# Published by Authority of the HON. WID. EULER M.P., <br> Minister of Trade and Commerce. 

## CANADA <br> DOMINION BUREAU OF STATISTICS

# REGIONAL INDEXES 

## OF

## DRUG STORE SALES

1936-1938


Published by Authority of the HUN. W. D. EULER, M.P., Minister of Trade and Commerce

DEPARTMENT OF TRADE AND COMMERCE<br>doininiun bureau or statistics<br>INTERNAL TRADE BRANCH<br>OTTAVA, CANADA

| Dominion Statistician: | R. H. Coats, LL.D., F.R.S.C., F.S.S. (Hon.) |
| :--- | :--- |
| Herbert Marshall, B.A., F.S.S. |  |

## CENSUS OF MERCHANDISING AND SERVICE ESTABLISHMENTS

## Regional Indexes of Drug Store Sales, 1936-1938.

Dominion indexes of retail sales have been published by the Internal Trade Branch of the Dominion Bureau of Statistics since the beginning of 1929. While these provide a useful measure of the trend in consumer purchasing in the country as a whole, they cannot be considered as representative of the trend in any one region. In a country such as Canada with its vast geographical proportions and diversity in natural resources, industries and climate, it is to be expected that their will be differences both in the seasonal pattern and also in the underlying trend in consumer purchasing in different sections. In order to provide current marketing data on a regional basis and at the same time to provide the individual retailer with e more valid standard for comparison with his own results the Internal Trade Branch has been expanding the scow e of the monthly surveys of retail trade to include separate figures for each of the economic divisions of the country. Monthly indexes of drug store sales for each of the five regions and covering the three-year period, 1936-19:8 are containe in this report. Current figures on a regional basis will be included in future issues of the bulletin, monthly Indexes of Retail Sales."

The Dominion average indexes previously published were compiled from returns submitted by the larger chain store companies. Adjustments were made to allow for the opening or closing of chain units $s$, that the indexes reflected the trend in sales for a constant number of units rather than the trend in drug chain sales as a whole: Cowing recent months monthly sales figures covering the period, 19\%6-19\%8 were secured from approximately 50 individual independent stores. These figures have been used to supplement the chain store data previnsly available and the combined results, properly weighted in proportion to the relative importance of chains and independents, Corm the basis $0^{\prime \prime}$ the regional indexes of drug store sales presented in this bulletin. Including chains and independents, monthly sales figures are nov available covering the operations of almost 800 stores and it is estimated that these transact more than 40 per cent of the total drug store business in Canada. The coverage of sales ranges from 36 per cent in British Columbia to 50 per cent in the Maritime Provinces.

# - 2 - <br> Table 1. - Coverage of Drug Store Sales in Monthly Indexes, by Regions 

| Region | Total Drug Store Sales 1936 <br> Estimated (1) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | _... Reporting Monthly <br> Number Annual Sales. 1926 |  |  |
|  |  | of Stores | Amount | \% of Total |
|  | \$ |  | \$ |  |
| Canada | 64, 055,000 | 777 | 26,799,045 | 41.8 |
| Maritime Provinces | 4,735,000 | 88 | 2,424,165 | 51.4 |
| Quebec | 12,188,003 | 124 | 4,719,54\% | 38.7 |
| Ontario | 30,647,000 | 361 | 13,383,721 | 43.7 |
| Prairie Provinces | 11,243,000 | 150 | 4,284,511 | \%.9.0 |
| Brlitish Columbia | 5,242,000 | 54 | 1,871,105 | 35.7 |

(1) Taken from results of annual survey of retail trade published by Internal Trade Branch for 1936.

## Trend in Sales, 19:6-1938

The underlying trend in drug store sales as reflected in the seasonally adjusted index was upward during 1936 and during the first eight months of $19: 7$. Sales ror the Dominion averaged 8.0 per cent higher in 1937 than in 1906 while gains for the various regions for which segarate results are mblished ranged from 3.9 per cent for the Prairie Provines to 10.1 per cent for the Mmitime Provinces. Ontario and Quehec sales both gained 8.6 per cent while British Columbia reported a gain of 9.0 per cent. Notwithstanding a downward turn in the latter part of $19: 7$ and which extended into 1938 , sales for the latter year were relatively well maintained. Sales for the country as a whole averaged only 1.5 per cent lower in 1938 than in $19: 7$ while decreases for those regions reporting declines were 1.5 per cent for British Columbia, 1.8 per cent for quebec, 1.8 per cent for Ontario, and 4.4 per cent for the Maritimes. Sales in the Prairie Provinces were 1.7 per cent greater in 1988 than in $19: 7$.

## Trend in Prices

Changes in the dollar value of sales reflect variations in priac levels as well as changes in the quantities of goods sold. While it would be exceedingly difficult to construct a price index which would accurately deflate the dollar value of drug store sales, there is evidence to show that most of the variation in the dollar sales over the period under review was due to changes in the quantities of goods purchased rather than to any appreciable variation in price levels. According to the results of the Census of Merchandising Establishments, sales of drug stores in 19zi] were comprised to the extent of 55 per cent drugs and drug sundries, 10 per cent cigars, cigarettes and tobacco and about 13 per cent toilet articles and preparations. Sub-group price indexes for these three groups, as compiled by the Prices Section of the Internal Trade Branch, reveal but minor movements during the period, 19:3-1938. A composite index including these three groups of commodities and thus giving representation to 78 per cent of the sales of drug stores, varies within limits of about one-half of one per cent. It is thus apparent that the variation in dollar sales was due almost entirely to changes in the quantities of goods purchased.

## Table 2.--Composite Index of Retail Prices Based on Prices of Medicines, Toilet Articles and Preparations and Tobacco. (Average 19:6 = 100)

|  | Jan. | Fel. | Warch | April | May | June | July | Aug. | Sept. | oct. | Nov. | Dec. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1936 | 99.7 | 99.7 | 99.7 | 100.2 | 100.2 | 100.2 | 100.1 | 100.1 | 100.1 | 100.1 | 100.1 | 100.1 |
| 1987 | 100.1 | 100.1 | 100.0 | 100.5 | 100.5 | 100.4 | 100.4 | 100.4 | 100.4 | 100.4 | 100.4 | 100.4 |
| 1938 | 100.4 | 100.4 | 100.4 | 100.6 | 100.ô | 100.ô | 100.5 | 100.5 | 100.5 | 100.6 | 100.6 | 100.6 |

## Seasonal Variations in Drug Store Sales

The annual business transacted by drug stores is more uniformly distributed over the various months of the year than is found too be the case in most lines of retail trade. It is true that there is a peak in the month of December when sales average about 24 per cent higher than a normal month due to the Christmas trade. There is also a low point in the month of January due to a falling off in sales of pre-Christmas merchandise such as toilet articles and preparations, stationery, and other Christmas gifts. With the exception of these two months, there is but slight variation in the proportions of the annual drug store business transacted in the various months of the year. The seasonal pattern of drug store sales in the Prairie Provinces varies from that for other regions, increased income in the Autumn months givine rise to a stimulus in all lines of retail buying in the months of September and October. The following table shows the percentage of annual drug store sales transacted in the different months of the year in the various economic divisions of the country:

> Table 3--Percentage of Annual Drug Store Business Normally Transacted in Different Months of the Year.

|  | CANALA | Maritimes | Quebec | Ontario | Prairie Provinces | British Columbia |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | \% | \% | \% | 管 | \% |
| January | 7.7 | 7.5 | 8.1 | 7, 8 | 7.4 | 7.7 |
| February | 8.2 | 7.8 | 8.7 | 8.2 | 7.7 | 8.0 |
| March . | 8.1 | 8.1 | 8.5 | 8.2 | 7.7 | 7.8 |
| April | 8.2 | 8.1 | 8.3 | 8.1 | 8.1 | 8.1 |
| May .. | 8.0 | 8.1 | 7.9 | 8.1 | 8.1 | 7.8 |
| June | 8.0 | 7.9 | 8.1 | 8.2 | 7.5 | 7.9 |
| July | 8.0 | 8.2 | 7.7 | 8.2 | 7.7 | 8.0 |
| August | 3.2 | 8.15 | 8.1 | 8.2 | 8.1 | 8.2 |
| September | 8.5 | 8.2 | 8.3 | 8.3 | 9.3 | 8.8 |
| October | 3.5 | 8.3 | 3.4 | 8.2 | 9.5 | 9.0 |
| November | 8.3 | 8.0 | 8.5 | $8 . ?$ | 8.2 | 8.0 |
| December | 10.3 | 11.2 | 9.4 | $10 . ?$ | 10.7 | 10.7 |
|  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

## - 4 - <br> Commodities Sold by Drug Stores

In connection with the Census of Merchandising Establishments taken at the time of the Decennial Census of 1931, information was secured from the larger retail stores regarding sales by comodity groups. Results of that inquiry indicate that 55.0 per cent of drug store sales consisted of drugs and drug sundries. Toilet articles and preparations accounted for 12.9 per cent of the annual turnover while cigars, cigarettes and tobacco comprised another 10.1 per cent. The remaining 22 per cent was made up of other commodities of which stationery, books and magazines, soda fountain sales including lunches and candy and confectionery were the most important. The percentage distribution of drug store sales for 1930 as obtained from the census results are shown in the following table:

Table 4e-Percentage Distribution of Drug Store Sales by Commodities, Canada, 1920

| Commodity | Per Cent of Sales |
| :---: | :---: |
| Bottled Beverages | 1.3 |
| Cameras and photographic supplies | 2.5 |
| Candy, confectionery and nuts ..... | 5.1 |
| Cigars, cigarettes, tobacco and smokers' supplies | 10.1 |
| Drugs and drug sundries ........................... | 55.0 |
| Professional and scientific instruments and equipment | 0.4 |
| Service (photo-finishing) | 0.9 |
| Soda fountain sales, ice cream and lunches | 4.2 |
| Stationery, books and magazines | 5.9 |
| Surgical, dental and hospital supplies | 0.9 |
| Toilet articles and preparations | 12.9 |
| Miscellaneous merchandise | 0.8 |

## Indexes of Sales

The following table presents indexes of dollar sales for the period, 1936.. 1938 for Canada as a whole and for each of the five economic divisions. The average monthly sales for 1936 is used in each case as the base upon which the indexes are computed. Three sets of index numbers are shown. The first is the index based on total monthly sales. The second set gives indexes of average daily sales in computing these indexes allowance was made not only for differences in the number of business days in various months but also for differences in the sales importance of different days of the week. The third set of index numbers are further corrected for normal seasonal variations as based on the average seasonal movements over the period under review.

The charts following the tables present graphically the seasonal movements and underlying trend in drug store sales during the past three years.

Table 5--Indexes of Drug Store Sales, by Regions (Average for $19: 3=100$ )
A. Unadjusted. B. Corrected for Number of Business Days. C. Adjusted for Number of Business Days and Seasonal Variations

| Year and Montr | Canalia |  |  | MARITIMES |  |  | QUEBEC |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | A | B | C | A | B | C |
| 1933 January | 90.9 | 89.1 | 95.8 | 85.8 | 84.1 | 93.4 | 94.3 | 92.5 | 95.4 |
| February | 92.2 | 94.7 | 96.6 | 87.4 | 89.7 | 95.4 | 98.0 | 100.6 | 96.7 |
| March | 94.2 | 95.2 | 98.1 | 92.0 | 92.9 | 95.8 | 100.5 | 101.5 | 99.5 |
| April | 96.2 | 97.8 | 99.8 | 94.7 | 96.2 | 98.2 | 97.9 | 99.5 | 99.5 |
| May | 97.9 | 95.7 | 99.7 | 98.3 | 96.1 | 99.1 | 96.7 | 94.5 | 99.5 |
| June | 94.7 | 96.9 | 100.9 | 93.7 | 95.9 | 100.9 | 96.8 | 99.1 | 102. 2 |
| July | 98.0 | 93.1 | 100.1 | 99.6 | 97.6 | 99.6 | 94.4 | 92.5 | 99.5 |
| August | 97.5 | 93.2 | 98.2 | $10 \% .3$ | 102.0 | 99.0 | 95.9 | 94.7 | 97.6 |
| September | 100.6 | 102.2 | 100.2 | 98.5 | 100.1 | 102.1 | 97.6 | 99.2 | 100.2 |
| October | 107.8 | 103.4 | 101.4 | 104.4 | 100.1 | 100.1 | 105.9 | 101.5 | 100.5 |
| November | 99.1 | 103.6 | 103.6 | 97.0 | 101.4 | 105. $\frac{1}{}$ | 102.8 | 107.4 | 105.3 |
| December | 130.7 | 128.6 | 103.7 | 145.0 | 142.7 | 106.5 | 11.9 .4 | 117.5 | 104.0 |
| Yearly Average | 100.0 |  | - | 100.0 | - |  | 100.0 |  |  |
| 1937 January | 100.7 | 98.4 | 105.8 | 96.5 | 94.3 | 104.8 | 104.7 | 102. $3^{2}$ | 105.5 |
| February | 98.3 | 107.1 | 109.3 | 92.8 | 101.1 | 107. 3 | 107.1 | 110.7 | 112.2 |
| March | 105.8 | 104.8 | 108.0 | 109.0 | 107.9 | 111.2 | 110.5 | 109.4 | 107.3 |
| April | 102.1 | 103.4 | 105.5 | 103.5 | 104.9 | 107.0 | 104.9 | 106.3 | 106.3 |
| May | 105.2 | 103.8 | 108.1 | 105.7 | 104.3 | 107.5 | 102.8 | 102.5 | 107.9 |
| June | 101.8 | 103.5 | 107.8 | 100.7 | 102.3 | 107.7 | 102. 1 | 103.8 | 107.0 |
| July | 107.6 | 10\%.2 | 107.5 | 114.9 | 110.2 | 112.4 | 105.7 | 101. 3 | 138.9 |
| August | 107.1 | 108.2 | 110.4 | 114.0 | 115.2 | 111.8 | 107.0 | 108.1 | 111.4 |
| September | 110.2 | 112.0 | 109.8 | 108.2 | 110.0 | 112.2 | 108.9 | 110.7 | 111.8 |
| October | 112.8 | 111.2 | 109.0 | 116.0 | 113.4 | 113.4 | 111.9 | 109.4 | 108.3 |
| November | 104.5 | 107.0 | 107.0 | 105.4 | 105.8 | 110.2 | 107.8 | 110.3 | 108.1 |
| December | 138.3 | 135.6 | 109.4 | 157.0 | 153.9 | 114.9 | 128.5 | 126.0 | 111.5 |
| Yearly Average | 108.0 |  |  | 110.1 | - |  | 108.6 |  |  |
| 1938 January .... | 101.7 | 100.4 | 108.0 | 101.3 | 100.0 | 111.1 | 105.2 | 104.8 | 108.0 |
| 2- February ... | 94.1 | 102.5 | 134.3 | 92.7 | 101.0 | 107.4 | 99.2 | 108.1 | 10\%.9 |
| March | 10\%. 3 | 102.0 | 105.2 | 102.9 | 101.3 | 104.4 | 109.6 | 107.9 | 105.8 |
| April | 105.0 | 104.0 | 103.1 | 106.5 | 105.4 | 107.6 | 107.5 | 103.4 | 106.4 |
| May | 100.5 | 101.6 | 105.8 | 101.2 | 102.2 | 105.4 | 100.2 | 101.2 | 103.5 |
| June | 101.1 | 102.7 | 107.0 | 99.3 | 150.9 | 103.2 | 100.9 | 102.5 | 105.7 |
| July | 104.3 | 102.2 | 105.5 | 105.2 | 102.8 | 104.8 | 101.5 | 99.2 | 105.7 |
| August ..... | 105.8 | 104.8 | 105.9 | 108.4 | 107.3 | 104.2 | 104.3 | 103.3 | 106.5 |
| September | 107.6 | 109.0 | 106.9 | 101.0 | 102.3 | 104.4 | 104.6 | 106.0 | 107.1 |
| October | 112.0 | 111.5 | 109.3 | 108.1 | 106.7 | 105.7 | 111.9 | 110.5 | 109.4 |
| November | 107.5 | 105.2 | 105.? | 99.4 | 101.0 | 105.2 | 107.7 | 103.5 | 107.4 |
| December | 173.0 | 130.4 | 105.2 | 135.9 | 131.3 | 98.0 | 125.9 | 120.7 | 106.8 |
| Yearly Average. | 103.4 | - | - | 135.3 |  | - | 103.3 | - | - |

## Table 5-Indexes of Drug Store Sales, by Regions--(Concl.) <br> (Average for $1936=100$ )

A. Unadjusted. B. Corrected for Number of Business Days. C. Adjusted for Number of Business Days and Seasonal Variations

| Year and Month | UNTARIO |  |  | PRAIFIES |  |  | BRITISH COLUMBIA |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | A | B | C | A | B | C |
| 1936 J anuary | 92.5 | 90.7 | 96.5 | 86.9 | 85.8 | 95.7 | 86.3 | 84.6 | 92.0 |
| February | 93.3 | 95.8 | 96.8 | 86.3 | 88.6 | 95.3 | 89.1 | 91.5 | 95.3 |
| March | 94.6 | 95.6 | 97.6 | 89.1 | 90.0 | 97.8 | 90.7 | 91.6 | 97.4 |
| April | 96.1 | 97.7 | 100.7 | 96.0 | 97.5 | 100.6 | 94.7 | 96.2 | 99.2 |
| May | 98.9 | 96.7 | 99.7 | 98.3 | 96.1 | 99.1 | 93.3 | 91.2 | 98.1 |
| June | 95.7 | 98.0 | 100.0 | 91.0 | 93.1 | 103.4 | 93.0 | 95.2 | 100.2 |
| July | 100.8 | 98.8 | 100.8 | 93.1 | 91.3 | 98.2 | 99.1 | 97.2 | 101.3 |
| August. | 97.1 | 95.9 | 97.9 | 95.7 | 95.5 | 98.5 | 100,7 | 99.4 | 101.4 |
| September .. | 97.6 | 99.2 | 100.2 | 110.8 | 112.6 | 100.5 | 104.3 | 106.0 | 100.0 |
| October | 104.2 | 99.9 | 100.9 | 118.6 | 113.7 | 99.7 | 112.7 | 108.1 | 100.1 |
| Navember | 99.0 | 103.4 | 104.4 | 97.3 | 101.7 | 103.8 | 96.5 | 100.8 | 105.0 |
| December | 129.8 | 127.8 | 103.1 | 135.9 | 123:8 | 104.5 | 139.1 | 133.9 | 106.1 |
| Yearly Avera | 100.0 | - |  | 100.0 | - | - | 100.0 | - | - |
| 1937 January | 102.0 | 99.7 | 106.1 | 94.2 | 92.1 | 103.5 | 102.2 | 99.9 | 108.6 |
| February | 99.0 | 107.8 | 108.9 | 89.8 | 97.8 | 105.2 | 96.8 | 105.4 | 109.8 |
| March | 106.8 | 105.7 | 107.9 | 99.0 | 98.0 | 106.5 | 101.5 | 100.5 | 106.9 |
| April | 101.5 | 102.8 | 106.0 | 100.2 | 101.5 | 104.6 | 102. 6 | 104.0 | 107.2 |
| May | 106.3 | 104,9 | 108.1 | 104.6 | 10ㄹ.3 | 106.5 | 103.2 | 101.9 | 109.6 |
| June | 103.7 | 105.4 | 107.6 | 96.5 | 98.1 | 109.0 | 102.4 | 104.1 | 109.6 |
| July | 110.8 | 105.2 | 108.4 | 97.4 | 93,4 | 100.4 | 109.5 | 105.0 | 109.4 |
| August ..... | 108.8 | 109.9 | 112.1 | 100.3 | 101.3 | 104.4 | 106.3 | 107.4 | 109.6 |
| September . . | 108.4 | 110.2 | 111.3 | 114.3 | 116.2 | 103.7 | 117.0 | 118.9 | 112.2 |
| October .... | 110.8 | 108.3 | 109.4 | 118.4 | 115.7 | 101.5 | 12 S .6 | 120.8 | 111.9 |
| November | 106.0 | 108.5 | 109.6 | 97.7 | 100.0 | 102.0 | 103.3 | 105.7 | 110.1 |
| December | 139.4 | 1.26 .7 | 110.2 | 134.8 | 132.2 | 103.3 | 146.4 | $14 \% .5$ | 111.2 |
| Yearly Average | 108.6 | - | - | 103.9 | - |  | 109.6 | - |  |
| 1938 January ... | 103.0 | 101.7 | 108.2 | 92.9 | 92.7 | 104.2 | 101.6 | 100.3 | 109.0 |
| February ... | 94.5 | 102.9 | 103.9 | 88.5 | 96.4 | 103.7 | 93.9 | 102.3 | 105.6 |
| March | 104.4 | 102.8 | 104.9 | 94.9 | 93.4 | 101.5 | 104.3 | 102.7 | 109.3 |
| April | 105.0 | 104.0 | 107.2 | 101.2 | 100.2 | 103.3 | 106.6 | 105.5 | 108.8 |
| May ......... | 101.8 | 102.8 | 105.0 | 97.6 | 98.6 | 101.6 | 101.1 | 102.1 | 109.8 |
| June | 103. 5 | 105.2 | 107.3 | 96.0 | 97.6 | 108.4 | 100.2 | 101.8 | 107.2 |
| July | 105.3 | 103.5 | 105.6 | 103. 4 | 101.1 | 108.7 | 106.0 | 103.6 | 107.9 |
| August..... | 105.8 | 104.8 | 106.9 | 106.3 | 105.2 | 108.5 | 105.5 | 105.4 | 107.6 |
| September .. | 105.4 | 106.8 | 107.9 | 116.5 | 118.0 | 105.4 | 114.0 | 115.5 | 109.0 |
| Octaber .... | 108.2 | 106.8 | 107.9 | 126.0 | 124.4 | 109.1 | 119.1 | 117.6 | 108.9 |
| Navember | 103.3 | 105.0 | 106.1 | 102.0 | 103.7 | 105.8 | 101.3 | 102.9 | 107.2 |
| December $\ldots$ | 137.0 | 131.4 | 106.0 | 141.6 | 125.8 | 106.1 | 141.0 | 135.2 | 104.8 |
| Yearly Average ... | 106.5 | - | - | 105.7 | - | - | 108.0 | - | - |









