

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: The International Gold Standard Reinterpreted, 1914-1934

Volume Author/Editor: William Adams Brown, Jr.

Volume Publisher: NBER

Volume ISBN: 0-87014-036-1

Volume URL: <http://www.nber.org/books/brow40-1>

Publication Date: 1940

Chapter Title: Book One, Breakdown; Part III, The Effect of the War upon the Substance of the International Gold Standard

Chapter Author: William Adams Brown, Jr.

Chapter URL: <http://www.nber.org/chapters/c5939>

Chapter pages in book: (p. 132 - 162)

PART III

*The Effect of the War upon the Substance
of the International Gold Standard*

CHAPTER 7

The Redistribution of Economic and Financial Power

The effects of the war upon the London-centered system of international banking and finance and upon British predominance in international trade, which in combination constituted, according to our analysis, the substance of the pre-war international gold standard, may be summed up in a single sentence. The international gold standard before the war was in reality a sterling exchange standard, but after the war this was no longer true. It was no longer true because after the war the gold standard had to function in a new economic environment in which the basic pull of Great Britain over the exchanges of the world was weakened, and in which the British 'international banking industry' was subject to new and serious competition.

A New Economic Environment

Pre-War Trends in International Trade

The international trade of the nineteenth century, in particular that of Great Britain with the rest of the world, was in the main complementary. Its outstanding characteristic was the exchange of the manufactured goods of industrialized regions for raw materials from elsewhere. At the beginning of the twentieth century this was giving way to international competition in the sale of industrial products of an intensity not before experienced. In addition, certain very fundamental, slow, and long run changes in the demand for both industrial and agricultural products were taking place. The demand for industrial products was beginning to shift relatively from the output of heavy industry to that of more highly specialized

and varied branches of production. A change of diet in western countries was already responsible for a relative decline in the world consumption of cereals, and a heavy growth in the consumption of fruit, dairy products, and of some 'colonial' goods. At the same time the efficiency of production of the basic cereals was being increased by the mechanization of agriculture, while the elimination of the use of animals for traction power was reducing the demand for major agricultural products. Cotton and wool were beginning to give place to silk and artificial silk in response to a demand for lighter clothing.¹

Such a general change in the basic characteristics of world trade had a double significance for the London-centered gold standard system. It affected the ability of outlying countries, particularly those dependent upon single staple agricultural products, to make the adjustments required by their membership in the gold standard system.² It also weakened the power of Great Britain to perform the functions of a world financial center, for it was a trend adverse to the particular type of industrial development that had been the foundation of British economic power.

Great Britain's International Competitive Position at the Outbreak of the War

During the last decade preceding the outbreak of the war it was becoming evident that certain favorable trends in the industrial life of England that had contributed to her ability to dominate the world's exchanges were becoming weaker. In addition to the gradual and slowly moving forces that were beginning to change world demand in a way adverse to British interest, Great Britain was beginning to stand in a new competitive relation to other industrial powers. Nevertheless, she continued to cling to the industrial organization

¹ League of Nations, *Course and Phases of the World Economic Depression*, prepared by Bertil Ohlin (rev. ed., Geneva, 1931), pp. 38-105 passim.

² Sir Arthur Salter, *Recovery, the Second Effort* (Century, 1932), pp. 37-42.

that had built up her economic power throughout the nineteenth century. In 1913 over half her total exports were accounted for by iron and steel exports and textiles. Textiles alone were one-third of her exports. She exported one-half of all the textiles and about one-third of all the iron and steel she produced, and these two industries alone employed over half of all the workers engaged in manufacturing in Great Britain. The weakness of this position in view of the trends in the domestic production and export trade of her competitors is one of the most salient facts of the economic history of the period just preceding the war.

By the end of the nineteenth century an internal struggle between industrial and agricultural interests had resulted in Germany's accepting the perils of international competition in the sale of manufactured products and entering into that struggle with all her national energy.⁸ While she did not abolish her agricultural tariffs, she did not increase them from 1900 to 1914 and she rapidly expanded her manufactures. As a result, between 1900 and 1913 German exports increased more rapidly than British exports; in particular, her exports of iron and steel increased twice as rapidly as those of Great Britain. In 1913 one-third of Germany's exports was accounted for by iron and steel, machinery, chemicals, dyes, and cotton manufactures, and these groups were increasing more rapidly than her exports in general. By the beginning of the twentieth century the internal development of the United States had been largely accomplished. The decline in the proportion of her imports and the increase in the proportion of her exports made up of manufactured goods, which had begun in the 1850's, was rapidly growing. By 1900 only half of America's imports and more than half of her exports were manufactured and semi-manufactured goods. By the beginning of the twentieth century Japan also had laid the founda-

⁸ One consequence of the growth of German industry and export trade was that just before the war Germany began to remit direct, instead of trading in sterling, and became increasingly independent of the London money market.

tions for a very rapid increase in the export of manufactured goods, in particular of textiles. By the outbreak of the war she was entrenched in the markets for textile goods in the Far East. Finally, the foundations for industrial expansion had been laid before the outbreak of the war in Canada and Australia.⁴ Great Britain's share in world trade had already begun to decline before the war,⁵ and the terms of trade, which during the nineteenth century had been steadily favorable, became unfavorable in the first decade of the twentieth century.⁶ The relation between the sheltered and unsheltered trades began to be discussed and British industry took a more critical attitude toward the traditional point of view of underwriters with respect to the unrestricted use of the proceeds of foreign loans.

The Weakening of England's Basic Pull over the Exchanges

The future historian will assign to these long run tendencies their proper place among the ultimate causes of the first World War. They were powerful forces, but their evolutionary character allowed time in which necessary adjustments could be made. The outbreak of the war interrupted an historical process in which each nation was working out gradually its economic relations with the rest of the world. By isolating certain important markets and causing enormous diversions in the distribution of productive powers it undermined the underlying balance in the world's exchanges. At its conclusion the productive powers of the various countries were no longer so adjusted as to produce an output that would, on the average, be absorbed on a profitable basis by the foreign and domestic markets combined. Europe had lost

⁴ The material summarized in this section and the next is taken from H. B. Killough, *International Trade* (McGraw-Hill, 1938), pp. 246, 270-7, 421-3. The writer wishes to acknowledge Professor Killough's kindness in allowing him to see this volume in manuscript.

⁵ Great Britain's share in the trade of 25 leading countries was 21.3 per cent in 1890 and 19.9 per cent in 1906; Killough, *op. cit.*, p. 395.

⁶ F. W. Taussig, *International Trade* (Macmillan, 1929), pp. 253-4.

to the rest of the world in the production not only of industrial products and metals, but also of raw materials and food-stuffs. In particular the reduction in Europe's wheat supplies owing to her own smaller production and the elimination of Russia as a wheat exporter, had been balanced by increased output in Canada, Argentina, and the United States. Of far more immediate importance for England's basic pull on the exchanges was the decline in British production of iron and steel which coincided with a large increase in the production of the United States and with the further entrenchment of Japan as a strong competitor in the world's markets for textiles. The birth of new industries operating under high cost in Europe because of the breakdown of international markets during the war was a general factor which became increasingly important in the post-war years. It has been frequently said that the changes in the industrial productive equipment and technique in the United States, Japan, Canada, and Australia and in other countries during the war were such as might otherwise have required a quarter of a century.

Of equal importance for the new British competitive position was the change in the world's merchant marines. The merchant fleet of the United Kingdom was a tenth less in 1920 than in 1910, while that of the United States was one-half greater and that of Japan had more than doubled.

These developments all affected the future competitive position of Great Britain in international trade. The extraordinary efforts made during the war to finance the abnormal increase in the import of goods into Europe and the draft made upon British resources accumulated in the past increased her competitive disadvantage. Her creditor position was reduced between 1914 and 1920 approximately one-quarter. Not only was she faced with new difficulties in maintaining her middleman position in international trade, but she had in some way to solve a threefold problem of capital investment. British capacity for accumulating capital for overseas investment had to be adjusted both to the restricted op-

portunities for profitable employment abroad under the new conditions and to the reduced current surplus of credit items in the balance of payments, while the distribution of capital investments at home had to be adjusted to the requirements of an international trade in which stresses and strains long gradually accumulating had been brought to premature fruition in the forcing house of war. In solving these problems Great Britain had to take account of certain new dangers. It was certain, at the close of the war, that those who rendered the services of middlemen in international transactions of all kinds would find a deterioration in the assets against which they could extend credit, whether long or short, because of fundamental elements of risk introduced into the world's markets for internationally traded-in goods. These risks were greatly increased by the introduction of a new and powerful factor of competition into the field of international credit extension by the rise of an international money market in New York.

Quite aside from the abnormal distribution of gold and of capital during the war, the ordinary peace-time international banking functions that had been so largely concentrated in London were becoming decentralized. At the close of hostilities it was impossible to foresee the consequences of this decentralization. But it should have been evident even then that in the field of international finance pre-war conditions would probably never be restored. A whole set of new relations with the dollar was suddenly superimposed upon the old set of relations with sterling. The old sterling relations were broadly based upon a long historical development and appropriate institutional techniques were established to regulate them. The new relations with the dollar were emergency relations created by a sudden upheaval. They were not solidified by an appropriate credit system. The war destroyed the world-wide dominance of the pound but did not substitute the dollar for it. It did not create even the prospect of a true dollar exchange standard. It left a disintegrated situation.

Release of Forces leading to the Rise of an International Money Market in New York

In one of its aspects the existence before the war of a world credit system with a single center was a natural result of the working out of principles of banking economy in the use of primary money on a world-wide scale. The same principles of banking economy were at work within the various countries and economic areas that were related to one another through London. The United States was no exception. In fact, because of its continental area and the diversity of its natural resources, America was perhaps the most striking example of the operation within a single political boundary of forces similar to those which established London as the world's financial center.

The Concentration of Funds⁷ in New York

Long before the war New York had become the center of a gold standard system embracing an entire continent which contained a vast variety of economic interests and was divided into debtor and creditor areas as the world was divided into debtor and creditor countries. It was the clearing center for the transactions of the different sections of the country with one another. The fundamental reason why New York occupied this position was its place in American trade, particularly as a market for the exchange of manufactured goods for agricultural products. This is brought out by J. G. Smith in *The New York Money Market* (II, 297-8) :

"The difference between population and food production constitutes the first fundamental basis for trade between the New

⁷ The term 'concentration of funds' is a loose one. J. G. Smith in *The New York Money Market*, Vol. II, differentiates the three forms it takes and thereby makes it possible to use the term with precision. He treats the concentration of 'funds' in the New York money market under the triple distinction of concentration of deposits, of loans, and of transactions. In this section we use Professor Smith's very fruitful distinction. For the historical development of the concentration of funds in New York before the war cf. Miss Myers' discussion in *The New York Money Market*, Vol. I.

York district and the rest of the country. New York buys agricultural products and sells services and manufactured goods. Also New York buys building materials largely from outside the Federal Reserve district. There are many manufactured products which, owing to a geographical division of labor, New York does not produce in great quantity—for instance, the textile industry in New England and the South, the automobile industry of Cleveland and Detroit, the iron and steel industries of Pennsylvania, Ohio, Illinois and Alabama, the pottery industries of southern New Jersey and Pennsylvania, West Virginia, Ohio and Illinois, all find their principal markets centered around New York. Some of the heavy industries formerly located close to New York have migrated to less expensive cities but still have their principal markets in New York City. This centralized market for many manufactured products exists not only because of the large consumer market but because, as a derivative of that, buyers of consumer markets all over the country make their inquiries to a very large extent through dealers and brokers in New York City.”

New York, moreover, was the distributing center for foreign imports into the United States and the entrepot center for American trade in general, largely because of its geographical location. Consequently there was a demand for New York funds from the interior to pay for imports. New York became the channel through which the demand of the whole country for foreign exchange was expressed, and because demand for foreign exchange arose in this way it became easy and natural to arrange for the financing of exports in New York even though they were shipped from other ports.

Transactions, loans, and deposits were thus concentrated in the New York market and consequently drafts on New York became in effect a national currency in America. Remittance from St. Louis to New Orleans could be made, for example, in New York funds. Cross-entries on the books of New York banks having the accounts of interior banks, and payments between such banks made through the New York clearing house, represented the use of New York funds to settle transactions between interior points. New York funds

provided a customary method of remittance, and this became an independent factor increasing the concentration of transactions arising from New York's position in American trade.

Sharing with London before the War

The long historical development that brought New York to this position took place within the general framework of the much older and much more inclusive process of the development of a world-wide credit and banking system centered in London.

New York shared with London the responsibility for providing the great gold standard area of which it was the financial center with the economic and financial services of a central money market. The net balance of payments of the various regions of the United States, the cotton producing states for example, involved a settlement with other regions of the United States as well as with other countries. In the continuous maintenance of this balance, credit operations of a time-bridging character played an essential role. Some of the economic services of a central money market which the South required for this purpose were provided by the New York money market and some by the London money market. The transactions were cleared on the books of New York banks through the building up and cancellation of the deposits of those banks, but this process involved corresponding debits and credits on the books of London banks for that part of the clearing process provided by them as principals. A part of the clearing operation in New York was carried out by New York banks merely as agents for London banks. Before the war the interregional and international settlements required of the various sections of the United States were accomplished through the draft on New York, through the draft on London, and through a distribution of gold and lawful money. In this final means of settlement, which required both an internal and an international movement of gold, New York acted as a channel of distribution.

It was, therefore, by a combination of the services of the New York market and of the London market acting through New York as a channel of distribution that the various sections of the United States were able to attract long term capital to supplement their own savings in the development of their resources, to find diversified employment for their savings and for portions of their working capital, and to command adequate means of remittance to all parts of the United States and of the world.

The Hierarchy of Financial Centers

This was true before the war of other financial centers such as Paris, Berlin, Buenos Aires, Budapest, or Johannesburg. It was the outstanding characteristic of the pre-war banking and credit system that London supplemented the money market centers of all other countries in greater or less degree. In other words, all countries secured the essential money market services in part from their own financial center and in part from London. Inter-money market relationships of this type are indeed a characteristic of any developed banking system. What was true of the relationship of the various sections of America to New York and London before the war was and is true, for example, of the relationship of certain mid-western states to Chicago and to New York. London, before the war, stood at the apex of a world hierarchy of financial centers through which the citizens of the most widely separated and inconspicuous communities could exchange their products and settle their debts. It was through London that a citizen of Ged, Louisiana, could make final payment for a Kashmir shawl.

In the perpetuation of such a system the momentum of an early start, the creation of the proper institutional means, and the inertia of habit played a great role. It is almost certainly true that the American economy had the capacity for providing many of the financial services customarily rendered by London long before 1914. But the mechanism of financing

world trade and clearing through London was deeply ingrained in the banking habits of the whole world. The sterling bill was the instrument most readily received in payment for American imports and the most universally offered in payment for American exports. It required a great shock to turn any large portion of the world from these deeply rooted habits of arranging for the financing of trade and for the payment of international accounts. Such a shock was provided by the outbreak of the world war.

Sharing with London during the War

The attempt to create an international money market in New York meant the taking over by New York of the full responsibility for the operation of the domestic gold standard system in America and the assumption by New York of the role of an international money market. It must be considered as part of a fundamental decentralization of the pre-war London centered system of finance, involving two clearly distinguishable steps:

- 1) the restriction of the role of London in providing the services of a financial center in the area in which it shared this function with New York before the war
- 2) the participation of New York with London in furnishing services of a financial center in areas in which New York did not participate before the war.

In the domain of long term credit extension both these steps were taken by the sudden rise of America to the position of financier of the war. During the period of her neutrality the compelling force was the opportunity for the employment of capital and labor suddenly opened up by the special demands of the belligerents. The position was well described by Secretary Lansing in the letter to President Wilson of September 6, 1915 already quoted:

"If the European countries cannot find means to pay for the excess of goods sold to them over those purchased from them, they will have to stop buying and our present export trade will shrink

proportionately. The result would be restriction of outputs, industrial depression, idle capital and idle labor, numerous failures, financial demoralization and general unrest and suffering among the laboring classes.

Probably a billion and three-quarters of the excess of European purchases can be taken care of by the sale of American securities held in Europe and by the transfer of trade balances of Oriental countries, but that will leave three-quarters of a billion to be met in some other way. Furthermore, even if that is arranged, we will have to face a more serious situation in January, 1916, as the American securities held abroad will have been exhausted.

I believe that Secretary McAdoo is convinced and I agree with him that there is only one means of avoiding this situation which would so seriously affect economic conditions in this country and that is the flotation of large bond issues by the belligerent governments.

Our financial institutions have the money to loan and wish to do so. On account of the great balance of trade in our favor, the proceeds of these loans would be expended here. The result would be a maintenance of the credit of the borrowing nations based on their gold reserve, a continuance of our commerce at its present volume and industrial activity with the consequent employment of capital and labor and national prosperity."

After the United States entered the war this motive continued, in addition to the all absorbing objective of military victory. In the post-war period the export capacity thus created provided the economic motive for continued foreign lending.

In the field of short term credit the outbreak of the war offered a long sought opportunity to America to take the first step toward financing American trade in dollars and creating an American foreign banking system.

New York and London as Grantors of Acceptance Credit

The mechanism of the London acceptance market was restored to effective operation during the war by the measures referred to above. In effect these measures resulted in carrying

over in cold storage until the end of the war £50 million of moratorium acceptances. Relieved of this burden, the acceptance houses resumed their normal functions, and the whole machinery by which the sterling bill had financed half the world's foreign trade and provided an international medium of exchange was restored to working order. The volume of sterling bills, however, did not return to the pre-crisis level. The shock to the whole system of world trade, of which the sterling bill was a finely adjusted part, was too great. New permanent forces of decline were set in motion which did not become apparent as basic factors in the life of the London money market until some years after the war.⁸ Nevertheless two changes of paramount importance can be clearly attributed to the war period—new methods of financing trade and the rise of the dollar bill.

CHANGES IN METHODS OF FINANCING TRADE

Even before the war students of the money markets had observed that the use of the foreign bill was declining and that cash transactions were being substituted for it.⁹ The growing use of the telegraphic transfer in the settlement of international indebtedness was already a force tending to reduce the volume of sterling acceptances before the war. It was greatly encouraged during the war because of the uncertainty created in the minds of merchants by war-time conditions which led them to demand cash payments instead of resorting to acceptance credit. It was encouraged by the growth of the amalgamation movement among British banks which made it easier and more natural in many cases to resort to the method of bank advance and settlement by telegraphic transfer instead of bills. Furthermore, during the war the government ex-

⁸ Cf. Ch. 11, *New York and London as Grantors of Acceptance Credit*, and Ch. 19, *Changes in Money Market Technique*.

⁹ Testimony of A. Bogie, General Manager of the Commercial Bank of Scotland in *Interviews on the Banking and Currency Systems of England, Scotland, France, Germany, Switzerland, and Italy* (National Monetary Commission, 1912), I, 180-1. Quoted in Harris, *op. cit.*, pp. 294 ff.

tended its control over the import of many commodities previously financed by acceptance credit. In financing its imports, the government did not use the sterling acceptance, and trade in articles not financed by the government was greatly reduced.

Though these influences were, to a large extent, of purely war-time origin, the increased use of the telegraphic transfer and the changes in the methods of financing wool, wheat, cotton, and meat became permanent features of the London market in the post-war period. The decline of the American cotton bill, for example—so characteristic of the London discount market for many years—seems to have been due to a permanent change in the method of financing cotton exports. Instead of many small bills being drawn upon British names by cotton growers, large revolving credits established in favor of the growers by American banks and replenished by telegraphic transfers became after the war a feature of the financing of the American cotton crop. A similar change in methods of financing Japanese exports is cited by Professor Harris, who has pointed out the growth of advances by the Bank of Japan against foreign bills during the war. The purchase of such bills by the Bank of Japan and their settlement by telegraphic transfer when due undoubtedly deprived the London market of part of its supply of bills.¹⁰

THE RISE OF THE DOLLAR BILL

During the war the London market was deprived of a large volume of bills previously flowing to it from drawers in enemy countries. This was, for the duration of the war at least, an important breach in the principle of world clearance through London. Of far more permanent significance, however, was the growth of a market for dollar acceptances in New York. This was an expression of the pre-war trend in the character and direction of American foreign trade. The groundwork for the creation of an American discount market

¹⁰ Harris, *op. cit.*, pp. 297-9; cf. Inouye, *op. cit.*, pp. 9-15.

was laid in the Federal Reserve Act, which gave to national banks the power to accept bills drawn upon them and provided that acceptances so made should be eligible for discount and purchase at the Federal Reserve banks. For at least a decade before the passage of the Federal Reserve Act ways and means of promoting American export trade in manufactured goods had been actively discussed in the United States. Among these were the extension of the foreign facilities of American banks and the creation of an acceptance market in New York. There had been an increasing desire to provide American exporters with facilities in foreign countries comparable to those built up during the nineteenth century by British banks and during the latter part of the nineteenth and the first part of the twentieth century by German, Italian, and other foreign banks. The extraordinary variety and strength of the sources of bills drawn on English acceptance houses and banks, and pouring into London through the system of foreign branch banks, controlled or affiliated banks, or long established foreign connections, is shown by tables prepared for these studies by P. L. J. Bateau in London. Though the facilities of this system provided American commerce with cheap and efficient financing, the increasingly competitive nature of American exports of manufactures rendered dependence on these foreign facilities distasteful to those engaged in an aggressive expansion of American trade. There was a strong feeling that the use of the sterling acceptance was a handicap to American trade because it strengthened the preference for British goods already built up by long standing connections and by British controlled enterprises throughout the world. The evidence of this feeling is embodied in a substantial volume of current and ephemeral literature in which these disadvantages are pointed out and in the interest taken in the details of the operation of the London acceptance market by the investigators of the National Monetary Commission of 1910. From the day on which the war broke out Americans began to lay the foundations for an extension of Ameri-

can banking abroad and therefore for the provision, at the points of origin of foreign business, of a supply of bills drawn under American credits. The war did not lay the foundations for this movement, but it swept away the obstacles that had impeded its development.

In consonance with the principle of detailed banking regulation appropriate to the unit banking system of the United States, the legal provisions for the creation of a discount market in New York were cast in the mold of a system of written regulations. The basic conception with which the American acceptance market was endowed by its founders was that of the self-liquidating salt water bill. In establishing this principle it was thought that the best British practice was being followed. The British banker's acceptance, however, was a more flexible instrument than the American regulatory system conceived it to be. In the London acceptance market there was a basic volume of self-liquidating commercial bills but also a smaller, though still substantial, volume of bills drawn for interest arbitrage and other financial purposes. Nothing is more difficult, as has been demonstrated time and again by the testimony of representatives of the City in the British courts, than to determine 'market practice' in London before the war. It is, therefore, not surprising that under the pressure of war-time conditions the rigid principle of confining the dollar acceptance within the boundaries of what was thought to be British practice was gradually broken down by a series of liberalizing regulations and interpretations.

The expansion of American banking abroad during the actual years of hostilities was very moderate. Even at its height in 1920, it was but a small affair in comparison with British foreign banking.¹¹ The creation of a steady demand for the banker's acceptance also encountered peculiar difficulties owing to the practice of daily settlements on the New York Stock

¹¹ C. W. Phelps, *The Foreign Expansion of American Banks* (Ronald Press, 1927), pp. 4 and 20.

Exchange and the customary use of call loans as secondary reserves by American banks.

In spite of these difficulties, the underlying trends of American commerce would, undoubtedly, have found expression in a discount market in New York even if there had been no war, but the war provided the occasion for the extraordinarily rapid growth of this market. By 1917 one billion dollars of banker's acceptances were outstanding in New York, of which two-thirds were drawn to finance foreign trade transactions.¹² This was an important modification in the clearing functions of the London market. Part of the international concentration of liabilities in London had been shifted to New York.

New York and London as Holders of Foreign Balances

Closely related to the decline in the sterling bill were changes in the volume and nature of foreign balances deposited in the London money market during the war. Some of these were of a purely war-time character, yet they were not unconnected with changes in the methods of financing trade which had begun before the war.

WAR-TIME BALANCES IN LONDON

Although, in the early weeks of the war, foreign banks, and especially Dominion and Colonial banks, had great difficulty in maintaining their bank balances in London, this situation was quickly altered by an unparalleled growth of the deposits at the disposal of such institutions. Out of these increasing balances advances made in the crisis at the outbreak of the war were repaid in 1915.¹³ It has already been pointed out in connection with the operations of foreign exchange pegging that large balances were left in London, as in other countries,

¹² On all questions relating to the growth of the New York discount market the admirable treatment of Professor Beckhart in *The New York Money Market*, III, 251-462, should be consulted.

¹³ Harris, *op. cit.*, pp. 103-4, 128.

by exporters who did not wish to remit home on account of adverse exchanges. Such exporters had to continue to accumulate sterling balances if they were to continue to export. This process was greatly encouraged and extended by the willingness of the various governments to come to the support of the exchanges, for this contributed to the willingness of holders of foreign balances to wait for better rates. There was, therefore, a cumulative effect through which official support of the exchanges attracted unofficial support. Not only did balances accumulate in London for the Dominions and neutrals whose nationals did not wish to remit at market rates of sterling exchange, but also as war-time note inflation in various countries developed, there was a quiet, steady flight of capital to England in the form of the retention of bank balances built up through trade and of the holdings of securities in London by foreigners. An example has been given above in connection with the efforts of the German government to stimulate the export of foreign securities owned by Germans to support the mark exchange.

Professor Harris has summarized various data published in foreign countries bearing upon the increase of foreign balances in London (*Monetary Problems of the British Empire*, pp. 49-50) :

"An indication of the large holdings of foreign assets in London is given in the banking reports of foreign countries. The Guaranty Trusty Company of New York had 25 million dollars on deposit in London in 1918. According to a semi-official report, Swiss Banks deposited 100 million francs with the Bank of England in 1918. A large part of Scandinavian balances was held in London. The excess of foreign assets over foreign liabilities of all Norwegian banks was as follows:

JULY	END OF YEAR			
	1914	1916	1918	1919
	(millions of kroner)			
13	196	340	212	

Another official report reveals that in 1919 Norwegian banks had assets of £34 million, a very large part of which was bank balances and other short-term assets. The excess of foreign assets over foreign liabilities of Swedish banks was as follows:

1914	1916	1917	1918	1919
	(millions of kronor)			
98	349	486	484	554

Colonial and Dominion banks apparently adhered to their traditional type of investment in London, namely, stock exchange loans, Treasury Bills, and deposits with bill brokers. However, the South African Government accumulated large balances in London which were deposited with the Imperial Treasury. The deposits abroad of Canadian banks were unusually large in the middle of 1917 and 1918. It seems probable that large deposits were held in London. The Banco de La Nacion advanced 3.6 and 6.24 million pesos on the security of balances abroad. A large part of these was held in London."

In conjunction with the decline in the volume of bankers' bills, these balances became available for absorbing the war-time issues of the British government, especially short term treasury bills, and for use by the government through the system of 'special deposits.'

WAR-TIME BALANCES IN NEW YORK

The New York money market soon began to take its place with London as a holder of foreign deposits. During the last six months of 1914 calculations of the balance of payments of the United States disclosed large unaccounted for credits. These are explained by Ralph A. Young as being due to large withdrawals of American deposits abroad and heavy accumulations of American bank deposits by belligerent governments. These were gradually built up to finance the expanding needs of the belligerents for American products and were also increased by various forms of capital flight from Europe.¹⁴

¹⁴R. A. Young, *The International Financial Position of the United States* (National Industrial Conference Board, 1929), pp. 40-1.

The American balance of payments estimates for 1915 disclosed the same trend. With the new situation that accompanied the pegging of the sterling-dollar exchange and the increasing drafts upon neutral countries for war supplies, the distribution of foreign deposits spread more widely. In 1916 American bank balances due foreigners were reduced but American balances were accumulated in neutral countries.

TABLE 9

Dollar Balances owed by the United States to Foreign Areas and owed by Foreign Areas to the United States, 1918-1919

	Feb. 27, 1918		June 26, 1918		Dec. 31, 1918		June 25, 1919	
	Owed by U.S.	Due to U.S.	Owed by U.S.	Due to U.S.	Owed by U.S.	Due to U.S.	Owed by U.S.	Due to U.S.
	(millions of dollars)							
Europe—Allies	507	136	621	94	508	85	369	70
Europe—Neutrals	264	1	281		324	1	277	6
Europe—Central Powers	3	6		9	2	12	2	19
Asia	67	28	137	39	175	86	155	158
North America	115	17	134	89	107	77	162	76
South America	40	37	100	59	96	62	81	65
Africa and Oceania	1	1	3	6	5	10	6	13
Total	997	223	1,276	295	1,214	332	1,049	406
Net Balance	774		981		882		643	

SOURCE: Foreign Exchange Operations, 1918-1919 (*Federal Reserve Bulletin*, Dec. 1921, pp. 1408-10)

This was accompanied by the rapid growth of the extension of short term credit to the belligerents through the American discount market and other forms of American short term advance.

The forces tending to build up balances held in America by foreigners continued to be strong during 1917 and 1918. This was true of the deposits of the Allies to whom America was extending credit and also of the deposits of neutrals, which could not be easily withdrawn after the imposition of the gold embargo by the United States. In December 1918, according to the figures presented by the Federal Reserve Board in 1921, nearly a billion and a quarter dollars of for-

foreign balances were held by banks in the United States as against \$332 million of foreign deposits due them (Table 9).

The position, therefore, with respect to the holdings of foreign balances and acceptances in the central money markets was strikingly different at the close of the war from the position before the war. Not only were the sources from which acceptance credit could be obtained to finance trade decentralized but there was a new international distribution of bank deposits. The connection between the volume of such deposits and the essential transactions of international finance was also weakened in large degree, and the size of the balances that were free to move from one market to another had become a threat to the stability of the exchanges. Part of the international concentration of deposits in London had shifted to New York.

London and New York as International Distributors of Securities

After April 1915, when the system of minimum prices adopted during the crisis was abolished, the New York Stock Exchange was the only stock exchange in the world that did not restrict trading in foreign securities. It became the chief market for the securities of both belligerent and neutral countries. Belligerents had to borrow in the United States to finance their requirements, and many neutral borrowers, finding their usual markets cut off, were obliged to apply for long term credit in the New York market. Even certain British borrowers, unable to get long term credit in London because of the restrictions upon the capital market there, had to apply to the New York market. The City of Dublin and Metropolitan Water Board issues in 1916 are examples. The only respect in which the activity of the New York Stock Exchange was restricted by war-time conditions was in the use of arbitrage transactions in American securities to hold the exchanges together, but the foundation was laid for a much wider security arbitrage business after the war.

The gradual broadening of the foreign business of the New York Stock Exchange was only a part of the change during the war in the share of the London Stock Exchange in the business of distributing international securities. Before the war London shared the burden of distributing American securities with the New York Stock Exchange, and it is probably true that as late as 1906 the London Stock Exchange was a more important market for American securities than the New York Stock Exchange. In this respect the situation was fundamentally altered during the war. Part of the international concentration of transactions in London had shifted to New York.

Changes brought about by the War in the Practices of the London Money Market

The underlying merchandise movement during the war forced all other considerations to yield to it. It weakened the basic pull of Great Britain over the foreign exchanges and suddenly made the United States a great competitor of London in the field of international finance. It had as a further consequence the following definite changes in the nature of the business of the London money market:

- 1) the rise of the treasury bill
- 2) the decline of the 'deposit-compelling'¹⁵ power of London and the substitution of a deposit-attracting policy
- 3) the victory of the principle that the proceeds of loans placed in Great Britain should be spent in Great Britain.

Together these changes altered the technical means by which stable domestic credit conditions were maintained in England, and by which sterling credit was used as a time-bridging and adjusting factor to maintain stable international credit conditions. They modified the manner in which England was able to exercise a 'surface pull' over the exchanges. Though prompted by war-time necessities they left legacies

¹⁵ For this phrase I am indebted to my colleague Carel Jan Smit.

for the post-war period that could be partly discerned even during the war itself.

Rise of the Treasury Bill

During the war it was virtually impossible for any central bank other than the Bank of England and the Federal Reserve banks to pursue a discount policy of credit control. Even in America after April 1917, market rates of interest were completely dominated by the Treasury. In the London market rates were dominated by the treasury bill rate and the rate on 'special deposits' at the Bank of England. The gap between the open market rate for bills and Bank rate had relatively little significance, and therefore the decline in the volume of sterling commercial bills did not add to the existing problems of credit control. On the other hand, this decline offered certain very definite advantages to the government. It created a shortage in the supply of short term investments that was admirably filled by treasury bills. This was of advantage to the government in placing its short term debt. Moreover, the issue of treasury bills which, by the end of 1916, were offered to the public in unlimited amounts at fixed rates, became part of a technique by which the government regularly replenished its balances at the Bank of England without undue disturbance to the money market. Therefore, under stress of its war-time needs the government definitely discouraged the use of trade bills through regulations issued under the Defense of the Realm Act. In this way it reserved the resources of the short term market for its own financing,¹⁶ and treasury bills outstanding grew from £81 million on March 31, 1915 to £973 million on March 31, 1918.

Though the British government earnestly desired to see the sterling acceptance reestablished after the emergency its treasury bill policy, like other war-time financial policies, left a legacy for post-war days. It was partly responsible for more

¹⁶ DORA 41d, 41dd, Harris, *op. cit.*, p. 295.

frequent use of the type of control so spectacularly employed in 1906 in connection with American finance bills. Moreover, the government's requirements for short term credit were a factor in the efforts of the Bank of England after the war to exercise a stricter general supervision over the drawing of finance bills than had been customary before the war.

The rise of the treasury bill satisfactorily solved the problem of providing secondary reserves for the joint stock banks created by the decline in bankers acceptances. For the acceptance houses the necessity of sharing a reduced volume of acceptance business with the joint stock banks meant a loss of business and revenue. For the discount houses the decline in the sterling bankers acceptance meant a gradual undermining of their distinctive functions in the money market. For the discount market as a whole the new situation raised questions of the most fundamental character going to the heart of its whole significance in the British financial system. The characteristic rate structure in the London market and the way in which Bank rate was rendered effective depended for their efficient operation upon the fact that the major short term instrument dealt in by that market was the bankers acceptance. To treat the treasury bill as the discount house traditionally treated the bankers acceptance was to act as if the two instruments were the same. But they are not the same in their relation to either the technique of domestic credit control or the control of the foreign exchanges.¹⁷

The Substitution of a Deposit-Attracting Policy for a Deposit-Compelling Power

The accumulation of abnormal amounts of foreign balances in the London market was also a direct consequence of conditions that were not expected to continue after the conclusion of peace. Nevertheless, the importance of retaining such balances to support the exchanges remained great as long as

¹⁷ Cf. Ch. 9, *The British Attempt to Return to Normal Techniques of Credit Control*, and Ch. 19, *The Discount Market*.

the underlying forces drawing balances to London were impaired by the weakening of Great Britain's foreign trade position and the new competition of New York as a foreign lender and an international financial middleman. By the end of the war there was no doubt that the mass of foreign deposits attracted by the deposit-compelling power of London as an international financial center had been to some degree replaced by a volume of deposits that could be retained in London only by the offer of advantageous terms. London had now to retain foreign balances by a deposit-attracting policy. It could no longer command them on its own terms.

The Victory of the Principle that the Proceeds of Foreign Loans should be spent at Home

One of the forces leading to the provision of the legal basis for building up a discount market in New York was the conviction that the British branch banking system and the dependence of potential American markets upon British capital exports gave an overwhelming competitive advantage to British trade. The kernel of truth that underlay this attitude helps to explain the tenacity with which British underwriters clung to the principle that borrowers of British funds should be free to use them as they saw fit. The British had long been in a position, without too great sacrifice of particular interests, to give practical recognition to the principle that restrictions upon the proceeds of international loans prevent such loans from bringing about equilibrium in the world's balances of payments and promoting the increase of international trade in general upon which the welfare of the lending countries depends. We have used government war loans as a laboratory example of this principle, which is of cardinal importance when lenders are few, trade is free, and exchanges are intended to be stable.

Until the outbreak of the war, the merchant bankers of London steadily refused to recognize any obligation to promote the interest of any particular industry. No restrictions

were placed upon the borrower. For example, if a government in northern Europe came to London to borrow money to build a bridge, the merchant banker did not inquire too closely where the materials for it were to be purchased. He did not stipulate that they should be purchased from a British maker, but he did know that the chances were much more than even that they would be bought at least in part in Great Britain, or that if purchased in Belgium or Germany, sterling would fall into the hands of someone who had to meet obligations in Great Britain growing out of British trade, finance, or insurance activity. The prevailing attitude was that new capital issues stimulated trade in general, and, therefore, British trade as a whole. To have followed the French example of imposing restrictions upon the use of the proceeds of foreign loans and the character of foreign loans placed in the market would have been to impair the efficiency of the great worldwide international banking structure centered in London. Indeed, one of the distinguishing characteristics of the whole pre-war gold standard system was precisely the lack of restriction imposed by the London market upon the utilization of sterling as a world medium of exchange. Those in control of the City in London never contemplated taking steps restricting the use of the proceeds of loans except when these were made for the express purpose of purchasing gold. The underlying position of Great Britain was still tremendously strong. It was probably stronger than British statistics alone would indicate, because from an economic point of view, the British balance of payments should probably be extended to include the balance of payments of the Crown Colonies, and perhaps of some of the Dominions also.

For the interpretation of the functioning of the gold standard after the war it is of great significance that the broad cosmopolitan conception of their functions by British international lenders did not survive the war. The weakening of Great Britain's position as a competitor in international trade, to which we have referred, though it did not overthrow,

was tending gradually to undermine this point of view even before the war. After 1870 two broad changes took place in British capital exports: first, a change in its geographical distribution from the continent of Europe to the more rapidly developing countries of the Empire and South and North America; second, a transition from the accumulation of a genuine new surplus of savings available for foreign investment to the simple reinvestment of income from previous foreign investments.¹⁸ These were the forerunners of another change more subtle and difficult to measure. In the decade before the war Great Britain was beginning to lend abroad because she *had* to. Past British capital exports had helped to develop other countries industrially and British products were feeling more and more intense competition. To protect their home markets other countries were erecting tariff barriers, which in their incidence bore heavily on England. The broad profit opportunities of British export industry were being restricted. It therefore became more and more a source of irritation to British industrial interests that the attitude of the banker toward the proceeds of foreign loans remained unchanged. The large proportion of new capital investment, which from 1870 to 1914 went to the Empire, undoubtedly diminished the volume of this criticism. Empire loans, and in particular those of the Crown Colonies and of India, were almost sure to result in purchases in Great Britain. The Crown Agents for the Colonies, for example, not only placed new borrowing in London, but also acted as purchasing agents for the Colonies in London. A similar close connection between loans and purchases was true of India. Nevertheless, particular loans, the proceeds of which went apparently to aid other industrial countries to encroach upon markets formerly British, were subjected to more and more criticism. The direct connection between specific orders to British industries and foreign loans became gradually a subject of concern,

¹⁸ Herbert Feis, *Europe, the World's Banker, 1870-1914* (Yale University Press, 1930), pp. 16-7.

which was shared even by the bankers, though their general point of view was unaltered. It is probable, though difficult to verify, that the great expansion of capital exports during the last pre-war decade was definitely encouraged by the joint stock banks, owing to their increasing eagerness to support British export trade.

A fissure had been opened in the solid foundation of the London-centered international gold standard system. The accentuation of the basic pre-war trends in international trade after 1914, together with the experience of war-time lending, widened this fissure into a chasm. The war ended with a victory in Great Britain of the principle that the proceeds of foreign loans should be spent in the lender's country.

New Types of Management in London

These changes in the functioning of London as the international financial and clearing center for the world introduced certain new elements of management into the London money market, whose chief characteristics were a new concern with *total* foreign balances deposited in London and with *total* foreign issues placed in the London market, and an increased power in money market control on the part of the Bank of England.

During the war the Banking and Currency Committee, of which the active members were Sir Felix Schuster and Lord Cunliffe, collected data on foreign balances in London and compared them with information of the same sort gathered for the three pre-war years. Though this information was not published, it was made part of the data upon which the administrators of British war finance relied in the formulation of policy. This was a type of financial management entirely foreign to pre-war British practice.

The necessities of war finance required restrictions upon capital exports and the closing of the capital market to borrowers whose requirements could not be shown to contribute directly to war purposes. Both these elements of Treasury

control of the market were novel, for government intervention in the business of foreign underwriters in the London market before the war had been restricted to cases in which large political questions of foreign policy were involved.

Great as the influence of the Bank of England had always been in the London money market, it did not carry with it the element of compulsion that came during the war by virtue of the fact that the Bank then expressed to the market or reflected 'Treasury views.' This added authority continued after the war and was generally recognized. It was a change similar to many other changes in British practice, nonetheless real for having been quietly accomplished.