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Chapter 4

Lending to Finance the War

IN BRITAIN, as in other warring countries, lending institutions found themselves more and more heavily involved in government finance as the war progressed. As outlined in Chapter 3, financial concerns assisted the government with exchange control, credit restrictions, and rationing, and provided short-term credits to meet swelling tax payments. They also participated in the financing of war industries by making direct loans. Their chief wartime function, however, was to make loans to the government and to help it borrow from the public.

GOVERNMENT BORROWING

The government's demand for funds to finance war industries and military operations in part replaced normal peacetime demands, but in part was superimposed upon them. The net effect was to raise the total demand for credit, and to concentrate it in the hands of the government. Lending institutions accordingly had to adapt their operations to the larger volume and changed nature of the demand.

The growth and composition of the British government's wartime borrowing are shown in Tables 5 and 6. Short-term obligations (less than one year) were the chief instrument of new indebtedness, providing more than half the increase in total marketable securities. At first sight it appears that Britain made less use of intermediate-term (1 to 5 years) and long-term obligations, and greater use of short-term borrowing than did the United States and Canada; at the end of the fiscal year 1946, 53 percent of the increase in British marketable public securities[1] consisted of obligations maturing within one year, compared with 38 percent in the United States and 15 percent in Canada. However, much of the increase in British floating debt comprised "ways-and-means advances" and Treasury bills. Ways-and-means advances consisted partly of loans to the Treasury from other government departments, and the tap issue of Treasury bills was held almost entirely by government departments, government insurance funds, the Exchange Equalization Account, and overseas governments, holding sterling balances. Altogether, nearly half of the floating debt was intra-

[1] Including Treasury deposit receipts.

Table 5—ANNUAL INCREASES IN BRITISH DEBT, BY WAR YEARS[a]
(in millions)

	Years Ending August 31						
	1940	1941	1942	1943	1944	1945	Total
War Loans Raised							
Bonds							
3% War loan	£302.5	....	....	....	....	....	£302.5
3% Defense bonds	146.5	£181.0	£151.4	£127.1	£113.8	£73.5	793.3
3% National defense loan[b]	....	121.9	....	123.6	....	....	245.5
3% Funding loan[b]	....	....	242.5	....	....	....	242.5
3% Terminable annuity[b]	....	....	....	120.0	474.1	342.3	936.4
2½% National war bonds	186.0	750.3	534.3	686.8	651.1	262.3	3,070.7
3% Savings bonds	....	291.0	545.1	501.5	391.2	385.4	2,114.2
1¾% Exchequer bonds	....	....	....	....	....	326.8	326.8
Tax reserve certificates	....	....	346.9	203.7	98.2	108.3	757.1
National saving certificates	124.5	185.4	213.4	272.6	247.1	126.4	1,169.5
"Other debt"	18.8	57.0	259.2	37.3	5.5	Dr 16.9	361.1
TOTAL	778.3	1,586.6	2,292.8	2,072.6	1,981.0	1,608.1	10,319.6
Floating Debt							
Ways-and-means advances							
Public departments	11.5	153.2	40.5	58.8	77.7	188.6	530.3
Bank of England	....	1.0	Dr 1.0	....	....	0.8	0.8
Treasury bills							
Tender	336.0	134.0	5.0	195.0	260.0	260.0	1,190.0
Tap	424.3	482.7	143.0	224.0	306.6	86.0	1,666.6
Treasury deposit receipts	30.0	483.0	182.5	349.5	433.5	707.0	2,185.5
TOTAL	801.8	1,253.9	370.0	827.3	1,077.8	1,242.4	5,573.2
GRAND TOTAL	£1,580.1	£2,840.5	£2,662.8	£2,899.9	£3,058.8	£2,850.5	£15,892.8

a From *The Economist*, Banking Supplement, October 27, 1945, p. 2. In some cases, totals do not agree with the sums of the items because of rounding.
b Invested by National Debt Commissioners on behalf of savings banks.

Table 6—MATURITY DISTRIBUTION OF MARKETABLE GOVERNMENT SECURITIES AT END OF FISCAL YEARS FOR UNITED KINGDOM, UNITED STATES, AND CANADA[a]
(pound and dollar figures in millions)

Maturity	United Kingdom	United States	Canada
Within 1 Year			
1939	£992	$5,094	$679
1946	7,126	62,091	2,499
Increase as percent of increase in total public marketable debt	53%	38%	15%
1 to 5 Years			
1939	£353	$13,394	$1,024
1946	1,343	35,055	4,738
Increase as percent of increase in total public marketable debt	9%	14%	27%
Over 5 Years			
1939	£5,476	$20,927	$2,735
1946	9,896	92,501	10,078
Increase as percent of increase in total public marketable debt	38%	48%	58%

[a] From compilations prepared for the National Bureau of Economic Research by the Board of Governors of the Federal Reserve System and the Bank of Canada. Although non-marketable, Treasury deposit receipts are included for the United Kingdom and Treasury deposit certificates for Canada, because of their similarity to Treasury bills. Fiscal years for the United Kingdom and Canada end on March 31 and for the United States on June 30.

governmental, and exclusion of the intra-governmental debt would reverse the relative positions of Britain and the United States and bring Britain and Canada much closer together. It should also be noted that when war broke out the share of total debt consisting of obligations with maturities of five years or less was much smaller in Britain than in the other two countries. By the end of fiscal 1946, however, the proportion had increased so that such obligations were 46 percent of the British marketable debt, compared with 42 percent in Canada and 51 percent in the United States.

Treasury bills—tender and tap—were the main instrument of floating indebtedness, constituting over half of the total wartime floating debt. After the third year of war, however, increases of floating debt consisted chiefly of Treasury deposit receipts ("TDR's"), just as the growth of Canadian short-term debt was composed mainly of Treasury deposit certificates. This new form of government security was introduced in Great Britain in July 1940, bore interest at the rate of 1⅛ percent per annum for six months, compared with 1 percent per annum for three months on Treasury bills, and was issued only to Eng-

lish and Scottish banks.[2] The Treasury stated its requirements of Treasury deposits every week, and allotment was made by agreement among these banks. The TDR's were non-negotiable. They could be redeemed prior to maturity "in case of emergency," subject to a discount at Bank rate, but it probably would have required a substantial "emergency" to induce the banks to use this privilege. Furthermore, TDR's could be tendered in payment for purchases of government obligations other than Treasury bills, whether on the bank's own account or on their customers' accounts, and after the first year or so this privilege was exercised frequently and substantially, especially during war loan campaigns.

From the Treasury's viewpoint, there were several reasons for the substitution of TDR's for Treasury bills. The new system enabled the Treasury to borrow directly from the banks for six months, at a rate only about 1/8 of 1 percent higher than the 3-month Treasury bill rate, and perhaps permitted more exact adjustment of revenues to outflows. Since the TDR's were non-negotiable, and the penalty on encashment prior to maturity for purposes other than conversion to government long-terms was a deterrent to liquidation, they afforded the Treasury control over its balances. At the same time, the prior encashment facility meant that if necessary the banks could draw on the Treasury's own balance at the Bank of England, and thus avoid undue pressure on the money market which would result from the transfer of public loan subscriptions to the Exchequer.

The tax reserve certificate was another new short-term credit instrument which grew in importance. It performed much the same function as the United States tax certificate,[3] being designed to divert to the Treasury deposits held idle in anticipation of tax payments. However, the British certificates, the income from which was tax-free, bore 1 percent interest if used for taxes, while the United States certificates, taxable as regards income, bore interest of from 1/2 of 1 percent to 2 percent. Since under the British income tax the standard rate was 50 percent of taxable income, a tax-free 1 percent was equivalent to a taxable minimum of 2 percent gross. For someone in the 80 percent tax bracket, the tax-free 1 percent was equivalent to 5 percent gross. Thus the tax certificates were an attractive investment, particularly for businesses and for people in the upper income groups, and sub-

[2] Cf. W. T. C. King and Paul Bareau, *The London Money Market and Banking System in the Second Eighteen Months of War* (National Institute of Economic and Social Research, London, 1942) and Charlotte Muller, "British War Finance and the Banks," *The Journal of Business of the University of Chicago,* April 1943, p. 86.

[3] Issues of American tax certificates were discontinued in June 1943, when Treasury tax savings notes of Series A were discontinued, and Treasury notes of Tax Series C were redesignated Treasury savings notes of Series C.

scriptions to them may not have been entirely from otherwise idle funds. The tax-free feature was attacked on the grounds that for individuals in the 47½ percent surtax bracket, the return on tax certificates was equivalent to 40 percent on any taxable security, while for those liable only to the standard income tax rate it was equal to just 2 percent.

In marketing long-term issues, the British attempted to provide securities suitable for "large" and "small" savings, and special emphasis was laid on the latter. The distinction was based on the size of the individual subscription expected and on the income group that the obligation was meant to reach. The chief differences between the two types of security were their tax status and denomination. National savings certificates and national defense bonds were small in denomination, and therefore regarded as particularly suitable for small investors. The 15s. savings certificates yielded a tax-free 3.17 percent if held to maturity and were freely redeemable; holdings were limited to 500 certificates. The £1 savings certificates yielded only 1.41 percent free of taxes, were cashable only after 90 days, and were limited to holdings of 250 certificates. The 3 percent defense bonds were subject to tax, were cashable at 6 months' notice, and were limited to holdings of £1,000. The £1 issue of savings certificates and the 3 percent national defense bonds were designed for small savers who had acquired their full quota of 15s. savings certificates. All issues intended for small savers were sold through Post Offices, Trustee Savings Banks, and Savings Groups. For statistical purposes, the government also considered increased balances in Post Offices and Trustee Savings Banks as small savings.

The obligations aimed at large investors consisted of the tap issues of 3 percent savings bonds, 2½ percent war bonds, and 1¾ percent Exchequer bonds, which were sold through the Bank of England and on the Stock Exchange by existing holders. These were available in large denominations (£50-£100) at the Bank of England and smaller denominations (£10-£25) at the Post Offices and Trustee Savings Banks.

Needless to say, any individual investor, whatever his income, probably obtained his quota of tax-free obligations before buying others; for taxpayers, the 3.17 percent tax-free yield on 15s. savings certificates was equivalent to a minimum of 6 1/3 percent on other securities. Because of the restricted quota on issues designed for small savers, and the greater inconvenience of the smaller denominations, institutions and people with high incomes no doubt invested mainly in other issues. It

does not follow automatically that the bulk of "small" savings came from families with small incomes. Statistical inquiries conducted in 1942 suggest that less than half of small savings up to that time came from the lower income groups. However, as working class earnings continued to rise, and medium and large investors reached the statutory limit to holdings of savings certificates and defense bonds, it seems likely that the proportion of these issues held by the lower income groups was somewhat higher in the later years of the war.[4]

The stimulation of public saving was entrusted mainly to the National War Savings Committee, an outgrowth of the Savings Movement which was launched in 1916 and which continued throughout the interwar period. The Committee, set up in November 1939, consisted of members appointed by the Treasury, representing interested agencies and organizations, and eighteen members elected by the Local Savings Committees, one for each of the twelve regions and each of the six great cities. There was an official staff of 1,600, including a Commissioner for each of the twelve regions, supplemented by some 600,000 voluntary workers. As the British Information Services put it, the local savings groups were the "cells" of the movement.[5] These groups were organized by industries, schools, neighborhoods, and branches of the Armed Forces. The number of such groups grew from 41,500 before the war to over 320,000 in July 1944, at which time their membership covered one-third of the total population. The Committee relied mainly on a steady flow of reminders of the need for saving, and except for the War Loan of March 1940, all long-term issues were on tap. However, the Committee did organize a series of special drives, similar to the American and Canadian war loan campaigns.

Lending by the Bank of England

War brought closer collaboration between the Treasury and the Central Bank in all belligerent countries. The Treasury in Great Britain, as in the United States and Canada, adopted a deliberate policy of "pegging" the interest structure at a low level,[6] and the cooperation of the Central Bank was essential to this policy in all three countries.

In accordance with traditional practice in time of crisis, the Bank

[4] Cf. M. Kalecki, "The Problem of 'Small' Savings," *Bulletin of the Oxford Institute of Statistics,* Vol. 5, No. 16, November 20, 1943.

[5] British Information Services, *The British War Savings Campaign,* I.D. 395 (April 1943).

[6] In a statement to the House of Commons on April 12, 1943, Sir Kingsley Wood remarked, "During this war we have stabilized the general complex of interest rates at a level so low as would have been thought impossible by anyone who merely based himself on the experience of the last war."

of England raised its Bank rate shortly before the outbreak of hostilities —from 2 to 4 percent. However, in keeping with the Treasury policy of maintaining a low rate of interest, the Bank rate was reduced to 3 percent on September 28, 1939, and to 2 percent on October 29, 1939, where it was held throughout the war. With world conditions as they were, it is unlikely that a higher Bank rate would have increased the supply of foreign exchange, either by attracting capital or by increasing exports.[7] In any case, responsibility for controlling foreign exchange rates was taken over by the Treasury's Exchange Equalization Fund, and the Bank served merely as the principal agent for operation of the Fund. During the war, central banking policy was determined mainly by domestic considerations.

In war as in peace, the Bank acted as the government's agent in the flotation of loans. It also lent directly to the government through ways-and-means advances and purchases of government obligations. However, since the Treasury in World War II borrowed from the commercial banks directly by means of TDR's, Bank ways-and-means advances were an insignificant aspect of war finance, and total Bank lending to the government was small.

By far the most important function of the Bank was to provide reserves to the joint stock banks, to help them buy government obligations, and to carry on as much of their traditional task of financing trade and industry as was compatible with a maximum war effort. In the years between the two World Wars, the Bank altered the volume of bank reserves according to the demand for credit from the commercial banks and to the Bank's own canons of sound finance, including its judgments regarding the proper balance between protecting the gold standard and reducing unemployment. During the war, the commercial banks lent to the government according to Treasury needs, and to industry, commerce, and consumers according to Treasury advice; the necessary reserves for these operations were provided by the Bank of England, by buying Treasury bills. As a rule the commercial banks met any stringency resulting from an exceptionally large issue of TDR's, or from heavy revenue payments to the Treasury, by calling funds from

[7] In World War I, likewise, the Bank consulted the Treasury when changes in the rate were made. The preponderance of Treasury bills in the discount market weakened the Bank's control of the open market rate on bills, and transferred much of the power over market rates to the Treasury. As stated in Chapter 2, shortly after the outbreak of war the Bank rate was reduced from its crisis peak of 10 percent to 5 percent, and it remained between 5 and 6 percent for the duration of the war. Had the financial authorities been concerned only with domestic policy and felt no need to use the discount rate to assist in supporting the pound, the rate might have been reduced further.

the discount houses, which were in turn compelled to sell Treasury bills to the Bank of England. Sometimes, however, the Bank bought bills directly from the commercial banks, usually at the market rate. In either case, the cash that the Bank paid for bills found its way into the commercial banks' tills or into their deposits with the Bank of England, thus increasing reserve ratios.

In September 1939, virtually all of the Issue Department's gold reserve (£279 million) was transferred to the Exchange Equalization Account. "Lending" by the Issue Department in connection with currency increases constituted nearly 87 percent of the Bank's wartime lending to the government. The increase in the Banking Department holdings of government securities was only £159 million to the end of the war period, less than 1 percent of the rise in national debt. Holdings by the Issue Department, on the other hand, rose by £1,054 million, just 7 percent of the increase in national debt. Thus, total central bank loans to the government were only 8 percent of the increase in debt. Over the fiscal years 1939-45, the Federal Reserve Banks absorbed 9 percent of the increase in the United States national debt, and the Bank of Canada 14 percent of the Canadian.

Lending by the Joint Stock Banks

The role of the joint stock banks in war finance was threefold: to buy government obligations themselves, to assist in the sale of government securities to institutional and other investors, and to make direct advances to war industries. The banks served as agents for the sale of war bonds, and they did much to stimulate and facilitate public subscriptions. Rates of interest paid on bank deposits were reduced below the prewar level early in the war, and were subject to a maximum of 1 percent. The banks likewise refrained from lending for personal purposes and nonessential undertakings. The embargo on new capital issues applied to borrowing from banks with the intention of repaying the loan out of proceeds from a subsequent issue of securities; and while the law applied to the borrower's action and not to the lender's, the banks undertook to scrutinize the purposes of loans and to refuse them if they were not satisfied with their legality.

The commercial banks absorbed only 15 percent of the wartime increase in national debt; this percentage was moderately lower than that in Canada and less than half as much as in the United States. Commercial bank holdings of governments included intermediate- and long-term as well as short-term securities. During the war years, holdings of intermediate- and long-term governments increased markedly, both absolutely and relative to total assets, and when the war ended

they comprised 22 percent of assets of the London clearing banks. This increase was largely the result of the banks' subscription of about £300 million to the first two loans. Since the Treasury, with the co-operation of the Bank of England, provided the banks with reserves and at the same time limited lending to business, the banks needed no direct urging to induce them to buy government securities during the war. During the last three years of the war, however, the banks' portfolios of long-terms were virtually constant, reflecting the government's continually increasing success in placing war loans with the general public.

In the first year of war, the banks followed the pattern of World War I by increasing their bill holdings considerably. After August 1940 bills were largely replaced by TDR's, which in August 1945 comprised 39 percent of the commercial banks' total assets, contrasted with 4 percent for Treasury bills. The banks' holdings of bills represented less than 5 percent of total Treasury bills outstanding at that time.

As mentioned above, TDR's had somewhat limited liquidity. They could be redeemed prior to maturity, subject to the penalty of discounting at Bank rate, in case of emergency; but discounting a 1⅛ percent security at the 2 percent Bank rate would, according to *The Economist,* "be too expensive, and perhaps too undignified, a procedure to commend itself to the banks, except on very abnormal occasions." [8] Bills were therefore a better reserve against such contingencies as tax payments by depositors. On the other hand, the TDR's had the advantage of being redeemable at par to pay for longer-term governments bought by a bank itself or by a customer. Consequently, subscriptions to war loans by depositors could be met by temporary depletion of the banks' TDR holdings instead of by temporary decreases in reserves; and the yield on TDR's was slightly higher than that on Treasury bills.

At the outbreak of war, it was an open question whether or not the Treasury's request that the banks curtail advances for "nonessential purposes" covered borrowing for the purchase of war loans. When the March 1940 war loan was tendered, the banks offered to grant facilities to their customers for subscribing to the issue, but such facilities were to be granted only for a very short period and only after careful consideration of each case. It is believed that very little use was made of the banks' offer, and by February 1942 the Treasury had expressly requested the public not to borrow for the purpose of buying war bonds.

[8] Quoted by Donald F. Heatherington in "British Banking and Finance," *Foreign Commerce Weekly,* July 24, 1943, p. 6.

However, the banks helped to finance the discount market's holdings of Treasury bills. Most of these were held on day-to-day money loaned from the commercial banks. The bulk of Treasury bills was held by government departments and various official and semi-official bodies, such as government insurance agencies, the Bank of England, and Dominion and other sterling-area central banks.

The banks not only assisted the Treasury with war finance but they also had their usual task of providing trade and industry with short-term credit. The traditional policy of the banks was one of making "self-liquidating" advances and of "not interfering in their clients' business affairs" by keeping most of their loans down to "average size."[9] When the war began the banks were asked by the government to extend short-term credit liberally to government contractors and subcontractors, even if this meant relaxation of peacetime standards of "sound finance." In order to aid the banks in this part of their contribution to the war effort, and to provide them with ready means of verifying the existence and exact status of their customers' war contracts, liaison officers were appointed by the banks to the supply ministries, and by the supply ministries to the banks. They served as a channel for informal discussion; and this system enabled the joint stock banks to extend overdraft facilities to war-essential industries very much in excess of what would normally be considered safe.

The government undertook to finance directly a large part of war industry. A good share of the armaments production was carried on by Royal Ordnance Factories entirely owned and operated by the government.[10] Other war plants were government owned but privately operated. In some cases the government supplied the fixed capital to these concerns, the private contractors receiving a "reasonable profit" on the working capital that they provided. In other cases the government supplied all the capital, and paid the contractors a fee for construction based on cost, and a fee for management based on output. From the beginning of the war to the end of 1942, the government extended capital assistance amounting to nearly £293.6 million.[11] Ex-

[9] According to evidence before the Macmillan Committee in 1930, the average overdraft of Lloyds Bank was £10,900 to £15,600 for industrial credits, £561 for personal and professional loans, and £1,151 for advances as a whole. (*Minutes of Evidence Taken before the Committee on Finance and Industry,* London, 1931, Vol. I, p. 128.)

[10] These plants turned out 60 or 70 percent of the explosives and 66⅔ percent of the guns produced in Great Britain (Report of the Minister of Supply to the House of Commons, August 5, 1942, House of Commons *Debates,* 1942, Cols. 1071-83).

[11] Select Committee on National Expenditures, Sixteenth Report, Session 1942-43, *State-owned Assets,* pp. 4-6.

cept for armaments, however, most war plants were privately owned and operated. The government aided long-term financing of these private firms by permitting them to raise money in the capital market, and by allowing generous rates of amortization for tax purposes.

The rapidity of expansion, the special risks of war operations, and the novelty of type and size of war contracts, created short-term credit requirements of a sort not easily met by traditional banking procedures. Accordingly, the supply ministries made increasing use of monthly progress payments, whereby the government extended funds, monthly, on work in progress under war contracts. Such payments ran as high as 90 percent of total expenditures incurred by a contractor during a month. The payments were made against "progress certificates," which testified to the exact expenditures incurred in connection with a government contract, and were signed by the firm's auditor or accountant.

Government short-term finance through progress payments was so general as to leave little scope for bank credit. Bank loans were used mainly for tiding over firms between the actual outlay and the next monthly progress payment. The wartime decline in advances indicates that the banks financed only a small fraction of the war industries' short-term credit requirements, and that this was insufficient to offset the diminishing requirements of civilian industries.

Lending by the Discount Market

The diminishing importance of the commercial bill in the London discount market during the twenties and thirties helps explain the market's smooth transition to war conditions. The war was anticipated, and as it drew nearer the acceptance houses required customers importing through German ports to have ample sterling funds in their accounts. Nevertheless, the government took stringent precautions on the day that war was declared to prevent a repetition of the panic that occurred in the exchange market at the outbreak of World War I. A government War Risks Insurance Office was opened, and the Treasury instructed the Bank of England to accommodate acceptance houses that might be called upon to meet their liabilities while deprived of the necessary remittances from their clients. This accommodation was offered at the punitive cost of 2 percent above Bank rate, with a minimum of 6 percent.

After the outbreak of war, the market's commercial business declined steadily, owing partly to Germany's occupation of the continent, partly to bulk purchases by government departments, and partly to the Lend-Lease Agreement, which took care of a large portion of Great Britain's trade with the United States. Defense regulations modified the nature

of some acceptances by forbidding loans to nonresidents. This necessitated the replacement of acceptance credits by sight credits, or acceptances fully covered by sterling accounts. As in World War I, Treasury bills assumed paramount importance in the discount market, and the Treasury again acquired a large degree of influence on the open market bill rate.

After a short flurry when war broke out the rate on three-month Treasury bills was held virtually constant at about 1.01 percent, compared with the rate on day-to-day loans, which was around 1 percent, leaving a slender margin for the market. However, on short- and intermediate-term bonds, which comprised an ever-growing share of discount market investments during the war, the profit margin was considerably greater.

Lending by the Capital Market

An embargo was imposed on new capital issues under "Defense (Finance) Regulations" at the very beginning of the war. Issues in excess of £5,000 in any one year were made illegal, except when specifically approved by the Treasury. "Issue" was defined broadly, to include mortgages and bank loans to be repaid from the proceeds of public issues, as well as public offerings of securities for sale or subscription. Blanket exemptions included issues involving no new cash subscriptions (such as those made only to amalgamate two or more companies or to rearrange a firm's capital), issues to any government department, and issues to provide direct security for bank advances. Otherwise "the issue of new securities other than Government war loans" had to be confined to "issues to raise money for essential services and enterprises or to provide for obligatory repayments of maturing debt",[12] as determined by the Treasury. Issues by firms operating in the United Kingdom or the Empire were allowed only if they were "advisable in the national interest," while issues for undertakings outside the Empire were permitted only "in special circumstances in cases of urgent necessity."

A Capital Issues Committee, composed of representatives of the business organizations most concerned with the capital market, reviewed applications for permission to float an issue, and made recommendations to the Treasury based on its findings. The majority of actual applications (as distinct from inquiries) were approved. The concerns allowed to go to the market for capital were mainly engineering and public utility enterprises.

[12] Quoted by W. F. Crick in *An Outline of Wartime Financial Control in the United Kingdom* (London, 1941) p. 11.

In November 1942, a new regulation was added prohibiting agreements to do, at some future date (when regulations would be relaxed), anything that was then illegal under the Defense (Finance) Regulations.[13] Special regulations were also issued at various times during the war to prevent payment of interest on capital items to enemy interests. Disposal of securities in which there was a nonresident interest was made subject to license in the spring of 1940, and later additional controls were imposed on collection of both income and capital items on securities belonging to residents of such neutral countries as Switzerland, Sweden, Spain, and Portugal.[14]

General Results of British Wartime Borrowing

Like the United States and Canada, Britain was able to carry through its huge wartime borrowing operations and at the same time to reduce interest rates. The decline in the average interest cost of the war debt, which fell from 3.1 percent in March 1939 to 2.4 percent in March 1945, was mainly a result of the change in debt structure.[15] The latter figure compares with 1.9 percent in the United States and 2.6 percent in Canada.

Despite the reductions in British interest rates after 1931 (Table 7), Britain entered the war with both short- and long-term rates on government debt somewhat higher than in Canada and considerably higher than in the United States. Prices of British long-term securities were then abnormally low, however, and they subsequently recovered to levels midway between the American and Canadian. Except for an initial flurry when war broke out, and for a brief period in the spring and summer of 1943 when allied military successes led to some shifting from government to other securities, the yields on long-terms followed a downward course throughout the war. As Table 7 shows, yields on corporate bonds and industrial securities moved in sympathy so far as wartime trends are concerned. Short-term rates rose sharply at the very beginning of the war, but promptly fell again and remained quite stable throughout the balance of the war period.

[13] Order-in-Council S. R. & O. 1942, No. 2096.

[14] Cf. *The Banker,* November 1940, pp. 84 ff.; April 1940, pp. 139 ff.; June 1940, article by J. Mead, "Bank Lending and the Capital Issues Control," pp. 9-18; April 1941, article by C. J. Shimmins, "Securities Work in Wartime"; January 1944 and August 1944, *passim.*

[15] The basis of this statement is a computation of the average interest cost that would have prevailed on the debt shown for 1945 in Table 7, at the interest rates prevailing for the three main categories of debt in 1939.

A second major feature of Britain's fiscal policy was the large proportion of the wartime increase in debt in Britain which was placed outside the banking system. Approximately 75 percent of the increase in debt from 1938 to 1945 was sold outside the Bank of England and the joint stock banks; comparable figures for Canada and the United States are approximately 77 and 60 percent, respectively. The reasons for these differences, in terms of the inducements offered and the preferences of investors to place funds in government securities, and the effects of the loan campaigns on the relative degree and timing of inflation in the three countries, are interesting and important subjects for analysis but lie outside the scope of this paper. There can be little doubt, however, that sales of government obligations to the public rather than to the banks helped to limit private expenditures during the war, and that the success of the loan campaigns was a factor in the relative stability of British prices after 1941.

Table 7—Yields (Actuaries Index) of British Securities[a]

Date[b]	Treasury Bills	2½ Percent Consols	Home Corp's	Industrial		
				Debentures	Preference	Ordinary
1931	5.60%	4.57%	5.01%	6.18%	6.75%	6.94%
1938	.93	3.56	3.64	4.15	4.65	6.13
1943	1.017	3.16	3.30	3.91	4.34	4.43
1944	1.004	3.08	3.28	3.82	4.20	4.16
1945, Sept.	1.010	2.83	3.21	3.80	4.23	4.27

[a] Data on Treasury bills for 1931 are from *Banking and Monetary Statistics* (Board of Governors of Federal Reserve System, 1943) p. 660; for 1938-45, from *Statistical Summary, Bank of Canada.* Data on other securities are from *The Economist,* October 6, 1945, p. 494.
[b] End of period indicated.