## CANADA <br> DEPARTMENT OF THAUE AND COMMERCE

DOMINION BUREAU OF STATLSTICS
EDUCATION STATISTICS BRANCH

## COST OF EDUCATION

BULLETIN No. 2.

Expenditure for Schools Considered in Relation to National Income and Cther Items of National Expenditure.

Published by Authority of the Hon. H.H. Stevens, M.P Minister of Trade and Commerce.

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## $P R B M A C B$

This bulletin, the second in the series, attempts to show how much money it is, out of the total spent by Canadians in a year, that goes to the support of schools and collegess It attempts also to make a broad classification of all consumer expenditures, thus making it possiblo to compare the support given to educational institutions with the amount spent for a number of other purposes. As in the preceding bulletin, the year to which the figuros apply is as nearly as possible the year covered by the census of 1931 , since much of the basic data used is from the congus, and is not available from any othor source. Hence it is not impliod that this mas a particularly normal year, though in point of fact it was probably less abnormal in some respects than the years imediately preceding or following.

It is indicatod that out of a total expenditure by Canadian consumers that was probably in the neighbourhood of $\$ 4,750,000,000$, about 55 per cent ment for the purchase of food, clothing and shelter, including taxos paid as a part of the purchaso prico, about 7 per cont was paid in diroct taxes, and alloming 8 por cont for savings, 30 por cont mas loft to spend for other things $w i t h$ a certain amount of indiroct tazes included in thoir cost. Of the total expenditure about 3.5 per cent ment to schools and univorsities. The greater part of this was includod in the 7 por cont paid as direct taxes. Indirect taxes took about 8 por cont of consumorsi outlay: thus total taxation, dircet and indiroct was about 15 per cont. The bulletin has been preparod by Mr. J. J. Robbins of the Education Branch of tho Burcau.

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## Soviets <br> To Geneva

Canadians Earn Less Than They SpendAnnually
Expenditures Total Ahout
$\$ 4,750,000,000$ a Year
While Total Recorder
Income $\$ 4,600,000,000$
About $\$ 165,000,000$
Goes For Education

Figures Released By the Bureau of Statistics Are Based on Last Census.
Canadian consumers spend in the neighborhood of $\$ 4,750,000,000$ a year according to a return made public by the Dominion Bureau of Statistics. About $\$ 165,000,000$ goes for education.

The recorded figures showed that Canadians spend $\$ 150,000,000$ a year more than their incomes. The total income was given as $\$ 4,600,000,000$ of which $\$ 3,392,854,200$ was salaries wages and other returns for labor The balance was the earnings of capital.
"It might be expected" the report declared. "that our national expenditure would be less than our recorded income, the difference representing saving or accumulation, but it seems doubtful whether this is the case.
"This is due" the report proceeds. "to a variety of reasons, among them being the fact that income derived from odd jobs, gratuities, bonuses, sales bribes, graft, gambing, bootlegging, etc., does not find its way into the records.

Instalment Buying.
"It is also due in part to the rapid extenston of consumer credit or instalment buying in recent years: in an increasing degree we have been buying more goods, or spending more money in a year, than our income of the year will pay for.
The figures which the Bureau used in making the compilation were largely those obtained in the last census in 1931, and for the most part applied to expenditures and incomes of the year before. Canadians divided their expenditures in the following ratio:

1. Food, clothing and housing, including taxes paid as part of the purchase price, 55 per cent
2. Direct taxes (being mainly on real estate and thus paying much the greater part of school costs) seven per cent.
3. Savings, probably elght per cent.
4. Other expenditures, including taxes paid as part of the purchase price, 30 per cent

Education.
Of the total expenditure, about 3.5 per cent went to schools and
universtties. The total expenditures raised by all churches would have shown in the annual survey of edu- been about $\$ 73,000,000$. cation for 1930 and 1932 was about $\$ 165,000,000$ and in 1931 slightly higher.
nigh and in 1931 slighily The greater part of the amount pald for education was included in the seven per cent in direct taxes The amount spent on education was divided. Untversittes and colleges $\$ 20,000,000$; high schools, $\$ 35,000,000$. and elementary schools, $\$ 110,000,000$. Respecting the amount raised by churches, the report declared:
"The amount provided for the support of churches is published by three of the five religious denominations in Canada claiming the most adherents. These three show a total of $\$ 23,200,000$ paised for all church purposes in 1930 ond the census of 1931 shows that their ad herents constituted 32 per cent of herents constituted 32 per cent of of other denominations contributed the same per capita, the amount 1

# DOMITIOIT BURBAU OF STATISTICS ROUCATIOIT BRANCH <br> OTTATHA 

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## DXPMDITJRE FOR SCHOOLS CONSIDERED IIT RNUSTIOIT TO MATINNL INCON dim omitr itmis or iatioillu mxpmiditure.

Whe oapeniture for all Canadian schools and institutions of higher learning, puvlic and private, is show in the mnual survers of Education for 1930 and 1932 to have beca c.bout $\$ 35,000: 000$. The intervening year is the only one in which it was ever higier. fonut $\$ 20,000,000$ of this is the share of universities and colleges, something lize $\$ 35,000,000$ is spent on the high school students, and $\$ 110,000,000$ on the elementiny.
I. considiering this sum of $\$ 165,000,000$ for schools as one item in the total amount of monev that we spend in a year, we are setting it in perspective in such a way as to matce clear its real weight or burden from a national standpoint. It is scarcely possible to see ciearly all the cetails of the panorama of national expenditure, of which education Es one, but there are parts of it that stand out in full view - as for instance izthe $19 j 1$ census of Retail Trade - and me know from a variety of sources the approximato exicht of the thole.

Mationo Income nin zenc: ture.
The cesses of 1931 found that the earnings of $2,477,038$ persons in Canada worling for meges on sumites were $\$ 2,102,877,400$ in the preceding year. Thero woro also 88,963 wom cornors thoze onmings more not recorded and 1,361,590 gainfully-occupied porsons who wore not ois nelary or vages; these were the employers, and people working on their own accome i , Ijre farnors, small storeleepers, doctors, etc. If me suppose that theso earned frou thetremeinesses and professions on the average the same as the earnings of those who wero storing for a fixod salary or wage, the combined earnings of all pould have beon $3,302,25 \%, 200$ This $\pm 3$ probably a conservative assumption, becauso the earnings of the arorage indopendent worker or employer may be highor, than thoso of tho omploycos. So rithcut c:lling this figuro an ostimate, it may bo considerod to provide an ider of the proportions that the aggregate income from labour or services probably assumed. In cidition to this type of income--the refard of labour or offort-mere is the incomo recoivad -yom capital, which appears as interost, dividonds, rentals, gains from sale of assets, cic. and income from insurance or ponsions. These sources provide the entiro incomo of a Eroun of pooplo not included at all among tho gainfully-cmployed, to whom wo have attributed probable earnings of the magnitude of $\$ 3,392,854,200$, and thoy also jicld sums to mony ci thoso in the larger group, which must bo added to thoir earnings to male their totul Encome. For the United States, the jational Bureau of ECOnomic Rescorcil finos that the effort-incone represented only 73.5 per cent of the total in 1929. If a similar ratic ihnuld be considerod to exist in canada, it wnuld point to an argregate nationnl incone in the vicinity of $\$ 4,600,000,000$. It is probably a Iiboral dssumbtion so auppos that the proportion of unoarmed income in the total is as high in camain as in the United states, but offsetting this is the fact that the fieuro for cornod inono is I ikely conservative.

The Conara Toan Pook, ${ }^{2 /}$ by quite a different approach, estimates the national income of 1930 to heve been in the neighbourhood of $\$ 4,750,000,000$. The method used in reaching this there is to find the value of goods produced (using the term in the nurion sonso of pariny paoduction and manufacture) and the number of poople engaged in producing these eools, then to assume that all others who were working (o.g. peoplo engaged in traneyontaiion, professionai and personal sorvices, etc.) producod the same value por captue. from tho total thus ootained 8 per cont is deductod for the roplaco ment of equipmont recd in the process of production, leaving a net income of $\$ 4,750,000,000$, a sure winch differs only about 3 por cent from the one calculated from earnings. lioreover, tho oarnings figures apply to a yoar onding five months later than the production fikpuros, at a time whon productive activity was on the declino. So it can porhins be siffery ascumed thet either figure prosents a reasonably accurate concoption of the dinensions of the neitional incomo.

1/ The wiomn Theme an its Purchasing Fower, 1930.
2/ P. 20, 193,

It might bo expected thet our national cxpondituro nould be loss than our rocordod incomo, the difforonce reprosenting savings or accumulation, but it scoms doubtful whether this is the case. A comprehonsive study $3 /$ for tho United Statos finds that a rocord of cxpendituros porsistontly oxcoods the rocord of incomos propared by tho Tational Buroau of Economic Rescarch. This is duo to a varicty of roasons, amnng thom boing the fact that income derived from odd jobs, gratuitics, bomuses, salos bribes, graft, gambling, bootlogeing, otc., doos not find its may into tho rocords. It is also due in part to tho rapid cxtension of consuncr credit or instalnont buying in recont yoars; in an incroasing degroe vo havo been buying moro goods, or sponding more monoy in a yoar, than our incono of the year will pay for. In fact a cosc could be made for the contention that Conadion expondituro oxcooded $\$ 5,000,000,000$, in the yoar undor considoration, but it is necessary for prosent purposes only to know that an exagsorated concoption of expenditure is not being obtained in regarding it as tho full equivalont of the figuro for incorie, say $\$ 4,750,000,000$.

Having settled on this figure, we are in a position to see that the $\$ 165,000,000$ in support of schools and colleges was about 3.5 per cent of the money that there was to spend in the year; and we can proceed to compare this amount with what was spent for other purposes.

How The Canadian Consumer Spends His Income.
As already mentioned, arything like a complete classification of the aggregate expenditure of Canadian consumers is not to be had, but there are complete or partial records of some typos of expenditure that are sufficient to help toward a sonso of balanco, or proportion, in judging of the real meight of any one.

Food, Clothing, Sheiter. Expenditure for food, clothing and housing is, in ono sonse, in a class by itself, since the human body must have these if like is to be sustained. It is quite certain that all the money actually spont for these purposes is not strictly essential for maintaining the population at its existing lovel of vitality, as there ore probably fow who cannot recall outlays of this kind made needlossly, if not unrisoly. But under post-mar conditions of lifo on this continent and in Groat Britain, various calculations seem to show, about 55 per cent of our oxpenditures come undor the so catogories. The Feavearyoar estimatos for Great Britaln (1924-27) shon 54.4 por cont, tho Businoss Wook estimates for the Unitod statos (1919-30) shom 55 por cont, and tho Hoyt (1926) shor 56 por cont. Whon the difference is so small botmoen thoso tiro countrics that are nearest to us in ways and standards of living, it soms a safo assumption that the proportion is much the same in Canada.

Broadly speaking then, nearly half of our income romains after the bare physical necossities of lifo have boon met. If we suppose that ono dollar in cach eloven spent for food, clothing and shelter, is unecossary or superfluous, fully half remains, and about 7 per ceat of this half gocs to the support of schools and colloges, though it is not paid by the consumer for educational institutions as such. Wuch the greater part of it leavos the porson who has earnod it, in the form of taxes, and is spent by the various governmental bodics acting in a collectivo capacity for the aggregato of individuals.

Direct Taxes. This fact invites consiceration of a second call upon the consumeris funds in the form of taxos, a necossitous call also, but difforing in the nature of its necessity from the domand for food, clothing and shelter. The combined ameunt of toxes paid to the Dominion, provincial, and municipal governmonts in 1930-31 mas approximately $\$ 700,000,000,5 /$ or about 15 por cent of tho sum of consumers' expenditure.

Only a fraction of the total, homever, was paid directly as taxes; the romainder was paid in the form of higher prices for commodities or services and is included in the cost of clothing, rents, and the like. The knowlodgo of taxation incidence is not sufficiontly completc to divide all taxation into tho tro classes completely, but the total of real and personal property taxcs, income taxes and succossion duties, mich mould be manly in the direct class, amountod to loss than $\$ 400,000,000$, Whoroas the aggregate of customs, excise, gnsoline and salos taxes, profit on liquor sales, and other indirect taxes mas ner $\$ 300,000,000$. A considorable part of the former surn, especially since tro-thirds of it roprosents roal property taxes, must havo boen paid

3/ The Businoss Weak, Issues Apr. 27 th Sopt. 7, 1932, MeGratreill Pub. On., Nor York. 4/ As suminarized by The Businoss Toek in the study to which reference is nade in the procecing note.
5/ Soe Cest of Goverment in Canadn, a pamphlet preparod by tho Rosorrch Comittec of the Canadian Chamber of Comerce, of which Mr. Sanford Ivans was chairman, and thor studies.
in tho fom of higher ront rather than out of the profits of tho porson aming the proporty. This airunt is included in sholtor costs, and it aconrdingly soons safo to supposo that at least half of all taxes rere paic indiroctly, leaving not more than $\$ 350,000,000$, and probebly less, to be paid directly. Sonething lile 7 por cont of consurier expenditures, then, soems to bo paid out in taxos, as such.

A General Classification. The foregoing would indicate that the Canadian consumer's expenditure could be classified roughly as follows:

> 1. Food, clothing and housing, including taxes paid as part of the purchase price
> 55 per cent

> 7 per cent
> 3. Sevings, probably
> 8 per cent
> 4. Other expenditures, including taxes pald as part of the purchase price
> 30 per cent

Indirect taxation, which we have taken to be about 8 per cent of all expenditure, is probably more than proportionately included under the last heading as compared with the first. That is, the rate of taxation avorages higher on the commoditios included in tho lattor group. For instance, the profits of provincial governments from liquor traffic (included as taxes) exceeded $\$ 30,000,000$ and the Dominion Customs and Bxciso on alcoholic beverages exceeded $\$ 36,000,000$ in the 1 iscal yoars ending in 1931, whereas the census of merchandising in 1931 showod solos of $\$ 131,375,000$ by liquor stores and taverns in the proceding year, indicating that roughly half of the purchase price of spirituous boverages on the average reprosents taxes. Similarly mith tobacco and its products. Tobacco manufactures in 1930 were valued at $\$ 85,672,000$, and something like half of this sum must have represented excise duties, for the excise collocted on tobacco in the nearest fiscal year was over $\$ 42,000,000$. Iiquor and tobacco are rather exceptional, among the commoditios purchased in important quantitios, in tho high proportion of their costs constituting taxes, but othor much-used commodities, such as motor vehicles and gasoline, include a relatively high proportion of taxes in thoir purchase price, as compared with food and clothing.

How the Residual 30 per cont is Spont. The summary abovo shows a balance of about 30 per cont after allowing for food, clothing, sheltor, diroct taxes and savings. This 30 per cent would represent a sum in the noighbourhood of $\$ 1,425,000,000$.

The Census of Retail Merchandising and Service Establishments, 1931, indicates hom a port of this money was spent, but the census classifies salos according to the kind of store in which they were made, and it is only in relatively fer cases that the sales of any particular type of comodity or service can be obtained from such a compilation. The receipts of motion picture houses, for instance, are recorded at $\$ 39,233,200$, and this is probably very near tho total amount spent on the movies, but the roceipts of bowling alleys and billiard parlours aro shom to bo $\$ 7,772,600$, those of barber shops and beauty parlours $\$ 23,085,700$, and these sums are likely to bo short of the total amount spent for the services that establishments of these tro kinds offer, since many hotels, tobacco stores, etc., have barbor shops or pool rooms, the recoipts from which are not includod. Novertheless the Census of Rotail Establishments provides much useful data for studying the details of Canadian exponditure.

A second method of obtaining knowledge of the amount spent for different commodities is to add the value of imports and subtract the value of exports from the value of goods produced, as shown in the production figures, and Census of Manufactures, of the Dominion Bureau of Statistics. Thus a conception of the expenditure for medicine might be gained by noting that the value of medicinal and other pharmaceutical prepar ations manufactured in Canada in 1930 was $\$ 17,769,000$, and imports of such products exceeded exports by $\$ 3,428,000$. Similarly manufactures and net imports of scientific and professional equipment (a large proportion of which would be for the use of doctors, dontists, etc.) had a value of $\$ 10,392,000$. With these figures as a basis it mould be possible to obtain a conception of the total expenditure for health purposes. The Census of Institutions in 1931 showed the budgets of hospitals to be in excess of $\$ 58,000,000$. If the earnings of all doctors, nurses and other health professionals such as dentists, opticians, etc., were the equivalent per capita (in each group) of those on hospital staffs or othervise on salary, the aroount paid to all health professionals would have boen $\$ 53,400,000$. Tho five sums added together make. some $\$ 143,000,000$ definitely attributable to hoalth purposes, though because some of the hospitals are supportod by taxation not all of tho total can be called consumer expenditure.

Various other methods can be used for obtaining an approximation of other types of expenditure. A special compilation of the Dominion Bureau of Statistics ${ }^{6} /$ estimates the expenditure of Canadian tourists abroad to have been $\$ 100,389,000$ in 1930. In the three preceding years it was. substantially higher, but in 1931 dropped to $\$ 76,452,000$. Expenditure for personal travel and holidays at home nould have to be estimated f rom a variety of sources.

The amount provided for the support of churches is published by three of the five religious denominations in canada claiming the most adherents. These three show a total of $\$ 23,200,000$ raised for all church purposes in 1930, and the census of 1931 shows that their adherents constituted 32 . per cent of the population. If the supporters of other denominations contributed the sme per capita, the amount raised by all churches mould have been about $\$ 73,000,000$.

Such are come of the probable sums included in the 30 per cont of Canadian consumer expenditure that ramins after food, clothing, housing, savings and direct taxes aro paid for, - and some indications of the manner in which othor of these cxpenditures may be ascertained. The sums mentioned scarcely account for half of the 30 per cent. The largest item of the group for which a figure is not indicated is undoubtedly motor cars and other means of passenger transportation, annther important one is expenditure for personal adorment including cosmetics, jowolry, otc. Still others aro, confectionery, fees for mombership in societios, tho cost of correspondence, reading matorial, masic, sports, and other private oducational, social or recroational activities.

6/ The Tourist Trade in Canada. Published annually.


[^0]:    R. H. COATS, Dominion Statistician.

