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Chapter 2

World War I and Its Effects on British Financial Institutions

GREAT BRITAIN'S effort in World War I was on an incomparably greater scale than that of the United States or Canada, and was sizable even on present day standards. Total government expenditures in the war years amounted to £9.5 billion, which, judging from national income estimates for 1913 and 1924, was possibly one-third of total national income for the period. Total government expenditures at their peak in the fiscal year 1918 exceeded the entire national income of 1913.

Considerably less use was made of taxation than in World War II, and the proportion of total outlays covered by taxes was smaller in Great Britain than in the United States or Canada. In the five fiscal years from April 1, 1914 through March 31, 1919, 25 percent of the government's financial resources was derived from taxes. Monetary expansion and borrowing from the public were the chief forms of war finance, and Lombard Street was heavily involved in both.

EMERGENCY MEASURES

Three factors influenced the Treasury's policy at the beginning of the war. First was the lack of any real precedent for its task. Second was the general belief that the war would be short, which seemed to justify short-run policies such as meeting war costs by credit creation. Third, when war broke out the City was on the verge of financial panic, and the Treasury felt obliged to create money market conditions that would prevent a crisis.

To this end, the government undertook a series of emergency measures. The Bank rate was raised from 3 percent on July 29, 1914 to 10 percent on August 1. On July 30 the government closed the stock exchange. On August 2 it declared a moratorium on bills of exchange, which was subsequently extended. On August 6 it passed the Currency and Bank Notes Act, which gave the Bank permission to extend its fiduciary issue without additional gold reserves. In addition, the Act authorized the Treasury to issue £1 and 10s. notes as legal tender, made postal orders legal tender until the Treasury notes could be printed and circulated, and permitted the Scotch and Irish banks to meet their obligations with their own notes. The Treasury currency, an innovation in British finance, was issued through the Bank of England to the banks, and by December 31, 1918 had reached a circulation of £323 million.[1] The government underwrote shipping insurance up to 80 percent, and the Treasury agreed to guarantee the Bank of England against loss on bills discounted for banks and brokers.

Wartime Borrowing

These emergency measures forestalled panic, but they simultaneously set the stage for credit inflation, and they became the basis for heavy reliance on credit-supported short- and intermediate-term loans for financing the war. The whole structure of debt was sustained by increased credit from the commercial banks, based in turn upon the Treasury's issues of currency notes. In view of the Bank of England's readiness to discount bills, it is not surprising that the Treasury found a ready market for its own bills; the banks could buy them and still provide the discount market with ample funds. Influenced by the success of its first big issue of bills, the Treasury subsequently made liberal use of short-term finance, in the form of Treasury bills and ways-and-means advances. Although Treasury bills were held mainly by the discount market, on day-to-day money from the commercial banks, the banks themselves held substantial quantities. Before the war, ways-and-means advances consisted of advances by the Bank of England to the Treasury on those rare occasions when the government found it difficult to renew its bills. During the war, however, this form of borrowing assumed a much more extensive role, and included borrowing "through" the Bank as well as "from" the Bank; that is, the Treasury borrowed spare balances of the commercial banks and of foreign depositors, in addition to borrowing directly from the Bank.[2]

The Treasury also borrowed the spare balances of Public Departments. In England, certain departments of the government with their own sources of funds and some degree of autonomy in their administration, such as the Post Office Savings Bank, the Trustee Savings Banks, the Post Office Fund, the National Health Insurance Fund, the Unemployment Insurance Fund, the Treasury Pensions Fund, etc., and (later) the

[1] The Treasury received a deposit credit with the Bank of England for the amount of currency deposited with it, and the Bank distributed the currency to the commercial banks, more or less in response to the banks' need for currency, up to a limit of 20 percent of each bank's liabilities on deposit accounts (savings or time deposits) plus current accounts. At the beginning of the scheme, the banks were charged interest on the currency distributed to them. Cf. Henry F. Grady, *British War Finance, 1914-1919* (New York, 1927) pp. 13-17.

[2] Cf. U. K. Hicks, *The Finance of British Government, 1920-1926* (London, 1938) pp. 320-21. See also A. W. Kirkaldy, *British Finance During and After the War, 1914-21* (London, 1921) p. 47.

Exchange Equalization Fund, are important subscribers to government securities.[3] These departments play a particularly useful role in smoothing the market for new issues, by disposing of Treasury bills, building up their balances with the Bank, buying enough of the new loan to guarantee its success, and then gradually disposing of their holdings of the longer-term issues to the general public, through the government broker, in order to replete their portfolio of Treasury bills.

The floating debt was reduced during the war period by three issues of long-term bonds.[4] The first of these, in November 1914, consisted of 3½ percent, fourteen-year war stock, issued at 95 to yield 3.97 percent. The bonds could be paid for in instalments. The public response was disappointing, and the banks were called upon to take nearly a third of the total cash subscriptions, which amounted to more than £330 million. The Second War Loan of June 1915 was hardly more successful. While the proceeds were larger, reaching about £600 million, there were only 597,000 subscribers and the banks again took about a third of the cash subscriptions.

A more intensive effort was made to sell the Third War Loan of January 1917 to the public. The issue was offered in two forms, both highly attractive. One was a 5 percent bond sold at 95, maturing in 1929-47, and so yielding 5.58 to 5.34 percent, depending on the year of retirement. The other was a tax-free 4 percent bond maturing in 1929-42 and issued at par. The Treasury embarked upon a widespread propaganda campaign, and even threatened compulsory purchases of Treasury securities if voluntary purchases proved inadequate. In addition, it encouraged the banks to grant liberal advances to potential subscribers. The loan yielded approximately £1 billion, with bank advances being kept down to one-fifth of cash subscriptions. The number of subscribers amounted to over two million.

Three- and five-year Exchequer Bonds bearing interest of 3 to 6 percent were used to reduce the volume of floating debt between major loan drives, and a few war savings certificates and war expenditure certificates were issued. Starting in October 1917, however, the Treasury abandoned tender issues for the duration, and tap issues[5] of

[3] According to U. K. Hicks (*op. cit., pp.* 165-70), the Unemployment Insurance Fund in 1936 held 36.2 percent of the outstanding 1 percent Treasury bonds.

[4] A fourth was issued in June 1919.

[5] "Tap issues" consisted of obligations sold by the Treasury at any time, as distinct from "tender issues," which consisted of obligations sold only on stipulated dates. There were four types of tap issues: 5 percent 5-year bonds redeemable at 102; 5 percent 7-year bonds redeemable at 103; 5 percent 10-year bonds redeemable at 105; and a tax-free 4 percent of 10-year maturity redeemable at par. For a summary table of British borrowing in World War I, see *The Economist,* October 4, 1919, p. 531.

"National War Bonds" became the chief form of government borrowing. Nevertheless, over the whole war period, Treasury bills accounted for 17.2 percent and ways-and-means advances for 8.3 percent of the total increase in internal debt. Altogether, about 25 percent of the debt contracted was short-term. The structure of debt was radically altered (Table 2); the funded debt (obligations with no specified maturity date, but subject to recall) shrank from 90 percent to about 5 percent of the total; the floating debt (less than one year's maturity) rose from 2 to 23 percent; and the unfunded debt (mostly 1 to 10 years' maturity) from 8 to 72 percent. Interest rates in this period rose sharply.

Table 2—British Debt Structure, End of Fiscal Years[a]
(pound figures in millions)

	March 31, 1914		March 31, 1919		March 31, 1920		March 31, 1926	
	Amt.	%	Amt.	%	Amt.	%	Amt.	%
Floating debt[b]	£13	2	£1,412	23	£1,264	19	£704	11
Unfunded debt[c]	50	8	4,413	72	4,974	76	4,728	72
Intermediate-term	50	8	2,268	37	2,089	32	1,593	24
Long-term	—	—	2,145	35	2,885	44	3,135	48
Funded debt[d]	587	90	318	5	315	5	1,074	17
Total	650	100	6,143	100	6,553	100	6,505	100
External debt	0	—	1,292	—	1,279	—	1,111	—

[a] Based on data in *Appendices to the Report of the Committee on National Debt and Taxation* (1927) pp. 14-17.

[b] Obligations of less than one year's maturity.

[c] Obligations of specified maturity over one year.

[d] Obligations with no specified maturity.

Foreign Borrowing and Disinvestment

Before the United States entered the war, British domestic policy was somewhat hampered by a belief that the pound sterling must be supported on the foreign exchange market. The desire to attract United States funds for this purpose was no doubt one reason for keeping up interest rates.

At the outbreak of war, there was a scramble for sterling which drove the pound to a temporary premium; but by the middle of February 1915 heavy British buying in the United States had forced it back to \$4.79, which was the lowest figure on record since the 1870's. Despite substantial transfers of gold and a $500 million loan in New York, the pound had sagged to $4.50 by September 1915. In December of that year the Treasury announced its "dollar security" plan, under which it borrowed or bought British-held American and other securities selling on the New York exchange, and either sold them in New York or used them as collateral for dollar loans.[6]

The original plan was on a purely voluntary basis. The first element of compulsion was introduced in May 1916 in the form of a penal additional income tax of 2 shillings on the pound on securities listed by the Treasury as eligible under the plan. Of the $4½ billion of American securities held in the country, $2 billion had been deposited by January 1917 when deposit of a selected list of eligible securities was made compulsory. The exchange yielded by the plan, together with proceeds from the sale of $250 million of Exchequer Bonds, $300 of 3- to 5-year bonds, and $250 million of 1- to 2-year bonds, was sufficient to maintain the pound at $4.75-$4.77, although the list of eligible securities had to be extended until it finally included 900 items. Altogether, some £900 million of foreign investments were liquidated, mostly American railway securities. After the United States entered the war, direct loans to the British government made it possible to withdraw certain securities from the list.

Bank of England

The Bank of England's first wartime task was to help the Treasury stave off panic in the London money market. During the summer and autumn of 1914, the Bank announced that it would make loans to the acceptance houses, backed by a Treasury guarantee, discount bills without recourse to the holder, and make advances to lenders to the amount of 60 percent of the value of securities held by the lenders against any loan outstanding on July 29. The discount rate was lowered from 10 to 5 percent, and kept between 5 and 6 percent for the duration of the war.

As the government's banker, the Bank assisted in the flotation of

[6] Under the original plan, the Treasury paid ½ of 1 percent of the face value of securities borrowed, as well as dividends accruing while the stocks were in Treasury hands. If the Treasury found it necessary to sell borrowed securities, it paid the lender the New York price plus 2½ percent. In August 1916 the plan was elaborated considerably. Under this broader plan securities were deposited with the Treasury for a period to expire by the end of March 1922, subject to the right of the Treasury to return them to the lender at any time on or after March 31, 1919. The lender received ½ of 1 percent as before; but if the stocks were sold, the lender received all payments he would have obtained from them in the five-year period, and at the end of that time the Treasury replaced them with similar securities or repaid the deposit value plus 5 percent.

war loans, serving as an agent for their sale. It also provided the joint stock banks with funds to meet temporary drains resulting from the marketing of these loans. For example, in the First War Loan, the Bank offered to make loans to the joint stock banks against war loan stock at the attractive rate of 1 percent below the Bank rate. Since the banks took nearly a third of this loan directly, and probably acquired more of it in the open market, this offer afforded a cheap and convenient means for the banks to borrow from the Bank of England. In early 1916, the Bank inaugurated the practice of borrowing the spare cash of commercial banks and holding it in the form of deposits withdrawable at three days' notice and bearing 3 to 5 percent interest; against this cash the Bank made advances to the Treasury. Indeed, the most striking wartime change in the Bank's weekly return was the rise in the banking department's portfolio of government securities, from £11.0 million on July 29, 1914 to £62.6 million on November 27, 1918, or from 13 percent of total assets to 33 percent. The Bank's note circulation increased in the same period from £55.1 million to £93.7 million.[7]

Superficially, little of the close relationship of the Bank to the Treasury and to the joint stock banks survived the reconstruction period. Such wartime innovations as direct lending to banks, borrowing from the banks and making ways-and-means advances "through" the banks, paying interest on deposits, and the special interest rate on foreign deposits, were scrapped within a year of the cessation of hostilities. The Treasury notes, another war phenomenon, were taken over by the Bank as part of its fiduciary issue, and its monopoly of the note issue was thus restored. However, despite the Treasury's heroic and partially successful efforts to consolidate its debt (see Table 2), government securities remained a much larger share of the assets of the Banking Department than they were before the war. Between June 30, 1919, when they reached their peak, and March 31, 1920, ways-and-means advances from the Bank of England and Public Departments were cut from £774 million to £205 million, and were further reduced to £139 million by March 31, 1926; but the Bank's holdings of government securities dropped only from an average of £58 million in April 1920 to an average of £41 million in April

[7] In view of the expansion of bank deposits and the availability of Treasury currency, the growth of Bank of England note circulation requires explanation. The suspension of the gold requirement for Bank of England notes seems to have been used for only two days after passage of the Currency and Bank Notes Act, to fill the need until the new Treasury currency could be printed. It seems likely that the increased stamp duty led to increased use of cash in general, and that the £1 and 10s. Treasury notes became inconveniently small as prices rose.

1926. Assistance with government finance in general continued to be an important aspect of the Bank's operations. Such being the case, it seems likely that the Bank's actual relationship with the Treasury was much closer in the decade following the war than in the decade before it.

The war reduced the power of the Bank in a number of subtle but significant ways. First, the relative displacement of sterling trade bills by Treasury bills in the portfolios of banks and discount houses diminished the effectiveness of the Bank's discount policy in controlling domestic credit. The supply of Treasury bills was dictated by considerations of public finance rather than by conditions of the money market; and, unlike the supply of commercial bills, it was not affected by changes in the Bank rate. On the other hand, the discount rates on commercial bills were inevitably influenced by rates on Treasury bills. While the Treasury no doubt consulted the Bank concerning its bill policy, the demands of war finance inevitably shifted some measure of monetary control from the Bank to the Treasury.[8]

In addition, the substitution of Treasury bills for commercial bills reduced the effectiveness of foreign exchange control through changes in Bank rate. Whereas a change in the rediscount rate could influence the flow of foreign funds into and out of London through borrowing and repayment under sterling acceptances, it did not influence the flow of Treasury bills. This development was only partially offset by the growth between 1920 and 1931 of deposits by foreigners, which were relatively responsive to changes in Bank rates.

This weakening of the Bank's control of international capital movements had four aspects, according to W. A. Brown: the Treasury bill did not broaden the market for sterling exchange in the same degree as the sterling acceptance did; it did not draw deposits to London; it did not multiply the effectiveness of changes in the Bank rate on the exchange market; and the decline in the volume of bankers' acceptances, together with an expansion of the volume of Treasury bills

[8] According to Lord Bradbury, the postwar situation was such "as to render the task of the Bank of England in controlling the supply (as distinct from the price) of the basis of credit extremely difficult. The main cause of this has been the enormous amount of Treasury bills. This has resulted not only in increasing the dimensions of the bill market (and so making larger scale operations necessary to produce a given effect) but also in altering its character. When the holdings of the market were mainly commercial bills drawn on London on foreign account, a rise in bank rate diminished the supply of these bills. Now that the market holdings are largely Treasury bills . . . a restriction in the volume of bankers' cash, followed by a reduction of their market money, merely . . . drives the 'market' 'into the Bank,' i.e., forces the Bank of England to recreate the credit it has previously withdrawn . . ." *Report of the Committee on Finance and Industry* (the Macmillan Report) Cmd. 3897 (London, 1931), Memorandum of Dissent by Lord Bradbury, p. 274.

outstanding, transferred some of the initiative in the control of sterling exchange from the grantors of sterling acceptance credit to foreign investors in British Treasury bills.[9]

There were other difficulties. The war led to such widely varying degrees of inflation in different countries that stabilization of foreign exchange rates through gold flows, price changes, and money market adjustments alone was impossible. Stabilization was eventually accomplished on the basis of various domestic policies, arrived at independently. The distribution of the world's monetary gold stocks was inconveniently uneven.[10] Mainly because of political insecurity, international capital movements did not proceed in an orderly manner through the London banking system, but were large and erratic. Sterling was not unchallenged as an international currency.[11]

Moreover, industrialization of other countries was stimulated, while Britain's peacetime industries lost ground. Britain's merchant marine dwindled 10 percent between 1910 and 1920, while the United States' merchant fleet expanded 50 percent and that of Japan more than doubled. New York established itself as a strong competitor in the international money market. During the war the sterling bill lost its unique position as the most acceptable means of payment for American imports, and dollar bills of exchange grew in volume and importance. The telegraphic transfer tended to reduce the volume of sterling acceptances. Embarrassing balances of Dominions and neutrals accumulated in London. Wartime controls over the London and other European stock markets made New York the chief trading center for securities. New York supplanted London as the world's main source of credit.

In the entire period between World War I and World War II, the chief problem of Central Bank policy was the British balance of payments and the pound-dollar relationship. After World War I, opinion in both the United States and Britain turned against the wartime system of pegging the pound by American loans. Early return to the gold standard was considered desirable, and the general opinion was that return to the old rate of £1 = $4.87 was a matter of honor and essential to the

[9] William Adams Brown, Jr., *The International Gold Standard Reinterpreted, 1914-1934* (National Bureau of Economic Research, 1940) Vol. I, pp. 643-54. See also A. T. K. Grant, *A Study of the Capital Market in Postwar Britain* (London, 1937) pp. 90-98, and N. F. Hall, *The Exchange Equalization Account* (London, 1935) pp. 85 ff.

[10] Even when an international gold exchange standard was eventually restored in 1928, it no longer had a single center but a "nucleus" of several leading money markets.

[11] The development of the "sterling bloc" in the early thirties clearly demonstrated that the sterling exchange standard was no longer an international gold standard.

recovery of prestige by the City.[12] Consequently, from 1919 to 1925 financial policy was dominated by efforts to bring the pound close enough to $4.87 to warrant return to gold at that rate. The instrument chosen was the classical one of endeavoring to affect price levels and capital movements by alterations of the Central Bank discount rate. British policy had perforce to be deflationary *relative to* the American. It was wishfully thought that American prices would rise so that relative deflation would require no reduction of British prices, but this hope was frustrated by the collapse of American prices in 1920-21. At last, in response to a number of factors,[13] the pound reached $4.84, the gold export point, toward the end of April 1925, and a month later the Gold Standard Act was passed, requiring the Bank to sell gold for 77s. 10½d. per ounce.[14]

Joint Stock Banks

In World War I the joint stock banks had the dual role of providing the Treasury with funds and financing wartime industry and trade. Deposits doubled, investments grew from 13 percent of total assets in 1913 to 20 percent in 1918, while discounts and advances fell in the same period from 56 percent to 48 percent, and acceptances shrank from 6 percent to 3 percent. Moreover, the ratio of bills discounted to advances rose from around 20 percent to more than 60 percent, mainly because of the acquisition of a large volume of Treasury bills.

Over the war period as a whole, the banks took only some 5-10 percent of the increase in long-term government debt. Loans to customers under the "borrow-to-buy" policy introduced in the Third War Loan of January 1917 contributed more than direct purchases by banks to the success of long-term issues. The banks advertised their willingness to lend against War Loan stock at 1 percent below the Bank rate to all purchasers of the Loan; and, as noted above, about one-fifth of total cash subscriptions to the Loan were financed in this manner.

Investments as a percentage of assets reached their peak in 1915. In the late years of the war, purchases of Treasury bills and indirect loans through Bank of England ways-and-means advances were a more

[12] According to W. A. Brown (*op. cit.*, Vol. I, p. 221), Britain's decision to return to gold at the old parity was made on the very day that she departed from the gold standard in 1914.

[13] For a full discussion of these factors, see W. A. Brown, *op. cit.*, Vol. II.

[14] The extent to which "overvaluation" of the pound was responsible for the lack of prosperity in Britain between 1925 and 1929 is not easily determined, but it clearly was a contributing factor. In sharp contrast to the prewar period, when the average annual rate for the pound tended to run above par, the pound was below par in every year between 1925 and 1931. There was a persistent tendency for gold to flow out, and British interest rates were kept relatively high throughout the entire period.

important form of financial assistance than purchases of long-term bonds. Altogether, the banks probably took 20 percent to 25 percent of the increase in debt directly, and perhaps financed as much again indirectly. By the close of 1918 investments of the banks were three times their 1913 figure; and the proportion of bills discounted that consisted of Treasury bills was much higher than before the war.

The prewar trend toward amalgamation, which had lowered the total number of British banks from 155 in 1895 to 77 in 1914, was accelerated during the war period. The most spectacular amalgamations occurred among the London joint stock banks; the 12 largest of these amalgamated into 5. In the same period the total number of London clearing banks was reduced from 17 to 11.[15] As for the private banks, only six survived the war. The concentration of banking power arising from amalgamation fostered a fear of monopoly in the financial field, and led to the introduction of the Joint Stock Banks (Amalgamations Control) Bill of April 1919. This Bill would have made consolidation subject to approval of the Treasury and the Board of Trade. The Bill was never passed, but the mere discussion of it was enough to check the movement toward concentration of banking.

In the early postwar years, interest rates on government securities were lower than rates on commercial loans, and the wartime growth of government obligations in bank portfolios brought a lower average return on bank assets. Such a development is not inconsistent with a rising rate of return on bank capital, when, as in this case, assets are rising relative to capital. The spread between rates on government securities and those on commercial loans may explain the increased competition for commercial paper after the war, both among the joint stock banks themselves and between those banks and other financial institutions. The competition among the banks took the form of an increase in the number of branch offices and bidding for deposits through the interest allowance.

Prior to the war the banks had acted merely as agents in the marketing of new issues, but after the war they acted increasingly as principals. They also invaded the acceptance market, arguing that with the growth of corporate organization in trade the personal contacts of the merchant bankers were less essential to the business of accepting bills. During the twenties, advances generally formed a somewhat higher proportion of

[15] Bank amalgamations, which usually resulted in the writing down of capital, are a partial explanation of the decline in the ratio of capital to deposits from 10 percent at the beginning of the war to 6 percent at the end, and the concomitant rise in the ratio of deposits to total liabilities from 84 percent in 1913 to 91 percent in 1918. However, the simple fact that deposits increased without a commensurate increase in capitalization for banks in general is undoubtedly the major factor in these relationships.

deposits than before the war, probably as a result of the gradual displacement of commercial paper by bank overdrafts.

In the thirties, there was a decline in bank advances relative to total assets. This decline can be explained in part by the efforts of the acceptance houses to reintroduce acceptances as a credit instrument in domestic trade, and partly by the increasing importance of self-finance in British industry. Postwar reconstruction in England brought greater use of the corporate organization, and greater concentration of industrial enterprises. The new giant corporations relied more and more on self-finance, building up their liquid funds out of undistributed profits. This tendency toward self-finance becomes more noticeable still when the composition of the bank's advances is analyzed.[16] The most striking feature is the small percentage figures for such important industries as textiles, "heavy" industries, leather, rubber, and chemicals, and the decline of these figures over the period 1930-38. Most of what they lost, however, was gained by the item "other advances," which are primarily personal and professional loans.

In order to recover some of the lost market for advances, the banks departed somewhat from their policy of making only short-term self-liquidating loans of moderate size, by occasionally granting large advances for capital expansion, in the expectation of repayment out of subsequent capital issues. In general, however, the banks continued to adhere to their traditional principles.

Investments declined somewhat during the twenties, both in absolute volume and as a share of total assets; at the same time Treasury bills averaged higher than commercial bills, despite the reduction of the floating debt and the consequent contraction of banks' holdings of Treasury bills. With the onslaught of the great depression, the volume of Treasury bills in bank portfolios rose, while commercial bills dropped sharply and investments began to increase again.

Discount Market

The outbreak of war in 1914 caused a great dislocation in the London bill market, mainly because of the importance of England's trade with Germany, and also because of the market's complete unpreparedness for the war. In addition to the emergency measures outlined above, the Bank of England relieved the market of bills whose normal liquidation was rendered impossible by the war.[17]

When the foreign bills outstanding had been liquidated, the market

[16] For figures on bank advances see Appendix Table C.

[17] For a brief description of the measures taken, see W. A. Brown, *op. cit.*, pp. 21-23.

was left with ample resources but little normal business for their employment. Its liquid funds, however, were soon taken up by Treasury bills; and for the duration of the war the market's main function was the financing of the floating debt. The result was a somewhat increased margin, which varied from ½ to 1 percent, between the bill rate and the money rate, and financial strengthening of the discount companies. The ebb and flow of the market's normal activities subsided almost completely, however; arbitrage was rendered impossible by the pegging of exchange rates; and there never was any need for rediscounting with the Bank of England. The Treasury, as the market's main customer, acquired complete control over the "open market rate," especially from 1916 onward, when it issued Treasury bills "on tap," in unlimited quantities at fixed rates.

The replacement of commercial bills by Treasury bills hit the discount market more directly than the joint stock banks. Not that the discount houses and merchant banks lacked outlets for their funds; Treasury bills served perfectly well for that purpose. But discount houses were no better equipped for handling Treasury bills than were other financial institutions. This fact, together with the growth of public corporations whose relative merits could be more easily judged by non-specialists than was the case for individual enterprises and partnerships, exposed the discount houses to increased competition from the joint stock banks.[18]

While the partial funding of the floating debt and the revival of international trade after the war brought the discount market closer to its normal activities, the market was less important than in prewar years. Other financial centers, especially New York, competed with London in international finance. The internal bill virtually disappeared from the London market, and domestic trade was increasingly financed by the joint stock banks, in the form of overdraft facilities or discounts. Treasury bills became a permanent feature of the discount market; and throughout the period between the two World Wars, Treasury bills made up more than half the total volume of bills held by the London market.

The discount houses were never in serious danger during the depression of the thirties. The Bank of England stood ready to discount bills affected by the German and Austrian standstill agreements, thus remov-

[18] As W. A. Brown put it, "The growth in the number of acceptances bearing the names of the joint stock banks (as distinct from merchant banks) seemed to the discount houses to improve the quality of bills. At the same time, however, this change in names together with the predominant importance of the treasury bill was gradually taking from the discount houses their genuine economic function of making a market for, maturing, and judging bills." *Op. cit.,* Vol. I, p. 649.

ing illiquidity of continental bills; and help was given to the discount houses when gilt-edged securities depreciated in 1931-32. However, the discount market was adversely affected by the decline in interest rates in the thirties, especially since (judging from the accounts of the "big three") their portfolios showed little over-all expansion. The partial replacement of bills by short-term bonds in the discount houses' portfolios was no doubt a response to the declining rate on the former, and may explain the rise in net profits of the "big three" after 1933. The depression also resulted in further contraction of international trade, and further substitution of Treasury for commercial bills.

Merchant Banks

Most seriously affected by changes in the position and operations of the London discount market were the merchant banks. These houses, more than other financial institutions in Lombard Street, traded upon their personal knowledge of commercial concerns; accordingly, when the importance of this knowledge diminished, their loss was considerable. Similarly, the merchant banks relied heavily on the supremacy of London in international finance, and therefore they suffered the greatest loss from the growing competition and competence of other financial centers and from the decline in international trade during the twenties and thirties.

Not only did the volume of trade bills decline after World War I; their quality deteriorated. Bills drawn by the foreign seller of goods were increasingly replaced by bills drawn by an importer or a bank, representing goods not yet sold. The line of demarcation between trade bills and finance bills became less clear-cut. Moreover, the wartime disruption of trade with the continent, and the loss of direct contact with continental traders, diminished the confidence of the merchant banks in their own judgment of continental firms.

The uncertainty introduced by the war and reconstruction into the acceptance market had two direct consequences. One was the innovation of granting acceptance credits to foreign bankers, as distinct from foreign traders. Another was the tendency for the acceptance houses to reorganize as limited liability corporations; partnerships were becoming too risky for the acceptance business. This revised form of organization probably diminished, rather than enhanced, the reputations of the acceptance houses.

The merchant banks suffered further blows during the depression. From 1928 to 1933, British foreign trade was so sharply contracted that the market for acceptance credit was cut approximately in half; and the expansion of the discount market facilities which had taken place in the twenties, in response to the opportunity for profitable investment in Treasury bills, proved to be excessive. Moreover, during the financial crisis of 1931 acceptance credit granted to continental bankers for short-term financing was used for long-term investment in industry, to the misfortune of the London discount houses. Abandonment of the gold standard in the same year restricted merchant-bank operations abroad. The scale of their operations in the long-term capital market also diminished. Their attempt to recoup losses by reviving the domestic bill market was thwarted by slack business and by a reduction of minimum rates for bank credit below the traditional 5 percent.

Capital Market

During the war years, restrictions were imposed on new issues in the capital market. In 1915, issues were permitted only with the approval of the Treasury; a committee was appointed "'to consider and advise upon applications received by the Treasury for approval of fresh issues of capital.'"[19] The committee, which included the Governor of the Bank of England and a representative of the Board of Trade, was to bar all issues on behalf of foreign borrowers, and to authorize issues on behalf of borrowers at home and within the Empire only when they appeared to be in the public interest. No restrictions were imposed on home investment through private channels, except by urging the purchase of war bonds, but the government had direct control over home investment through allocation of raw materials.

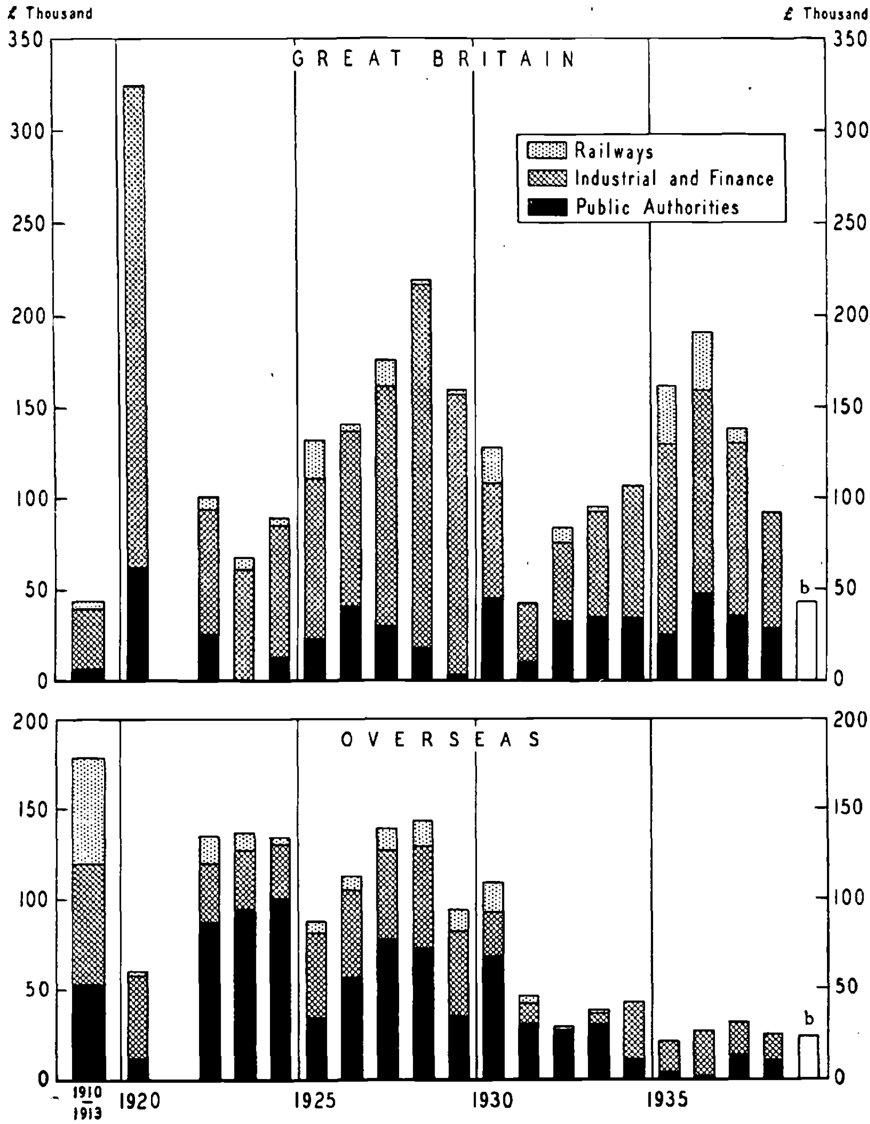
There was widespread recognition that the regular sources of long-term capital for domestic purposes would be unable to meet the greatly increased demands of the reconstruction period. A parliamentary "Committee on Financial Facilities for Trade" was appointed in 1916 to consider this problem; and on recommendation of this committee the British Trade Corporation was founded in an effort to introduce in England the continental system of industrial banking. In 1917 a committee appointed by the Exchequer suggested that the joint stock banks should depart from their traditional short-term lending policy and assist reconstruction by lending on long term to domestic enterprises.

No departure from traditional British banking practice proved to be necessary, however, for the problem was finally solved by adjustments in the capital market. The political uncertainty of the twenties and thirties, together with American competition, decreased the attractiveness of foreign investment, which was also discouraged by the authorities. Finding its main outlet blocked, the new issues market turned to the domestic field for new customers. At the same time the resources

[19] *The Economist,* January 30, 1915, p. 185.

of the capital market were increased. Many investors who before the war lent directly to private firms learned to appreciate the convenience of marketable securities during the war, and looked to the capital

Chart 1—New Issues in the London Capital Market[a]



[a] Based on data from *The Statist* and reports from the Midland Bank, Ltd. The data for 1910-13 are an average of annual totals; for 1920 and subsequent years, they are annual totals.

[b] Total figures only are available.

market for investment opportunities when the war-loan campaigns came to an end.

The discrepancy between the geographic distribution of the demand for capital and of the supply of loan funds, arising out of changes in industrial location, led naturally to increasing reliance on the stock exchange, as distinct from personal relations, for the financing of industry. The growth of building societies, insurance companies, and investment trusts for the mobilization of small savings further increased the market's resources, because the funds of these institutions were available for investment in marketable securities. Higher death duties, which increased the importance of having investments in liquid form, may also have played some role in the expansion of domestic security markets.

The London capital market ceased to be primarily an organization for overseas lending and became the main channel for long-term investment at home. The investment houses, specializing by industries, made closer contacts with domestic enterprises; and the industries that came into existence in this period were usually established on a corporate basis. Subsidiary changes in the nature of British long-term lending during the twenties and thirties were the sharp decline of overseas railroad financing compared with prewar years, and the growing scale of borrowing by local public authorities and by local industrial and financial concerns (Chart 1).

It is interesting to note that between the return to the gold standard and the crisis of 1929, Britain regained some of the foreign investment market from the United States.[20] British new foreign lending as a percentage of American rose from 36 in 1925 to 52 in 1928.

Summary

By 1914, Lombard Street had enjoyed half a century of stability and prosperity, interrupted only by minor crises. By 1939, the British financial system had been shaken by 25 years of almost unceasing uncertainty and varying degrees of depression. In view of the enormity of the problems it faced, Lombard Street showed great strength and considerable flexibility in the interwar period; but changes came so fast that the adjustment of the financial organization to these changes necessarily lagged somewhat. At the beginning of World War II the British money market was considerably less secure than it was on the eve of World War I.

[20] See W. A. Brown, *op. cit.*, Vol. I, p. 618.