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## Canadian War Finance

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If the taxation under the new revenue law is as heavy as can be administered efficiently now, we must educate ourselves to the real facts so that we shall be psychologically prepared to sacrifice more. Unfortunately, voluntary sacrifices are not likely to be sufficient in this great emergency; hence the desirability of drafting, so that the burden will be more equitably distributed and so that the war may be won at the least cost in lives and goods. The writer is heartily in sympathy with our part in this great war to "make the world safe for democracy," we could not keep out of it horrible as it is; but is it wise to weaken our own present fighting strength and to jeopardize our own democracy, when better methods will gain our ends much more effectively?

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## CANADIAN WAR FINANCE

For over three years now Canada has been facing the task of financing the no small part it has assumed in the common war against autocracy. The sums involved may not appear great, as compared with the war budgets of Britain or France or the United States, but the record of her efforts has a distinct value and interest of its own, and not least so for the citizens of the great sister democracy. Broadly speaking, the experience of Canada has been identical with that of the other belligerents in the revelation the war has brought of the unsuspected powers of financial expansion a nation possesses. It has also its distinctive features, arising out of the industrial condition in which Canada found herself at the outbreak of the war, her traditional fiscal policy, and her peculiar financial and trade relations with the United Kingdom and the United States. The working of the budget system is also a point worth the consideration of the United States student of finance.

Before reviewing the course of war finance, some of the distinctive features of pre-war finance must be noted—the purposes of federal expenditure, its rapid expansion, and the sources of taxation and of loans.

Since the union of the provinces in 1867, the objects of federal expenditure have been much the same in Canada as in the United States. There were, however, some notable differences. Until 1911, the Dominion made no provision for a navy, and its pension roll was brief. On the other hand, Canadian governments have long considered it necessary to undertake or aid great national enterprises, to a degree unknown in the United States, in the endeavor to bind together by railway and canal the nine far-flung provinces which geography and the diplomats have done so much to sever. Another outlay not found in the United States was the subsidy paid the various provinces of the federal government, roughly on a population basis, in lieu of the customs revenues the provinces gave up on entering Confederation.

The growth alike of revenue and of expenditure was slow until nearly the end of the century. Then came the realization of the possibilities of the West, with the rush of immigrants, the multiplying of railways, the expansion of factories and the building of towns that followed. In the dozen crowded years of this growing time, the calls upon the government for expenditure increased

even faster than the population. The revenues, reflecting the growth of the imports required for all the tasks of a construction period, grew with almost equal swiftness, until in the year before the war, income and outgo were both more than three times as great as they had been in 1900. In the fifteen years from 1900 to 1914 there was spent on capital account, chiefly for railways, canals, and other public works, nearly \$300,000,000, as compared with \$220,000,000 in the thirty-two years from Confederation to 1899. Even so, at the close of this period the increase in the net debt was only seventy millions, and the per capita burden was less than in 1900.

The following table summarizes sufficiently the stages in this growth:

TABLE 1.—CANADIAN FEDERAL REVENUE, EXPENDITURE AND DEBT, 1870-1914.

Fiscal year <sup>1</sup>	Population	Revenue	Expenditure	Net debt
1870	3,425,000	\$15,512,226	\$18,016,614	\$78,209,742
1880	4,215,000	23,307,407	34,041,756	152,451,589
1890	4,793,000	39,879,925	41,770,333	237,533,212
1900	5,322,000	51,029,994	52,717,466	265,493,807
1910	6,917,000	101,503,711	115,395,774	336,268,546
1911	7,158,000	117,780,409	122,861,250	340,042,052
1912	7,467,000	136,108,217	137,142,082	339,919,461
1913	7,758,000	168,689,903	144,456,877	314,301,625
1914	8,075,000	163,174,395	186,241,048	335,996,850

Through all this period, the chief sources of revenue were customs and excise taxes. The post office and government railways gave practically no net return. Taxes other than customs and excise were insignificant. The tariff was the great reliance of ministers of finance. It yielded large and increasing sums, but encouraged extravagance by the automatic increase it yielded when imports mounted.

For the modest loans required in this period, federal ministers of finance looked wholly to English investors. Of the net debt in 1914, over 99 per cent was payable in London. Capital was too scarce in Canada and opportunities for investment too many for the sweet simplicity of the three per cents to appeal to home investors. Provincial, and to a less extent municipal, borrowers, sought the same market. It was to England, also, that railway

<sup>1</sup> In Canada, until 1907, the fiscal year ended June 30; since that date, on March 31. By "the fiscal year 1914" is understood the year from April 1, 1913, to March 31, 1914.

promoters, backed often by government guarantees, looked almost wholly for the hundreds of millions that were poured into railway construction in these years. All told, at the outbreak of the war, English investors held at least \$2,500,000,000 of Canadian public and private securities, mainly government and railway bonds. The Englishman made few direct investments in Canadian enterprises; he was a creditor, not a partner. The capital required for the business expansion of the period—as seen, for example, in the growth of the capital employed in manufacturing, from \$353,000,000 in 1901 to \$1,247,000,000 in 1911—came almost wholly from within the country. The chartered banks, extremely efficient and economical financial instruments, practically all owned by Canadian stockholders, increased their discounts from \$388,000,000 in 1901 to \$1,101,000,000 in 1914. United States investments, mainly in branch factories, mines, timber lands, and municipal and corporation bonds, reached over \$600,000,000 by 1913.

Even before the war broke out, financial difficulties were looming up. The construction period, with its lavish borrowing, its mounting imports and import duties, its hectic land speculation, had come to an end for the time. The country was realizing that the actual production of goods had not kept pace with expenditure, that the bulk of the energy of the past few years had been directed toward foundation enterprises, such as railways, which had not yet come to the productive point, or had been wasted in speculation. A readjustment set in, which fortunately was being effected without any serious crash, when the fatal August days of 1914 faced the Canadian people with a task immensely greater than had ever been foreseen.

Without a day's hesitation the government and people of the Dominion decided to take their full share in the struggle. In six weeks from the declaration of war 33,000 Canadian soldiers were crossing the Atlantic. Contingent followed contingent until by the summer of 1917 over 430,000 soldiers had volunteered for service, of whom three fourths had been sent overseas.

The first steps taken in the war session of Parliament, in August, 1914, were directed toward averting financial panic and preventing the drain of gold abroad. The government undertook to issue Dominion notes against approved securities deposited by the banks. It authorized the banks to issue excess circulation the year round, instead of during the crop-moving period only,

to an amount not exceeding 15 per cent of their combined capital and reserve, subject to a tax of 5 per cent, and to make payments in banknotes instead of in gold or Dominion notes. The redemption in gold of Dominion notes was also suspended. Power was taken to declare a moratorium, but this power was not exercised. These measures amply secured their purpose, and while for some months commercial depression continued, there was no sign whatever of crash or panic.

The fiscal year, which in Canada begins on April 1, was nearly half over when the war began. The estimates of the Finance Minister had provided for an expenditure of \$146,786,126 on ordinary or consolidated fund account and \$43,949,050 on capital account, or a total of \$190,735,176. To cover the war expenses, an appropriation of \$50,000,000 was made in the August session, of which it was estimated some \$30,000,000 would be required by the end of the fiscal year, on March 31. As a matter of fact, the war expenditure amounted to over \$60,000,000, while ordinary and capital expenditure ran to within two millions of the estimates.

To meet these increased calls, the Finance Minister relied upon an issue of Dominion notes, increased taxes, and loans in London.

By the Dominion Notes act the government secured a loan without interest of \$15,000,000. Under the previously existing arrangement, the government was authorized to issue paper, covered only by a reserve of 25 per cent, of which 15 per cent might be in debentures, but all of which was in fact gold, up to \$30,000,000. Over this sum, all note issues were required to be covered dollar for dollar in gold. The measure of August, 1914, authorized the extension of the amount for which only a 25 per cent reserve was required to \$50,000,000, thus giving \$15,000,000 free. In November, the government by order-in-council issued an additional \$26,000,000, of which \$16,000,000 was lent the Canadian Northern and Grand Trunk Pacific Railway on the security of their own debentures, which had previously been guaranteed by the Dominion but could not be realized upon in the market conditions of that autumn. This action was later sanctioned by Parliament. Steps were taken to reduce the amount of inconvertible paper outstanding, and by March 31, 1916, the total outstanding was \$177,943,000, or an increase of \$60,000,000 over March 31, 1914. Of this amount \$144,000,000 was in \$5,000 notes, used only by the banks, and only \$22,000,000 in the small denominations used by the public. The percentage of gold to

notes in circulation was at this time 68, as against only 41 per cent in 1880, and 35 per cent in 1900, so that ample security was provided. No fresh recourse has been made to this means of securing revenue since 1914. Today the ratio of gold held by the government and the banks to notes outstanding is greater by a small fraction than when the war broke out.

In the emergency, it was not possible to devise new forms of taxation. The only feasible plan was to utilize the customs and excise machinery, and this was done by imposing a tax on coffee and increased taxes on sugar, tobacco, and liquors, estimated to bring in \$7,200,000 in the balance of the fiscal year. Slackening trade, however, and consequent falling off in imports brought a serious decline in the customs duties levied under the old provisions which the new taxes did not offset. The total customs yield for the year 1914-15, including the new taxes, proved to amount to only \$97,000,000, or a decrease of \$30,000,000 from the preceding year.

For loans, there was as yet no thought of turning elsewhere than to the old source, London. Six months' treasury bills were sold in that market in December, 1914, to the amount of £3,000,000, over half of the proceeds being used to retire bills which matured in November; £1,300,000 of Dominion of Canada 1940-1960 stock was sold at 94½, and £5,000,000 5-10 bonds, bearing 4½ per cent, were sold at 99½ for public works expenditure. Arrangements were made with the British government for temporary advances for military purposes up to £12,000,000, with interest at the same rate the British government was paying, 3½ per cent. With a temporary loan of \$5,000,000 from the Bank of Montreal, these measures gave the government ample credit balances both in London and in Canada.

The result of this first war year's financing was the addition of \$113,000,000 to the net debt. The sudden falling off in revenue, coming at the very time that the demands upon the treasury were soaring, brought the result that it was necessary to borrow to cover not merely the whole cost of the war and of the capital expenditures, but a small fraction of the ordinary expenditure as well.

When Parliament reassembled in February, 1915, it was apparent that the war would be a long one, and that much more drastic financial measures were required. In this session a further war appropriation of \$100,000,000 was voted. The Finance Minister presented his budget for the next fiscal year, April 1, 1915,

TABLE 2.—CANADIAN FEDERAL REVENUE AND EXPENDITURE, 1914-15.

Revenue		Expenditure	
Consolidated fund receipts .....	\$133,073,482	Consolidated fund expenditure .....	\$135,523,207
		Expenditure chargeable to capital .....	41,447,320
		Railway subsidies .....	5,191,507
		Expenses in placing loans .....	4,911,360
Sinking funds .....	1,645,811	Sundry transfers .....	274,656
Net increase to debt....	113,379,233	War expenditure .....	60,750,476
	\$248,098,526		\$248,098,526

to March 31, 1916, on February 11. He estimated the ordinary revenue for 1915-16 at \$120,000,000. Ordinary expenditure would be \$144,000,000, capital outlay \$40,000,000, and war expenditure \$100,000,000 with \$20,000,000 floating debt to take up. To fill this gap he proposed to raise \$30,000,000 by additional taxation, and the remaining \$154,000,000 by loans.

Of the \$30,000,000 to come from taxes, the customs tariff was again relied upon for the bulk. A straight horizontal increase of 7½ per cent ad valorem in the general and intermediate and of 5 per cent in the preferential tariff, levied alike on the free list and on goods formerly dutiable, with a few specific exceptions, was estimated to yield \$22,000,000 a year. The remainder was to come from a series of minor direct and excise taxes: 1 per cent on the note circulation of banks and the gross income of trust and loan companies, and the net premiums of insurance companies other than life, fraternal, benefit or marine associations; 1 cent on telegraph messages; 5 cents per \$5 on railway or steamboat tickets and 10 cents on sleeping-car berths and parlor-car seats; stamp taxes, 2 cents on cheques, receipts, bills of exchange, express and post office money orders, bills of lading; 1 cent on letters and postcards; 1 to 2 cents on patent medicines and perfumery packages, and 5 cents per quart bottle on non-sparkling wines and 25 cents per pint bottle on sparkling wines.

The weight of tradition, the strength of protectionist feeling, and uncertainty as to the country's resources prevented any more effective attempt to meet expenditure out of taxes. An income tax was urged with growing force, but was still scouted in official quarters.

For its borrowings, the government at first continued to look to London. A public loan of £5,000,000 floated the end of March,

at  $4\frac{1}{2}$  per cent, was heavily oversubscribed. From the British government the sum of £2,000,000 monthly continued to be borrowed until June, 1915, when new sources of funds were found. In July, 1915, for the first time in its history, the Canadian government sought the New York market. Two note issues, one of \$25,000,000 for one year and the other of \$20,000,000 for two years, bearing 5 per cent interest, and with the privilege of conversion into 20-year debentures, were sold through the Bank of Montreal and J. P. Morgan and Company at the very favorable price of  $99\frac{1}{2}$ . A still more radical venture was the decision to float a loan in Canada itself. The chances of success in a country which, however great its resources, had little realized and concentrated wealth, and had been borrowing huge sums for over a decade, and had never raised a popular loan, seemed doubtful. The loan was offered in November, 1915, \$50,000,000, 5 per cent bonds, maturing in 1925, at  $97\frac{1}{2}$ . It was an immense success. In eight hours it was oversubscribed, and when the books were closed a week later, well over \$100,000,000 had been offered. It was decided to increase the issue to \$100,000,000, accepting the smaller subscriptions in full. Of this sum half was set aside as a loan to the British government, to finance purchases in Canada.

Meanwhile the general financial condition had greatly improved, thanks chiefly to wheat and munitions. The wheat crop of 1915 had proved the most remarkable in Canada's history, in fact a freak crop difficult to parallel in any country's history: about 230,000,000 bushels were available for export at high prices. Then began the placing of Allied orders for supplies, at first in a small and hesitating way, with little realization of Canadian potentialities, but soon on undreamed scales. Trade revived; war orders meant importing machinery and supplies, and war order prosperity meant a revival of imports of luxuries, and so imports and customs duties mounted, and the difficulties of the Finance Minister were lightened.

The change in the situation was most clearly marked in the reversal of relations between the Canadian and the British governments. When the year began, Canada was borrowing from Britain to finance her war preparations at home; when it closed, the Canadian government and Canadian banks were lending still larger sums to the British government to purchase munitions and other supplies on this side of the water. The conditions of exchange in 1915 made some such step highly advisable in Britain's



5, 10, and 15-year bonds, sold at 99.56, 97.13, and 94.94 respectively, less  $2\frac{5}{8}$  per cent commissions. Six months later a second domestic loan was issued, \$100,000,000 5 per cent bonds, maturing in 1931, and offered at 97 $\frac{1}{2}$ . The loan was again more than doubly oversubscribed. All subscriptions from \$100 to \$25,000 were taken in full, private subscriptions above that sum cut down, and the \$50,000,000 offered by the banks, "if necessary," turned instead to a credit to the Imperial Munitions Board. To the first loan there were 25,000 subscribers; to the second, 35,000. In spite of the success of the loans it was clear from these figures that the general public had not yet been reached in the degree already achieved in the United Kingdom, France, and Germany.

The arrangements with the British government continued to increase in magnitude and in complexity. At the outset, as has been noted, a large part of Canada's war expenditure was financed by temporary loans from the British treasury. After June, 1915, practically nothing was borrowed for expenditure in Canada, though the practice was continued, and still continues, of borrowing from the British Treasury part of the amount required for the overseas expenditure of the Canadian forces. With an army overseas which reached over 300,000 men, this latter expenditure soon became greater than the direct war outlay in Canada itself, and necessitated the appointment of an Overseas Minister (the Acting High Commissioner in London, Sir George Perley) to supervise it. A special difficulty arose in connection with the expenditure at the front. Canada, like Australia and the other Dominions, has undertaken to bear every cent of the cost of maintaining her own troops, but when these forces are working in close coöperation with British divisions in the field, obtaining rations, equipment and munitions from the same supply bases, it is difficult to determine precisely what the share of each contingent should be. An arrangement was accordingly effected in November, 1916, that a rate per head should be agreed upon to cover all expenditure that could not be differentiated. After careful study of the cost of rations, forage, fuel, clothing, equipment, and general stores and munitions (the latter based not on the daily rate of expenditure of the Ministry of Munitions but on the consumption in the field, in April, 1916), it was agreed that this figure should be set at 6 shillings per day per man. This of course did not include the pay of the troops, which was

on a higher scale than the British rates and was provided direct by the Canadian authorities.

The indebtedness of Canada to the British Treasury at first took the form merely of an open account. It was expected that later a long-term loan would be issued in London to repay it, but a different arrangement was decided upon when the need of financial aid to the British government on this side of the water became clear. At the suggestion of the Finance Minister, it was arranged to issue to the British Treasury Dominion dollar bonds bearing the same rate of interest and with the same maturities as the British public issues from which the Treasury made the advances. These bonds were then to be used by the British government as collateral for its loans in New York or in Canada itself. Up to February, 1917, the Canadian government had issued \$122,000,000 to the British Treasury, chiefly in 3½ and 4½ per cent bonds.

This, however, covered only part of the indebtedness. The balance was left to be adjusted in a similar fashion later, or simply to be offset by the counter indebtedness of Great Britain to Canada, which was reaching large dimensions. In Canada, as in the United States, in view particularly of the exchange situation, it became practically necessary to provide a credit for the British government before war orders could be placed. In December, 1915, the oversubscription of the first domestic loan, \$50,000,000, was turned over as a credit for the Imperial Munitions Board, the buying agency in Canada of the British government. In April, 1916, the Finance Minister, by an arrangement with the banks, acting through the Canadian Bankers' Association, advanced another \$75,000,000 for the same purpose; in July, \$25,000,000 and in September, 1916, \$50,000,000 of the oversubscription of the second domestic loan. In November of the same year a syndicate of Canadian banks arranged a credit to the British government of \$20,000,000 for the purchase of wheat.

In reviewing the fiscal year 1916-17, in his budget speech on April 24, 1917, the Finance Minister noted that the revenue had surpassed all expectations, both as to customs duties and as to the business profit tax. The total revenue had been \$232,000,000, or \$100,000,000 more than in the year 1914-15. Of this sum, customs duties accounted for \$134,000,000, excise for \$24,000,000 and the business profits tax for \$12,500,000, with two

or three million more still to come in.<sup>2</sup> The ordinary expenditure amounted to \$145,000,000, including \$25,000,000 spent on pensions and on interest charges on war loans, and the capital and subsidy expenditure to \$27,000,000—a welcome decrease. This meant that after paying all current and capital expenditure, and meeting interest and pension charges, a surplus of \$60,000,000 was available toward the principal of the war expenditure, which had been \$217,000,000 up to January 20.

For the coming year, 1917-18 (to March 31, 1918), Parliament voted a war appropriation of \$500,000,000. The estimated war expenditure was put at \$433,000,000, including \$218,000,000 as pay and separation allowances for 400,000 troops, and \$17,500,000 for naval service.

As to new revenue, the Minister of Finance still declined to introduce an income tax, urging the difficulty and cost of administration, the small yield probable, the voluntary contributions to the Patriotic and Red Cross funds—later put by Sir Herbert Ames at \$50,000,000 since 1914—and the existence of municipal and in some cases provincial income taxes. The fairest basis for abnormal expenses was abnormal profits. He therefore proposed to extend the business profits tax, which had yielded large sums and at a low cost of administration—about one half of one per cent. The tax, which would apply to the last accounting period of the three-year term originally contemplated, would now be graduated. Profits between 7 and 15 per cent would be subjected to the existing 25 per cent tax; profits over 15 but not exceeding 20, to a 50 per cent tax, and all profits over 20 per cent to a 70 per cent tax.

The returns of profits made to the government are confidential, but thanks to the desire of the government whip to show that

<sup>2</sup> The increase in customs was due partly to the increase in rates, but more to the increase in imports or in their value, as shown by the following summary of Canada's foreign trade (excluding coin and bullion, as the movements of gold have not their ordinary significance since the making of the arrangement whereby a depository of the Bank of England was established at Ottawa).

Fiscal year ending March 31	Imports	Exports
1913	\$686,515,000	\$377,068,000
1914	635,383,000	455,437,000
1915	497,376,000	461,442,000
1916	530,211,000	779,300,000
1917	845,330,000	1,179,211,000

great steps had been taken in the direction of the conscription of wealth which the Opposition was demanding, the figures as to some of the larger payments made were put on Hansard in June, 1917, as follows:

TABLE 4.—COMPARATIVE STATEMENT OF TAXATION UNDER BUSINESS PROFITS WAR TAX ACT, 1916, AND THE AMENDMENT THERETO OF 1917.

Name of taxpayer	Accounting period	Amount assessed	Statement showing what the assessment would have been had the amendment of 1917 been in force
Imperial Oil Co...	Jan. 1, 1915—Dec. 31, 1915	\$734,046	\$924,849
Ford Motor Car Co.	Oct. 1, 1914—Sept. 30, 1915	697,323	1,782,094
Canadian Explosives .....	Jan. 1, 1915—Dec. 31, 1915	609,537	1,337,631
Northern Aluminium Co. ....	Jan. 1, 1915—Dec. 31, 1915	341,679	822,332
Steel Co. of Canada	Jan. 1, 1915—Dec. 31, 1915	308,240	337,055
Ogilvie Flour Mills Co. ....	Sept. 1, 1914—Aug. 31, 1915	280,886	547,478
Nova Scotia Steel & Coal Co. ....	Jan. 1, 1915—Dec. 31, 1915	237,252	320,754
Metal Drawing Co. ....	Jan. 1, 1915—March 31, 1916	223,840	669,551
Canada Foundries & Forgings.....	Jan. 1, 1915—Dec. 31, 1915	222,368	590,691
Alberta Pacific Grain Co. ....	Aug. 1, 1914—Aug. 15, 1915	178,669	377,220
Richardson & Sons, James (grain) ..	Aug. 1, 1914—July 31, 1915	155,092	380,327
British Empire Grain Co. ....	July 1, 1914—June 30, 1915	150,347	415,278
F. W. Woolworth Co. (chain of stores) .....	Jan. 1, 1915—Dec. 31, 1915	134,498	329,207
Grain Growers Export Co. ....	July 1, 1914—Aug. 31, 1915	130,777	367,956
Toronto Chemical Co. ....	July 1, 1915—July 31, 1916	130,520	378,327
Montreal Ammunition Co. ....	Jan. 1, 1915—Dec. 31, 1915	124,173	358,396
Dominion Steel Foundry Co. ....	Jan. 1, 1915—Dec. 31, 1915	112,048	273,180
William Davies Co. (packers) ...	April 1, 1914—March 30, 1915	109,624	223,062
John Bertram Sons Co. (machinery)	Jan. 1, 1915—Dec. 31, 1915	104,803	265,485
Penmans (woolens) .....	Jan. 1, 1915—Dec. 31, 1915	104,130	145,042
Dominion Steel Corporation ...	April 1, 1915—March 31, 1916	103,721	103,721
Canadian Fairbanks Morse & Co. (machinery & munitions)....	Jan. 1, 1915—Dec. 31, 1915	102,748	131,767

The demand for conscription of wealth, following the proposal of the government in the spring of 1917 to introduce conscription of men, became too strong to ignore. The measure most loudly urged was the graduated income tax which the government had steadfastly refused to introduce. At the same time the "profiteers" were vigorous in their condemnation of the business profits tax as excessive, arbitrary, and discriminating. Apparently the government decided to please both parties. In July, 1917, the Minister of Finance introduced an income tax measure, and at the same time announced that the business profits tax would not be renewed at the expiry of the three-year period; for the ensuing year corporations would pay only one tax, whichever was higher. It was soon discovered that this meant a very great reduction in the case of companies with large profits. Four of the companies listed above, which had paid \$1,930,000 under the original business profits tax, and would have to pay \$4,490,000 under the amended tax, would get off with \$375,000. The protest brought a declaration from the Minister of Finance that if at the expiration of the three-year period the need still existed, abnormal profits would again be subjected to an abnormal tax. With this general understanding, the income tax was speedily enacted.

The new income tax law follows United States rather than English models. It imposes a straight tax of 4 per cent on incomes exceeding \$1,500 (at first \$2,000 was proposed) in the case of unmarried men or widowers without children; and on incomes in excess of \$3,000, on other persons, including corporations. In addition a supertax is imposed as follows: where the income exceeds \$6,000 and does not exceed \$10,000, 2 per cent; from \$10,000 to \$20,000, 5 per cent; from \$20,000 to \$30,000, 8 per cent; from \$30,000 to \$50,000, 10 per cent; from \$50,000 to \$100,000, 15 per cent; above \$100,000, 25 per cent.

These additions to the taxation system made it certain that a substantial share of the burden of the war would be paid by those who were reaping benefits from war prosperity. Much the greater part, however, was still left to posterity. A third domestic loan was floated in March, 1917, for \$150,000,000, with \$266,000,000 subscribed. With this transaction over half of the funded debt became payable in Canada—though not all held by Canadians. The participants again showed an increase in number, but it was still evident that the great body of non-investors had not yet been tapped. To reach them, war savings certifi-

cates, on sale at the branch banks and post offices, in denominations of \$25, \$50, and \$100, maturing in three years, and issued at \$21.50, \$43, and \$86 respectively, were placed on sale in January, 1917. In August, \$10 certificates were added, and it was arranged later that such certificates could be purchased in small instalments by use of the stamp-book method. Large numbers of these certificates have been taken. In connection with the fourth domestic loan, probably for \$150,000,000, to be issued in November, it is planned to make a much wider popular appeal, particularly to the prosperous farmer, than ever before. The sale in New York of \$100,000,000 two-year notes, bearing 5 per cent interest, and issued at 98, with  $1\frac{1}{2}$  per cent to the underwriters, was the other important public borrowing of the year.

During the year advances to the British government for the purchase of supplies in Canada continued. On August 27, the Minister of Finance announced that up to that time \$285,000,000 had been advanced by the government and \$100,000,000 by the banks, to the Imperial Munitions Board. The government advances would continue throughout the year at the rate of \$25,000,000 a month. In addition, \$50,000,000 was advanced for the purchase of cheese, hay, oats, and flour.<sup>3</sup> During 1916 the value of the output of munitions had been practically \$1,000,000 a day; the orders for 1917 would reach \$500,000,000, even though in some lines orders were lessening because of the ability of British factories to cope now with the situation unaided. Even so, the fact that the British government could buy on this side of the Atlantic only to the extent that it could raise money here would make it necessary to extend the same policy of government and bank assistance to the other main commodities exported to Britain.

The cost of the war for practically three years—to July 20, 1917—has been given by the Minister of Finance at \$623,000,000. Of this amount \$388,000,000 was spent in Canada and the balance in the United Kingdom and France. From April 1 to July 20 war expenditure in Canada amounted to \$39,700,000 and overseas to \$62,600,000, or \$917,000 a day: it doubtless now exceeds \$1,000,000 a day. By the end of the fiscal year the debt will be \$1,200,000,000 or \$1,300,000,000, against \$336,000,000 when the war began.

<sup>3</sup> In the month following this statement the banks advanced \$155,000,000 for the purchase of meat and wheat, and further large credits were foreshadowed.

On the same date, July 20, 1917, the total borrowings of Canada from Great Britain amounted to \$317,000,000, of which \$107,000,000 has been repaid by the issue of dollar bonds deposited in New York as collateral, and to be disposed of there or in Canada after the war. The borrowings of Britain from the Canadian government were \$302,000,000, so that quite aside from the indebtedness to Canadian banks, there was a balance on open account due by Great Britain on this date of \$92,000,000—a sufficiently striking change from the former financial relations of Canada and Britain.

The shift of capital sources is made clear by the following table, compiled by the *Monetary Times*, of Canadian bonds, government, railroad, and industrial, sold in the past twelve years:

TABLE 5.—SALES OF CANADIAN BONDS IN CANADA, GREAT BRITAIN AND THE UNITED STATES, 1905-1916.

Year	Sold in Canada	Sold in Great Britain	Sold in United States	Total
1905	\$35,149,921	\$85,621,395	\$9,256,782	\$134,874,531
1906	23,304,958	26,563,700	4,118,350	53,987,008
1907	14,761,683	63,095,057	4,779,000	82,635,740
1908	24,585,140	165,455,031	6,316,350	196,356,521
1909	60,433,964	194,356,788	10,367,500	265,158,252
1910	39,296,462	188,070,128	3,634,000	231,000,590
1911	44,989,878	204,269,143	17,553,967	266,812,988
1912	37,735,182	204,236,394	30,966,406	272,937,982
1913	45,603,753	277,470,780	50,720,762	373,795,295
1914	32,999,860	185,990,659	53,944,548	272,935,067
1915 <sup>1</sup>	11,275,214	41,175,000	178,606,114	335,106,328
1916 <sup>1</sup>	102,938,778	5,000,000	204,943,764	356,882,542 <sup>2</sup>

<sup>1</sup> Including internal war loans of \$100,000,000 each, issued in November, 1915, and September, 1916. Of the first loan, \$25,000,000, and of the second loan, \$30,000,000 is estimated to have gone to the United States.

<sup>2</sup> Included in this sum are \$8,000,000 of a total of \$50,000,000 Canadian bonds repurchased in Great Britain since the war commenced. The inclusion of the \$42,000,000 of unclassified repurchases brings the total of Canadian bond sales in 1916 to \$356,000,000.

In all the financing of the war, a great burden has rested on the Finance Minister, Sir Thomas White, who, before going into politics in 1911 on the anti-reciprocity issue, was general manager of the National Trust Company. Under the Canadian cabinet system, which throws upon a minister legislative as well as administrative duties, and with the preparation of the budget wholly entrusted to him, a greater share of responsibility rests on a minister of finance than on any corresponding official in the

United States. While there is naturally some difference of opinion on policy, it is universally agreed that the administrative tasks have been admirably performed. In this work the Minister of Finance has been greatly aided by the chartered banks. The branch bank feature, and the coördination possible through the Canadian Bankers' Association, have made it possible for the banks to coöperate very effectively in mobilizing the country's financial resources.

The war will leave Canada, in common with the other belligerents, with a heavy burden of debt, but it will leave her also with a fiscal system greatly strengthened by the inclusion of direct taxes, and, more important, with the consciousness of industrial and financial capacities hitherto unrealized.

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## METHODS OF PROVIDING FOR EXPENSES OF OBTAINING NEW BUSINESS BY LIFE INSURANCE COMPANIES

It is a well-known fact that new business is obtained by life insurance companies at considerable expense, involving commissions to agents and fees to medical examiners. Attempts have been made to lessen this expense, but are not likely to have a decided effect in the near future. It seems to be good public policy to extend insurance, even at considerable cost, among persons too careless to take the initiative in protecting their dependents. At any rate, it must be expected that the writing of new life insurance business during a year will remain much more expensive than the handling of an equal amount of old business during the same time.

It should perhaps be stated that the term "expense" as used in this paper does not include the payment of death claims, but means the expense of conducting business.

In dealing with the subject of initial expenses, the question at once arises as to the basic principle on which these expenses are to be met. The expense of conducting business is a very different factor from that of insurance risk, where death losses are distributed over a group of persons on certain principles of mutuality. There seems to be a fair consensus of opinion among insurance authorities that, in so far as it is feasible, each policyholder should pay the expense of placing his policy on the books of the company. Indeed, there is sufficient agreement on this point so that it does not seem inappropriate to state in a textbook for beginners in the study of insurance that "an equitable system of loading must require every policyholder to pay the expenses which his policy costs the company, as nearly as this amount can approximately be determined."<sup>1</sup>

To carry out this principle requires careful consideration of methods of loading, and of computing the reserve liability of a company; for the ideas back of level net premium reserves ignore the condition that expenses are higher in the first policy year than in subsequent years. This fact was emphasized by the statements of eminent American actuaries as early as 1904, to the effect that level net premium valuation laws had strangled young companies

<sup>1</sup> S. S. Huebner, *Life Insurance* (Appleton, 1915), p. 214.

