 | 1.62 | 2 | . 93 | 2.15 | 1.59 | 14.67 | 3.72 |
| 96. Unfilled orders, durable goods industries 55. Wholesale prices, industrial | Jan. '53-June '68. | 1.38 | . 50 | 1.23 | . 41 | 1 | .41 | 2.15 5.14 | 1.62 | 15.42 | 5.14 |
| 58. commodities . . . . . . . . . . . . . . . . . . . . . . | Jan. '53-Sep. '67. . | .17 | . 11 | .13 | . 84 | 1 | . 84 | 4.09 | 1.66 | 9.26 | 4.09 |
| 58. Wholesale prices, manufactured goods. . . . . . . . . . | Jan. '53-Sep. '67. . | . 20 | . 16 | . 12 | 1.26 | 2 | . 79 | 3.26 | 1.80 | 10.35 | 4.49 |
| 114. Treasury bill rate.... | Jan. '53-Sep. '67. . | 6.42 | 4.69 | 4.32 | 1.09 | 2 | . 71 | 2.59 | 1.71 | 6.52 | 3.72 |
| 116. Corporate bond yields. | Jan. '59-Sep. '67. | 1.75 | 1.39 | . 4.34 | 1.47 | 3 | . 68 | 2.67 | 1.76 | 11.56 | 4.08 |
| 115. Treasury bond yields. | Jan. '53-Sep. '67. . | 1.65 | 1.29 | . 96 | 1.35 | 2 | . 94 | 2.79 | 1.93 | 7.65 | 3.89 |
| 11. Municipal bond yields | Jan. $53-\mathrm{sep} .67$. | 2.49 | 2.05 | 1.18 | 1.73 | 3 | . 82 | 2.63 | 1.89 | 7.65 | 4.05 |

See footnotes and definitions of measures at end of part 1.

## C. MCD and Related Measures of Variability.-Continued

Part 1. Average Percentage Changes--Continued

| Monthly series | Period covered | $\overline{\mathrm{Cl}}$ | $\bar{T}$ | $\overline{\mathrm{c}}$ | T/ $/$ | MCD | $\begin{aligned} & \bar{T} / \bar{C} \\ & \text { for } \\ & M C D \\ & \text { span } \end{aligned}$ | Average duration of run (ADR) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Cl | 1 | C | MCD |
|  | MONTHLY SERIES-Continued |  |  |  |  |  |  |  |  |  |  |
| LAGGING INDICATORS <br> *502. Unemployment rate, 15 weeks and over <br> 505. Machinery and equipment sales and business $\qquad$ construction expenditures. <br> *71. Book value, manufacturing and trade inventories ... <br> 65. Book value, manufacturers' inventories of finished goods. . |  |  |  |  |  |  |  |  |  |  |  |
|  | Jan. '53-Sep. '67. . | 6.26 | 5.03 | 3.98 | 1.26 | 2 | . 63 | 4.09 | 1.56 | 6.77 | 5.65 |
|  | Jan. '53-June '68 . | 1.69 | 1.33 | . 93 | 1.43 | 2 | . 75 | 1.91 | 1.50 | 16.82 | 2.92 |
|  | Jan. '53-Sep. '67. . | . 52 | . 18 | . 49 | . 37 | 1 | . 37 | 6.77 | 1.59 | 25.14 | 6.77 |
|  | Jan. '53-June '68 . | . 60 | . 27 | . 52 | . 51 | 1 | . 51 | 3.30 | 1.53 | 14.23 | 3.30 |
| *62. Labor cost per unit of output, manufacturing. | Jan. '53-Sep. '67.. | . 59 | . 46 | . 32 | 1.44 | 2 | . 89 | 2.48 | 1.64 | 6.07 | 4.07 |
| 66. Consumer installment dett.............. | Jan. '53-Sep. '67 . . | . 82 | .10 | . 80 | . 13 | 1 | . 13 | 13.54 | 1.64 | 25.14 | 13.54 |
| *72. Commercial and indus. loans outstanding, weekly reporting large commercial banks . . . . . . . . . . . | Jan. '53-Sep. '67 . . | . 97 | . 50 | . 82 | . 62 | 1 | . 62 | 3.67 | 1.52 | 25.14 | 3.67 |
| 118. Mortgage yields, residential. . . . . . . . . . . . . . . . | July '61-Sep. '67 . . | . 56 | . 21 | . 48 | . 43 | 1 | . 43 | 10.57 | 2.00 | 6.73 | 10.57 |
| SERIES UNCLASSIFIED BY CYCLICAL TIMING |  |  |  |  |  |  |  |  |  |  |  |
| 81. Consumer prices ... | Jan. '53-Sep. '67.. | . 19 | . 12 | . 15 | . 78 | 1 | . 78 | 4.19 | 1.64 | 10.35 | 4.19 |
| 86. Exports, excluding military aid ${ }^{3} \ldots \ldots . . .$. | Jan. '53-0ct. '67.. | 3.58 | 3.36 | . 90 | 3.74 | 4 | . 90 | 1.82 | 1.62 | 11.80 | 3.41 |
| 861. Export orders, durables except motor vehicles and parts | Jan. '63-May '68 .. | 10.41 | 10.28 | 1.13 | 9.13 | 6 | ${ }^{1}$ ) | 1.42 | 1.36 | 12.80 | 2.57 |
| 862. Export orders, nonelectrical machinery. | Jan. '57-Sep. '67... | 6.44 | 6.23 | 1.75 | 3.55 | 4 | . 92 | 1.60 | 1.51 | 9.14 | 2.84 |
| 87. General imports? ${ }^{3}$. | Jan. '53-0ct. '67.. | 2.87 | 2.69 | . 87 | 3.09 | 4 | .73 | 1.79 | 1.62 | 11.80 | 3.48 |
| 91. Defense Department obligations, total. | July '53-Sep. '67.. | 13.58 | 13.32 | 1.37 | 9.74 | 6 | ${ }^{1}$ (1) | 1.44 | 1.47 | 8.50 | 2.06 |
| 90. Defense Dept. obligations, procurement | Jan. '56-Sep. '67.. | 26.22 | 26.08 | 2.00 | 13.04 | 6 | (2) | 1.43 | 1.46 | 9.33 | 1.96 |
| 99. New orders, defense products industries | Jan. '53-June '68 | 20.01 | 19.93 | 1.65 | 12.04 | 6 | (1) | 1.52 | 1.42 | 10.28 | 2.22 |
| 92. Military contract awards in U.S. . | Jan. '53-Sep. '67 . . | 20.91 | 20.82 | 2.61 | 7.98 | 6 | (1) | 1.48 | 1.43 | 9.78 | 2.59 |
| SERIES UNCLASSIFIED BY CYCLICAL TIMING AND ECONOMIC PROCESS |  |  |  |  |  |  |  |  |  |  |  |
| 851. Ratio, inventories to sales, mfg. and trade . . . . . . | 'an. '53-Sep. '67. . | . 99 | . 85 | . 46 | 1.84 | 2 | . 95 | 2.84 | 1.54 | 8.80 | 4.61 |
| 855. Ratio, unfilled orders to shipments, durable goods. . | Jan. '53-Apr.'68\|. . | 1.87 | 1.62 | . 88 | 1.84 | 3 | . 74 | 2.13. | 1.63 | 12.20 | 4.31 |
| 853. Ratio, production of business equipment to production of consumer goods. | Jan. '53-Sep. '67 .. | . 93 | . 60 | . 65 | . 93 | 1 | . 93 | 2.84 | 1.63 | 9.26 | 2.84 |
| 855. Ratio, nonagricultural job openings unfilled to number of persons unemployed. | Jan. '53-Sep. '67.. | 5.54 | 3.33 | 4.15 | . 80 | 1 | . 80 | 3.26 | 1.52 | 8.38 | 3.26 |
| 856. Ratio, average hourly earnings of production workers in manufacturing to consumer prices. .... | Jan. '53-Dec.' $67 .$. | . 39 | . 36 | . 18 | 2.03 | 3 | . 77 | 3.14 | 1.56 | 10.53 | 7.08 |
| 859. Real spendable avg. weekly earnings, nonagri. prod. or nonsupv. workers | Jan. '64-Dec. '67 | . 32 | . 28 | . 13 | 2.04 | 3 | . 74 | 1.96 | 1.57 | 11.75 | 3.21 |
| INTERNATIONAL COMPARISONS |  |  |  |  |  |  |  |  |  |  |  |
| 123. Canada, industrial production. | Jan. '53-Sep. '67.. | . 81 | . 67 | . 55 | 1.21 | 2 | . 56 | 4.29 | 1.41 | 10.35 | 6.48 |
| 122. United Kingdom, industrial production . . . . . . . . . | Jan. '53-Sep. '67.. | 1.04 | . 98 | . 37 | 2.63 | 3 | . 94 | 2.38 | 1.45 | 8.80 | 4.14 |
| 121. OECD European countries, industrial production... | Jan. '53-Dec. '67.. | . 89 | . 83 | . 56 | 1.49 | 2 | . 82 | 3.98 | 1.54 | 16.27 | 7.74 |
| 126. France, industrial production..... | Jan. '53-Sep. '67.. | 1.19 | 1.07 | . 62 | 1.71 | 2 | . 87 | 3.45 | 1.48 | 16.00 | 9.21 |
| 125. West Germany, industrial production. | Jan. '53-Dec. '67.. | 1.72 | 1.59 | . 63 | 2.53 | 3 | . 68 | 2.06 | 1.43 | 19.89 | 4.32 |
| 128. Japan, industrial production. | Jan. '53-Sep. '67.. | 1.69 | 1.17 | 1.23 | . 95 | 1 | . 95 | 3.59 | 1.39 | 13.54 | 3.59 |
| 127. Italy, industrial production. | Jan. '53-Sep. '67.. | 1.43 | 1.28 | . 72 | 1.78 | 2 | . 98 | 2.79 | 1.66 | 29.33 | 4.07 |
| 133. Canada, consumer prices. | Jan. '53-Sep. '67 .. | . 25 | . 31 | . 19 | 1.66 | 2 | . 93 | 9.26 | 2.00 | 11.00 | 12.50 |
| 132. United Kingdom, consumer prices | Jan. '53-Sep. '67.. | . 45 | . 49 | . 27 | 1.82 | 3 | . 73 | 6.29 | 1.68 | 14.67 | 8.70 |
| 136. France, consumer prices. | Jan. '53-Sep. '67.. | . 52 | . 44 | . 39 | 1.14 | 2 | . 59 | 7.04 | 1.54 | 8.80 | 7.61 |
| 135. West Germany, consumer prices | Jan. '53-Sep. '67.. | . 32 | . 36 | . 22 | 1.65 | 3 | . 75 | 8.00 | 1.98 | 11.73 | 11.60 |
| 138. Japan, consumer prices. | Jan. '53-Sep. '67.. | . 81 | . 74 | . 38 | 1.95 | 3 | . 69 | 3.09 | 1.64 | 10.35 | 6.96 |
| 137. Italy, consumer prices. | Jan. '53-Sep. '67.. | . 33 | . 35 | . 31 | 1.14 | 2 | .61 | 19.56 | 1.80 | 8.38 | 25.00 |
| 143. Canada, stock prices. | Jan. '53-Sep. '67.. | 2.77 | 2.13 | 1.61 | 1.33 | 2 | . 87 | 3.26 | 1.78 | 11.00 | 3.98 |
| 142. United Kingdom, stock prices | Jan. '53-Sep. '67.. | 3.13 | 2.49 | 1.68 | 1.48 | 2 | . 90 | 2.63 | 1.71 | 8.00 | 3.72 |
| 146. France, stock prices. | Jan. '53-Sep. '67.. | 4.00 | 3.35 | 1.87 | 1.79 | 3 | . 66 | 2.48 | 1.68 | 7.33 | 4.14 |
| 145. West Germany, stock prices | Jan. '53-Sep. '67.. | 3.34 | 2.03 | 2.37 | . 86 | 1 | . 86 | 3.52 | 1.85 | 7.33 | 3.52 |
| 148. Japan, stock prices. | Jan. '53-Sep. '67.. | 3.60 | 2.44 | 2.29 | 1.07 | 2 | .64 | 3.26 | 1.68 | 7.04 | 4.49 |
| 147. Italy, stock prices. . | Jan. '53-Sep. '67 .. | 3.78 | 3.00 | 1.89 | 1.59 | 3 | . 72 | 2.44 | 1.85 | 8.80 | 5.12 |

See footnotes and definitions of measures at end of part 1.

## C. MCD and Related Measures of Variability--Continued

Part 1. Average Percentage Changes--Continued

| Quarterly series | Period covered | $\overline{\mathrm{Cl}}$ | I | $\overline{\mathrm{C}}$ | $\bar{T} / \bar{C}$ | QCD | $\begin{gathered} \bar{T} / \bar{C} \\ \text { for } \\ Q C D \\ \text { span } \end{gathered}$ | Average duration of run (ADR) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Cl | 1 | C | QCD |
|  | QUARTERLY SERIES |  |  |  |  |  |  |  |  |  |  |
| LEADING INDICATORS |  |  |  |  |  |  |  |  |  |  |  |
| 11. New capital appropriations, manufacturing . . . . . | IQ '53-1110 '67. . . . | 9.31 | 4.62 | 6.89 | .67 | 1 | .67 | 3.05 | 1.29 | 3.41 | 3.05 |
| *16. Corporate profits after taxes. . . . . . . . . . . . . | IQ '53-1Q '68 . . . . | 5.24 | 2.88 | 4.07 | . 71 | 1 | . 71 | 3.00 | 1.25 | 5.00 | 3.00 |
| 22. Ratio, profits to income originating, corporate, all industries | IQ '53-1Q '68 . . . . | 4.15 | 2.72 | 2.94 | . 93 | 1 | . 93 | 2.40 | 1.25 | 4.62 | 2.40 |
| 18. Profits per dollar of sales, manufacturing. | IQ '53-111Q '67.... | 5.59 | 3.41 | 3.67 | . 93 | 1 | . 93 | 2.64 | 1.32 | 3.87 | 2.64 |
| 110. Total private borrowing . . . . . . . . . . | IQ '53-IIIQ'67 ... | 10.95 | 6.17 | 8.16 | .76 | 1 | . 76 | 2.23 | 1.29 | 3.62 | 2.23 |
| ROUGHLY COINCIDENT INDICATORS |  |  |  |  |  |  |  |  |  |  |  |
| 49. GNP in current dollars . . . . . . . . . . . . . . . . | IQ '53-11Q '68.... . | 1.58 | . 34 | 1.51 | . 22 | 1 | . 22 | 6.78 | 1.30 | 8.71 | 6.78 |
| *50. GNP in 1958 dollars . . . . . . . . . . . . . . . . . | IQ '53-1IQ '68.... . | 1.25 | . 33 | 1.12 | . 29 | 1 | . 29 | 3.59 | 1.30 | 6.78 | 3.59 |
| 57. Final sales . . . . . . . . . . . . . . . . . . . . | IQ '53-1蜆68.... | 1.45 | . 31 | 1.41 | . 22 | 1 | . 22 | 12.20 | 1.20 | 12.20 | 12.20 |
| 97. Backlog of capital appropriations, manufacturing. | IQ '53-111Q '67. . . . | 5.36 | . 84 | 5.21 | . 16 | 1 | .16 | 4.14 | 1.32 | 5.80 | 4.14 |
| LAGGING INDICATORS |  |  |  |  |  |  |  |  |  |  |  |
| *61. Business expenditures, new plant and equipment | 10 '53-111Q '67. . . . . | 3.13 |  |  |  |  |  |  |  |  |  |
| 68. Labor cost (cur, dol.) per unit of gross product (1958 dol.), nonfinancial corporations . |  | 3.13 .86 | .74 .39 | 2.91 .71 | .26 .55 | 1 | .26 .55 | 5.80 3.53 | 1.41 1.28 | 5.80 4.62 | 5.80 3.53 |
| *67. Bank rates on short-term business loans . . . . . . | IQ '53.1IQ '67. . . . | 2.23 | 1.02 | 2.05 | . 50 | 1 | . 50 | 2.64 | 1.28 | 4.62 3.62 | 3.53 2.64 |
| SERIES UNCLASSIFIED BY CYCLICAL TIMING |  |  |  |  |  |  |  |  |  |  |  |
| 951. Fed. receipts, nat'l income and product acct. . . . | $1 Q^{\prime} 53-10^{\prime} 68 \ldots .$ | 2.50 | . 92 | 2.24 | . 41 | 1 | . 41 | 4.00 | 1.40 | 6.00 | 4.00 |
| 952. Fed. expenditures, nat'I income and product acct. | 10 '53-110 '68.... | 2.19 | . 92 | 1.92 | . 48 | 1 | . 48 | 4.07 | 1.24 | 5.55 | 4.07 |
| 101. National defense purchases, current dollars . . . . | 10'53-11Q '68.... | 2.33 | . 81 | 2.01 | . 40 | 1 | . 40 | 2.90 | 1.24 | 5.08 | 2.90 |
| SERIES UNCLASSIFIED BY CYCLICAL TIMING AND ECONOMIC PROCESS |  |  |  |  |  |  |  |  |  |  |  |
| 850. Ratio, output to capacity, mfg.. . . . . . . . . . . . | 1Q '53-111Q'67 ... | 2.18 | . 85 | 1.77 | . 48 | 1 | . 48 | 2.90 | 1.41 | 3.87 | 2.90 |
| 854. Ratio, personal saving to disposable personal income. | LQ $Q^{\prime} 53-110^{\prime} 68 . . .$. | 8.22 | 6.42 | 4.44 | 1.44 | 2 | . 52 | 1.56 | 1.30 | 3.21 | 3.00 |
| 857. Vacancy rate in total rental housing . . . . . . . . | 10 '56-IIQQ'67 ... | 3.78 | 2.21 | 2.47 | . 90 | 1 | . 90 | 2.09 | 1.44 | 3.29 | 2.09 |
| 858. Output per man-hour, total private nonfarm. | 1Q'53-11Q '68,.... | . 88 | . 41 | . 71 | . 58 | 1 | . 58 | 3.21 | 1.22 | 8.71 | 3.21 |

*Series included in the 1966 NBER "short list" of 25 indicators. ${ }^{1}$ Not shown for series when MCD is "6" or more.
${ }^{2}$ Bimonthly series; average percentage changes, MCD and average durations of run are for bimonthly spans. ${ }^{3}$ Measures based on data adjusted for abnormalities during the periods December 1962-March 1963 and December 1964-May l965 due to effects of strikes.

## BRIEF DEFINITIONS OF MEASURES SHOWN IN PART 1

The following are brief definitions of the measures shown in part 1 of this table. More complete explanations appear in Electronic Computers and Business Indicators, by Julius Shiskin, issued as Occasional Paper 57 by the National Bureau of Economic Research, 1957 (reprinted from Journal of Business, October 1957).
" $\overline{\mathrm{Cl}}{ }^{"}$ is the average month-to-month (or quarter -toquarter) percentage change, without regard to sign, in the seasonally adjusted series (i.e., the series after adjustment for measurable seasonal, trading-day, and holiday variations).
" $\overline{\mathrm{I}}$ " is the same for the irregular component, obtained by dividing the cyclical component into the seasonally adjusted series.
" $\overline{\mathrm{C}}$ " is the same for the cyclical component, a smooth, flexible moving average of the seasonally adjusted series.
"MCD" (months for cyclical dominance) provides an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. It is small for smooth series and large for irregular series. In deriving MCD, percentage changes are computed separately for the irregular component and the cyclical component over 1-month spans (Jan.-Feb., Feb.-Mar., etc.), 2-month spans (Jan.-Mar., Feb.- Apr., etc.), up to 12 -month spans. Averages, without regard to sign, are then computed for the changes over each span. MCD is the shortest span in months for which the average percentage change (without regard to sign) in the cyclical component is larger than the average percentage
change (without regard to sign) in the irregular component, and remains so. Thus, it indicates the point at which fluctuations in the seasonally adjusted series become dominated by cyclical rather than irregular movements. All series with an MCD greater than " 5 " are shown as " 6 ".

Similarly, "QCD" provides an estimate of the appropriate time span over which to observe cyclical movements in quarterly series. It is the shortest span (in quarters) for which the average percentage change (without regard to sign) in the cyclical component is larger than the average percentage change (without regard to sign) in the irregular component, and remains so.
" $\overline{\mathrm{I} / \mathrm{C}}$ " is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series. For monthly series, it is shown for 1 -month spans and for spans of the period of MCD. When MCD is " 6 ", no $\bar{I} / \bar{C}$ ratio is shown for the MCD period. For quarterly series, $\bar{I} / \mathrm{C}$ is shown for 1 -quarter spans and QCD spans.
"Average Duration of Run" (ADR) is another measure of smoothness and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between 2 months, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series Cl , irregular component I, cyclical component C, and the MCD curve. The

MCD curve is an unweighted moving average (with the number of terms equal to MCD) of the seasonally adjusted series.

A comparison of these measures of ADR with the expected ADR of a random series gives an indication of whether the changes approximate those of a random series. Over 1-month intervals in a random series, the expected value of the ADR is 1.5. The actual value of ADR falls between 1.36 and 1.75 about 95 percent of the time. Over 1 -month intervals in a moving average (MCD) of a random series, the expected value of ADR is 2.0. For example, the ADR of CI is 1.73 for the series on average weekly initial claims, State unemployment insurance (series 5). This indicates that 1 -month changes in the seasonally adjusted series, on the average, reverse sign about as often as expected in a random series. The ADR measures shown in the next two columns, 1.48 for $I$ and 12.57 for $C$, suggest that the seasonally adjusted series has been successfully separated into an essentially random component and a cyclical (nonrandom) component. Finally, ADR is 3.95 for the MCD moving average. This indicates that a 2 -month moving average of the seasonally adjusted series ( 2 months being the MCD span) reverses direction, on the average, about every 4 months. The increase in the ADR from 1.48 for CI to 3.95 for the MCD moving average indicates that, for this series, month-to-month changes in the MCD moving average usually reflect the underlying cyclical trend movements of the series, whereas the month-to-month changes in the seasonally adjusted series usually do not.

## C. MCD and Related Measures of Variability-.Continued

Part 2. Average Unit Changes

| Monthly series | Period covered | Unit of measure | $\overline{\mathrm{Cl}}$ | T | $\overline{\mathrm{C}}$ | $\overline{1} / \bar{C}$ | MCD | $\begin{aligned} & \bar{T} / \bar{C} \\ & \text { for } \\ & \text { MCD } \\ & \text { span } \end{aligned}$ | Average duration of run (ADR) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | Cl | 1 | C | MCD |
|  | MONTHLY SERIES |  |  |  |  |  |  |  |  |  |  |  |
| LEADING INDICATORS |  |  |  |  |  |  |  |  |  |  |  |  |
| *31. Change in book value, manufacturing and trade inventories | Jan. '53-Sep. '67. | Ann. rate, bil. dol.. | 3.79 | 3.67 | .77 | 4.78 | 5 | . 96 | 1.53 | 1.45 | 6.29 | 2.65 |
| 20. Change in book value of manufacturers' inventories of materials, supplies. | Jan. '53-June '68 | ... do. . . | 1.41 | 1.35 | . 29 | 4.60 | 6 | (1) | 1.57 | 1.47 | 6.85 | 3.05 |
| 25. Change in unfilled orders, dur. goods industries. | Jan. '53-June '68 | Bil. dol. . | . 48 | . 45 | .13 | 3.54 | 4 | . 96 | 1.70 | 1.61 | 8.04 | 3.19 |
| 98. Change in money supply and time deposits . . . . | Jan. '53-Apr. '68. | Ann. rate, percent . | 2.42 | 2.38 | . 48 | 4.97 | 6 | (1) | 1.52 | 1.41 | 7.04 | 2.78 |
| 85. Change in U.S. money supply. . . . . . . . . . . . | Jan. '53-Apr. '68 • | . . do. . . | 2.85 | 2.87 | . 37 | 7.83 | 6 | (1) | 1.40 | 1.36 | 10.76 | 2.87 |
| 33. Change in mortgage debt . . . . . . . . . . . . . . . | Jan. '55-Sep. '67. | Ann. rate, bil. dol.. | 1.34 | 1.26 | . 37 | 3.43 | 3 | . 98 | 1.49 | 1.35 | 10.13 | 2.94 |
| *113. Change in consumer installment debt . . . . . . . . | Jan.'53-Sep. '67 . | . . do. . ${ }^{\text {d }}$ | . .86 | . .78 | .30 | 2.64 | 3 | .90 | 1.64 | 1.48 | 11.00 | 3.16 |
| 112. Change in business loans . . . . . . . . . . . . . . | Aug. '59-Sep. '67. | . . . do. . | 2.77 | 2.72 | . 28 | 9.78 | 6 | $\left({ }^{1}\right)$ | 1.56 | 1.56 | 10.78 | 3.83 |
| ROUGHLY COINCIDENT INDICATORS |  |  |  |  |  |  |  |  |  |  |  |  |
| 93. Free reserves. | Jan. '53-Sep. '67. | Mil. dol. . | 93.44 | 75.38 | 46.88 | 1.61 | 2 | . 96 | 2.07 | 1.59 | 9.26 | 3.13 |
| SERIES UNCLASSIFIED BY CYCLICAL TIMING |  |  |  |  |  |  |  |  |  |  |  |  |
| 88. Merchandise trade balance ${ }^{2}$. | Jan. '53-0ct. '67. | . . . do. . | 57.74 | 55.59 | 15.55 | 3.58 | 4 | . 86 | 1.62 | 1.57 | 9.32 | 3.55 |

See footnotes and definitions of measures at end of part 2.

## C. MCD and Related Measures of Variability-.Continued

Part 2. Average Unit Changes--Continued

| Quarterly series | Period covered | Unit of measure | $\overline{\mathrm{Cl}}$ | $T$ | $\overline{\mathrm{C}}$ | $\bar{T} / \bar{C}$ | QCD | $\begin{aligned} & T / \bar{C} \\ & \text { for } \\ & \text { QCD } \\ & \text { span } \end{aligned}$ | Average duration of run (ADR) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | Cl | 1 | C | QCD |
|  | QUARTERLY SERIES |  |  |  |  |  |  |  |  |  |  |  |
| LEADING INDICATORS |  |  |  |  |  |  |  |  |  |  |  |  |
| 21. Change in business inventories, all industries. | 1Q '53-11Q '68 .. | Ann. rate, bil. dol. . | 2.73 | 1.80 | 1.52 | 1.18 | 2 | . 51 | 1.74 | 1.36 | 3.81 | 2.73 |
| SERIES UNCLASSIFIED BY CYCLICAL TIMING |  |  |  |  |  |  |  |  |  |  |  |  |
| 89. U.S. balance of payments: <br> a. Liquidity balance basis. <br> b. Official settlements basis | IQ '53-1Q ${ }^{10} 68$. | Mil. dol... . . do. ${ }^{\text {d }}$ - | 341.38 570.53 | 241.54 376.87 | 204.65 | 1.18 1.39 | 2 | . 49 | 1.82 | 1.28 1.45 | 3.16 2.46 | 2.68 2.38 |
| 95. Fed. balance, nat'l. income and product acct. . . . . . | IQ '53-111Q '67. . | Ann. rate, bil. dol. . | 2.61 | 1.36 | 2.00 | . 68 | 1 | . 68 | 2.23 | 1.38 | 3.62 | 2.23 |

[^6]
## BRIEF DEFINITIONS OF MEASURES SHOWN IN PART 2

The measures in part 2 are computed by an additive method to avoid the distortion caused by zero and negative data.

Thus, " $\overline{\mathrm{CI}}$ " is the average month-to-month (or quarter-to-quarter) change in the seasonally adjusted series. This average is computed without regard to sign and is expressed in the same unit of measure as the series itself.
" $\overline{\mathrm{C}}$ " is the same for the cyclical component, which is a moving average of the seasonally adjusted series.
" $\overline{\mathrm{I}}$ " is the same for the irregular component, which is determined by subtracting the cyclical component from the seasonally adjusted series.

All other measures shown in part 2 have the same meaning as in part 1.
D. Current Adjustment Factors for Business Cycle Series

| Series |
| :--- |

NOTE: These data are not published by the source agency in seasonally adjusted form. Seasonal adjustments were made by the Bureau of the Census or the National Bureau of Economic Research, Inc. They are kept current by the Bureau of the Census. Seasonally adjusted data prepared by the source agency will be substituted whenever they are published. For a description of the method used to compute these factors, see Bureau of the Census Technical Paper No. 15, The X-11 Variant of the Census Method II Seasonal Adjustment Program.
${ }^{1}$ Factors are products of seasonal and trading-day factors. Seasonally adjusted data resulting from the application of these combined factors may differ slightly from those obtained by separate applications of seasonal and trading-day factors due to rounding.
${ }^{2}$ Quarterly series; figures are placed in middle month of quarter.
${ }^{3}$ These quantities, in millions of dollars, are to be subtracted from the month-to-month net change in the unadjusted monthly totals to yield the seasonally adjusted net change. They were computed by the additive version of the $\mathrm{X}-11$ variant of the Census Method II seasonal adjustment program.
${ }^{4}$ Bimonthly series. Data are for even-numbered months (February, April, June, etc.).
${ }^{5}$ Factors apply to monthly totals before month-to-month changes are computed.
${ }^{6}$ l-quarter diffusion index: Figures are placed on the lst month of the quarter. The unadjusted diffusion index is computed and the factors, computed by the additive version of the X-11 variant of the Census Method II seasonal adjustment program, are subtracted to yield the seasonally adjusted index.

|  | Percent change: Reference peak to reference trough |  |  |  |  |  |  | *43. Unemployment rate, total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Contractions: Reference peak to reference trough | *41. Employees on non-agricultural payrolls | *47. Index of industrial production | *50. GNP <br> in 1958 dollars <br> (Q) ${ }^{1}$ | 49. GNP <br> in current dollars (Q) ${ }^{1}$ | *52. Personal income | *816. Manufacturing and trade sales | *54. Sales of retail stores | Change in rate, peak to trough | Rate at peak | Rate at trough |
| Jan. 1920-July 1921. . . . . . . . . . . . | (NA) | -31.6 | (NA) | -19.7 | -21.9 | (NA) | -4.3 | ${ }^{2}+7.9$ | ${ }^{2} 4.0$ | ${ }^{2} 11.9$ |
| May 1923-July 1924. . . . . . . . . . . | (NA) | -18.0 | -0.3 | -2.3 | 0.0 | (NA) | -1.9 | ${ }^{2}+2.3$ | 23.2 | 25.5 |
| Oct. 1926-Nov. 1927 | (NA) | -5.9 | +2.3 | +0.4 | +0.9 | (NA) | 0.0 | ${ }^{2}+2.2$ | 21.9 | 24.1 |
| Aug. 1929-Mar. 1933 . . . . . . . . . . | -31.6 | -51.8 | -28.0 | -49.6 | -50.8 | (NA) | -43.5 | +25.4 | ${ }^{3} 0.0$ | 25.4 |
| May 1937-June 1938 | -10.4 | -31.7 | -8.9 | -11.9 | -10.9 | (NA) | -17.3 | +8.8 | 11.2 | 20.0 |
| Feb. 1945-0ct. 1945 ${ }^{4}$ | -7.9 | -31.4 | (NA) | -10.9 | -4.0 | (NA) | +8.6 | +2.2 | 1.1 | 3.3 |
| Nov. 1948-Oct. $1949{ }^{5}$ | -5.1 | -8.5 | -1.6 | -3.4 | -4.7 | -7.5 | -0.5 | +4.1 | 33.8 | 7.9 |
| July 1953-Aug. $1954{ }^{5}$. . . . . . . . . . | -3.4 | -9.1 | -2.2 | -0.8 | 0.0 | -7.2 | -0.5 | +3.4 | 2.6 | 6.0 |
| July 1957-Apr. 1958 | -4.0 | -14.1 | -3.4 | -1.8 | +0.2 | -6.8 | -2.4 | +3.2 | 4.2 | 7.4 |
| May 1960-Feb. 1961 | -1.8 | -5.7 | -1.4 | -0.2 | +0.9 | -3.1 | $-2.7$ | +1.8 | 5.1 | 6.9 |
| Median: ${ }^{6}$ |  |  |  |  |  |  |  |  |  |  |
| All contractions . . . . . . . . . . | -5.7 | -16.0 | -1.9 | -2.8 | -2.0 | -7.0 | -2.2 | +3.3 | 3.5 | 7.2 |
| Excluding postwar contractions . | -6.5 | -16.0 | -2.1 | -2.8 | -2.4 | -5.8 | -2.6 | +3.6 | 3.9 | 7.6 |
| 4 contractions since 1948 . | -3.7 | -8. 8 | -1.9 | -1. 3 | +0.1 | -7.0 | -1.4 | +3.3 | 4.0 | 7.2 |
| Expansions: Reference trough to reference peak | Percent change: Reference trough to reference peak |  |  |  |  |  |  | *43. Unemployment rate, total |  |  |
|  | *41. Em- |  |  |  |  |  |  |  |  |  |
|  | ployees | *47. Index of indus | *50. GNP | 49. GNP |  | *816. Manu- |  | Change |  |  |
|  | on non- | trial | in 1958 | rent | sonal | facturing | 34. Sales of retail | in rate, | Rate at | Rate at |
|  | agricul- | produc- | dollars | dollars | income | and trade | stores | trough | trough | peak |
|  | tural | tion | (Q) ${ }^{1}$ | $(Q)^{1}$ |  | sales |  | to peak |  |  |
|  | payrolls |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| July 1921-May 1923 . . . . . . . . . | (NA) | +64.2 | (NA) | +25.1 | +29.6 | (NA) | +15.7 | ${ }^{2}-8.7$ | 211.9 | 23.2 |
| July 1924-Oct. 1926 | (NA) | +30.4 | +12.4 | +14.7 | +13.2 | (NA) | +9.9 | 2-3.6 | 25.5 | 21.9 |
| Nov. 1927-Aug. 1929 | (NA) | +24.1 | +12.6 | +13.3 | +12.2 | (NA) | +3.6 | 2-0.9 | 24.1 | 233.2 |
| Mar. 1933-May 1937 . . . . . . . . . . | +40.2 | +119.9 | +42.1 | +73.9 | +76.3 | (NA) | +69.2 | -14.2 | 25.4 | 11.2 |
| June 1938-Feb. 1945 ${ }^{\text {c . . . . . . . . . }}$ | +45.9 | +183.3 | (NA) | +169.6 | +157.3 | (NA) | +105.4 | -18.9 | 20.0 | 1.1 |
| Oct. 1945-Nov. 1948 . . . . . . . . . . | +17.2 | +21.9 | +3.3 | +34.9 | +28.5 | (NA) | +63.8 | +0.3 | 3.3 | ${ }^{3} 3.6$ |
| Oct. 1949-July 19535. | +17.8 | +50.0 | +28.8 | +44.1 | +41.4 | +50.0 | +25.6 | -5.3 | 7.9 | 2.6 |
| Aug. 1954-July 1957 . . . . . . . . . . | +8.9 | +19.7 | +11.8 | +22.4 | +22.1 | +22.6 | +20.3 | -1. 8 | 6.0 | 4.2 |
| Apr. 1958-May 1960 . . . . . . . . . | +6.9 | +25.2 | $+11.4$ | +15.1 | +13.3 | +16.2 | +11.9 | -2.3 | 7.4 | 5.1 |
| Median: ${ }^{6}$ |  |  |  |  |  |  |  |  |  |  |
| All expansions . . . . . . . . . . . | +17.5 | +35.2 | +12.3 | +27.5 | +26.7 | +29.6 | +20.5 | -3.7 | 7.1 | 3.3 |
| Excluding wartime expansions .. | +13.0 | +26.6 | +12.1 | +20.9 | +21.3 | +19.4 | +16.0 | -2.6 | 6.3 | 3.7 |
| 4 expansions since $1945 . . . .$. | +13.0 | +23.6 | +11.6 | +28.6 | +25.3 | (NA) | +23.0 | -2.0 | 6.7 | 3.9 |

NOTE: For series with a "months for cyclical dominance" (MCD) of " 1 " or " 2 " (series $41,43,47,52$, and 816 ), the figure for the reference peak (trough) month is used as the base. For series with an MCD of " 3 "" or more (series 54), the average of the 3 months centered on the reference peak (trough) month is used as the base. The base for quarterly series (series 49 and 50 ) is the reference peak (trough) quarter. See also MCD footnote to appendix C. *Series included in the 1966 NBER "short list" of 25 indicators. $N A=$ Not available.
${ }^{1}$ The most recent quarterly reference dates are as follows: 2d quarter 1958 (trough); 2 d quarter 1960 (peak); and 1st quarter 1961 (trough). For earlier dates, see Business Cycle Indicators (NBER) vol. 1, p. 670.
${ }^{2}$ Based on average for the calendar year.
${ }^{3}$ Differs from figure for same date in expansion (contraction) part of table because of change in series used.
${ }^{4}$ World War II contraction or expansion period.
${ }^{5}$ Korean War contraction or expansion period.
${ }^{6}$ The median is an average of the middle 2 or 3 items.
Source: National Bureau of Economic Research, Inc.

## F. Historical Data for Selected Series

This appendix contains historical data for Business Cycle Developments series extending back to 1945 or to the earliest date thereafter for which data are available. Data are published in this appendix for (a) new series which have been added to Business Cycle Developments, (b) series which have been revised recently, and (c) series which have not been shown historically for a long period of time. See the Index, Series Finding Guide, for the latest issue in which historical data for each series were published. Current data are shown in tables 2 and 3 . Data are seasonally adjusted unless the symbol (@) (indicating unadjusted data) follows the series title. Official source agency quarterdy and/or annual totals are presented in this table wherever possible. These figures are often calculated from monthly data with more digits or from data which have not been seasonally adjusted; therefore, they may differ slightly from totals and averages computed from monthly data presented herein.


NOTE: The series on this page are revised from 1953 to date.
OCTOBER 1968

Series Finding Guide
(See table of contents (page i) for chart and table titles)

| Series titles by economic process and other groupings (See complete titles and sources on back cover) |  |  | $\left\|\begin{array}{c} \text { Tables } \\ \text { (p. No. }) \end{array}\right\|$ | $\begin{array}{\|c\|} \text { Historical } \\ \text { data } \\ \text { (issue date) } \end{array}$ | Series description (issue date) | Series titles by economic process and other groupings (See complete titles and soulces on back cover) | 高 |  | $\begin{aligned} & \text { Tables } \\ & \text { (p. No.) } \end{aligned}$ | $\begin{gathered} \text { Historical } \\ \text { data } \\ \text { (issue date) } \end{gathered}$ | Series description (issue date) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. EMPLOYMENT AND UNEMPLOYMENT |  |  |  |  |  | V. PRICES, COSTS, AND PROFITS.-Continued |  |  |  |  |  |
| *1. Avg. workweek, production workers, mfg. | L | 9 | 6, 33 | Aug. 168 | Aug. '68 | 68. Labor cost per unit of gross product, |  |  |  |  |  |
| *30. Nonagricultural placements, all industries | L |  | 6,33 | Apr. 168 |  | nonfinancial corporations ....... | Lg | 23 | 8, 42 | July 168 | July '68 |
| 2. Accession rate, manufacturing. . . . . . . | L | 9 | 6, 33 | Aug. ' 68 | Aug. 68 | *62. Labor cost per unit of output, manufacturing.. | Lg | 23 | 8, 42 | July 167 |  |
| 5. Initial claims, State unemploy, in | L | 9 | 6, 33 | Apr. 168 | Aug. | 81. Consumer prices . . . . . . . . . . . . . . . . . . | $U$ | 24 | 8, 43 | May '68 |  |
| 3. Layoff rate, manufacturing | L | 9 | 6, 33 | Aug. 168 | Aug. 68 |  |  |  |  |  |  |
| 301. Nonagri. job openings unfilled | C | 17 | 7, 38 | Feb. 168 |  |  |  |  |  |  |  |
| 46. Help-wanted advertising .. | C | 17 | 7, 38 | June 168 |  | VI. MONEY AND CREDIT |  |  |  |  |  |
| 511. Man-hours in nonagii, establishme | C | 17 | 7, 38 | Aug. 168 | Aug. '68 | 98. Change, money supply and time deposits | L | 15 | 6, 37 | Aug. 168 | Aug. 168 |
| *41. Employees on nonagri. payrolls. | C | 17 | 7, 38 | Aug. 168 | Aug. '68 | 85. Change, money supply. | L | 15 | 6, 37 | Aug. 168 | Aug. '68 |
| 42. Persons engaged in nonagri. actichen | C | 17 | 7,38 | Feb. 168 |  | 33. Change, mortgage debt | L | 15 | 6, 37 | Apr. 167 |  |
| *43. Unemployment rate, total... | C | 18 | 7, 38 | Feb. 168 |  | *113. Change, consumer installment debt | L | 15 | 6, 37 | Dec. 167 | July 164 |
| 45. Avg, weekly insured unemploy, rate | C | 18 | 7, 38 | Dec. 167 |  | 112. Change, business loans | L | 15 | 6, 37 | Apr. 167 | July 164 |
| 40. Unemployment rate, married males. | C | 18 | 7, 38 | Feb. 168 |  | 110. Total private borrowing | L | 16 | 6,37 | Mar. 168 | July '64 |
| *502. Unemploy. rate, 15 weeks and over | Lg | 22 | 7,41 | Feb. ${ }^{68}$ |  |  | L | 16 |  | Mar. ${ }^{168}$ |  |
|  |  |  |  |  |  | 39. Delinquency rate, installment loans, |  |  | 6, 37 | Mar. 68 |  |
|  |  |  |  |  |  | . 30 days and over ............ | L | 16 | 6, 37 | Apr. 167 |  |
| AND TRADE |  |  |  |  |  | 93. Free reserves | C | 21 | 7, 40 | Jan. ${ }^{168}$ |  |
|  |  |  |  |  |  | 114. Treasury bill rate | C | 21 | 7,40 | Apr. ${ }^{68}$ | July '64 |
| 49. GNP in current dollars | C | 18 | 7, 39 | July 168 | July '68 | 116. Corporate bond yields | C | 21 | 7,40 | June '68 | July '64 |
| *50. GNP in 1958 dollars | C | 18 | 7, 39 | July 168 | July '68 |  |  |  |  |  |  |
| *52. Industrial production. | C | 18 | 7,39 7,39 | $\begin{array}{ll}\text { Dec. } & 167 \\ \text { July } & 168 \\ \text { Jug }\end{array}$ |  | 115. Treasury bond yields | C | 21 | 7, 70 | Jan. <br> Jan. <br> Ja8 <br> 168 | $\begin{aligned} & \text { July } \\ & \text { July } \\ & \hline \end{aligned} 64$ |
| *52. Personal income . . . . . . . . . . . . . . | C | 19 | 7,39 7,39 | July ${ }^{\text {Jug }}$ J 68 | July <br> July <br> J 68 | 117. Municipal bond yields 66. Consumer instaliment debt |  | 21 | 7, 40 | Jan. <br> Dec. <br> 167 | July 164 |
| 53. Wages and salaries, mining, mfg. constr * 16. Manufacturing and trade sales ....... | C | 19 | 7,39 7,39 | July 168 Apr. 167 | July '68 $\ldots . . . . . .$. | *72. Comsumer ind instal ment deans . . . . . . . ${ }^{\text {* }}$. | $\stackrel{\mathrm{Lg}}{\mathrm{Lg}}$ | 23 | 8, 42 | Dec. <br> Apr. <br> 167 |  |
| *816. Manufacturing and trade sales 57. Final sales ............ | C | 19 | 7, 39 | $\begin{array}{ll}\text { Apr. } & 67 \\ \text { July } & 168\end{array}$ | July 108 | *67. Bank rates on short-term business loa | Lg | 23 | 8, 42 | Jan. '68 |  |
| *54. Sales of retail stores | C | 19 | 7, 39 | May : 68 | July 68 | 118. Mortgage yields, residential ...... | Lg | 23 | 8,42 | Jan. 168 | July '64 |
| III. FIXED CAPITAL INVESTMENT |  |  |  |  |  | VII. FOREIGN TRADE AND PAYMENTS |  |  |  |  |  |
| *38. Index of net business formation | L | 10 | 6, 33 | Apr. ${ }^{168}$ |  | 89. U.S. balance of payments: |  |  |  |  |  |
| 13. New business incorporations. | L | 10 | 6,33 | Mar. ${ }^{68}$ |  | a. Liquidity balance basis | 4 | 24 | 8, 43 | June 167 |  |
| ${ }^{*} 6$. New orders, durable goods industries | L | 10 | 6, 34 | Sept. '68 | Sept. ${ }^{168}$ | b. Official settlements basi | U | 24 | 8, 43 | Sept. '68 | Sept. 168 |
| 94. Construction contracts, value . . | L | 10 | 6, 34 | Sopt. 68 | Sept. 6 | 88. Merchandise trade balance | U | 24 | 8, 43 | Sept. '68 | Sept. '68 |
| *10. Contracts and orders, plant and equipmer | L | 10 | 6, 34 | Sept. '68 | Sept. '68 | 86. Exports, excluding military aid | $U$ | 25 | 8, 43 | Apr. ${ }^{6} 67$ |  |
| 11. New capital appropriations, manufacturing | L | 11 | 6,34 | Aug. ' 67 |  | 861. Export orders, durable goods, except motor vehicles |  |  |  |  |  |
| 24. New orders, mach. and equip. industries ..... | L | 11 | 6, 34 | Sept. 168 | Sept. '68 | motor vehicles <br> 862. Export orders, nonelectric machinery | $\begin{aligned} & U \\ & U \end{aligned}$ | 25 | 8,43 8,43 | $\begin{aligned} & \text { Aug. } 168 \\ & \text { Apr. } 67 \end{aligned}$ | Aug. 168 |
| 9. Construction contracts, comm. and industria | L | 11 | 6, 34 | May 167 |  | 87. General imports... | U | 25 | 8, 43 | Apr. ${ }^{67}$ |  |
| 7. Private nonfarm housing starts | L | 11 | 6, 34 | May 168 |  |  |  |  |  |  |  |
| *29. New building permits, private housing | L | 11 | 6, 34 | June '68 |  |  |  |  |  |  |  |
| 96. Unfilled orders, durable goods industries | C | 20 | 7, 40 | Sept. ${ }^{168}$ | Sept. ${ }^{168}$ | VIII. FEDERAL GOVERNMENT ACTIVITIES |  |  |  |  |  |
| 97. Backlog of capital appropriations, mfg. .... | C | 20 | 7, 40 | Aug. 167 <br> Apr. |  |  |  |  |  |  |  |
| *61. Bus. expenditures, new plant and equipment . ${ }^{\text {505. }}$ Mach. | Lg | 22 | 7, 41 | Apr. Sept. S |  | 95. Fed. balance, nat'l. income and prod. acct. .. |  | 26 | 8, 44 | $\begin{array}{lll}\text { July } & 168 \\ \text { July } & 168\end{array}$ | $\begin{aligned} & \text { July } \quad 68 \\ & \text { July } 68 \end{aligned}$ |
| 505. Mach. and equip. sales and bus, constr. expend. | Lg | 22 | 7,41 | Sept. '68 | Sept. '68 | 951. Fed. receipts, nat' 1 income and prod. acct. . . <br> 952. Fed. expend.,nat'l. income and prod. acct. . . . |  | $\begin{aligned} & 26 \\ & 26 \end{aligned}$ | 8, 44 | $\begin{aligned} & \text { July } 168 \\ & \text { July } 168 \end{aligned}$ | July '68 |
|  |  |  |  |  |  | 101. National defense purchases, current dollars . | U | 27 | 8, 44 | July 68 | July ${ }^{1} 68$ |
| IV. INVENTORIES AND INVENTORY INVESTMENT |  |  |  |  |  | 91. Defense Department obligations, total | U | 27 | 8,44 | Dec. ${ }^{167}$ |  |
|  |  |  |  |  |  | 90. Defense Dept. obligations, procurement | U | 27 | 8, 44 | Sept. '68 | Sept. '68 |
| 21. Change in business inventories | L | 12 | 6, 35 | July ${ }^{168}$ | July ${ }^{168}$ | 99. New orders, defense products industries | U | 27 | 8, 44 | Mar. 168 |  |
| *31. Change, mfg. and trade inventories | L | 12 | 6, 35 | Nov. 166 |  | 92. Military contract awards in U.S. | $U$ | 27 | 8, 44 | Aug. ${ }^{6} 67$ |  |
| 37. Purchased materials, higher inventories | L | 12 | 6, 35 | Mar. ${ }^{168}$ |  |  |  |  |  |  |  |
| 20. Change, mitls. and supplies inventories | L | 12 | 6, 35 | Sept. ${ }^{168}$ | Sept. '68 |  |  |  |  |  |  |
| 26. Buying policy, production materials. | L | 12 | 6, 35 | Mar. 168 | .......... | SERIES unclassified by cyclical timing AND ECONOMIC PROCESS |  |  |  |  |  |
| 32. Vendor performance, slower deliveries ${ }^{\text {25. }}$ Change in unfilled orders, durable goods | L | 13 | 6,35 | Jan. <br> Sept. <br> 168 |  |  |  |  |  |  |  |
| 25. Change in unfilled orders, durable goods | ${ }_{\text {Lg }}$ | 13 | 6, 35 | Sept. ${ }^{\text {Apr }}$ '68 Apr | Sept. 168 | 850. Ratio, output to capacity, manufacturing. | U | $\underline{2} 8$ | 8, 45 | July 167 |  |
| 65. Mirs.' inventories, finished goods, book value | Lg | 22 | 7, 41 | Sept. 168 | Sept. 68 | 851. Ratio, inventories to sales, mfg. and trade ... | U | 28 | 8, 45 | July 167 |  |
|  |  |  |  |  |  | 852. Ratio, unfilled orders to shipments dur. goods. | U | 28 | 8, 45 | Sept. '68 | Sept. '68 |
|  |  |  |  |  |  | 853. Ratio, prod. of bus. equip. to consumer goods. | U | 28 | 8, 45 | July 167 | .......... |
| v. PRICES, COSTS, AND PROFITS |  |  |  |  |  | 854. Ratio, personal saving to disposable personal income | U | 29 | 8, 45 | July '68 | July '68 |
| *23. Industrial materials prices | L | 13 | 6, 36 | Dec. ' 67 |  |  |  |  |  |  |  |
| *19. Stock prices, 500 c . stocks (1941-43=10). |  | 13 | 6,36 | Mar. 168 |  | 855. Ratio, nonagri. job openings unfilled |  |  |  |  |  |
| 19. Stock prices, 500 c c. stocks ( $1957-59=100$ ) | L | 32 |  | Oct. 67 |  | 55. to unemployed. . . . . . . | U | 29 | 8, 45 | Feb. 168 |  |
| *16. Corporate profits after taxes.............. | L | 14 | 6, 36 | July 168 | July 168 | 858. Output per man-hour, total private nonfarm. | U | 29 | 8, 45 | Sept. '68 | Sept. '68 |
| 22. Ratio, profits to income originating, corporate . 18. Profits per dollar of sales, mfg $\qquad$ | L | 14 | 6,36 6,36 | July 168 <br> Apr. <br> 167 | July '68 | 856. Real avg. hourly earnings, prod. workers, |  |  |  |  |  |
| *17. Ratio, price to unit labor cost, mfg. | L | 14 | 6, 66 | Apr. 67 <br> July 67 <br> 167  |  | 859. Real spendable a . . . . wkily. . . earnings, . . . | U | 29 | 8, 45 | June '68 | June 168 |
| 55. Wholesale price index, industrial commodities.. | C | 20 | 7, 40 | May 168 |  | prod. or nonsupv. workers ( $1957-59=100$ ). | U | 29 | 8, 45 | June 168 | June '68 |
| 58. Wholesale price index, manufactured goods.. | C | 20 | 7,40 | May 168 |  | 857. Vacancy rate, total rental housing | U | 29 | 8, 45 | Feb. '68 |  |

*Series preceded by an asterisk (*) are on the 1966 NBER "short list" of 25 indicators. $L=$ leading, $C=$ roughly coincident, $L g=$ lagging, $U=$ unclassified ("series unclassified by cyclical timing," "series unclassified by cyclical timing and economic process," and "international comparisons").

## Series Finding Guide--Continued

| Series titles by economic process and other groupings (See complete tities and souces on back cover) |  |  | $\begin{aligned} & \text { Tables } \\ & \text { (p. No.) } \end{aligned}$ | $\begin{aligned} & \text { Historical } \\ & \text { data } \\ & \text { (issue date) } \end{aligned}$ | Series description (issue date) | Series titles by economic process and other groupings (See complete titles and sources on back cover) |  |  | Tables (p. No.) | $\begin{gathered} \text { Historical } \\ \text { data } \\ \text { (issue date) } \end{gathered}$ | Series description (issue date) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INTERNATIONAL COMPARISONS |  |  |  |  |  | DIFFUSION INDEXES |  |  |  |  |  |
| 123. Canada, index of industrial production | U | 30 | 46 | July 167 |  | D1. Average workweek |  | 51 |  | Sept. ${ }^{168}$ | Sept. '68 |
| 122. United Kingdom, index of industrial production . | -U | 30 | 46 | Nov. 167 |  | D6. New orders |  | 51 | 54, 58 | Oct. 168 |  |
| 126. France, index of industrial production....... | U | 30 | 46 | Nov. 167 | .......... | D11. Capital appropriations |  | 51 | 54 | Aug. ${ }^{167}$ |  |
| 125. West Germany, index of industrial production | U | 30 | 46 | June 168 | .......... |  |  |  |  |  |  |
| 128. Japan, index of industrial production ...... | U | 30 | 46 | Apr. '68 |  | D34. Profits, mfg. |  | 51 | 55 | Oct. 164 |  |
| 121. OECD-Europe, index of industrial production . . | U | 30 | 46 | June ${ }^{168}$ |  | D19. Stock prices. |  | 51 | 55, 59 | Apr. '65 | -......... |
| 127. Italy, index of industrial production.. | U | 30 | 46 | Nov. ' 67 |  | D23. Industrial materials prices | .. | 51 | 55,60 | Apr. ${ }^{165}$ | .......... |
| 133. Canada, index of consumer prices ...... | U | 31 | 47 | Oct. 167 |  |  |  |  |  |  |  |
| 132. United Kingdom, index of consumer prices | U | 31 | 47 | Oct. 167 |  | D41. Employees on nonagi. payrolls |  | 51 52 | 55,60 56,61 |  |  |
| 136. France, index of consumer prices. | U | 31 | 47 | Oct. 167 |  | D47. Industrial production ....... |  | 52 52 | 56, 61 | $\text { Apr. } 165$ | Sept. '68 |
| 135. West Germany, index of consumer prices | U | 31. | 47 | Oct. 167 |  | D47. Industrial production |  | 52 | 56, 61 | Apr. ${ }^{6} 6$ |  |
| 138. Japan, index of consumer prices | U | 31 | 47 | Oct. ${ }^{167}$ | .......... |  |  |  |  |  |  |
| 137. Italy, index of consumer prices | U | 31 | 47 | Oct. 167 |  | 058. Wholesale prices, mfg. |  | 52 | 56, 62 | Apr. 167 |  |
| 143. Canada, index of stock prices | U | 32 | 48 | Oct. 167 |  | D54. Retail sales |  | 52 | 56, 63 | Apr. 165 |  |
| 142. United Kingdom, index of stock prices | U | 32 | 48 | Oct. 167 |  | 035. Net sales, mfrs. | . | 53 | 57 | Nov. ${ }^{6} 4$ |  |
| 146. France, index of stock prices | U | 32 | 48 | Oct. 167 |  |  |  |  |  |  |  |
| 145. West Germany, index of stock prices | U | 32 | 48 | Oct. 167 |  | D36. New orders |  | 53 | 57 | Nov. 164 |  |
| 148. Japan, index of stock prices | U | 32 | 48 | Oct. 167 |  | D48. Freight carloadings |  | 53 | 57 | Nov. 164 |  |
| 147. Italy, index of stock prices | U | 32 | 48 | Oct. 167 |  | D61. New plant and equipment expenditures | . | 53 | 57 | Nov. 164 |  |

$U=$ unclassified ("series unclassified by cyclical timing," "series unclassified by cyclical timing and economic process," and "international comparisons").

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## 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 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" (end of the month) or "EOQ" (end of the quarter). The Roman numeral identifies the economic process group in which a series is classified. (See Finding Guide.) Thus, "(M, II)" indicates a monthly series classified in group II. The general classification follows the approach of the National Bureau of Economic Research, Inc. The series preceded by an asterisk (*) are included in the 1966 NBER "short list" of 25 indicators.

## 36 Leading Indicators

*1. Average workweek of production workers, manufacturing (M,I) $\cdots$ Department of Labor, Bureau of Labor Statistics
2. Accession rate, manufacturing ( $M, I$ ). - Department of Labor, Bureau of Labor Statistics
3. Layoff rate, manufacturing (M,I).-Department of Labor, Bureau of Labor Statistics
5. Average weekly initial claims for unemployment insurance, State programs (M,I).-Department of Labor, Bureau of Employment Security; seasonal adjustment by Bureau of the Census
*6. Value of manufacturers' new orders, durable goods industries (M,III).--Department of Commerce, Bureau of the Census
7. New private nonfarm housing units started (M,III).--Department of Commerce, Bureau of the Census
9. Construction contracts awarded for commercial and industrial buildings, floor space (M,III).-McGraw-Hill Information Systems Company; seasonal adjustment by Bureau of the Census and National Bureau of Economic Research, Inc.
*10. Contracts and orders for plant and equipment (M,III).-Department of Commerce, Bureau of the Census, and McGrawHill Information Systems Company; seasonal adjustment by Bureau of the Census and National Bureau of Economic Research, inc.
11. Newly approved capital appropriations, 1,000 manufacturing corporations ( $Q$,III). $-\cdots$ National Industrial Conference Board; component industries are seasonally adjusted and added to obtain seasonally adjusted total
13. Number of new business incorporations (M,III).--Dun and Bradstreet, inc.; seasonal adjusiment by Bureau of the Census and National Bureau of Economic Research, Inc.
14. Current liabilities of business failures (M,VI)...Dun and Bradstreet, Inc. seasonal adjustment by Bureau of the Census and National Bureau of Economic Research, Inc.
*16. Corporate profits after taxes ( $\mathbf{Q}, \mathrm{V}$ ).-Department of Commerce, Office of Business Economics
*17. Price per unit of labor cost index-ratio, wholesale prices of manufactured goods index (unadjusted) to seasonally adjusted index of compensation of employees (sum of wages, salaries, and supplements to wages and salaries) per unit of output ( $M, V$ ).--Department of Comimerce, Office of Business Economics; Department of Labor, Bureau of Labor Statistics; and Board of Governors of the Federal Reserve System
18. Profits (before taxes) per dollar of sales, all manufacturing corporations ( $Q, V$ ).-Federal Trade Commission and Securities and Exchange Commission; seasonal adjustment by Bureau of the Census
*19. Index of stock prices, 500 common stocks ( $\mathrm{m}, \mathrm{Y}$ ) .--Standarú and Poor's Corporation; no seasonal adjustmeni
20. Change in book value of manufacturers' inventories ui materials and supplies (M,IV).--Department of Commerce, Bureau of the Census
21. Change in business inventories, farm and nonfarm, atter valuation adjustment (GNP component) (Q,IV).--Department of Commerce, Office of Business Economics
22. Ratio of profits (after taxes) to income originating, corpo rate, all industries ( $\mathrm{Q}, \mathrm{V}$ )..-Department of Commerce, Office of Business Economics
*23. Index of industrial materials prices (M,V).-Department of Labor, Bureau of Labor Statistics; no seasonal adjustment
24. Value of manufacturers' new orders, machinery and equipment industries (M,III).--Department of Commerce, Bureau of the Census
25. Change in manufacturers' unfilled orders, durable goods industries (M,IV).-Department of Commerce, Bureau of the Census
26. Buying policy--production materials, percent reporting commitments 60 days or longer (M,IV). - National Association of Purchasing Management; no seasonal adjustment
*29. Index of new private housing units authorized by local building permits ( $\mathrm{M}, \mathrm{III}$ ).- Department of Commerce, Bureau of the Census
*30. Nonagricultural placements, all industries (M,I).--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,IV)..-Department of Commerce, Office of Business Economics, and Bureau of the Census
32. Vendor performance, percent reporting slower deliveries (M,IV.).--Chicago Purchasing Agents Association; no seasonal adjustment
33. Net change in mortgage debt held by financial institutions and life insurance companies (M,VI).--Institute of Life Insurance, Federal National Mortgage Association, National Association of Mutual Savings Banks, U.S. Savings and Loan League, and Board of Governors of the Federal Fe . serve Svstem; seasonal adjustment by Bureau of the Census
37. Percent reporting higher inventories, purchased materials (M,IV).- National Association of Purchasing Management; seasonal adjustment by Bureau of the Census
*38. Index of net business formation (M,III)...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.
39. Percent of consumer installment loans delinquent 30 days and over (EOM,VI)..-American Bankers Association: seasonal adjustment by Bureau of the Census and National Bureau of Economic Research, Inc. (Bimonthly since December 1964)
85. Percent change in total U.S. money supply (demand deposits plus currency) (M,VI).-Board of Governors of the Federal Reserve System
94. Index of construction contracts, total value (M,III).--McGrawHill Information Systems Company
98. Percent change in total U.S. money supply (demand deposits plus currency) and commercial bank time deposits (M,VI)-Board of Governors of the Federal Reserve System
110. Total funds raised by private nonfinancial borrowers in credit markets ( $\mathrm{Q}, \mathrm{VI}$ ).--Board of Governors of the Federal Reserve System
112. Net change in jank loans to businesses ( $M, V I$ ) .- Board of Governors of the Federal Reserve System; seasonal adjustment by Bureau of the Census
*113. Net change in consumer instaliment debt ( $M, V I$ )..-Board of Governors of the Federal Reserve System

## 25 Roughly Coincident Indicators

40. Unemployment rate, married males, spouse present ( $M, 1$ )... Department of Labor, Bureau of Labor Statistics, and Department of Commerce, Bureau of the Census
*41. Number of employees on nonagricultural payiolls, establishment survey (M,I)..-Department of Labor, Bureau of Labor Statistics
41. Total number of persons engaged in nonagricultural activities, labor force survey ( $M, I)$.--Department of Labor, Bureau of Labor Statistics, and Department of Commerce, Bureau of the Census
*43. Unemployment rate, total ( $M, 1$ ) Department of Labor, Bureau of Labor Statistics, and Department of Commerce, Bureau of the. Census
42. Average weekly insured unemployment rate, State programs (M,I).--Department of Labor, Bureau of Employment Security
43. Index of help-wanted advertising in newspapers (M,I)..National Industrial Conference Board
*47. Index of industrial production (M,II). $\sim$ Board of Governors of the Federal Reserve System
44. Gross national product in current dollars ( $\mathrm{Q}, \mathrm{II}$ ).-Department of Commerce, Office of Business Economics
*50. Gross national product in 1958 dollars ( Q .II)..-Department of Commerce, Office of Business Economics
*52. Personal income (M,II).--Department of Commerce, Office of Business Economics
45. Wage and salary income in mining, manufacturing, and construction (M,II). .-Department of Commerce, Office of Business Economics
*54. Sales of retail stores (M,II).-Department of Commerce, Bureau of the Census
46. Index of wholesale prices, industrial commodities ( $M, V$ )... Department of Labor, Bureau of Labor Statistics; no seasonal adjustment
47. Final sales (series 49 minus series 21 ) ( $Q, 11$ )...Department of Commerce, Office of Business Economics
48. Index of wholesale prices, manufactured goods (M,V).Department of Labor, Bureau of Labor Statistics: no seasonal adjustment
49. Free reserves (member bank excess reserves minus borrowings) (M,VI)... Board of Governors of the Federal Reserve System; no seasonal adjustment
50. Manufacturers' unfilled orders, durable goods industries (EOM, III).-Department of Commerce, Bureau of the Census
51. Backlog of capital appropriations, manufacturing (EOQ,III).National Industrial Conference Board; component industries are seasonally adjusted and added to obtain seasonally adjusted total
52. Discount rate on new issues of 91 -day Treasury bills (M,VI).-Board of Governors of the Federal Reserve System; no seasonal adjustment
53. Yield on long-term Treasury bonds (M,VI).--Treasury Department; no seasonal adjustment
54. Yield on new issues of high-grade corporate bonds (M,VI).First National City Bank of New York and Treasury Department; no seasonal adjustment
55. Yield on municipal bonds, 20 -bond average ( $\mathrm{M}, \mathrm{VI}$ )...The Bond Buyer; no seasonal adjustment
56. Nonagricultural job openings unfilled (EOM,I).--Department of Labor, Bureau of Employment Security; seasonal adjustment by Bureau of the Census
57. Man-hours in nonagricultural establishments, (M,I).Department of Labor, Bureau of Labor Statistics
*816. Manulacturing and trade sales (M,II).--Departiment of Coffmerce, Office of Business Economics and Bureau of the Census

## 11 Lagging Indicators

*61. Business expenditures on new plant and equipment, total (Q,III)..-Department of Commerce, Office of Business Economics, and the Securities and Exchange Commission
*62. Index of labor cost per unit of output, total manufacturingratio, 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 ( $M, V$ ).--Department of Commerce, Office of Business Economics, and the Board of Governors of the Federal Reserve System
65. Book value of manufacturers' inventories of finished goods, all manufacturing industries (EOM,IV).-Department of Commerce, Bureau of the Census
66. Consumer installment debt (EOM,VI) - -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

## Titles and Sources of Principal Business Cycle Series and Diffusion Indexes-Continued

*67. Bank rates on short-term business loans, 35 cities ( $\mathrm{Q}, \mathrm{VI}$ ).-Board of Governors of the Federal Reserve System; no seasonal adjustment
68. Labor cost (current dollars) per unit of gross product (1958 dollars), nonfinancial corporations (ratio of current-dollar compensation of employees to gross corporate product in 1958 dollars) ( $\mathrm{Q}, \mathrm{V}$ ).-Department of Commerce, Office of Business Economics, National Income Division
*71. Book value, manufacturing and trade inventories, total (EOM, IV).-Department of Commerce, Office of Business Economics and Bureau of the Census
*72. Commercial and industrial loans outstanding, weekly reporting large commercial banks (EOM,VI).--Board of Governors of the Federal Reserve System; seasonal adjustment by Bureau of the Census
118. Secondary market yields on FHA mortgages (M,VI)..-Federal Housing Administration; no seasonal adjustment
*502. Unemployment rate, 15 weeks and over (M,I).--Department of Labor, Bureau of Labor Statistics
505. Manufacturers' machinery and equipment sales and business construction expenditures (industrial and commercial construction put in place) (M,III)..-Department of Commerce, Bureau of the Census

## 15 Series Unclassified by Cyclical Timing

81. Index of consumer prices ( $M, V$ ).-Department of Labor, Bureau of Labor Statistics; no seasonal adjustment
82. Exports, excluding military aid shipments, total (M,VII).Department of Commerce, Bureau of the Census
83. General imports, total (M,VII).--Department of Commerce, Bureau of the Census
84. Merchandise trade balance (series 86 minus series 87) (M,VII).--Department of Commerce, Bureau of the Census
85. Excess of receipts or payments in U.S. balance of payments (Q,VII).-Department of Commerce, Office of Business Economics
86. Defense Department obligations incurred, procurement (M,Vill), -Department of Defense, Fiscal Analysis Division; seasonal adjustment by Bureau of the Census
87. Defense Depariment obligations incurred, total ( $M, \mathrm{~V}$ III).Department of Defense, Fiscal Analysis Division; seasonal adjustment by Bureau of the Census
88. Military prime contract awards to U.S. business firms and institutions ( $\mathrm{M}, \mathrm{VIII}$ )..-Department of Defense, Directorate for Statistical Services; seasonal adjustment by Bureau of the Census
89. Federal Government surplus or deficit, national income and product account ( $\mathrm{Q}, \mathrm{VIII}$ ), -Department of Commerce, Office of Business Economics
90. New orders, defense products industries (M,VIII).--Department of Commerce, Bureau of the Census
91. Federal purchases of goods and services, national defense (Q,VIII).-Department of Commerce, Office of Business Economics
92. Manulacturess' new orders for export, durable goods except motor vehicles and parts (M,VII).--Department of Commerce, Bureau of the Census
93. Index of export orders for nonelectrical machinery (M,VII)... McGraw-Hill, Department of Economics; seasonal adjustment by Bureau of the Census
94. Federal Govemment receipts, national income and product account ( $\mathbf{Q}$ )..-Department of Commerce, Office of Business Economics
95. Federal expenditures, national income and productaccount (Q).-Department of Commerce, Office of Business Economics

## 10 Series Unclassified by Cyclical Timing and Economic Process

850. Ratio, output to capacity, mfg. (Q).-Board of Governors of the Federal Reserve System, Department of Commerce, and McGraw-Hill Economics Department
851. Ratio, inventories (BCD series 71) to sales (BCD series 816), manufacturing and trade total (M).- Department of Commerce, Office of Business Economics
852. Ratio, unfilled orders (BCD series 96) to shipments, manufacturers' durable goods (m).. Department of Commerce, Bureau of the Census
853. Ratio, production of business equipment to production of consumer goods (index: $1957-59=100$ ) (M). - Board of Governors of the Federal Reserve System. (Based upon components of the Federal Reserve index of industrial production.)
854. Ratio, personal saving to disposable personal income (Q).-Department of Commerce, Office of Business Economics
855. Ratio, nonagricultural job openings unfilled (BCD series 301) to number of persons unemployed (Mi).-Department of Labor, Bureau of Employment Security and Bureau of Labor Statistics; and Department of Commerce, Bureau of the Census
856. Real average hourly earnings of production workers in manufacturing, 1957-59 doliars (M) -- Department of Labor, Bureau of Labor Statistics
857. Vacancy rate in rental housing-unoccupied rental housing units as a percent of total rental housing (Q).-- Department of Commerce, Bureau of the Census.
858. Index of output per man-hour, total private noniarm (Q). Department of Labor, Bureau of Labor Statistics
859. Real spendable average weekly earnings of nonsupervisory production workers (with 3 dependents) on private nonagricultural payrolls, 1957-59 dollars (M) -Department of Labor, Bureau of Labor Statistics

## 19 International Comparisons

121. Organization for Economic Cooperation and Development, European Countries, index of industrial production (M).Organization for Economic Cooperation and Development (Paris)
122. United Kingdom, index of industrial production (Mi).--Central Statistical Office (London)
123. Canada, index of industrial production (M).--Dominion Bureau of Statistics (0ttawa)
124. West Germany, index of industrial production (M). - Statistisches Bundesamt (Wiesbaden); seasonally adjusted by OECD
125. France, index of industrial production (M).--Institut National de la Statistique et des Etudes Economiques (Paris)
126. Italy, index of industrial production (M).-- stituto Centrale di Statistica (Rome)
127. Japan, index of industrial production (M).-Ministry of International Trade and Industry (Tokyo)
... United States, index of industrial production ( $M, I I$ ).-See series 47
128. United Kingdom, index of consumer prices (M).-Ministry of Labour (London); no seasonal adjustment
129. Canada, index of consumer prices (M).--Dominion Bureau of Statistics (Ottawa); no seasonal adjustment
130. West Germany, index of consumer prices (M).-Statistisches Bundesamt (Wiesbaden); no seasonal adjustment
131. France, index. of consumer prices (M).-Institut National de la Statistique et des Etudes Economiques (Paris); no seasonal adjustment
132. Italy, index of consumer prices (MI).--Istituto Centrale di Statistica (Rome); no seasonal adjustment
133. Japan, index of consumer prices (Mil). .-Office of the Prime Minister (Tokyo); no seasonal adjustment
.. United States, index of consumer prices ( $M, V$ ). - See Series 81
134. United Kingdom, index of stock prices (M)..-The Financial Times (London); no seasonal adjustment
135. Canada, index of stock prices (M).-Dominion Bureau of Statistics (Ottawa); no seasonal adjustment
136. West Germany, index of stock prices (M). -Statistisches Bundesamt (Wiesbaden); no seasonal adjustment
137. France, index of stock prices (M).--Institut National de la Statistique et des Etudes Economiques (Paris); no seasonal adjustment
138. Italy, index of stock prices (M).-Istituta Cenfrale di Statistica (Rome); no seasonal adjustment
139. Japan, index of stock prices (M).-Tokyo Stock Exchange (Tokyo); no seasonal adjustment
... United States, index of stock prices, 500 common stocks (M,V).--See series 19

## 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, D58, 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 Bureau of the Census and 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


[^0]:    *Series included in the 1966 NBER "short list" of indicators. (1) Not seasonally adjusted.解 To facilitate interpetations 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 $3,5,14,39,40,43$, ${ }_{4} 45,93$, and 502 ). Percent changes are computed in the usual way but the signs are reversed. See footnote 10 for other "changen ${ }^{n}$ qualifications, ${ }^{3}{ }^{3}$ Average computed with regard to sign. ${ }^{4}$ Average computed without regard to sign. ${ }^{5}$ The period varies among the series; however, for most series, the period covered is $1953-67$. "Average number of consecutive monthly changes in the same direction (see the explanation for the "Average Duration of Run" in appendix C ). "Duration of the current direction of change (see the sign of the latest entry in current percent change columns) measured in months. When there is no change between two consecutive values the direction is assumed to be the same as that of the preceding period. ${ }^{8}$ Series are seasonally adjusted except for those series, indicated by (1), that appear to contain no seasonal movement. See additional basic data and notes in table 2. ${ }^{9}$ Quarterly series; figures are placed in the middle month of quarter. ${ }^{10}$ Since basic data for this series afe 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 percentages. ${ }^{11}$ End-of-quarter series; figures are placed in the last month of quarter.

[^1]:    See 'How to Read Charts 1 and 2,' page 4. Current data for these series are shown on page 47.

[^2]:    ${ }^{1}$ Data exclude Puerto Rico which is included in figures published by source agency.

[^3]:    *Denotes machinery and equipment industries that comprise series 24 . † These industries plus ordnance comprise series 99.
    ${ }^{1}$ Data are seasonally adjusted by the source agency.
    ${ }^{2}$ Data are not seasonally adjusted. The 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 3.
    ${ }^{3}$ Based on 76 compoentns through August 1968, and on 75 components thereafter.

[^4]:    NOTE: To facilitate interpretation, the month-to-month directions of change are shown along with the numbers: $(+)=$ rising, $(0)=$ unchanged, and $(-)=$ falling. Only

[^5]:    ${ }^{1}$ Data are seasonally adjusted by the source agency.
    ${ }^{2}$ Data are not seasonally adjusted.

[^6]:    *Series included in the 1966 NBER "short list" of 25 indicators. ${ }^{1}$ Not shown for series when MCD is " 6 " or more.
    ${ }^{2}$ Measures based on data adjusted for abnormalities during the periods December 1962-March 1963 and December 1964 -May 1965 due to effects of strikes.

