CANADA

SEASONALLY ADJUSTED ECONOMIC INDICATORS 1947-1955

(An Outline of Problems and Methods)

Reference Paper No. 77

DOMINION BUREAU OF STATISTICS
Research and Development Division
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FOREWORD

The purpose of this reference paper is to provide, on a seasonally adjusted basis, about seventy economic time series for the post-war years 1947-1955; and in addition, to bring together a more complete discussion of the sources, methods, uses, and limitations of these data than was possible at the time the series (for recent years) were first released in the February 1956 issue of the Canadian Statistical Review.

The early recognition and interpretation of economic developments requires the use of monthly or quarterly data. However, basic movements in the economy are often obscured by large month-to-month or quarter-to-quarter seasonal (or intra-annual repetitive) fluctuations. Thus, when it is important to establish the direction of basic underlying movements in the economy, seasonally adjusted dat provide a powerful, almost indispensable, tool of analysis.

The present document describes many of the problems, techniques, assumptions, and limitations with which the economist or statistician must deal in the course of applying seasonal adjustments to economic time series for use in analysis. The material was prepared in the Research and Development Division by A.S. Rubinoff, with the assistance of E.C. West.

WALTER E. DUFFETT.
Dominion Statistician.

FOREWORD

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PART I

CHAPTER I

INTRODUCTION

This reference paper deals with the measurement of seasonal variation in Canada. The Canadian economy is subject to unusually wide seasonal swings—for example, total production normally shows a one-third increase from its low point in the first quarter of the year to the peak in the third quarter. Thus the measurement of seasonality is of interest in its own right. However, in Canada as elsewhere, the study of cyclical behaviour has absorbed an increasing share of the attention of economists and statisticians in recent decades. Monthly series in their original form show wide seasonal swings which often obscure underlying trends and baffle the analyst who seeks to study cyclical behaviour or to interpret the significance of current economic developments. Accordingly, seasonally adjusted series, which abstract from seasonal change, are generally acknowledged to be an essential tool in business cycle analysis.

Historical Review

The presentation of seasonally adjusted statistics is not a new departure for the Dominion Bureau of Statistics. Seasonally adjusted data on production and employment were published in the old Monthly Review of Business Statistics, covering in the main the years 1919-1947[1]. From January 1948 to November 1952 the Canadian Statistical Review published detail of the seasonally adjusted index of industrial production. The index of industrial production was then being revised and it was decided to cease publishing seasonally adjusted material, pending new techniques of computation and clarification of post-war seasonal patterns. The release of quarterly estimates of National Accounts in November 1953, included seasonally adjusted quarterly series of the components of Gross National Product, National Income and Personal Income. Experimentation proceeded on monthly series, and in the February 1956 issue of the Canadian Statistical Review about seventy economic indicators were released, on a seasonally adjusted basis, for the current months.

This reference paper includes data for most of the post-war period for these seventy series and describes the methods used in computing the results. Research on new methods and techniques is still proceeding, and from time to time it is planned to issue additional series as well as any improvements in already published material. One of the most promising developments is the programing of the computation of seasonally adjusted material on electronic computers; these developments are being followed carefully in continuing research on this problem.

1. See *Monthly Review of Business Statistics*, February 1944 and May 1947, for seasonally adjusted series 1919-1946.

CHAPTER II

DEFINITIONS AND CONCEPTS

Economists have long viewed time series, that is quantitative records arranged in chronological sequence, as a synthesis of four distinct types of concurrent change. These are classified as secular, cyclical, seasonal and random or irregular movements. *Secular* movements are defined as those smooth regular long-term movements of a statistical series whose persistence is associated with some basic underlying characteristic. The concept covers both positive and negative changes. *Cyclical* movements have been the subject of intensive study by the National Bureau of Economic Research and the definition set out in their publications may be quoted here;

> "Business cycles are a type of fluctuation found in the aggregate economic activity of nations that organize their work mainly in business enterprises: a cycle consists of expansions occurring at about the same time in many economic activities followed by similarly general recessions, contractions and revivals which merge into the expansion phase of the next cycle; this sequence of changes is recurrent but not periodic; in duration, business cycles vary from more than one year to ten or twelve years; they are not divisible into shorter cycles of similar character with amplitudes approximating their own."[2]

Seasonal movements are those intra-annual movements persisting from year to year with similar patterns of timing and amplitudes and having some stability in the structure of the industry or area under observation. *Random* or *irregular* movements are those which occur from time to time without any clear pattern in timing or amplitude. From the view-

2. A.F. Burns and W.C. Mitchell, *Measuring Business Cycles*, National Bureau of Economic Research, New York, 1946, page 3.

point of the theorist they are accidental; examples are disturbances caused by floods, strikes or wars. Random may be distinguished from irregular factors in that we have some knowledge of the latter and none of the former.

Time series analysis consists of isolating one or more of the elements that make up the composite movement of the series. Sometimes the object is to study the seasonal, secular or cyclical element in isolation, but more often to study the trend and cycle in combination.

Seasonal movement is distinguished from secular by its oscillating character, from cyclical by being confined within the limits of a twelve-month period, and from random or irregular by the fact of its regular recurrence. For purposes of devising a technique of measurement, seasonal variations are defined as relatively stable fluctuations that occur in a repetitive fashion within each year for a number of years. This concept of stability embraces both constant and moving seasonals. The concept has to be further modified to take account of shifts which may occur in the timing or amplitude of these fluctuations. Seasonally adjusted time series are a combination of trend, cycle and irregular movements with the element of seasonal variation removed.

CHAPTER III

SEASONALITY – ITS CAUSES AND CHARACTERISTICS

The notion of seasonal variation is inherent in the nature of changing seasons, although human institutions also produce seasonal variations in economic activity. Changing seasons bring changing temperatures, precipitation and length of day and night; in turn these affect conditions of production and demand for many commodities. In Canada, for the most part, the growing season for crops is restricted to spring and summer months. The amount of pasture available throughout the year helps to determine the breeding and slaughter of livestock and affects the output of dairy products. Fishing, trapping and forestry are greatly influenced by climatic conditions. In northern climates, construction slows up markedly with the advent of cold weather and waterways and harbours are closed to shipping during the winter months. The demand for fuel, clothing and even for some foodstuffs varies with seasonal changes in temperature and precipitation.

Some seasonal changes are based on social and institutional factors. Law and custom ordain the observance of certain holidays and religious festivals. Behaviour in social and business life follows certain patterns fixed by long-established usage. Indeed one of the most pervasive seasonal factors in monthly time series is the conventional calendar which makes February ten per cent shorter than January and April nearly three per cent shorter than March. Thus conventional seasons are superimposed on climatic seasons to produce fluctuations recurring year after year and having broadly similar patterns of timing and amplitude. Seasonality at any stage of the economic process, from the supply of raw material to the sale of the final product, enforces corresponding fluctuations in a wide chain of interdependent activities. Thus seasonality radiates out from its point of origin.

As has been noted, these seasonal fluctuations are based upon relatively stable factors such as climate or social institutions. Because of this relative stability, the seasonal element as such may be isolated and measured. However, variations do occur in the stability of these factors, and these variations give rise to many of the more difficult problems associated with the process of seasonal measurement. For example, the transition from season to season does not take place at precisely the same time each year and the same season will register widely varying rates of temperature and precipitation from year to year. Conventional seasons also display temporal changes, the shifting date of Easter being the classic example.

Temporal shifts in seasonal patterns may arise from a variety of other reasons. The decisions of regulatory bodies frequently introduce discontinuities in economic time series. Seasonal patterns of production and sales of many consumer items were wholly or partially suppressed during World War II and remained in abeyance for several years after normal peace time production had been resumed, so great was the demand accumulated over the war years. The rapid development of a new resource or an abrupt change in technology may also make for discontinuity in economic time series.

While secular changes in climate may be ruled out of consideration for practical purposes, secular changes in other seasonal factors are constantly taking place. A decline in the relative importance of agriculture will modify seasonal patterns in the economy as a whole, as will a shift in the geographical distribution of industry in a country extending over several climatic zones. Changes in technology may alter the importance of climatic factors. Custom and habit change over time. With a rising standard of life, tastes that were once the prerogative of a small social group become diffused among the mass of consumers, thereby altering the area of demand that is influenced by fashion and style. A dampening down of seasonality may come about as a result of conscious effort by business or by government. In general, it might be expected that many of the long-run secular forces would be towards dampening down or minimizing seasonal variation, insofar as seasonal fluctuations represent a cost to the firm in unused capacity, or a cost to society in unutilized resources.

Seasonal fluctuations are not always independent of cyclical influences and sometimes respond to changing levels of activity and changing prospects for output, prices and profits. When prospects are good, businessmen may be willing to produce for stock during the seasonal low in demand but unwilling to do so if prospects are deteriorating. Thus cyclical influences may tend to intensify or to otherwise alter seasonal fluctuations.

Changes in seasonal variation brought about by the impact of secular or cyclical forces may have some regular pattern. If so, these changes can be measured, allowed for, and if necessary extrapolated into current periods. However, when these factors operate to introduce changes that have no clear pattern, then economic time series will not respond to a mechanical measure for seasonal variations and individual cases must be analyzed to determine the possible nature and direction of these changes.

CHAPTER IV

THE NEED FOR SEASONALLY ADJUSTED SERIES

It may be argued that seasonal variations may be judged simply by examining the unadjusted data. For example, the amount of seasonal variation in the construction industry could be deduced by comparing the month of highest employment and the month of lowest employment in any given year. However, this would be a true measure of seasonality only if the industry were not in a stage of growth or decline for secular or cyclical reasons. Furthermore, the use of the unadjusted data would not bring to light any changes in seasonal variations as they occurred through time. Thus, seasonally adjusted series are a useful tool for those who are primarily concerned with the study of seasonality itself.

The major share of attention, however, has been devoted to the measurement of seasonality as an essential tool in the analysis of business cycles. Experience has shown that the cyclical behaviour cannot be analyzed successfully on the basis of annual data. At the same time monthly or quarterly data are difficult to interpret if an element of seasonal variation is present. If the seasonal element is sufficiently large, the underlying cyclical movement may be lost to sight. This point is illustrated in Chart I, which depicts a situation where a normal seasonal change occurred in the opposite direction to the underlying non-seasonal (trend-cycle) movement and where the seasonal change was larger than the non-seasonal change. The series shown is without jobs and seeking work.

A small non-seasonal decline in unemployment between mid-1954 and the spring of 1955 took place at the same time that a large normal seasonal increase occurred. Thus, unemployment as shown by the unadjusted data reached a post-war peak in March of 1955 even though there had been a slight improvement in the underlying situation during the preceding six months.

The economist or statistician who attempts to interpret business conditions is always concerned to know the direction in which business is moving and it may be his task to forecast the future on the basis of emerging trends or tendencies. For this purpose it is often necessary to make comparisons of the current month with some preceding month or other point in time. Seasonal variations completely invalidate comparisons of the current month with some other month of the same year, and the underlying trend or cyclical movement cannot be discerned clearly unless this seasonal element is removed[1].

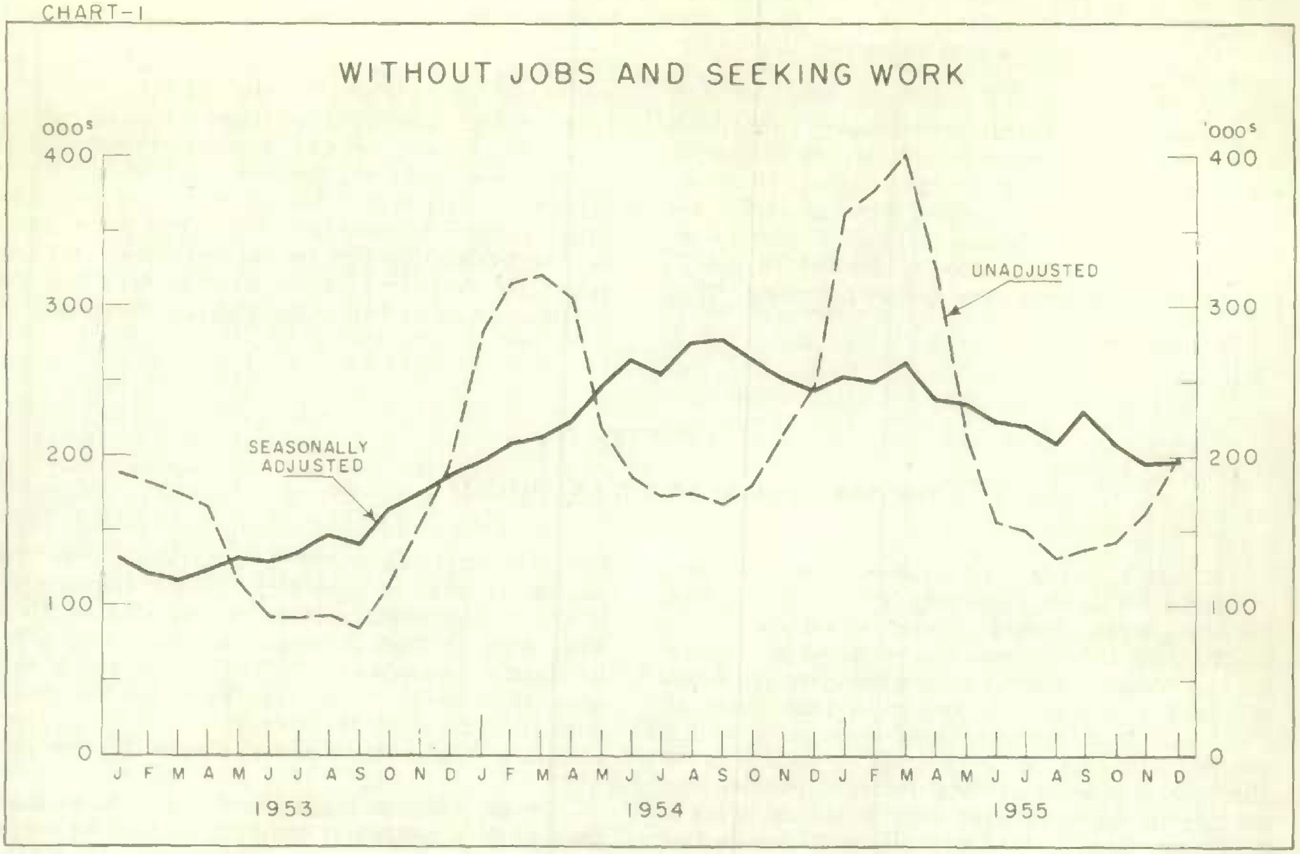
In the course of extensive research on the business cycle a number of different methods of establishing and measuring the trend-cycle have been devised. It is convenient at this point to examine these methods of establishing a trend-cycle, to discuss their limitations and to compare the results with seasonally adjusted time series.

(1) The Twelve Month Centred Moving Average

Some notion of the underlying trend-cycle in an economic time series may be derived by running a twelve month moving average through the original data. This averaging procedure removes the seasonal but it is a rather crude approximation to the underlying trend-cycle in certain circumstances. A cyclical peak or trough occurs at a given point in time. Because the twelve month moving average gives equal weight to all months, the impact of the cyclical turning point month will be spread out over the six months preceding and following. Thus the twelve month moving average is relatively insensitive to sharp cyclical movements. Moreover, a single irregular event will affect the average for six months prior and six months subsequent to the event. It is due to this characteristic — smoothness — that most authorities consider the twelve month centred

1. The reader should note that the removal of seasonal variation from a time series does not indicate how the series would have moved had there been no seasonal variation. Rather it shows more clearly the trend-cycle, abstracting from seasonal variation. The process is somewhat analogous to price deflation, whereby volume comparisons can be made though these comparisons do not show what would have happened in the absence of price change.

CHART-I



moving average does not trace effectively the exact timing of the cycle nor its exact amplitude from peak to trough. Furthermore, the moving average, being always six months behind the current period, is not a tool that can be used to analyze current data.

(2) Year to Year Links

Perhaps a more common technique is the use of year to year comparisons or links as they are often called. An attempt is made to eliminate seasonality by comparing the same periods, that is July with July, August with August and so on. The series of percentage changes in each comparison is used to establish the current trend. No subjective decision is involved in this procedure and it is sometimes suggested that the link method is a better alternative than seasonal adjustment. However, there are a number of basic objections to this technique.

The first difficulty with year to year links is that the user is not really able to make comparisons involving seasonality. In other words, while it is possible to compare February of this year with February of last year and July of this year with July of last year, the user is unable to compare February of this year with July of this year. In fact the only valid comparison that can be made in raw data is on the February-February type of basis and such a comparison must be interpreted within rather severe limitations. However, it may be important at times to make comparisons between February and July, for example during turning points in business activity or where one wants to compare the current month with the peak or trough of some recent cycle. The second difficulty is that the user cannot measure the extent of seasonality involved by using the link method. How much of the unemployment in winter months (see Chart I) is the result of purely seasonal factors cannot be established by the link method.

Finally, the relationship of year to year comparisons or links to emerging economic trends is a rather complex problem. It may be asked whether it is possible to assess the direction of movement in the future by studying past movement in the links. For example, if July over July was up 10%. August over August up 9%, could the user not anticipate that September over September might be up 8%? Such a conclusion would not be warranted and for a number of reasons. The August over August change of 9% tells only that this change took place within the intervening eleven months; it does not tell when that change occurred. Nor does it tell whether that change was due to secular, cyclical, seasonal or irregular factors. Also, the narrowing in the year to year links cannot readily be interpreted as a slowing down in the rate of increase or as an actual decline.

Some of the difficulties implicit in the relationship of links to emerging trends may be elaborated.

1. The base period for the comparisons may be erratic. Thus, in the previous example, July and August of last year may have been very poor months, while September may have been a more normal month. In such a case, the July and August links would appear much more favourable than in normal circumstances. It may well be that the September over September link, based on normal movements, would not show any increase whatever. Thus the user of the link method must consider not only current months but also note any erratic movement in the base period.

2. Even if there were no unusual event in the base period, the user would still run into difficulty when a turning point was reached. For example, if July of the preceding year had been the trough of a cycle, and pick-up occurred in August, then the July over July link would probably give a too favourable comparison, while the August over August link would show a slowing down in activity, a result which would reflect simply the base of the year before, rather than underlying current conditions.

3. Even if there were nothing so drastic as a change in turning point, the result would be affected by a change in slope in the base period; in such a case the rate of change from one month to the next in the base period would be different and current percentage links would reflect this difference.

4. Even assuming that none of the limitations already mentioned were present, the user would still be unable to ascertain the current position if the results showed a change in the rate of percentage links. For example, if the month-to-month links showed diminishing increments going gradually from plus 10 per cent to plus 2 per cent, he would not know whether there was (a) a slowdown in the rate of expansion, (b) a levelling in activity, or (c) a decline in activity.

There is in fact a relationship between year-to-year links and the moving average technique previously discussed; one writer[1] has pointed out that a year-to-year comparison is analogous to the mathematical procedure of taking the first difference of a twelve-month moving total, the result being centered back six months. At best a year-to-year comparison portrays an underlying situation that developed six months earlier.

The index of industrial production shown below illustrates the time-lag involved in the use of year-to-year links as compared with seasonal adjustment.

1. F.R. Macaulay, *The Smoothing of Time Series*, National Bureau of Economic Research, New York, 1931, page 134.

Industrial Production

Date	Index seasonally adjusted	Index unadjusted	Per cent change year/year	Date	Index seasonally adjusted	Index unadjusted	Per cent change year/year
1952 J	226·3	212·9		1953 J	252·0	247·1	+ 8·2
F	223·9	218·6		A	249·5	248·6	+ 6·1
M	223·4	222·2		S	249·1	257·1	+ 5·3
A	228·9	230·7		O	245·8	254·5	+ 2·6
M	230·8	234·6		N	246·1	250·6	+ 1·0
J	230·0	238·3		D	245·0	235·5	- 0·1
J	232·7	228·3		1954 J	245·5	229·1	- 1·3
A	235·0	234·2		F	245·7	239·4	- 1·1
S	237·2	244·1		M	239·0	236·8	- 4·1
O	239·7	248·1		A	240·6	242·4	- 4·8
N	243·3	248·1		M	242·0	245·6	- 3·6
D	244·5	235·7		J	243·3	252·5	- 1·9
1953 J	246·6	232·1	+ 9·0	J	242·9	238·5	- 3·5
F	247·9	242·0	+ 10·7	A	246·0	246·7	- 0·8
M	248·6	246·8	+ 11·1	S	244·9	253·7	- 1·3
A	251·6	254·6	+ 10·4	O	246·8	256·0	+ 0·6
M	250·5	254·8	+ 8·6	N	249·1	254·4	+ 1·5
J	248·9	257·5	+ 8·1	D	250·4	240·6	+ 2·2

While the peak of activity, seasonally adjusted, was recorded in mid-1953, it was not until December 1953 that the year-to-year comparisons showed a decline. During the period when the rate of increase from month to month was diminishing, as shown by the links, it was impossible to establish whether this implied a slowing-down in the rate of increase, a flattening of activity, or a decline in activity. It was fully six months after the peak had been reached that the user could have been certain that a decline had in fact occurred. The use of the seasonally adjusted data revealed the underlying situation (e.g. that a turning point had occurred) a full half year earlier.

Another facet of the problem of interpreting current trends with year to year links rather than seasonally adjusted data is in connection with the checking of forecasts. In such cases, the projected figure is adjusted for seasonal variation and compared with current data, likewise adjusted. If the results appear inconsistent after considering other known factors, then a reassessment of the forecast would be made. Sometimes results appear reasonable on the basis of links which do not appear reasonable when adjustment is made for seasonal variations. The following example illustrates the point.

	Data unadjusted	Year to year percentage change	Data seasonally adjusted
1954 1Q	200		250
2Q	300		250
3Q	200		250
4Q	300		250
1955 1Q	175	- 12%	225
2Q	190	- 37%	140
3Q	85	- 57%	135
4Q	200	- 33%	150
1956 1Q	130	- 26%	180
2Q	250	+ 32%	200
3Q (Forecast)	130	+ 53%	180

Note. Assumed seasonal factors are: 1Q - 50, 2Q + 50, 3Q - 50, 4Q + 50.

In the above model a third quarter forecast of 130 is made on an unadjusted basis. On the basis of the movement of the year to year links this forecast appears reasonable. However, after seasonal adjustment is is obvious that this figure of 130 represents a break in the seasonally adjusted trend which drops from 200 to 180. On this basis it appears that the forecast of 130 is too low and needs to be revised upward unless there is some knowledge of the economic situation that suggests a reversal of the previous trend in the seasonally adjusted series.

In one study of forecasts a writer compared results of forecasts of traffic made by railroad shippers with his own results which were based simply upon a projection of seasonally adjusted data[1]. In this study, the simple projection of seasonally adjusted data provided more reliable forecasts than the informed knowledge of conditions expressed in quarter over quarter terms by the shippers.

In summary, seasonal indexes are necessary to give a good measure of seasonal patterns, past and present, for the use of those concerned with seasonality as an economic problem. For the analyst of business conditions, whether his primary concern is historical data, current economic conditions, or probable future developments, seasonally adjusted time series which effectively trace the trend cycle, the exact timing and amplitude of peaks and troughs, and the turning points from one phase to another, are an indispensable statistical tool.

1. T. Hultgren, "Forecasts of Railway Traffic, in *Short Term Economic Forecasting*, Princeton University Press, Princeton, 1955, pp. 363-380.

CHAPTER V

SEASONAL ADJUSTMENT – GENERAL PROBLEMS AND METHODS

Problems in Seasonal Adjustment

Some indication of the problems of seasonal adjustment was given in Chapters III and IV, which discussed the character of seasonality, the difficulty of isolating the trend cycle from other elements in a time series, and the limitations of the various methods that may be used. It is sufficient to say here that discerning the trend cycle is one of the most important and baffling problems in the process of seasonal adjustment. However, the separation of irregular and random elements from seasonal factors also raises a number of problems. Distinct but related difficulties arise from the nature of seasonality itself, namely the fact that seasonal patterns are subject to temporal change.

The separation of seasonal factors from random events would at first sight appear to present no problems. Random events are assumed to have a symmetrical distribution and if a series is available over a sufficiently long period of time, random events would tend to cancel out and have no net effect on the computation of the seasonal index. However, few series are available over so long a period of time as to give full validity to this assumption. So far as irregular events are concerned, some impart a known bias to a series; for example, strikes operate to reduce employment series.

It has already been noted that seasonal patterns can vary over time for a variety of reasons. Apart from year to year disturbances in the timing and amplitude of seasonal swings, seasonal patterns undergo secular changes and sometimes respond to cyclical influences. As suggested above, the concept of stability in seasonal variation embraces movements over time that have some reasonably regular pattern. This pattern may take the form of constant or fixed seasonals. For example, if all the various influences impinging on the seasonal factor for the month of June for employment do not change, the measure of seasonal variations for June will be a constant over the period of time. On the other hand, in the month of July, the institutional extension of vacations with pay may operate to steadily reduce the element of production for July and the seasonal factor will be stable but downward over a long period.

The application of fixed constant seasonals in the situation where there is stable downward (or upward) movement of this character operates to introduce choppiness into seasonally adjusted series because the seasonal index over-corrects at some point of time under-corrects at another. Here, the use of moving seasonals is indicated. There are cases where the changes in seasonal patterns over time do not have this degree of regularity; in such cases the application of a purely mechanical procedure is not warranted and individual cases must be fully analyzed to determine the inherent real nature of the seasonal variation.

Method of Seasonal Adjustment

The methods of seasonal adjustment in common use are: the percentage-of-trend line, the link relative, the graphic and the ratio-to-moving-average. The choice of a method depends in the final analysis on the conditions under which the work is to be performed, these conditions in turn being a function of the primary data and the amount of time and skill that can be devoted to the process. The method chosen must be fairly simple to compute so that large numbers of series can be adjusted. It must be sufficiently flexible to meet a multitude of technical problems. It must be reasonably objective and reach agreed scientific standards. At the same time, it, should give scope to the trained analyst to apply his knowledge and judgment.

A combination of the graphic and the ratio-to-moving-average method was finally evolved as the technique of seasonal adjustment in the Dominion Bureau of Statistics. The percentage-of-trend line was ruled out because the major changes apparent as an aftermath of World War II made obsolete any trend line derived from earlier historical data. The link relative method proved unadaptable for varying rates of growth and unworkable in time series showing turning points as well as moving seasonals.

The method finally selected, the combination of graphic and ratio-to-moving-average, met the criteria set out above. It is fairly easy to compute as the following example will show. It can be adapted to meet technical problems and proved flexible in dealing with series featuring varying rates of growth as well as turning points. It is reasonably objective and has been used by most of the leading authorities in this field. At the same time it leaves room for the exercise of judgment and the application of knowledge.

In the method of seasonal measurement adopted by D.B.S. the trend-cycle is first approximated by running a twelve month moving average through the raw data. This leaves seasonal, irregular and random factors as a residual; and in those cases where the moving average is insensitive, some residual cycle may also be present. Irregular factors may be analyzed and removed leaving largely seasonal movements. The seasonal factors are derived by the use of moving averages and graphic methods, and finally the trend-cycle calculated a second time by the application of the derived seasonal factors to the raw data. This second calculation is a much closer approximation to the trend-cycle than the first. Recent developments in the field of seasonally adjusted data by electronic computers have carried this general approach of successive approximations a stage further.

Outline of the Method Adopted

The general approach to the seasonal adjustment of monthly series adopted by the Dominion

Bureau of Statistics is set out below:

(1) The Twelve month moving total of the original data is calculated.

(2) The two month moving total of the twelve month moving total is then computed.

(3) The two month total of the twelve month total is divided by 24 to give a centred twelve month moving average.

(4) The original data are divided by the centred twelve month moving average; these are the ratios-to-moving average.

(5) On individual charts for each of the twelve months of the year are plotted all the observations (ratios-to-moving-average) for that month, that is all the Januarys on one chart, all the Februarys on another, and so on for the twelve months. The plotting of each individual deviation (or ratio) is done in chronological order. This yields a time series of ratios-to-moving average for all months.

(6) A three term moving average of the ratios-to-moving average for each month is computed and marked on the chart for each month; this is a guide to the next step.

(7) For each successive month a free hand curve is drawn to fit the data.

(8) For each month of each year the readings of the free hand line are taken.

(9) The readings for the twelve calendar months of each year are summed and adjusted to equal twelve hundred; these adjusted series are the final seasonal indexes.

(10) The original data are divided by the seasonal indexes to derive the seasonally adjusted results.

(11) Tier charts are drawn to check for residual seasonal.

The various steps outlined above are illustrated in the example on pages 16, 17, 18 and 19 which deal with the complete seasonal adjustment of Live Applicants for Employment.

Live Applicants for Employment

Seasonal adjustment

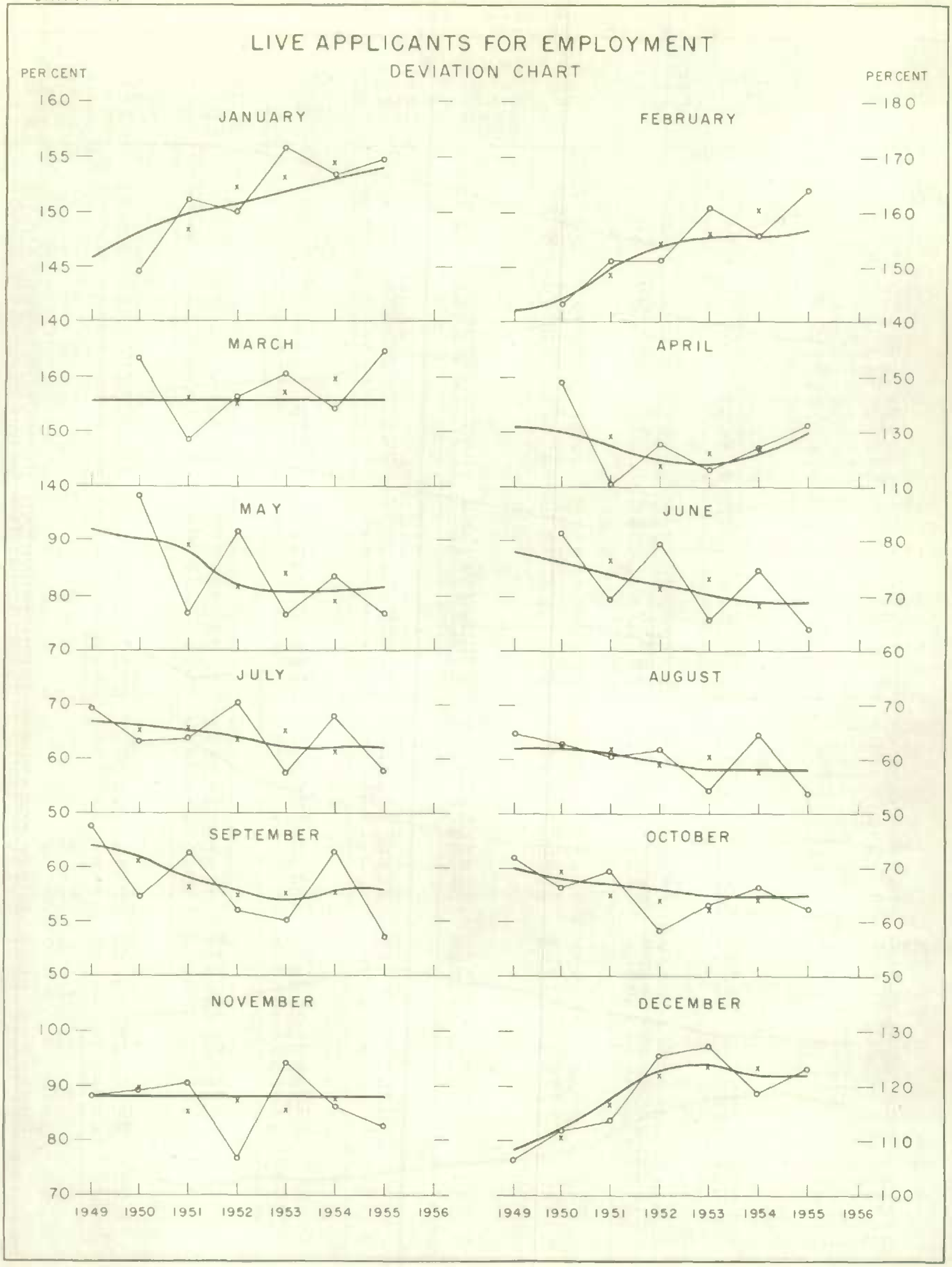
Date	Original data (millions)	12 mos. moving total of (1)	2 mos. moving total of (2)	Centered moving average = (3) ÷ 24	Ratio to moving average = (1) ÷ (4)	Reading from chart	Adjustment factor = 1200 ÷ annual Total	Seasonal index = (6) x (7)	Seasonally adjusted series = (1) ÷ (8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1949 Jan.	257	—	—	—	—	146·0	·9975	145·6	177
Feb.	262	—	—	—	—	142·0	·9975	141·6	185
Mar.	247	—	—	—	—	156·0	·9975	155·6	159
Apr.	204	—	—	—	—	132·0	·9975	131·7	155
May	155	—	—	—	—	92·0	·9975	91·8	169
June	147	—	—	—	—	78·0	·9975	77·8	189
July	140	2,359	4,837	202	69·3	67·0	·9975	66·8	210
Aug.	137	2,478	5,070	211	64·9	62·0	·9975	61·8	222
Sept.	143	2,592	5,365	224	63·8	62·0	·9975	61·8	231
Oct.	172	2,773	5,730	239	72·0	70·0	·9975	69·8	246
Nov.	221	2,957	6,013	251	88·0	88·0	·9975	87·8	252
Dec.	274	3,056	6,170	257	106·6	108·0	·9975	107·7	254
Year	2,359	—	—	—	—	1,203·0	—	1,199·8	2,449
1950 Jan.	376	3,114	6,246	260	144·6	148·0	·99916	147·9	254
Feb.	376	3,132	6,280	262	143·5	144·0	·99916	143·9	261
Mar.	428	3,148	6,287	262	163·4	156·0	·99916	155·9	275
Apr.	388	3,139	6,254	261	148·7	130·0	·99916	129·9	299
May	254	3,115	6,196	258	98·4	90·0	·99916	89·9	283
June	205	3,081	6,115	255	80·4	76·0	·99916	75·9	270
July	158	3,034	5,993	250	63·2	66·0	·99916	65·9	240
Aug.	153	2,959	5,840	243	63·0	62·0	·99916	61·9	247
Sept.	134	2,881	5,625	234	57·3	61·0	·99916	60·9	220
Oct.	148	2,744	5,318	222	66·7	68·0	·99916	67·9	218
Nov.	187	2,574	5,046	210	89·0	88·0	·99916	87·9	213
Dec.	227	2,472	4,879	203	111·8	112·0	·99916	111·9	203
Year	3,034	—	—	—	—	1,201·0	—	1,199·8	2,983
1951 Jan.	301	2,407	4,787	199	151·3	150·0	·99916	149·9	201
Feb.	298	2,380	4,735	197	151·3	150·0	·99916	149·9	199
Mar.	291	2,355	4,709	196	148·5	156·0	·99916	155·9	187
Apr.	218	2,354	4,717	197	110·7	125·0	·99916	124·9	175
May	152	2,363	4,749	198	76·8	88·0	·99916	87·9	173
June	140	2,386	4,814	201	69·7	74·0	·99916	73·9	189
July	131	2,428	4,918	205	63·9	65·5	·99916	65·4	200
Aug.	128	2,490	5,053	211	60·7	61·0	·99916	60·9	210

Live Applicants for Employment — Concluded

Seasonal adjustment

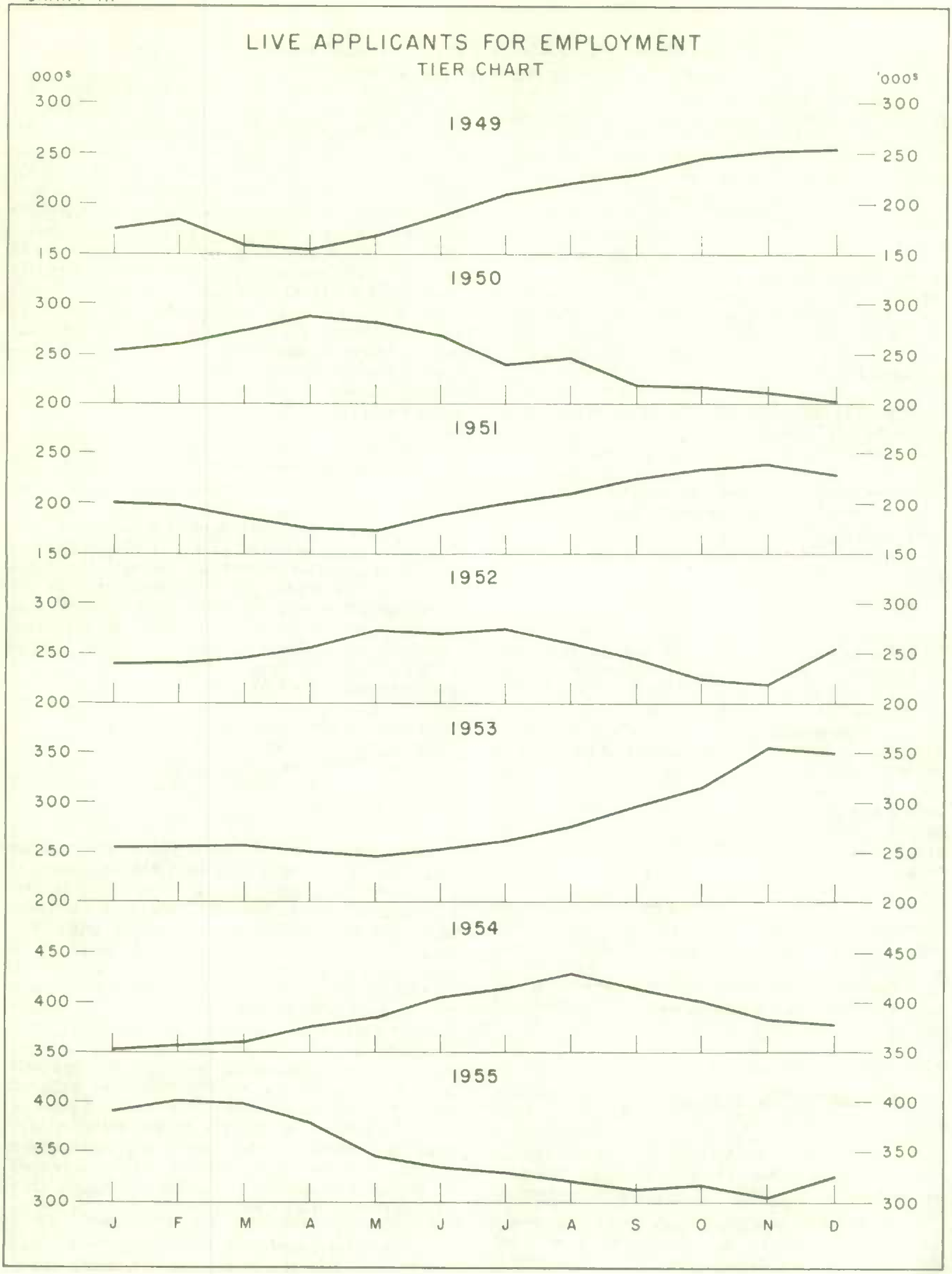
Date	Original data (millions)	12 mos. moving total of (1)	2 mos. moving total of (2)	Centered moving average = (3) ÷ 24	Ratio to moving average = (1) ÷ (4)	Reading from chart	Adjustment factor = 1200 ÷ annual total	Seasonal index = (6) x (7)	Seasonally adjusted series = (1) ÷ (8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1951 Sept. (conc.)	133	2,563	5,220	217	61·3	59·0	·99916	59·0	225
Oct.	157	2,657	5,406	225	69·8	67·0	·99916	66·9	235
Nov.	210	2,749	5,571	232	90·5	88·0	·99916	87·9	239
Dec.	269	2,822	5,700	237	113·5	117·5	·99916	117·4	229
Year	2,428	—	—	—	—	1,201·0	—	1,199·9	2,462
1952 Jan.	363	2,878	5,801	242	150·0	151·0	1.0054	151·8	239
Feb.	371	2,923	5,874	245	151·4	154·0	1·0054	154·8	240
Mar.	385	2,951	5,912	246	156·5	156·0	1·0054	156·8	246
Apr.	310	2,961	5,914	246	126·0	120·0	1·0054	120·7	257
May	225	2,953	5,891	245	91·8	82·0	1·0054	82·4	273
June	196	2,938	5,923	247	79·4	72·0	1·0054	72·4	271
July	176	2,985	5,998	250	70·4	64·0	1·0054	64·3	274
Aug.	156	3,013	6,059	252	61·9	59·5	1·0054	59·8	261
Sept.	143	3,046	6,112	255	56·1	58·0	1·0054	58·3	245
Oct.	149	3,066	6,121	255	58·4	66·0	1·0054	66·4	224
Nov.	195	3,055	6,087	254	76·8	88·0	1·0054	88·5	220
Dec.	316	3,032	6,048	252	125·4	123·0	1·0054	123·7	255
Year	2,985	—	—	—	—	1,193·5	—	1,199·9	3,005
1953 Jan.	391	3,016	6,020	251	155·8	152·0	1·0105	153·6	255
Feb.	404	3,004	6,014	251	161·0	156·0	1·0105	157·6	256
Mar.	405	3,010	6,048	252	160·7	156·0	1·0105	157·6	257
Apr.	299	3,038	6,133	256	116·8	118·0	1·0105	119·2	251
May	202	3,095	6,311	263	76·8	81·0	1·0105	81·9	247
June	180	3,216	6,555	273	65·9	70·5	1·0105	71·2	253
July	164	3,339	6,830	285	57·5	62·0	1·0105	62·7	262
Aug.	162	3,491	7,141	298	54·4	58·0	1·0105	58·6	276
Sept.	171	3,650	7,463	311	55·0	57·0	1·0105	57·6	297
Oct.	206	3,813	7,793	325	63·4	65·0	1·0105	65·7	314
Nov.	316	3,980	8,073	336	94·0	88·0	1·0105	88·9	355
Dec.	439	4,093	8,289	345	127·2	124·0	1·0105	125·3	350
Year	3,339	—	—	—	—	1,187·5	—	1,199·9	3,373
1954 Jan.	543	4,196	8,487	354	153·4	153·0	1·0075	154·1	352
Feb.	563	4,291	8,671	361	156·0	156·0	1·0075	157·2	358
Mar.	568	4,380	8,831	368	154·3	156·0	1·0075	157·2	361
Apr.	466	4,451	8,960	373	124·9	123·0	1·0075	123·9	376
May	315	4,509	9,043	377	83·6	81·0	1·0075	81·6	386
June	283	4,534	9,095	379	74·7	69·0	1·0075	69·5	407
July	259	4,561	9,180	382	67·8	62·0	1·0075	62·5	414
Aug.	251	4,619	9,304	388	64·7	58.0	1.0075	58·4	430
Sept.	242	4,685	9,422	393	61·6	58·0	1·0075	58·4	414
Oct.	264	4,737	9,501	396	66·7	65·0	1·0075	65·5	403
Nov.	341	4,764	9,495	396	86·1	88·0	1·0075	88·7	384
Dec.	466	4,731	9,410	392	118·9	122·0	1·0075	122·9	379
Year	4,561	—	—	—	—	1,191·0	—	1,199·9	4,664
1955 Jan.	601	4,679	9,304	388	154·9	154·0	·99958	153·9	391
Feb.	629	4,625	9,185	383	164·2	157·0	·99958	156·9	401
Mar.	620	4,560	9,059	377	164·5	156·0	·99958	155·9	398
Apr.	493	4,499	8,940	372	132·5	130·0	·99958	129·9	380
May	282	4,441	8,809	367	76·8	81·5	·99958	81·5	346
June	231	4,368	8,665	361	64·0	69·0	·99958	69·0	335
July	205	4,297	8,497	354	57·9	62·0	·99958	62·0	331
Aug.	186	4,200	8,298	346	53·8	58·0	·99958	58·0	321
Sept.	181	4,098	8,109	338	53·6	58·0	·99958	58·0	312
Oct.	206	4,011	7,932	330	62·4	65·0	·99958	65·0	317
Nov.	268	3,921	7,789	325	82·5	88·0	·99958	88·0	305
Dec.	395	3,868	7,694	321	123·1	122·0	·99958	121·9	324
Year	4,297	—	—	—	—	1,200·5	—	1,200·0	4,161
1956 Jan.	504	3,826	—	—	—	—	—	—	—
Feb.	527	—	—	—	—	—	—	—	—
Mar.	533	—	—	—	—	—	—	—	—
Apr.	403	—	—	—	—	—	—	—	—
May	229	—	—	—	—	—	—	—	—
June	189	—	—	—	—	—	—	—	—

CHART-11



LIVE APPLICANTS FOR EMPLOYMENT
DEVIATION CHART
PER CENT
PER CENT
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER
1949 1950 1951 1952 1953 1954 1955 1956
1949 1950 1951 1952 1953 1954 1955 1956

CHART-III


LIVE APPLICANTS FOR EMPLOYMENT
TIER CHART
000s
'000s
1949
1950
1951
1952
1953
1954
1955
300
250
200
150
350
450
400
J F M A M J J A S O N D

The singificance of each step may be explained as follows: Step 1, 2 and 3 are taken in order to derive the twelve month centred moving average which is the first approximation to the trend-cycle. A twelve month moving average eliminates the seasonal variation in that each average includes twelve months. An uncentred twelve month moving average would represent the first of each month and would therefore not be fully representative of the entire month. It was decided to centre the twelve month moving average by taking an average of the calculation for each month and that of the succeeding month. In other words, the first twelve month moving average is centred at say July 1st, the second twelve month moving average on August 1st. An average of the two is centred at July 15th and it is thus more representative of the month. Taking a two month moving total of a twelve month moving total is only a short hand method of deriving a centred result.

Dividing the original data by the centred twelve month moving average gives a first approximation to the seasonal and irregular components. Since the original data represent a composite of the trend, cycle, seasonal, and irregular and since the twelve month moving average represents trend, cycle and some irregular, then the ratio of the original data to the moving average gives a first approximation to seasonal components as well as some irregular.

The ratios are plotted by months to enable the statistician to discern the irregular events or any tendency for a seasonal factor to shift through time. Graphic presentation is of crucial importance in successful seasonal adjustment. The three term moving average which is run through the ratio-to-moving average are helpful in detecting persistent movements in the seasonal factors and act as a guide in ensuring that the free hand curve gives a reasonable fit[1]. The twelve seasonal indexes for each year are adjusted to equal twelve hundred in order that the sum of the seasonally adjusted data will approximate more closely the sum of the unadjusted data.

The final step, dividing the original data by the seasonal index simply removes the seasonal element from the original series thus leaving the trend, cycle and the irregular factors in the final result. The tier charts are used simply to check for any residual seasonal which may not have been adjusted out by all the previous steps.

Underlying Assumption and Limitations

While the above description of the seasonal adjustment technique may appear fairly straightforward, it may be useful at this point to reiterate and elaborate on the assumptions and limitations involved in the process. The first assumption involved is that the seasonal factor itself is reasonably stable and can be expected to repeat itself from year to year in somewhat similar fashion and thus that it is possible to measure it. However, it does not follow that conditions will remain unchanged in future periods. Thus, while the seasonal characteristic may have been quite evident in the past, current measurement of seasonally adjusted data is subject to limitations of possible change in the original conditions. The discovery of a change in seasonal factors normally requires a period of hindsight and to this extent the application of past seasonal factors to current periods must be done cautiously. Seasonal adjustment is therefore a never-ending process and the underlying factors have to be kept under continual scrutiny. The process of seasonal adjustment thus has an advantage in the analysis of current data simply because it compels constant scrutiny for possible shifts in the seasonal pattern. Even though it may be impossible to discern the exact nature of this shift, the search for logical reasons for changes in results helps to uncover changes in seasonal factors.

The second assumption involved in the process of seasonal adjustment is that random events will cancel themselves out through time so that they will not have any net effect on seasonal factors. The essence of the problem of seasonal adjustment is to distinguish seasonal characteristics from these random or irregular factors. In the original attempt to define the trend-cycle by means of a twelve month moving average the ratio of the original data to the twelve month centred moving average contain both seasonal and irrecular elements. If those events which we have defined as irregular (i.e. events of which we have some knowledge) are removed from the calculation, then the remaining ratios represent seasonal and random elements. If a sufficient number of observations are used in the computation, then it is assumed that the random element will tend to cancel out, thus leaving a good measure of seasonal.

For our purposes we have defined the minimum period necessary for proper seasonal adjustment to be six years. In some cases six years of data were not available and a number of techniques have been developed to establish proper seasonal patterns in such circumstances. One technique was to extend back the centred moving average free hand for six months at the beginning of the series and forward for six months at the end of the series in order to give an additional observation for each month. (The computation of a moving average loses one half-year of observations at the beginning and one half-year at the end of each series.) Another technique was to carry a series back on the basis of some related indicator. An example is the series without jobs and seeking work which was carried back monthly from November, 1952 to 1946, on the trend of unplaced applicants using the quarterly without jobs survey data as a bench mark.

The third assumption underlying seasonal adjustment is that the centred twelve month moving

1. A five term moving average would be preferable but many series are not long enough to allow for it. Difficulties associated with a three term average can be taken into account by statistician.

average is a reasonably good approximation of the trend-cycle thus permitting the estimation of the seasonal element from this trend. As mentioned above, however, the simple twelve month moving average is not a perfect representation of the trend-cycle. There is usually a possibility that the twelve month moving average will not trace effectively either the precise timing of the real business cycle nor its exact amplitude from peak to trough. This follows from the fact that each month in each successive twelve month moving period gets equal weight[1]. Thus both cyclical movements that occur at a point in time or irregular movements which occur at a point in time will be spread over a full twelve month period. In other words, this moving average tends to be too smooth and because of this characteristic the twelve month moving average has been critized as failing to delineate peaks and troughs clearly enough to portray the exact trend-cycle.

There are a number of solutions to the problems involved in the use of a simple twelve-montn moving average. The first possibility is to redraw the moving average free-hand to go deeper into the peaks and troughs, also taking into account the straying of the simple weighted moving average because of an irregular event[2]. This is another aspect of the approximation technique previously described. In such a case, the trend-cycle is given a second approximation before the ratios-to-the moving average are computed.

A second possibility is to remove those ratios which are affected by extreme movements in the moving average, that is to say, the statistician ignores not only those deviations from the moving average which are in themselves erratic, but also all the deviations which are affected by a distortion in the moving average itself. While this approach causes a considerable loss of information, it is an effective way of handling irregular events when they are not too common.

A third possibility is to change the raw data itself before computing the moving average. In such a case (e.g. the occurrence of a strike) the reported raw data are adjusted upwards by the number of people on strike, in effect assuming that no strike occurred. The calculated moving average then portrays a better approximation of the underlying trend-cycle. With this information, a good seasonal index may be derived, and this in turn divided into the original raw data, so that the effect of the strike will be shown in the final seasonally adjusted series. This technique has been tested on a large number of employment series, and the results have been promising.

A fourth possibility is to elaborate the method of approximation described earlier in this section. A simple weighted centred moving average is used to derive a seasonally adjusted series, which is then smoothed and used once more in the recalculation of the seasonal indexes; in the recalculation it is not the moving average which is used to compute the ratios, but rather the smoothed first round seasonally adjusted series. This technique of iteration has been used successfully in recent experiments on electronic computers. As can be appreciated, it involves a considerable amount of calculation, and would not prove practicable using hand methods[3].

Test of Reliability

Once the seasonal adjustment process has been carried out, a number of tests are applied to judge the accuracy of the seasonal adjustment. First, the sum of the seasonally adjusted data is compared with the sum of the raw data. If the totals are approximately the same, this is judged to be one test of goodness of the seasonal adjustment. The data are then charted, with each year plotted on top of the previous year in the form of tiers. Any seasonal movement remaining may then be immediately noted and corrections made in the seasonally adjusted series[4]. While there are a number of further calculations which may be made to test the accuracy of the seasonal adjustment depending on the resources available, the conditions set out above appear to be sufficient to attest to the general accuracy of the method[5].

1. Actually, the weights of a centred twelve-month moving average consist of unit weights for the middle eleven months and half-weights for the two end months. Weights of a more complicated average might be 1, 2, 3, 4, 5, 6, 6, 5, 4, 3, 2, 1, a pattern which gives heavier weights to the middle months. A somewhat similar weighting concentration can be obtained by using a 3 of a 4 of a 5 month moving average.

2. This technique is described in the Federal Reserve Bulletin, June, 1941, "Adjustment for Seasonal Variation", pages 518-528, H.C. Barton, Jr.

3. This technique is described more fully in Chapter X of this paper.

4. However, it should be noted that tier charts are a helpful but not a complete check on the adequacy of seasonal adjustment. For example, a tier chart may exhibit residual seasonal but on examination of the deviation charts the latter are found to be fully accurate. It is the occurrence of irregular events in different months in successive years that gives the impression of residual seasonal.

5. In seasonal adjustment carried out by electronic machines, a number of additional tests are applied. (See Chapter X of this paper.)

CHAPTER VI

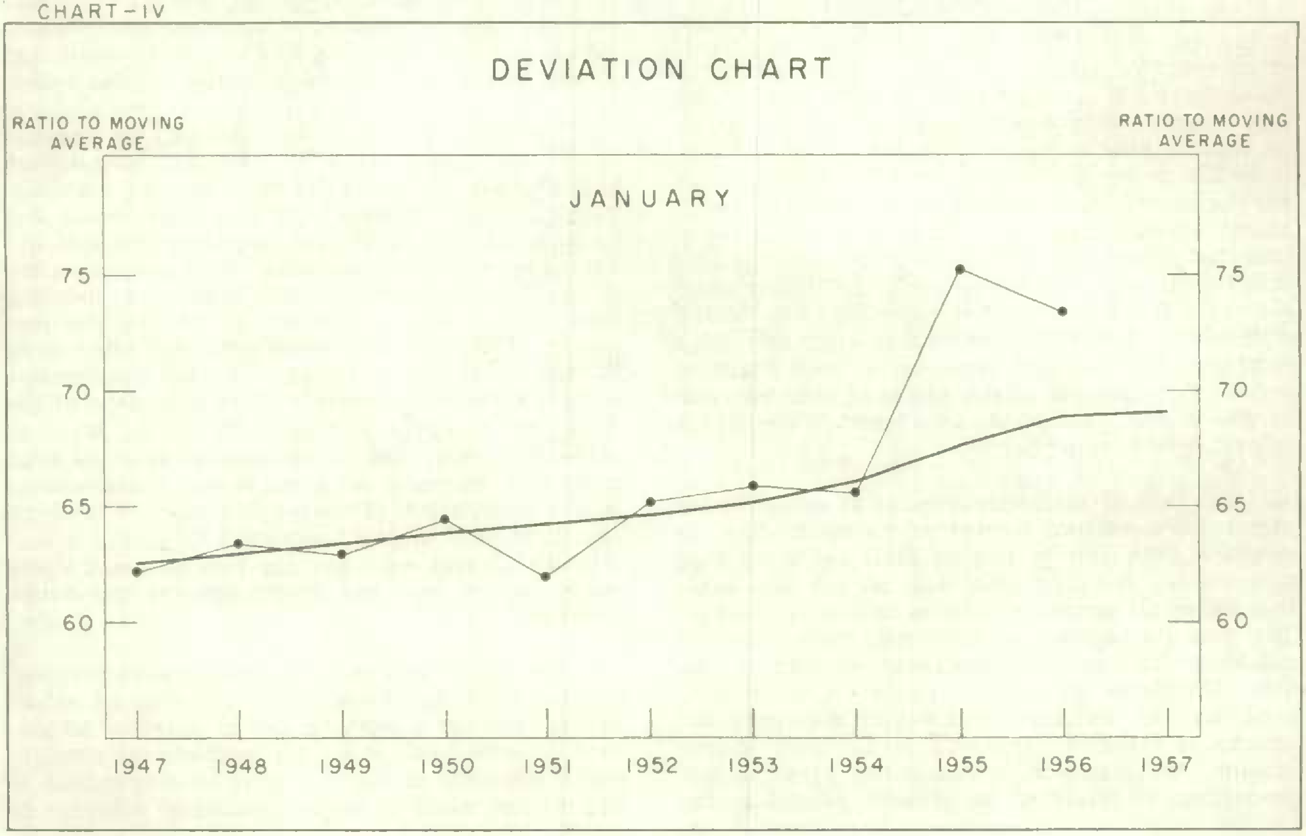
PROBLEMS OF SEASONALLY ADJUSTING CURRENT DATA

The major limitation inherent in moving averages is the loss of current observations due to centering. Out of this rises the problem of deriving seasonal indexes for use in adjusting current economic data. As a first step the seasonal index for the preceding year may be used. If this gives reasonable results in the light of all known information about the particular series then this procedure is useful. If the results appear unreasonable, that is if sharp breaks in the underlying trend-cycle result or if choppiness becomes apparent in relation to the previous seasonally adjusted series, then further analysis is required. There may be a trend in the previously observed seasonal pattern; that is it may be sloping downward or upward. In such a case an extension of this trend might be used to derive the current seasonal ratio. If this second approach again does not provide reasonable results, it is possible then to extend the moving average of the raw data free hand into the current month and calculate a ratio of the original data to this extrapolated moving average; this approach is more readily adapted to quarterly than monthly data. The ratio can then be compared with ratios for preceding years and this comparison helps the statistician to assess the correctness of the current seasonal adjustment. As subsequent data become available and it is possible to extend the moving average, the basis of these solutions can be checked for reliability and accuracy. It can be seen from the above that a considerable element of judgement is involved in extending the seasonal ratios into the current period.

Judgment must be based on many considerations. Questions such as what is the relationship between the deviation derived this year and that calculated for last year? Was last year's deviation regarded as unusual and was this a correct interpretation? Should last year's seasonal index and this year's seasonal index be revised in the light of changing circumstances? Does this year's ratio to the moving average reflect an unusual event that is not likely to be repeated in the future?

These questions suggest some of the ways in which the situation may be kept under constant scrutiny. The following chart illustrates this point. It will be noted from the chart that the ratio to the moving average for the current year was considerably above the moving seasonal line as projected. At the same time, the ratio for the previous year was also above the line. While in the previous year this ratio to moving average would have been interpreted as a possible random movement, the evidence furnished by the current year's data casts doubt on

CHART-IV



this initial interpretation. Whether both these ratios to moving averages should be considered as containing a large random element or whether they should be regarded as a change in seasonal pattern can only be determined by examining the relationship to other factors. The statistician must know the nature of the series, the course of events in the past two years, and the forces operating on the basic seasonal pattern.

All this suggests that if the basic seasonal pattern appears to be changing an effort is made to account for this phenomenon. The procedure followed in such a situation is to exhaust the possibilities of the application of knowledge. If after investigation the statistician is still uncertain of the nature of these movements, the approach then used is to draw the moving seasonal somewhat closer to the deviations than previously but only about half way between the old index and the most recent ratios. If the seasonals are in fact changing this procedure would make the current measure approximate more closely to the seasonal index as finally revised. Alternatively if the movements eventually prove to be random it would minimize the revision that would eventually have to be made.

The rationale of the above approach is that a moving seasonal may continue to move in the same direction as previously, it may stabilize at the present level, or it may change direction. An analysis of the factors operating upon seasonality in the particular time series may indicate which one of these alternatives has the highest probability. It was noted earlier that the forces operating on a seasonal are long-run as well as cyclical. To the extent that forces are secular, it may be assumed that the index will continue to move in the same direction. There are of course definite limits to the movement of a seasonal, the upper and lower limits being 1,200 and 0 in the case of monthly data, — that is to say, either all or none of the year's activity will take place in one month. If the forces operating on seasonality are likely in the long run to dampen seasonal variation, then all seasonal indexes will tend to move toward 100. Long-run restraints conceivably could cause the moving seasonal to stabilize.

It was pointed out earlier that cyclical forces may also be operating on seasonals, and to this extent it is possible that any seasonal movement might also be altered as business conditions change cyclically.

CHAPTER VII

VARIATIONS IN THE LENGTH OF THE REPORTING PERIOD

Perhaps the most widely used adjustment and one which appears to yield some of the best results is in connection with variations in reporting periods or calendar variation. Variation in the length of the month is one of the most basic of these factors. All other things being equal, output in February would be smaller than in any other month simply because it is the shortest month of the year. Not only may any economic series differ from month to month within a year purely as a result of calendar variation, but it may also vary between the same months in different years. If, for example, the factory operates on a five day week, not operating on Saturdays or Sundays, then it is important to know how many Saturdays and Sundays there are in each reporting period. It is possible for a series to vary as much as 10% in one month purely as a result of the change in number of working days.

The task of the statistician is to ascertain the effect of a varying number of calendar days, to measure them and to remove their influence from time series. The unadjusted data are put on a basis that makes all months equivalent to a daily average. The data are adjusted on this basis before the calculations for seasonal adjustment are carried out. The difficulties encountered in making the adjustment are the practical problems of measuring the effects of calendar variations In the case of production, the situation is reasonably clear in that production is likely to be directly related to the amount of time put in by workers, and all that would be required is a schedule of the mode of operations within the industry. If a five day week were customary adjustments would be made on that basis.

However, in other time series, for example retail trade, the effect of calendar variation is obscure. If a five or six day working week were customary in retail trade it is by no means certain that sales would vary simply because there would be one day more or less for shopping. Food purchases are probably independent of the number of shopping days in any month. However, it may be that purchases of clothing or durable goods are affected by the number of shopping days. A further complication is the differing importance of various days of the week for shopping purposes. The total value of sales may vary, not in accordance with the total number of shopping days, but rather in accordance with a distribution of the type of days. A Saturday may be of much greater importance for shopping than Mondays. If this were true the best approach would be to weight each day by its relative importance to sales.

The reader will note the complexities involved in this problem. There is the difficulty of establishing whether a working day or calendar adjustment is necessary. If so, the institutional arrangements operating in the area must be ascertained. It may be necessary to obtain statistical evidence of the importance of different days. While a beginning has been made, a good deal of further research must be undertaken before a completely satisfactory solution can be derived for this particular problem.

At present, calendar day adjustments are made as follows:

(1) In the industrial production series all components are adjusted for working days on the basis of the customary working practices in each industry. This adjustment appears in the raw data published in the Canadian Statistical Review.

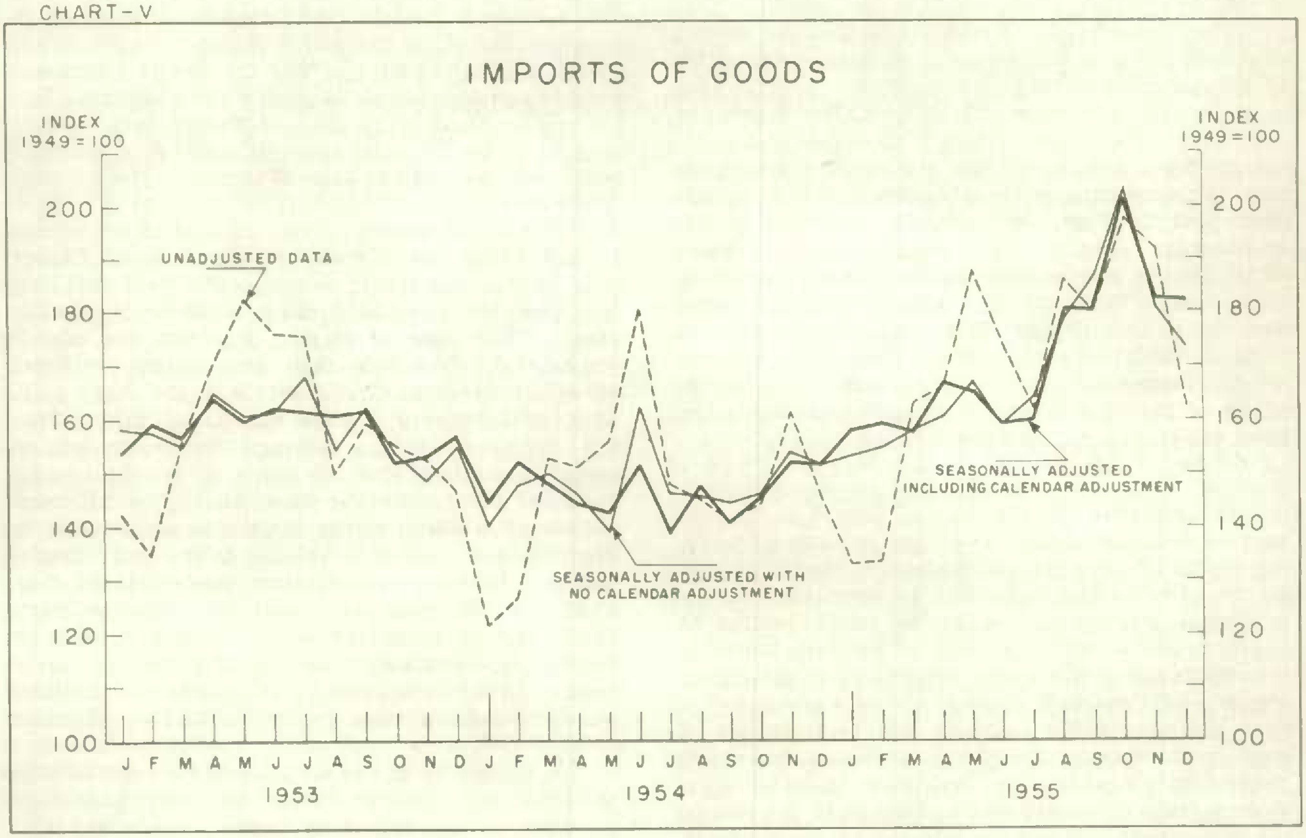
(2) All employment series are in effect adjusted for working days before publication of the employment indexes.

(3) Retail trade series are adjusted on the basis of a six day shopping week. All days are given equal weight. The discussion in the previous paragraph indicates the limitations of this approach, but it is considered that the seasonally adjusted series are improved by this procedure.

(4) Merchandise exports and imports are adjusted on the basis of the number of days worked per week by the customs officials, five and a half days until mid-1953 and five days thereafter. In addition, a number of other adjustments are made. Since on the average, data require two days to reach the final tabulating offices in Ottawa, this delay was taken into account in computing the time period of the month. In addition certain adjustments are made for changes in coding or administrative procedures, particularly for the months of June, 1954 and March and April, 1956. This rather complex procedure proved useful particularly in the import series.

The final test of accuracy was to compare the results of the seasonally adjusted series without the calendar adjustment with those having a calendar adjustment. An improvement was apparent in the import series shown. In the chart below are shown the unadjusted raw data, the seasonally adjusted data without calendar variation and the seasonally adjusted data with calendar variation. The reader will note the improvement effected by the use of the calendar variation adjustment.

CHART-V



The effectiveness of a calendar adjustment of this type can only be judged by comparing the same series seasonally adjusted with and without this computation. Should there exist a logical relationship between the variation in the calendar and the values established in the time series and should the calendar adjusted series contain less irregular movement than those without the calendar adjustment, then it was felt that the calendar adjustment should be incorporated into the procedure. This approach is another example of the application of knowledge and logic to time series in preference to purely mechanical procedures.

No special allowance was made for holidays because they fall with the exception of Easter in the same month of each year and would be adjusted for in the normal process of seasonal computation.

CHAPTER VIII

VARIATIONS IN SEASONAL PATTERN

The Shifting Date of Easter

Another set of problems arises when the underlying causes of seasonal variation shift from month to month and are not consistent from year to year. Strictly speaking these movements are not to be classed as seasonal, as seasonality was defined earlier. However to neglect these problems because they do not fall precisely in line with the general notion of seasonals and to treat them as an irregular component is to neglect one of the most fruitful areas of investigation in time series analysis. The problems in this area are calendar variation, Easter, shipping, forestry, farm production and automobile production and sales.

The essence of the problem is that the normal treatment of seasonal variation defines seasonality as a reasonably stable movement from year to year in its pattern, of timing and amplitude. The success of measuring this seasonal factor depends upon minimizing the variation of the ratios of the original data to the moving average for each of the months from year to year. Any unusual variation is immediately suspect and the general approach calls for omitting these aberrations from any computation made. The logic of the adjustments discussed here is quite different. The irregularities are not omitted but are used in the computation because of the information they convey about the composition of the time series and their relationships to some predetermined variable.

For example, as the date of Easter shifts from year to year and at the same time the sale of clothing shifts in much the same manner, then it is useful to measure the difference between the average movement of clothing sales in these months as against the actual movement of clothing sales in the month and relate these differences to the changing date of Easter. If there is a direct relationship, then the seasonal adjustment will be improved. In such a case even though the seasonal index will change from year to year, and do so in an irregular manner, this is considered preferable to not making the adjustment. Should the adjustment not be made, the analyst studying the data is faced with the question: "While clothing sales rose seasonally adjusted in March of this year, we know that Easter occurred quite early this year in comparison with previous years. How much of the increase in clothing purchases was attributable to the early date of Easter and how much to any underlying improvement in business conditions?" Such a question is inevitably raised and the statistician is asked to make an adjustment in any event as an aid to the user.

The method of computing the adjustments for the shifting date of Easter is as follows[1]: The average seasonal variations for the months of March and April are computed. The actual ratio to moving average for each year and the average seasonal ratio are differenced. The differences between the March residual and the April residual for each year are plotted on a chart using the date of Easter as the X-axis. A straight line fitted to these readings becomes the gross correction factor. The correction factor is divided by two and the result subtracted from March and added to April. The correction factor applicable for the date of Easter each year is applied to the average seasonal to give a seasonal index adjusted for the date of Easter.

The logic of the method is that if movements in the series are affected by the date of Easter, then the deviations in any specific year will vary from the average of all years in some direct relationship to the date of Easter. For example, should Easter fall in March, then presumably the March sales will increase relatively and the April sales will fall relatively. To the extent that this is true, the ratios to moving average for March will be larger than usual and the ratios to moving average for April will be smaller than usual. The difference between the actual ratios and the average ratios for April or March are then related to the early date of Easter. As more observations are obtained there should be a consistent pattern, with the March sales falling relatively more and the April sales increasing relatively more as the date of Easter shifts further into April. The technique outlined above permits a measurement of this relationship.

A number of the retail trade series are affected by the shifting date of Easter. An Easter adjustment is made in the following series: men's and children's clothing, women's clothing, family clothing, shoe stores, drug stores, variety stores and restaurants.

1. F.E. Croxton and D.J. Cowden "Applied General Statistics", Prentice Hall, New York 1943, pp. 509-515.

Other Sudden Shifts in Timing

Similar problems arise in connection with other sudden shifts in the timing of climatic or conventional seasons and solutions like that of the Easter adjustment can be adopted. The obvious examples are the timing of the shipping season, the timing of the winter cutting season in the forests and the timing of the model changeover in the automobile industry. It may be that special adjustments are required in some of the external trade series and in series related to forestry[1]; it is certain that automobile production sales series should be adjusted for the timing of the new model. However, because of lack of data or because further experimentation is required, these special adjustments have not been made to any of the series published in this paper. Special attention is being given to the automobile series and while no definite conclusions have been reached, the reader is warned that declines registered in the latter part of the year over the past few years are partly attributable to the shifting date of the changeover. The series related to forestry at present available should also be intrepreted with care.

Varying Amplitudes Agriculture

A problem of sudden shifts in the seasonal factors arises in the case of agricultural products where the production and shipment of these commodities remains more or less constant in timing from year to year but there are wide variations in amplitude as a result of fortuitous weather conditions. Thus, the wheat crop from the same acreage may vary from one year to the next from perhaps 300 million bushels to 600 million bushels. In many cases the disposition of these crops is similarly affected, particularly where the commodity cannot be stored. An unusually large tomato crop in any year will be reflected in a large production increase in the harvest season and a correspondingly large decrease in inventories as the crop is disposed of.

The application of some average seasonal technique to this type of phenomenon results in a choppy type of seasonally adjusted series, with large increases showing in the harvest period of some years and large decreases in others. It is not possible to apply a moving seasonal to these series in that the changes from year to year are discrete. The solution in such cases is to compute the seasonal index somewhat analogous to the Easter type of adjustment, which adjusts for varying amplitudes[2]. The seasonal indexes are adjusted each year for varying amplitude as a regression line is fitted to the seasonal readings and to the deviations from the moving average. No use is made of this technique in any material published by the Dominion Bureau of Statistics but experimentation is proceding on some of the agricultural series.

Discontinuities in Time Series

Time series may show discontinuities in a number of situations, among them the aftermath of war or following the decisions of regulatory bodies and as a reflection of new events[3]. In the analysis of historical data, problems of discontinuity in a series are fairly readily resolved, but in the current measurement of seasonality it is often difficult to arrive at a wholly satisfactory solution. Regardless of the cause of the discontinuity, the best solution in general is to treat the series as two distinct series and to isolate and measure the seasonal factors present in each segment. This presents no difficulty with a long historical series. Four illustrations will serve to show how specific problems of discontinuity have been dealt with in current measurement.

(1) Automobile production and sales in the immediate post-war period, when there was a heavy accumulated demand.
(2) The removal late in 1950 of foreign exchange control board regulations governing the payment of dividends abroad.
(3) Changes in income tax rates effective at certain dates.
(4) The rapid development of television production after 1952.

In the first example, little or no seasonality was evident in the automobile industry in the immediate post-war period, and the series was left unadjusted for a time. As a seasonal pattern began to re-assert itself, an attempt was made to measure it utilizing previous experience. In the second example, the pattern of dividends paid abroad shifted suddenly and drastically but the seasonal pattern was not obliterated. This time series was broken at 1950 and new seasonal factors estimated for the period thereafter. These factors became increasingly clear with the passage of time but only rough approximations could be made in the first few years. The third example, changes in income tax rates, presented a different problem in that the general seasonal pattern remained stable but it was impossible to derive the underlying trend cycle by means of an unweighted moving average. The simple moving average could not show adequately the timing of the change in tax rates (and the consequent sudden change in the level of collections) with the result that the ratios to moving average did not adequately measure the seasonal variation. The solution adopted was to treat the annual (fiscal year) average as the trend cycle and to calculate the ratios of the raw data to the annual average. This neglected the

1. The United States Federal Reserve Board suggests handling problems of this nature by adding together the raw data for the months affected by the changing date of the snowfall, adding together the seasonal indexes for these months and dividing the average seasonal index for these months into the average of the unadjusted data. The seasonally adjusted data for each of the months are identical and the effect of the shifting date of the snowfall is smoothed.

2. See F.E. Croxton and D.J. Cowden, op. cit, Pages 518 to 524.

3. The problem of measuring seasonality in the presence of new events is often in essence one of weighting, the subject discussed in the following section.

element of growth within the year but the overall results were much improved. The last example concerns the rapid development of television production after 1952. This component revealed a seasonal pattern different from that of the rest of the major industry group, electrical apparatus and supplies, and it was necessary to break the series at this point and to treat the two components separately in computing seasonal indexes.

CHAPTER IX

WEIGHTING AND OTHER TECHNICAL PROBLEMS

Problems of method in the field of seasonal adjustment arise from the possibility that a given answer may be derived either from a direct adjustment of a total or alternatively from an adjustment of component parts which are then summed to a total. While the differences in results may not be large, it is only in unusual circumstances that they will be identical. To the extent that there are differences, the problem becomes one of deciding which solution is the better. This problem has a number of ramifications:

(1) What is the best seasonal adjustment for a series? Should it be done at the total level or by the summation of parts?
(2) What is the optimum of detail to use in seasonal adjustment?
(3) Should quarterly adjustments be made independently or should they equal the sum of the component months?
(4) How is the residual error in the National Accounts affected by internal shifts in weighting?

When a seasonally adjusted series is computed, the original data are divided by the seasonal index. If the total is derived by summation of the various seasonally adjusted components, this procedure is analogous to deflation by price indexes, the seasonal index being the deflator and seasonally adjusted data the weights. The summation of the seasonally adjusted series then includes all the weights implicit in the movement of the individual components. If the seasonally adjusted total derived by a summation of the parts is divided into the sum of the raw data, the overall implicit seasonal index is currently weighted, the weights being the individual seasonally adjusted components. Only if the weights of the individual seasonally adjusted components remain unchanged over time will the implicit seasonal index of the summed series be identical with that derived from an adjustment of the total. An illustration follows:

Assume a time series has a constant annual level of 2,400. Thus, the seasonally adjusted monthly values will be 200. Assuming that the month of January has a constant value of 300, the seasonal index, will be $\frac{300}{200} = 150$. Assume further that the January total consists of 3 items having the following constant values:

Period I

Item	Unadjusted value	Seasonal index	Seasonally adjusted series
A	100	100	100
B	50	200	25
C	150	200	75
Total of items	**300**	**150**	**200**

Assume now that in period II, the unadjusted items vary, although the total remains constant. This has the effect of changing the weighting of the seasonally adjusted items.

Period II

Item	Unadjusted value	Seasonal index	Seasonally adjusted series
A	50	100	50
B	100	200	50
C	150	200	75
Total of items	**300**	**172** (implicit)	**175**

The sum of the adjusted series is now different because of shifting weights within the group and the implicit seasonal index is also different. While it appears desirable to take account of compositional shifts in seasonally adjusted series it should be noted that any implicit seasonal index derived after summation of items is currently weighted and may tend to move erratically. For this reason analysis of seasonal indexes per se is more appropriately carried out at the item level wherever the seasonal adjustment has been done in detail.

The advantages of deriving a total as a sum of parts are as follows:

(1) The seasonal pattern is unique for each homogeneous level of detail.
(2) Any unusual event affecting an individual component can be eliminated by applying direct knowledge.
(3) Changes in underlying conditions which affect the seasonal pattern can be handled more effectively when components are analysed individually.
(4) Analysis of movements in the total may be facilitated if the seasonally adjusted components are available.
(5) The sum of the parts equals the total thus permitting reconciliation between the movements in the total and those of the parts.
(6) Weight shifts between individual components are taken into account.

The approach used by the Dominion Bureau of Statistics in the National Accounts as well as in the selected monthly economic indicators is to derive totals from a sum of the parts where the components are readily available. Thus, totals of retail trade and foreign trade are a summation of the individual groups contained therein. On the other hand, no complete seasonal adjustment is available for all the components of the main industry groups of industrial production and these groups are adjusted at the total level (non-durable manufacturing, durable manufacturing, mining and public utilities).

When it is decided to derive the total from the sum of parts, the statistician must choose the level of detail at which he is able to operate. It will be appreciated that in many series (foreign trade) there are virtually hundreds of series that could be used in summation. The criteria used in such cases were as follows: (1) The groups used should be as homogeneous as possible, so that knowledge could be applied to the series. (2) The level of detail should not be unmanageable. (3) The summation of the seasonally adjusted results should not contain any residual movement[1].

1. For example, earlier experiments with foreign trade data indicated that after the seasonal movement had been removed from numerous detailed series, a seasonal factor appeared at the total level after summation. This was apparently caused by some underlying seasonal factor, such as shipping, which manifested itself at the detailed level in a large number of random or irregular events, but which showed up quite clearly in the total. In such cases, it was found that the optimum number of series for seasonal adjustment was considerably smaller than the total amount of data readily available.

It is useful to compare the results of a seasonally adjusted series derived from the summation of its parts with a direct seasonal adjustment of the total. Any differences between the two should be explicable by means of internal shifts in weighting. When they cannot be so explained the individual seasonal adjustments applied to the component series should be re-examined.

Decisions on summation have also to be made when deriving quarterly totals. If monthly series are available, then it seems worthwhile to derive the quarterly by summation, as is done in the Labour Income series, since adjustments may be more readily made on monthly than on quarterly data. However, many adjustments, working day adjustments for example, which are quite essential in the analysis of month-to-month movements, tend to cancel out over a quarter. There is an advantage to be gained by summing monthly data to derive the quarterly, but if quarterly data are all that is desired, a great deal of work may be saved by applying seasonal factors directly to the quarterly totals. At present the only national accounts series derived quarterly from the sum of months is the Labour Income series. However, after further research, other series may be adjusted monthly and summed to quarterly totals.

The problem of weighting and its implications for seasonal adjustment also arises in connection with the summation of seasonally adjusted data to an annual total. As the weighting of the unadjusted series in any year may differ from that implicit in the seasonal indexes due to irregular elements, the sum of the seasonally adjusted data will diverge from that of the raw data. Only when the weighting is identical[2] as between the seasonal index and the raw data will the two sums be equivalent. In such a case, the final seasonally adjusted result contains no irregular or random elements and is represented by a smooth curve. This is a very special situation (see Model I). Normally, there is some difference between the annual sum of the seasonally adjusted data and the annual sum of the unadjusted data (see Model II). However one of the tests of goodness of seasonal adjustment is for the two series to sum to approximately the same total[3]. While it is recognized that such differences exist, no specific adjustment is usually made to equate the seasonally adjusted material to that of the unadjusted material. However, in dealing with quarterly National Accounts, for reasons of consistency, the seasonally adjusted components are further adjusted to the annual level of the unadjusted material. The differences are prorated over the values. It should be noted that this procedure makes for a slight discontinuity between years. However, the discontinuity is slight and it is considered to be justified by the need to maintain consistency with the unadjusted data.

2. It is possible that shifts in weighting may be offsetting and the sums of the unadjusted and adjusted series match exactly.

3. Burns and Mitchell in "The Measuring Business Cycles" page 42, suggest a tolerance of 10 per cent between the sum of the seasonally adjusted and that of the unadjusted. In D.B.S. experience, most of the differences are in the range of 2 to 3 per cent and 10 per cent is unusual.

Model I

Raw	Seasonal index	Seasonally adjusted
50	50	100
150	150	100
100	100	100
100	100	100
400	400	400

Model II

Raw	Seasonal index	Seasonally adjusted
45	50	90
155	150	103
100	100	100
100	100	100
400	400	393

An interesting aspect of the weighting problem arises in the seasonal adjustment of the National Accounts. Owing to shifts in the composition of Gross National Product and Expenditure, it is possible for the national accounts to contain some residual error after seasonal adjustment, even though the components themselves have been properly adjusted. The following example illustrates how this may arise.

Period I

Gross national product				Gross national expenditure			
	Raw	Seasonal index	Seasonally adjusted		Raw	Seasonal index	Seasonally adjusted
Wages and salaries	1,000	50	2,000	Consumer expenditure	1,000	50	2,000
Corporation profits	1,000	100	1,000	Government expenditure	1,000	100	1,000
Gross national product	**2,000**		**3,000**	**Gross national expenditure**	**2,000**		**3,000**

Period II

Wages and salaries	1,500	50	3,000	Consumer expenditure	1,000	50	2,000
Corporation profits	500	100	500	Government expenditure	1,000	100	1,000
Gross national product	**2,000**		**3,500**	**Gross national expenditure**	**2,000**		**3,000**

It is apparent that in Period I no difficulty arises from the process of seasonal adjustment, seasonally adjusted Gross National Product being equal to seasonally adjusted Gross National Expenditure. However, in Period II, with a drastic shift in the composition of Gross National Product, the seasonally adjusted total is no longer identical with Gross National Expenditure *and there is no reason why it should be identical.* Indeed the two totals would be identical only if the implicit weightings of the various seasonal indexes on both sides of the accounts were to remain the same, or to change in the same proportions. In this example, where wages and salaries increased and corporation profits fell, *it would have been necessary for consumer expenditure and government expenditure to have moved in precisely the same fashion as the Gross National Product components just mentioned.* Such parallel movements would occur only in unusual circumstances. Although any imbalance between the accounts after seasonal adjustment, purely as a result of weighting, may be quite small, it is worthwhile noting that it does occur.

Other Problems

There are some series which, as a result of their peculiar characteristics, require a treatment slightly different from the usual approach. For example, where negative items appear in a series, as in inventory change, or where the data approach zero, then the application of the ratio to moving average technique becomes exceedingly difficult or even impossible. The approach adopted in such cases is to use an additive rather than a multiplicative type of seasonal factor, that is the seasonals are computed in absolute amounts rather than as ratios or percentages of the total. The procedures followed are analogous to those previously outlined, except that the ratio to moving average is replaced by the absolute difference between the original data and the moving average, and the seasonal factor, when derived, is subtracted from the original data rather than being divided into it. This technique has been successfully applied to the series of inventory change in the quarterly National Accounts. Should there be a growth element in the series, so that a constant absolute amount proves inapplicable, then the treatment proposed is to break the series every few years, and change the seasonal factor, or, alternatively, to adopt a moving seasonal factor.

Another difficult problem arises when a large irregular element appears during a seasonally low period. The application of the normal seasonal index to the data magnifies the irregular element out of all proportion to its actual impact. A solution to this problem has been suggested[1]. The procedure is to (1) multiply the moving average by the seasonal index, (2) subtract this product from the original data, (3) add this difference to the moving average. Step (1) estimates the unadjusted data, free from the irregular component. Step (2) derives the irregular component. Step (3) yields the trend-cycle plus the irregular, without having magnified the irregular by the seasonal index.

CHAPTER X

FUTURE DEVELOPMENTS

The program for the future will develop along several lines. It is planned to expand the number of series to be seasonally adjusted, as available resources permit. More research will be done on problems of calendar adjustment, working day adjustment, and related matters, as discussed in a previous section. Techniques to overcome some of the limitations of an unweighted moving average are to be evolved, with the possibility that many of the judmatical decisions involved in the removal of extreme items will no longer be necessary.

The use of high speed electronic computors opens up new possibilities in the development of seasonally adjusted time series. In the past, the high cost of processing by hand put limits to the number of series that could be handled and hampered the adoption of more elaborate techniques. Electronic machines are well suited to the process of seasonal adjustment. In seasonal adjustment, a large number of calculations are performed on a relatively small amount of data and electronic machines perform best under these conditions. The judgment decisions which are made in the normal procedure of seasonal adjustment, such as the elimination of extreme items, can be elaborated fully, and specific instructions given to the machine for handling any given possibility. The ability to store previously computed results and to perform operations in sequence based upon specific instructions makes possible the process of seasonal adjustment with a great deal of accuracy. Finally, the speed of operation of the machine is such as to make feasible and practicable calculations which, while marginal in result, are nevertheless an improvement. Many series have been seasonally adjusted by electronic machines in the United States, and future development in this field appears certain. The Dominion Bureau of Statistics is experimenting with this technique, and as experimentation continues it is possible that Canadian data will be processed in this manner.

A brief outline of the seasonal adjustment technique on electronic machines follows so that the reader may appreciate the significance of this development and understand how many of the judgment decisions are handled.

The general approach on electronic machines is one of reiteration. A preliminary seasonally adjusted series, derived in much the standard manner, is smoothed by a weighted moving average, giving a much more sensitive indicator of the underlying trend and cycle, with the erratic elements removed. This result is then used as the basis of a second

1. See A.F. Burns and W.C. Mitchell, "Measuring Business Cycles", National Bureau of Economic Research, New York, page 49.

round of calculations. The ratios of the original data to the smoothed seasonally adjusted series are calculated. These ratios are then used to compute a moving seasonal. The irregular elements are removed by a formula which gives much less weight to those ratios which are outside the range of a given tolerance. It will be noted that a great many of the judgment decisions made by the statistician in the normal process of seasonal adjustment are based upon the limitations of the moving average in adequately describing the underlying trend and cycle. The procedure adopted in the use of electronic machines solves most of these problems by calculating a better estimate of the trend-cycle with the irregular component removed. Results achieved by the procedure outlined, on testing, compare favourably with the best hand methods.

Some additional features of seasonal adjustment by electronic machines might be mentioned. Ease and speed of calculation makes possible many more computations than can be carried out by laborious and costly hand methods. For example, ratios of one month with the average of the preceding and following months can be calculated to establish whether seasonality exists in the raw data and to determine whether seasonality has been completely removed from the seasonally adjusted data. The relationship of the seasonally adjusted series to a series obtained by a further smoothing by a weighted moving average gives a measurement of the irregular component. Month-to-month changes in the smoothed seasonally adjusted series can be averaged to give a measurement of the average amplitude of the underlying trend-cycle. Comparisons can be made to derive the average seasonal in a month-to-month change. The relationships between irregular movements, cyclical movements and seasonal movements gives an additional tool for use in the analysis of time series. For example, a series having a small irregular movement compared with its average trend-cyclical change can be used more confidently than a series with a large irregular movement, in the interpretation of current movements of time series. Series that have been adjusted for working days or some other calendar variation may be compared with the same series without the additional adjustment. If the adjustment for working days is effective, it will reduce the irregular component in the series, and this can be determined quickly on an electronic computer. At the same time, the approach suggested previously for improving seasonally adjusted series, that is the application of specific knowledge to time series, generally requires some type of correlation technique (e.g. easter adjustment). This involves a considerable amount of calculation, and the use of electronic machines will permit more extensive calculations to be made.

The reader should note that the developments just outlined are an elaboration of the principles that have been established by the better type of hand seasonal adjustment. An understanding of these principles is essential in appreciating the limitations and uses of material developed wholly by electronic machines, as well as its future possibilities.

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PART II

TABLE 1. Gross National Product at Market Prices

(million dollars)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted (at annual rates)	1947	13,032	13,752	13,692	14,596
	1948	15,168	15,360	15,672	16,252
	1949	16,352	16,428	16,332	16,736
	1950	16,948	17,672	18,444	19,748
	1951	20,928	21,948	21,460	21,560
	1952	22,916	22,952	23,124	24,028
	1953	24,144	24,332	24,700	24,716
	1954	24,024	24,072	24,372	24,800
	1955	25,488	26,628	27,320	27,640
Seasonal Indices (Implicit)	1947	87.0	92.8	119.2	100.4
	1948	85.2	90.4	124.5	99.2
	1949	87.3	93.3	119.7	99.8
	1950	87.6	95.8	118.4	97.2
	1951	88.1	94.6	119.0	98.2
	1952	88.1	94.1	120.0	97.7
	1953	88.6	95.7	118.0	97.5
	1954	90.6	97.9	110.5	100.9
	1955	89.3	97.8	113.0	99.1
Unadjusted	1947	2,836	3,190	4,079	3,663
	1948	3,232	3,471	4,878	4,032
	1949	3,570	3,830	4,888	4,174
	1950	3,711	4,231	5,460	4,801
	1951	4,608	5,190	6,385	5,291
	1952	5,046	5,401	6,937	5,871
	1953	5,345	5,819	7,287	6,022
	1954	5,440	5,891	6,732	6,254
	1955	5,693	6,512	7,719	6,845

TABLE 2. Gross National Product at Market Prices – Non-Farm[1]

(million dollars)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted (at annual rates)	1947	11,900	12,524	12,444	13,312
	1948	13,664	13,872	14,212	14,632
	1949	14,884	14,980	14,924	15,044
	1950	15,540	16,256	16,896	18,108
	1951	18,992	19,316	19,456	19,844
	1952	20,952	21,096	21,424	22,144
	1953	22,504	22,760	23,040	22,980
	1954	22,816	22,952	23,292	23,620
	1955	24,160	25,152	25,924	26,224
Seasonal Indices (Implicit)	1947	93.5	96.5	104.5	104.9
	1948	93.2	98.2	103.1	105.0
	1949	93.4	97.1	104.8	104.7
	1950	93.9	99.4	103.9	102.1
	1951	94.7	99.5	102.9	102.8
	1952	94.2	100.3	103.1	102.1
	1953	94.7	100.3	102.7	102.3
	1954	94.3	100.1	102.9	102.6
	1955	94.4	100.4	102.8	102.0
Unadjusted	1947	2,781	3,022	3,252	3,490
	1948	3,185	3,405	3,664	3,841
	1949	3,474	3,638	3,909	3,937
	1950	3,648	4,039	4,390	4,623
	1951	4,494	4,803	5,005	5,100
	1952	4,936	5,292	5,523	5,653
	1953	5,326	5,706	5,913	5,876
	1954	5,379	5,744	5,991	6,056
	1955	5,700	6,315	6,660	6,690

1. Gross National Product at market prices excluding accrued net income of farm operators from farm production.

TABLE 3. Total Industrial Production

(Volume Indexes 1935-39 = 100)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	185.1	184.3	184.0	184.9	185.5	187.1	191.4	190.3	188.0	189.7	191.2	192.2
	1948	194.2	193.8	195.0	193.2	194.9	193.6	196.2	197.0	198.5	199.9	199.3	199.9
	1949	199.8	197.7	196.4	199.1	198.7	199.3	198.9	202.2	201.9	199.9	198.5	202.2
	1950	201.0	202.9	201.3	205.0	204.8	211.1	215.5	209.6	219.2	220.6	222.1	224.6
	1951	228.6	228.5	228.4	228.1	231.8	229.3	228.0	227.9	224.0	223.7	220.1	219.7
	1952	226.3	223.9	223.4	228.9	230.8	230.0	232.7	235.0	237.2	239.7	243.3	244.5
	1953	246.6	247.9	248.6	251.6	250.5	248.9	252.0	249.5	249.1	245.8	246.1	245.0
	1954	245.4	245.7	239.0	240.6	242.0	243.3	242.9	246.0	244.9	246.8	249.1	250.4
	1955	254.5	254.7	254.6	259.0	262.8	265.6	268.9	270.4	271.8	273.6	277.8	275.2
Seasonal Indices (Implicit)	1947	95.6	97.9	99.1	101.4	101.0	103.0	97.9	99.3	102.5	103.2	102.8	96.3
	1948	95.3	97.9	99.6	101.2	101.1	102.9	97.8	99.6	102.5	103.1	102.3	96.2
	1949	94.5	97.9	99.1	101.1	101.5	103.4	97.9	99.3	102.8	103.3	103.0	96.4
	1950	94.3	97.7	98.9	100.9	101.6	103.7	97.9	99.2	102.8	103.3	102.8	96.3
	1951	93.9	97.7	100.4	100.8	101.5	103.5	97.9	99.5	102.8	103.3	102.4	96.3
	1952	94.1	97.6	99.5	100.8	101.6	103.6	98.1	99.7	102.9	103.5	102.0	96.4
	1953	94.1	97.6	99.3	101.2	101.7	103.5	98.1	99.6	103.2	103.5	101.8	96.1
	1954	93.4	97.4	99.1	100.7	101.5	103.8	98.2	100.3	103.6	103.7	102.1	96.1
	1955	93.6	97.4	98.9	100.1	101.8	104.2	98.1	100.5	103.5	103.8	102.1	96.0
Unadjusted	1947	177.0	180.4	182.3	187.5	187.4	192.7	187.4	188.9	192.7	195.7	196.6	185.1
	1948	185.1	189.8	194.3	195.5	197.1	199.2	191.8	196.3	203.5	206.0	204.9	192.4
	1949	188.9	193.5	194.7	201.3	201.7	206.1	194.8	200.7	207.6	206.4	204.4	195.0
	1950	189.5	198.2	199.1	206.8	208.0	219.0	211.0	207.9	225.4	227.9	228.3	216.4
	1951	214.6	223.2	229.4	229.9	235.3	237.3	223.2	226.8	230.2	231.1	225.4	211.6
	1952	212.9	218.6	222.2	230.7	234.6	238.3	228.3	234.2	244.1	248.1	248.1	235.7
	1953	232.1	242.0	246.8	254.6	254.8	257.5	247.1	248.6	257.1	254.5	250.6	235.5
	1954	229.1	239.4	236.8	242.4	245.6	252.5	238.5	246.7	253.7	256.0	254.4	240.6
	1955	238.2	248.0	251.9	259.2	267.4	276.8	263.7	271.7	281.2	284.0	283.7	264.3

TABLE 4. Mining Production

(Volume Indexes 1935-39 = 100)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	102.7	98.7	103.1	101.4	103.2	105.9	108.9	107.6	106.6	113.4	108.2	113.5
	1948	108.8	109.5	114.7	123.3	123.2	120.5	126.7	121.4	125.9	128.4	129.5	131.3
	1949	128.3	132.3	126.7	127.6	128.1	128.9	131.1	137.5	135.3	133.2	133.5	136.5
	1950	136.6	145.6	143.7	145.6	144.5	143.1	143.3	135.0	147.5	149.3	157.5	151.4
	1951	158.8	157.1	140.9	153.7	164.8	168.1	164.2	172.0	163.1	167.7	164.5	164.5
	1952	165.2	163.6	165.3	173.9	177.0	175.0	174.5	176.3	177.4	180.1	178.6	185.7
	1953	182.3	182.1	182.5	186.1	179.7	184.5	193.2	190.8	188.0	181.2	189.6	188.6
	1954	190.7	204.3	195.5	198.8	204.5	206.7	209.0	210.4	217.2	221.2	222.6	228.3
	1955	223.7	230.2	232.1	229.4	231.8	239.0	241.5	242.9	242.3	256.3	266.4	261.7
Seasonal Indices	1947	89.8	92.3	92.8	99.8	98.3	105.8	102.8	102.8	105.8	107.8	106.8	94.8
	1948	91.4	92.9	97.4	97.4	96.9	104.8	100.8	106.3	105.8	106.3	106.3	93.9
	1949	90.0	93.0	93.0	96.5	99.0	105.9	102.9	102.0	108.4	107.4	106.9	95.0
	1950	90.2	92.2	92.2	95.7	100.7	106.2	103.2	102.2	109.7	108.7	105.7	93.7
	1951	89.4	90.4	100.8	94.3	100.8	105.3	103.3	101.8	109.7	108.7	103.3	92.3
	1952	90.3	89.8	88.8	94.8	102.3	106.3	105.8	103.8	111.3	110.3	103.3	93.3
	1953	90.3	89.3	87.8	94.3	100.4	106.4	106.9	105.4	112.9	110.4	102.4	93.3
	1954	90.0	89.0	87.5	92.0	99.0	106.0	109.0	107.5	113.5	111.0	102.5	93.5
	1955	90.3	89.3	87.8	88.3	99.3	106.3	109.3	107.8	113.8	111.3	102.8	93.8
Unadjusted	1947	92.2	91.1	95.7	101.2	101.4	112.0	111.9	110.6	112.8	122.2	115.6	107.6
	1948	99.4	101.7	111.7	120.1	119.4	126.3	127.7	129.0	133.2	136.5	137.7	123.3
	1949	115.5	123.0	117.8	123.1	126.8	136.5	134.9	140.2	146.7	143.1	142.7	129.7
	1950	123.2	134.2	132.5	139.3	145.5	152.0	147.9	138.0	161.8	162.3	166.5	141.9
	1951	142.0	142.0	142.0	144.9	166.1	177.0	169.6	175.1	178.9	182.3	169.9	151.9
	1952	149.2	146.9	146.8	164.9	181.1	186.0	184.6	183.0	197.5	198.7	184.5	173.3
	1953	164.6	162.6	160.2	175.5	180.4	196.3	206.5	201.1	212.2	200.0	194.1	176.0
	1954	171.6	181.8	171.1	182.9	202.5	219.1	227.8	226.2	246.5	245.5	228.2	213.5
	1955	202.0	205.6	203.8	202.6	230.2	254.1	264.0	261.8	275.7	285.3	273.9	245.5

TABLE 5. Total Manufacturing Production

(Volume Indexes 1935-39 = 100)

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonably adjusted	1947	204.8	204.1	203.3	205.2	205.2	207.2	211.7	210.8	208.0	208.2	212.1	212.0
	1948	215.7	215.1	215.4	211.8	213.1	212.6	214.5	216.2	217.4	218.6	217.9	218.1
	1949	219.0	215.1	214.5	216.3	216.3	217.0	216.5	219.2	219.0	216.8	214.9	218.8
	1950	217.3	217.4	216.3	220.4	220.2	228.2	233.6	227.7	237.4	238.8	238.4	242.7
	1951	245.9	246.2	249.1	246.4	248.4	244.6	244.6	241.9	238.8	236.6	232.2	231.9
	1952	239.6	237.1	236.5	245.7	243.2	242.7	246.3	248.8	250.5	252.9	258.4	258.4
	1953	261.4	262.8	263.6	266.2	266.8	264.2	266.3	263.7	263.2	260.8	259.2	257.9
	1954	256.3	255.4	248.2	249.1	249.4	249.9	249.2	253.0	249.4	250.8	253.1	252.9
	1955	259.6	258.5	257.7	264.2	268.4	270.7	274.6	275.5	277.6	277.6	279.3	277.3
Seasonal Indices (Implicit)	1947	95.9	98.2	99.5	101.2	101.4	102.7	97.5	99.2	102.5	103.0	102.6	96.3
	1948	95.4	98.3	99.6	101.3	101.4	102.6	97.5	99.3	102.6	103.1	102.6	96.5
	1949	94.7	98.3	99.7	101.3	101.5	103.2	97.5	99.3	102.6	103.1	102.7	96.4
	1950	94.3	98.2	99.5	101.2	101.4	103.5	97.5	99.2	102.5	103.0	102.6	96.4
	1951	93.9	98.3	100.2	101.3	101.3	103.5	97.0	99.6	102.5	102.9	102.5	96.4
	1952	93.9	98.3	100.7	99.6	101.4	103.5	97.4	99.5	102.4	103.0	102.0	96.3
	1953	94.0	98.3	100.8	101.8	101.9	103.4	97.1	99.4	102.6	102.8	101.8	95.9
	1954	93.7	98.3	100.7	101.8	101.9	104.0	96.8	99.8	102.7	102.7	101.9	95.8
	1955	93.3	98.2	100.7	101.7	102.2	104.5	96.5	100.0	102.4	102.6	101.9	95.7
Unadjusted	1947	196.4	200.4	202.2	207.7	208.0	212.7	206.4	209.2	213.3	214.5	217.6	204.2
	1948	205.7	211.4	214.6	214.6	216.0	218.2	209.1	214.6	223.0	225.3	223.5	210.4
	1949	207.4	211.4	213.8	219.1	219.6	223.9	211.1	217.6	224.8	223.5	220.6	211.0
	1950	205.0	213.5	215.2	223.0	223.2	236.2	227.7	225.9	243.4	246.0	244.5	233.9
	1951	231.0	242.0	249.5	249.5	251.7	253.1	237.2	241.0	244.7	243.5	237.9	223.5
	1952	225.1	233.0	238.2	244.8	246.7	251.3	239.8	247.6	256.5	260.4	263.5	248.9
	1953	245.6	258.3	265.6	270.9	271.8	273.3	258.5	262.1	270.1	268.2	263.8	247.4
	1954	240.1	251.0	249.9	253.5	254.1	259.9	241.2	252.5	256.2	257.6	258.0	242.4
	1955	242.2	253.9	259.5	268.8	274.2	282.9	265.1	275.5	284.3	284.9	284.6	265.5

TABLE 6. Durable Manufacturing Production

(Volume Indexes 1935-39 = 100)

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonably adjusted	1947	227.5	227.0	223.9	227.7	229.2	233.2	238.1	239.6	236.1	238.1	240.5	241.0
	1948	243.3	240.5	242.6	241.2	242.6	241.1	240.9	247.8	246.9	246.7	249.4	249.8
	1949	249.3	246.4	246.0	246.4	245.8	246.9	245.8	250.7	247.1	242.4	241.9	246.9
	1950	239.7	241.3	237.3	240.8	247.5	259.4	271.4	265.5	275.7	275.0	277.3	281.0
	1951	287.9	291.7	291.6	289.7	294.7	290.2	288.2	286.1	283.8	276.9	277.7	272.5
	1952	281.0	282.5	281.0	288.0	292.4	288.8	290.8	297.7	303.9	305.6	313.1	314.9
	1953	322.6	328.3	325.6	329.8	327.6	325.4	330.8	322.7	323.0	319.1	317.8	315.1
	1954	310.2	311.7	297.4	299.8	291.2	291.0	294.3	296.5	289.5	292.3	300.3	300.3
	1955	304.9	307.3	309.9	318.5	319.1	323.6	331.3	333.3	335.6	339.5	342.4	333.2
Seasonal Indices	1947	96.9	99.9	102.9	102.9	101.9	102.3	96.9	95.9	100.9	101.9	100.9	96.9
	1948	96.9	99.9	102.9	102.9	101.9	102.3	96.9	95.9	100.9	101.9	100.9	96.9
	1949	96.8	99.8	102.8	102.8	102.0	103.3	96.8	95.8	100.8	101.8	100.8	96.8
	1950	96.7	99.7	102.7	102.7	101.7	104.0	96.7	95.7	100.7	101.7	100.7	96.7
	1951	96.7	99.6	102.6	102.6	101.6	103.9	96.7	96.7	100.6	101.6	100.6	96.7
	1952	96.7	99.7	102.7	102.7	101.9	104.2	96.7	96.7	100.7	101.7	99.7	96.7
	1953	96.6	99.6	102.6	102.6	102.8	103.9	96.6	96.6	100.6	101.6	99.6	96.6
	1954	96.6	99.6	102.6	102.6	103.0	104.0	96.6	96.6	100.6	101.2	99.6	96.6
	1955	96.6	99.6	102.6	102.6	103.5	104.0	96.6	96.6	100.6	101.1	99.6	96.6
Unadjusted	1947	220.4	226.8	230.4	234.3	233.6	238.6	230.7	229.8	238.2	242.6	242.7	233.5
	1948	235.8	240.3	249.6	248.2	247.2	246.6	233.4	237.6	249.1	251.4	251.6	242.1
	1949	241.3	245.9	252.9	253.3	250.7	255.0	237.9	240.2	249.1	246.8	243.8	239.0
	1950	231.8	240.6	243.7	247.3	251.7	269.8	262.4	254.1	277.6	279.7	279.2	271.7
	1951	278.4	290.5	299.2	297.2	299.4	301.5	278.7	276.7	285.5	281.3	279.4	263.5
	1952	271.7	281.7	288.6	295.8	298.0	300.9	281.2	287.9	306.0	310.8	312.2	304.5
	1953	311.6	327.0	334.1	338.4	336.8	338.1	319.6	311.7	324.9	324.2	315.5	304.4
	1954	299.7	310.5	305.1	307.6	299.9	302.6	284.3	286.4	291.2	295.8	299.1	290.1
	1955	294.5	306.1	318.0	326.8	330.3	336.5	320.0	322.0	337.6	343.2	341.0	321.9

TABLE 7. Non-Durable Manufacturing Production

(Volume Indexes 1935-39 = 100)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	190.3	189.4	190.1	190.9	189.9	190.6	194.9	192.3	190.0	189.1	194.0	193.4
	1948	198.0	198.9	198.1	193.1	194.2	194.3	197.6	196.0	198.5	200.7	197.7	197.9
	1949	199.6	195.1	194.4	197.1	197.5	197.9	197.8	199.0	201.0	200.4	197.6	200.9
	1950	202.9	202.1	202.8	207.3	202.8	208.2	209.5	203.6	212.9	215.7	213.5	218.2
	1951	219.1	217.2	221.9	218.8	218.8	215.5	214.7	213.6	210.0	210.8	203.1	205.9
	1952	213.2	208.0	208.0	212.2	211.8	215.2	217.8	217.5	216.3	219.3	223.5	222.3
	1953	222.3	220.9	224.0	225.5	228.0	225.1	225.1	226.0	225.0	223.6	221.8	221.4
	1954	221.9	219.5	216.8	216.7	222.7	223.6	220.3	225.2	223.7	224.2	222.9	222.6
	1955	230.7	227.3	224.4	229.5	236.0	236.9	238.4	238.6	240.6	238.0	239.0	241.6
Seasonal Indices	1947	95.1	96.9	96.9	99.9	100.9	102.9	97.9	101.9	103.9	103.9	103.9	95.9
	1948	94.2	97.0	97.0	100.0	101.0	103.0	98.0	102.0	104.0	104.0	104.0	96.0
	1949	93.1	97.1	97.1	100.1	101.1	103.1	98.1	102.1	104.1	104.1	104.1	96.1
	1950	92.6	97.1	97.1	100.1	101.1	103.1	98.1	102.1	104.1	104.1	104.1	96.1
	1951	91.6	97.1	98.1	100.1	101.1	103.1	98.1	102.1	104.1	104.1	104.1	96.1
	1952	91.6	97.0	99.0	100.0	101.0	103.0	98.0	102.0	104.0	104.0	104.0	96.0
	1953	91.5	97.0	99.0	101.0	101.0	103.0	97.5	102.0	104.5	104.0	104.0	95.2
	1954	91.0	97.0	99.0	101.0	101.0	104.0	97.0	102.5	104.5	104.0	104.0	95.2
	1955	90.5	97.0	99.0	101.0	101.0	105.0	96.5	103.0	104.0	104.0	104.0	95.0
Unadjusted	1947	181.0	183.5	184.2	190.7	191.6	196.1	190.8	196.0	197.4	196.5	201.6	185.5
	1948	186.5	192.9	192.2	193.1	196.1	200.1	193.6	199.9	206.4	208.7	205.6	190.0
	1949	185.8	189.4	188.8	197.3	199.7	204.0	194.0	203.2	209.2	208.6	205.7	193.1
	1950	187.9	196.2	196.9	207.5	205.0	214.7	205.5	207.9	221.6	224.5	222.3	209.7
	1951	200.7	210.9	217.7	219.0	221.2	222.2	210.6	218.1	218.6	219.4	211.4	197.9
	1952	195.3	201.8	205.9	212.2	213.9	219.6	213.4	221.8	224.9	228.1	232.4	213.4
	1953	203.4	214.3	221.8	227.8	230.3	231.9	219.5	230.5	235.1	232.5	230.7	210.8
	1954	201.9	212.9	214.6	218.9	224.9	232.5	213.7	230.8	233.8	233.2	231.8	211.9
	1955	208.8	220.5	222.2	231.8	238.4	248.7	230.1	245.8	250.2	247.5	248.6	229.5

TABLE 8. Food and Beverages Production

(Volume Indexes 1935-39 = 100)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	198.3	193.2	195.2	199.2
	1948	213.6	193.8	202.9	200.5
	1949	197.3	199.8	207.0	207.9
	1950	204.5	206.7	202.5	207.5
	1951	213.1	212.1	215.4	209.4
	1952	219.2	223.9	225.1	224.9
	1953	222.7	225.5	225.6	226.3
	1954	226.3	228.9	226.1	225.2
	1955	231.5	239.2	244.1	231.6
Seasonal Indices	1947	84.0	101.0	112.0	103.0
	1948	84.0	101.0	112.0	103.0
	1949	84.0	101.0	112.0	103.0
	1950	84.0	101.0	112.0	103.0
	1951	84.0	101.0	112.0	103.0
	1952	84.0	101.0	112.0	103.0
	1953	84.0	101.0	112.0	103.0
	1954	84.0	101.0	112.0	103.0
	1955	84.0	101.0	112.0	103.0
Unadjusted[1]	1947	166.6	195.1	218.6	205.2
	1948	179.4	195.7	227.2	206.5
	1949	165.7	201.8	231.8	214.1
	1950	171.8	208.8	226.8	213.7
	1951	179.0	214.2	241.3	215.7
	1952	184.1	226.1	252.1	231.6
	1953	187.1	227.8	252.7	233.1
	1954	190.1	231.2	253.2	232.0
	1955	194.5	241.6	273.4	238.5

1. Quarterly averages of monthly data.

TABLE 9. Tobacco and Products Production

(Volume Indexes 1935-39 = 100)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	240.4	188.4	201.4	218.5
	1948	214.5	205.6	222.5	221.6
	1949	216.9	224.7	233.0	223.7
	1950	241.0	230.0	226.3	213.2
	1951	250.9	215.2	165.1	213.8
	1952	210.4	259.1	271.9	229.2
	1953	247.1	273.6	285.1	272.0
	1954	275.8	272.8	281.7	287.7
	1955	294.5	303.3	300.6	314.1
Seasonal Indices	1947	98.0	106.9	91.1	104.0
	1948	98.0	106.9	91.1	104.0
	1949	98.0	106.9	91.1	104.0
	1950	98.0	106.9	91.1	104.0
	1951	98.0	106.9	91.1	104.0
	1952	98.0	106.9	91.1	104.0
	1953	95.0	112.0	93.0	100.0
	1954	95.0	112.0	93.0	100.0
	1955	95.0	112.0	93.0	100.0
Unadjusted[1]	1947	235.6	201.4	183.5	227.2
	1948	210.2	219.8	202.7	230.5
	1949	212.6	240.2	212.3	232.6
	1950	236.2	245.9	206.2	221.7
	1951	245.9	230.1	150.4	222.3
	1952	206.2	277.0	247.7	238.4
	1953	234.7	306.4	265.1	272.0
	1954	262.0	305.5	262.0	287.7
	1955	279.8	339.7	279.6	314.1

1. Quarterly averages of monthly data.

TABLE 10. Rubber Products Production

(Volume Indexes 1935-39 = 100)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	228.1	231.5	235.0	228.7
	1948	237.9	227.7	214.8	227.8
	1949	217.4	206.2	201.8	207.5
	1950	221.9	233.6	273.9	282.8
	1951	290.6	277.6	266.9	221.2
	1952	236.8	246.8	235.9	264.7
	1953	270.4	267.5	264.8	253.7
	1954	254.7	253.5	249.2	252.5
	1955	277.9	287.9	296.3	324.2
Seasonal Indices	1947	105.7	104.2	87.4	102.7
	1948	105.7	104.2	87.4	102.7
	1949	105.7	104.2	87.4	102.7
	1950	105.7	104.2	87.4	102.7
	1951	105.7	104.2	87.4	102.7
	1952	105.7	104.2	87.4	102.7
	1953	106.1	105.6	87.2	101.1
	1954	106.1	105.6	87.2	101.1
	1955	106.1	105.6	87.2	101.1
Unadjusted[1]	1947	241.1	241.2	205.4	234.9
	1948	251.5	237.3	187.7	233.9
	1949	229.8	214.9	176.4	213.1
	1950	234.5	243.4	239.4	290.4
	1951	307.2	289.3	233.3	227.2
	1952	250.3	257.2	206.2	271.8
	1953	286.9	282.5	230.9	256.5
	1954	270.2	267.7	217.3	255.3
	1955	294.9	304.0	258.4	327.8

1. Quarterly averages of monthly data.

TABLE 11. Leather Products Production

(Volume Indexes 1935-39 = 100)

		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	155.4	152.3	148.4	137.8
	1948	133.8	123.9	126.9	133.5
	1949	131.4	133.4	138.7	131.1
	1950	126.8	118.9	127.9	134.3
	1951	134.2	121.5	109.1	100.6
	1952	115.7	125.7	136.2	136.5
	1953	141.6	140.2	135.0	128.7
	1954	129.7	129.7	130.9	123.8
	1955	130.2	132.5	138.3	147.1
Seasonal Indices	1947	107.5	105.5	89.5	97.5
	1948	107.5	105.5	89.5	97.5
	1949	107.5	105.5	89.5	97.5
	1950	107.5	105.5	89.5	97.5
	1951	107.5	105.5	89.5	97.5
	1952	107.5	105.5	89.5	97.5
	1953	109.0	106.0	90.0	95.0
	1954	109.0	106.0	90.0	95.0
	1955	109.0	106.0	90.0	95.0
Unadjusted[1]	1947	167.1	160.7	132.8	134.4
	1948	143.8	130.7	113.6	130.2
	1949	141.3	140.7	124.1	127.8
	1950	136.3	125.4	114.5	130.9
	1951	144.3	128.2	97.6	98.1
	1952	124.4	132.6	121.9	133.1
	1953	154.3	148.6	121.5	122.3
	1954	141.4	137.5	117.8	117.6
	1955	141.9	140.5	124.5	139.7

1. Quarterly averages of monthly data.

TABLE 12. Textiles Except Clothing Production

(Volume Indexes 1935-39 = 100)

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	169.0	169.6	173.8	172.0	170.9	175.1	165.4	176.4	176.4	177.9	173.5	174.4
	1948	174.8	175.3	170.8	173.4	177.3	176.5	179.8	180.5	182.6	187.6	191.3	194.0
	1949	189.6	184.6	186.0	186.0	183.5	187.8	183.4	190.1	184.9	185.9	185.2	186.1
	1950	199.8	205.6	201.4	205.9	202.3	204.4	207.8	206.8	226.4	227.0	231.2	230.9
	1951	211.2	222.6	226.0	225.7	231.1	231.1	194.0	203.7	199.8	181.5	182.0	188.2
	1952	191.8	174.8	172.9	166.0	177.5	165.3	199.3	193.5	181.8	206.2	196.6	190.4
	1953	198.6	201.1	201.5	209.8	200.8	187.1	195.8	190.5	183.7	171.3	162.6	149.1
	1954	152.1	149.1	151.6	151.2	157.5	157.7	165.1	173.5	169.2	167.9	163.1	176.4
	1955	175.3	178.6	182.8	185.1	186.6	194.9	189.6	194.7	178.6	180.0	188.0	192.4
Seasonal Indices	1947	96.9	104.9	105.9	103.9	102.9	97.4	99.9	93.9	97.9	97.9	100.4	98.4
	1948	99.5	106.0	108.0	106.5	101.5	98.5	92.9	92.4	98.5	97.4	100.0	99.0
	1949	100.6	108.6	109.6	108.6	99.1	98.1	88.1	89.6	99.6	98.1	100.1	99.6
	1950	100.7	110.2	111.2	110.7	97.2	97.7	84.8	87.3	100.7	97.7	100.5	101.2
	1951	101.9	111.9	110.9	110.9	95.4	97.9	79.9	85.4	102.4	99.4	102.1	101.9
	1952	102.2	112.2	110.2	110.7	93.7	98.2	75.2	84.2	102.7	103.2	105.2	102.2
	1953	100.4	110.9	107.4	108.9	97.9	97.4	74.4	87.4	104.9	103.9	104.9	101.9
	1954	97.7	110.7	110.7	105.7	96.7	97.7	72.8	90.7	106.7	105.7	103.7	101.7
	1955	97.3	110.8	107.3	104.8	97.8	97.8	71.9	92.3	107.8	107.8	103.8	100.8
Unadjusted	1947	163.8	177.9	184.1	178.7	175.9	170.5	165.2	165.6	172.7	174.2	174.2	171.6
	1948	173.9	185.8	184.5	184.7	180.0	173.9	167.0	166.8	179.9	182.7	191.3	192.1
	1949	190.7	200.5	203.9	202.0	181.8	184.2	161.6	170.3	184.2	182.4	185.4	185.4
	1950	201.2	226.6	224.0	227.9	196.6	199.7	176.2	180.5	228.0	221.8	232.4	233.7
	1951	215.2	249.1	250.6	250.3	220.5	226.2	155.0	174.0	204.6	180.4	185.8	191.8
	1952	196.0	196.1	190.5	183.8	166.3	162.3	149.9	162.9	186.7	212.8	206.8	194.6
	1953	199.4	223.0	216.4	228.5	196.6	182.2	145.7	166.5	192.7	178.0	170.6	151.9
	1954	148.6	165.1	167.8	159.8	152.3	154.1	120.2	157.4	180.5	177.5	169.1	179.4
	1955	170.6	197.9	196.1	194.0	182.5	190.6	136.3	179.7	192.5	194.0	195.1	193.9

TABLE 13. Clothing (Textile and Fur) Production

(Volume Indexes 1935-39 = 100)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	145.3	144.1	147.3	147.5	148.2	150.9	149.5	149.9	149.2	147.6	147.5	147.1
	1948	154.4	155.4	155.7	152.2	153.8	153.1	154.5	152.4	154.9	160.1	161.6	165.6
	1949	161.4	162.8	162.2	161.5	157.4	157.3	157.0	161.1	159.5	158.4	156.9	156.8
	1950	151.9	150.7	151.9	152.2	153.3	155.1	155.3	154.5	156.9	160.8	161.5	164.9
	1951	165.0	159.1	157.5	157.7	158.0	156.2	152.0	147.6	142.5	136.9	134.0	129.0
	1952	133.1	140.4	143.9	145.2	150.6	149.2	153.5	159.2	167.1	170.0	171.2	169.9
	1953	175.2	173.4	172.8	170.8	171.5	170.3	168.0	168.6	166.1	160.5	157.7	151.9
	1954	153.0	152.2	150.2	145.1	136.1	137.2	139.7	146.0	145.1	145.8	146.9	145.9
	1955	145.6	145.5	143.9	143.1	142.6	146.5	144.2	151.8	152.2	154.4	159.3	158.8
Seasonal Indices	1947	100.0	103.0	102.0	101.5	99.5	96.5	95.5	97.0	99.5	102.5	102.5	100.0
	1948	101.7	103.2	103.2	102.7	99.7	95.7	93.7	96.2	99.7	101.7	102.2	100.2
	1949	102.8	103.3	104.3	103.8	99.3	94.8	92.8	95.3	100.3	101.8	101.8	99.8
	1950	102.3	103.8	105.3	105.3	99.2	95.2	92.2	96.2	99.7	101.3	100.8	98.7
	1951	99.2	103.7	106.2	106.2	100.2	95.7	91.7	95.7	100.2	101.7	100.2	99.2
	1952	97.5	103.0	106.0	106.5	101.5	98.0	90.5	95.0	99.5	102.0	101.0	99.5
	1953	97.2	102.7	106.6	106.6	101.2	96.2	90.8	96.2	102.2	103.2	99.2	97.7
	1954	96.9	102.9	106.9	104.4	101.4	95.9	90.5	96.9	102.9	103.4	100.4	97.4
	1955	97.0	103.5	107.0	103.5	101.5	96.0	91.0	96.5	103.0	103.5	100.5	97.5
Unadjusted	1947	145.3	148.4	150.2	149.7	147.5	145.6	142.8	145.4	148.5	151.3	151.2	147.1
	1948	157.0	160.4	158.6	156.3	153.3	146.5	144.8	146.6	154.4	162.8	165.2	165.9
	1949	165.9	168.2	169.2	167.6	156.3	149.1	145.7	153.5	160.0	161.3	159.7	156.5
	1950	155.4	156.4	159.9	160.3	152.1	147.7	143.2	148.6	156.4	162.9	162.8	162.8
	1951	163.7	165.0	167.3	167.5	158.3	149.5	139.4	141.3	142.8	139.2	134.3	128.0
	1952	129.8	144.6	152.5	154.6	152.9	146.2	138.9	151.2	166.3	173.4	172.9	169.1
	1953	170.3	178.1	184.2	182.1	173.6	163.8	152.5	162.2	169.8	165.6	156.4	148.4
	1954	148.3	156.6	160.6	151.5	138.0	131.6	126.4	141.5	149.3	150.8	147.5	142.1
	1955	141.2	150.6	154.0	148.1	144.7	140.6	131.2	146.5	156.8	159.8	160.1	154.8

TABLE 14. Paper Products Production

(Volume Indexes 1935-39 = 100)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	206.5	207.3	207.6	208.4
	1948	218.2	219.0	216.3	217.2
	1949	214.4	211.3	211.0	218.1
	1950	219.5	226.4	234.8	240.6
	1951	245.5	249.1	250.5	245.8
	1952	244.9	229.1	232.7	235.6
	1953	238.0	242.1	248.5	250.3
	1954	251.1	252.9	258.4	255.7
	1955	259.4	265.7	271.4	274.4
Seasonal Indices	1947	98.8	101.2	99.3	100.7
	1948	98.8	101.2	99.3	100.7
	1949	98.8	101.2	99.3	100.7
	1950	98.8	101.2	99.3	100.7
	1951	98.8	101.2	99.3	100.7
	1952	98.8	101.2	99.3	100.7
	1953	98.2	102.3	99.2	100.2
	1954	98.2	102.3	99.2	100.2
	1955	98.2	102.3	99.2	100.3
Unadjusted[1]	1947	204.0	209.8	206.1	209.9
	1948	215.6	221.6	214.8	218.7
	1949	211.8	213.8	209.5	219.6
	1950	216.9	229.1	233.2	242.3
	1951	242.6	252.1	248.7	247.5
	1952	242.0	231.8	231.1	237.2
	1953	233.7	247.7	246.5	250.8
	1954	246.6	258.7	256.3	256.2
	1955	254.7	271.8	269.2	275.2

1. Quarterly averages of monthly data.

TABLE 15. Printing, Publishing and Allied Industries Production

(Volume Indexes 1935-39 = 100)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	158.0	161.6	169.6	164.2
	1948	174.2	176.1	180.1	178.4
	1949	182.2	188.7	183.5	180.9
	1950	191.1	193.9	194.2	201.8
	1951	195.5	192.2	196.8	194.2
	1952	188.7	191.1	191.7	198.1
	1953	203.9	203.7	203.7	207.6
	1954	208.1	214.5	217.3	219.1
	1955	215.5	219.1	219.7	223.7
Seasonal Indices	1947	100.2	100.2	97.3	102.3
	1948	100.2	100.2	97.3	102.3
	1949	100.2	100.2	97.3	102.3
	1950	100.2	100.2	97.3	102.3
	1951	100.2	100.2	97.3	102.3
	1952	100.2	100.2	97.3	102.3
	1953	99.0	101.0	97.5	102.5
	1954	99.0	101.0	97.5	102.5
	1955	99.0	101.0	97.5	102.5
Unadjusted[1]	1947	158.3	161.9	165.0	168.0
	1948	174.5	176.5	175.2	182.5
	1949	182.6	189.1	178.5	185.1
	1950	191.5	194.3	189.0	206.4
	1951	195.9	192.6	191.5	198.7
	1952	189.1	191.5	186.5	202.7
	1953	201.9	205.7	198.6	212.8
	1954	206.0	216.6	211.9	224.6
	1955	213.3	221.3	214.2	229.3

1. Quarterly averages of monthly data.

TABLE 16. Products of Petroleum and Coal Production

(Volume Indexes 1935-39 = 100)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	181.3	179.7	178.1	185.9
	1948	188.6	194.5	204.2	207.1
	1949	210.4	218.4	219.2	223.3
	1950	231.4	240.0	249.0	252.0
	1951	261.5	270.3	282.2	283.8
	1952	285.4	281.9	299.9	311.7
	1953	313.3	317.2	332.2	333.7
	1954	338.2	333.1	335.7	340.9
	1955	362.2	385.5	396.1	396.8
Seasonal Indices	1947	90.0	101.5	107.0	101.5
	1948	90.0	101.5	107.0	101.5
	1949	90.0	101.5	107.0	101.5
	1950	90.0	101.5	107.0	101.5
	1951	91.1	100.1	107.2	101.6
	1952	93.1	98.1	107.2	101.6
	1953	98.0	98.0	104.0	100.0
	1954	98.0	98.0	104.0	100.0
	1955	98.0	98.0	104.0	100.0
Unadjusted[1]	1947	163.2	182.4	190.6	188.7
	1948	169.7	197.4	218.5	210.2
	1949	189.4	221.7	234.5	226.6
	1950	208.3	243.6	266.4	255.8
	1951	238.2	270.6	302.5	288.3
	1952	265.7	276.5	321.5	316.7
	1953	307.0	310.9	345.5	333.7
	1954	331.4	326.4	349.1	340.9
	1955	355.0	377.8	411.9	396.8

1. Quarterly averages of monthly data.

TABLE 17. Chemicals and Allied Industries Production

(Volume Indexes 1935-39 = 100)

		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	251.5	246.8	242.4	241.4
	1948	246.1	244.1	240.4	242.2
	1949	238.4	239.9	239.1	240.7
	1950	241.9	250.9	256.8	265.6
	1951	264.0	266.3	268.6	272.3
	1952	272.5	266.8	274.8	275.9
	1953	277.4	281.3	287.0	291.9
	1954	287.1	286.1	282.7	283.8
	1955	285.9	292.9	290.5	298.0
Seasonal Indices	1947	99.4	103.3	99.4	97.9
	1948	99.4	103.3	99.4	97.9
	1949	99.4	103.3	99.4	97.9
	1950	99.4	103.3	99.4	97.9
	1951	99.4	103.3	99.4	97.9
	1952	99.4	103.3	99.4	97.9
	1953	99.4	103.3	99.4	97.9
	1954	98.4	103.7	99.7	98.2
	1955	98.4	103.7	99.7	98.2
Unadjusted[1]	1947	250.0	254.9	240.9	236.3
	1948	244.6	252.2	239.0	237.1
	1949	237.0	247.8	237.7	235.6
	1950	240.4	259.2	255.3	260.0
	1951	262.4	275.1	267.0	266.6
	1952	270.9	275.6	273.2	270.1
	1953	275.7	290.6	285.3	285.8
	1954	282.5	296.7	281.9	278.7
	1955	281.3	303.7	289.6	292.6

1. Quarterly averages of monthly data.

TABLE 18. Wood Products Production

(Volume Indexes 1935-39 = 100)

		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	193.1	193.7	203.3	191.4
	1948	208.0	201.2	199.5	193.9
	1949	199.9	204.1	202.1	203.1
	1950	192.3	208.1	229.1	230.3
	1951	229.2	227.3	219.5	205.4
	1952	208.3	204.8	213.1	231.6
	1953	243.8	237.4	234.8	224.7
	1954	221.7	226.3	233.0	240.3
	1955	254.8	250.3	254.5	261.2
Seasonal Indices	1947	96.2	103.1	108.0	92.7
	1948	96.2	103.1	108.0	92.7
	1949	96.2	103.1	108.0	92.7
	1950	96.2	103.1	108.0	92.7
	1951	96.2	103.1	108.0	92.7
	1952	96.2	103.1	108.0	92.7
	1953	96.4	103.4	107.3	92.9
	1954	97.2	100.8	108.3	93.7
	1955	97.2	100.8	108.3	93.7
Unadjusted[1]	1947	185.8	199.7	219.6	177.4
	1948	200.1	207.4	215.5	179.7
	1949	192.3	210.4	218.3	188.3
	1950	185.0	214.6	247.4	213.5
	1951	220.5	234.3	237.1	190.4
	1952	200.4	211.1	230.2	214.7
	1953	235.0	245.5	251.9	208.7
	1954	215.5	228.1	252.3	225.2
	1955	247.7	252.3	275.6	244.7

1. Quarterly averages of monthly data.

TABLE 19. Iron and Steel Products Production

(Volume Indexes 1935-39 = 100)

Description		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Seasonally adjusted	1947	237.1	241.0	238.8	248.4	251.2	249.9	250.9	256.4	259.2	258.7	254.6	255.5
	1948	260.2	259.0	263.4	266.7	274.2	270.0	272.9	274.7	276.1	277.2	274.3	278.8
	1949	279.6	278.0	276.5	274.3	267.2	266.5	258.7	260.3	253.1	248.1	251.8	257.6
	1950	246.3	246.1	246.8	248.7	253.1	260.6	266.8	269.7	276.7	281.7	282.0	283.7
	1951	291.1	291.3	292.9	299.1	302.0	297.4	289.1	291.6	286.6	289.2	290.2	283.5
	1952	290.3	292.1	291.9	287.6	291.2	289.4	297.6	291.5	292.2	296.7	295.9	297.3
	1953	300.3	296.5	294.8	295.3	294.1	294.1	287.7	289.1	288.9	291.6	285.0	269.6
	1954	265.5	267.8	252.8	250.7	248.9	256.3	252.9	253.5	248.7	248.1	241.4	236.0
	1955	251.7	260.5	269.3	271.2	284.8	288.1	287.3	291.9	304.2	313.6	313.6	310.3
Seasonal Indices	1947	105.5	105.0	106.5	104.0	99.0	98.5	92.5	92.0	96.0	99.5	102.5	99.0
	1948	103.3	103.8	105.3	103.8	98.8	98.8	91.8	92.8	98.8	100.8	102.8	98.8
	1949	101.8	102.3	104.3	103.3	99.8	99.3	91.8	93.3	100.3	101.3	103.8	98.8
	1950	100.3	101.8	103.8	102.8	100.3	100.3	92.3	94.3	100.3	101.3	103.8	98.3
	1951	99.0	101.5	103.5	103.0	101.0	101.0	93.5	94.5	100.5	101.5	103.0	98.5
	1952	98.8	101.2	103.2	103.7	102.2	101.2	94.3	93.3	100.2	100.7	102.2	98.8
	1953	97.3	100.3	103.3	104.3	101.8	101.8	94.8	96.3	100.3	100.8	101.8	97.8
	1954	97.3	98.8	101.8	103.8	100.8	102.3	95.3	98.3	100.8	100.8	101.8	97.8
	1955	95.8	99.8	100.8	103.8	100.8	102.8	95.3	98.8	100.8	101.8	101.8	97.8
Unadjusted	1947	250.1	253.1	254.3	258.3	248.7	246.2	232.1	235.9	248.8	257.4	261.0	252.9
	1948	268.8	268.8	277.4	276.8	270.9	266.8	250.5	254.9	272.8	279.4	282.0	275.5
	1949	284.6	284.4	288.4	283.4	266.7	264.6	237.5	242.9	253.9	251.3	261.4	254.5
	1950	247.0	250.5	256.2	255.7	252.9	261.4	246.3	254.3	277.5	285.4	292.7	278.9
	1951	288.2	295.7	303.1	308.1	305.0	300.4	270.3	275.6	288.0	293.5	298.9	279.2
	1952	286.8	295.6	301.2	298.2	297.6	292.9	280.6	272.0	292.8	298.8	302.4	293.7
	1953	292.2	297.4	304.5	308.0	299.4	299.4	272.7	278.4	289.8	293.9	290.1	263.7
	1954	258.3	264.6	257.4	260.2	250.9	262.2	241.0	249.2	250.7	250.1	245.7	230.8
	1955	241.1	260.0	271.5	281.5	287.1	296.2	273.8	288.4	306.6	319.2	319.2	303.5

TABLE 20. Transportation Equipment Production

(Volume Indexes 1935-39 = 100)

Description		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Seasonally adjusted	1947	229.9	229.1	226.1	225.9	233.7	238.6	245.7	246.6	256.4	256.8	248.6	238.9
	1948	230.7	223.9	238.4	237.3	229.5	227.8	212.3	230.0	232.1	231.9	246.3	249.1
	1949	229.7	237.4	242.2	251.9	250.9	247.1	248.0	250.3	245.0	245.4	234.1	243.5
	1950	254.8	252.9	236.8	236.7	247.3	264.0	278.5	256.6	273.9	276.0	284.1	289.6
	1951	304.5	313.6	329.8	306.7	314.2	301.7	300.3	319.8	319.6	318.8	331.5	321.4
	1952	334.1	324.5	326.6	363.3	366.7	372.6	357.0	392.2	399.4	408.1	422.8	427.8
	1953	418.0	442.9	430.1	441.1	447.6	446.3	452.4	424.9	448.4	440.0	402.5	437.4
	1954	415.3	420.5	373.8	382.3	360.2	332.4	332.9	327.1	310.1	307.1	327.7	342.7
	1955	323.4	331.6	341.5	371.6	380.9	383.8	382.8	335.3	326.1	330.0	348.7	340.3
Seasonal Indices	1947	95.9	100.9	104.9	105.9	102.4	99.4	94.9	90.4	98.4	99.9	105.4	101.4
	1948	94.7	97.2	104.2	103.2	101.7	102.2	96.7	91.2	103.2	104.2	101.2	100.2
	1949	95.1	98.2	103.7	104.2	101.2	105.2	99.7	89.1	104.2	103.2	97.1	99.2
	1950	96.6	102.1	105.2	106.2	103.1	106.2	101.1	87.5	102.1	100.6	94.1	95.1
	1951	98.1	104.2	105.2	108.2	104.2	106.2	99.6	87.0	100.1	99.1	95.1	93.1
	1952	98.7	104.7	107.7	110.7	105.7	105.2	98.7	86.7	97.7	97.7	94.2	92.2
	1953	101.3	104.8	112.8	112.3	108.3	105.3	99.2	87.2	91.2	94.2	91.2	92.2
	1954	102.0	105.6	113.6	113.1	109.1	106.1	100.0	87.8	86.9	91.9	90.9	92.9
	1955	102.2	105.7	113.8	113.3	109.3	106.2	100.2	88.0	87.0	91.1	90.1	93.1
Unadjusted	1947	220.5	231.2	237.2	239.2	239.3	237.2	233.2	222.9	252.3	256.5	262.0	242.2
	1948	218.5	217.6	248.4	244.9	233.4	232.8	205.3	209.8	239.5	241.6	249.3	249.6
	1949	218.4	233.1	251.2	262.5	253.9	259.9	247.3	223.0	255.3	253.3	227.3	241.6
	1950	246.1	258.2	249.1	251.4	255.0	280.4	281.6	224.5	279.7	277.7	267.3	275.4
	1951	298.7	326.8	347.0	331.8	327.4	320.4	299.1	278.2	319.9	315.9	315.3	299.2
	1952	329.8	339.8	351.7	402.2	387.6	392.0	352.4	340.0	390.2	398.7	398.3	394.4
	1953	423.4	464.2	485.1	495.4	484.8	470.0	448.8	370.5	408.9	414.5	367.1	403.3
	1954	423.6	444.1	424.6	432.4	393.0	352.7	332.9	287.2	269.5	282.2	297.9	318.4
	1955	330.5	350.5	388.6	421.0	416.3	407.6	383.6	295.1	283.7	300.6	314.2	316.8

TABLE 21. Non-Ferrous Metal Products Production

(Volume Indexes 1935-39 = 100)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	173.1	182.9	182.9	192.2
	1948	199.3	201.5	202.4	203.0
	1949	198.3	200.4	201.6	201.5
	1950	202.5	207.0	215.1	226.4
	1951	238.6	238.7	235.6	225.9
	1952	235.9	232.2	223.8	236.7
	1953	253.0	240.3	242.2	237.9
	1954	235.0	240.3	245.8	265.6
	1955	271.1	270.1	271.3	271.2
Seasonal Indices	1947	98.4	103.3	98.4	99.9
	1948	98.4	103.3	98.4	99.9
	1949	98.4	103.3	98.4	99.9
	1950	98.4	103.3	98.4	99.9
	1951	98.4	103.3	98.4	99.9
	1952	98.4	103.3	98.4	99.9
	1953	98.4	103.3	98.4	99.9
	1954	98.4	103.3	98.4	99.9
	1955	98.4	103.3	98.4	99.9
Unadjusted[1]	1947	170.3	188.9	180.0	192.0
	1948	196.1	208.1	199.2	202.8
	1949	195.1	207.0	198.4	201.3
	1950	199.3	213.8	211.7	226.2
	1951	234.8	246.6	231.8	225.7
	1952	232.1	239.9	220.2	236.5
	1953	249.0	248.2	238.3	237.7
	1954	231.2	248.2	241.9	265.3
	1955	266.8	279.0	267.0	270.9

1. Quarterly averages of monthly data.

TABLE 22. Electrical Apparatus and Supplies Production

(Volume Indexes 1935-39 = 100)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	285.4	288.7	297.8	301.7	312.1	323.6	318.8	321.8	338.9	351.1	334.3	332.9
	1948	327.0	331.0	329.9	332.3	329.4	326.0	325.9	324.2	328.8	330.2	326.6	329.1
	1949	341.3	332.3	332.4	337.0	332.4	325.9	330.8	343.8	334.3	330.3	331.0	336.2
	1950	318.4	326.6	332.7	345.0	352.9	376.0	380.0	365.7	388.0	394.4	405.6	418.1
	1951	422.2	421.3	427.6	424.8	416.2	396.0	393.0	385.1	372.2	351.2	355.0	350.0
	1952	359.3	347.5	356.9	354.5	373.9	375.6	400.1	415.7	416.1	426.5	442.7	447.6
	1953	450.5	456.1	456.5	479.4	486.7	504.2	497.6	484.3	500.9	505.4	507.1	507.5
	1954	501.2	471.8	471.8	467.7	457.3	472.5	426.5	448.2	489.1	499.8	506.7	506.5
	1955	491.7	492.1	507.7	505.4	504.2	503.7	483.7	545.4	615.2	614.5	585.5	552.0
Seasonal Indices	1947	104.0	106.0	103.0	100.5	99.5	98.0	94.5	96.5	94.5	96.0	105.0	102.5
	1948	101.2	103.7	100.7	99.8	99.3	98.3	92.3	97.3	99.8	100.2	105.2	102.2
	1949	98.5	101.0	100.0	99.5	98.5	99.0	93.1	96.6	102.0	104.0	105.5	102.0
	1950	97.0	99.5	99.0	99.5	99.5	100.5	94.5	97.5	103.0	104.5	105.5	100.5
	1951	96.2	98.7	99.2	99.7	99.7	101.3	95.7	96.7	102.3	105.3	104.8	100.3
	1952	97.8	100.3	99.8	100.8	99.3	101.3	93.8	96.3	102.3	104.8	104.3	98.8
	1953	97.1	100.6	99.6	100.6	98.1	97.1	91.6	95.1	102.6	104.6	108.6	104.6
	1954	99.3	103.3	99.8	97.3	94.3	93.3	90.4	94.8	102.3	106.2	111.2	107.7
	1955	101.0	106.0	100.5	95.5	92.0	91.0	89.0	95.5	103.0	106.0	112.0	108.0
Unadjusted	1947	296.8	306.0	306.7	303.2	310.5	317.1	301.3	310.5	320.3	337.1	351.0	341.2
	1948	330.9	343.2	332.2	331.6	327.1	320.5	300.8	315.4	328.1	330.9	343.6	336.3
	1949	336.2	335.6	332.4	335.3	327.4	322.6	308.0	332.1	341.0	343.5	349.2	342.9
	1950	308.8	325.0	329.4	343.3	351.1	377.9	359.1	356.6	399.6	412.1	427.9	420.2
	1951	406.2	415.8	424.2	423.5	415.0	401.1	376.1	372.4	380.8	369.8	372.0	351.1
	1952	351.4	348.5	356.2	357.3	371.3	380.5	375.3	400.3	425.7	447.0	461.7	442.2
	1953	437.4	458.8	454.7	482.3	477.5	489.6	455.8	460.6	513.9	528.6	550.7	530.8
	1954	497.7	487.4	470.9	455.1	431.2	440.8	385.6	424.9	500.3	530.8	563.5	545.5
	1955	496.6	521.6	510.2	482.7	463.9	458.4	430.5	520.9	633.7	651.4	655.8	596.2

TABLE 23. Non-Metallic Mineral Products Production

(Volume Indexes 1935-39 = 100)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	263.5	270.5	269.6	275.0
	1948	281.0	278.5	283.3	291.8
	1949	283.4	284.0	284.2	286.1
	1950	283.9	309.4	325.9	336.6
	1951	346.3	355.3	340.2	326.5
	1952	324.7	339.0	351.6	367.4
	1953	391.8	399.2	394.2	410.5
	1954	400.0	412.4	409.3	415.1
	1955	423.8	463.5	494.5	496.7
Seasonal Indices	1947	93.1	102.1	104.2	100.6
	1948	93.1	102.1	104.2	100.6
	1949	93.1	102.1	104.2	100.6
	1950	93.1	102.1	104.2	100.6
	1951	93.1	102.1	104.2	100.6
	1952	93.1	102.1	104.2	100.6
	1953	92.0	100.9	107.7	99.4
	1954	88.8	101.9	108.8	100.5
	1955	88.8	101.9	108.8	100.5
Unadjusted[1]	1947	245.3	276.2	280.9	276.6
	1948	261.6	284.3	295.2	293.6
	1949	263.8	290.0	296.1	287.8
	1950	264.3	315.9	339.6	338.6
	1951	322.4	362.8	354.5	328.5
	1952	302.3	346.1	366.4	369.6
	1953	360.5	402.8	424.6	408.0
	1954	355.2	420.2	445.3	417.2
	1955	376.3	472.3	538.0	499.2

1. Quarterly averages of monthly data.

TABLE 24. Electricity and Gas Production

(Volume Indexes 1935-39 = 100)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	171.4	176.5	169.5	166.1	164.0	166.9	170.4	169.1	169.0	173.5	166.1	169.6
	1948	168.7	167.6	168.3	161.8	171.6	166.1	167.7	173.0	171.0	170.7	167.8	169.3
	1949	166.6	168.8	169.1	184.7	178.6	178.0	172.5	176.2	179.2	178.9	179.2	180.9
	1950	181.6	185.0	179.4	182.4	184.5	191.1	193.8	193.6	196.6	196.3	202.2	205.9
	1951	209.2	209.1	215.5	209.1	214.1	211.7	215.7	212.2	211.3	219.0	222.5	220.7
	1952	227.9	225.6	221.8	221.8	224.9	225.0	226.0	227.4	236.8	239.4	234.8	236.2
	1953	240.7	244.6	244.9	251.2	243.9	238.6	238.9	237.4	242.5	238.9	239.6	240.8
	1954	239.5	240.5	242.8	247.3	250.5	259.1	255.6	254.7	261.2	264.4	268.0	273.9
	1955	271.3	271.0	273.4	271.9	275.0	273.0	272.2	279.8	278.5	271.8	287.3	284.1
Seasonal Indices	1947	100.0	100.6	103.1	106.1	105.1	102.6	96.5	94.0	96.5	98.0	100.0	97.5
	1948	100.0	100.7	103.2	106.2	105.2	102.7	96.0	94.1	96.2	98.2	100.2	97.7
	1949	99.7	100.7	103.2	106.2	105.2	102.7	95.2	94.2	95.2	98.2	100.2	99.2
	1950	100.0	101.2	103.2	106.2	105.2	102.2	94.7	94.2	94.7	98.2	100.2	100.2
	1951	100.7	102.7	103.2	106.2	104.7	100.7	93.7	94.2	94.2	98.2	100.2	101.7
	1952	101.7	103.7	103.2	106.2	103.2	99.7	93.0	94.2	94.2	98.2	100.2	102.2
	1953	102.5	104.0	102.5	106.0	102.5	98.8	93.5	92.0	93.5	99.5	102.0	103.0
	1954	102.7	104.2	103.2	106.2	102.2	97.7	92.2	91.7	93.7	99.7	103.2	103.2
	1955	102.7	104.2	103.2	106.2	102.2	97.7	91.7	91.2	94.2	100.2	103.2	103.2
Unadjusted	1947	171.4	177.6	174.8	176.2	172.4	171.2	164.4	159.0	163.1	170.0	166.1	165.4
	1948	168.7	168.8	173.7	171.8	180.5	170.6	161.0	162.8	164.5	167.6	168.1	165.4
	1949	166.1	170.0	174.5	196.1	187.9	182.8	164.2	166.0	170.6	175.7	179.6	179.5
	1950	181.6	187.2	185.1	193.7	194.1	195.3	183.5	182.4	186.2	192.8	202.6	206.3
	1951	210.7	214.7	222.4	222.1	224.2	213.2	202.1	199.9	199.0	215.1	222.9	224.5
	1952	231.8	233.9	228.9	235.5	232.1	224.3	210.2	214.2	223.1	235.1	235.3	241.4
	1953	246.7	254.4	251.0	266.3	250.0	235.7	223.4	218.4	226.7	237.7	244.4	248.0
	1954	246.0	250.6	250.6	262.6	256.0	253.1	235.7	233.6	244.7	263.6	276.6	282.7
	1955	278.6	282.4	282.2	288.8	281.1	266.7	249.6	255.2	262.3	272.3	296.5	293.2

TABLE 25. Industrial Composite Employment

(1949=100)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	92.4	95.1	94.6	95.1	95.1	95.1	96.2	96.4	95.8	96.1	97.5	98.4
	1948	98.8	99.7	99.5	98.2	98.2	99.2	100.1	100.5	100.0	100.8	100.5	100.8
	1949	100.2	100.5	99.6	99.0	99.7	100.3	100.8	100.3	100.0	99.7	100.1	100.0
	1950	99.1	98.7	99.5	99.2	99.6	101.4	102.3	102.3	102.2	104.0	104.1	105.2
	1951	106.1	107.4	107.4	108.0	109.5	110.2	110.0	109.4	108.9	109.6	109.5	109.6
	1952	109.7	111.1	111.3	111.2	110.3	111.8	111.3	112.2	112.2	112.2	113.1	113.0
	1953	113.3	114.1	113.8	113.8	114.7	113.9	114.1	113.7	113.5	112.7	112.3	111.1
	1954	110.2	110.7	110.2	109.2	109.8	110.4	110.9	110.4	109.9	109.4	109.0	109.2
	1955	109.4	109.4	109.2	109.3	111.1	113.2	114.5	114.2	115.2	114.3	114.5	114.8
Seasonal Indices	1947	99.8	96.8	97.3	96.8	96.3	98.8	100.2	101.7	102.7	103.2	103.2	103.2
	1948	99.8	96.8	96.8	96.8	96.8	98.8	100.7	101.7	102.7	102.7	103.2	103.2
	1949	99.8	96.8	96.8	96.8	96.8	98.8	100.8	101.8	102.8	103.3	102.8	102.8
	1950	99.9	96.9	95.9	96.9	96.9	98.9	100.9	101.9	102.9	102.9	103.4	102.9
	1951	99.8	96.9	96.9	96.9	96.9	98.8	100.8	101.8	102.8	102.8	102.8	102.8
	1952	99.7	96.7	96.7	96.7	97.2	98.7	100.7	101.7	102.7	103.7	102.7	102.7
	1953	99.7	96.7	96.7	96.7	96.7	98.7	100.7	101.7	102.7	103.7	103.2	102.7
	1954	99.7	96.7	96.7	96.7	96.7	98.7	100.7	101.7	102.7	103.7	103.2	102.7
	1955	99.7	96.7	96.7	96.7	96.7	98.7	100.7	101.7	102.7	103.7	103.2	102.7
Unadjusted[1]	1947	92.2	92.1	92.0	92.1	91.6	94.0	96.4	98.0	98.4	99.2	100.6	101.5
	1948	98.6	96.5	96.3	95.1	95.1	98.0	100.8	102.2	102.7	103.5	103.7	104.0
	1949	100.0	97.3	96.4	95.8	96.5	99.1	101.6	102.1	102.8	103.0	102.9	102.8
	1950	99.0	95.6	95.4	96.1	96.5	100.3	103.2	104.2	105.2	107.0	107.6	108.3
	1951	105.9	104.1	104.1	104.7	106.1	108.9	110.9	111.4	112.0	112.7	112.6	112.7
	1952	109.4	107.4	107.6	107.5	107.2	110.3	112.1	114.1	115.2	116.4	116.2	116.1
	1953	113.0	110.3	110.0	110.0	110.9	112.4	114.9	115.6	116.6	116.9	115.9	114.1
	1954	109.9	107.0	106.0	105.6	106.2	109.0	111.7	112.3	112.9	113.4	112.5	112.1
	1955	109.1	105.8	105.6	105.7	107.4	111.7	115.3	116.1	118.3	118.5	118.2	117.9

1. Compiled from data which relate to the last pay period of the preceding month.

TABLE 26. Total Manufacturing Employment

(1949=100)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	94.3	96.2	99.1	96.9	97.2	96.9	97.6	98.9	98.5	98.3	99.3	99.1
	1948	99.3	99.6	101.0	100.1	99.9	99.8	100.6	100.6	100.9	100.7	100.4	100.5
	1949	100.3	100.4	100.7	100.2	100.3	100.3	100.3	99.7	100.3	99.8	99.3	98.8
	1950	98.5	98.6	99.2	98.5	99.3	99.9	100.8	101.4	102.0	103.5	104.2	104.7
	1951	105.4	107.2	107.9	108.3	109.2	109.7	109.8	109.8	108.7	108.6	107.7	107.3
	1952	106.4	107.9	108.9	108.3	108.9	109.4	108.6	109.5	110.9	112.3	113.1	113.9
	1953	113.8	114.8	114.8	114.8	114.9	114.5	114.4	114.8	114.0	113.0	112.6	111.5
	1954	110.7	111.2	110.2	109.3	108.8	108.6	107.9	108.0	106.4	105.4	105.3	105.9
	1955	105.6	106.4	107.7	108.1	108.8	108.8	111.0	111.4	111.9	111.1	112.2	113.0
Seasonal Indices (Implicit)	1947	98.6	98.5	95.9	98.3	98.4	99.6	100.3	99.9	100.9	101.2	101.0	101.2
	1948	98.5	98.5	98.0	98.5	98.6	99.5	100.5	100.1	101.3	101.8	101.3	101.0
	1949	98.6	98.4	98.3	98.8	98.8	99.6	100.7	100.8	101.5	101.8	101.3	100.8
	1950	98.7	98.3	98.3	99.3	98.8	99.8	100.7	100.7	101.8	101.9	101.2	100.6
	1951	98.4	97.9	98.1	99.1	98.9	99.5	100.4	100.5	101.5	101.7	100.7	100.2
	1952	98.1	97.6	97.8	98.8	98.5	99.2	100.2	100.7	101.7	101.7	100.4	99.6
	1953	97.9	97.5	98.2	98.3	98.4	99.0	100.3	99.7	101.4	101.9	100.4	99.5
	1954	97.6	97.4	98.3	98.7	98.6	99.2	100.8	100.0	101.8	102.6	100.9	99.5
	1955	97.7	97.4	98.1	98.5	98.6	100.5	100.5	100.0	101.9	102.1	100.5	99.4
Unadjusted[1]	1947	93.0	94.8	95.0	95.3	95.6	96.5	97.9	98.8	99.4	99.5	100.3	100.3
	1948	97.8	98.1	99.0	98.6	98.5	99.3	101.1	100.7	102.2	102.5	101.7	101.5
	1949	98.9	98.8	99.0	99.0	99.1	99.9	101.0	100.5	101.8	101.6	100.6	99.6
	1950	97.2	96.9	97.5	97.8	98.1	99.7	101.5	102.1	103.8	105.5	105.4	105.3
	1951	103.7	104.9	105.9	107.3	108.0	109.2	110.2	110.3	110.3	110.4	108.5	107.5
	1952	104.4	105.3	106.5	107.0	107.3	108.5	108.8	110.3	112.8	114.2	113.6	113.5
	1953	111.4	111.9	112.7	112.9	113.1	113.4	114.7	114.4	115.6	115.2	113.1	110.9
	1954	108.0	108.3	108.3	107.9	107.3	107.7	108.8	108.0	108.3	108.1	106.3	105.4
	1955	103.2	103.6	105.7	106.5	107.3	109.3	111.6	111.4	114.0	113.4	112.8	112.3

1. Compiled from data which relate to the last pay period of the preceding month.

TABLE 27. Durable Manufacturing Employment

(1949 = 100)

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	94.3	96.8	101.2	96.9	97.8	97.1	98.8	99.3	99.7	99.7	100.9	100.7
	1948	100.6	100.7	101.6	101.5	101.1	100.5	101.9	101.2	100.9	100.9	101.6	101.9
	1949	101.0	101.7	100.7	100.8	100.5	100.2	100.3	99.4	99.1	98.8	99.3	98.2
	1950	97.6	97.6	97.8	97.0	97.9	98.9	100.8	102.0	103.5	104.7	106.2	106.5
	1951	107.7	110.6	110.9	112.1	113.2	114.0	115.0	114.6	113.9	113.7	113.8	113.4
	1952	112.7	114.4	115.0	115.2	116.2	116.7	115.4	116.7	118.7	120.5	121.7	123.0
	1953	123.5	125.0	124.8	124.5	125.0	124.5	123.6	123.6	124.0	122.6	122.2	119.9
	1954	120.9	120.8	119.4	117.6	117.1	116.0	114.9	113.2	111.4	110.9	109.6	109.3
	1955	110.9	111.7	114.6	114.9	116.0	117.0	118.6	118.3	119.0	118.6	119.6	119.9
Seasonal Indices	1947	98.4	97.9	98.9	99.9	99.4	101.4	100.9	100.9	100.9	100.9	99.9	100.4
	1948	99.0	98.0	99.0	99.9	99.9	101.0	101.0	100.4	101.0	101.0	99.9	99.9
	1949	98.8	97.8	99.3	99.9	99.9	100.9	100.9	100.9	100.9	100.9	99.9	99.9
	1950	99.0	98.0	98.9	99.9	99.4	101.0	101.0	101.0	101.0	101.0	99.9	99.9
	1951	98.9	97.9	98.9	99.9	99.9	100.8	100.8	100.8	101.4	100.8	99.9	99.9
	1952	98.9	97.9	98.9	99.9	99.9	100.9	100.9	100.9	100.9	100.9	99.9	99.9
	1953	98.6	98.1	99.1	100.1	99.7	100.7	101.9	101.1	100.7	101.1	100.1	100.1
	1954	98.1	98.1	99.0	100.1	99.7	100.6	101.1	101.1	100.9	100.7	100.1	100.1
	1955	98.0	98.0	98.9	100.0	100.0	101.0	101.0	101.0	101.0	100.8	100.0	100.0
Unadjusted[1]	1947	92.8	94.8	100.1	96.8	97.2	98.5	99.7	100.2	100.6	100.6	100.8	101.1
	1948	99.6	98.7	100.6	101.4	101.0	101.5	102.9	101.6	101.9	101.9	101.5	101.8
	1949	99.8	99.5	100.0	100.7	100.4	101.1	101.2	100.3	100.0	99.7	99.2	98.1
	1950	96.6	95.6	96.7	96.9	97.3	99.9	101.8	103.0	104.5	105.7	106.1	106.4
	1951	106.5	108.3	109.7	112.0	113.1	114.9	115.9	115.5	115.5	114.6	113.7	113.3
	1952	111.5	112.0	113.7	115.1	116.1	117.7	116.4	117.8	119.8	121.6	121.6	122.9
	1953	121.8	122.6	123.7	124.6	124.6	125.4	125.9	125.0	124.9	123.9	122.3	120.0
	1954	118.6	118.5	118.2	117.7	116.7	116.7	116.2	114.4	112.4	111.7	109.7	109.4
	1955	108.7	109.5	113.3	114.9	116.0	118.2	119.8	119.5	120.2	119.5	119.6	119.9

1. Compiled from data which relate to the last pay period of the preceding month.

TABLE 28. Non-Durable Manufacturing Employment

(1949 = 100)

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	94.3	95.5	96.9	96.8	96.5	96.7	96.3	98.5	97.2	96.9	97.7	97.5
	1948	98.0	98.4	100.4	98.6	98.6	99.1	99.3	99.9	100.9	100.4	99.1	99.0
	1949	99.5	99.1	100.6	99.5	100.0	100.4	100.3	100.0	101.4	100.7	99.3	99.3
	1950	99.3	99.6	100.6	99.9	100.7	100.9	100.7	100.7	100.5	102.2	102.1	102.8
	1951	103.0	103.7	104.9	104.4	105.2	105.4	104.5	104.9	103.4	103.4	101.6	101.1
	1952	100.1	101.4	102.7	101.4	101.6	102.1	101.7	102.3	103.1	104.1	104.5	104.8
	1953	104.2	104.8	104.9	105.1	105.0	104.6	104.0	104.2	104.0	103.6	103.1	103.1
	1954	100.6	101.9	101.3	101.3	100.8	101.4	101.1	101.4	101.5	101.2	101.1	102.7
	1955	100.4	101.2	101.0	101.4	101.7	102.7	103.4	103.3	104.8	103.8	104.8	106.2
Seasonal Indices	1947	99.1	99.6	97.6	97.6	98.1	98.6	100.6	99.6	101.6	102.2	102.7	102.7
	1948	98.6	99.6	97.6	98.1	98.1	98.6	100.6	100.1	101.5	102.5	102.6	102.1
	1949	98.6	99.1	97.6	98.1	98.1	98.6	100.6	100.6	102.1	102.6	102.6	101.6
	1950	98.5	98.5	97.5	98.5	98.0	98.5	100.5	100.5	102.5	103.0	102.5	101.5
	1951	98.2	98.2	97.7	98.7	98.2	98.7	100.7	100.7	102.2	103.2	102.2	101.2
	1952	98.0	98.0	97.5	98.5	98.0	98.5	100.5	101.5	103.5	103.5	102.0	100.5
	1953	98.0	97.6	98.0	98.0	98.0	98.5	101.0	101.0	103.5	104.0	102.0	100.0
	1954	98.3	97.6	98.3	98.1	98.3	98.5	101.3	101.1	103.4	103.8	102.3	99.3
	1955	98.1	97.4	98.1	97.9	98.1	98.9	101.1	101.1	103.6	104.1	102.0	99.6
Unadjusted[1]	1947	93.5	95.1	94.6	94.5	94.7	95.3	96.9	98.1	98.8	99.0	100.3	100.1
	1948	96.6	98.0	98.0	96.7	96.7	97.7	99.9	100.0	102.4	102.9	101.7	101.1
	1949	98.1	98.2	98.2	97.6	98.1	99.0	100.9	100.6	103.5	103.3	101.9	100.9
	1950	97.8	98.1	98.1	98.4	98.7	99.4	101.2	101.2	103.0	105.3	104.7	104.3
	1951	101.1	101.8	102.5	103.0	103.3	104.0	105.2	105.6	105.7	106.7	103.8	102.3
	1952	98.1	99.4	100.1	99.9	99.6	100.6	102.2	103.8	106.7	107.7	106.6	105.3
	1953	102.1	102.3	102.8	103.0	102.9	103.0	105.0	105.2	107.6	107.7	105.2	103.1
	1954	98.9	99.5	99.6	99.4	99.1	99.9	102.4	102.5	104.9	105.0	103.4	102.0
	1955	98.5	98.6	99.1	99.3	99.8	101.6	104.5	104.4	108.6	108.1	106.9	105.8

1. Compiled from data which relate to the last pay period of the preceding month.

TABLE 29. Construction — Buildings and Structures Employment

(1949 = 100)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	71.2	74.5	80.5	82.3	81.2	80.9	80.8	83.3	85.3	86.7	86.4	86.4
	1948	86.9	86.8	88.6	87.3	88.8	91.1	92.3	92.6	93.4	93.9	94.5	97.3
	1949	96.7	97.9	98.4	97.6	98.6	97.5	100.6	100.3	101.9	102.7	102.0	103.3
	1950	101.7	98.9	100.0	102.3	103.0	105.8	107.3	106.5	106.7	106.2	106.3	108.6
	1951	109.9	112.9	114.5	114.1	116.0	118.2	116.4	113.3	117.5	118.1	118.7	120.2
	1952	118.8	124.9	126.5	129.5	128.6	125.9	125.9	125.9	127.4	130.8	129.8	129.5
	1953	130.0	128.0	126.5	125.6	124.0	124.3	131.8	131.5	132.4	130.4	126.1	126.0
	1954	124.8	118.0	119.7	119.7	116.5	115.7	115.6	113.3	113.9	112.8	111.2	113.3
	1955	113.8	113.4	111.6	111.6	114.4	117.5	119.2	117.9	120.9	121.2	122.1	119.8
Seasonal Indices	1947	95.0	91.0	86.0	90.0	92.0	98.5	105.0	107.9	108.9	108.9	110.9	105.9
	1948	94.4	89.9	85.9	88.9	91.9	98.9	104.9	108.4	109.9	109.9	111.4	105.9
	1949	93.9	89.4	85.9	88.4	91.9	98.9	104.9	108.9	110.9	110.4	110.9	105.9
	1950	92.9	88.9	85.9	87.9	91.9	98.9	104.9	109.4	111.9	110.9	110.4	105.9
	1951	92.8	87.8	85.8	87.3	91.8	98.8	104.7	110.7	112.2	111.7	110.7	105.7
	1952	91.8	87.3	85.8	86.8	91.8	98.8	104.7	110.2	113.2	112.2	111.7	105.7
	1953	91.4	86.9	83.1	84.4	91.9	98.9	104.8	111.8	113.8	113.6	113.3	105.8
	1954	91.6	86.3	83.3	83.3	90.9	98.9	105.4	112.4	114.5	114.5	112.4	106.4
	1955	92.0	85.7	83.4	83.6	90.1	99.1	105.6	112.6	114.6	114.6	112.1	106.6
Unadjusted[1]	1947	67.6	67.8	69.2	74.1	74.7	79.7	84.8	89.9	92.9	94.4	95.8	91.5
	1948	82.0	78.0	76.1	77.0	81.6	90.1	96.8	100.4	102.7	103.2	105.3	103.0
	1949	90.8	87.5	84.5	86.3	90.6	96.4	105.5	109.2	113.0	113.4	113.1	109.4
	1950	94.5	87.9	85.9	89.9	94.7	104.6	112.6	116.5	119.4	117.8	117.3	115.0
	1951	102.0	99.1	98.2	99.6	106.5	116.8	121.9	125.4	131.8	131.9	131.4	127.0
	1952	109.1	109.0	108.5	112.4	118.1	124.4	131.8	138.7	144.2	146.8	145.0	136.9
	1953	118.8	111.2	105.1	106.0	114.0	122.9	138.1	147.0	150.7	148.1	142.9	133.3
	1954	114.3	101.8	99.7	99.7	105.9	114.4	121.8	127.3	130.4	129.2	125.0	120.6
	1955	104.7	97.2	93.1	93.3	103.1	116.4	125.9	132.8	138.6	138.9	136.9	127.7

1. Compiled from data which relate to the last pay period of the preceding month.

TABLE 30. Mining Employment

(1949 = 100)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	85.5	89.0	84.2	84.1	83.7	87.9	90.2	91.6	90.5	90.8	91.3	92.0
	1948	93.2	86.8	98.4	99.2	100.6	97.9	97.3	96.8	97.9	99.2	99.7	99.7
	1949	98.8	102.0	98.8	98.6	98.9	98.8	97.1	100.5	100.8	102.0	102.4	101.6
	1950	101.3	102.2	104.2	104.4	104.9	105.4	105.7	106.5	106.4	107.4	107.8	108.8
	1951	108.6	108.4	109.4	109.9	109.7	109.8	110.1	111.7	110.6	111.8	113.5	113.7
	1952	114.0	114.8	116.0	117.1	116.8	117.6	117.0	117.8	117.7	117.6	118.3	116.5
	1953	116.9	115.8	113.6	113.5	113.3	112.3	112.2	111.6	110.9	107.9	108.0	104.8
	1954	105.6	107.2	108.0	109.5	109.1	109.4	110.2	110.6	110.9	111.8	113.1	112.1
	1955	112.7	112.2	109.3	110.9	112.4	112.8	114.5	113.1	115.1	115.3	116.4	115.6
Seasonal Indices	1947	101.0	102.0	90.4	92.4	93.4	100.5	104.0	104.0	103.5	102.0	103.0	104.0
	1948	100.3	98.8	93.8	95.3	95.8	99.8	102.8	103.8	103.8	101.3	101.8	102.3
	1949	100.1	98.1	96.6	97.1	97.1	99.6	102.6	102.1	103.1	101.1	101.1	101.6
	1950	99.6	99.1	97.6	98.1	97.6	99.6	102.1	101.6	101.6	101.1	101.1	100.6
	1951	99.6	99.6	98.5	98.1	98.5	99.6	101.5	101.0	101.5	101.0	100.5	100.5
	1952	99.1	99.6	99.6	98.1	98.5	99.6	101.0	101.5	101.5	101.0	100.0	100.5
	1953	98.3	98.8	99.8	98.6	98.8	99.8	101.3	102.8	101.3	100.8	99.8	100.3
	1954	98.1	98.8	100.5	98.8	97.8	99.4	101.2	102.7	101.7	100.7	99.8	100.5
	1955	98.3	98.2	100.6	99.2	97.0	99.2	100.9	103.0	102.0	101.0	100.2	100.8
Unadjusted[1]	1947	86.4	90.8	76.1	77.7	78.2	88.3	93.8	95.3	93.7	92.6	94.0	95.7
	1948	93.5	85.8	92.3	94.5	96.4	97.7	100.0	100.5	101.6	100.5	101.5	102.0
	1949	98.9	100.1	95.4	95.7	96.0	98.4	99.6	102.6	103.9	103.1	103.5	103.2
	1950	100.9	101.3	101.7	102.4	102.4	105.0	107.9	108.2	108.1	108.6	109.0	109.5
	1951	108.2	108.0	107.8	107.8	108.1	109.4	111.8	112.8	112.3	112.9	114.1	114.3
	1952	113.0	114.3	115.5	114.9	115.0	117.1	118.2	119.6	119.5	118.8	118.3	117.1
	1953	114.9	114.4	113.4	111.9	111.9	112.1	113.7	114.7	112.3	108.8	107.8	105.1
	1954	103.6	105.9	108.5	108.2	106.7	108.7	111.5	113.6	112.8	112.6	112.9	112.7
	1955	110.8	110.2	110.0	110.0	109.0	111.9	115.5	116.5	117.4	116.5	116.6	116.5

1. Compiled from data which relate to the last pay period of the preceding month.

TABLE 31. Civilian Labour Force

(thousands)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	4,890	4,920	4,968	4,983
	1948	5,007	5,000	4,970	4,981
	1949	5,000	5,057	5,101	5,182
	1950	5,162	5,162	5,158	5,169
	1951	5,210	5,205	5,217	5,242
	1952	5,277	5,314	5,313	5,352
	1953	5,364	5,375	5,428	5,409
	1954	5,398	5,418	5,439	5,476
	1955	5,507	5,543	5,604	5,620
Seasonal Indices	1947	96.7	100.7	103.0	99.7
	1948	96.8	100.7	102.8	99.6
	1949	97.4	100.7	102.2	99.5
	1950	97.8	100.7	102.1	99.4
	1951	97.9	100.6	102.1	99.3
	1952	98.0	100.4	102.3	99.4
	1953	97.9	100.1	102.6	99.3
	1954	97.9	99.9	102.8	99.3
	1955	97.9	99.9	103.0	99.3
Unadjusted[1]	1947	4,729	4,954	5,117	4,968
	1948	4,847	5,035	5,109	4,961
	1949	4,870	5,092	5,213	5,156
	1950	5,048	5,198	5,266	5,138
	1951	5,101	5,236	5,327	5,205
	1952	5,171	5,335	5,435	5,320
	1953	5,251	5,380	5,569	5,371
	1954	5,285	5,413	5,591	5,438
	1955	5,391	5,537	5,772	5,581

1. Middle month in each quarter.

TABLE 32. Civilian Labour Force — Non-Agricultural

(thousands)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	3,792	3,803	3,829	3,846
	1948	3,872	3,862	3,883	3,934
	1949	3,913	3,984	4,017	4,080
	1950	4,110	4,138	4,156	4,158
	1951	4,266	4,253	4,272	4,301
	1952	4,349	4,419	4,429	4,486
	1953	4,489	4,501	4,578	4,546
	1954	4,535	4,551	4,550	4,558
	1955	4,674	4,688	4,780	4,817
Seasonal Indices	1947	100.0	99.4	99.5	101.1
	1948	100.0	99.6	99.4	101.0
	1949	100.1	99.8	99.3	100.8
	1950	100.1	99.8	99.4	100.6
	1951	100.0	99.8	99.7	100.6
	1952	99.8	99.7	99.8	100.6
	1953	99.6	99.5	100.3	100.6
	1954	99.4	99.3	100.5	100.7
	1955	99.5	99.4	100.6	100.6
Unadjusted[1]	1947	3,792	3,780	3,810	3,888
	1948	3,872	3,847	3,860	3,973
	1949	3,917	3,976	3,989	4,113
	1950	4,114	4,130	4,131	4,183
	1951	4,266	4,244	4,259	4,327
	1952	4,340	4,406	4,420	4,513
	1953	4,471	4,478	4,592	4,573
	1954	4,508	4,519	4,573	4,590
	1955	4,651	4,660	4,809	4,846

1. Middle month in each quarter.

TABLE 33. Persons With Jobs — Non-Agricultural

(thousands)

		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	3,708	3,701	3,727	3,753
	1948	3,784	3,772	3,784	3,820
	1949	3,798	3,869	3,879	3,930
	1950	3,897	3,974	4,016	4,033
	1951	4,181	4,147	4,156	4,196
	1952	4,222	4,298	4,298	4,359
	1953	4,386	4,377	4,452	4,375
	1954	4,302	4,315	4,344	4,326
	1955	4,383	4,460	4,621	4,631
Seasonal Indices	1947	98.6	99.7	100.3	101.4
	1948	98.4	99.9	100.3	101.4
	1949	98.1	100.2	100.4	101.2
	1950	98.0	100.4	100.4	101.0
	1951	98.1	100.4	100.7	100.9
	1952	98.0	100.1	100.9	101.0
	1953	97.9	99.8	101.1	101.1
	1954	97.7	99.8	101.3	101.3
	1955	97.7	99.8	101.3	101.3
Unadjusted[1]	1947	3,656	3,690	3,738	3,806
	1948	3,723	3,768	3,795	3,873
	1949	3,726	3,877	3,895	3,977
	1950	3,819	3,990	4,032	4,073
	1951	4,102	4,164	4,185	4,234
	1952	4,138	4,302	4,337	4,403
	1953	4,294	4,368	4,501	4,423
	1954	4,203	4,306	4,400	4,382
	1955	4,282	4,451	4,681	4,691

1. Middle month in each quarter.

TABLE 34. Persons With Jobs — Construction

(thousands)

		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	242	244	254	272
	1948	278	280	291	302
	1949	309	335	328	311
	1950	315	331	344	346
	1951	355	349	353	349
	1952	353	356	357	348
	1953	350	356	362	357
	1954	329	336	339	343
	1955	364	359	374	382
Seasonal Indices	1947	77.8	105.0	112.0	105.0
	1948	79.1	105.2	110.5	105.2
	1949	81.0	104.2	109.6	105.0
	1950	82.5	102.9	109.6	104.9
	1951	84.0	101.1	109.9	104.9
	1952	83.4	99.9	111.9	104.9
	1953	82.0	99.8	113.1	105.1
	1954	79.9	99.9	115.1	105.1
	1955	79.3	99.9	115.4	105.4
Unadjusted[1]	1947	188	256	285	286
	1948	220	295	322	318
	1949	250	349	359	327
	1950	260	341	377	363
	1951	298	353	388	366
	1952	294	356	399	365
	1953	287	355	409	375
	1954	263	336	390	361
	1955	289	359	432	403

1. Middle month in each quarter.

TABLE 35. Paid Workers – Non-Agricultural

(thousands)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted	1947	3,164	3,152	3,169	3,185
	1948	3,223	3,231	3,252	3,275
	1949	3,254	3,323	3,341	3,378
	1950	3,347	3,415	3,458	3,500
	1951	3,627	3,611	3,636	3,666
	1952	3,708	3,786	3,784	3,820
	1953	3,812	3,849	3,917	3,856
	1954	3,774	3,795	3,826	3,826
	1955	3,839	3,955	4,120	4,115
Seasonal Indices	1947	98.1	99.6	100.5	101.8
	1948	97.9	99.8	100.4	101.8
	1949	97.8	100.1	100.4	101.6
	1950	97.9	100.4	100.5	101.3
	1951	98.0	100.4	100.6	101.1
	1952	98.0	100.0	100.8	101.0
	1953	98.1	99.7	101.0	101.1
	1954	98.1	99.5	101.1	101.3
	1955	98.1	99.5	101.1	101.3
Unadjusted[1]	1947	3,104	3,139	3,185	3,242
	1948	3,155	3,225	3,265	3,334
	1949	3,182	3,326	3,354	3,432
	1950	3,277	3,429	3,475	3,546
	1951	3,554	3,625	3,658	3,706
	1952	3,634	3,786	3,814	3,858
	1953	3,740	3,837	3,956	3,898
	1954	3,702	3,776	3,868	3,876
	1955	3,766	3,935	4,165	4,168

1. Middle month in each quarter.

TABLE 36. Without Jobs and Seeking Work

(Thousands)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947												
	1948												
	1949												
	1950												
	1951												
	1952											128	129
	1953	131	120	115	122	132	129	135	147	140	164	174	188
	1954	197	208	211	223	247	264	254	276	279	264	252	245
	1955	253	250	263	238	236	224	220	208	230	209	195	198
Seasonal Indices	1947												
	1948												
	1949												
	1950												
	1951												
	1952											89.3	102.5
	1953	144.1	151.0	151.0	136.4	87.1	70.5	67.5	63.4	60.7	68.5	88.1	102.0
	1954	143.7	151.3	151.8	137.2	88.4	70.4	67.8	63.3	60.3	68.3	85.4	101.5
	1955	143.3	151.8	152.3	137.3	90.2	70.1	68.1	63.1	60.1	68.1	83.2	101.0
Unadjusted[1]	1947												
	1948												
	1949												
	1950												
	1951												
	1952											114	132
	1953	189	181	174	167	115	91	91	93	85	112	153	192
	1954	283	315	321	306	218	186	172	175	168	180	215	248
	1955	363	379	401	327	213	157	150	131	138	142	162	200

1. This series became available on a monthly basis as of November 1952. Prior to this date only quarterly surveys were available. To obtain an unadjusted series that is sufficiently long for developing a seasonal pattern, interpolation between these quarterly survey dates was made on the basis of the Live Applicants for Employment series.

TABLE 37. Live Applications for Employment

(thousands)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947												
	1948												
	1949	177	185	159	155	169	189	210	222	231	246	252	254
	1950	254	261	275	299	283	270	240	247	220	218	213	203
	1951	201	199	187	175	173	189	200	210	225	235	239	229
	1952	239	240	246	257	273	271	274	261	245	224	220	255
	1953	255	256	257	251	247	253	262	276	297	314	355	350
	1954	352	358	361	376	386	407	414	430	414	403	384	379
	1955	391	401	398	380	346	335	331	321	312	317	305	324
Seasonal Indices	1947												
	1948												
	1949	145.6	141.6	155.6	131.7	91.8	77.8	66.8	61.8	61.8	69.8	87.8	107.7
	1950	147.9	143.9	155.9	129.9	89.9	75.9	65.9	61.9	60.9	67.9	87.9	111.0
	1951	149.9	149.9	155.9	124.9	87.9	73.9	65.4	60.9	59.0	66.9	87.9	117.4
	1952	151.8	154.8	156.8	120.7	82.4	72.4	64.3	59.8	58.3	66.4	88.5	123.7
	1953	153.6	157.6	157.6	119.2	81.9	71.2	62.7	58.6	57.6	65.7	88.9	125.3
	1954	154.1	157.2	157.2	123.9	81.6	69.5	62.5	58.4	58.4	65.5	88.7	122.9
	1955	153.9	156.9	155.9	129.9	81.5	69.0	62.0	58.0	58.0	65.0	88.0	121.9
Unadjusted	1947												
	1948												
	1949	257	262	247	204	155	147	140	137	143	172	221	274
	1950	376	376	428	388	254	205	158	153	134	148	187	227
	1951	301	298	291	218	152	140	131	128	133	157	210	269
	1952	363	371	385	310	225	196	176	156	143	149	195	316
	1953	391	404	405	299	202	180	164	162	171	206	316	439
	1954	543	563	568	466	315	283	259	251	242	264	341	466
	1955	601	629	620	493	282	231	205	186	181	206	268	395

TABLE 38. Average Hours Worked Per Week in Durable Goods Manufacturing

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947												
	1948												
	1949	43.9	43.0	42.8	42.8	42.3	41.1	42.2	42.5	42.5	42.4	42.4	42.4
	1950	43.1	42.0	42.2	42.6	42.5	42.2	42.7	43.1	41.5	42.4	42.7	42.5
	1951	43.0	42.9	42.1	41.9	42.2	42.1	41.8	42.7	41.7	41.4	41.7	41.6
	1952	41.0	41.7	41.4	41.9	41.7	41.4	41.2	41.5	41.8	41.6	41.7	42.0
	1953	41.2	41.7	42.0	41.9	41.8	42.1	41.7	41.8	41.3	41.3	41.3	41.1
	1954	41.2	40.7	41.0	40.7	40.6	40.1	40.8	41.4	41.1	41.0	41.3	41.0
	1955	41.8	41.0	41.0	41.0	41.2	41.4	40.9	41.4	41.3	41.4	41.5	41.2
Seasonal Indices	1947												
	1948												
	1949	93.4	100.4	101.0	101.0	101.0	100.0	100.4	99.0	100.0	101.4	101.0	101.4
	1950	93.4	100.4	101.0	101.0	101.0	100.0	100.4	99.0	100.0	101.4	101.0	101.4
	1951	93.4	100.4	101.0	101.0	101.0	100.0	100.4	99.0	100.0	101.4	101.0	101.4
	1952	93.4	100.4	101.0	101.0	101.0	100.0	100.4	99.0	100.0	101.4	101.0	101.4
	1953	93.4	100.4	101.0	101.0	101.0	100.0	100.4	99.0	100.0	101.4	101.0	101.4
	1954	94.8	100.3	100.8	100.8	100.8	99.8	100.3	98.8	99.8	101.3	100.8	101.3
	1955	94.8	100.3	100.8	100.8	100.8	99.8	100.3	98.8	99.8	101.3	100.8	101.3
Unadjusted[1]	1947												
	1948												
	1949	41.0	43.2	43.2	43.2	42.7	41.1	42.4	42.1	42.5	43.0	42.8	43.0
	1950	40.3	42.2	42.6	43.0	42.9	42.2	42.9	42.7	41.5	43.0	43.1	43.1
	1951	40.2	43.1	42.5	42.3	42.6	42.1	42.0	41.4	41.7	42.0	42.1	42.2
	1952	38.3	41.9	41.8	42.3	42.1	41.4	41.4	41.1	41.8	42.2	42.1	42.6
	1953	38.5	41.9	42.4	42.3	42.2	42.1	41.9	41.4	41.3	41.9	41.7	41.7
	1954	39.1	40.8	41.3	41.0	40.9	40.0	40.9	40.9	41.0	41.5	41.6	41.5
	1955	39.6	41.1	41.3	41.3	41.5	41.3	41.0	40.9	41.2	41.9	41.8	41.7

1. Compiled from data which relate to the last pay period of the preceding month.

TABLE 39. Average Hours Worked Per Week in Non-Durable Goods Manufacturing

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947												
	1948												
	1949	43.0	42.3	42.3	42.2	41.9	40.5	41.4	41.9	42.0	42.1	42.3	42.3
	1950	42.3	42.0	42.2	42.2	42.0	41.7	42.4	42.4	42.2	42.4	42.4	42.5
	1951	42.6	42.2	41.8	41.7	42.1	41.6	41.6	41.5	41.2	41.4	40.9	41.0
	1952	40.5	40.8	41.1	41.4	41.2	41.3	41.4	41.3	41.2	41.6	41.5	41.6
	1953	40.8	41.4	41.3	41.4	41.1	41.3	41.0	40.8	40.6	40.7	40.4	40.1
	1954	40.4	40.2	40.4	40.3	39.9	39.6	40.3	40.6	40.6	40.6	40.4	40.4
	1955	41.1	40.8	40.6	40.5	40.6	40.7	40.9	40.9	41.0	40.8	40.9	40.8
Seasonal Indices	1947												
	1948												
	1949	93.5	101.0	101.0	101.0	101.0	100.0	99.5	99.5	100.5	101.0	101.5	101.5
	1950	93.5	101.0	101.0	101.0	101.0	100.0	99.5	99.5	100.5	101.0	101.5	101.5
	1951	93.5	101.0	101.0	101.0	101.0	100.0	99.5	99.5	100.5	101.0	101.5	101.5
	1952	93.5	101.0	101.0	101.0	101.0	100.0	99.5	99.5	100.5	101.0	101.5	101.5
	1953	93.5	101.0	101.0	101.0	101.0	100.0	99.5	99.5	100.5	101.0	101.5	101.5
	1954	93.5	101.0	101.0	101.0	101.0	100.0	99.5	99.5	100.5	101.0	101.5	101.5
	1955	94.9	99.9	100.9	100.9	100.9	99.9	99.4	99.4	100.4	100.9	101.4	101.4
Unadjusted[1]	1947												
	1948												
	1949	40.2	42.7	42.7	42.6	42.3	40.5	41.2	41.7	42.2	42.5	42.9	42.9
	1950	39.6	42.4	42.5	42.6	42.4	41.7	42.2	42.2	42.4	42.8	43.0	43.1
	1951	39.9	42.6	42.2	42.1	42.5	41.6	41.4	41.3	41.4	41.8	41.5	41.6
	1952	37.9	41.2	41.5	41.8	41.6	41.3	41.2	41.1	41.4	42.0	42.1	42.2
	1953	38.2	41.8	41.7	41.8	41.5	41.3	40.8	40.6	40.8	41.1	41.0	40.7
	1954	37.8	40.6	40.8	40.7	40.3	39.6	40.1	40.4	40.8	41.0	41.0	41.0
	1955	39.0	40.8	41.0	40.9	41.0	40.7	40.7	40.7	41.2	41.2	41.5	41.4

1. Compiled from data which relate to the last pay period of the preceding month.

TABLE 40. Total Labour Income[1]

(Million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted[2]	1947	483	492	498	503	508	512	525	526	526	534	554	560
	1948	556	567	563	574	586	599	611	615	618	620	630	631
	1949	632	633	634	639	640	652	652	657	650	651	661	660
	1950	654	658	667	668	680	693	703	691	709	717	731	740
	1951	760	759	776	793	807	816	816	824	829	835	848	853
	1952	870	879	894	888	894	889	901	916	919	930	942	946
	1953	967	956	957	977	980	979	980	983	988	986	979	983
	1954	979	984	980	986	990	1,001	1,011	1,006	1,010	1,011	1,012	1,024
	1955	1,017	1,021	1,022	1,040	1,061	1,081	1,082	1,092	1,092	1,096	1,100	1,106
Seasonal Indices (Implicit)	1947	97.3	97.2	97.0	96.6	99.0	101.0	100.4	101.3	103.0	103.0	102.5	100.7
	1948	97.3	97.2	97.0	97.0	98.8	100.8	100.3	101.5	102.9	103.1	102.4	100.6
	1949	97.2	97.0	97.0	97.0	98.9	100.9	100.9	101.7	103.1	103.1	102.3	100.6
	1950	96.8	96.7	96.9	97.3	99.1	100.9	100.6	101.4	103.0	103.2	102.5	100.8
	1951	97.1	97.1	96.9	96.7	98.6	100.7	100.5	101.5	103.0	103.2	102.6	101.1
	1952	97.2	97.3	96.9	97.0	98.9	100.8	100.7	101.4	102.9	103.1	102.5	100.7
	1953	97.1	97.1	97.0	97.1	99.0	100.6	100.7	101.5	103.1	103.1	102.3	101.0
	1954	97.0	97.1	97.0	97.3	99.0	100.8	100.6	101.3	102.9	103.3	102.6	100.9
	1955	97.0	97.1	97.1	97.2	98.9	100.8	100.3	101.4	102.8	103.2	102.5	101.0
Unadjusted	1947	470	478	483	486	503	517	527	533	542	550	568	564
	1948	541	551	546	557	579	604	613	624	636	639	645	635
	1949	614	614	615	620	633	658	658	668	670	671	676	664
	1950	633	636	646	650	674	699	707	701	730	740	749	746
	1951	738	737	752	767	796	822	820	836	854	862	870	862
	1952	846	855	866	861	884	896	907	929	946	959	966	953
	1953	939	928	928	949	970	985	987	998	1,019	1,017	1,002	993
	1954	950	955	951	959	980	1,009	1,017	1,019	1,039	1,044	1,038	1,033
	1955	986	991	992	1,011	1,049	1,090	1,085	1,107	1,123	1,131	1,128	1,117

1. This series is in process of being revised.
2. Seasonal adjustment computed by Labour and Prices Division, D.B.S.

TABLE 41. Total Retail Trade[1]

(Million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	523.0	577.6	581.8	546.3	587.3	569.0	570.4	598.7	590.1	572.7	633.3	595.3
	1948	632.5	627.2	634.5	615.4	649.1	637.8	644.5	645.4	650.7	684.0	671.1	676.4
	1949	685.3	675.5	694.2	725.1	714.7	701.3	721.1	712.7	720.3	732.1	715.2	737.6
	1950	737.5	755.7	760.5	769.7	774.8	797.2	815.8	816.3	836.5	817.5	834.9	867.3
	1951	865.6	898.4	896.0	893.7	873.5	883.5	872.9	882.9	907.3	871.1	905.3	900.5
	1952	911.4	909.9	928.9	912.7	976.6	960.2	952.8	982.8	958.0	982.6	1,015.9	978.7
	1953	992.2	992.3	999.4	995.1	1,020.8	1,012.6	1,004.2	1,006.4	986.3	1,034.0	1,008.9	1,015.8
	1954	979.1	991.0	992.6	988.7	987.0	980.9	1,034.0	999.0	992.8	989.0	975.7	1,013.6
	1955	1,038.5	989.6	970.2	1,064.4	1,039.1	1,095.5	1,105.6	1,083.7	1,112.0	1,102.1	1,066.3	1,093.4
Seasonal Indices (Implicit).	1947	82.0	82.4	89.2	100.5	102.5	106.5	99.8	100.5	106.0	108.3	106.1	116.8
	1948	80.9	82.9	89.6	100.5	102.4	107.1	101.0	100.1	105.5	107.5	103.8	117.6
	1949	80.6	83.8	89.2	103.1	102.4	107.3	101.8	100.0	105.5	105.6	102.4	117.8
	1950	80.4	85.4	91.1	103.3	102.9	108.2	102.4	100.4	105.2	103.2	100.1	114.7
	1951	80.3	86.5	92.7	103.3	104.5	108.7	101.7	100.1	103.6	101.9	102.4	115.4
	1952	81.0	86.8	91.7	103.8	106.3	109.4	100.9	100.0	101.8	101.3	102.1	114.1
	1953	81.2	87.6	92.8	103.9	108.4	109.9	101.4	100.6	102.1	102.0	103.5	115.4
	1954	81.9	87.9	91.5	104.1	108.5	108.5	99.1	99.5	101.9	103.1	103.9	118.7
	1955	81.0	87.4	90.9	103.4	108.2	108.6	100.6	98.8	100.9	102.1	102.7	117.9
Unadjusted (including working day adjustment).	1947	429.0	476.2	518.8	548.9	602.0	605.8	569.3	601.8	625.3	620.2	671.9	695.1
	1948	511.9	519.7	568.6	618.6	664.7	682.8	651.0	646.1	686.3	735.6	696.5	795.6
	1949	552.2	566.1	618.9	747.9	731.9	752.6	734.4	712.5	760.0	773.3	732.2	868.7
	1950	593.0	645.0	693.1	795.0	797.3	862.5	835.0	819.2	879.6	844.0	835.6	994.8
	1951	694.9	776.8	830.2	923.4	912.4	960.2	887.7	883.4	939.7	887.3	927.0	1,039.3
	1952	738.5	790.2	851.6	947.2	1,038.0	1,050.2	961.6	983.2	975.5	995.5	1,036.9	1,116.4
	1953	805.4	869.4	927.7	1,034.3	1,106.1	1,113.2	1,017.9	1,012.7	1,006.9	1,055.0	1,044.1	1,172.2
	1954	802.0	871.1	908.1	1,029.5	1,070.7	1,064.6	1,024.4	994.0	1,011.2	1,020.0	1,013.7	1,202.7
	1955	840.1	864.8	882.0	1,101.0	1,124.0	1,189.2	1,112.3	1,071.1	1,121.8	1,125.4	1,094.6	1,289.6

1. This series is in process of being revised.

TABLE 42. Grocery and Combination Store Sales[1]

(million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	87.8	92.0	97.4	89.8	102.7	96.4	95.8	101.8	101.0	100.0	107.2	102.3
	1948	109.0	107.2	107.4	106.9	114.7	110.2	115.5	115.5	115.5	121.3	116.3	117.9
	1949	120.3	119.2	118.4	123.9	122.1	120.5	126.0	122.9	124.6	125.7	124.5	129.6
	1950	127.7	128.5	128.7	134.5	129.2	136.1	135.1	133.6	138.7	136.9	139.6	143.9
	1951	142.0	149.2	157.0	151.2	153.2	163.3	157.3	160.7	169.1	158.6	167.4	167.5
	1952	169.1	167.8	171.9	163.9	173.6	165.6	167.9	179.0	164.7	172.2	176.8	162.7
	1953	175.2	174.6	172.4	174.0	180.5	178.7	179.4	179.3	176.2	185.2	178.7	184.0
	1954	186.8	184.9	184.7	189.9	186.7	185.6	208.1	185.4	189.5	192.0	191.6	193.4
	1955	191.2	193.2	199.3	211.7	189.0	201.0	198.5	194.2	205.9	201.3	204.9	208.2
Seasonal Indices	1947	92.1	97.0	93.8	101.0	98.8	103.6	100.8	102.3	99.8	101.9	103.0	106.0
	1948	92.4	97.3	94.0	101.3	99.1	103.9	102.9	98.6	100.6	102.2	99.1	108.1
	1949	91.4	97.8	96.0	101.9	98.5	105.5	103.1	98.1	101.3	100.6	96.6	109.1
	1950	91.1	98.2	97.2	101.3	98.4	106.2	102.4	98.2	102.2	97.5	97.2	110.0
	1951	91.3	98.0	97.4	100.0	99.8	106.0	101.0	98.3	102.0	97.7	99.0	109.5
	1952	92.6	97.8	96.0	98.8	101.8	105.6	99.9	99.2	100.8	98.8	99.8	108.8
	1953	94.0	97.7	93.7	98.0	103.5	104.4	99.7	99.7	99.7	101.9	98.7	108.7
	1954	95.0	98.0	91.8	98.0	104.0	104.0	100.0	99.5	99.8	104.0	96.5	108.9
	1955	95.2	98.2	91.1	98.2	104.2	104.2	101.4	98.4	100.0	104.2	96.2	109.1
Unadjusted (including working day adjustment).	1947	80.9	89.2	91.4	90.7	101.5	99.9	96.6	104.1	100.8	101.9	110.4	108.4
	1948	100.7	104.3	101.0	108.3	113.7	114.5	118.8	113.9	116.2	124.0	115.3	127.5
	1949	110.0	116.6	113.7	126.3	120.3	127.1	129.9	120.6	126.2	126.5	120.3	141.4
	1950	116.4	126.2	125.1	136.3	127.2	144.5	138.4	131.2	141.9	133.5	135.7	158.3
	1951	129.6	146.3	152.9	151.2	152.9	173.1	158.8	158.0	172.5	154.9	165.7	183.4
	1952	156.6	164.1	165.0	161.9	176.7	174.9	167.7	177.6	166.0	170.1	176.4	177.0
	1953	164.7	170.6	161.6	170.6	186.8	186.6	178.8	178.8	175.7	188.7	176.4	200.0
	1954	177.5	181.2	169.6	186.1	194.2	193.0	208.1	184.5	189.1	199.7	184.9	210.6
	1955	182.0	189.7	181.6	207.9	196.9	209.4	201.3	191.1	205.9	209.8	197.1	227.2

1. This series is in process of being revised.

TABLE 43. General Store Sales[1]

(million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	32.7	34.7	35.7	33.7	35.8	35.4	33.8	35.8	36.2	34.7	38.9	35.9
	1948	36.6	37.0	36.8	37.1	37.9	37.2	37.6	37.8	38.0	39.1	38.2	37.5
	1949	40.6	39.5	39.6	42.5	40.2	39.0	40.3	40.8	40.0	41.3	39.4	40.4
	1950	39.2	38.9	38.6	39.2	38.7	40.1	40.8	40.2	41.0	39.8	41.0	41.5
	1951	40.7	43.0	42.9	42.9	42.8	44.5	43.6	42.7	44.7	43.6	44.8	45.4
	1952	45.6	45.2	46.8	44.9	44.9	44.3	44.1	46.2	43.9	44.8	45.3	43.2
	1953	43.6	43.4	43.0	43.6	44.1	44.6	43.4	43.9	43.8	43.3	42.5	43.0
	1954	43.7	43.6	41.6	43.0	42.7	41.9	44.8	41.3	42.2	42.9	42.9	42.5
	1955	44.9	42.8	41.5	44.9	42.6	44.3	46.8	40.6	44.7	44.0	44.3	43.8
Seasonal Indices	1947	76.4	79.2	82.8	93.9	107.3	107.2	111.1	109.2	109.8	108.7	104.2	110.2
	1948	76.3	79.1	82.7	93.8	107.2	107.1	110.8	108.9	109.6	108.7	103.4	112.6
	1949	75.6	79.8	83.6	93.4	106.7	107.3	110.3	108.9	109.4	107.9	103.0	113.9
	1950	75.6	80.5	84.2	93.2	106.6	107.6	109.6	109.3	109.1	106.8	103.1	114.2
	1951	76.2	81.0	84.4	93.2	107.0	107.7	109.0	109.3	108.5	105.5	103.8	113.9
	1952	77.4	81.7	84.7	93.4	107.8	108.2	108.7	110.5	105.2	104.8	103.9	114.0
	1953	78.6	82.1	84.8	93.5	108.3	108.4	108.3	111.0	104.7	104.5	102.0	114.1
	1954	79.0	82.5	84.9	93.7	108.8	108.5	108.4	111.3	104.8	104.6	99.4	114.2
	1955	79.2	82.9	85.1	93.6	108.9	108.5	108.3	111.1	104.7	104.5	99.2	114.1
Unadjusted (including working day adjustment)	1947	24.9	27.5	29.6	31.6	38.4	37.9	37.6	39.1	39.7	37.7	40.5	39.6
	1948	27.9	29.3	30.4	34.8	40.6	39.8	41.7	41.2	41.6	42.5	39.5	42.2
	1949	30.7	31.5	33.1	39.7	42.9	41.8	44.5	44.4	43.8	44.6	40.6	46.0
	1950	29.6	31.3	32.5	36.5	41.3	43.2	44.7	43.9	44.7	42.5	42.3	47.4
	1951	31.0	34.8	36.2	40.0	45.8	47.9	47.5	46.7	48.5	46.0	46.5	51.7
	1952	35.3	36.9	39.6	41.9	48.4	47.9	47.9	51.0	46.2	46.9	47.1	49.3
	1953	34.3	35.6	36.5	40.8	47.8	48.4	47.0	48.7	45.9	45.3	43.4	49.1
	1954	34.5	36.0	35.3	40.3	46.5	45.5	48.6	46.0	44.2	44.9	42.6	48.5
	1955	35.6	35.5	35.3	42.0	46.4	48.1	50.7	45.1	46.8	46.0	43.9	50.0

1. This series is in process of being revised.

TABLE 44. Department Store Sales[1]

(million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	53.1	61.5	60.3	52.3	57.2	55.5	59.8	59.1	60.5	54.3	64.1	59.2
	1948	61.6	63.7	64.2	62.6	64.3	65.8	64.8	66.9	65.0	70.3	68.5	68.0
	1949	69.6	69.9	70.9	73.8	72.3	70.8	70.4	71.9	72.3	73.0	71.3	73.4
	1950	69.8	69.0	70.3	67.6	71.3	72.9	76.7	73.9	76.0	74.9	74.8	76.0
	1951	77.8	79.0	76.8	79.7	74.9	73.4	75.6	73.8	73.8	71.3	76.5	75.9
	1952	76.5	78.0	78.0	77.7	82.1	84.4	80.0	86.6	84.4	86.7	84.2	83.6
	1953	85.5	83.5	86.1	82.3	85.8	85.6	86.7	85.5	85.9	85.8	87.0	88.0
	1954	84.7	87.3	86.0	89.5	84.8	87.1	88.8	89.9	88.3	88.4	87.9	91.0
	1955	92.9	89.3	91.6	93.1	93.0	93.2	96.9	94.8	101.1	98.3	98.3	97.5
Seasonal Indices	1947	69.5	77.2	96.0	103.0	100.6	95.4	70.6	80.2	110.0	117.0	130.9	149.9
	1948	69.5	77.2	96.0	103.0	100.6	95.4	70.8	80.0	107.8	116.0	130.0	153.8
	1949	70.5	78.0	94.2	102.2	100.3	95.6	71.3	80.0	106.0	114.2	131.1	156.3
	1950	71.5	79.3	92.9	100.9	100.0	95.7	72.1	80.5	103.9	112.6	132.4	157.9
	1951	72.7	80.6	91.7	99.2	99.9	95.9	72.7	81.1	102.7	110.9	133.8	158.8
	1952	73.5	81.3	91.1	97.9	99.8	76.3	73.1	81.5	101.3	109.3	134.9	159.8
	1953	73.8	81.7	90.5	96.9	99.8	96.6	73.1	81.8	100.9	108.9	134.1	160.9
	1954	73.9	81.8	90.0	96.9	99.9	96.8	73.1	82.0	100.9	108.9	134.9	160.8
	1955	74.3	82.2	86.0	97.1	100.2	97.2	73.4	82.5	101.2	109.2	135.3	161.3
Unadjusted (including working day adjustment).	1947	36.9	47.5	57.9	53.9	57.5	53.0	42.2	47.4	66.6	63.6	83.9	88.8
	1948	42.8	49.2	61.6	64.5	64.7	62.8	45.9	53.5	70.1	81.6	89.0	104.6
	1949	49.1	54.5	66.8	75.4	72.5	67.7	50.2	57.5	76.6	83.4	93.5	114.8
	1950	49.9	54.7	65.3	68.2	71.3	69.8	55.3	59.5	79.0	84.4	99.1	120.0
	1951	56.6	63.7	70.4	79.1	74.8	70.4	55.0	59.9	75.8	79.1	102.4	120.6
	1952	56.2	63.4	71.1	76.1	81.9	81.3	58.5	70.6	85.5	94.9	113.6	133.6
	1953	63.1	68.2	77.9	79.8	85.6	82.7	63.4	70.0	86.7	93.4	116.7	141.6
	1954	62.6	71.4	77.4	86.7	84.7	84.3	64.9	73.7	89.1	96.3	118.6	146.4
	1955	69.0	73.4	78.8	90.4	93.2	90.6	71.1	78.2	102.3	107.3	133.0	157.3

1. This series is in process of being revised.

TABLE 45. Variety Store Sales[1]

(Million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	10.6	11.4	11.3	10.6	11.4	11.6	11.3	11.9	11.7	11.0	12.7	11.7
	1948	12.6	13.0	13.1	12.1	13.1	13.0	13.6	13.0	13.1	14.2	13.3	13.3
	1949	14.0	13.7	14.1	13.8	13.7	13.6	13.9	14.0	14.0	14.3	14.0	14.5
	1950	13.9	14.0	13.4	15.1	14.2	14.7	14.6	14.3	14.6	14.1	14.6	15.6
	1951	15.2	15.0	16.7	15.3	16.1	16.7	16.4	16.3	16.9	15.9	16.7	16.5
	1952	16.8	17.1	18.3	17.1	17.2	17.5	17.2	18.4	17.5	18.5	18.7	17.7
	1953	19.1	18.5	17.8	18.6	19.1	18.7	18.6	18.4	18.6	19.2	18.7	19.2
	1954	19.0	19.2	19.4	18.7	19.3	19.2	20.3	19.0	19.4	20.0	19.4	19.2
	1955	20.2	19.6	18.3	21.9	19.7	20.2	21.1	19.8	22.2	21.6	21.2	20.6
Seasonal Indices	1947	64.4	72.1	82.0	94.0	98.0	99.0	93.0	88.2	93.0	103.4	112.0	201.0
	1948	64.3	71.8	84.9	90.9	97.9	98.9	94.0	86.7	93.9	102.9	108.9	204.8
	1949	63.4	71.5	74.0	102.0	96.3	99.7	94.0	86.0	95.8	102.1	107.0	208.0
	1950	62.6	71.3	80.1	96.1	96.1	100.8	93.6	86.5	100.0	101.6	106.3	209.2
	1951	62.5	71.3	85.2	91.3	96.7	101.7	92.7	87.7	95.3	99.3	106.6	209.7
	1952	62.5	71.8	77.2	99.2	97.6	101.8	91.7	89.1	93.2	98.7	107.8	209.5
	1953	62.8	72.4	83.1	93.1	98.1	101.1	91.3	90.0	93.1	98.6	107.9	208.3
	1954	63.1	72.5	73.1	103.2	98.6	101.0	91.1	88.3	93.1	100.2	108.0	207.8
	1955	63.4	72.6	79.2	97.3	98.8	100.3	91.3	87.3	93.3	100.4	108.1	208.1
Unadjusted (including working day adjustment.)	1947	6.8	8.2	9.3	10.0	11.2	11.5	10.5	10.5	10.9	11.4	14.2	23.6
	1948	8.1	9.3	11.1	11.0	12.8	12.9	12.8	11.3	12.3	14.6	14.5	27.2
	1949	8.9	9.8	10.4	14.1	13.2	13.6	13.1	12.0	13.4	14.6	15.0	30.1
	1950	8.7	10.0	10.7	14.5	13.6	14.8	13.7	12.4	14.6	14.3	15.5	32.6
	1951	9.5	10.7	14.2	14.0	15.6	17.0	15.2	14.3	16.1	15.8	17.8	34.5
	1952	10.5	12.3	14.1	17.0	16.8	17.8	15.8	16.4	16.3	18.3	20.1	37.1
	1953	12.0	13.4	14.8	17.3	18.7	18.9	17.0	16.6	17.3	18.9	20.2	39.8
	1954	12.0	13.9	14.2	19.3	19.0	19.4	18.5	16.8	18.1	20.0	21.0	40.0
	1955	12.8	14.2	14.5	21.3	19.5	20.3	19.3	17.3	20.7	21.7	22.9	42.9

1. This series is in process of being revised.

TABLE 46. Motor Vehicle Dealer Sales[1]

(Million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	57.4	64.3	56.6	53.9	58.9	55.5	57.6	64.7	62.7	62.3	68.4	65.0
	1948	70.4	62.6	64.3	62.3	65.9	64.4	59.5	62.2	66.0	71.1	75.6	77.3
	1949	66.7	58.9	72.5	83.3	88.9	81.1	91.1	83.9	91.3	91.2	86.9	92.7
	1950	102.9	116.9	115.6	107.5	117.0	121.6	132.2	134.3	131.8	133.4	145.0	155.7
	1951	161.0	175.9	164.5	165.0	157.1	149.8	143.0	157.6	154.7	151.1	153.4	148.1
	1952	154.4	149.8	152.0	160.4	195.9	180.1	173.3	166.6	181.8	179.0	204.3	194.8
	1953	184.4	189.6	197.2	194.7	192.2	193.5	189.8	191.5	176.3	200.4	188.8	189.4
	1954	163.2	168.2	183.0	171.7	170.7	165.4	166.6	175.5	171.0	153.8	152.0	175.6
	1955	185.9	156.7	159.1	192.6	198.6	213.9	200.9	224.2	207.0	207.1	182.6	196.8
Seasonal Indices	1947	81.3	77.0	98.0	115.1	109.1	118.1	106.1	92.1	110.1	113.1	100.1	80.0
	1948	82.3	77.9	99.2	116.4	108.3	119.5	112.4	94.7	108.3	108.3	95.0	77.7
	1949	81.2	84.2	102.3	120.0	109.6	119.7	114.9	95.9	105.5	102.5	89.3	75.1
	1950	79.8	89.2	103.9	122.6	111.5	120.6	116.2	96.3	103.4	97.3	86.1	73.0
	1951	77.5	91.8	104.7	124.3	116.0	121.7	116.3	95.8	98.8	94.2	87.7	71.1
	1952	75.0	91.7	105.3	125.9	120.9	124.0	116.8	95.7	95.7	92.2	85.4	70.5
	1953	71.9	91.6	104.9	126.3	124.7	126.9	116.3	95.1	94.1	89.8	88.3	70.1
	1954	69.0	91.0	105.0	127.0	128.5	127.9	116.2	95.0	94.0	89.0	86.1	71.2
	1955	68.1	89.7	105.3	127.3	129.8	128.4	116.3	95.2	94.2	89.0	84.4	72.2
Unadjusted (including working day adjustment).	1947	46.7	49.5	55.5	62.0	64.3	65.6	61.1	59.6	69.0	70.5	68.5	52.0
	1948	57.9	48.8	63.8	72.5	71.4	76.9	66.9	58.9	71.5	77.0	71.8	60.1
	1949	54.2	49.6	74.2	99.9	97.4	97.1	104.7	80.5	96.3	93.5	77.6	69.6
	1950	82.1	104.3	120.1	131.8	130.5	146.6	153.6	129.4	136.3	129.8	124.9	113.7
	1951	124.8	161.5	172.2	205.1	182.2	182.3	166.3	151.0	152.9	142.4	134.6	105.3
	1952	115.8	137.4	160.1	201.9	236.9	223.3	202.4	159.4	174.0	165.0	174.5	137.3
	1953	132.6	173.7	206.9	245.9	239.7	245.6	220.7	182.1	165.9	180.0	166.7	132.8
	1954	112.6	153.1	192.1	218.1	219.3	211.6	193.6	166.7	160.7	136.9	130.9	125.0
	1955	126.6	140.6	167.5	245.2	257.8	274.6	233.6	213.4	195.0	184.3	154.1	142.1

1. This series is in process of being revised.

TABLE 47. New Passenger Car Sales[1]

(Million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	21.0	24.7	19.3	20.2	21.5	21.7	23.1	25.5	27.3	26.6	26.9	25.5
	1948	22.6	19.6	22.9	20.6	20.7	21.7	19.1	23.1	23.2	28.2	29.6	31.7
	1949	17.5	22.5	31.5	37.1	36.4	34.1	39.8	32.5	38.8	46.2	31.5	37.7
	1950	52.7	50.6	48.5	45.1	50.8	56.6	58.4	60.7	58.2	58.7	65.9	62.7
	1951	73.4	80.2	72.6	68.1	53.0	48.6	47.0	48.4	49.7	41.2	45.4	45.7
	1952	44.6	47.8	48.9	54.4	68.4	65.6	63.5	57.8	62.6	74.6	75.2	67.2
	1953	75.9	80.1	79.2	77.3	73.3	73.7	77.1	70.3	69.8	78.2	71.0	69.1
	1954	66.2	66.3	74.4	71.1	64.5	63.6	64.4	67.4	73.7	52.0	55.3	73.7
	1955	70.5	66.6	61.5	81.7	93.5	91.3	93.6	102.7	82.7	97.2	89.0	97.1
Seasonal Indices	1947	74.7	74.1	110.3	103.9	100.3	118.0	110.1	85.1	110.1	106.1	112.1	95.1
	1948	76.1	77.9	111.9	108.7	104.0	119.0	110.9	82.7	109.9	102.9	101.9	93.8
	1949	78.6	84.2	116.2	114.5	110.9	121.2	112.9	80.6	106.8	97.5	89.3	87.3
	1950	80.5	92.8	112.1	123.0	118.9	123.7	114.7	78.2	103.2	92.3	82.4	78.2
	1951	80.5	98.4	124.0	129.7	126.6	123.0	112.8	75.7	95.2	84.6	77.4	72.0
	1952	79.5	98.7	124.6	138.3	135.3	122.9	111.9	76.3	85.4	80.4	75.5	71.2
	1953	75.3	95.2	125.6	142.1	141.0	127.4	111.2	78.1	79.9	78.4	75.1	70.8
	1954	70.6	91.3	127.1	141.7	144.5	129.6	111.0	81.7	79.5	76.7	75.7	70.6
	1955	67.0	87.1	127.9	148.1	145.2	130.9	110.8	84.4	77.8	74.8	75.5	70.5
Unadjusted[2] (including working day adjustment)	1947	15.7	18.3	21.3	20.9	21.5	25.6	25.4	21.7	30.0	28.2	30.2	24.3
	1948	17.2	15.3	25.7	22.4	21.5	25.9	21.1	19.1	26.0	29.0	30.1	29.7
	1949	13.8	19.0	36.6	42.5	40.4	41.3	44.9	26.2	41.4	45.1	28.1	32.9
	1950	42.4	47.0	54.3	55.5	60.4	70.0	67.0	47.4	60.0	54.2	54.3	49.0
	1951	59.1	78.9	90.0	88.3	67.1	59.8	53.1	36.7	47.3	34.9	35.2	32.9
	1952	35.4	47.2	60.9	75.2	92.6	80.6	71.0	44.1	53.4	60.0	56.8	47.9
	1953	57.1	76.2	99.5	109.8	103.3	93.8	85.7	54.9	55.8	61.3	53.3	48.9
	1954	46.7	60.5	94.6	100.8	93.2	82.4	71.5	55.0	58.6	39.9	41.9	52.0
	1955	47.2	58.0	78.7	121.0	135.7	119.5	103.7	86.7	64.4	72.6	67.2	68.5

1. This series is in process of being revised.
2. Source: Sales of New Motor Vehicles and Motor Vehicle Financing.

TABLE 48. Commercial Vehicle Sales[1]

(Million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	10.6	10.0	9.3	10.4	9.5	9.0	10.8	11.2	13.0	16.6	11.8	11.9
	1948	12.3	11.5	13.3	12.7	12.9	15.2	11.8	9.9	11.1	12.7	15.9	17.7
	1949	14.6	15.6	14.3	15.2	15.2	14.0	14.3	12.7	14.4	16.4	13.9	15.7
	1950	15.8	14.3	14.6	15.4	17.3	20.5	22.2	24.0	21.8	20.2	19.5	19.5
	1951	22.1	24.7	23.8	21.4	20.3	20.7	21.3	21.5	22.2	23.0	23.4	23.8
	1952	22.0	21.2	21.9	22.9	24.4	22.2	23.0	26.0	24.0	23.7	24.9	20.6
	1953	23.4	22.7	22.5	25.3	22.8	20.9	20.9	20.1	20.9	21.4	20.4	19.9
	1954	17.3	18.2	19.8	17.1	15.4	15.5	14.3	16.3	13.9	13.4	15.3	15.2
	1955	15.0	13.4	12.1	18.3	18.4	22.7	22.4	26.9	22.2	21.1	17.6	22.2
Seasonal Indices	1947	79.5	89.6	112.8	120.8	125.8	115.8	100.7	85.6	105.7	100.7	87.6	75.5
	1948	79.5	89.6	112.8	120.8	125.8	115.8	100.7	85.6	105.7	100.7	87.6	75.5
	1949	79.5	89.6	112.8	120.8	125.8	115.8	100.7	85.6	105.7	100.7	87.6	75.5
	1950	79.5	89.6	112.8	120.8	125.8	115.8	100.7	85.6	105.7	100.7	87.6	75.5
	1951	79.5	89.6	112.8	120.8	125.8	115.8	100.7	85.6	105.7	100.7	87.6	75.5
	1952	79.5	89.6	112.8	120.8	125.8	115.8	100.7	85.6	105.7	100.7	87.6	75.5
	1953	76.4	89.4	112.6	121.6	131.7	115.6	100.5	90.5	95.5	100.5	90.5	75.4
	1954	71.6	89.7	112.9	123.0	132.1	116.0	100.8	90.8	95.8	100.8	90.8	75.6
	1955	67.9	89.2	113.5	123.6	131.8	116.6	101.4	91.2	96.3	101.4	91.2	76.0
Unadjusted[2] (including working day adjustment)	1947	8.5	8.9	10.5	12.5	11.9	10.4	10.9	9.6	13.7	16.7	10.4	9.0
	1948	9.7	10.3	15.0	15.3	16.2	17.6	11.9	8.5	11.7	12.8	14.0	13.3
	1949	11.6	14.0	16.1	18.3	19.2	16.2	14.4	10.9	15.2	16.5	12.2	11.9
	1950	12.6	12.8	16.5	18.6	21.7	23.8	22.3	20.5	23.0	20.3	17.1	14.8
	1951	17.6	22.1	26.9	25.9	25.5	24.0	21.5	18.4	23.5	23.2	20.5	18.0
	1952	17.5	19.0	24.7	27.7	30.8	25.7	23.2	22.3	25.3	23.9	21.8	15.6
	1953	17.9	20.3	25.3	30.8	30.0	24.2	21.1	18.2	20.0	21.5	18.4	15.0
	1954	12.4	16.3	22.3	21.0	20.4	18.0	14.4	14.8	13.3	13.5	13.9	11.5
	1955	10.2	12.0	13.7	22.7	24.2	26.5	22.7	24.6	21.4	21.4	16.1	16.9

1. This series is in process of being revised.
2. Source: Sales of New Motor Vehicles and Motor Vehicle Financing.

TABLE 49. Garage and Filling Station Sales[1]

(million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	29.2	30.4	29.4	29.1	29.7	30.0	29.8	30.8	29.9	29.7	31.8	31.4
	1948	32.9	33.9	33.9	32.7	34.7	34.6	34.0	34.2	34.6	36.0	35.3	34.6
	1949	36.0	35.5	36.2	37.9	37.4	37.3	38.0	38.3	38.7	38.9	38.0	38.8
	1950	37.4	37.0	36.9	37.5	37.3	37.6	38.7	39.2	38.9	37.9	39.0	39.7
	1951	39.9	40.1	39.4	39.8	39.5	39.5	39.9	38.3	39.8	39.9	40.4	41.3
	1952	41.5	41.5	42.9	42.1	41.7	41.8	41.2	42.3	41.9	43.8	42.5	41.7
	1953	42.9	44.5	46.3	45.7	47.0	47.1	47.0	47.4	46.2	46.5	48.2	47.8
	1954	53.3	53.3	52.5	51.9	53.2	51.9	52.9	51.6	51.9	52.8	52.6	53.0
	1955	54.0	52.9	51.9	53.1	54.1	56.0	56.7	51.9	56.3	54.8	54.6	55.2
Seasonal Indices	1947	75.3	76.1	79.6	96.2	106.0	114.2	120.2	120.7	112.2	109.9	101.2	88.4
	1948	75.3	76.1	79.6	96.2	106.0	114.2	120.2	119.9	112.7	110.0	99.6	90.3
	1949	75.1	76.4	79.6	98.4	105.7	114.1	120.2	118.7	112.7	109.4	98.5	91.2
	1950	76.0	77.9	80.5	99.5	106.2	113.8	120.1	117.1	112.3	108.4	97.0	91.2
	1951	77.5	79.4	82.5	99.8	107.1	113.5	118.8	115.7	111.9	107.4	95.7	90.8
	1952	79.6	81.3	84.1	100.3	108.2	113.0	116.9	115.6	108.6	107.3	95.0	90.5
	1953	80.8	82.3	84.5	100.3	109.0	112.3	115.6	115.5	107.8	107.2	94.7	90.1
	1954	81.6	82.9	83.2	100.6	109.8	111.8	115.7	115.8	106.1	107.4	94.9	90.2
	1955	82.1	83.8	82.7	100.7	109.8	111.5	115.6	115.9	106.0	107.7	94.9	90.2
Unadjusted (including working day adjustment).	1947	22.0	23.1	23.4	28.0	31.5	34.3	35.8	37.2	33.6	32.6	32.2	27.8
	1948	24.8	25.8	27.0	31.5	36.8	39.5	40.9	41.0	39.0	39.6	35.2	31.2
	1949	27.0	27.1	28.8	37.3	39.5	42.6	45.7	45.5	43.6	42.6	37.4	35.4
	1950	28.4	28.8	29.7	37.3	39.6	42.8	46.5	45.9	43.7	41.1	37.8	36.2
	1951	30.9	31.8	32.5	39.7	42.3	44.8	47.4	44.3	44.5	42.9	38.7	37.5
	1952	33.0	33.7	36.1	42.2	45.1	47.2	48.2	48.9	45.5	47.0	40.4	37.7
	1953	34.7	36.6	39.1	45.8	51.2	52.8	54.3	54.7	49.8	49.9	45.6	43.1
	1954	43.5	44.2	43.7	52.2	58.4	58.0	61.2	59.7	55.1	56.7	49.9	47.8
	1955	44.3	44.3	42.9	53.5	59.4	62.4	65.5	60.2	59.7	59.0	51.8	49.8

1. This series is in process of being revised.

TABLE 50. Clothing Stores Sales[1,2]

(million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonnally adjusted	1947	34.3	39.4	38.2	35.2	37.5	36.4	36.0	39.2	37.9	35.0	42.7	38.1
	1948	39.6	40.9	39.8	40.7	41.7	40.6	41.2	41.4	41.7	45.6	42.4	42.3
	1949	44.8	42.6	46.9	48.0	43.7	43.8	44.5	43.0	42.5	43.2	42.6	42.9
	1950	40.1	40.3	39.5	43.8	40.9	42.4	43.1	43.3	44.9	43.3	43.9	45.6
	1951	46.6	48.6	48.0	48.4	47.9	49.4	48.8	49.1	50.6	46.9	50.1	50.4
	1952	51.3	50.2	53.0	49.8	51.4	51.8	51.4	55.8	50.7	55.3	54.6	52.7
	1953	54.6	53.1	53.7	51.0	56.0	53.9	54.7	53.2	52.6	53.7	52.8	54.3
	1954	52.7	53.8	51.6	48.7	50.9	50.4	54.7	52.6	50.3	50.8	50.7	51.3
	1955	51.8	51.3	45.4	53.3	54.1	51.9	56.0	52.0	54.0	52.7	54.1	54.2
Seasonal Indices (Implicit) ..	1947	75.2	72.6	92.4	106.3	105.1	108.5	87.5	80.1	98.7	113.1	114.1	147.5
	1948	75.3	72.4	95.2	102.9	104.8	108.1	88.8	79.5	98.3	111.6	112.5	151.3
	1949	75.0	72.3	83.4	114.6	104.3	108.4	88.8	78.8	97.9	110.0	112.2	152.9
	1950	75.1	72.2	89.4	107.3	103.4	108.3	88.2	79.0	97.3	108.3	113.7	158.8
	1951	75.8	72.8	94.0	102.1	103.8	107.7	86.9	79.0	95.7	106.4	114.4	162.1
	1952	77.2	73.3	85.3	109.4	103.9	106.8	85.6	79.0	93.7	106.0	114.7	165.3
	1953	78.4	73.8	91.1	103.1	103.4	105.8	85.4	79.1	92.6	107.1	113.3	166.9
	1954	78.9	65.8	81.4	113.1	102.8	105.2	85.6	75.1	92.4	107.3	111.6	168.2
	1955	79.7	74.9	88.3	107.5	95.9	105.8	86.6	79.4	92.8	108.0	110.9	169.2
Unadjusted (including working day adjustment)	1947	25.8	28.6	35.3	37.4	39.4	39.5	31.5	31.4	37.4	39.6	48.7	56.2
	1948	29.8	29.6	37.9	41.9	43.7	43.9	36.6	32.9	41.0	50.9	47.7	64.0
	1949	33.6	30.8	39.1	55.0	45.6	47.5	39.5	33.9	41.6	47.5	47.8	65.6
	1950	30.1	29.1	35.3	47.0	42.3	45.9	38.0	34.2	43.7	46.9	49.9	72.4
	1951	35.3	35.4	45.1	49.4	49.7	53.2	42.4	38.8	48.4	49.9	57.3	81.7
	1952	39.6	36.8	45.2	54.5	53.4	55.3	44.0	44.1	47.5	58.6	62.6	87.1
	1953	42.8	39.2	48.9	52.6	57.9	57.0	46.7	42.1	48.7	57.5	59.8	90.6
	1954	41.6	35.4	42.0	55.1	52.3	53.0	46.8	39.5	46.5	54.5	56.6	86.3
	1955	41.3	38.4	40.1	57.3	51.9	54.9	48.5	41.3	50.1	56.9	60.0	91.7

1. This series is in process of being revised.
2. Includes "Men's Clothing," "Family Clothing," and "Women's Clothing".

TABLE 51. Shoe Store Sales[1]

(million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	6.8	7.0	7.7	6.5	7.5	7.2	7.0	8.2	8.7	7.4	8.2	7.7
	1948	7.8	8.7	8.1	7.8	8.1	7.8	8.4	7.9	7.6	8.6	7.2	8.5
	1949	8.6	8.4	9.3	9.6	8.7	8.6	8.6	8.5	8.3	8.8	8.5	8.4
	1950	8.1	8.0	8.1	9.0	8.2	8.7	8.6	8.6	9.1	8.4	8.5	9.1
	1951	8.8	9.1	9.2	8.9	9.2	9.3	9.2	9.2	9.9	9.1	10.1	9.4
	1952	8.7	9.4	10.3	9.5	9.8	9.8	9.5	10.3	9.6	10.0	9.8	10.0
	1953	10.6	10.2	10.2	9.7	10.6	10.2	10.5	10.1	9.9	10.4	10.0	10.2
	1954	10.5	10.2	10.0	9.5	9.0	9.9	10.3	9.6	9.9	10.2	10.0	9.9
	1955	9.8	9.7	8.6	10.6	9.8	10.0	10.4	9.7	10.9	10.7	10.6	10.1
Seasonal Indices	1947	64.3	63.3	82.9	112.1	109.5	125.6	96.5	87.4	107.5	101.5	111.6	137.7
	1948	64.2	63.2	86.3	108.4	109.4	125.4	95.4	85.6	107.2	100.3	110.6	144.0
	1949	65.2	62.8	73.2	121.3	109.3	125.3	94.2	86.0	107.0	99.2	110.3	146.2
	1950	67.0	62.6	80.1	114.2	110.1	124.8	92.9	86.5	106.7	97.4	110.0	147.8
	1951	69.0	62.8	86.0	108.0	110.8	123.9	91.0	87.7	106.0	96.5	109.4	148.6
	1952	70.9	63.5	76.4	117.3	111.7	122.6	89.8	88.1	105.0	95.9	107.8	150.9
	1953	71.7	64.4	83.1	110.0	112.4	120.9	89.6	88.3	104.5	97.1	106.2	151.8
	1954	72.5	64.7	72.0	120.6	112.1	119.7	90.9	87.3	104.2	98.8	105.4	151.8
	1955	72.6	64.7	78.9	113.6	112.1	119.4	91.3	86.3	104.2	100.0	105.2	151.8
Unadjusted (including working day adjustment).	1947	4.4	4.4	6.4	7.3	8.2	9.0	6.8	7.2	9.4	7.5	9.2	10.6
	1948	5.0	5.5	7.0	8.5	8.9	9.8	8.0	6.8	8.1	8.6	8.0	12.3
	1949	5.6	5.3	6.8	11.7	9.5	10.8	8.1	7.3	8.9	8.7	9.3	12.3
	1950	5.4	5.0	6.5	10.3	9.0	10.8	8.0	7.4	9.7	8.2	9.4	13.5
	1951	6.1	5.7	7.9	9.6	10.2	11.5	8.4	8.1	10.5	8.8	11.0	14.0
	1952	6.2	6.0	7.9	11.1	10.9	12.0	8.5	9.1	10.1	9.6	10.6	15.1
	1953	7.6	6.6	8.5	10.7	11.9	12.3	9.4	8.9	10.3	10.1	10.6	15.5
	1954	7.6	6.6	7.2	11.4	10.1	11.8	9.4	8.4	10.3	10.1	10.5	15.1
	1955	7.1	6.3	6.8	12.0	11.0	11.9	9.5	8.4	11.4	10.7	11.2	15.4

1. This series is in process of being revised.

TABLE 52. Lumber and Building Materials and Hardware Sales[1]

(million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	29.0	31.0	33.1	31.4	32.6	31.2	32.7	32.4	33.2	32.2	33.7	32.7
	1948	34.5	35.0	35.7	35.8	36.0	36.9	37.1	37.9	37.0	38.9	39.1	40.5
	1949	40.4	40.9	41.0	41.6	41.3	39.7	39.8	40.2	41.4	42.1	41.0	41.7
	1950	41.3	42.4	43.3	42.8	45.2	48.9	49.5	50.8	48.8	48.8	49.3	50.6
	1951	51.7	51.9	49.1	52.8	50.8	48.5	49.2	47.0	47.9	46.2	46.3	45.3
	1952	47.6	47.5	47.9	47.0	48.4	49.1	48.4	50.1	51.5	52.8	52.6	53.4
	1953	53.8	54.4	55.4	54.9	55.6	56.0	56.0	55.7	55.3	55.6	57.2	56.5
	1954	52.9	53.5	54.7	51.5	53.5	54.4	55.6	56.7	53.5	53.3	54.0	54.2
	1955	57.7	53.2	49.9	52.8	58.5	60.7	58.5	59.8	61.1	60.0	56.1	55.5
Seasonal Indices (Implicit)	1947	70.0	68.1	74.6	96.8	115.3	122.8	107.6	109.0	112.3	117.7	108.6	97.2
	1948	69.9	68.0	73.9	96.6	115.0	122.5	108.9	112.7	113.5	117.2	106.6	95.6
	1949	69.6	68.7	73.9	95.9	114.8	122.2	109.3	113.7	114.0	116.2	104.9	97.1
	1950	69.0	69.1	73.9	94.6	114.6	122.1	110.9	114.8	114.8	116.2	103.9	95.3
	1951	68.1	69.6	73.9	93.6	114.4	121.6	111.6	115.1	115.2	115.6	104.3	97.6
	1952	67.2	69.3	74.1	92.8	114.0	121.0	112.2	115.0	116.1	116.0	105.1	96.8
	1953	66.0	69.1	74.4	91.3	113.7	120.2	112.5	115.4	116.6	116.5	106.1	97.5
	1954	64.7	69.0	74.4	90.7	113.3	118.9	113.3	116.6	117.6	117.1	106.7	99.1
	1955	64.6	68.4	74.3	89.4	112.5	118.6	113.2	117.7	117.7	117.8	107.1	99.6
Unadjusted (including working day adjustment).	1947	20.3	21.1	24.7	30.4	37.6	38.3	35.2	35.3	37.3	37.9	36.6	31.8
	1948	24.1	23.8	26.4	34.6	41.4	45.2	40.4	42.7	42.0	45.6	41.7	38.7
	1949	28.1	28.1	30.3	39.9	47.4	48.5	43.5	45.7	47.2	48.9	43.0	40.5
	1950	28.5	29.3	32.0	40.5	51.8	59.7	54.9	58.3	56.0	56.7	51.2	48.2
	1951	35.2	36.1	36.3	49.4	58.1	59.0	54.9	54.1	55.2	53.4	48.3	44.2
	1952	32.0	32.9	35.5	43.6	55.2	59.4	54.3	57.6	59.8	61.2	55.3	51.7
	1953	35.5	37.6	41.2	50.1	63.2	67.3	63.0	64.3	64.5	64.8	60.7	55.1
	1954	34.2	36.9	40.7	46.7	60.6	64.7	63.0	66.1	62.9	62.4	57.6	53.7
	1955	37.3	36.4	37.1	47.2	65.8	72.0	66.2	70.4	71.9	70.7	60.1	55.3

1. This series is in process of being revised.

TABLE 53. Furniture plus Radio and Appliance Sales[1]

(million dollars)

Description	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	19.1	20.4	20.5	18.4	21.9	21.6	20.8	21.4	21.0	20.3	23.7	21.3
	1948	21.9	22.1	22.1	21.9	23.9	22.2	22.4	22.1	22.3	24.1	23.9	22.9
	1949	23.8	24.0	24.5	24.8	25.1	24.6	24.9	25.6	25.3	26.0	26.2	28.0
	1950	24.2	25.0	24.7	26.7	27.3	28.8	29.0	29.5	32.5	29.7	27.5	29.0
	1951	32.2	33.1	32.2	36.3	26.8	28.1	27.3	27.6	28.4	27.1	28.6	29.5
	1952	29.7	32.7	34.3	32.3	37.9	41.5	39.3	39.8	38.3	38.2	40.6	40.1
	1953	40.1	39.4	38.9	39.3	41.4	42.2	40.0	39.7	38.5	41.7	40.5	40.1
	1954	38.6	38.2	40.7	39.7	37.9	39.7	40.7	41.1	42.5	44.0	40.6	40.4
	1955	44.4	38.8	38.5	40.9	38.0	42.6	45.2	44.3	47.2	48.3	43.4	45.6
Seasonal Indices (Implicit)	1947	86.9	88.7	92.7	106.5	101.4	100.5	91.3	89.7	101.9	109.9	105.9	124.4
	1948	87.7	89.1	93.2	106.4	100.4	100.9	92.4	90.0	102.7	109.1	103.3	124.9
	1949	89.9	90.8	95.1	105.2	100.4	99.6	92.8	89.5	102.4	106.5	102.7	125.0
	1950	90.9	93.2	97.2	104.1	100.7	99.0	93.1	89.5	101.5	103.0	102.2	124.8
	1951	92.9	95.2	99.1	102.2	101.9	100.4	93.0	89.5	100.7	100.4	102.8	124.4
	1952	90.9	96.0	98.5	100.0	103.2	100.2	88.8	89.2	99.5	97.6	104.9	125.7
	1953	91.5	96.4	97.9	98.0	103.6	100.5	92.5	88.9	98.4	98.1	106.7	125.9
	1954	91.5	96.6	98.0	97.0	102.9	100.5	92.1	88.8	97.6	99.1	107.6	125.0
	1955	91.7	96.9	97.7	96.6	102.1	100.5	92.0	88.9	97.7	100.0	108.1	127.9
Unadjusted (including working day adjustment).	1947	16.6	18.1	19.0	19.6	22.2	21.7	19.0	19.2	21.4	22.3	25.1	26.5
	1948	19.2	19.7	20.6	23.3	24.0	22.4	20.7	19.9	22.9	26.3	24.7	28.6
	1949	21.4	21.8	23.3	26.1	25.2	24.5	23.1	22.9	25.9	27.7	26.9	35.0
	1950	22.0	23.3	24.0	27.8	27.5	28.5	27.0	26.4	33.0	30.6	28.1	36.2
	1951	29.0	31.5	31.9	37.1	27.3	28.2	25.4	24.7	28.6	27.2	29.4	36.7
	1952	27.0	31.4	33.8	32.3	39.1	41.6	34.9	35.5	38.1	37.3	42.6	50.4
	1953	36.7	38.0	38.1	38.5	42.9	42.4	37.0	35.3	37.9	40.9	43.2	50.5
	1954	35.3	36.9	39.9	38.5	39.0	39.9	37.5	36.5	41.5	43.6	43.7	50.5
	1955	40.7	37.6	37.6	39.5	38.8	42.8	41.6	39.4	46.1	48.3	46.9	58.3

1. This series is in process of being revised.

TABLE 54. Restaurant Sales[1]

(million dollars)

Description	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	23.3	23.8	25.6	23.9	24.7	25.5	24.9	25.4	24.7	24.3	26.3	25.6
	1948	26.3	27.3	27.4	26.9	27.6	25.0	27.2	27.5	27.9	28.5	28.4	28.2
	1949	29.5	29.6	30.5	29.8	30.6	30.4	30.9	30.8	30.6	30.7	30.1	31.0
	1950	30.6	30.9	30.7	32.4	31.8	32.3	32.7	31.7	33.1	33.9	34.0	34.6
	1951	34.4	33.6	35.3	37.0	35.6	35.7	36.9	36.6	38.8	36.7	36.8	38.2
	1952	38.1	38.8	39.7	38.1	38.4	39.2	38.3	40.0	38.4	38.7	40.2	38.6
	1953	39.3	39.9	38.9	39.1	39.9	40.6	39.4	39.8	39.4	39.6	39.7	39.7
	1954	37.8	39.0	37.1	37.3	38.8	37.1	37.6	38.0	37.3	38.1	36.1	37.0
	1955	37.7	36.4	35.2	38.2	38.3	37.8	38.1	37.0	38.6	38.4	35.9	37.0
Seasonal Indices	1947	90.2	94.3	90.4	98.2	101.3	102.3	109.4	115.0	107.0	102.9	97.2	91.8
	1948	89.3	93.4	90.2	96.6	100.3	110.0	108.3	112.2	107.5	103.7	96.4	92.1
	1949	88.8	90.8	88.5	99.3	99.8	102.4	112.1	112.6	109.3	105.3	97.1	93.8
	1950	87.9	89.9	89.6	98.2	99.2	102.7	112.6	113.2	108.6	105.7	98.1	94.2
	1951	87.0	89.5	90.6	97.0	99.8	103.0	111.8	114.6	107.0	105.8	100.2	94.0
	1952	86.2	89.4	88.9	98.5	101.2	103.1	109.8	115.8	105.9	105.8	101.9	93.7
	1953	85.8	89.2	89.8	97.1	101.9	102.9	108.5	116.3	107.2	105.6	102.9	93.2
	1954	85.1	89.2	87.9	99.0	102.5	102.8	108.3	116.4	107.2	105.6	103.2	92.9
	1955	85.1	89.2	89.0	97.9	102.9	102.9	108.3	116.4	107.2	105.6	103.2	92.7
Unadjusted (including working day adjustment)	1947	21.0	22.4	23.1	23.5	25.0	26.1	27.2	29.2	26.4	25.0	25.6	23.5
	1948	23.5	25.5	24.7	26.0	27.7	27.5	29.5	30.8	30.0	29.6	27.4	26.0
	1949	26.2	26.9	27.0	29.6	30.5	31.1	34.6	34.7	33.4	32.3	29.2	29.1
	1950	26.9	27.8	27.5	31.8	31.5	33.2	36.8	35.9	36.0	35.8	33.4	32.6
	1951	29.9	30.1	32.0	35.9	35.5	36.8	41.3	42.0	41.5	38.8	36.9	35.9
	1952	32.8	34.7	35.3	37.5	38.9	40.4	42.1	46.3	40.7	40.9	41.0	36.2
	1953	33.7	35.6	34.9	38.0	40.7	41.8	42.7	46.3	42.2	41.8	40.8	37.0
	1954	32.2	34.8	32.6	36.9	39.8	38.1	40.7	44.2	40.0	40.2	37.3	34.4
	1955	32.1	32.5	31.3	37.4	39.3	38.9	41.3	43.1	41.4	40.6	37.1	34.3

1. This series is in process of being revised.

TABLE 55. Fuel Dealers Sales[1]

(million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	11.5	12.3	12.6	17.9	16.5	15.5	14.9	13.5	13.6	14.2	15.5	15.5
	1948	15.9	16.0	15.8	17.1	17.2	16.4	17.1	16.8	15.7	17.3	15.1	15.9
	1949	16.0	16.0	16.0	14.1	16.8	16.8	15.3	16.8	18.9	17.2	18.0	18.2
	1950	17.1	17.6	19.0	19.5	17.6	18.3	18.8	19.6	19.0	18.5	17.6	18.4
	1951	18.2	19.6	17.6	18.3	18.2	18.8	19.7	19.2	18.9	19.9	22.4	20.8
	1952	20.6	19.7	19.8	17.8	20.2	19.5	18.4	20.0	19.8	21.2	18.1	18.7
	1953	17.4	18.1	18.3	18.4	18.6	19.3	19.6	19.2	19.0	19.4	18.8	19.9
	1954	21.5	20.4	20.8	22.5	19.2	19.2	19.7	20.0	20.3	20.1	20.5	23.6
	1955	21.4	23.7	23.5	20.2	17.7	19.0	17.6	17.0	20.0	21.1	24.5	29.6
Seasonal Indices	1947	124.4	126.5	105.7	75.0	70.1	78.2	81.2	92.3	117.3	111.6	106.3	111.3
	1948	122.9	126.0	105.3	74.7	69.8	77.9	78.4	92.5	116.9	114.1	109.7	111.9
	1949	123.5	127.0	105.4	72.9	66.8	76.8	77.6	91.7	115.6	115.6	112.5	114.6
	1950	125.4	127.4	105.5	71.9	66.0	75.6	76.6	89.7	113.4	116.5	114.5	117.6
	1951	128.9	127.4	105.8	71.1	65.3	74.3	75.7	87.2	110.3	117.2	115.8	120.4
	1952	135.8	128.6	107.3	71.2	65.2	73.0	70.0	79.9	109.0	116.8	117.7	123.8
	1953	143.2	129.9	109.7	71.7	65.6	72.4	62.9	74.6	108.7	115.6	119.5	126.2
	1954	148.6	129.9	112.0	72.0	65.7	70.8	59.4	72.5	108.2	114.3	119.8	126.7
	1955	151.3	130.1	114.4	71.8	65.6	69.6	59.2	71.3	107.9	113.0	119.5	126.4
Unadjusted (including working day adjustment).	1947	14.3	15.5	13.3	13.4	11.6	12.1	12.1	12.5	15.9	15.9	16.5	17.2
	1948	19.5	20.1	16.6	12.8	12.0	12.8	13.4	15.5	18.4	19.7	16.6	17.8
	1949	19.7	20.3	16.9	10.3	11.2	12.9	11.9	15.4	21.9	19.9	20.3	20.9
	1950	21.5	22.4	20.0	14.0	11.6	13.8	14.4	17.6	21.5	21.6	20.2	21.6
	1951	23.5	25.0	18.6	13.0	11.9	14.0	14.9	16.7	20.8	23.3	25.9	25.1
	1952	28.0	25.3	21.2	12.7	13.2	14.2	12.9	16.0	21.6	24.8	21.3	23.1
	1953	24.9	23.5	20.1	13.2	12.2	14.0	12.3	14.3	20.7	22.4	22.5	25.1
	1954	31.9	26.5	23.3	16.2	12.6	13.6	11.7	14.5	22.0	23.0	24.6	29.9
	1955	32.4	30.8	26.9	14.5	11.6	13.2	10.4	12.1	21.6	23.8	29.3	37.4

1. This series is in process of being revised.

TABLE 56. Drug Store Sales[1]

(million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	13.7	13.8	14.7	13.9	14.9	15.1	15.1	15.3	15.1	14.9	16.2	15.6
	1948	15.5	15.8	15.8	15.6	16.6	16.2	16.2	16.4	16.5	17.0	16.9	16.6
	1949	17.5	17.2	18.0	17.7	17.8	17.5	17.9	18.1	17.6	18.0	17.7	18.0
	1950	17.8	17.7	18.0	18.5	17.9	19.0	18.9	18.3	19.1	19.0	19.0	19.5
	1951	19.3	21.2	20.5	20.0	20.2	20.8	21.0	20.4	21.5	20.9	20.9	21.3
	1952	21.5	21.5	22.5	21.3	22.2	22.1	22.0	22.9	22.3	22.5	22.9	22.3
	1953	23.2	23.2	23.1	22.9	23.6	23.7	23.4	24.0	23.5	24.2	24.0	24.3
	1954	23.4	23.5	22.8	23.1	23.9	23.0	24.0	23.4	23.4	23.7	23.3	23.4
	1955	23.7	23.1	22.8	24.0	23.7	23.6	24.9	23.7	24.6	24.0	23.5	24.3
Seasonal Indices	1947	96.6	101.4	97.0	98.7	97.1	96.7	92.8	98.0	98.1	99.3	94.1	130.5
	1948	96.6	101.4	97.6	98.1	97.1	96.7	92.6	96.1	98.9	99.4	94.0	131.7
	1949	96.0	101.8	95.2	100.7	96.1	97.4	92.3	95.0	99.6	99.0	94.0	132.5
	1950	95.3	102.1	96.8	99.5	95.4	95.1	92.0	95.8	99.9	99.2	95.8	133.3
	1951	94.6	101.7	97.5	98.0	94.7	98.5	90.6	96.4	99.5	98.8	96.6	133.2
	1952	94.6	101.5	95.5	99.8	94.7	98.8	89.7	97.1	98.4	98.7	97.3	133.4
	1953	95.0	101.4	96.9	98.4	94.9	98.9	89.3	97.5	97.7	99.7	97.2	133.5
	1954	95.4	99.9	94.8	100.7	95.1	99.0	89.4	97.6	97.4	100.2	96.7	134.0
	1955	95.4	100.2	96.2	99.3	95.1	99.0	89.4	97.6	97.3	100.3	95.8	134.0
Unadjusted (including working day adjustment).	1947	13.2	14.0	14.3	13.7	14.5	14.6	14.0	15.0	14.8	14.8	15.2	20.4
	1948	15.0	16.0	15.4	15.3	16.1	15.7	15.0	15.8	16.3	16.9	15.9	21.9
	1949	16.8	17.5	17.1	17.8	17.1	17.0	16.5	17.2	17.5	17.8	16.7	23.9
	1950	17.0	18.1	17.4	18.4	17.1	18.1	17.4	17.5	19.1	18.8	18.2	26.0
	1951	18.3	21.6	20.0	19.6	19.1	20.5	19.0	19.7	21.4	20.6	20.2	28.4
	1952	20.3	21.8	21.5	21.3	21.0	21.8	19.7	22.2	21.9	22.2	22.3	29.7
	1953	22.0	23.5	22.4	22.5	22.4	23.4	20.9	23.4	23.0	24.1	23.3	32.4
	1954	22.3	23.5	21.6	23.3	22.7	22.8	21.4	22.8	22.8	23.7	22.5	31.4
	1955	22.6	23.1	21.9	23.8	22.5	23.4	22.3	23.1	23.9	24.1	22.5	32.5

1. This series is in process of being revised.

TABLE 57. Jewellery Store Sales[1]

(million dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	6.4	7.1	6.4	5.7	7.4	6.7	6.7	6.6	6.5	6.6	7.3	6.7
	1948	7.1	6.9	6.7	5.8	6.9	7.2	7.1	7.1	7.2	7.1	6.9	7.1
	1949	7.1	6.9	7.4	8.3	7.6	7.3	7.6	7.5	7.4	7.8	8.0	7.9
	1950	7.3	7.6	7.4	7.7	7.6	7.7	7.9	8.0	9.4	8.2	7.5	7.9
	1951	8.7	8.8	9.0	8.9	8.2	8.7	8.7	8.6	8.6	8.3	9.0	8.8
	1952	8.9	8.8	8.8	8.8	9.5	9.7	9.6	9.7	9.5	9.7	9.8	9.9
	1953	10.3	10.2	9.7	9.9	10.2	10.1	10.2	10.2	10.0	10.3	10.3	10.0
	1954	9.7	10.2	9.7	10.0	9.8	9.1	9.6	9.9	9.4	9.4	9.4	9.4
	1955	10.0	9.9	9.6	9.8	9.3	9.9	10.6	10.5	10.0	9.4	9.9	9.8
Seasonal Indices	1947	65.5	67.9	76.6	84.4	82.4	89.4	82.5	93.8	93.6	92.9	105.8	265.1
	1948	66.1	68.5	77.3	85.2	83.2	90.3	83.2	94.1	94.5	94.1	100.2	263.5
	1949	66.3	69.6	78.4	83.9	82.7	91.0	83.0	93.6	94.7	94.5	99.9	262.4
	1950	67.2	70.6	78.2	82.2	84.0	92.0	82.4	92.8	94.3	94.2	102.4	259.6
	1951	69.2	71.4	77.5	80.2	83.8	92.7	81.9	92.0	93.9	93.9	105.9	257.3
	1952	70.7	71.8	76.5	78.5	84.6	92.9	81.6	91.5	93.6	93.6	109.6	255.0
	1953	71.7	71.7	75.5	76.8	85.2	93.4	81.1	91.0	93.6	94.9	111.7	253.6
	1954	71.8	71.7	74.5	75.7	85.7	93.3	81.2	90.7	93.6	96.4	112.4	252.8
	1955	72.3	71.7	74.7	75.7	85.7	93.4	81.0	90.6	92.6	96.8	112.6	252.8
Unadjusted (including working day adjustment).	1947	4.2	4.8	4.9	4.8	6.1	6.0	5.5	6.2	6.1	6.1	7.7	17.8
	1948	4.7	4.7	5.2	4.9	5.7	6.5	5.9	6.7	6.8	6.7	6.9	18.7
	1949	4.7	4.8	5.8	7.0	6.3	6.6	6.3	7.0	7.0	7.4	8.0	20.8
	1950	4.9	5.4	5.8	6.3	6.4	7.1	6.5	7.4	8.9	7.7	7.7	20.5
	1951	6.0	6.3	7.0	7.1	6.9	8.1	7.1	7.9	8.1	7.8	9.5	22.6
	1952	6.3	6.3	6.7	6.9	8.0	9.0	7.8	8.9	8.9	9.1	10.7	25.3
	1953	7.4	7.3	7.3	7.6	8.7	9.4	8.3	9.3	9.4	9.8	11.5	25.4
	1954	7.0	7.3	7.2	7.6	8.4	8.5	7.8	9.0	8.8	9.1	10.6	23.7
	1955	7.2	7.1	7.2	7.4	8.0	9.2	8.6	9.5	9.3	9.1	11.1	24.7

1. This series is in process of being revised.

TABLE 58. Total Housing Starts

(thousands)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted[1] (at annual rates)	1947				
	1948	62.8	97.0	96.0	84.9
	1949	78.9	93.2	84.6	96.3
	1950	84.7	97.1	91.2	91.6
	1951	92.1	84.0	58.5	48.9
	1952	68.3	82.1	81.9	94.4
	1953	112.1	102.0	100.8	101.2
	1954	110.2	101.6	116.1	130.0
	1955	126.0	132.7	145.4	142.7
Seasonal Indices	1947				
	1948	42.6	136.7	130.8	89.9
	1949	42.6	136.7	130.8	89.9
	1950	42.6	136.7	130.8	89.9
	1951	42.6	136.7	130.8	89.9
	1952	42.6	136.7	130.8	89.9
	1953	42.6	136.7	130.8	89.9
	1954	42.6	136.7	130.8	89.9
	1955	42.6	136.7	130.8	89.9
Unadjusted	1947				
	1948	6.7	33.1	31.3	19.1
	1949	8.4	31.8	27.7	21.6
	1950	9.0	33.1	29.8	20.6
	1951	9.8	28.7	19.1	11.0
	1952	7.3	28.0	26.7	21.2
	1953	11.9	34.8	32.9	22.7
	1954	11.7	34.7	37.9	29.2
	1955	13.4	45.3	47.5	32.1

1. Seasonal adjustment computed by Central Mortgage and Housing Corporation.

TABLE 59. Total Housing Completions

(thousands)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted[1] (at annual rates)	1947				
	1948	55.8	85.3	80.0	79.6
	1949	86.0	98.6	94.4	75.6
	1950	86.1	81.4	95.3	91.1
	1951	94.1	86.3	78.0	72.4
	1952	63.0	68.7	74.9	81.0
	1953	88.6	94.9	93.0	106.1
	1954	98.0	95.6	100.3	109.9
	1955	117.2	127.3	128.5	134.5
Seasonal Indices	1947				
	1948	82.9	88.8	98.6	129.7
	1949	82.9	88.8	98.6	129.7
	1950	82.9	88.8	98.6	129.7
	1951	82.9	88.8	98.6	129.7
	1952	82.9	88.8	98.6	129.7
	1953	82.9	88.8	98.6	129.7
	1954	82.9	88.8	98.6	129.7
	1955	82.9	88.8	98.6	129.7
Unadjusted	1947				
	1948	11.6	19.0	19.7	25.9
	1949	17.8	21.9	23.3	24.5
	1950	17.9	18.1	23.5	29.6
	1951	19.5	19.2	19.1	23.5
	1952	13.1	15.3	18.4	26.3
	1953	18.4	21.1	22.9	34.4
	1954	20.3	21.2	24.7	35.7
	1955	24.3	28.3	31.6	43.7

1. Seasonal adjustment computed by Central Mortgage and Housing Corporation.

TABLE 60. Housing Starts in Municipalities of 5000 and over

(thousands)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted[1] (at annual rates).	1947												
	1948												
	1949	60.5	36.6	52.7	58.8	48.7	56.4	55.5	60.9	62.3	61.0	70.1	76.9
	1950	59.3	62.4	63.9	61.6	66.5	67.3	75.1	67.9	75.2	75.1	69.6	69.7
	1951	71.2	66.7	56.2	56.7	54.2	50.2	43.2	41.5	37.6	37.2	36.9	33.8
	1952	39.3	49.6	52.8	56.7	60.5	61.4	62.6	76.3	63.1	69.7	77.5	73.2
	1953	81.0	81.4	84.0	86.3	77.4	74.9	81.1	73.8	83.6	84.5	80.9	78.4
	1954	83.4	83.1	92.0	84.5	79.5	82.2	91.1	84.7	99.5	91.7	98.9	116.4
	1955	90.5	87.9	80.7	89.4	96.7	101.4	97.4	108.6	96.7	97.1	101.4	103.9
Seasonal Indices	1947												
	1948												
	1949	39.5	44.1	67.6	118.3	167.9	156.9	113.6	108.1	123.6	116.2	84.3	59.9
	1950	39.6	44.0	68.7	120.0	168.0	155.4	114.7	110.1	121.0	115.4	84.4	58.6
	1951	39.4	43.3	70.4	124.7	166.1	152.6	116.1	113.1	118.1	115.1	85.4	55.7
	1952	41.1	41.2	72.1	126.8	153.8	147.3	119.3	118.3	118.0	116.3	90.4	55.3
	1953	39.8	39.6	71.4	122.6	141.2	148.0	128.2	119.6	119.0	117.6	98.7	54.2
	1954	42.1	41.6	71.2	108.8	139.4	137.7	137.7	122.3	123.3	118.3	101.5	56.1
	1955	42.1	42.8	65.9	102.8	139.8	138.5	145.2	124.3	124.3	116.9	101.5	55.8
Unadjusted	1947												
	1948												
	1949	2.0	1.3	3.0	5.8	6.8	7.4	5.6	5.5	6.4	5.9	4.9	3.8
	1950	2.0	2.3	3.7	6.2	9.3	8.7	7.2	6.2	7.6	7.2	4.9	3.4
	1951	2.3	2.4	3.3	5.9	7.5	6.4	4.2	3.9	3.7	3.6	2.6	1.6
	1952	1.3	1.7	3.2	6.0	7.8	7.5	6.2	7.5	6.2	6.8	5.8	3.4
	1953	2.7	2.7	5.0	8.8	9.1	9.2	8.7	7.4	8.3	8.3	6.6	3.5
	1954	2.9	2.9	5.5	7.6	9.2	9.4	10.5	8.6	10.2	9.0	8.4	5.4
	1955	3.2	3.1	4.4	7.7	11.3	11.7	11.8	11.3	10.0	9.5	8.6	4.8

1. Seasonal adjustment computed by Central Mortgage and Housing Corporation.

TABLE 61. Housing Completions in Municipalities of 5,000 and over

(thousands)

Description	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted[1] (at annual rates)	1947												
	1948												
	1949	56.1	57.4	57.5	66.5	60.6	63.2	64.7	59.2	58.5	61.9	58.2	54.3
	1950	56.2	48.9	65.3	55.2	59.0	61.2	62.2	69.2	72.8	62.2	59.1	78.9
	1951	73.3	75.1	64.4	61.9	66.3	65.8	56.2	57.4	59.5	57.3	55.7	47.5
	1952	49.1	52.9	45.3	56.4	48.3	46.5	47.0	61.6	47.9	57.3	67.9	61.4
	1953	58.2	67.4	71.4	64.0	72.4	77.2	74.9	69.6	81.0	81.2	76.8	79.9
	1954	88.2	73.6	73.6	77.2	83.0	70.3	90.0	79.8	78.6	80.0	77.3	92.9
	1955	84.4	92.0	95.7	90.6	88.8	98.0	94.3	92.9	100.1	92.5	98.8	96.1
Seasonal Indices	1947												
	1948												
	1949	97.3	79.8	99.6	93.9	94.7	104.9	87.9	101.3	96.4	119.4	113.0	111.9
	1950	97.0	84.5	97.0	93.6	94.0	101.0	84.2	102.1	97.4	123.7	115.1	110.4
	1951	95.9	86.9	90.1	93.2	93.5	94.1	82.1	102.1	97.1	129.2	125.9	109.9
	1952	95.1	87.9	83.5	93.6	94.0	89.6	82.1	100.8	96.9	135.4	130.2	110.8
	1953	95.7	86.6	83.0	94.0	94.7	87.4	83.9	96.9	97.3	137.0	131.2	113.3
	1954	96.2	83.5	82.1	93.2	94.6	88.0	87.0	93.1	99.1	136.9	130.8	115.4
	1955	96.0	77.8	84.5	92.5	94.0	90.1	89.8	92.7	100.2	136.3	129.6	116.4
Unadjusted	1947												
	1948												
	1949	4.6	3.8	4.8	5.2	4.8	5.5	4.7	5.0	4.7	6.2	5.5	5.1
	1950	4.5	3.4	5.3	4.3	4.6	5.2	4.4	5.9	5.9	6.4	5.7	7.3
	1951	5.9	5.4	4.8	4.8	5.2	5.2	3.8	4.9	4.8	6.2	5.8	4.4
	1952	3.9	3.9	3.2	4.4	3.8	3.5	3.2	5.2	3.9	6.5	7.4	5.7
	1953	4.6	4.9	4.9	5.0	5.7	5.6	5.2	5.6	6.6	9.2	8.4	7.5
	1954	7.1	5.1	5.1	6.0	6.5	5.2	6.5	6.2	6.5	9.1	8.4	8.9
	1955	6.8	6.0	6.7	7.0	7.0	7.4	7.1	7.2	8.4	10.5	10.7	9.3

1. Seasonal adjustment computed by Central Mortgage and Housing Corporation.

TABLE 62. Value of Building Permits – Industrial

(thousand dollars)

Description	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted (with 3 term moving average)	1947												
	1948		2,499	3,832	4,976	5,719	5,942	4,933	4,531	4,308	4,688	4,759	4,342
	1949	3,889	3,732	3,764	3,438	2,740	2,510	2,813	3,527	3,460	3,591	3,295	3,920
	1950	3,697	4,098	3,572	3,827	5,177	5,304	6,574	5,790	6,058	5,518	5,739	6,941
	1951	9,065	9,858	9,693	9,632	8,876	8,498	6,963	7,528	9,808	10,208	11,932	10,102
	1952	9,321	7,076	8,512	7,890	8,477	9,279	9,566	9,194	6,790	7,066	7,930	7,730
	1953	11,306	13,058	15,403	16,179	17,053	17,354	16,060	17,388	18,750	20,882	18,230	17,622
	1954	14,679	16,751	16,314	15,752	14,602	14,184	13,780	12,687	11,958	12,397	15,274	16,236
	1955	17,616	15,174	13,755	13,296	13,915	16,532	21,589	21,528	20,521	16,358	14,288	15,698
Seasonal Indices	1947												
	1948	148.6	53.0	81.0	82.0	81.0	92.2	123.0	123.0	123.0	102.5	110.7	79.9
	1949	152.4	54.6	82.0	84.1	83.0	94.6	98.8	126.1	124.0	113.5	94.6	92.5
	1950	128.0	53.1	82.2	104.1	100.9	93.7	93.7	121.8	113.4	121.8	91.6	95.7
	1951	102.0	53.1	80.6	127.5	110.2	91.8	100.0	112.2	102.0	130.6	89.8	100.0
	1952	80.1	55.0	80.1	142.1	115.1	90.1	110.1	105.1	97.1	138.1	90.1	97.1
	1953	61.4	55.3	82.5	135.8	117.7	100.6	121.7	102.6	100.6	125.7	100.6	95.6
	1954	54.2	56.3	89.0	122.8	117.6	112.5	123.8	104.3	102.3	117.6	102.3	97.2
	1955	54.7	56.7	89.8	113.5	118.7	118.7	124.8	105.2	103.2	113.5	103.2	98.0
Unadjusted	1947												
	1948	1,634	1,719	2,555	4,182	5,406	4,964	7,093	4,487	5,138	5,225	5,301	3,508
	1949	5,861	1,873	3,215	3,315	2,036	1,727	3,212	4,238	4,921	3,463	3,550	2,851
	1950	6,305	1,637	3,522	3,485	3,882	7,811	3,495	9,324	6,788	5,520	5,530	6,361
	1951	8,301	6,590	7,275	9,744	13,476	6,203	6,507	8,556	8,619	17,433	8,823	12,624
	1952	6,294	4,115	4,716	17,289	6,464	6,891	16,045	6,808	6,341	10,168	6,581	8,358
	1953	4,153	9,971	11,362	18,739	23,964	17,102	17,892	16,906	21,110	23,617	23,010	12,456
	1954	9,194	7,908	17,127	19,222	14,533	17,769	17,826	11,626	12,803	14,360	12,752	20,555
	1955	8,257	9,415	12,413	12,301	18,076	18,611	23,324	31,980	15,991	17,785	18,483	9,099

TABLE 63. Value of Building Permits — Institutional & Government

(thousand dollars)

Description	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted (with 3 term moving average)	1947												
	1948		3,882	5,362	6,743	6,847	8,483	8,458	8,369	6,219	5,553	5,310	6,707
	1949	6,820	7,146	6,815	7,368	8,519	8,480	8,964	7,736	8,175	8,848	10,252	10,365
	1950	9,417	8,143	7,379	7,986	8,044	7,275	7,897	9,483	12,155	12,516	11,083	9,078
	1951	10,139	11,812	13,574	13,759	13,095	14,201	12,006	12,180	10,145	10,948	11,582	11,146
	1952	10,853	10,403	11,354	10,936	11,576	11,580	13,928	13,473	14,371	13,770	16,323	16,390
	1953	16,149	13,126	13,730	14,481	17,196	20,632	20,466	20,911	18,343	19,253	17,107	16,401
	1954	16,008	19,410	21,855	24,714	23,564	21,509	21,461	21,022	25,436	23,922	23,581	25,382
	1955	24,086	24,044	20,878	19,306	28,798	25,402	26,025	25,552	27,123	24,211	26,271	28,997
Seasonal Indices	1947												
	1948	65.0	62.0	89.0	123.0	105.0	108.0	110.0	124.0	90.0	102.0	100.0	122.0
	1949	62.7	59.8	85.9	118.7	101.4	104.3	113.9	113.9	94.6	112.9	96.5	135.1
	1950	49.6	61.6	81.4	99.3	100.3	109.2	119.5	109.2	99.3	118.2	99.3	153.9
	1951	46.5	59.4	79.2	89.1	99.0	110.9	126.7	105.9	104.9	115.8	99.0	163.4
	1952	44.1	54.1	80.2	87.2	100.2	118.3	130.3	105.3	109.3	100.2	100.2	170.4
	1953	46.8	48.8	83.1	92.5	103.9	124.7	143.4	108.1	116.4	95.6	103.9	133.0
	1954	45.7	45.7	85.0	97.7	106.2	131.7	146.5	109.4	118.9	97.7	106.2	109.4
	1955	41.5	32.7	87.3	100.4	109.1	130.9	150.5	111.3	122.2	98.2	109.1	106.9
Unadjusted	1947												
	1948	1,367	1,688	6,069	8,050	7,208	7,701	12,597	8,422	6,178	5,101	4,794	7,486
	1949	5,762	3,070	6,112	9,729	6,887	11,025	9,200	9,392	6,512	10,594	9,915	14,992
	1950	4,822	4,578	5,923	7,378	9,281	8,134	6,122	12,142	12,123	15,530	12,116	12,174
	1951	3,312	9,138	10,239	11,057	15,779	12,128	19,928	9,906	12,018	11,145	11,646	21,828
	1952	3,667	5,888	9,631	9,740	9,647	16,478	14,571	17,556	13,731	13,906	14,898	34,458
	1953	6,589	6,903	9,270	14,700	17,035	24,068	37,571	17,185	24,022	17,681	19,354	18,883
	1954	7,484	7,975	20,742	23,167	27,642	27,595	25,706	28,315	23,350	30,080	22,663	20,364
	1955	15,020	5,706	16,142	26,800	41,011	28,944	24,837	43,918	25,288	20,833	33,520	28,727

TABLE 64. Value of Building Permits — Residential

(thousand dollars)

Description	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonnaly adjusted (with 3 term moving average)	1947												
	1948		24,025	25,103	25,385	28,193	29,277	32,050	30,923	31,541	32,032	33,190	33,752
	1949	32,530	33,527	33,111	32,793	32,439	32,010	34,046	35,785	35,377	37,399	38,233	37,165
	1950	34,716	32,940	35,355	39,664	42,351	44,147	42,098	41,578	42,219	41,773	39,198	42,421
	1951	44,629	46,056	40,880	37,024	34,703	32,668	31,853	29,611	25,645	27,912	29,141	30,870
	1952	34,238	35,619	38,775	40,274	44,640	45,903	47,452	49,441	52,374	54,164	55,934	56,818
	1953	56,805	59,100	61,176	61,979	60,819	60,863	62,589	65,436	64,963	65,776	64,556	64,667
	1954	60,948	63,074	59,666	63,123	61,989	69,435	74,582	74,589	71,644	72,447	76,931	82,257
	1955	76,908	72,501	70,350	76,705	81,268	83,505	84,814	86,298	86,712	81,695	77,445	79,772
Seasonal Indices	1947												
	1948	29.0	43.5	91.9	140.3	181.9	135.5	116.1	113.2	109.3	91.0	82.2	65.8
	1949	29.6	44.5	93.9	143.3	185.8	138.4	118.6	113.7	105.8	93.9	78.1	54.4
	1950	30.0	47.0	94.9	146.9	179.8	139.9	119.9	112.9	103.9	100.9	74.9	48.9
	1951	32.2	50.3	94.6	148.0	174.2	140.9	120.8	110.7	103.7	105.7	73.5	45.3
	1952	33.5	50.7	95.3	150.1	166.3	142.0	121.7	107.5	103.5	108.5	76.1	44.6
	1953	35.6	50.9	95.7	149.7	155.8	142.6	122.2	104.9	104.9	109.0	84.5	43.8
	1954	34.2	50.3	93.5	140.8	144.8	146.9	122.7	112.7	110.6	106.6	92.5	44.3
	1955	34.1	49.1	94.2	132.2	145.2	145.2	124.2	120.2	111.2	107.2	92.2	45.1
Unadjusted	1947												
	1948	7,553	9,699	21,812	41,077	42,099	43,571	37,767	35,617	31,448	31,294	27,072	21,219
	1949	10,678	13,024	33,089	49,909	52,603	47,302	39,778	39,136	41,681	30,345	31,619	22,793
	1950	8,733	15,576	34,705	53,405	82,828	62,440	50,050	45,067	44,741	44,069	28,898	17,280
	1951	17,177	22,738	37,479	55,967	58,596	46,011	38,307	34,530	26,888	29,170	22,205	13,415
	1952	10,983	20,440	32,169	63,424	74,520	66,534	56,036	53,166	54,671	59,504	41,725	25,926
	1953	20,468	27,889	62,218	95,394	89,117	87,748	78,030	65,437	73,508	68,053	54,772	29,090
	1954	21,466	26,992	68,061	73,980	92,720	101,935	91,880	89,566	76,771	70,404	75,743	36,709
	1955	27,969	32,326	65,606	99,909	123,278	121,003	102,188	106,774	97,619	89,531	68,024	33,842

TABLE 65. Value of Building Permits – Commercial

(thousand dollars)

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted (with 3 term moving average)	1947												
	1948		10,591	11,594	12,101	11,520	10,135	10,071	10,805	11,419	11,694	12,412	11,961
	1949	12,160	12,370	14,926	15,177	13,877	11,369	11,254	11,950	12,451	13,152	11,785	13,390
	1950	13,201	15,003	14,388	16,437	20,455	23,298	23,872	21,281	19,868	19,404	21,466	21,657
	1951	21,031	18,777	15,639	13,765	10,864	12,094	11,505	12,698	16,420	10,447	8,624	8,257
	1952	9,503	10,901	14,040	14,300	15,369	13,645	14,409	15,253	15,803	17,208	18,307	19,337
	1953	16,827	15,392	13,868	14,616	15,152	15,470	15,248	13,525	16,026	16,899	19,521	16,425
	1954	15,647	12,955	13,236	13,610	14,493	15,833	18,728	20,281	21,013	17,811	17,169	16,448
	1955	17,519	16,516	18,584	21,378	24,400	21,830	23,182	22,682	23,034	21,040	20,576	31,752
Seasonal Indices	1947												
	1948	52.0	69.7	86.3	93.6	135.2	145.6	122.7	104.0	93.6	101.9	104.0	91.5
	1949	51.1	68.5	84.8	92.0	132.9	143.1	130.8	109.4	102.2	102.2	102.2	80.7
	1950	55.3	69.3	89.4	100.5	128.6	136.7	130.6	105.5	105.5	105.5	100.5	72.4
	1951	58.0	70.0	92.1	107.1	124.1	126.1	130.1	100.1	106.1	113.1	103.1	70.0
	1952	58.0	70.0	97.1	110.1	118.1	114.1	125.1	95.1	108.1	128.1	106.1	70.0
	1953	52.7	68.9	100.3	116.5	115.5	101.3	121.6	91.2	109.4	141.9	109.4	70.9
	1954	51.1	66.8	102.3	117.9	114.8	104.3	125.2	93.9	112.7	114.8	114.8	81.4
	1955	52.0	61.2	98.9	111.1	112.1	102.0	122.0	91.8	112.1	141.7	112.1	82.6
Unadjusted	1947												
	1948	5,756	6,468	9,860	13,176	14,603	14,097	12,173	11,036	11,121	11,989	11,892	12,844
	1949	5,320	8,242	12,435	16,634	16,993	15,403	13,807	13,610	13,137	12,322	14,866	7,063
	1950	9,330	9,688	12,656	15,103	25,882	35,829	30,766	23,052	19,451	20,381	20,559	17,827
	1951	11,536	13,007	16,448	11,222	16,080	11,547	18,431	11,203	13,513	11,118	9,046	5,088
	1952	5,063	8,757	11,133	19,978	15,695	16,741	16,229	14,818	18,600	18,731	21,005	14,352
	1953	9,334	8,452	16,245	15,309	16,760	18,034	17,140	12,628	13,822	30,649	18,013	14,533
	1954	6,291	9,440	12,708	15,507	17,628	15,720	21,499	22,481	22,235	16,459	12,081	14,491
	1955	8,947	10.740	14,631	26,008	29,618	23,835	19,157	27,978	24,513	23,744	27,459	16,914

TABLE 66. Personal Disposable Income

(million dollars)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted (at Annual Rates),	1947	9,044	9,428	9,644	10,280
	1948	10,468	11,648	10,988	11,380
	1949	11,552	12,408	11,704	12,208
	1950	12,200	12,472	12,684	13,340
	1951	13,960	15,132	14,448	15,112
	1952	15,476	15,532	15,580	16,976
	1953	16,264	16,716	16,692	17,128
	1954	16,528	16,656	16,772	17,196
	1955	17,416	18,316	18,416	18,652
Seasonal Indices	1947	86.7	89.8	124.1	98.5
	1948	84.6	86.0	134.2	95.4
	1949	86.5	91.6	125.8	96.6
	1950	87.3	92.9	123.7	95.7
	1951	87.0	90.6	126.4	96.2
	1952	87.6	89.7	128.0	95.0
	1953	88.0	92.2	123.9	95.8
	1954	91.7	95.9	112.4	99.9
	1955	90.0	95.2	116.3	97.9
Unadjusted	1947	1,960	2,116	2,991	2,532
	1948	2,218	2,504	3,686	2,713
	1949	2,497	2,842	3,680	2,949
	1950	2,664	2,897	3,921	3,192
	1951	3,038	3,426	4,565	3,634
	1952	3,391	3,483	4,984	4,033
	1953	3,577	3,851	5,170	4,102
	1954	3,787	3,992	4,715	4,294
	1955	3,918	4,360	5,356	4,566

TABLE 67. Corporation Profits Before Taxes

(Million dollars)

Description		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Seasonally adjusted (at annual rates)	1947				
(adjusted to annual level)	1948				
	1949				
	1950	2,024	2,184	2,824	2,992
	1951	3,160	2,840	2,552	2,648
	1952	2,640	2,660	2,656	2,724
	1953	2,740	2,688	2,532	2,320
	1954	2,356	2,332	2,336	2,376
	1955	2,452	2,752	3,052	3,232
Seasonal Indices	1947				
	1948				
	1949				
	1950	88	110	107	95
	1951	88	110	107	95
	1952	88	110	107	95
	1953	88	110	107	95
	1954	88	110	107	95
	1955	88	110	107	95
Unadjusted	1947				
	1948				
	1949				
	1950	444	599	754	709
	1951	698	784	686	632
	1952	581	731	710	648
	1953	603	739	677	551
	1954	519	641	625	565
	1955	538	755	814	765

TABLE 68. Value of Domestic Exports of Goods

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	83.6	89.9	96.5	88.3	91.7	114.4	95.5	100.2	87.9	85.5	93.0	97.8
(1949 = 100)	1948	96.8	101.9	102.4	95.9	100.6	94.8	100.7	95.7	113.4	108.6	104.9	114.3
	1949	101.5	101.1	95.9	105.0	101.0	98.6	100.4	102.3	92.3	96.2	104.4	101.4
	1950	97.2	98.6	97.6	92.9	104.3	111.1	103.6	101.5	112.1	117.5	106.0	108.8
	1951	122.8	116.6	122.7	132.8	120.1	117.9	147.3	136.0	135.9	135.7	137.4	142.7
	1952	143.3	146.9	153.9	153.8	138.5	144.6	135.5	144.0	137.9	136.9	147.2	140.9
	1953	139.2	136.3	134.2	130.4	142.2	150.5	140.7	141.4	139.8	134.6	136.0	129.8
	1954	123.1	136.5	128.4	126.9	135.9	123.6	123.4	126.4	134.8	131.6	134.7	139.5
	1955	141.1	143.5	141.1	151.8	134.4	137.9	141.1	146.6	156.7	158.5	143.0	143.4
Seasonal Indices (Implicit)	1947	93.7	88.9	86.4	88.1	111.8	99.2	97.5	93.1	99.3	112.3	113.3	106.3
	1948	93.1	89.0	87.2	88.3	112.0	100.4	100.2	94.2	99.5	112.7	114.1	108.1
	1949	93.1	88.2	88.3	90.4	110.0	103.3	101.3	94.8	98.8	111.6	114.1	107.9
	1950	92.7	88.1	89.5	92.1	107.5	103.9	103.3	97.5	99.4	109.3	110.2	106.3
	1951	90.6	87.4	90.6	92.5	105.2	105.8	104.6	99.0	98.0	106.8	110.2	106.1
	1952	88.3	88.0	92.0	92.3	105.8	108.5	107.5	101.4	97.5	104.6	109.5	108.0
	1953	86.9	87.5	93.0	91.8	106.3	111.0	107.5	102.1	97.3	102.6	108.7	105.5
	1954	88.2	88.1	93.6	91.6	108.8	110.0	104.4	101.4	97.6	99.5	107.8	105.1
	1955	90.3	90.5	94.1	92.1	108.7	109.0	102.9	99.1	97.5	98.3	107.5	104.3
Unadjusted (including working day adjustment)	1947	194.7	198.8	207.3	193.2	254.9	282.2	231.4	231.8	216.9	238.6	261.9	258.4
(million dollars)	1948	224.0	225.5	221.8	210.6	279.9	236.6	250.8	224.2	280.7	304.4	297.7	307.2
	1949	235.1	221.7	210.5	235.9	276.3	253.2	252.8	240.9	226.7	266.9	296.0	271.8
	1950	224.0	215.9	217.2	212.7	278.7	287.0	266.0	245.9	277.0	319.4	290.3	287.6
	1951	276.8	253.2	276.4	305.5	313.9	310.0	383.0	334.8	331.3	360.3	376.6	376.4
	1952	314.6	321.3	351.9	352.8	364.1	390.0	362.3	363.1	334.2	356.0	400.6	378.2
	1953	300.7	296.7	310.5	297.6	375.7	415.4	376.3	358.9	338.1	343.5	367.7	340.6
	1954	270.0	299.0	298.6	289.0	367.4	338.0	320.4	318.5	327.0	325.7	361.1	364.4
	1955	316.7	322.8	329.9	347.8	363.1	373.5	360.8	361.1	379.7	387.5	382.1	371.7

TABLE 69. Value of Imports of Goods

Description		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seasonally adjusted	1947	76.7	89.2	93.6	93.4	94.4	95.6	92.5	101.4	93.4	99.3	96.7	87.1
(1949 = 100)	1948	91.9	92.5	87.7	97.2	90.1	91.8	94.9	95.7	98.6	97.6	96.4	109.7
	1949	104.0	104.5	103.9	100.3	98.6	102.0	99.6	94.1	98.6	95.4	96.2	102.7
	1950	97.2	102.4	103.9	99.7	108.3	115.9	112.1	117.5	124.2	132.0	135.6	128.8
	1951	144.9	140.9	147.5	168.8	153.0	146.5	155.7	155.3	143.9	137.8	136.7	133.0
	1952	142.0	137.8	143.9	133.6	144.3	136.2	136.4	142.1	149.9	155.2	156.5	161.5
	1953	153.8	159.4	157.0	164.4	159.9	162.1	161.6	161.0	161.7	152.0	153.5	157.0
	1954	144.3	152.1	148.1	144.3	142.9	151.8	138.7	147.5	140.6	145.8	152.4	151.8
	1955	158.1	159.3	158.1	166.9	165.2	159.2	160.0	180.7	180.1	201.3	182.9	182.1
Seasonal Indices (Implicit)....	1947	95.4	93.2	93.9	104.0	107.2	108.5	104.0	91.7	93.8	107.9	106.4	92.1
	1948	94.5	92.5	92.8	102.5	107.4	109.2	105.2	93.7	96.7	107.4	106.4	91.0
	1949	94.6	92.5	95.7	104.2	109.3	108.0	105.4	93.5	96.7	105.8	107.1	89.5
	1950	93.8	91.8	96.3	104.0	110.6	107.1	105.3	94.4	96.9	104.5	106.3	89.0
	1951	93.2	91.3	97.8	104.5	111.5	105.9	105.7	95.6	97.2	103.1	104.7	88.3
	1952	91.1	91.9	97.8	104.4	112.7	106.9	106.7	96.9	98.1	102.2	104.3	88.3
	1953	89.4	90.9	98.3	104.3	112.8	107.4	106.4	97.5	98.6	102.3	104.1	89.5
	1954	87.3	90.9	97.8	103.6	113.2	107.7	105.5	97.5	99.0	102.7	104.8	91.0
	1955	87.1	91.2	97.7	103.1	112.7	108.3	104.7	97.6	98.7	102.0	103.9	90.9
Unadjusted (including working day adjustment).	1947	168.7	191.7	202.7	223.8	233.4	239.1	221.9	214.4	202.1	247.0	237.2	185.0
(million dollars)	1948	200.2	197.2	187.6	229.7	223.2	231.2	230.2	206.6	219.9	241.6	236.4	230.1
	1949	226.7	222.9	229.2	240.8	248.5	253.7	241.9	202.9	219.8	232.5	237.6	211.9
	1950	210.1	216.6	230.6	239.0	276.2	286.2	272.0	255.7	277.5	317.9	332.1	264.1
	1951	311.4	296.6	332.6	406.8	393.4	357.5	379.2	342.1	322.4	327.6	330.0	270.7
	1952	298.2	292.0	324.3	321.3	374.8	335.7	335.6	317.3	338.8	365.5	376.1	328.5
	1953	317.1	334.0	355.8	395.4	415.6	401.3	396.6	361.8	367.5	358.3	368.3	323.9
	1954	290.3	318.5	333.9	344.7	372.8	377.0	337.4	331.5	320.9	345.0	368.1	318.5
	1955	317.6	335.0	355.9	396.4	429.2	397.3	386.0	406.6	409.6	473.1	438.2	381.6