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It is against this background of rapidly growing expenditures, revenues, and deficits, and increasingly extensive price and production controls, that the Canadian financial system has functioned in wartime. Financial institutions are affected by taxes and direct controls, but most of them by their very nature are more immediately concerned with government borrowing than with any other aspect of war finance. Canadian national debt rose by 130 percent in four years of war, and while this increase is only half the rise in American debt in the same four years, it is nonetheless substantial. This section is primarily concerned with the role of various institutions in these government loan operations.

The Department of Finance

The Department of Finance, analogous to the United States Treasury, is the fulcrum of Canadian war finance. It has a large share of the responsibility for determining fiscal policy; it collects taxes, exercises supervisory powers over foreign exchange and price control programs, borrows money, and disburses public funds. Through the Department of Munitions and Supply, with some guidance from the Department of Finance, the government made $820 million of the estimated billion dollar investment in war plant expansion up to the end of 1942.[17] To implement this investment, government-owned corporations have been organized, such as Polymer Corporation, Atlas Plant Extension Limited, Park Steamship Co. Limited, Wartime Shipping Limited, Wartime Housing Limited, and others; they are managed by prominent businessmen under the general guidance of the Department of Munitions and Supply. In some cases, the latter Department has also financed the expansion of existing plants, but has retained ownership of the new equipment that it provided. As may be seen from Table 3, the government has concentrated its investment in industries with little or no peacetime demand for its products.

The government has also advanced over $900 million in working capital to war industries, and has used the "special depreciation privilege" as a more indirect form of assistance in financing war plants. This privilege was granted less readily in 1943 than earlier in the

[17] Originally, some $200 million of the total investment was made by the British government, but British interests have since been bought out by the Canadian government.

TABLE 3 – GOVERNMENT LOANS TO WAR INDUSTRY TO DECEMBER 31, 1942

Item	*Amount* (millions)	*Percent Expended*
Working Capital Advances	$903	100%
Fixed Capital Commitments	821	84
General munitions	543	82
Government-owned and operated plants	119	100
Aircraft	76	61
Arsenals and other Crown plants	59	100
Shipbuilding and repairs	24	68

Source: *Votes and Proceedings of the House of Commons* (March 26, 1943).

war, and the 1943 tax bill imposed penalties on firms obviously misusing this privilege. Government guarantees of loans by banks to war industries at rates close to the yield on government bonds, similar to the American "V" loans, have been proposed as a substitute for direct government financing.

Public subscriptions to war bonds have accounted for almost 75 percent of loan funds. As the figures in Table 4 reveal, public issues have grown from 31 percent of total net borrowing in the first year of war to 95 percent in the fourth year. The public issues have consisted of intermediate-term bonds (2½-6 years) bearing 1½-2¼ percent interest, and long-terms (8-16 years) with a 3-3¼ percent coupon. (The record and features of the seven War Loans undertaken to the end of 1943 are set forth in Table 5.)

Special wartime issues to banks, in the form of 1- to 5-year notes and bonds carrying 1-2 percent interest, have been next in importance to public loans. However, these special issues have dwindled in size as the war has progressed, partly because of the increasing success of public loan campaigns and partly because of the introduction of a new credit instrument, the deposit certificate. This is a six months' security issued only to banks, bearing ¾ of 1 percent interest. Deposit certificates have produced nearly as large a volume of funds as special issues to banks, and have tended to replace Treasury bills as well.

War savings certificates have accounted for only 3.6 percent of loan receipts up to August 31, 1943. The return on savings certificates is tax free, and slightly higher than on bonds of comparable maturity, but purchases are limited to $50 per month and the small

TABLE 4 — BORROWING OPERATIONS OF THE CANADIAN GOVERNMENT, WAR YEARS 1940-43 (dollar figures in millions)

New Issues and Redemptions	*Twelve Months Ending August 31*				*War Total*	
	1940	1941	1942	1943	Amount	Percent
New Issues						
War savings certificates and stamps (net) [a]	$20	$71	$74	$46	$211	3.6%
Bonds sold to the public in Canada [b]	200	1,030	843	2,300	4,373	74.4
Special issues sold to banks [b]	450[c]	250	193	..	893	15.2
Treasury bills (net)	75[d]	..	40	60	175	3.0
Deposit certificates (net)	..	..	305	435	740	12.6
Temporary advances from (or repayments to) the Bank of Canada by the FECB	..	40	– 40	37	37	.6
Redemptions[e]						
Payable in Canada only [f]	– 68	– 95	– 37	– 60	– 260	– 4.4
Payable in New York	..	– 11	..	– 125	– 136	– 2.3
Balancing Item [g]	– 23	– 305	447	– 275	– 156	– 2.7
TOTAL	$654	$980	$1,825	$2,418	$5,877	100.0%

Source: Bank of Canada, *Statistical Summary* (August-September 1943).

[a] Includes non-interest-bearing certificates.

[b] Excludes conversion issues.

[c] Includes $250 million 1-year notes bought by Bank of Canada to finance acquisition of gold and foreign exchange by Foreign Exchange Control Board.

[d] Bought by Bank of Canada to finance acquisition of gold and foreign exchange by FECB.

[e] Excludes amounts converted.

[f] Includes redemption of unconverted bonds held by banks as well as by the public.

[g] Mainly increase (–) or decrease (+) in government's Canadian cash balance.

denomination makes them somewhat less convenient for large holdings. Critics of the war savings campaign point to the negligible returns, and argue that the small sales of savings certificates have been at the expense of subscriptions to war loans. Government spokesmen, on the other hand, contend that the $211 million obtained is "very good money" — that is, likely to have come almost entirely from current consumption.

The case is not altogether clear. It is possible that the purchase of either war loans or savings certificates might be financed by the creation of new money or by the activation of idle money. While it is true that war savings certificates, unlike bonds, cannot be resold to banks, they can be redeemed after six months; redemptions have been running between 20 and 30 percent of sales six months before,[18] or about 1¼ percent of the total eligible for redemption. Monthly sales reached their peak in March 1941, while redemptions show a marked upward trend. After this time, there was a drop in sales which no doubt was connected with the shift in promotional emphasis from savings certificates to Victory Bonds. With the announcement of each successive budget, current sales have dropped and redemptions have increased sharply. From March 31 to August 31, 1943 redemptions were over 40 percent of sales six months before. In those months, redemptions ranged from 1.4 to 1.9 percent of the total eligible for redemption. By the end of August 1943, cumulative redemptions for the whole war period had reached 20 percent of the total eligible.[19] On the other hand, in support of the savings campaign, it must be pointed out that savings certificates or stamps can be bought by people whose incomes do not permit subscriptions to bonds, even with the instalment-payment privilege that has been granted in the five Victory Loans. Its significance lies largely in the educational and psychological value of having as many people as possible participate in government war borrowing.

The Department of Finance has apparently been anxious to minimize interest cost, and has set maturities as short and the yields as

[18] In the United States the redemption of Series E bonds has been running about 13 percent of sales two months before and has shown a tendency to increase in relation to total sales. Only an approximate comparison of American experience in Series E bonds with Canadian experience in war savings certificates is justified, since E bonds can be bought up to $5,000 per year.

[19] At that time cumulative redemptions of United States Series E bonds were 9 percent of total eligible.

TABLE 5 — SIZE AND FEATURES OF CANADIAN WAR LOANS [a]

War Loans	*Cash Subscriptions* (millions)	*Conversions* (millions)	*No. of Subscribers* (thousands)	*Maturity* (years)	*Coupon* (semi-annual)	*Yield to Maturity at Offering*	*Issue Price*	*Value at Maturity*	*Issues Accepted for Conversion*
1st War Loan (February 1940)	$200[b]	$50	178	8-12	3.25%	3.27%	100%	100 100½ 101	3's 1940 at 100.17 + int.
2nd War Loan (October 1940)	300[b]	25	151	12	3.0	3.125	98.75	100	4½'s 1940 at 100.25
3rd War or 1st Victory Loan (June 1941)	730	107	968	5 10	2.0 3.0	2.19 3.09	99 100	100 101	5's 1941 at 102.5 + int.
4th War or 2nd Victory Loan (February 1942)	843	154	1,681	2½ 6 12	1.5 2.25 3.0	1.50 2.25 3.07	100	100 100 101	1½'s 1942 at 100.59; 2's 1943 at 100.8
5th War or 3rd Victory Loan (November 1942)	991	..	2,000	4 14	1.75 3.0	1.75 3.06	100	100 101	None
6th War or 4th Victory Loan (May 1943)	1,309	..	2,670	3½ 14	1.75 3.0	1.75 3.0	100	100	None
7th War or 5th Victory Loan (November 1943)	1,383	188	3,008	4 16	1.75 3.0	1.75 3.0	100	100	5's 1943; 4's 1945 called

Sources: *Loan Prospectuses,* and National War Finance Committee releases.

[a] Purchasers of the first two War Loans paid in full on delivery. Beginning with the 3rd War (or 1st Victory) Loan, subscribers who so desired could make a 10 percent cash down payment and pay the balance on a specified date thereafter.

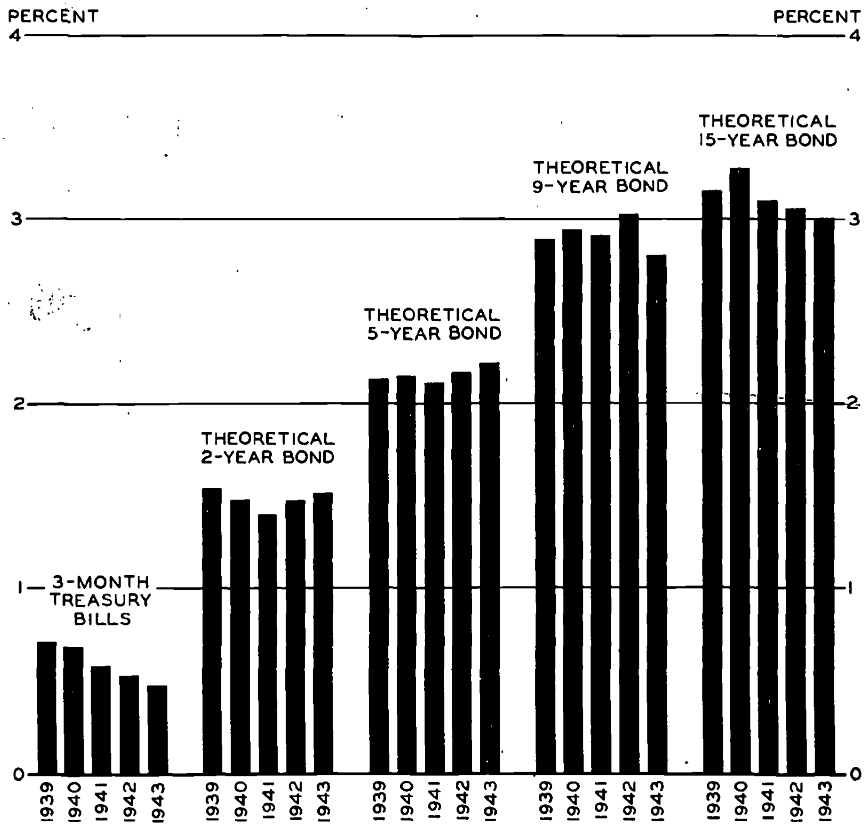
[b] Allotments for the first two War Loan cash subscriptions were $320 million and $342 million respectively. Since then, all subscriptions have been allotted in full.

low as seemed expedient. (The Canadian investor is used to shorter maturities and higher yields than the American.) While there is no announced policy of pegging the level and maintaining the pattern of interest rates as in the United States, the Department of Finance nevertheless feels that higher coupon rates would not call forth significantly greater sums and would needlessly raise the cost of war finance. It also feels a "moral obligation" to maintain the value of its securities. Canadian policy has been to collect as much as possible in taxation, borrow as much as possible from the public at roughly 3 percent for long-terms and 1½ to 2 percent for medium-terms, and to borrow the balance needed to meet government expenditures by sales of special obligations to the banking system. The recent reduction in the Bank of Canada rediscount rate is evidence of the government's intention to maintain current interest levels.

The Department's large-scale borrowing operations have actually been accomplished with a reduction of the average yield on government securities. At 2.6 percent, the average rate on Federal obligations at the close of fiscal 1943 was the lowest in history, and nearly 1 percent below the prewar level. Yields on long-term securities and obligations have tended to fall, while yields on intermediate-term securities (2 to 5 years) have risen slightly. Interest rates in general have been higher in Canada than in the United States or in the United Kingdom, but the spread between the Canadian yields and those in the other two countries has been considerably reduced during the war. The development of interest structures in this period is shown in Chart IV.

In August and September 1939, the market for government obligations broke sharply in Canada, as it did in Great Britain and in the United States. The market price of the 3 percent of June 1955, for example, fell from $100.38 in July to $91.00 in September. The market recovered much of its losses in October, and since then the chief characteristic of the Canadian market for government securities has been stability around a gently rising price trend. In the case of each war loan, the dealers' prices have fallen slightly below par for some months after issue. The Bank of Canada has imposed restrictions for periods varying from a few days to a few months on below-par offers made to the public by dealers. In some cases the low dealer's price was reached before, and in other cases after, these restrictions were removed. The maximum discount has ranged from

CHART IV — YIELDS FALLING ON SHORT- AND LONG-TERMS, RISING ON MEDIUM-TERMS



Source: Bank of Canada, *Statistical Summary* (December 1943-January 1944).

3/8 to 5/8, and has included a dealer's commission of 1/8 to 1/4. All long-term loans rose above par within a few months of their issue, to a certain extent because of their closer approach to maturity and because of the pattern of rates increasing with maturity.[20]

The National War Finance Committee

The National War Finance Committee is the latest, and probably the last, organization to be set up for selling wartime issues to the public. Its establishment by the Minister of Finance in January

[20] See W. Braddock Hickman, *The Term Structure of Interest Rates* (National Bureau of Economic Research, Financial Research Program, ms. 1942).

1942, just before the Second Victory Loan campaign, was the final step in the unification of the government sales organization. The functions and many of the personnel of the former War Savings and Victory Loan Committees were absorbed by the NWFC. Its objectives were later announced as follows:

> "Under present plans, future operations of NWFC contemplate (a) a continuous program of public education in the national and personal need for, and advantages of, voluntary savings during the war years, (b) the continuous sales promotion of War Savings Certificates and Stamps, (c) the sale of two Victory Loans in each year, one in the Spring months and another in the Fall, and (d) the development of a better public understanding of the advantages, both national and personal, to be realized through retention, at least for the duration of the war, of securities purchased during the war years."[21]

The NWFC itself is made up of the National Executive Committee and representatives of major industries, agriculture, labor, commerce, finance, women's organizations and so forth, some 60 persons in all. In addition there are Committees in each province, and some 460 Local Units. The administrators in the central office constitute the National Management Committee, and they, together with the Chairmen of the Provincial Committees, comprise the National Executive Committee. The entire permanent full-time staff of the NWFC is less than 400 persons. This nucleus is supplemented by some 125,000 voluntary workers attached to Local Units, about 17,000 temporary workers hired by the Committee and salesmen selling on a commission basis, and about 1,850 investment dealers and brokers.

The work of the NWFC is carried out by five Divisions. The "Special Names Division" recruits its personnel from officers of investment and brokerage houses, and canvasses corporations, financial institutions, government agencies, and individuals believed ca-

21 Mr. Ilsley to the House of Commons, June 28, 1943. The first two War Loans were organized by the Bank of Canada, acting as fiscal agent of the government, with the assistance of a Special Advisory Committee consisting of representatives of bond dealers and chartered banks. The War Savings Committee was established in May 1940 when war savings certificates and stamps were introduced. Partly because of the disappointing public response to the Second War Loan, a Victory Loan Committee was organized in June 1941 to market the First Victory Loan. Personnel consisted of professional dealers, voluntary workers, general canvassers enrolled in each locality, and insurance agents and others made available by their employers.

pable of subscribing $25,000 or more. "Special Names" investors have accounted for some 60 percent of Victory Loan subscriptions. The "Payroll Savings Division" covers the armed forces, and employees with incomes up to $3,000 in concerns with a minimum of 25 employees, or 50 in Ontario, Quebec, and British Columbia. No commissions are paid on subscriptions in the Special Names and Payroll Savings Divisions.

The "General Sales Division" deals with the rest of the potential investing public. To a large extent, the technique in this Division consists of house-to-house canvass. Commissions are paid to individual canvassers amounting in the aggregate to ⅛ of 1 percent on medium-term and ⅝ of 1 percent on long-term issues, and are usually "pooled" and shared on some pre-established basis. The remuneration of dealers and brokers is determined by the Minister of Finance on the basis of services rendered. Subscribers designate some bank through which they wish their bonds delivered, and the banks are paid a handling fee of ⅛ of 1 percent on short-term and ¼ of 1 percent on long-term issues.[22]

Advertising is handled by the "Public Relations Division." The general policy of this Division is to try every attack that might sell bonds: reasoning about the relation of bond sales to inflation, threats of military disaster if bonds are not bought, promises of earlier victory if they are, radio programs, parades, perambulating public address systems, movie stars, slogans — no device holding any possibility of success is slighted. Finally, the "Administrative Division" consists of full-time personnel concerned with organization and supervision of the whole process.

As a war service, insurance agents and banks have voluntarily undertaken to sell war savings certificates and stamps without commission. As in the United States, war savings stamps may be bought in post offices, chain stores, moving picture theatres, railway offices,

22 On the first two War Loans, the commission to individual canvassers was ¾ of 1 percent. The banks as a whole received a fixed proportion of total commissions payable, which was then reallocated among individual banks. On the First Victory Loan (Third War Loan) the commissions to individual salesmen were ¼ of 1 percent on short-term, and ½ of 1 percent on long-term, for all sales other than "Special Names"; there was no Payroll Division at that time. For the Second Victory Loan the rates were ⅛ of 1 percent higher in each case, but no commissions were paid on conversion subscriptions. The banks received service fees of ¼ of 1 percent on all bonds handled under the first two Victory Loans.

insurance offices, and the like. Customers are urged to take change in savings stamps. Emphasis has been laid upon the desirability of commitments for regular purchases, and in most large firms pay-deduction agreements have been obtained from employees.

The success of the NWFC is revealed by the fact that subscriptions to the Seventh War Loan were over six and a half times as great as for the First War Loan and the number of subscribers 17 times as great, despite lower yields. The over-all cost of the Victory Loan campaigns, including publicity and engraving, has been kept below 1 percent of the amount of money raised.

Bank of Canada

The basic wartime policy of the Bank of Canada has been to provide the chartered banks with sufficient reserves to meet credit requirements and drains on cash, and to enable them to buy enough government securities to maintain a stable and orderly market. Open market operations have been the means to this end, and no attempt has been made to use the rediscount rate to influence bank reserves. The rate was held constant at 2½ percent from the Bank's inception to February 8, 1944. Its reduction to 1½ percent at that time was not designed to facilitate replenishment of bank reserves by borrowing from the central bank. The chartered banks do not borrow significant amounts from the Bank of Canada, and it is not expected that they will. The purpose of the lower rate was to serve notice that the Bank's "easy money" policy would be pursued during and after the war, and that no rise in interest rates should be expected. As indicated in Table 6, the effects on bank reserves of Bank of Canada operations have been expansionary in every year since the war began, and the rate of expansion has shown a distinct tendency to increase.

The first war budget message of September 1939 took the position that easy money in the early stages of war would be not merely harmless but distinctly useful, particularly in stimulating the rapid absorption of excess industrial capacity and unemployment. Central bank policy followed this principle in the fall of 1939 when the drain on chartered bank cash was unusually severe. There was a supernormal demand for agricultural credit to move the bumper wheat crop, the second highest on record; higher incomes, increasing business activity, an outflow of United States currency in response to the

TABLE 6 — EFFECT OF CENTRAL BANK POLICY ON CHARTERED BANK RESERVES, WAR YEARS 1940-43
(in millions)

Balance Sheet Changes [a]	*Twelve Months Ending August 31*				*Total*
	1940	1941	1942	1943	
Assets					
Gold and exchange reserves	$ − 260	$38	$ − 40	$37	$ − 225
Dominion-Provincial securities	388	110	209	270	977
Liabilities					
Notes held by public	114	105	152	185	556
Dominion government and other deposits	− 5	34	− 28	27	28
Rest fund and other liabilities *less* subsidiary coin	− 8	1	14	− 7	0
Increase in chartered bank reserves	27	8	31	102	168

Sources: Bank of Canada, *Statistical Summary* and *Monthly Statements,* various issues.
[a] Increases in central bank assets add to chartered bank reserves, increases in central bank liabilities reduce chartered bank reserves.

premium on American funds, and the general uncertainty accompanying the outbreak of war resulted in a considerable increase in note circulation. Finally, in accordance with its expansionist policy, the Department of Finance arranged a loan with the banks for $200 million. To meet this situation, the Bank of Canada purchased securities, and thus permitted the banks to meet these various drains without sacrificing their customary reserve ratio of 10 percent against deposits.

The remainder of the $388 million increase in Bank of Canada holdings of government securities during the first year of war is accounted for mainly by an arrangement made under the Foreign Exchange Acquisition Order of April 30, 1940, by which the Bank sold to the Foreign Exchange Control Board $28 million worth of foreign exchange and $226 million worth of gold. To provide the Board with funds to buy gold and exchange, the Bank purchased $325 million worth of Dominion 1 percent 1-year notes and Treasury bills. In this way the Bank's holdings of gold and foreign exchange were in effect replaced by holdings of Dominion securities, and ownership of gold reserves was transferred to the Foreign Exchange Control Board.

Nervousness over adverse war news led to a renewed demand for currency in the spring of 1940. Since then currency circulation has continued to increase for much the same reasons as in the United States: the rise in incomes, especially among groups that do not use banks; increased ratio of payrolls to total income payments; the use of cash rather than deposits by men in the armed forces; shifts in location of population and disruption of bank connections; increased bank charges; and the greater relative importance of goods and services usually paid for in cash.[23] Apart from this drain on cash, the chartered banks have needed central bank support mainly to finance their own acquisitions of government securities. In four war years, the Bank acquired enough securities to offset the transfer of foreign exchange and the increased public demand for currency, and to add $130 million to chartered bank reserves.

After the fall of France, as Canada's war production program got into full swing and excess capacity and unemployment had largely disappeared, the officially declared fiscal and monetary policy was to limit further monetary expansion as much as possible. Nevertheless, the Bank of Canada continued to provide the chartered banks with whatever cash was required to keep their reserve ratios constant in the face of wartime needs. The result has been open market purchases of government securities on an ever-increasing scale. The only special issues bought by the Bank of Canada were those in connection with financing the Foreign Exchange Control Board and the refunding operations; the Bank's subscriptions to Victory Loans have been negligible.[24] Except for $193 million in 2-2½ year notes bought in June 1942, to finance government purchases of sterling from FECB, increases in Bank of Canada holdings of Dominion-Provincial securities since the first year of war have been acquired mainly on the open market. Increased Bank of Canada holdings have amounted to 16⅔ percent of the rise in debt in the first four years of war, while the Federal Reserve Banks have taken only 5 percent of the increase in American debt. Even if the $251 million received in exchange for reserves are excluded, the Canadian figure is still over 12 percent. The Canadian banking system as a whole, however, has taken a smaller share of the wartime increase of national debt than the American banks.

23 See Charles R. Whittlesey, *The Effect of War on Currency and Deposits* (National Bureau of Economic Research, Financial Research Program, Occasional Paper 11, 1943), and *Federal Reserve Bulletin* (June 1943) p. 499.

24 "Special issues" is used here in the same sense as in Table 4, and does not include Treasury bills or Treasury deposit certificates.

Foreign Exchange Control Board

While legally a distinct body subject to direction by the Minister of Finance, the Foreign Exchange Control Board is in close working relationship with the Bank of Canada. The Bank is the Board's "technical advisor and agent,"[25] the Bank Governor is also Chairman of the Board, and many of the technical personnel of the Control Board have been recruited from the Bank. The Board was set up on September 15, 1939, and a Foreign Exchange Control Order was enacted permitting the Board to use the Exchange Fund established by the Exchange Fund Act of 1935 for the purpose of controlling fluctuations in foreign exchange rates.

Like the pound sterling, the Canadian dollar depreciated in the last days of August 1939, and when exchange control was introduced, the premium on American funds had risen to about 11 percent. Since September 1939, the Board has maintained the official premium on the United States dollar at 10 percent buying and 11 percent selling, equivalent to a discount rate on the Canadian dollar in the United States of 9 3/32 to 9 29/32 percent. The main feature of Canadian exchange control has been rigorous limitation of capital exports and travel expenditures, and non-essential commodity imports have been restricted as well. Under the Foreign Exchange Acquisition Order of April 1940, all Canadian residents are required to sell their foreign exchange to the Board except for normal working balances; the banks act as agents of the Board, and receive 1/8 of 1 percent commission on all foreign exchange handled.

In addition to the official market for Canadian funds, there is a recognized unofficial market for transactions not subject to the regulations of the Board, such as transfers from one non-resident to another. The American market for unofficial Canadian dollars has fluctuated widely at times, especially in the early months of exchange control, and fell to a low of U.S. $.78 in May 1940. The supply of unofficial Canadian dollars has since dried up, and the unofficial rate now prevails close to the official rate.

As mentioned above, the Foreign Exchange Control Board was advanced $325 million to assist it to acquire gold and foreign exchange from the Bank of Canada and from residents. Additional needs for Canadian dollars have appeared from time to time, and these have been met by temporary borrowing from the Bank of

25 Bank of Canada, *Annual Report* (1940) p. 8.

Canada, or by advances from the Department of Finance. During the late thirties Canada had a favorable balance of payments amounting to some $200 million annually, that could be used to reduce foreign indebtedness. Her large import surplus from the United States and her larger debit balance of interest and dividends payable to the United States were in considerable measure offset by American tourist expenditure in Canada and by sale of gold to the United States Treasury.[26] Net exports to the United Kingdom outweighed net interest and dividends due the United Kingdom, and left a large credit balance in favor of Canada. The balance on current account with other countries was also favorable.

With the outbreak of war, this convenient triangular structure was seriously disrupted. Both exports to Britain and imports from the United States expanded enormously, but Great Britain found it increasingly difficult to make payments for imports from Canada. The third side of the triangle, exports to non-Empire countries other than the United States, soon dwindled to insignificance. During the first year of war England sold $250 million worth of gold to Canada, and increased her commodity exports to Canada by $24 million, but since then Canada has in effect paid for her own exports to Great Britain, except for U.S. $150 million transferred by Britain early in 1943. As shown in Table 7, up to the end of fiscal 1942, the chief methods of financing the sterling area's deficiency of Canadian dollars were to accumulate sterling balances in London and to repatriate British-held Canadian securities.

In March 1942, the "War Appropriations (United Kingdom) Act" authorized outright gifts to the British government of $1 billion worth of war supplies to cover the Canadian dollar deficiency of the sterling area. At the same time, $700 million worth of the sterling balances was consolidated into a loan, interest free during the war, and with a term and interest rate to be determined after the war. The "billion dollar gift" was expected to last a year, but it was exhausted by the end of 1942.[27] In February 1943, the Mutual Aid

26 Recent revisions of estimates of net tourist expenditures in Canada suggest that they had been previously overestimated by at least 100 percent. It seems likely that net balance of payments to the United States was substantial even after American tourist expenditures and gold sales had been deducted. See Dominion Bureau of Statistics, *Canada's Tourist Trade 1940.*

27 It was to cover deficiencies accruing before a new arrangement was made that $150 million of American exchange was made available to Canada.

TABLE 7 — FINANCING OF STERLING AREA'S DEFICIENCY OF CANADIAN DOLLARS TO AUGUST 31, 1943
(in millions)

Source of Canadian Dollars	*Sept. 15, 1939-March 31, 1942*	*March 31, 1942-Aug. 31, 1943*
Sales of gold and U. S. dollars by United Kingdom to Canada	$250	$166[a]
Private repatriation of securities, gifts, etc.	126	48[a]
Financed by government of Canada:		
By accumulation of sterling	892	− 892
Official repatriation of Dominion's direct and guaranteed securities	626	73[a]
"War Appropriations Act" gift	..	1,000
Mutual Aid Act	..	192
Interest Free Loan	..	700
TOTAL	$1,894	$1,287

Sources: Department of Finance, *Loan Prospectus* (January 14, 1943); Bank of Canada, *Statistical Summary* (April-May and August-September 1943).
[a] To March 31, 1943 only.

Program was introduced, making $1 billion of war supplies available under a variety of terms to all the United Nations with provisions for reciprocal assistance wherever possible. At that time too, Canada purchased from Great Britain $200 million worth of investments in war plants in Canada. Aid to Britain has constituted nearly 40 percent of total Canadian expenditures, and has added materially to the magnitude of the problem of war finance.

American tourist expenditures, "a small but encouraging inflow of capital from the United States," [28] and sale of gold to the American Treasury prevented any acute American dollar shortage during the first eight months of war. From then on, however, American dollar deficits led to serious depletion of reserves of gold and foreign exchange. This depletion was relieved by the "Hyde Park Declaration" of April 1941. The Declaration, made jointly by the President of the United States and the Prime Minister of Canada, had two main features. First, war materials sent to Canada for ultimate delivery to Great Britain as war supplies could be financed under the terms of the Lend-Lease agreement with Great Britain, an arrangement which relieved Canada of the necessity of finding American dollars for much of her imports from the United States. Second,

[28] *Budget Speech* (June 1940) p. 6.

the American government agreed to buy direct from Canada "certain kinds of munition, strategic materials, aluminum, and ships." Such purchases were originally expected to run to $200 or $300 million annually, but it appears that the actual figure has been much higher.[29] Rising American prices have increased both the supply of and demand for American dollars on commodity account. However, net capital imports from the United States reached an unprecedented volume in 1943. These transfers arose partly from a belief that the Canadian dollar was undervalued, partly from the higher yield on Canadian securities, and partly from fears of American inflation. Some of the more important factors in the Canadian exchange position are summarized in Table 8.

TABLE 8 — CAPITAL IMPORTS AND BORROWING OF FOREIGN EXCHANGE CONTROL BOARD, WAR YEARS 1940-43
(in millions)

Item	*Twelve Months Ending August 31*				*Total*
	1940	1941	1942	1943	
Net Capital Imports					
From the United States	$32	$23	$94	$175	$324
From all countries	31	21	88	169	309
Advances to FECB					
From the Treasury	325	400	— 556	268	437
From the Bank of Canada	..	40	— 40	37	37

Sources: Bank of Canada, *Statistical Summary* (August-September 1943), and Dominion Bureau of Statistics, *Sales and Purchases of Securities Between Canada and Other Countries*, various issues.

In a free exchange market rising American prices and increasingly heavy capital exports would tend to raise the value of the Canadian dollar in New York. In terms of the "purchasing power parity equation," the Canadian dollar was undervalued at the end of 1943 assuming that the prewar rate of exchange was an "equilibrium" rate. However, the "purchasing power parity" approach is even less reliable in war than in peace, because of the greater inadequacy of published price indices. Moreover, termination of Hyde Park deliveries and removal of present exchange controls at any time would

29 *Budget Speech* (June 1942) p. 4. Among the items which Canada is called upon to supply are: aluminum, cargo ships, corvettes and minesweepers, anti-aircraft guns, shells, small arms ammunition, gun barrels, chemicals, nickel, lead, zinc, universal carriers, aircraft, and certain secret devices.

partially offset rising American prices and capital exports. It is reasonable to suppose that wartime foreign exchange policy has been influenced by considerations pertinent to postwar stability as well as by the current exchange position.

The Chartered Banks

Since the outbreak of war, and especially during the third and fourth war years, the primary function of the chartered banks has been to help finance war loans. This observation is borne out by the data presented in Table 9. Commercial loans increased only $20 million

TABLE 9 – CHANGES IN PRINCIPAL ASSETS OF CHARTERED BANKS, WAR YEARS 1940-43
(in millions)

Asset Item	*Twelve Months Ending August 31*				*Total*
	1940	1941	1942	1943	
Commercial loans	$94	$92	$ – 139	$ – 27	$20
Temporary financing of instalment subscriptions to Victory Loans	..	98	– 63	95	130
Dominion-Provincial securities (own account)	118	218	511	376	1,223
Other securities	– 31	– 21	– 16	– 25	– 93

Source: Bank of Canada, *Statistical Summary* (August-September 1943) p. 59.

in four years of war, and actually dropped $166 million in the last two war years. Holdings of non-government securities have fallen throughout the entire war period. The most important change in chartered bank assets is the rise in their own holdings of Dominion-Provincial securities, which may be safely assumed to consist entirely of Federal securities. The banks have also provided temporary financing for something like 25 percent of their customers' subscriptions to war loans. Within six months after a campaign, loans against the current issue are permitted at a rate equal to the return on the bonds. However, such loans must be paid off within six months, and accordingly bank financing of public subscriptions has resulted in no serious increase in bank deposits.

The chartered banks absorbed only 19 percent of the increase in debt up to the end of the fourth year of war, while all insured American member banks took nearly 39 percent of the rise in American debt from June 30, 1939 to June 30, 1943. Excluding the securities received by the Bank of Canada in return for its gold and foreign

TABLE 10 – INCREASES IN CANADIAN GOVERNMENT DEBT (PAYABLE IN CANADA) AND BANK HOLDINGS OF GOVERNMENT SECURITIES, WAR YEARS 1940-43
(dollar figures in millions)

Item	Twelve Months Ending August 31				Total
	1940	1941	1942	1943	
Increase in:					
Canadian government debt	$677	$1,296	$1,378	$2,818	$6,209
Chartered bank holdings[a]	118	146[b]	448[b]	471[b]	1,183
Bank of Canada holdings	388[c]	110	209	270	977
Total holdings of banking system	506	256	657	741	2,160
Percent of Increase in Government Debt Represented by:					
Chartered bank holdings	18%	11%	33%	17%	19%
Bank of Canada holdings	57[c]	9	15	9	16
Total holdings of banking system	75	20	48	26	35

Source: Bank of Canada, *Statistical Summary* (August-September 1943).

[a] Includes Dominion-guaranteed and Provincial obligations, but increases can be assumed to consist of Federal securities only.

[b] Includes loans and security holdings connected with instalment purchases of Victory Bonds amounting to $98 million, $63 million and $95 million for the second, third, and fourth war years respectively.

[c] Includes $325 million notes purchased to finance FECB gold and exchange acquisitions.

exchange, the Canadian banking system as a whole accounts for less than 31 percent of the rise in debt; when these are included the figure is 35 percent. The American banking system absorbed over 48 percent of the rise in American debt between June 30, 1939 and June 30, 1943.[30] The growth of Canadian government debt and holdings of the banking system are compared in Table 10.

Chartered bank cash subscriptions to war loans have been negligible, and "conversion subscriptions" have not been large.[31] The

30 For Canada the figure includes increased holdings of chartered banks, the Bank of Canada, and an estimate for the Quebec savings banks, trust companies, mortgage and loan companies, etc., based on figures of subscriptions. For the United States, the figure includes all insured banks (Federal Deposit Insurance Corporation, *Reports*), mutual savings banks (*Treasury Bulletins* and *Annual Reports of the Comptroller of the Currency*), and Federal Reserve Banks (*Federal Reserve Bulletins*).

31 As shown in Table 5 above, in some War Loans, earlier issues maturing or called for redemption were accepted in exchange for the new issues. The banking system held some of the bonds thus accepted for conversion, and made use of the conversion privilege to the extent of $42 million in war year 1941 and $117 million in war year 1942.

TABLE 11 — ESTIMATED RESALES OF GOVERNMENT OBLIGATIONS PURCHASED BY THE PUBLIC TO THE BANKING SYSTEM, WAR YEARS 1940-43
(dollar figures in millions)

Item	*Twelve Months Ending August 31*				*Total*
	1940	1941	1942	1943	
Net public subscriptions[a]	$233	$1,077	$918	$2,346	$4,574
Resales to banking system[b]	35	64	177	334	607
Resales in percent of net subscriptions	15%	6%	19%	14%	13%

Source: Bank of Canada, *Statistical Summary* (August-September 1943).

[a] Calculated as the sum of net sales of war savings certificates, war savings stamps, and bonds to the public, plus one-quarter of net sales of Treasury bills, minus 60 percent of redemptions payable in Canada, as shown in Table 4.

[b] Increase in holdings of banking system (Table 10) plus redemptions and resales by the banking system to government funds, minus direct purchases, calculated as the sum of special issues, deposit certificates, and three-quarters of Treasury bills as shown in Table 4, plus cash subscriptions to war loans of $1 million in each of the war years 1941-42.

banks have, however, bought substantial amounts of various Federal securities in the open market. Assuming that three-quarters of the net increases in Treasury bills have gone into the banking system, total holdings of government securities by the banking system have increased by more than the system's direct purchases from the government in every war year but the first. Conversion subscriptions merely replace earlier issues with new ones, and any excess of the increase in holdings over cash purchases from the government must represent purchases from the public. Redemptions of maturing issues other than those called for conversion would in themselves reduce holdings, and replacement by open market purchases can be assumed to the extent of such redemptions. It seems conservative to estimate total bank holdings of maturing obligations at 40 percent.[32] The banks also held small amounts of maturing provincial bonds, and fairly substantial amounts of government bonds have been reabsorbed from the banking system by Federal agencies and funds. An estimate of the resale of public issues to the banking system by the public is shown in Table 11. It amounts to about $600 million

[32] The banking system held over 35 percent of the direct and guaranteed Dominion debt payable in Canadian dollars when war began, and over 40 percent after four years of war. Since the banks probably buy some long-terms on the open market as they approach maturity, their share in redemptions would be higher than their share in total debt outstanding.

in four years of war, or 13 percent of the net bond sales to the public.

In addition to direct resales to the banks, the public has sold some of its Canadian government obligations to American investors. Other things being equal, liquidation by non-bank investors of government bonds tends to bring about expansion of bank deposits, whether they are sold to banks or to foreign holders.

It must be pointed out that all the bonds purchased in the market by chartered banks do not stay in their hands. Chartered bank purchases of special issues are almost exactly equal to the rise in their holdings of government obligations plus probable share of redemptions and resales to government agencies and funds; accordingly, they have made little net acquisition of governments apart from special issues, and their purchases of government securities from the public must have been largely offset by sales to the Bank of Canada. The figures of the Bank's holdings shown in Table 6 confirm this conclusion. Thus the banks are in effect intermediaries between the public and the Central Bank. While influenced by the whole constellation of wartime financial policies, the process is primarily the result of the Bank's policy of providing the banks with reserves to meet the drain on cash and buy whatever volume of special obligations the government finds necessary.

Canada seems to be somewhat more successful than the United States in selling war bonds outside the banking system, and almost equally successful in keeping them there. A calculation for the United States shows that the banks resold to the public in the third year of War II slightly more government obligations than they bought from the public, but the net "rebound" from the public into the banking system was about 13 percent of net sales to the public in the fourth war year. "Rebounds" of this magnitude are scarcely surprising in either country. It seems beyond question that under the pressure of Victory Loan drives many Canadians subscribed for more bonds than they found it convenient to carry. There are indications, too, that Canadian corporations subscribed for more than they intended to hold for any length of time, either because of the advertising value attached to large subscriptions from corporations on the Special Names list, or simply because they had a temporary surfeit of cash. No doubt the rise in tax rates is partially responsible for these liquidations of private and corporate holdings.

Such resales diminish the effectiveness of war loans in reducing consumer spending and checking inflation. As early as August 1942, the National War Finance Committee published an advertisement in the Canadian press with the admonition "Don't be a Welsher!" urging subscribers to hang on to their war bonds. In the May 1943 campaign the NWFC tried to persuade the public to hold, as well as buy, the Fourth Victory Loan. As mentioned above, the Finance Minister later listed the education of the public to the need of holding the war issues they buy as one of four future objectives of the Committee. On the other hand, some corporations feel they are helping to smooth the market by acquiring large amounts of bonds during a campaign and disposing of them gradually as the market is able to absorb them. To the extent that this claim is well founded, such corporations are performing a sort of banking function through their war loan policy.

Role of Life Insurance Companies

Life insurance companies figure prominently in the Canadian economy. Before the war, the people of Canada were investing about half their personal savings in life insurance, a larger proportion than any other nation.[33] The choice of investment outlets for these savings is a matter of no little importance for the economy as a whole. whether in war or in peace. During the present war, life insurance companies have made increasingly heavy contributions to public war loans, and their subscriptions to the first five Victory Loans amounted to $743 million, over 13 percent of the total.

Shortly after Canada entered the war, the Canadian Life Insurance Officers Association assured the Finance Minister of "fullest possible support of Canadian life insurance companies to government loans." They offered to release key men for participation in the sale of war loans and war savings certificates, and agreed to invest any increased receipts in war loans. Actually, as Table 12 shows, investments by life insurance companies in Dominion war issues has far exceeded the modest increase in their net receipts, and over 100 percent of net receipts from Canadian business has been used for this purpose. Annual subscriptions to war loans of all companies

[33] This statement, which was made by E. C. MacDonald of the Metropolitan Life Insurance Company of Canada in an address to the Life Underwriters Association of Montreal (*Montreal Gazette,* March 19, 1942), has been independently checked by the author. Mr. MacDonald's figures were 52.4 percent for Canada and 41 percent for the United States.

TABLE 12 – RECEIPTS AND SUBSCRIPTIONS OF LIFE INSURANCE COMPANIES TO WAR LOANS, 1939-42
(in millions)

Group	*Calendar Years*				*Total*
	1939	1940	1941	1942	
Canadian Companies					
Net receipts from Canadian business	$64	$63	$78	$89	$294
Subscriptions to war loans	..	39	85	208	333
Increase in Dominion obligations held	..	41	74	143	258
British and Foreign Companies Operating in Canada[a]					
Net receipts from Canadian business	21	25	32	41	119
Subscriptions to war loans	..	10[b]	24	69	101

Source: Department of Insurance, Canadian Life Insurance Officers Association.

[a] Increase in Dominion obligations held not available for British and foreign companies.

[b] Estimate based on proportion of subscriptions to Victory Loans.

operating in Canada have risen from 56 percent of net receipts from Canadian business in 1940 to 213 percent in 1942. During 1940 and 1941, Canadian companies' holdings of Canadian municipal and public utility bonds increased substantially, but in 1942 holdings of all categories of Canadian bonds, other than Dominion, actually fell. Participation in the Fourth Victory Loan was heavier than ever, but did not maintain the rate of increase in insurance company subscriptions, and subscriptions to the Fifth Victory Loan were only $6 million more than for the Fourth. It seems likely that these companies have reached the point where they cannot be expected to absorb government bonds at a rate faster than they are now doing.

With an eye to the long-term nature of their obligations, insurance companies have concentrated their holdings of government securities in higher-yield maturities. Their subscriptions have been entirely for the long-term issues, except for $4 million on the First Victory Loan and $200,000 on the Second, and because of their established policy of adjusting their portfolio to the pattern of interest rates, they probably hold few issues to maturity. Their conversion subscriptions have been only $44 million, and their share in other redemptions has presumably not been large. However, Canadian life insurance companies, along with other investors, have been disposing of certain types of Dominion securities, such as Canadian National Railway bonds, which have found their way over the American border. Consequently, the increase in holdings of Dominion obligations has been considerably less than subscriptions to war loans.

On the whole, the insurance companies have more than fulfilled their promise to support war finance operations to the full. The privilege granted to taxpayers of deducting life insurance premiums from the minimum savings requirement of the income tax is mainly a reflection of the importance of insurance in Canadian savings, and of the government's desire not to impose tax barriers to continued saving in this form.[34] At the same time the knowledge that any consequent rise in earnings of insurance companies would go directly to the coffers of the government has made the granting of this privilege compatible with the government's anti-inflationary aims.

Role of Other Business Concerns

Corporations (excluding life insurance companies and banks) have accounted for over one-third of the subscriptions to war loans.[35] The

[34] Not only premiums on existing policies, but half the first year's and all subsequent premiums on new policies, may be deducted. Thus the privilege not only encourages maintenance of policies already in force, but provides an additional incentive to take out new ones. The government declined to make all premiums on new policies deductible, since about half the first year's premiums go to the insurance agent as commission.

[35] Business subscriptions to the first five Victory Loans (Third to Seventh War Loans) were as follows (in millions):

	First		*Second*		*Third*	*Fourth*	*Fifth*	
	Cash	Conversion	Cash	Conversion	Cash	Cash	Cash	Conversion
Business incl. manufacturing	$242	$6	$276	$3	$298	$377	$401	$3
Mining	39	..	29	9	44	55	48	..
Insurance other than life	6	2	11	0.5	12	15	13	1
Miscellaneous financial	a	a	a	a	26	42	39	1
Total	$295		$328		$380	$489	$506	

Source: Statements by Mr. Ilsley to the House of Commons, June 28 and December 14, 1943.

[a] Included with "business and manufacturing."

role of other insurance companies, trust companies, mortgage and loan companies, and other financial organizations, has been small, and the same is true of colleges, churches, associations and funds, and similar institutions. The combined total for such organizations is about 4 percent of total war loan subscriptions. Nearly one-third of total subscriptions to the Victory Loans have come from business firms and corporations whose main function is non-financial.

Since detailed portfolios are not published, it is impossible to say to just what extent these subscriptions have increased total business holdings of government obligations. Conversions have been small relative to cash subscriptions, since non-financial firms were not heavy investors in government securities before the war and accordingly held only small amounts of the issues called for conversion. For the same reason it is unlikely that maturities of other issues have been of real importance. There are some indications that business concerns are responsible for the bulk of resales to banks, but even if they accounted for the entire "rebound," when the Fifth Victory Loan drive closed, businesses held nearly $1.5 billion more in government obligations than they did before the war.

Individuals

Over 40 percent of the total value of subscriptions to war loans came from individuals, of which less than 7 percent was from people on the Special Names list.[36] There were 3.0 million subscriptions (excluding Special Names) to the Fifth Victory Loan, from a population of 11.5 million. Thus sales were apparently made well down the income scale. "Employee applications" account for less than 10 percent of the value, but over half the number of total subscriptions. Likewise, subscriptions to $50 and $100 bonds excluding payroll

[36] Subscriptions of individuals to the first five Victory Loans were as follows (in millions):

	First		*Second*		*Third*	*Fourth*	*Fifth*	
	Cash	Conversion	Cash	Conversion	Cash	Cash	Cash	Conversion
Special Names	$37	$1	$29	$1	$26	$37	$27	$2
Others	279	34	335	..	375	530	604	38
Total	$351		$366		$401	$567	$671	

Source: Statements by Mr. Ilsley to the House of Commons, June 28 and December 14, 1943.

applications, most of which come from individuals, are low in dollars yielded and high in number. Interestingly enough, subscriptions to small denomination bonds are dwindling relative to both number and value of total subscriptions from all sources. Figures released by NWFC show that resales of $50 and $100 bonds constituted a very high proportion of the total number of sales, reaching 24 percent for the Second Victory Loan, but their total dollar value was relatively small. Individuals have probably kept all but $100 to $200 million of their subscriptions, leaving them with nearly $2.5 billion more government securities after the Fifth Victory Loan campaign than they held before the war, including war savings certificates of over $150 million. These holdings clearly represent a substantial rise in liquid claims readily convertible into purchasing power by sale on the market.

Government Accounts

Published records of the National War Finance Committee show that Federal, provincial, and municipal governments have bought relatively small amounts of war loans – about 5 percent of the total. Their subscriptions have been almost entirely in cash, suggesting that even these modest holdings are something of a novelty for them. Federal government units have subscribed less than half as much to these five loans as provincial and local units.[37]

Summary

Table 13 provides a summary percentage distribution of subscriptions to the five Victory Loans. Unfortunately, no comparable figures are available for the first two War Loans. The table demonstrates the dominant position of individual and business subscriptions, and shows that direct bank support has been negligible.

37 Government subscriptions to the first five Victory Loans were as follows (in millions):

	First	*Second*	*Third*	*Fourth*	*Fifth*	
	Cash	Cash	Cash	Cash	Cash	Conversion
Federal	$10	$20	$23	$31	$22	$2
Provincial and local	21	27	32	54	56	0.2
Total	$32	$47	$55	$85	$81	

Source: Statements by Mr. Ilsley to the House of Commons, June 28 and December 14, 1943.

TABLE 13 — PERCENTAGE DISTRIBUTION OF CASH SUBSCRIPTIONS OF VARIOUS GROUPS TO VICTORY LOANS

Group	*First*	*Second*	*Third*	*Fourth*	*Fifth*
Business incl. mfg. and mining	40%[a]	37%[a]	35%	33%	33%
Individuals	43	43	40	43	46
Government	4	6	5	7	6
Banks (Bank of Canada and chartered)	1	..	[b]	[b]	..
Life insurance	12	14	16	13	13
All other[c]	..	..	4	4	4

Source: Statements by Mr. Ilsley to the House of Commons, June 28 and December 14, 1943.

[a] Includes "all other."

[b] Less than .5 percent.

[c] Includes insurance other than life, Quebec savings banks, pension and benevolent funds, trust companies, charitable organizations, etc.