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## CANADA <br> DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS

FAMILY LIVING EXPENDITURE IN

CANADA

Wage-earner Fancily Expenditure and Income

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# DOMINION BUREAU OF STATISTICS - CANADA DEPARTMENT OF TRADE AND COMARCE 

## PAMTLY LTVING EXPENDITTRES IN CANADA

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\frac{\text { WAGE-EARNER FAMILY EXPENDITURE AND INCOME }}{\text { (A preliminary analysis) }}
$$

## STRMARY

Results from the recent Dominion Bureau of Statistics survey of family living expenditures show that incomes of Canadian wage-earner families tend to centre between $\$ 1,200$ and $\$ 1,600$ a year, with the proportion receiving less than $\$ 1,200$ being largar than the proportion receiving above $\$ 1,600$. This was true for famllies of both British and French origin.

The father provided about 93 per cent of income for the 1,135 British families and 91 per cent for the 211 French families in the survey.

Among the British families 32 per cont owned their own homes and 33 per cent owned motor cars. Six per cent of the French families owned their own homes and 10 per cent operated motor cars.

Iiving expenditures of British and French families were similar in character. Food accounted for 27.2 per cent of British family expenditure and 30.3 per cent for French families. Corresponding percentages for shelter were 17.3 and 16.7 ; and for clothing 10.1 and 11.9. Savings (including life insurance premiums) for both groups amounted to 9.4 per cent of total expenditure. Approximately the same proportion of expenditures was financed from credit or from savings of preceding years.

## INTRODUCTORY

The family must be considered as-a-unit for many types of social and market analysis. This is true, for example, of investigations concerned with housing standards and household maintenance costs. Records from the 1,439 Canadian wage-earner families contributing to the Dominion Bureau of Statistics survey of family expenditures, there fore, have been grouped according to amounts of family income, and expenditures have beer examined at various income levels. This preliminary study will be supplemented later by an analysis of expenditure records according to income per person which gives a more accurate basis than total family income of appraising economic circumstances.

Expenditure records were collected only from self-supportine wage-earner familles with annual earnings in the yoar ended September 30 , 1938 , ranging from $\$ 450$ to $\$ 2,500$. In ali of the 1,439 families both parents and one or more children were present in the home, and one lodger or domestic lived with some of the families. completed records were obtained from l, 135 families of British origin in Charlottetown, Falifax, St.John, Montreal, Ottawe, Toronto, London, Winnipeg, Saskatoon, Edmonton, and Vancouver; an additional 211 records were collected from French families in Montreal and quebeo; and 93 from families of other racial origin in Montreal and Winnipeg. Separate analyses of records for the English and French family groups have been made, but the similarity of family living expenditure patterns in these cities (shown in earlier releases) was considered sufficient to justify computation of composite averages including data for ell clties. The number of "other race" family records was not considered sufficient to form significant averages for the family income groups chosen.

## CHARACTERISTICS OF VAGE-EARIER FAMILIES AT PROGRESSIVE INCOME LEVELS

Differences in the composition of the family and evidence also of differences in economic position may be observed at progressive levels of family income. Families of British origin averaged approximately the same number of persons throughout annual income ranges from $\$ 400$ to $\$ 2,400$. This was paralleled by an equally consistent average number of children, which centred closely around 2.3. For French families, however, the number of children rose sharply from an average of 2.1 in the $400-\$ 799$ income group to 4.9 for families with $\$ 2,000$ or more per annum. Earnings of members other than the father in French families averaged slightly higher than those for other members of British
families, but the difference was not sufficient to account for the variation in relationships between income and family size in the two racial groups. The average age of the father moved gradually higher in progressive income groups in both British and French families. The number of rooms per family increased gradually from 4.3 for the $\$ 400-\$ 799$ income group to 6.0 for families with antual incomes of more than $\$ 2,000$, while corresponding averages for French families were 3.8 and 6.4 respectively. A much sharper rate of increase in actual shelter costs indicated that there was more concern over qualitative attributh of the home than the provision of more living space as income increased. The average number of rooms per person was almost constant at 0.9 for French families, while for British families it increased moderately from 1.0 in the $\$ 400$ - $\$ 799$ income ramge to 1.3 for families with $\$ 2,400$ or more per ennum. The proportion of home owners tended to rise materially as income mounted; and the same was true of motor car owners.

TABLE i. FAMILI GIARACTHRTSTICS AT PROGRESSIVE INCOME LEVELS

1. 135 British Families


211 French Families


## DISTRIBUTION OF FAMILY EXPENDITURES AT PROGRESSIVE INCONE LEVELS

Actual expenditures in all budget groups showed substantial increases at successive family income levels. Proportions of total expenditure upon some of the most - important living requirements declined steadily, however, as family incomes mounted. This was true of foods, shelter costs, fuel and light. Proportions of expenditure on nearly all other budget groups moved steadily upward with family income. This was particularly marked for household requirements and transportation costs. Proportions for health and personal care mounted gradually until annual incomes reached approximately $\$ 1,600$ and then receded slightly. There were few appreciable differences between expenditure patterns for English and French families. Actual expenditure averages and percentage proportions at different income levels may be examined for both racial groups in Tables 2 and 3. Expenditure averages correspond with averages of gross income, but are considerably higher than net income which is the basis of classification for Tables 2 and 3. The principal constituents of income and expenditure may be summarized as follows:

## Income

## Net

Earnings
Value of payments in kind
Income from investments
Other cash
Gross
Loans and credit outstanding
(for purchases in the survey year only)
Reductions in bank savings and investments
Value of trade-in allowances

## Expenditure

Outlays for cumodities and services required for family living

## Savings

Bank
Investments
Life insurance
Re-payment of old dehts
(considered as saved from
current income)

The following list will give an indication of the more important items entering into expenditure averages in Tables 2 and 3. Families were asked to report total costs of all purchases during the survey year.

Food and Clothing: All such purchases for the family,
Yousing: Interest, repairs, taxes, insurance for owners. Rent and water taxes for tenants. Capital expenditure on the home included down payments on new homes, and the cost of additions, but not repairs.

Fousehold Operation: Ice, telephone, laundry, domestic help.
Furniture: In addition to furniture, textile furnishings, chinaware, electrical and kitchen equipment.

Yealth: Medical cere, dentists, glasses, etc.
Personal Care: Toilet articles, barber, hairdresser.
Transportation: All fares, bicycles, motor cars--new purchases and current
costs.
Recreation: Newspapers, periodicals, etc., entertainment admissions,
hobby expenses.
Savings: Life insurance, bank balance increases, investments, re-payment of debts incurred prior to the survey year.

> Children's Education and Vocation: Tuition, board, professional and union dues.

Community Welfare and Gifts: Church and charitable contributions, personal taxes, gifts to persons outside the family.

| Averages |  |  |  |  |  |  |  |  |  |  | Percentages |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income Groups : | $\begin{array}{r} \$ 400 \\ -799 \\ \hline \end{array}$ | $\begin{aligned} & \$ 800: \$ 1000: \$ 1200 \\ & -999:-1199:-1399 \end{aligned}$ |  |  | $\begin{aligned} & \$ 1400 \\ & \therefore 15999 \end{aligned}$ | $\begin{aligned} & \$ 1600 \\ & 01799 \end{aligned}$ | $\begin{aligned} & \$ 1800 \$ 2000 \\ & \$ 1999-2399 \end{aligned}$ |  | \$2400 | Total | $\begin{array}{r} \$ 400 \\ -799 \end{array}$ | $\begin{aligned} & \$ 800: \$ 1000 \\ & -999:-1199 \end{aligned}$ |  | \$1200: | $\$ 1400$ | $\$ 1600: \$ 1800:$ |  | $\$ 2000: \$ 2400^{+}$ |  | $:$ Total |
| Number of Families: | 45: | 108: | 184 | : 236 | : 212 | : 118 | : 91 | : 100 | 41 | 1135: | 45: | 108: | 184 | 236: | - 212: | 118: | : 91: | 100 | 41 | : 1135 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total Annual Focd.. | 288 | 351 | 380 | 419 | 442 | 473 | 508 | 517 | 578 | 433 " | 37.2 | 35.2 | 31.7 | 29.3 | 27.2 | 25.6 | 24.6 | 21.7 | 20 | 27.2 |
| Housing . . ........ | 165 | 187 | 224 | 254 | 283 | 324 | 315 | 396 | 420 | 276? | 21.3 | 18.7 | 18.7 | 17.8 | 17.4 | 17.5 | 15.3 | 16.6 |  | 17.3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| on Home ......... | 0 | 4 | 2 | 10 | 11 | 8 | 12 | 23 | 20 | $9:$ | 0 | . 4 | . 2 | .7 | . 7 | . 4 | - 6 | 1.0 | 7 | 6 |
| Fuel and Light .... | 70 | 78 | 84 | 94 | 103 | 110 | 116 | 139 | 142 | 101: | 9.0 | 7.7 | 7.0 | 6.6 | 6.3 | 6.0 | 5.6 | 5 | 5 | 3 |
| Total Clothing .... | 62 | 93 | 120 | 147 | 165 | 187 | 217 | 253 | 260 | 160 |  |  |  |  |  |  |  |  |  | . 3 |
| Household Operation |  |  |  |  |  |  |  |  |  | 160 | $7 \cdot 9$ |  | 10.1 | 10.2 | 10.1 | 10.1 | 10.5 | 10.6 | 9.3 | 10.1 |
| Household Operation | 5 | 8 | 13 | 21 | 30 | 38 | 48 | 60 | 74 | 29: | - 5 | . 9 | 1.1 | 1.4 | 1.9 | $2 \cdot 1$ | $2 \cdot 3$ | 2.5 | 2. 6 | 1.8 |
| Furniture .......... | 36 | 47 | 72 | 82 | 99 | 107 | 134 | 128 | 176 | 92: | 4.6 | 4.7 | 6.0 | 5.7 | 6.1 | 5 | 6 |  |  |  |
| Health ........... | 25 | 41 | 60 | 59 | 70 | 77 | 8 | 94 | 95 |  |  |  |  |  |  |  |  | 5.4 | 6.3 | 5.8 |
|  |  |  |  |  | \% |  | 86 | 94 | 95 | 67 | 3.3 | 4.0 | 5.0 | 4.1 | 4.3 | 4.2 | 4.2 | 3.9 | 3.4 | 4.2 |
| Personal Care ..... | 13 | 16 | 20 | 23 | 26 | 28 | 30 | 34 | 35 | 24: | 1.6 | 1.6 | 1.7 | 1.6 | 1.6 | 1.5 | 1.5 | 1.4 | 1.2 | 1.6 |
| Total Transportation | 12 | 35 | 39 | 73 | 90 | 125 | 143 | 182 | 306 | 93: | 1.6 | 3.5 |  | 5.1 | 5.5 |  |  |  |  |  |
| Recreation ......... | 39 | 49 | 62 | 83 |  |  |  |  |  |  |  |  |  |  |  | 6.7 | 6.9 | 7.6 | 10.9 | 5.9 |
|  |  | 49 | 62 | 83 | 102 | 114 | 128 | 139 | 179 | 93: | 5.1 | 4.9 | 5.2 | 5.8 | 6.2 | 6.2 | 6.2 | 5.9 | 6.4 | 5.9 |
| Savings ............. | 43 | 69 | 84 | 121 | 143 | 176 | 218 | 307 | 362 | 150: | 5.6 | 6.9 | 7.1 | 8.5 | 8.8 | 9.5 | 10.6 | 12.9 | 12.9 | 9.4 |
| Children's Education and Vocation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Community Welfare |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| and Gifts ........ | 11 | 15 | 24 | 32 | 43 | 52 | 71 | 72 | 106 | 42: | 1.5 | 1.5 | 2.0 | 2.2 | 2.7 | 2.8 | 3.4 | 3.0 | 3.8 | 2.6 |
| Total Expenditure.. | 775 | 1000 | 1196 | 1432 | 1626 | 1848 | 2062 | 2384 | 2804 | 590: |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 2062 | 2384 | 2804 | 1590. |  | 100. 10 | 00. | 100. | 100. | 100. | 100. | 100. | 100. | 100. |

TABLR 3. DISTRIBUTION OF FAMILY EXPENDITURES ACCORDING TO NET INCOME
Actual Amounts and Percentages - 211 French Families


## FAMILY INCOME

(a) Numbers of Survey Femilies at Different Income Levels

It has been noted that the total income of wage-earner families is almost invariably larger than the actual cash amount of earnings from regular employment. The term gross income is used to indicate all family resources used for family expenditure during the survey year, including net income items of earnings, the value of payments in kind, income from investments, and other cash receipts. In addition, gross income includes the value of loons and merchandise credit outstanding, reductions in savings and investments, and trade-in allowances. Net income has been taken as the basis of subsequent analysis, although the sample of families reporting was originally selected upon the basis of family earnings only

TABIE 4. SUMMARY OF THE NET IHCONE DISTRIBUTION OF 1,439 WAGE-EARNER FAMILIES IN 12 CANADIAN CITIES

| Income Ranges | $: \$ 400-: \$ 800-: \$ 1000: \$ 1200 \div \$ 1400 \cdots: \$ 1600-: \$ 1800-: \$ 2000-: \$ 2200-: \$ 2400+$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race Groups |  |  |  |  |  |  |  |  |  |  |
| British . | 45 | 108 | 134 | 236 | 212 |  |  |  |  |  |
| French . | 27 | 25 | 37 | 43 | 25 | -16 | 18 | 14 | 34 |  |
| Other .. | 15 | 12 | 12 | 11 | 21 | 7 | 18 7 | 14 | 1 | $\begin{aligned} & 2 \\ & 3 \end{aligned}$ |

The character of this distribution is affected to some extent by the fact that different cities are not represented proportionately to their total wage-earner population. The general similarity of individual city income distributions, however, makes this a point of relatively minor importance, A more serious defect resulted from difficulty in obtaining co-operation from families with incomes ranging from $\$ 400$ to \$799. Nearly four of every five in the random selection from this income range refused to co-operate or were unable to give complete records. Among families with incomes above $\$ 800$ per annum, almost every second one contributed a satisfactory record. Within the income range of the sample, thorefore, there is a definite deficiency of low income families. For purposes of establishing broad averages, however, this is compensated for in large part by the complete absence of families in the sample with reported earnings of more than $\$ 2,500$. Above this income limit the proportion of wage-earner families of the type sampled would not exceed 15 per cant in the cities of the survey.
(b) Composition of Family Incorne

Although earnings of the family head form the major portion of family income they are by no means its only source. This may be observed from the averages obtained from British and French family records presented in Table 5. Other sources accounted for more than 7 per cent of British family net income and more than 9 per cent of the net income of French families.

TABLE 5. COMPOSITION OF WAGE-EARNER FAMILY NET INCOME

| Income Ranges | $\begin{array}{r} \$ 400 \\ 799 \\ \hline \end{array}$ | $\begin{gathered} \$ 800 \text { : } \\ 999 \end{gathered}$ | $\$ 1000$ | $\begin{array}{r} 1200 \\ 1399 \end{array}$ | $\begin{aligned} & \$ 1400 \\ & 1599 \end{aligned}$ | $\begin{aligned} & \$ 1600 \\ & 1799 \end{aligned}$ | $\begin{gathered} \$ 1800 \\ 1999 \end{gathered}$ | 2399 | \$2400 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of <br> Families | 45 | 108. |  |  |  |  |  |  |  |  |
| Source of Income | 45 | 108. | 184 | 236 | 212 | 118 | $91:$ | 100 | 41 | 1135 |
| Earnings of |  | * | \$ | * | \$ | \% | \$ | \$ | \$ | \$ |
| Family Head .... | 690 | 868 | 1024 | 1202 | 1377 | 1555 | 1701 | 1950 | 2323 | 1337 |
| Other Family |  |  |  |  |  |  |  |  |  |  |
| Earnings | 5 | 23 | 31 | 48 | 56 | 65 | 100 | 113 | 115 | 57 |
| Other Income | 9 | 17 | 27 | 33 | 50 | 67 | 72 | 80 | 194 | 49 |
| Total ....... | 704 | 908 | 1082 | 1283 | 1483 | 1687 | 1873 | 2143 | 2632 | 1443 |

Table 5. Cont'd - 211 French Families

| Income Range | \$400-799 | \$800-11 | \$1200-159 | \$1600-1 | \$200 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Families | 27 | 62 | 68 | 34 | 20 | 211 |
| $\frac{\text { Source of }}{\text { Earnings }}$ Income | \$ | \% | \$ | \$ | \$ | \$ |
| Family Head .... | 635 | 974 | 1246 | 1547 | 1869 | 1196 |
| Other Family |  |  |  |  |  |  |
| Earnings .... | 25 | 35 | 58 | 148 | 170 | 72 |
| Other Income | 5 | 14 | 43 | 74 | 190 | 48 |
| Total | 665 | 1023 | 1347 | 1769 | 2229 | 1316 |

It will be noted that tho proportion which "Other Pamily Parnings" and "Other Income" bear to total income lncreases in the higher income groups. The increase in "Other "amily aarnings" is associated with larger numbers of children in the higher income ranges for French families, but not to any appreciable extent in the case of British families. The rising tendenov in "Other Income" is probably associated with the more firmly establishea financial position at higher income levels. The savings of families at relatively high income leveis were more than proportionately greater than those of families with low incame.

## (c) The Relation of Family Income and Expenditure Averages

In the present anziysis savings from annual income have been treated as items of expenditure, and since considerable credit is utilized by wage-earner families, expenditure averages are materially above ccrresponding averages of family net income. This difference is accentuated by purchases made from savings and by trade-in-allowances. The margin of expenditure over net income averaged $\$ 147$ for all British families, while sav.. ings inclusive of lite insurance premiums averaged \$150. The detailed examination of the dirferences between income and expenditure in relation to debt is not yet completed for all cities, and this preliminary atatement is limited to records from Halifax, Montreal. Toronto, Saskatoon and Vancouver. If all recorcs were perfectly accurate an exact balance would be obtained between the margin of expenditure over net income and the difference between gross and net income which $1 s$ made up of (a) debts incurred during the current year, (b) reductions in savings and intestment, and $(c)$ the value of trade-in allowances on purchases. The discrepancy between these totals is, therefore, an index of the accuracy which the records possess.

TABLE 6. CITY CONPARISONS OF GROSS TNCONE ITYMS ARD DIFFERENCES BETWEEN NET INCOME AND TUTAL EXPENDITURE

| City | $\vdots$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

No precise interpretation of the differences between expenditure margins and the gross income differentials can be made. Understatement of current debts and reductions in savings seem rather more probable than overstatements in records of expenditure, but even if expenditure has been overstated it is apparent that any bias in this direction 6 is likely to affect the accuracy of expenditure averages very little. No budget record was used for which gross income and expenditure did not balance within 10 per cent and 88 per cent of all records balanced within 5 per cent.

The excess of family expenditures over net income was remarkably consistent for British families at different income levels. This consistency may be appreciated by reference to Table 7 showing average net family income and expenditures at progressive income levels. In the French sample the margin of expenditure was comparatively high at low income levels and formed a steadily decreasing proportion of net income in progressively higher income ranges. This tendency was more pronounced in Quebec City than in Montreal although the average margin of expenditure over net income was greater in Montreal.

As already noted the margin of expenditure over net income cannot be taken as a measure of net indebtedness incurred during the survey year, since all investments and bank savings were included as part of expenditure. This may be observed from the financial summary in Table 8 for the same cities included in comparisons of debts and expenditures margins over net income.

TABLE 7. AVERAGES OF FAMILY NET INCOME AND EXPENDITURE AT PROGRESSIVE INCOME LEVELS
1,135 British Families

| Income Ranges | \$400- | \$800 | $\begin{aligned} & \$ 1000 \\ & 1199 \end{aligned}$ | \$1200 | 1599 | 1799 | 1999 | \$2000 |  | tal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Income ... | 704 | 908 | 1082 | 1283 | 1483 | 1687 | 1873 | 2143 | 2632 | 1443 |
| Family Expenditure. | 775 | 1000 | 1196 | 1432 | 1626 | 1848 | 2062 | 2384 | 2804 | 1590 |
| Expenditure Margin <br> over Net Income |  |  |  |  |  |  |  |  |  |  |
| in Percentage*... |  | 10.1 | 10.4 | 11.7 | 9.8 | 9.6 | 10.2 | 11.2 | 6.5 | 10.3 |

211 French Families

| Income Ranges | \$400-799 | \$800-1199: | \$1200-1599: | \$1600-1999 | \$2000+: | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Families: | 27 | 62 | 68 | 34 | 20 | 211 |
| Family Net Income.. | 665 | 1023 | 1347 | 1769 | 2229 | 1316 |
| Family Expenditure. | 794 | 1160 | 1495 | 1954 | 2427 | 1469 |
| Expenditure Margin over Net Income in Percentage* ... | 19.4 | 13.4 | 11.0 | 10.5 | 8.9 | 11.6 |

* Reckoned as a percentage of net income. Not comparable with expenditure percentages computed in terms of total expenditure.


## FINANCIAL SUMMARY

In order to make an appraisal of the family's financial position, debit items must include reductions in bank savined and other assets as well as new debts of the survey year still outstanding. Aggregate savings out of current income, on the other hand, rightly include amounts in repayment of old debts incurred before the survey year. A substantial but indeterminate proportion of life insurance premiums should also be grouped with savings, (probably about three-fourths). The following totals which show all life insurance premiums as savings may be somewhat too high to represent savings accurately, although they omit any reference to investments in the home, and also the element of savings contained in purchases of durable goods. This is likely offset by depreciation in equipment already possessed.

TABLE 8. FINANCIAL SUMMARY OF WAGE-EARNER FAMILIES IN SPECIFIED CITIES



