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MONETARY PROBLEMS  
OF THE BRITISH EMPIRE



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# MONETARY PROBLEMS OF THE BRITISH EMPIRE

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AFFECTIONATELY DEDICATED  
TO MY WIFE  
RUTH B. HARRIS



## ACKNOWLEDGMENTS

IN 1920-21, I wrote a paper on the British Currency Notes for Professor Kemmerer's Seminar at Princeton. The present study on which I have worked intensively since 1926 is the result of the interest aroused in 1920-21.

My greatest debt is to my wife, who read and reread the manuscript and made invaluable improvements throughout the text. Her patience and courage under the most trying conditions have been an example for me in the years given to this treatise.

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S. E. HARRIS.

Dunster House,  
Harvard University,  
January, 1931.



## PREFATORY NOTE

THE object of this study is to discuss recent monetary problems of the British Empire with particular attention to Great Britain. A study of British Monetary Policy should not be confined to an examination of monetary conditions in Great Britain alone. Isolation in monetary policy is a phenomenon of the past. The British Dominions and India hold balances in London of varying magnitude; and changes in their economic and monetary conditions, which are reflected in fluctuations in their balances in London, are of great significance for the London money market. In the early days of the War, Dominion and Colonial balances were wiped out as London refused to renew credits; but Dominion and Colonial banks replenished their balances by rediscounting pre-moratorium bills, accepting deposits of their Home Governments now borrowing from the British Treasury, and by calling in large advances to the stock market. Although the Dominions incurred abnormally large external obligations during the War, their balances in London were large, with the result that measures had to be taken to absorb this surplus of cash. The unfavorable reversal in their balance of payments in 1920-21 had important repercussions on Sterling.

An understanding of British Monetary Policy requires a consideration of monetary conditions in foreign countries. Neutrals exported more than they imported; and they accepted large payments in London balances or British securities. Moreover, when Sterling depreciated, they were inclined to speculate on a rise and hence retained balances in London. Sterling was strengthened by the accumulation of balances and the liquidation of Sterling bills from 1914 to 1918; but the reverse movement was a source of weakness in 1919-20.

Inflation did not advance as rapidly in neutral countries as in Great Britain from 1915 to 1917. But beginning in the latter part of 1917, the cumulative effects of reduced supplies, gold imports,

the substitution of foreign assets for gold for reserve purposes when the latter was not available, and the increasing participation of the banks and the Government in the financing of exports and in the trading and distribution of necessary supplies, all contributed to a rise in prices in 1918 and 1919 which was more spectacular than the rise in belligerent Great Britain.

In the post-War period, neutrals withdrew their balances; but the flight of capital from countries with currencies depreciating rapidly, was probably an important source of strength for Sterling. No doubt, the relatively unstable conditions in Great Britain in 1919-20 prevented Great Britain from profiting fully from the exodus of balances from Central Europe and from France and Italy. However, in 1922 a similar movement accounted in part for the spectacular appreciation of Sterling. On the whole, the movements of British and European neutral exchanges were strikingly parallel in the years 1922 to 1925. But a "European-American exchange" does not accurately describe the situation. In 1919-20, a few European neutrals resisted fairly well the general tendency toward inflation. Sweden and the Netherlands did particularly well. The movement of balances and credits was not exclusively between Europe and the United States. The weakness of Sterling in the early post-War period was caused not only by England's advances to European countries, but also by the repatriation of balances previously held in England by European neutrals that were now able to maintain relatively stable monetary conditions. After 1920 one is struck by the similarity of movements between British exchanges on the one hand and Dutch, Swedish and Swiss exchanges on the other. An examination of South American exchanges reveals that they also shared in the general depreciation in 1920-21, the appreciation of 1922, the decline of 1923, and the recovery in 1924. The exchanges of the weaker European neutrals—Norway, Denmark, Spain, and Portugal—also moved in sympathy with Sterling. When Sterling was strong, balances from Central Europe and the Latin countries were transferred to London.

The historian can get a measure of comfort out of the mass of material published by the British Government relating to British Monetary Policies since 1914. Some obscurities remain which can be cleared up only by Treasury officials. But there are

other points that could be elaborated with the help of materials from widely scattered sources. Occasionally the evidence points to conclusions that can not be labeled as certain. The British Government have never given more than a scattered and incomplete history of the very important advances by the Bank of England under Government guarantees in the early months of the War. On the subject of Ways and Means they have not only remained uncommunicative, but in so far as they have published materials, their figures are frequently inconsistent and misleading. The history of Department Ways and Means, advances to the Allies and Dominions, and Special Deposits, is replete with obscurities and inconsistencies. The British have remained silent on their gold policy, gold movements and exchange policy. Frequently, scattered materials published by them throw some light on these problems, and official statements or documents emanating from other countries are helpful. If Great Britain found it advantageous to conceal gold movements, importing nations had less at stake. India had less reason than Great Britain to conceal the nature of financial transactions between India and Great Britain. Australian and Canadian documents frequently reveal the position of the British Exchequer in a more accurate manner than British documents. Neutral countries, proud of their creditor position, were more inclined than England to reveal the magnitude of London balances. American Treasury officials and Congressional committees spoke relatively freely of the financial and monetary relations of Great Britain and the United States.



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**MONETARY POLICY OF GREAT  
BRITAIN SINCE 1914**



## INTRODUCTION

IN the first Book, the effects of the financial measures of the British Government and of the Bank of England during the early days of the War are discussed. An examination of the Bank of England figures reveals that the very large rediscounts of pre-moratorium bills and advances to acceptors were not of as great significance as might be expected; the explanation is that the discounts and advances were *successive*. As more bills were discounted, others were liquidated; and the proceeds of the advances to the acceptors were used to meet bills maturing at the Bank of England. An examination of Financial statements, Parliamentary questions, bank statements and Finance accounts reveals that virtually all pre-moratorium bills were redeemed in the early months of the War and that the larger part of the advances to acceptors was repaid to the Bank in the first year of the War. The Government made a payment of 28 millions to the Bank and thus took over the advances to acceptors that were outstanding in 1915. Approximately 20 millions of advances had not been repaid at the end of the War. Repayments were on a limited scale in the last three years of the War.

The British moratorium in its international aspects can be justified only if it did not lead to similar measures abroad. Apparently the policies of important debtor nations were determined by other considerations. Moreover, traders of high reputation refused to take advantage of the moratoria.

In Book II, it is pointed out that Ways and Means financing was not as important a cause of inflation as has generally been assumed. Special Deposits were a mechanism for depriving the market of surplus balances, and hence were in a sense deflationary. Similarly, Department Ways and Means were deflationary, because as departmental advances were made, transfers were made from the money market to the Government. This statement holds for the advances from the Currency Notes Account. The

issue of notes was necessary to sustain a large measure of inflation; but the additional notes were obtained in exchange for balances at the Bank of England. The large advances to the Allies and Dominions were in part made by the Bank at first. Neither in the accounts of the Government nor of the Bank of England were they treated as Ways and Means advances. If we leave them out of consideration, we may conclude that after the first few months of the War the market was deprived of more cash as a result of Ways and Means operations than it acquired through their creation. However, a creation of an orthodox Ways and Means advance is reflected in an addition of cash until the loan is repaid; but the acceptance of a Special Deposit is deflationary only until the Government disburses the proceeds.

Departmental Ways and Means and Special Deposits may be considered deflationary to the extent that the market was deprived of cash. The loss was temporary, it is true, except in so far as the Treasury held larger balances. Moreover, by accepting Special Deposits and selling Treasury bills at relatively high rates, the authorities pegged market rates. High rates were not normally effective, however, and it is therefore doubtful whether potential borrowers were deterred to any important degree by the increase in rates. Rather, the deflation was produced directly in the transfer of cash to the Treasury and further inflation was averted, for the Treasury was saved the necessity of borrowing more heavily directly from the Bank of England. When the Treasury was unable to obtain adequate supplies of cash by the sales of Treasury bills and the acceptance of Special Deposits at rates determined by the Government, it borrowed from the Bank directly. Thus the Treasury prevented rates from rising further. The Treasury rate was both a minimum and a maximum. The Bank rate was therefore of limited significance in the years 1915 to 1921 except in so far as it reflected the Treasury rates. It is not exactly accurate to refer to the deflationary effects of departmental advances. The money market lost its cash when the State Trading Departments obtained the cash or when the Treasury issued its notes. These transactions preceded the advances.

Price control is in part a fiscal weapon. I point out in Book

III that the control of prices, which was necessarily followed by the control of the distribution of commodities, was in part responsible for the phenomenal sale of War securities in 1917 and 1918. Surplus purchasing power that could not be used in the purchase of securities, was necessarily hoarded. When confidence in the Government lagged, hoarding of cash and deposits became more general. Hence, the Government put pressure on the banks to reduce their rates on deposits in 1918. The price level was fictitious. Commodities were not always available at market or controlled prices. Prices depressed by subsidies were fictitious. What the consumer did not pay, the taxpayer paid. More units of purchasing power may have been available for markets that were not controlled or subsidized and, hence, the general price level may not have been depressed as a result of interference. Purchasing power was diverted to other markets in so far as sales of commodities were restricted, but frequently the Government allowed consumers to purchase freely in controlled markets and, hence, more rather than less purchasing power was consumed on some markets. Bread was sold in unlimited quantities at abnormally low prices; bacon was sold in unlimited quantities in 1918 at the high purchase prices paid by the Government.

The problem of inflation (Book IV) is in large part a problem of deficient supplies. If a small deficit appears, the public dumps large quantities of purchasing power on the market in an attempt to obtain necessary supplies. The weight to be attached to the large issues of currency notes in an explanation of inflation, has been the subject of rather bitter discussions. Cannan's contention that notes were created to meet fiscal deficits, is scarcely defensible. More notes were not forthcoming in periods of financial stress; in fact, in 1917 and 1918, the years in which the fiscal problem was most troublesome, the authorities began to issue Bank of England notes secured by gold received from South Africa. In return, Great Britain paid South Africa's debts. If currency notes were a necessary condition of continued inflation, the withdrawal of notes was a deflationary factor in the midst of a period of inflation, for balances at the Bank of England were reduced. The position taken by the Government that the creation of notes was not the cause of inflation, was on the whole defen-

sible. Proposals to limit notes in such periods are fanciful. Criticism may be justly placed on the shoulders of the Government for encouraging high real wages in a period in which they should have aimed to save supplies. Authorities were rather slow to perceive the possibility of using taxation as a means of economizing on supplies.

Advances on pre-moratorium bills were the first inflationary measures taken. The beneficial effects of their repayment were wasted, because the Bank made large advances to the Allies and Dominions which were in part reflected in inflated balances at the Bank of England. However, the banks lost part of this surplus cash in paying for subscriptions to the early war loans; and the introduction of Special Deposits was also a deflationary factor. A higher Bank rate would have been of little avail. Market rates were appreciably lower than the Bank rate, and in fact, only the preparedness of the Government to accept unlimited supplies of Special Deposits and to sell unlimited supplies of Treasury bills saved the Bank rate from complete ineffectiveness. Too much attention has been paid to it. Low rates were not an inflationary factor of great importance, because through their control of raw materials and capital and their pressure on the banks, the Government were able to restrict the use of credit for non-essential purposes. The reserve policy of the Bank of England was modified in the latter part of the War, when the demands for cash were met by issuing newly created currency notes or Bank of England notes which were being created in large quantities in 1917-18 instead of by depleting the reserves of the Bank. Perhaps this change was symptomatic of the Treasury's concern over the lack of confidence in the British monetary situation. That the Government did not request permission to issue £5 currency notes, which might have been issued instead of Bank notes, seems to indicate that the Treasury was prepared to preserve pre-war monetary standards to the fullest possible extent. The issue of Bank of England notes rather than currency notes in the latter part of the War was not within the discretion of the Bank; but it might well have been made a matter of discretion.

The Government's contribution to the policy of deflation was important. But their declarations of policy were colored by the

economic conditions of the day. Increasing protests against excessive expansion brought forth a declaration of a policy of contraction; but the grumbling that followed the first signs of business recession made the Government extremely cautious, and soon the independence of the Bank of England was proclaimed. A reduction of perhaps a hundred millions of Bank advances and a half billion of Treasury bills was the Treasury's contribution to deflation. But a large loss of Special Deposits was offset by increased sales of Treasury bills. Moreover, the reduction in currency notes outstanding enabled the banks to replenish their balances at the Bank of England. However, in spite of a reduction of notes by 100 millions, the banks lost approximately 50 millions of cash in the years 1920 to 1924 as a result of the reduction of Ways and Means. The monetary stringency of the period is easily explained by the history of Ways and Means. (The normal reserves of British banks are approximately 200 millions.) Of course this movement was successive, and perhaps is explicable in part by the steady transfer of balances from non-British to British institutions at the Bank of England. The procedure was not unlike that to be expected under a gold standard. However, the stringency of the period would probably not have been so great had the market been able to import gold or had the limitation of issues of fiduciary notes not been so stringent. When I say that the reduction in Ways and Means was approximately 50 millions, I mean that the average in 1924 was approximately 50 millions below the average in the second half of 1920.

The British pegging policy (Book VI) was judicious. Control of the import trade saved the country from the large imports that might accompany pegging in a period in which unnecessary consumption and, particularly, unnecessary imports were to be discouraged. Moreover, Great Britain was thus able to obtain many dollars for its large receipts in Sterling on capital account and for shipping services and the like; and the resultant confidence in Sterling made it easier to borrow at advantageous terms both at home and abroad. However, the increased value of Sterling was not a net gain; for American banks were forced to create more dollars on account of the large number of dollars put at the disposal of Great Britain in the course of the pegging process, and,

therefore, as a result of the higher prices, more dollars were required for the purchase of American commodities.

Writers are inclined to exaggerate the depressing effects on Sterling of the credits advanced to Europe by England in the post-War period. In fact, large disbursements were made through London for Europe and the Dominions out of the balances and credits accumulated in London during the War period. That is to say, what was a source of strength for Sterling during the War, became a source of weakness after the War. A consideration of the phenomenal adverse balance of trade of Great Britain will convince one that England's large imports were an important cause of the decline in Sterling. From 1920 to 1924, the influx of capital was a source of strength. A courageous fiscal policy was effective both in bringing down internal prices and thus strengthening Sterling and in encouraging speculative movements of balances to London. Modifications in monetary policies both in Great Britain and abroad had significant effects on Sterling. When other countries were introducing stable conditions, Great Britain faced renewed competition for available balances. Monetary depreciation abroad was a bullish factor for Sterling.

The objective of England's deflation policy was to raise Sterling to the pre-war parity with gold, and therefore, the appreciation of the dollar, or its equivalent gold, made England's task more difficult; and the fluctuations in the value of the dollar are perhaps the most important single explanation of the fluctuations in Sterling from 1920 to 1925. Mr. Hawtrey has presented this position well in his brilliant discussions of British monetary policy since 1914. In the discussion that follows I have somewhat neglected this phase of the subject merely because Mr. Hawtrey's position is now commonly understood and accepted.

I am indebted to Mr. Hawtrey at numerous places in my discussion of inflation, deflation and the foreign exchanges. His approach is always fresh and his interpretations ingenious and sound.

## PART I

### SPECIAL PHASES OF INFLATION



## Book I

# FINANCIAL HISTORY OF THE EARLY MONTHS OF THE WAR

## CHAPTER I

### INTRODUCTION

THE Bank of England made large advances to the money market before the Government announced their guarantee against losses incurred by the Bank of England in rediscounting promotorium bills. Incurring additional obligations and subjected to heavy withdrawals of cash, the Bank of England requested permission to issue notes beyond the fiduciary limit set by the Bank Act of 1844. The result was the creation of the Treasury note. It now became possible to lend directly to the banks rather than to bill brokers, now in a precarious position.

When the Government agreed to guarantee the Bank of England against losses incurred in discounting bills and (later) in making advances to acceptors, they gave the first impulse to the later inflation. But the magnitude of these discounts and advances gives an exaggerated impression of the damage done. This is apparent from the relatively moderate increase in the Other Deposits of the Bank of England. The explanation is that all the bills discounted by the Bank of England were not outstanding at once. As new rediscounts were made, bills discounted before the guarantee was introduced, as well as bills already rediscounted under the guarantee on which remittances had been received, were redeemed. Moreover, the large advances to acceptors were made to enable them to meet bills already rediscounted.

In the early months of the War, advances to the Treasury by the Bank were most moderate. It is necessary also to consider the advances referred to above and the movements of notes and gold

to understand the fluctuations in Other Deposits of the Bank. (They consist for the most part of balances of London joint stock banks with the Bank.) In the early days of the War, large withdrawals of cash were made from the Bank, which were charged against Other Deposits. Later, large accretions of gold, which were in the main deposited abroad, were reflected in large additions to Other Deposits. Moreover, Other Deposits were replenished by disbursements of the proceeds of Ways and Means advances. The relative stability of O.S.<sup>1</sup> and O.D.<sup>2</sup> during the period in which the large advances were made to acceptors, is evidence that virtually all bills (pre-moratorium) rediscounted at the Bank of England had been liquidated before November with the exception of those that were liquidated with the proceeds of the advances to acceptors. In addition, there apparently were approximately 25 millions of bills on which no remittance could be obtained, and in repayment of these the Government reimbursed the Bank in 1915. The increase in O.D. in 1914 is not to be explained by direct advances from the Bank to the Government in any large measure, because the larger part of Ways and Means advances was departmental and hence was obtained in the first instance from the market. An examination of the monthly figures of the clearing banks reveals that they received smaller accretions of cash in the early months of the War than might be expected. The explanation may be that outside institutions benefited to a disproportionate degree from the early activities of the Bank and Government and that the public withdrew large amounts of cash.

In the chapter on the moratoria, it is contended that Great Britain had much to lose from the adoption of a moratorium which might have led to the adoption of similar measures abroad. But except in a few unimportant instances, the British moratorium had no important effects abroad. Moreover, foreign creditors attempted to meet their obligations in spite of moratoria.

The War worked havoc with the bill market. A brief description of the relation between the bill market and money market might be helpful here. British joint stock banks, bill brokers and

<sup>1</sup> Other Securities of the Bank of England.

<sup>2</sup> Other Deposits of the Bank of England.

outside institutions invest heavily in Sterling bills. British acceptance houses, and to some extent, joint stock banks guarantee these bills. When foreigners in August, 1914, were unable or unwilling to meet these bills at maturity, the British Government announced that they would guarantee the Bank of England against all losses involved in rediscounting bills drawn before the moratorium (August 4). Thus investors and other endorsers of bills were protected against losses. Accepting houses on the other hand were still liable for the fulfillment of their guarantee although they were temporarily relieved by the terms of the moratorium. When the moratorium was suspended, the Government provided for advances to acceptors under a Government guarantee, which might be periodically renewed until after the War.

British banks hold large balances with the Bank of England, which constitute an important part of their cash. But the O.D. of the Bank of England include also the accounts of outside banking institutions, and of foreign, Colonial and Dominion Governments as well as private accounts. Foreign and Dominion banking houses—including the exchange banks—established in London held large portfolios of Sterling bills at the outbreak of the War. The payments on Sterling bills not renewed were reflected in reduced London balances of institutions from these countries; but that loss was probably more than offset by the cash received in exchange for bills rediscounted at the Bank.

As the Bank of England made advances to accepting houses and rediscounted bills, its O.S. and O.D. increased. In a similar manner, advances to the Government are reflected in increases in Public Securities (P.S.) and Public Deposits (P.D.). In an abnormal period, it cannot be assumed that fluctuations in O.D. are symptomatic of corresponding fluctuations in the cash holdings of British joint stock banks. Gold imports result in an increase in O.D., and withdrawals of cash from the Bank of England result in a reduction of O.D. But if part of the cash thus withdrawn is retained by the banks in their vaults, the net loss of cash is reduced.

## CHAPTER II

### GOVERNMENT COÖPERATION

By August 1, the Bank of England had advanced upwards of £27 million to bill brokers, bankers and merchants in London upon the security of Government stocks, bills of exchange and the like.<sup>1</sup> The banks had been ruthless in calling in advances to bill brokers. It was not until several days later that the Government guaranteed the Bank of England against losses incurred in rediscounting pre-moratorium bills.<sup>2</sup> On August 5, 1914, Lloyd George announced that although it had not been necessary to suspend specie payments, it was necessary to issue small currency notes in order to economize gold. He hoped that they would not be brought in for redemption.<sup>3</sup> In an oral answer of November 9, 1915, the Prime Minister pointed out that the Bank of England had not availed itself of the privilege offered by the suspension of the Bank Act except to issue a few millions of notes under the Currency Notes Act before the currency notes had been printed.<sup>4</sup>

<sup>1</sup> Correspondence between Treasury and Bank of England as to Issue of Notes in Excess of Limit Fixed by Law at Time of Outbreak of War. H. C. 370 (1914-16).

<sup>2</sup> Treasury Assistance to Banks and Discount Houses, Continuance of Moratorium and Nature of Banking Facilities Available. H. C. 457 (1914). Lloyd George wrote an explanatory letter to the Bank of England on August 12, 1914. He pointed out that the reduction of remittances from abroad was a very serious problem. In a later letter to the Bank, he outlined the accounting procedure to be followed in discounting pre-moratorium bills. The Bank was to be indemnified later for the net balances remaining after the amounts realized by the Bank in respect of bills and interest received for bills were deducted from the amount due on bills discounted. *Manual of Emergency Legislation*, Financial Edition, pp. 33-34. Also see H. C. 457.

<sup>3</sup> 65 H. C. Cols. 1902-03. [This form refers to a Debate.] On August 1, the Bank of England asked for permission to issue notes in excess of the legal limit. It had advanced £27 million in 5 days, and its reserve would probably be reduced to 11 millions by the end of the day. H. C. 370 (1914-16).

<sup>4</sup> 75 H. C., Col. 1002. I discuss the significance of the currency notes in my essay on Inflation. They were indispensable; the public absorbed 48 millions of cash in the early days of the War. J. M. Keynes, "The Prospects of Money, November, 1914," *Economic Journal*, 1914, pp. 614-15. See Bill to Authorize Issue of Currency Notes, 1914 (361) 1.867; Bill to Amend Currency and Bank Notes Act 1914. 1914 (379) 1.873. Correspondence between Treasury and Bank of England, H. C. 370 (1914-16). Treasury Minutes, August 6, August 20, 1914, etc.,

The decision to issue £1 currency notes was not novel. Ricardo had made a proposal that the Government should derive the profits from the issue of currency notes and he proposed to issue £1 notes. However, he suggested precautions against over-issue.<sup>5</sup> The panic of 1825 was partly caused by the demand for gold to replace the £1 notes withdrawn from circulation by the failure of country banks.<sup>6</sup> The *Economist* criticized the Peel Act and proposed the introduction of a £1 note in order to economize gold.<sup>7</sup> In the course of a later panic, the *Economist* reiterated its earlier position.<sup>8</sup> Finally in 1890 came Goschen's well known proposals to issue £1 notes, which were to be substituted for the gold carried about by the public.<sup>9</sup>

The obligations undertaken by the Government in the early days of the War are described in a schedule appended to the Government War Obligations Bill.<sup>10</sup> Of the obligations assumed, the most important was the guarantee against losses incurred in rediscounting pre-moratorium bills, the object of which was to make the resources of investors in bills available for renewed financing of foreign trade. According to an estimate made by Lloyd George, 400 applications for accommodation under the terms of the Government guarantee were made to the Bank of England, and 300 were approved. In considering applications, the Bank was guided by the nature of the transaction, the standing of the applicant and the value of the security.<sup>11</sup> It is known that the Bank of England did not apply its usual standards;<sup>12</sup> and the Bank of England did not escape criticism for its decisions in the early months of the War. Sir A. Markham accused the Bank

Cmd. 7836 (1914-16); Treasury Minute July 10, 1915, Cmd. 8024 (1914-16). One object of issuing currency notes was to make possible direct advances to banks.

<sup>5</sup> Plan for the Establishment of a National Bank. McCulloch's edition of *Ricardo's Work*, pp. 503-9.

<sup>6</sup> The *Economist*, May 18, 1844. [This periodical is commonly known as the *London Economist*, and throughout this work is abbreviated—*L. E.*]

<sup>7</sup> *L. E.*, 1845, pp. 238, 311, 337, 360, 385, 455; *Ibid.*, 1847, pp. 545, 1186.

<sup>8</sup> *Ibid.*, November 14, 1857.

<sup>9</sup> "Mr. Goschen's Currency Proposals," *Economic Journal*, 1892, pp. 139-56; also see A. Crump, "One Pound Notes and the Metallic Reserve of the Bank of England," *Economic Journal*, 1892, pp. 156-62.

<sup>10</sup> 68 H. C., Col. 1154.

<sup>11</sup> 68 H. C., Cols. 1540-41.

<sup>12</sup> French officials boasted that the Bank of France had given more accommodation in the emergency than the Bank of England. *L'Économiste Français*, January 2, 1915, *Bulletin de Statistique et de Législation Comparée*, 1914 (76), pp. 470-71.

of partiality to firms connected with members of the Directorate of the Bank; but his evidence was not at all convincing.<sup>13</sup> Of the £350 to £500 million of bills outstanding, 120 millions were rediscounted under the Government guarantee in the early weeks of the War.<sup>14</sup>

It has been pointed out that the liberal opportunities offered by the Bank and the Government induced holders of bills to rediscount them in order to free themselves of a contingent liability even when they were in a relatively strong position.<sup>15</sup> Of course the result was unnecessary inflation. Even the banks of enemy countries were given the privilege of rediscounting their bills, and in fact they received accommodation to the extent of approximately £12 million.<sup>16</sup> The object of granting this accommodation of a rather unusual type was to assure the resumption of normal business relations by relieving investors in bills and other endorser of their liability.<sup>17</sup>

The second weighty responsibility undertaken by the Government was to guarantee advances to acceptors of bills. When the moratorium was terminated, it became necessary to protect acceptors of bills. In a statement to the Press of September 5, 1914, the Government referred to the coöperation of the Bank of England and the joint stock banks in making advances to the acceptors. On September 30, the Government announced the procedure to be followed by acceptors in borrowing from the Bank of England and on October 1, the Bank issued further regulations.<sup>18</sup> The acceptors were liable for the bills now held by the Bank as well as those retained by the brokers and banks.

How large were the advances made by the Bank of England under the provisions of these guarantees and when were they repaid? In October, the *Economist* pointed out that the Bank's holdings of O.S. had declined, which movement the editor at-

<sup>13</sup> 68 H. C., Cols. 1158-62, 1520-29.

<sup>14</sup> *Ibid.*, Col. 1544.

<sup>15</sup> *Ibid.*, Col. 1559; W. R. Lawson, *British War Finance*, p. 19; J. M. Keynes, *op. cit.*, *Economic Journal*, 1914, pp. 613-14.

<sup>16</sup> Reports on Enemy Banks, Cmd. 8430 (1916); 8889 (1917). Also see License of Deutsche Bank, Cmd. 8398 (1916). Advances were made to enemy banks in order to enable them to repay British and neutral creditors. Acceptances of Enemy Banks were paid off because the British assets were made available by liquidation.

<sup>17</sup> 68 H. C., Cols. 1547-48.

<sup>18</sup> *Manual of Emergency Legislation*, Financial Edition, pp. 35-38.

tributed to the excess of bills repaid over new advances.<sup>19</sup> On November 27, 1914, Lloyd George announced that all but £12.5 million of the bills rediscounted had been repaid.<sup>20</sup> Apparently, the remainder had matured and recourse had been had to the acceptor or drawer.<sup>21</sup> The inference to be drawn is not that the remaining 108 millions of bills rediscounted under Government guarantee had been repaid out of the resources of the market, for large advances had been made to acceptors to enable them to meet bills at maturity. The Bank of England had advanced £60 million or thereabouts to acceptors who had been unable to collect from their clients. Lloyd George estimated that 50 millions of bills accepted in large part for German and Russian institutions would be unpaid at the end of the War.<sup>22</sup> When Lloyd George announced in November that all but 12.5 millions of the bills had been repaid, his statement was in a sense misleading and easily misinterpreted. He did not point out that 50 or 60 millions of advances were obtained from the Bank of England by acceptors to meet these bills as they matured.<sup>23</sup> Apparently, a very large proportion of the bills rediscounted was thus liquidated. That is not surprising as investors in bills would not as a rule have rediscounted at the Bank of England if they were certain of receiving payment at maturity. It is probable that many bills were rediscounted merely because the future was uncertain or because it was deemed necessary to obtain additional cash.

On June 21, 1915, McKenna announced that the liability of the Government on advances to accepting houses and others had been reduced from £120 million in November, 1914, to less than 50 millions in June.<sup>24</sup> McKenna's statement is inaccurate. The net liability in November, 1914, was probably no more than 60 or 70 millions. One liability, advances to acceptors, had been substituted for another, namely, guarantees on bills rediscounted,

<sup>19</sup> *L. E.*, October 24, 1914, Banking Number.

<sup>20</sup> 68 H. C., Col. 1544.

<sup>21</sup> The Treasury was to receive approximately one third of the interest earned on these advances. 68 H. C. Col. 1536.

<sup>22</sup> *Ibid.*, Cols. 1544-46.

<sup>23</sup> A few days earlier he had announced that the total of bills dealt with under the announcements of August 12 and September 15 had been 120 millions. 68 H. C., Col. 803. The repayment of approximately one half of the bills required advances to acceptors. Also see Treasury Assistance to Banks, H. C. 457 (1914); and Government Assistance to Credit and Business, Cmd. 7684 (1914-16).

<sup>24</sup> 72 H. C., Cols. 951-52.

and McKenna did not allow for the bills repaid before November out of the market's own resources. That is to say, the Bank of England in all had rediscounted 120 millions of bills. A large part had matured and been redeemed before advances had been made to acceptors. They borrowed 50 or 60 millions in order to cover their obligations on bills not liquidated. That accounted for all the bills with the exception of approximately 28 millions which the Government had to cover. At no time was the Treasury liable for a sum even close to 120 millions. McKenna announced that, "the policy of the Government ought to be to reduce those debts, direct and indirect, to the Bank of England so as to leave the Bank as free as possible to carry out its time-honored duty of watching over the exchanges and protecting the gold reserve."<sup>25</sup> The Government soon thereafter paid the Bank 28 millions and thus took over the advances to acceptors.<sup>26</sup>

On December 22, 1915, McKenna announced that a total of 200 millions of advances had been made in the early months of the War to protect the credit system, and that the total of advances outstanding was 35 millions. The repayments from 1916 to 1919 were of negligible proportions, for early in 1919, 30 millions of obligations were still outstanding.<sup>27</sup> In June, 1919, Baldwin announced that of 120 millions of bills rediscounted, all but £40,000 to 50,000 Sterling had been repaid and of 70 millions advanced to acceptors, all but 20 millions had been repaid.<sup>28</sup> Acceptors were not legally bound to repay before a few years after the War. An examination of the Finance Accounts reveals that the Treasury received £3.6 million on account of repayments and interest on pre-moratorium bills in 1920-21. For the year 1922-23, the receipts were £6.10 million.<sup>29</sup>

A few bank reports throw some light on these transactions. Thus the London and Hanseatic Bank in its meeting of February, 1916, announced that its acceptances including advances made under the Government scheme of September, 1914, had been re-

<sup>25</sup> 72 H. C. Col. 951-52.

<sup>26</sup> *L. E.*, December 18, 1915, War Supplement. The losses of the Reichsbank on similar advances were negligible. W. Prion, *Kreditbanken*, p. 33

<sup>27</sup> 77 H. C. Col. 476. In August, 1916, the outstanding obligations had been reduced to 31 millions. 80 H. C. Col. 511.

<sup>28</sup> 116 H. C. Col. 1790.

<sup>29</sup> *Finance Accounts* 1920-21, p. 36; 162 H. C. Col. 1725.

duced by  $1\frac{1}{4}$  millions.<sup>30</sup> The Chairman of the London Merchant Bank at its meeting in 1923 revealed that his bank had borrowed £3.25 million under the Treasury scheme of September, 1914, and that £242,000 of this debt were unpaid at the end of 1922.<sup>31</sup> The London and Liverpool Bank of Commerce borrowed £1 million from the Bank of England. The debt remained uncomfortably large until 1920-1921 but was entirely discharged in June-July, 1922, a month or two before it was due.<sup>32</sup> In 1926, the Anglo-Austrian Bank was reorganized by the Bank of England because it had failed to meet its obligations on pre-moratorium bills to the Bank of England.<sup>33</sup>

The following figures from Bank of England's weekly statements are significant:

Millions £ Sterling	1914				Percentage Reserve (Banking)
	Public Deposits (P. D.)	Other Deposits (O. D.)	Public Securities (P. S.)	Other Securities (O. S.)	
July 22 . . . . .	13.7	42.2	11.0	33.6	27.7
August 7 . . . . .	11.5	56.7	11.0	65.3	8.4
August 14 . . . . .	7.9	83.3	23.0	70.8	14.7
August 19 . . . . .	13.7	108.1	26.0	94.7	18.4
September 16 . . . . .	23.9	135.0	20.8	113.8	31.9

(Figures for August 7 relate to August 1.)

The increase in O.S. of 80 millions was surprisingly moderate. If the Bank of England rediscounted 120 millions of pre-moratorium bills and in addition advanced approximately 30 millions in the last days of July, why did not O.S. increase by 150 millions? One important explanation is that the earlier advances and the 120 millions of pre-moratorium bills rediscounted were not outstanding simultaneously. While additional bills were being rediscounted, earlier advances and bills previously rediscounted were being repaid. Banks and brokers who rediscounted bills, probably used the proceeds to pay off pre-War advances and to pay off bills on which they had received remittances or were certain to receive remittances. I discuss the significance of these early advances by the Bank of England in my essay on Inflation. Here I wish to emphasize the point that the inflationary effects may be exaggerated if we neglect to consider that these transactions were successive. Keynes and Lawson have pointed out that

<sup>30</sup> *L. E.*, February 5, 1916.

<sup>31</sup> *Ibid.*, March 17, 1923.

<sup>32</sup> *Ibid.*, February 10, 1923.

<sup>33</sup> *Ibid.*, September 4, 1926.

because the money market had been tempted by the additional facilities put at its disposal by the Government, it had borrowed from the Bank of England at 5 to 5½ per cent, or perhaps 6 to 7 per cent, and had lent the proceeds out at 2 per cent or less; <sup>34</sup> but with the passage of time the banks and brokers became aware that they had acquired too much cash and hence they were disposed to pay off part of their indebtedness to the Bank. The bill brokers, who especially profited from the intervention of the Government, used part of their newly acquired cash to repay their creditors, the joint stock banks. Thus the possibility of inflation was increased in that British banks received additional cash by rediscounting bills and calling in loans from bill brokers. However, foreign banks and bill brokers had also converted bills into cash, and hence, the additional cash was not put at the disposal of British banks exclusively. Rates are depressed in London by the creation of additional cash; but the danger of inflation is especially great if the cash is accumulated by British banks.

The market did not take advantage of the special facilities offered by the Bank and the Government as quickly as is commonly supposed. Thus the increase in O.S. in successive weeks beginning with the periods ending August 7 (1) was 18 (this increase is accounted for by the advances made before the Government offered their guarantees), 6, 24, 15, and 11 millions. The week ending September 9 witnessed a decline in O.S. and the general tendency was downward in September and October, and slightly upward in November. The rise in O. D. was approximately of equal magnitude.<sup>35</sup> But in the period in which O.S. declined, the tendency of O.D. was slightly upwards in spite of appreciable withdrawals of currency notes.<sup>36</sup> The divergent tendencies in O.D. and O.S. are explained by the large receipts of gold at the Bank of England and the reduction in P.D., both of which were reflected in increases in O.D. The reserves of the

<sup>34</sup> W. R. Lawson, *British War Finance*, p. 19.

<sup>35</sup> From July 22 to August 1 the increase in O.D. was but 14.5 millions as compared to an increase of 31.7 millions in O.S. The banks were withdrawing Bank of England and currency notes.

<sup>36</sup> Banks exchange balances at the Bank of England (O.D.) for currency notes. The Government's balances (P.D.) increase with issues of currency notes; but they are reduced and O.D. are increased as the Government disburse the proceeds.

Banking Department of the Bank of England increased from £8.4 million on August 7 to £31.9 million on September 16, and in the same period, the gold coin and bullion in the Issue Department increased by 22 millions. From July 22 to August 7, the loss of gold had been but 12.6 millions. I point out in a later essay on Gold that increased supplies of gold were deposited on behalf of the Bank in the British Dominions and India.<sup>37</sup> Balances of their institutions in London were thus increased. In so far as the economic position of these countries was adversely affected by War conditions, they were forced to employ the cash thus received in meeting their indebtedness in London.<sup>38</sup>

The remarkable stability in O.S. in October and November suggests that where recourse to acceptors was not necessary, the bills were redeemed before rather than after October. In the seven weeks during which approximately 60 millions of advances were made to acceptors, O.D. fluctuated between 105 and 116 millions; and between October 14 and November 18, O.S. fluctuated within a radius of 3 millions.<sup>39</sup> Hence it is probable that the bills paid off in this period were in large measure those which were redeemed out of the proceeds of advances to acceptors. Otherwise, fluctuations in O.D. and O.S. would have been greater. On October 18, the first pre-moratorium bills became due, and on November 17, the last of them became due.

The Government guaranteed advances by the Bank of England up to 60 per cent on loans to the stock exchange on the condition that the collateral would not be sold until one year after the War.<sup>40</sup> It was estimated that 70 to 80 millions of advances to the stock market were outstanding, of which the banks had contributed 50 millions. Lloyd George made an official investigation, in the course of which he found that 92 millions of these advances were outstanding and that 77 millions were adequately covered.<sup>41</sup>

<sup>37</sup> *L. E.*, February 13, 1915; *U. S. Mint Report* 1915, p. 274.

<sup>38</sup> Australian banks had low balances in London in 1914. *L. E.*, October 24, 1914. Report of Union Bank of Australia. *L. E.*, February 6, 1915; however, see Report of Bank of New South Wales, *L. E.*, January 16, 1915.

<sup>39</sup> *L. E.*, 1914, *passim*; also see Further Papers Relating to Measures taken by His Majesty's Government for Sustaining Credit and Facilitating Business. Government Assistance to Credit and Business. Cmd. 7684 (1914-16).

<sup>40</sup> 68 H. C. Cols. 1548-50.

<sup>41</sup> *L. E.*, October 17, 1914. The *Bankers' Magazine* estimated that one half of the advances to the stock market had been repaid early in 1915. For an estimate of the large depreciation of stock exchange securities before August 1, see

Banks apparently did not consider the Government's offer a generous one or the facilities were offered for emergency purposes, for the accommodation applied for under this guarantee was negligible.<sup>42</sup> The repayments of advances to the stock market were made at a surprisingly rapid rate. Dominion and Colonial banks especially profited from the repayment of stock exchange loans as they had a large part of their resources invested in them. In the early weeks of the War, Dominion and Colonial banks faced great difficulties in maintaining necessary balances of cash in London.<sup>43</sup> But as stock exchange loans were repaid, their position was strengthened.<sup>44</sup> Bill brokers were able to repay advances to these banks out of the proceeds of cash received for bills discounted. Where the stock market received the cash to repay the banks, is a more puzzling question. It probably involved a loss of cash for British institutions. The repayment of stock exchange loans frequently enabled outside institutions to repay the Bank of England.<sup>45</sup>

*Bankers' Magazine* (hereafter abbreviated *B. M.*), 1914, (93), pp. 368-70, *Review of Economic Statistics*, Prel., 1919, p. 169.

<sup>42</sup> 71 H. C. Col. 853.

<sup>43</sup> Meeting of Union Bank of Australia *L. E.*, February 6, 1915.

<sup>44</sup> Canadian banks converted a debit balance in London in July, 1914, into a large credit balance in October (Banking Number, *L. E.*, October 24, 1914.) The explanation was not only that stock exchange loans were repaid. Advances to acceptors and redi-counts by the Bank of England were probably important (Meeting of Canadian Bank of Commerce *L. E.*, February 6, 1915.) The Union Bank of Australia (*L. E.*, February 6, 1915, July 31, 1915), the Bank of New South Wales (*L. E.*, July 14, 1915), the London Bank of Australia (*L. E.*, May 8, 1915), the Commonwealth Bank of Australia (*L. E.*, April 24, 1915), all reported large reductions in Money at Call and Short Notice, and they generally reported large increases in cash. The Standard Bank of South Africa put more of its resources into Money at Call because trade was dull at home. *L. E.*, April 24, 1915.

<sup>45</sup> Meeting of Ionian Bank, *L. E.*, April 17, 1915.

## CHAPTER III

### PUBLIC BORROWING

THE direct relations between the Government and the Bank should also be considered. On August 6, the Government warned the Bank of England that heavy borrowing from the Bank would be necessary.<sup>1</sup> However, an examination of the "Annual Statement of the Bank of England of Exchequer Bills and Other Government Securities Purchased" reveals that the Treasury borrowed moderate amounts from the Bank in the early months of the War.<sup>2</sup> The figures for August are as follows:

*Millions of £ Sterling*

August 7.....	0
August 8.....	3
August 10.....	3
August 14.....	1
August 15.....	1

According to the weekly Exchequer Accounts, the Government borrowed more than 30 millions on Ways and Means in the last two weeks of August; but these advances were not obtained from the Bank of England. Perhaps they were in large part receipts from issues of currency notes which were included in Department Ways and Means. The increase in P.S. of the Bank of England from August 7 to August 19 was 15 millions; the Bank advanced 14.7 millions to the Government during the period August 1 to August 15. On August 20 the Governor of the Bank of England in a reply to a formal request of August 6 for temporary advances, began thus, "We beg to inform you that your letter of the 6th instant was laid before, etc., etc." But a reply of October 1 promptly following a request of September 30

<sup>1</sup> H. C. 123 (1914-16). Hahn points out that in the modern state, the Central Bank cannot withhold necessary accommodation. If necessary, the Bank suspends payments and the Government introduce a moratorium. A. Hahn, *Volkswirtschaftliche Theorie des Bankkredits*, pp. 77-78.

<sup>2</sup> Account of Exchequer Bills and Other Government Securities Purchased by Bank of England. H. C. 103, 415 (1914-16).

began thus, "We have to acknowledge receipt of your letter of the 30th, etc., etc."<sup>3</sup> Was the change of language pre-meditated, and did it indicate a change of attitude? Advances from the Bank of England to the Government for the remainder of the year were as follows:

<i>Millions of £ Sterling</i>		
October 3	.....	5
November 14	.....	2
November 21	.....	8
December 5	.....	9

The increase in P.S. of the Bank of England in the last few months of 1914 is to be explained in large part by the purchase of Treasury bills. The Finance Accounts (1914-15) include monthly figures for Ways and Means advances. They are given below together with the figures for Ways and Means advances other than from the Bank of England. The latter are obtained by deducting advances from the Bank of England from the total of Ways and Means.

<i>Millions of £ Sterling</i>		
1914	Total	Other Ways and Means
July	1.0	1.0
August	46.5	31.5
September	15.3	15.3
October	10.1	5.1
November	20.2	5.2
December	3.0	3.0
1915		
January 1-5	5.0	5.0

I discuss more fully in my essay on Ways and Means the nature of Department Ways and Means. I point out there that they were probably composed in large part of securities in the Currency Notes Account. It is apparent that all securities in the Currency Notes Account were not included in Department Ways and Means. Thus, at the end of the financial year 1914-15, no Ways and Means advances were outstanding; however, securities were deposited in the Currency Notes Account. Securities appeared in the Currency Notes Account for the first time on September 9 (10.9 millions). But the weekly statements of public receipts and expenditures do not take cognizance of this issue of securities. The only transactions in securities recorded in the weeks ending September 5 and September 12 were an issue of

<sup>3</sup> Application of First Lord of Treasury, 1914-15, H. C. 123 (1914-16).

£1 million of Treasury bills, a creation of Ways and Means of 7.26 millions and a repayment of 7 millions of Ways and Means. Moreover, although the Treasury obtained £31.5 million through departmental advances in August, securities appeared in the Currency Notes Account for the first time in September. Hence it seems improbable that departmental advances at this early date were in large part advances from the Currency Notes Account unless the Government included receipts from the issue of currency notes as Department Ways and Means even though they were not covered by securities deposited in the Currency Notes Account. This is a plausible assumption. It is difficult to account for the receipts from issues of currency notes in any other manner.<sup>4</sup>

<sup>4</sup> By the Treasury Minute of August 20, the Government assumed the power to borrow from the Currency Notes Account. *Select Statutes, Documents and Reports Relating to British Banking, 1832-1928*. Selected by T. E. Gregory, vol. I, pp. liv-lv.

## CHAPTER IV

### THE BANKS

ALTHOUGH the Government put additional currency notes and other facilities at the disposal of the banks, the latter apparently restricted their advances to the public unnecessarily.<sup>1</sup> Lloyd George threatened to take action against the banks if they did not grant credit more liberally.<sup>2</sup> The London Chamber of Commerce demanded that the Government withhold their support of the banks unless the latter accommodate industry.<sup>3</sup> However, 6341 out of 7310 business men or corporations replying to an inquiry of the Government, were satisfied that banking facilities compared favorably with those available before the War.<sup>4</sup> Dissatisfaction was also expressed with the behavior of the German banks.<sup>5</sup> French banks held inadequate reserves and a disproportionate quantity of securities that could not be liquidated in a crisis.<sup>6</sup>

An examination of the monthly figures of clearing banks throws some light on the financial history of this period. I give below the fluctuations in cash holdings of these banks. Identical banks are compared from month to month although the number varies. Percentage change (compared to previous month):

1914	July.....	+ 1	1915	January (Compared to	
	August .....	+41		Nov.) .....	--11
	September .....	+11		February .....	— 2
	October .....	+ 6		March .....	— 1
	November .....	+11		April .....	+ 9
				May .....	+ 2
				June .....	+18

O.D. constituted a large part of the cash reserves of banks; hence it is clear why the increase of cash of British banks was so large in August. That the increase was not larger may be explained by

<sup>1</sup> J. M. Keynes, "War and the Financial System, August 1914," *Economic Journal*, 1914, p. 470.

<sup>2</sup> 66 H. C., cols. 71-72.

<sup>3</sup> *L. E.*, August 29, 1914.

<sup>4</sup> *Ibid.*, September 5, 1914.

<sup>5</sup> G. Bernhard, "Die Politik der Reichsbank im Kriege," *Archiv für Sozialwissenschaft und Sozialpolitik*, 1915 (40), pp. 77-78. However, see W. Prion, *Kreditbanken*, p. 37.

<sup>6</sup> "Exposé des Motifs." *Bulletin de Statistique et de Législation Comparée*, 1914 (76), p. 455.

the fact that the public hoarded more cash; and that the large advances made by the Bank may have been reflected in disproportionate increases in the cash of accounts other than those of British banks. That the increase in cash was not greater in October and November in spite of the very large advances to acceptors, is to be accounted for by the repayment of bills previously rediscounted and the important position occupied by foreign banks and British accepting houses in the acceptance market. The later movements are explained by subscriptions to the war loan (1914-15) and the disbursement of cash thus received by the Treasury.

<i>Money at Call and Short Notice</i>		<i>Month-to-Month Change. Percentage of Preceding Month</i>	
1914	July . . . . . -7	1915	January . . . . . -28
	August . . . . . -9		(Compared to November)
	September . . . . . 1		February . . . . . - 8
	October . . . . . 7		March . . . . . 4
	November . . . . . -4		April . . . . . 10
			May . . . . . 4
			June . . . . . 7

Bill brokers were able to repay the banks out of the proceeds of bills rediscounted with the Bank of England. The large reductions of Money at Call in January and February were probably the result of repayments by stock brokers who were now able to dispose of their securities. If the public purchased these securities, which was probably not true in general, there was a corresponding reduction in deposits; in so far as the banks purchased them, their investments increased. Perhaps appreciable sales were made abroad. The increase in the later months may be explained by the renewed activities on the stock exchange and a revival of the practice of financing trade by bills.

The increase in deposits, if not large, was at least steady. In February, 1915, the only decline of the period under consideration was recorded. Only five banks distinguish discounts from loans. Their bills were reduced by 21 per cent from July to September, increased by 10 per cent from September to November, and by 28 per cent from January to June. The reduction is to be referred to the rediscounting with the Bank of England. The first increase is probably explained by the purchase of Treasury bills and the second by purchases of trade bills.

## CHAPTER V

### MORATORIUM

THE Postponement of Payments Bill voted on August 3, 1914, gave the Government the power to make legal the suspension of payments on bills of exchange and other obligations.<sup>1</sup> The accepting houses were first to receive the support of a moratorium. Sprague maintained that the moratorium gave Great Britain no relief in its relation with foreign countries; but it saved the accepting houses.<sup>2</sup> The *Commercial and Financial Chronicle* commented on the moratorium, which was introduced, in its opinion, to meet the present crisis in international banking and to protect the Bank of England's gold reserve which declined from 40 to 14.6 per cent in one week.<sup>3</sup> In fact, Great Britain, a creditor, might suffer from the general stoppage of foreign remittances.<sup>4</sup> New York normally borrowed large sums in the spring which were repaid in the autumn when Sterling was at a low value.<sup>5</sup> Lloyd George came to the rescue of the acceptors because foreigners were not remitting.<sup>6</sup> New York had a floating indebtedness estimated at from 200 to 300 million dollars.<sup>7</sup>

Because Great Britain, a creditor nation, had everything to gain and little to lose by the continuance of remittances between countries, the wisdom of the introduction of a moratorium may

<sup>1</sup> Return of Papers Relating to Assistance Rendered by Treasury to Banks and Discount Houses since Outbreak of War. H. C. 457 (1914). Government Assistance to Credit and Business, Cmd. 7684 (1914-16). Copies of Postponement of Payments Act, 1914, Cmd. 7633 (1914-16). 65 H. C., Cols. 1805-9; *Manual of Emergency Legislation*, Financial Edition, pp. 19-22.

<sup>2</sup> O. M. W. Sprague, "Crises of 1914 in the United States," *American Economic Review*, 1915, p. 526.

<sup>3</sup> August 8, 1914.

<sup>4</sup> The *Crédit Lyonnais*, a French institution, complained of the refusal of foreigners to remit. J. Lorin, *La Politique des Banques Françaises de Dépôts*, p. 190.

<sup>5</sup> E. W. Kemmerer, *Seasonal Variation for Money and Capital in the United States*, pp. 138-41.

<sup>6</sup> *Manual of Emergency Legislation*, Financial Edition, pp. 35-36.

<sup>7</sup> The estimate of the *Commercial and Financial Chronicle* was lower. August 15, 1914. Raffalovich pointed out that American obligations were unusually large at the outbreak of the War. *Le Marché Financier, Journal des Économistes*, 6th Series, 1914 (44), pp. 122-23.

be questioned if Great Britain's example led to the introduction of moratoria elsewhere.<sup>8</sup> Moratoria are unhealthy because the honest find it increasingly difficult to meet their obligations if their debtors are indemnified against non-fulfillment of contracts. The United States, Great Britain's largest debtor, did not introduce a moratorium. Moreover, Germany, the owner of large assets in London, was an enemy country, and hence, for British-German financial relations the moratorium was of no practical significance.<sup>9</sup> Holland, another important debtor, did not declare a moratorium. A large proportion of the creditors in countries that introduced moratoria refused to accept the proffered protection and met their obligations. That is probably the explanation in part of the early depreciation of the exchanges of many neutral countries.<sup>10</sup> Several countries proclaimed moratoria before Great Britain or at about the same time. Russia issued Ukases on the subject beginning July 27; Belgium introduced a moratorium on August 2, and France on August 4.<sup>11</sup> However, it is apparent that several countries were forced to adopt moratoria because the practice had become general. Thus Italy apparently did not introduce a moratorium until August 16, and Norway delayed until September 17. Several countries, Switzerland, Sweden and Argentina, for example, regulated their moratoria by the actions of other countries. Almost all European countries, the more important South American countries and China introduced moratoria. Germany introduced a modified form of moratorium. A few countries (Chile for example) allowed payments to foreigners in local currencies. It is doubtful whether Great Britain's example stimulated other countries, in any important sense, to adopt similar measures.

<sup>8</sup> For a history of the legislation in relation to moratoria throughout the World, see *Moratorien und Andere Sonderregelungen des Zahlungsverkehrs im Auslande* by Handelskammer Zu Berlin; *Board of Trade Journal* [hereafter abbreviated *B. T. J.*], especially August 13, and August 20, 1914; *Commercial and Financial Chronicle*, especially March 6, 1915, June 12, 1915; *Volkswirtschaftliche Chronik* (Geld, Kredit und Wahrung), September, December, 1914. Also see A. Mayer, "Zur Geschichte und Theorie des Moratoriums," *Schmoller's Jahrbucher*, 1915 (39-4), pp. 181-228.

<sup>9</sup> Riesser wrote before the War that the accumulation of large foreign investments was necessary in order to obtain gold in the early days of War. J. Riesser, *Great German Banks and Their Concentration*, p. 542.

<sup>10</sup> *B. T. J.*, October 1, 1914.

<sup>11</sup> Lorin bitterly attacks the Government for introducing a moratorium in France. J. Lorin, *op. cit.*, pp. 195-96.

What were the effects of the moratoria on Great Britain? <sup>12</sup> Most neutral exchanges depreciated in terms of Sterling. Apparently the pressure for remittance to London was great in spite of the moratoria. Creditors refused to accept the opportunity to postpone payment either because their business ethics was high or because they anticipated a termination of the moratoria. Argentina, Denmark, Sweden and several other countries complained of the refusal of Great Britain to renew maturing credits. <sup>13</sup> France was the target for similar criticisms, although the authorities of Russia and France made arrangements for the payment in Russia of Russia's debts to France. <sup>14</sup> The moratorium was virtually over in Great Britain in November, but was renewed periodically in several countries well into 1915. In fact, the Trustee of the Enemy Banks established in London was finding laws against payment of debt an obstacle as late as 1917. <sup>15</sup> The early appreciation of Sterling is frequently attributed to the refusal to renew maturing debts. <sup>16</sup> That seems to indicate that the moratoria were not as important as might be held. The reduction in Sterling bills was not always followed by an increase in cash of British institutions because an appreciable proportion of the bills was held by foreigners, and hence at maturity payment was made by one foreigner to another. <sup>17</sup> Buff was of the opinion that the state of the foreign exchanges in general improved because of the introduction of moratoria. <sup>18</sup>

The effects of the moratoria in Great Britain are not easily traced. It has been contended that they were followed by lethargy in business because no pretense was made of meeting obliga-

<sup>12</sup> Del Vecchio was critical of the moratoria. G. Del Vecchio, "Economia e Finanza Di Guerra," *Giornale degli Economisti*, 1915 (50), p. 11.

<sup>13</sup> Russia ("Projet de Budget," *Bulletin de Statistique et de Législation Comparée*, 1916 (80), p. 160), Denmark (E. Cohn, "Die Wirtschaftlichen Verhältnisse Dänemarks," *Jahrbücher für Nationalökonomie*, 1916, p. 520), Sweden (*L. E.*, September 5, 1914), Chile (L. S. Rowe, *The Early Effects of the European War upon the Finance, Commerce and Industry of Chile*, pp. 51-52), Holland (*L. E.*, July 10, 1915), Argentina (*B. T. J.*, August 27, 1914), were all seriously affected by the withdrawal of Sterling credits.

<sup>14</sup> Minister Ribot admitted that France had refused to renew credits. (M. Ribot, "La Situation Financière de la France.") *L'Économiste Français*, January 2, 1915.

<sup>15</sup> Sir William Plender's Second Report on Enemy Banks, Cmd. 8089 (1917).

<sup>16</sup> A. Lansburgh, *Der Internationale Kapitalmarkt im Kriege*, pp. 39-40.

<sup>17</sup> See *Annual Report of the Bank of Netherlands*, 1914-15, p. 41, for some comments on holdings of bills. A Dutch correspondent wrote that the bill portfolio of the Bank was exhausted in the early days of the War. *L. E.*, July 10, 1915.

<sup>18</sup> S. Buff, "Die Auswärtigen Wechselkurse im Kriege," *Archiv für Sozialpolitik*, 1916-17 (43), pp. 538-39.

tions.<sup>19</sup> One writer says that the beneficial effects were lost because the public did not anticipate a moratorium and hence hoarded cash.<sup>20</sup> The temptation to hoard balances on account of the uncertainty was reduced; but on the other hand, payments were postponed. However, more payments were made after the termination of the moratoria.

If foreigners were prevented from withdrawing their balances from London as a result of the moratorium, the result was that more funds were available in London. But this was probably not a very important cause of the monetary ease of the period. Most foreign countries were forced to use their London balances in order to meet their increasing liabilities in London.<sup>21</sup> Large balances of enemy countries in London could not have been withdrawn even if moratoria had not been introduced. When Sterling depreciated in terms of neutral currencies, creditors preferred to postpone withdrawals from London until Sterling was at par again. Apparently, large withdrawals of balances were made even before the declaration of War; English and French banks were withdrawing balances from Germany, Russia, and Austria from July 28 to July 30.<sup>22</sup>

It should also be considered that the Courts (Emergency Powers) Act 1914, empowered the courts to relieve debtors from harsh proceedings on the part of creditors when failure to pay could be shown to be due to the War. This was important as facilitating an escape from the moratorium. Also, the moratorium might have been averted if the Government had announced earlier their willingness to make advances to acceptors.

<sup>19</sup> However, compare S. J. Chapman and D. Kemp, "The War and the Textile Industries," *Royal Statistical Journal* [hereafter abbreviated *R. S. J.*], 1915, p. 183.

<sup>20</sup> A. Popovics, *Das Geldwesen im Kriege*, p. 103.

<sup>21</sup> A Dutch correspondent wrote that on account of the War large foreign balances were of little use except to pay for food and supplies. *L. E.*, July 10, 1915. The President of the Bank of Montreal said that foreign balances had been very useful because gold shipments had been averted. Meeting of December 7, 1914, *L. E.*, January 2, 1915.

<sup>22</sup> The premium on the franc in the early days of the War has been explained by the attempts of Continental banks without London branches to sell Sterling through Paris. "Le Marché Monétaire," *Journal des Économistes*, *passim*, 1914. Also see *L. E.*, August 29, 1914. The London, County and Westminster Bank was worried over transfers of balances from London to neutral countries. English and French banks were withdrawing balances in Germany, Russia and Austria from July 28 to July 30. *Commercial and Financial Chronicle*, August 1, 1914. "Oesterreich-Ungarns Geld und Kreditwesen im Kriege," *Archiv für Sozialwissenschaft und Sozialpolitik*, 1915 (40), pp. 328-29.

## SUMMARY OF BOOK I

EVEN before August 1, the Bank of England made large advances to the money market; and the banks withdrew large quantities of cash. A few days later the Government announced their guarantee of all Sterling bills rediscounted by the Bank of England, which had been drawn before the moratorium. Later, a similar guarantee was announced for advances to acceptors. Investors in bills took advantage of the Government's liberality, and at the least provocation, they converted bills into cash. The official figures have been rather misleading. Although a total liability of 200 millions was involved, the total accommodation outstanding at any time was appreciably less than 100 millions. A steady flow of remittances enabled the market to redeem bills held by the Bank of England at the same time that banks and discount houses were rediscounting other bills. Moreover, the proceeds of 60 or 70 millions of advances to acceptors were used for the most part in redeeming bills held by the Bank of England. The Government were relieved of one liability upon assuming another. From 1916 to 1919, relatively few bills purchased by the Bank under the guarantee were redeemed, and unimportant advances to acceptors were repaid.

An examination of the figures for O.S. and O.D. of the Bank of England confirms the conclusion that the contingent liability of the Government was at no time close to 100 millions. The stability of O.D. and O.S. in October and November is explained by the fact that acceptors of bills used the proceeds of advances to pay off bills held by the Bank of England, and that the larger part of the remaining bills purchased by the Bank was redeemed before the termination of the moratorium. A more rapid increase in O.D. than in O.S. in the last three weeks of August and in September is explained by the disbursement of the proceeds of Treasury advances from the Bank of England, and by large accretions of gold.

The Government's proposal to aid banks that were creditors of the stock market was not of great practical significance. The latter repaid the banks in rapid fashion. Dominion institutions were thus able to convert money at Call and Short Notice into cash. Probably the latter thus obtained cash at the expense of British institutions.

In the early months of the War, the Treasury's borrowings from the Bank of England were moderate. However, the Treasury received additional receipts from Ways and Means. Included in its Department Ways and Means were receipts from the issue of currency notes. The Treasury probably included cash obtained for notes as Department Ways and Means even before securities were deposited in the Currency Notes Account.

A study of the monthly accounts of joint stock banks reveals that they did not receive as much additional cash as a result of the large amount of accommodation granted by the Bank of England as might be expected. Withdrawals of money for circulation, the participation of outside institutions in the distribution of the additional cash created by the joint action of the Government and the Bank of England, and the fact that the accommodation was given in successive installments, probably explain this fact.



**Book II**  
**WAYS AND MEANS**

**CHAPTER I**

**INTRODUCTION**

THE history of Ways and Means is replete with obscurities. The weekly figures for "Other Advances" were made consistent with the quarterly figures by making large adjustments in the final week of each quarter. The large Department Ways and Means are not easily accounted for. A comparison of figures for securities in the Currency Notes Account and Department Ways and Means outstanding, points to the conclusion that departmental advances were in part securities issued against currency notes. But there were other securities in the Currency Notes Account in addition, as became apparent early in 1915 when all Ways and Means were repaid, and all securities in the Currency Notes Account were not liquidated. Moreover, Department Ways and Means were not composed exclusively of securities in the Currency Notes Account, as is evident from the larger fluctuations in the former. After the War, Treasury officials announced that securities in the Currency Notes Account were for the most part Treasury bills. Although Department Ways and Means in the post-War period were not as large as securities in the Notes Account, it does not seem probable that Treasury bills constituted the major part of the securities in the Notes Account unless the Treasury bills were included in departmental advances.

Special Deposits were a mechanism by which the Bank of England absorbed surplus funds on the money market, and thus maintained relatively high money rates. Because it was necessary to command the large cash balances of foreign institutions established in London, the privilege of making interest-paying deposits



as investments by the Bank of England, I obtained figures for P.S. (on the books of the Bank of England) that would have been outstanding had no Special Deposits been accepted. By comparing the P.S. on the books of the Bank of England with the latter series, one can obtain an estimate of the magnitude of Special Deposits.

From a perusal of the figures for the traditional type of Ways and Means, Department Ways and Means and Special Deposits, I come to the conclusion that the inflationary effects of Ways and Means have been exaggerated, for the latter two are deflationary in a sense. However, an allowance should be made for the advances to the Allies and Dominions which were of great importance in 1915 and 1916. The Bank concealed the true nature of these advances by including them in its O.S. In their effects they did not differ from the traditional type of Ways and Means. The British Government reimbursed the Bank for these advances. Normally, advances (Ways and Means) to the British Government by the Bank of England are reflected by increases in P.S.

The Department Ways and Means and Special Deposits were deflationary in the sense that the market was temporarily deprived of cash; and they should be distinguished from the orthodox type of Ways and Means in that the creation of the latter results in a net addition to the cash resources of the money market. In addition, the authorities probably curtailed advances by pegging rates in accepting Special Deposits and Treasury bills at high rates. It may be pointed out here that advances to the Allies and Dominions were provided for in the Votes of Credit; but temporarily advances were made by the Bank of England; and some rather large advances of a more or less permanent nature were made to France by the Bank. During the greater part of the early years of the War, O.D. were appreciably inflated as a result of the large advances to the Allies and Dominions outstanding.

The Treasury distinguished advances on Treasury bills from Other Advances. The latter was composed of advances from the Bank of England, Department Ways and Means, and Special De-

posits.<sup>2</sup> What were Special Deposits and Departmental Advances? Of what significance were they? What quantities were outstanding? These are important problems that require investigation.<sup>3</sup>

Only scanty information is disclosed by the authorities. In fact, they sometimes published figures in a manner that suggests intent to mislead. Thus although advances to the Government from the Bank of England are normally recorded as an increase in P.S. on the books of the Bank of England, the very important advances of the Bank to the Government on behalf of the Allied and Dominion Governments were recorded as increases in O.S. (These advances were in fact made to the British Government, which later reimbursed the Bank.) This episode is discussed in detail in my essay on Inflation. Some information is obtained from the official statistics for Treasury bills outstanding, the Quarterly and Annual Finance Accounts, the Correspondence between the Bank of England and the Lords of the Treasury, and the Annual Statement of Exchequer Bills Purchased by the Bank of England. Oral or written answers to members of Parliament, and the financial accounting presented to Parliament on the introduction of Votes of Credit, occasionally throw light on Ways and Means. In the later years of the War, balances in London belonging to foreigners were frequently converted into Ways and Means advances, and, therefore, foreign banking statistics sometimes are helpful.

Official figures are frequently not consistent. Conspicuous are the discrepancies between weekly and quarterly figures. The total increases and decreases of Treasury bills for Supply for the last 3 quarters of 1916 were:

	<i>Millions of £ Sterling</i>			
	<i>Increase</i>		<i>Decrease</i>	
	Weekly	Quarterly	Weekly	Quarterly
April-June .....	3.85	20.1	17.5	47.6
July-September .....	0	47.7	26.0	19.9
October-December .....	286.5	371.8	6.0	70.9

<sup>2</sup> Writers too frequently discuss all classes of Ways and Means without differentiation. H. F. Grady, *British War Finance*, 1914-19, p. 121.

<sup>3</sup> The only important distinction before the War was between Deficiency Advances and Ways and Means. O. Hultegger, *Die Bank von England*, pp. 83-84. The Treasury was empowered to borrow from the Bank of England or otherwise under the Appropriation Act. *Committee of Public Accounts, Report*, 1920, VI, pp. 899-906. [Hereafter reports of the Committees of Public Accounts are referred to as *C. P. A.*]

The Government did not publish the figures for the last week of the quarter, and hence the discrepancies may be explained by this omission. On this point, the figures for Other Advances are of some significance.

			OTHER ADVANCES	
			<i>Millions of £ Sterling</i>	
			<i>Total Change for Quarter</i>	<i>Change of Last Week</i>
1917	1st Quarter	Increase	503	183
		Decrease	427	91
	2nd "	Increase	302	119
		Decrease	305	102
	3rd "	Increase	243	102
		Decrease	237	123
	4th "	Increase	293	140
		Decrease	225	135
1918	1st Quarter	Increase	192	114
		Decrease	278	117
	2nd "	Increase	315	135
		Decrease	192	126
	3rd "	Increase	335	222
		Decrease	315	216
	4th "	Increase	459	282
		Decrease	340	257
1919	1st Quarter	Increase	457	333
		Decrease	457	259
	2nd "	Increase	774	447
		Decrease	445	375
	3rd "	Increase	468	170
		Decrease	849	125
	4th "	Increase	325	29
		Decrease	474	9

The large increases and decreases in Other Advances of the last week of each quarter are to be explained in part by the legal requirement that they be repaid in the quarter following that in which they are made; but the necessity of correcting figures at the end of the quarter is also to be considered. In one of its weekly finance statements, the Treasury announced that an increase in Ways and Means of 117 millions for the last week of 1916 included 77 millions required for the adjustment of American transactions. (The Government had probably borrowed on

Ways and Means to purchase securities to be sold in the United States.) According to the Treasury's weekly figures, there were increases of 183 millions and reductions of 91 millions in the last week of March, 1917. Was it probable that the Government would borrow so heavily during a week in which very large revenues from taxes were received, and when very large revenues were being received in payment for a large War loan?

Perhaps the first protest against Ways and Means financing emanated from the Bank of England. In a letter to the Treasury on November 26, 1914, the Governor pointed out that the inflation of credit was affecting the foreign exchanges adversely.<sup>4</sup> Criticism of the Treasury for its reliance on Ways and Means emanated from the press, from economists, and from the better official Committees, the Select Committees on National Expenditure of 1917, and the Cunliffe Committee in particular. But according to the published figures, advances on Ways and Means by the Bank of England made in the early days of the War were repaid by January, 1915, and there was virtually no recourse to Ways and Means advances from the Bank of England in 1915. Advances of approximately 70 millions were obtained in the last quarter of 1915; but these were probably departmental advances and were repaid by the end of the year. Advances from the Bank of England which were recorded as the traditional Ways and Means both by the Government and the Banks, did not become a significant factor on the money market until 1917. But there was a type of borrowing, which in its effects was as inflationary as the traditional Bank of England Ways and Means. The Bank of England advanced cash to the Dominion and Allied Governments. Although neither the Government nor the Bank of England itemized these advances as Ways and Means advances from the Bank of England, they were essentially Ways and Means advances.

<sup>4</sup> H. C. 123 (1914-16).

## CHAPTER II

### DEPARTMENT WAYS AND MEANS

THE Government have not revealed much information concerning Department Ways and Means. After 1915 the return of "investments in British Securities by Government Departments" was discontinued. According to the 1914 report, departments that had invested over 300 millions in Government securities carried but a few millions of Ways and Means on their books.<sup>1</sup> A study of the annual returns for 1919 of these departments reveals a negligible total of Ways and Means.<sup>2</sup> Two relatively unimportant departments invested a few millions in Ways and Means.<sup>3</sup> Perhaps the Depreciation Fund created by the Finance Act of 1917 was invested in Ways and Means; the law required that this fund be invested in Treasury bills or in advances to the Treasury.<sup>4</sup> However, this fund only amounted to approximately 10 millions.

It has been assumed by many that securities included in Department Ways and Means were the most important investments in the Currency Notes Account. This explanation is not without difficulties. At an early period of the War, no Department Ways and Means were outstanding although securities were included in the Currency Notes Account. An important Treasury official, Sir O. Niemeyer, appearing before the Select Committee on Public Accounts in 1922 and before the Colwyn Committee in 1925, said that the currency notes were secured primarily by Treasury bills.<sup>5</sup> Perhaps the Treasury bills referred to were included in departmental advances. According to the *Bankers' Magazine*, Treasury bills and temporary advances were the most important invest-

<sup>1</sup> H. C. 291 (1914).

<sup>2</sup> Not published 1915-1918.

<sup>3</sup> The following funds were important: Trustee and Savings Banks, Post Office Savings Banks, National Insurance Act (Part I) Fund, Official Trustee of Charitable Funds. H. C. 127, 128 (1919).

<sup>4</sup> *Consolidated Fund Abstract*, 1917-18.

<sup>5</sup> *C. P. A.*, 1922. H. C. 167 (1922), Qs. 2451-56. Committee on National Debt and Taxation (Colwyn). Paragraph 99 of the Report, and Qs. 8691-99, 8704.

ments in the Currency Notes Account, although some longer dated securities were included.<sup>6</sup> My conclusion is that the Treasury bills in the Currency Notes Account were included in Department Ways and Means; but all securities in the Currency Notes Account were not included in Department Ways and Means. Probably, large supplies of cash in Government Trading Accounts were transferred to the Treasury.

Fortunately, the Government began to publish figures for Department Ways and Means in 1919. Their fluctuations in the post-War period are of significance for both the War and post-War period. The following observations are made:

1. *Large seasonal movements.* Reductions occurred in the early months of the year, and increases in the last three months of the year. In 1921, the seasonal decline was especially large, and it was spread over a period of six months. (The seasonal movement of currency notes was of similar proportions.) Department Ways and Means were reduced from 211 to 113 millions in the course of the first half of the year. The seasonal expansion was also abnormally large and of long duration in 1921; but the peak was below that of the preceding year. The minimum and maximum for the years 1919 to 1924 were as follows:

	<i>Millions of £ Sterling</i>	
	Lowest	Highest
1919 (after April 12) .....	180	245
1920 .....	167	219
1921 .....	113	211
1922 .....	111	186
1923 .....	153	211
1924 .....	155	211

2. *Elasticity.* Fluctuations were rather large until the second quarter of 1922. In general, when Bank of England Ways and Means declined, Department Ways and Means also declined. But frequently reductions in the former were accompanied by increases in the latter; <sup>7</sup> what is, perhaps, a less harmful type of borrowing was thus substituted whenever possible. However, the departmental advances were not always available, as is apparent

<sup>6</sup> *B. M.*, 1921 (111), p. 513.

<sup>7</sup> In August, 1921, Bank of England Ways and Means were reduced and departmental advances were increased. The London *Economist* accounts for these changes by the increase in one of the departmental accounts, namely, the Reparation Account. *L. E.*, August 27, 1921.

from the large additions to Bank of England advances in April and May, 1921, when departmental advances were being repaid.

3. *Preparation for a War Loan.* The major fluctuations in the course of preparation for a large War loan, as well as during the period of actual transfers, were in Bank of England Ways and Means, and, to some extent, in Special Deposits. The market was prepared by large disbursements of cash that had been placed at the disposal of the Government by the Bank of England. The fluctuations in the departmental advances were of minor proportions; increases in departmental advances would not bring about the required ease in the money market.

1919	Ways and Means other than	Departmental
	<i>Millions of £ Sterling</i>	
May 31 .....	221	237
July 12 .....	703	227
August 2 .....	215	216
November 22 .....	19	182

These figures give an exaggerated impression of the increase in market resources from May to July. Part of the new resources made available was immediately converted into Special Deposits, and they are included in Ways and Means. Thus if 100 millions were thus converted the market received no additional cash from the creation of 200 millions of Ways and Means. (The problems relating to Special Deposits are discussed in a later chapter.) Keynes contends that the Government by borrowing on their Currency Notes Account, averted further recourse to Ways and Means advances and to the sales of Treasury bills. Cannan's reply that as a result of increased issues more accommodation was granted to the Government by increasing advances on Ways and Means and purchasing Treasury bills for the Currency Notes Account, is not adequate. The nature of the advance is of significance, not the name given to the advance.<sup>8</sup>

The Bank of England reveals the magnitude of advances to the Government outstanding for January 5 of each year. The Treasury, in its weekly statements, publishes the figures for Other Advances outstanding. If the former are deducted from

<sup>8</sup> E. Cannan, "Limitation of Currency or Credit," *Economic Journal*, 1924, pp. 56-57.

the latter, the remainder is the total of Department Ways and Means outstanding. I compare below the Department Ways and Means and the Securities in the Currency Notes Account:

<i>Millions of £ Sterling</i>		
	Securities in the Notes Account	Ways and Means (Department)
1915.....	20	0
1916.....	65	65
1917.....	118	114 <sup>9</sup>
1918.....	188	116
1919.....	300	203
1920.....	330	190
1921.....	330	219
1922.....	283	174
1923.....	253	211
1924.....	249	203
1925.....	244	195

Except for the year ending January 5, 1918, the movements are strikingly parallel. (In 1923, the fluctuations were in opposite directions, but they were not large.) A possible explanation of the stability of the Ways and Means (other than Bank of England) for 1918 is that the Government became concerned over the large Ways and Means advances outstanding and substituted some other security in the Currency Notes Account.

A valid conclusion is not easily drawn from a comparison of the seasonal increases in Department Ways and Means and the securities in the Currency Notes Account:

<i>Millions of £ Sterling—Seasonal Increases</i>		
	Departmental	Securities in Currency Notes Account
1919.....	58	10
1920.....	75	12
1921.....	80	14
1922.....	62	10
1923.....	53	18
1924.....	36	7

The largest decline occurred in the first half of 1921 when Department Ways and Means were reduced by 100 millions and securities in the Currency Notes Account by 50 millions. Seasonal reductions in departmental advances were larger than those of

<sup>9</sup> There is a possibility of an appreciable error here. Other Advances are given for January 6, and undischarged Bank of England Ways and Means for January 5. Unfortunately, preparations were being made for the flotation of the 1917 War Loan, and, hence, the results obtained by interpolating may not be closely accurate.

securities in the Currency Notes Account. In these years (1919-24) the correlation is marked; but it is evident that departmental advances include items of great importance in addition to securities in the Currency Notes Account.

## CHAPTER III

### SPECIAL DEPOSITS <sup>1</sup>

THIS subject is discussed at some length in the essay on Inflation. It repays investigation; for "Special Deposits" were a mechanism by which the Government and the Bank of England, by absorbing surplus cash, controlled the money market. During the inflationary years, Sterling was strengthened by the transfer of foreign balances to the Bank of England's Special Deposit Account. In 1919, the repayment of Special Deposits was a strong inflationary factor at home, and the withdrawals of balances by foreigners made the exchange problem more difficult for Great Britain.<sup>2</sup> The acceptance and payment of Special Deposits were a substitute for open market operations. Market rates were low during the War. Hence to assure the retention of foreign balances, it was necessary to bolster the rates. Higher rates were also necessary in order to discourage the consumption of bank credit by non-essential industries. It was necessary to retain the large foreign balances normally held in London as well as the additional balances accumulated as a result of the depreciation of Sterling and the peculiar monetary conditions of the War period.<sup>3</sup>

In November, 1915, the *Bankers' Magazine* commented on the heavy disbursements of the Government, which were reflected in the large balances at the disposal of foreign institutions in Lon-

<sup>1</sup> The London *Economist* wrote May 18, 1918, "Financial historians of the future in centuries to come, are likely to devise some highly interesting theories as to what really happened to our money market during the war if they make any attempt to work on the published figures." The occasion of this complaint was the accounting of the Bank of England for Special Deposits.

<sup>2</sup> Foreigners did not necessarily withdraw their balances. Joint stock banks offered favorable terms. In 1926, a Treasury official recommended the conversion of Treasury bills because (among other reasons) they were held in large part by foreigners. Committee on National Debt and Taxation, Qs. 8689-90. Chamberlain had made a similar point in 1919. 116 H. C., Cols. 1727-29. The Treasury continued to sell Treasury bills at high rates; but the public was not tempted by high rates on Special Deposits or Treasury bills.

<sup>3</sup> See Jaffé, *Das englische Bankwesen*, pp. 101, 243-44; *Annual Report of the Federal Reserve Board*, 1918, p. 22.

don. An official proposal was made that the Treasury borrow these balances for monthly periods at  $4\frac{1}{2}$  per cent.<sup>4</sup> (A Dutch writer inquired early in 1916 why investments of 400 million guildens of money in neutral countries available for short periods should yield but  $1\frac{1}{2}$  per cent at home when they might be invested in foreign Treasury bills.<sup>5</sup>) In 1915, the *Commercial and Financial Chronicle* commented on the introduction of some such scheme.<sup>6</sup> In March, 1916, the Government began to pay 5 per cent for balances of clearing bankers.<sup>7</sup> That foreign institutions were the first to be offered the privilege, merely reflects the seriousness of the exchange situation in the late months of 1915, and the early months of 1916.<sup>8</sup> In June, 1917, the rates were reduced to 4 per cent for clearing banks and  $3\frac{1}{2}$  per cent for others.<sup>9</sup> (America had come into the War, and hence the exchange problem was less troublesome; but the problem of excessive cash supplies at home still concerned the authorities.) Early in 1918, the rate was reduced for domestic institutions, and a large differential was established in favor of foreign institutions.<sup>10</sup> The change in policy is easily explained by the depreciation of the Allied exchanges in terms of neutral European exchanges in 1917-18.<sup>11</sup> The Bank of Netherlands justified its high rates in 1917-18 (among other reasons) on the grounds that foreign deposits in Netherlands might be retained.<sup>12</sup> More difficult to explain is the apparent voluntary relinquishment of the control of the money market, which re-

<sup>4</sup> *B. M.*, 1915 (100). November Review.

<sup>5</sup> Rentegevend Goud, *Economisch—Statistische Berichten*, March 15, 1916, pp. 145-46. Also see *Journal of the Institute of Bankers in South Africa*, 1915-16, pp. 90-91.

<sup>6</sup> *Commercial and Financial Chronicle*, October 23, 1915.

<sup>7</sup> *L. E.*, December 30, 1916.

<sup>8</sup> It is to be remembered that foreign countries from which England could draw Special Deposits were virtually limited to European neutrals and possibly Japan. The magnitude of Colonial and Dominion balances was determined by other factors. South America was shifting its balances to New York. Federal Reserve Foreign Bank: Hearings, Senate Banking and Currency Committee (65:2), 1918, pp. 220-21.

<sup>9</sup> *L. E.*, June 23, 1917.

<sup>10</sup> *Ibid.*, February 16, 1918. The *L. E.* had suggested a differential rate early in 1917. *Ibid.*, January 20, 1917.

<sup>11</sup> When Senator Owen became concerned over the depreciation of the American exchanges in 1918, he pointed out that banks in neutral countries held 97 millions of dollars on deposit in New York. He proposed a higher rate as a means of attracting additional balances. He also pointed out that Spanish exporters and banks were holding increasing deposits in both New York and London. Federal Reserve Foreign Bank: Hearings, Senate Banking and Currency Committee (65:2), 1918, pp. 8-9, 27.

<sup>12</sup> *Bank of Netherlands Annual Report*, 1917-18, p. 23.

sulted from the reduction of the rate on Special Deposits of domestic institutions. The authorities obtained a modicum of control in the latter part of 1916 and 1917 by accepting Special Deposits. But in 1918 the market rate fell to 3 per cent while the Bank rate remained at 5 per cent.<sup>13</sup> The explanation, in my opinion, is that control was retained by dictating the nature and distribution of bank advances and by virtually forcing the banks to put all available resources into war securities directly or indirectly, or into industries closely connected with the War. By allowing the banks to substitute investments yielding 5 per cent or more for Special Deposits yielding 3 or 4 per cent, the Government were able to limit the expansion of Ways and Means advances. (Of course the resulting reduction in Ways and Means was of significance primarily for window dressing purposes.) Moreover, a reduction of the market rate made possible sales of war securities at more favorable prices.

In July, 1919, the Bank of England discontinued the acceptance of Special Deposits from domestic institutions; and in October, it withdrew the offer to accept interest bearing deposits from outside institutions.<sup>14</sup> The differential rate in favor of France, Italy, and Belgium had been discontinued early in the year. Concerned over the depreciation of the exchanges, the authorities hesitated to repay Special Deposits of institutions of other foreign countries.<sup>15</sup> However, the transfer of French balances was just as damaging as the transfer of Danish balances. The depreciation of the franc should have made little difference.

<sup>13</sup> See the interesting chart presented before the Joint Committee on Agricultural Inquiry. In the latter part of the War and the early post-War period, the market rate in Great Britain was from 1 to 2 per cent below the Bank rate; in New York, the market rate was higher. No doubt, the large foreign balances available in London tended to depress the market rate. Joint Agricultural Inquiry: Hearings (67:1), 1921, II, p. 559.

<sup>14</sup> *L. E.*, July 26, 1919; October 25, 1919.

<sup>15</sup> The repayment of Special Deposits did not necessarily result in a withdrawal of balances from Great Britain. Joint stock banks now offered advantageous terms to those holding surplus cash. Late in 1920, Spanish institutions were still finding it profitable to keep these balances in London. *Overseas Trade Report on Spain*, December, 1920, p. 14. The Spanish representative at the Brussels Conference estimated that Spanish banks had balances of from £20 to £30 million in London in September, 1920. This cash had been received in payment for Spanish exports. The British paid 6 per cent on these deposits. *Brussels Conference*, 1920, Verbatim Record, p. 81. The Bank of Netherlands accumulated balances and gold in the United States and Great Britain during the War with a view to purchasing foreign bills. *Bank of Netherlands*, 1919-20, p. 24.

In its annual statements to its shareholders, the British Bank of Northern Commerce, an institution transacting business in London but drawing resources from the Scandinavian countries, revealed the nature and extent of its participation in the development of Special Deposits.<sup>16</sup> Money at Call and Short Notice consisted mainly of deposits with the Bank of England.

<i>Millions of £ Sterling</i>		
	Money at Call and Short Notice	Treasury Bills
1917.....	.825	...
1918.....	7.73	12.2
1919.....	15.00	18

The expansion of Special Deposits was marked, although the increase in 1919 was at the expense of investments in Treasury bills.

An indication of the large holdings of foreign assets in London is given in the banking reports of foreign countries. The Guaranty Trust Company of New York had 25 million dollars on deposit in London in 1918.<sup>17</sup> According to a semi-official report, Swiss Banks deposited 100 million francs with the Bank of England in 1918.<sup>18</sup> 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:<sup>19</sup>

<i>Millions of Kr.</i>		
July,	1914.....	13.
End of	1916.....	190.
“ “	1918.....	340.
“ “	1919.....	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.<sup>20</sup> The excess of foreign assets over foreign liabilities of Swedish banks was as follows:<sup>21</sup>

<sup>16</sup> *B. M.*, 1919 (108), pp. 50-51.

<sup>17</sup> Federal Reserve Foreign Bank: Hearings, Senate Banking and Currency Committee (65:2), 1918, p. 207.

<sup>18</sup> "Das Schweizerischen Bankwesen im Jahre 1919." *Journal de Statistique Suisse*, 1920, p. 439. The large British banks agreed to draw and accept bills for a total of 100 million francs, which the British Government promised to meet in Switzerland. Treasury Minute, April 17, 1918, Cd. 9049 (1918).

<sup>19</sup> From *Meddelelser Fra Det Statistiske Centralbyraa*.

<sup>20</sup> "Finansstatistik Undersøkelse," *Statistiske Meddelelser*, May, 1919, pp. 10-11.

<sup>21</sup> From *Årbok Sveriges Riksbank and Ekonomisk Tidskrift*, *passim*.

*Millions of Kr.*

1914.....	98.
1916.....	349.
1917.....	486.
1918.....	484.
1919.....	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.<sup>22</sup> However, the South African Government accumulated large balances in London which were deposited with the Imperial Treasury.<sup>23</sup> 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.<sup>24</sup> 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.<sup>25</sup>

It is not true, as has been assumed frequently, that Special Deposits were not recorded on the books of the Bank of England.<sup>26</sup> The procedure was regular. As Special Deposits were accepted on behalf of the Government, the Bank pledged an equal amount of its portfolio. The acceptance of, say, 100 millions of Special Deposits would result, as a rule, in an equal reduction of the asset, P.S., and of the liability, O.D. It would be more accurate to say that it was very difficult to deduce the quantity of Special Deposits outstanding from the accounts of the Bank of England. Equal additions of Ways and Means advances to the Government and of Special Deposits would result in no net change in P.S. on the books of the Bank.<sup>27</sup> Cannan points out that the Bank of England collected cash from the other banks

<sup>22</sup> Bank of New South Wales, Meeting of November 27, 1914, *L. E.*, January 16, 1915; English, Scottish and Australian Bank, Meeting of November 7, 1917, *L. E.*, November 10, 1917; Bank of Montreal, Meeting of December 3, 1917, *L. E.*, January 12, 1918; Union Bank of Australia, Meeting of January 28, 1918, *L. E.*, February 2, 1918; Australian Banks, *L. E.*, August 10, 1918.

<sup>23</sup> South Africa, Select Committee on Public Accounts, 1920, Testimony of Secretary for Finance, Q. 131.

<sup>24</sup> Review of Canadian Banking in 1918, *Monetary Times* (Toronto), January 3, 1919.

<sup>25</sup> *Banco de la Nacion*, 1918 and 1919, *passim*.

<sup>26</sup> *L. E.*, banking number, May 18, 1918.

<sup>27</sup> The *Bankers' Magazine* made an error when it wrote that the full effect of a reduction of Ways and Means and Treasury bills had not been felt because no Special Deposits had been received. The writer did not realize that the market was deprived of funds by an increase in Special Deposits. *B. M.* 1919 (108), p. 6.

which it placed at the disposal of the Government; but these transactions were not reflected in an increase in O.D. and P.S.<sup>28</sup> Not only was there no increase, but there actually was a reduction in the magnitude of these items. The reduction in O.D. was only temporary, however. The procedure was as follows: 1. Bank of England accepts Special Deposits: O.D. and P.S. decline. 2. The Government accept Special Deposits: P.D. and P.S. increase. 3. The Government disburse the proceeds: P.D. decline and O.D. increase.

Macrosty makes a few interesting comments on this subject. He is struck by the fact that the total assets on the books of the Bank of England were 175 millions on June 25, 1919, although the total advances from the Bank of England were 529 millions on June 30. He accounts for the discrepancy by pointing to the large amount of Special Deposits outstanding. Macrosty contends that the banks were cajoled into converting Treasury bills into temporary advances.<sup>29</sup> He is not completely accurate here: In anticipation of the Victory Loan, the Government borrowed large sums from the Bank of England. This cash was transferred to the banks in the course of time, and the latter converted it into Special Deposits in anticipation of the large transfers necessary to pay for purchases of the new war loan.

The Bank of England accepted Special Deposits from 1916 to 1919, a period in which its O.D. and P.D., and O.S. and P.S. remained stable, remarkably so, if we consider the large monetary transactions of the period. In a period of three months in 1918, the public subscribed to 300 millions of war bonds and the Treasury repaid 80 millions of advances from the Bank of England; but the P.S. of the Bank were reduced by but 11 millions. When the Treasury borrowed to meet interest payments, the potential addition to P.S. of the Bank was not made, because Special Deposits were accepted; when the Treasury deprived the market of large supplies of cash, Special Deposits were withdrawn.

The market obtained large cash resources in the early months of the War when the Bank of England rediscounted pre-mora-

<sup>28</sup> E. Cannan, "Recent Memoirs on Currency Policy," *Economic Journal*, 1922, pp. 62.

<sup>29</sup> H. W. Macrosty, "Inflation and Deflation in the United States and the United Kingdom, 1919-23," *R. S. J.*, 1927, pp. 73-74.

torium bills, and banks consumed part of their unemployed resources in the purchase of Treasury bills. Perhaps the Government would have continued to rely on this method of absorbing the surplus cash had not the happy system of Special Deposits been conceived. But the banks may not have been willing to deviate too far from traditional lines, and hence may have refused to purchase large supplies of Treasury bills.

Did the Government pay interest on Special Deposits? The Bank borrowed balances from the market in the form of Special Deposits, and the Bank made its usual advances to the Government. Hence, it might be said that the Bank of England paid the interest in the first instance, and the Government reimbursed the Bank in so far as Ways and Means advances were made to the Government. The Bank intermittently made profits. Thus the Treasury paid from  $4\frac{1}{2}$  to 5 per cent for advances while the Bank paid only 3 per cent to domestic institutions and  $4\frac{1}{2}$  per cent to foreign institutions in 1918, and approximately 4 per cent to both in 1917. However, the Bank of England accumulated unemployed balances in so far as Special Deposits at any moment were in excess of advances to the Government.

Cannan and others have surmised that British banks classified Special Deposits as Money at Call and Short Notice.<sup>30</sup> That the increase in this account in 1916 was from 262 to 369 millions, is evidence of the correctness of Cannan's guess. The *Bankers' Magazine* accounted for a reduction of Money at Call and Short Notice, during 1919, by a withdrawal of Special Deposits.<sup>31</sup> In addresses to their shareholders, the chairmen of two of the large London banks revealed that deposits with the Bank of England were included as Money at Call and Short Notice.<sup>32</sup> Pigou comments on a rumor that banks included Special Deposits with their cash.<sup>33</sup> There are some grounds for such suspicions. Sir Edward Holden, the Chairman of the London, Joint City, and Midland, accounted for a reduction of cash in 1918 by the repayment of

<sup>30</sup> E. Cannan, "Recent Memoirs on Currency Policy," *Economic Journal*, 1922, p. 62.

<sup>31</sup> *B. M.*, 1920 (110), p. 267.

<sup>32</sup> *Ibid.*, 1919 (107), p. 315.

<sup>33</sup> A. C. Pigou, *Political Economy of War*, p. 99.

advances made to the Government through the Bank of England.<sup>34</sup> It would be surprising if some banks did not include Special Deposits as cash, for they were unlike the usual balances with the Bank of England only in that they were interest-paying deposits, subject to three days' notice before withdrawal.

The total of Special Deposits outstanding has never been revealed. In October, 1919, the *Bankers' Magazine* estimated that the total deposits of foreign institutions had reached 150 millions.<sup>35</sup> Commenting on the condition of the London, Joint City and Midland Bank in the autumn of 1918, Sir Edward Holden revealed that the Bank had invested 40 millions in Government securities and was lending an additional 50 millions to the Government through the Bank of England and otherwise.<sup>36</sup> Perhaps the advances designated by "otherwise" were the contribution of the Midland Bank to the syndicated borrowing of British banks from American banks before the United States entered the War. That item, however, was but a few million pounds. Considering that the rate on Special Deposits had been reduced to 3 per cent, I find it difficult to believe that the Midland had invested so heavily in Special Deposits. If the other banks invested an equal part of their resources in Special Deposits, the total outstanding was very large.

When the Bank of England made large advances to the Government, the banks obtained additional cash which they were able to convert in part into Special Deposits. P.S. on the books of the Bank of England were thus reduced; for in accepting Special Deposits, the Bank pledged P.S. A rough approximation of the total of Special Deposits outstanding might be obtained by subtracting the total of P.S. on the books of the Bank of England from the total of Bank of England advances. Unfortunately, the Government did not distinguish Department from Bank of England Ways and Means before April, 1919. However, the Bank of England published an annual statement of Advances on Exchequer Bills. Some allowance should be made for holdings of P.S. as investments by the Bank. On the basis of the amount of

<sup>34</sup> *L. E.*, February 1, 1919.

<sup>35</sup> *B. M.*, 1919 (110), p. 267.

<sup>36</sup> *L. E.*, September 13, 1918.

P.S. held by the Bank when no advances from the Bank of England were outstanding, I estimate that an allowance of 30-40 millions is adequate.

An estimate of Special Deposits outstanding early in January is given below. The method employed is as follows. An allowance is made for P.S. held as investments. It is also assumed that when there are 100 millions of Ways and Means advances outstanding, there should be at least 100 millions of P.S. on the books of the Bank of England in addition to the securities held as investments. Hence in Column 4 is given the total of P.S. on the assumption that no Special Deposits are outstanding. The total of Special Deposits is obtained by taking the difference between P.S. actually held (Column 2) and P.S. that would have been held had there been no Special Deposits outstanding. If 100 millions of Bank of England Ways and Means (and no Special Deposits or P.S. as investments) were outstanding, there would be 100 millions of P.S. on the books of the Bank of England. If 50 millions were then deposited with the Bank of England and transferred to the Treasury, the Bank of England would pledge 50 millions of P.S. and the Government would deposit 50 millions of Exchequer bills with the Bank. Therefore Ways and Means would now be at 150 millions and P.S. would remain at 100 millions.

Undoubtedly, Special Deposits were included in the advances of the Bank of England, which are designated by the Bank in its annual statement as Exchequer Bills Purchased. That is evident from the very rapid decline of Ways and Means advances in 1919 when Special Deposits were withdrawn. The rapid increases in advances of the Bank of England to the Government from 1917 to 1919 are explicable in part on the same grounds. It is apparent from the table given below that the importance of financing by traditional Ways and Means has been exaggerated; and that a deflationary type of Ways and Means, i.e., Special Deposits, were in magnitude larger than the inflationary type of advance from the Bank of England. In fact, P.S. were at so low a figure that the Bank early in 1917 had to use O.S. rather than P.S. as collateral against Special Deposits; and allowance is made for the withdrawal of O.S. in the estimate for 1917. The estimate for 1917 may be less accurate than the other estimates because an interpo-

lation is necessary in the midst of a period during which preparations were being made for the 1917 War Loan.

I present below a similar table for the weekly periods beginning April 12, 1919, when departmental advances were first distinguished. The important part played by Special Deposits in the rather abnormal financial period of 1919, is apparent from this table. As the Government borrowed from the Bank in order to prepare the market for the necessary transfers involved in the flotation of the Victory Loan, the market received additional cash, which it converted into Special Deposits; and when payments were made on the War Loan, the banks withdrew Special Deposits. In part, the reduction in Special Deposits is to be explained by changes in policy; but the flotation of the loan resulted in large withdrawals. The inflationary movement of 1919 was stimulated by the repayment of Special Deposits. With more cash at their disposal, the banks were less inclined to resist the pressure for more accommodation. One may argue that the continuation of the acceptance of Special Deposits would have been a deflationary factor.

On January 5, 1917, Exchequer bills purchased by the Bank of England totalled 46 millions. Special Deposits were probably in excess of that figure. The discrepancy is probably explained by the use of O.S. for collateral against Special Deposits and the excess of Special Deposits over the amount of these deposits put at the disposal of the Treasury. (Adequate supplies of P.S. were not available.) In the second quarter of 1916, P.S. remained relatively stable; but O.S. declined from 96 to 64 millions for the week ending June 7. The decline is to be explained by the increase of Special Deposits. In accepting them, the Bank of England was able to shift part of the responsibility for short-term financing of the Government to private institutions.

The important part played by Special Deposits is well illustrated by the history of the War Loan of 1917. In six weeks the market obtained 447 millions of cash from the redemption of Treasury bills and from the disbursements of the proceeds of advances of the Bank of England to the Treasury. Compared to the large borrowings of the Treasury from the Bank and the large transfers necessitated by the flotation of the Loan, the increases in

	1	2	3	4	5
Millions of £ Sterling	Exchequer Bills Purchased by Bank of England	Public Securities Actually Held by the Bank of England	Public Securities for Investment Purposes	Public Securities on the Assumption of No Special Deposits Outstanding	Special Deposits
January 5					
1916	0	33	33	33	0
1917	46	79	40*	79 or more	65†
1918	150	65	40	190	125
1919	246	94	30	276	182

\* In 1915, no advances from the Bank of England were outstanding. (Advances to the Government for the Allies and Dominions were reflected in increases in O. S.) P. S. fluctuated between 15 and 51 millions in the first half of the year, and from 33 to 51 millions in the second half.

† This figure is arrived at by allowing for a reduction in O. S. which were pledged for Special Deposits from December, 1916 to January 10, 1917. It is not clear why P. S. were not pledged as usual. The probable explanation is that P. S. were not available. Moreover, O. S. had been pledged by the British Government for advances to the Allies and Dominions. Perhaps it was anticipated that as the proceeds from the War Loan were received, the Government would repay Ways and Means advances of the Bank of England, and hence P. S. might not be available.

*1919 Special Deposits*      *Millions of £ Sterling*

	Bank of England Advances	Public* Securities	Public Securities for Investment Purposes	Public Securities on the Assumption of No Special Deposits	Special Deposits
1919					
April 12	227	58	30	257	199
May 3	234	52	30	264	212
May 31	221	55	30	251	196
June 7	338	60	30	368	308
June 14	410	57	30	440	383
June 21	458	53	30	488	435
June 30	529	90	30	559	469
July 12	703	98	30	733	635
July 19	502	47	30	532	485
July 26	336	47	30	366	319
August 2	215	39	30	245	206
September 6	178	30	30	208	178
September 13	158	21	20	178	157
September 20	203	22	20	223	201
October 11	176	47	20	196	149
October 18	125	53	20	145	92
October 25	62	68	20	82	14
November 1	45	51	20	65	14
1920					
January 10	18	58	40	58	0
February 7	26	47	21	47	0
March 6	18	47	29	47	0

\* Bank of England figures are interpolated to day of Government return.

P.S. and O.S. were moderate indeed. Although 281 millions additional Ways and Means were created, the maximum increase in P.S. was but 150 millions. The difference is to be explained by the creation of Special Deposits.

In four weeks, the Government received 733 millions in payment for the War Loan. But the reduction in O.D. and P.S. was but 107 and 188 millions, and the increase in O.S. but 158 millions. The withdrawal of Special Deposits explains the moderate decline in O.D. and P.S., and the moderate increase in O.S.

Special Deposits were of great importance in 1918. In the first few months of 1918, the Treasury disposed of large blocs of war bonds and used the proceeds in part to repay 78 millions of Ways and Means advances. But P.S. increased. Of course the explanation is that the market withdrew its Special Deposits to moderate the disturbance caused by the payments to the Government for these securities. In the last nine months of the year, Ways and Means and P.S. increased by 262 and 12 millions respectively. Although in part the increase in the former was in departmental advances, the discrepancy is largely explained by the increase of Special Deposits. Advances from the Bank of England totalled 150 millions on January 5, 1918, considerably less in March 1918, and 246 millions on January 5, 1919. In the early part of the year, the withdrawal of Special Deposits was the method by which the market obtained the cash to make the necessary payments for war securities and taxes; in the latter part of the year, additions to Special Deposits absorbed surplus supplies of cash.

In 1919, there were frequent complaints of scarcity. However, even during the course of the transference of 400 millions to the Government in payment for the Victory Loans, the increase in O.S. was most moderate. When Special Deposits were repaid in the post-War period, the excessive cash made available contributed to the unhealthy expansion of 1919-20.<sup>37</sup>

By accepting Special Deposits, the authorities succeeded in bolstering the market rate and thus attracted foreign deposits and discouraged unproductive uses of bank credit. The market was

<sup>37</sup> Chamberlain commented on a reduction of Ways and Means advances of 212 millions from March 31 to October 25, which had been made for the most part by the Bank of England and other banks. 120 H. C., Cols. 751-52.

deprived of 200 millions of cash, or more than the equivalent of the average banking reserves of the United Kingdom during the War. The deflationary effects of Special Deposits were offset by the inflationary effects of other Ways and Means financing. The higher rates that resulted from the introduction of Special Deposits also enabled other banks to attract and retain large foreign deposits. In the meeting of October 23, 1918, the Chairman of the Anglo-South American Bank said, "Our own accounts bear testimony to the fact that very important sums have during the war accumulated here on behalf of neutral creditors for goods supplied, and have been left here on deposit, earning good interest pending a recovery in the currency value of the £, now fast approaching pre-War levels. Simultaneously considerable sums have been remitted here from neutral countries in Europe, as well as The Treasury was generally prepared to sell unlimited supplies of Treasury bills; hence bills might be substituted for Special Deposits.

<sup>38</sup> *L. E.*, October 26, 1918.

## CHAPTER IV

### WAYS AND MEANS AND INFLATION <sup>1</sup>

THE advances other than Special Deposits included under advances from the Bank of England were appreciably smaller than Special Deposits in the latter part of the War. The surplus cash made available by the creation of the former was taken off the market by the acceptance of the latter; hence, it seems that the net effects of advances from the Bank of England to the Government from 1916 to 1918 were distinctly deflationary. That is, the cash resources of the money market were reduced. If the advances to the British Government for the Allies and Dominions are included in Ways and Means advances from the Bank of England, this conclusion would have to be modified. But more important is the consideration that the creation of orthodox Ways and Means resulted in an increase of cash which remained outstanding until the advance was repaid; the creation of a Special Deposit deprived the market of cash only until it was disbursed by the Government.

The Government borrowed little from the Bank in 1916 with the exception of the large advances made in the last week of the year in anticipation of the War Loan of 1917. Of course, the

<sup>1</sup> The study of the inflationary effects of Ways and Means is made difficult by the inadequacy of official information. In the first quarter of 1915, all Other Advances were repaid; in the corresponding period of 1916, the net reduction (absolute) was even larger. Only Department Ways and Means remained outstanding. Treasury bills were being issued at an alarming rate. It seems improbable that the Government would substitute bills disposed of to the public for departmental advances, unless there were no alternatives. If the public departments demanded repayment of their advances, it is unlikely that their advances consisted of securities placed in the Notes Account to the exclusion of other assets. It is also possible that the Government preferred to swamp the market with Treasury bills rather than to maintain Ways and Means at a high level, merely because high totals for Ways and Means aroused fears. The Government might have solved this problem by distinguishing departmental advances from the more harmful form of Ways and Means, and by explaining that the former were not inflationary. Perhaps the Government substituted Treasury bills for departmental advances in the Currency Notes Account and thus issued Treasury bills without relying on the money market; the advantage was an increase of confidence resulting from the reduction of Ways and Means outstanding.

		<i>Millions of £ Sterling</i>		
		Advances from the Bank of England (Includes Special Deposits)	Advances minus Special Deposits	Special Deposits
January 5	1916 . . . .	0	0	0
	1917 . . . .	46	-19	65
	1918 . . . .	150	25	125
	1919 . . . .	246	64	182

Government borrowed on behalf of the Dominion and Allied Governments throughout the year; but these advances were reflected in the magnitude of O.S. The stability in P.S. was remarkable (advances to the Government are normally reflected in increases in P.S.):

P.S. at Bank of England (Banking Department)

*Millions of £ Sterling*

1916	32.8	first	14	weeks
	33.2	next	7	"
	38.2	"		week
	42.2	"	29	weeks
	57.2	week		ending December 27
1916-17.	62.2	"	"	January 3, 1917
1917	120.7	"	"	" 10, 1917

The P.S. in the first 51 weeks were probably almost exclusively Treasury bills purchased by the Bank. Perhaps P.S. were used as collateral against Special Deposits and thus were maintained at a low figure; but in the light of such stability, that is not likely. The Bank was apparently pledging O.S. against Special Deposits, which were deposited against advances to the Allies and Dominions, and, hence, were essentially P.S. The Bank of England advanced 46 millions on Exchequer bills to the Government from January 5, 1916, to January 5, 1917, and was repaid 19 millions in the course of the year.

The resources of the Bank of England at the disposal of the market were being reduced steadily in 1915 and 1916 by the repayment of the advances made in the early months of the War and later by the conversion of cash into Special Deposits. The important inflationary factor was the large advances to the Allies and Dominions. But in 1917 the increase in direct advances from the Bank to the Treasury was large. The important advances that had been made in anticipation of the new War Loan early in 1917 were not entirely repaid from its proceeds, and thereafter

advances from the Bank of England remained at a higher level. The Treasury apparently had exaggerated hopes, for although Treasury bills were reduced rapidly, Other Advances increased from 57 millions on December 23, 1916, to 420 millions on February 10, 1917, and then fell to a low point of 124 millions on March 24, and rose to 216 millions on March 31. But if the increase in Other Advances from December 23, 1916, to January 5, 1918 was 209 millions, it should also be remembered that the market was deprived of 200 millions or thereabouts by additions to Department Ways and Means and Special Deposits. In 1918 the inflationary effects of Ways and Means financing were no greater; for an increase of approximately 185 millions was offset by an addition of 176 millions to Special Deposits and Department Ways and Means. I assume additions to Department Ways and Means were deflationary. In so far as they were advances by the Currency Notes Account to the Government, the deflationary effects are easily visualized. Once more, it is important to point out, however, that the market regains its cash when the Treasury disburses the cash received through Special Deposits. Here again it is necessary to point out that I am talking in terms of monetary resources, a reduction of which is considered deflationary.

On July 5, 1917, March 17, 1919, and September 22, 1919, the Bank of England protested against continued financing by Ways and Means. Undoubtedly, the first protest was called forth by the unfortunate aftermath of the 1917 Loan. According to the weekly Finance Accounts, the increase in Ways and Means advances was from 158 to 203 millions for the 10 days ending September 30, 1919. Perhaps the Bank was annoyed by a large increase in the wake of rapid declines in July and August, 1919. The protest was strong: "The Court, however, desires us to draw your attention both to the amount and to the duration of these advances, which for the past two years have in effect to a large extent partaken of the nature of a continuous loan, and again to express the earnest hope that such loans may hereafter be obtained from the public, and advances from the Bank once more confined to the temporary requirements of the Treasury."

## SUMMARY OF BOOK II

THE more important conclusions of this Book follow:

1. Advances from the Bank of England to the Allies and Dominions were made on behalf of the British Government. However, they were not accounted for in the manner of Ways and Means, and were reflected in increases in O.S. instead of P.S. On occasions, these advances were of appreciable proportions; however, with the exception of the advances to the Bank of France, they were of a temporary nature. But in the early years of the War, new advances tended to accumulate when old ones were repaid out of the proceeds of War loans. (This episode is discussed more fully in an essay on Inflation.)

2. Department Ways and Means were in large part securities in the Currency Notes Account, which fact is apparent from a comparison of the yearly movements and the seasonal fluctuations in both variables. The large amounts of Treasury bills used as security against currency notes were probably a type of departmental advance.

3. The introduction of Special Deposits prevented a dangerous ease in the money market and was a source of strength for Sterling, because foreign balances were attracted and retained. The changing attitude toward foreign balances was reflected in the changing fortune of Sterling. In 1919, the repayment of Special Deposits was a source of weakness for Sterling both at home and abroad.

4. War Finance required large transfers of cash from the Government to the market and from the market to the Government. The Bank of England prepared for these disturbances by advancing large sums of money to the Government, which the latter promptly disbursed. But the increases in the balances and borrowings at the Bank by the Treasury and the market were of surprisingly small proportions. The explanation is that the market converted its cash into Special Deposits when the Treasury dis-

bursed much cash; and by withdrawing Special Deposits, the market avoided the necessity of borrowing heavily from the Bank of England when payments were made for subscriptions to the War loans.

5. An estimate is made of Special Deposits outstanding for the years 1916-19. The figures are obtained on the basis of (1) the Exchequer bills purchased by the Bank of England; (2) P.S. revealed in its weekly statements; (3) P.S. held as investments by the Bank; and (4) comparison between P.S. actually held with P. S. that would have been held had no Special Deposits been outstanding. The acceptance of a Special Deposit is reflected by a reduction of O.D. and P.S.

6. The inflationary effects of Ways and Means financing have been exaggerated by writers. Advances from the Bank of England were moderate in the early years of the War. In the latter part of the War, Special Deposits and Department Ways and Means were deflationary forces that at least in large part offset the inflation caused by the orthodox method of borrowing from the Bank of England. But advances to the Allies and Dominions from 1914 to 1916 were large and in their effects were as inflationary as traditional Ways and Means though they were not included with Ways and Means. True enough, these advances were generally temporary; but until the Government were able to reimburse the Bank out of the proceeds of Votes of Credit, the market retained additional resources; and the Government were in debt to the Bank for appreciable sums advanced to the Allies and Dominions during most of the time in the years 1914-16. It is to be recalled that the issue and repayment of Treasury bills had effects similar to the acceptance and payment of Special Deposits.

## Book III

# CONTROL OF PRICES AND SUPPLIES

## CHAPTER I

### INTRODUCTION

A CONSIDERATION of prices and supplies is necessary for a satisfactory understanding of the price history of 1914 to 1919. The object of official interference was to eliminate unnecessary profits and to assure the country of adequate supplies at reasonable prices. The authorities in turn controlled the profits of middlemen and producers by negotiation, inspected books and determined prices according to the costs of production of the units under consideration and—in some instances—according to the higher costs of production then current, and finally nationalized important industries or assumed control of the distribution of important commodities. An inspection of books would be made against opposition only if the Government were prepared to requisition.<sup>1</sup> Where supplies were for the most part obtainable abroad, control of the distributive profits in Great Britain alone was possible. The Government learned from experience that middlemen, strategically located, might obtain unreasonable profits if control were not introduced at every stage.

The Government made large savings as a result of their control of prices and supplies. Undoubtedly, the public was left with smaller supplies because the Army and Navy and other official organizations had prior liens on essential supplies. But a large part of the total purchasing power was diverted to the Government,

<sup>1</sup> Lloyd presents an excellent legal study of price control. In particular, he points out that the early requisitions were made under Section 115 of the Army Act. The latter was soon superseded by *D.O.R.R.* 2B, and by 30A and 2E. The latter two were especially important. Manufacturers were not obliged to submit their books under the *D.O.R.R.*, but they found it convenient to do so rather than yield to the jurisdiction of the courts. E. M. H. Lloyd, *Experiments in State Control*, especially pp. 51-64.

and, hence, the purchasing power and commodities available for private purchases were reduced. The net effect on prices of these official purchases depends upon the manner in which the Treasury obtained the necessary Sterling. Was it taken from the public or was it created *ad hoc*? The authorities introduced discriminatory prices for some commodities, and sold at low prices for military or other essential purposes.

In one domain, official interference was costly. Subsidies were offered for the purchase of bread, sugar, and iron and steel. Prices on these markets were therefore fictitious. However, the general price level may not have been seriously affected because purchasing power saved on these markets was diverted to other markets. But disbursements on other markets were probably reduced as a result of the depressed prices and restricted sales on subsidized markets. A relevant question is, was the amount of money spent on each of these markets reduced. Also of significance for this problem is the question of the manner in which the Treasury raised the money necessary to finance these subsidies.

The Government did not always seem to be aware that the problem of the control of the prices of many commodities was a different problem from that of the control of individual commodities. It may be contended that if price control is successful, prices are reduced. That holds even if we allow that the British Government perceived the necessity for encouraging production by offering a fair price. But a general depression of prices brought on by control does not seem possible if we consider that purchasing power saved on one market on account of price reduction and control of distribution, is diverted to other markets. However, supplies were deficient, and as the Government obtained control of more and more commodities, the possibility of expending this surplus of purchasing power on commodity markets became more and more difficult. Bread is an important exception. The policy of the Government was to allow unrestricted purchases of bread.<sup>2</sup> It becomes apparent why control necessarily spreads to less and less important markets; for as the free markets become less numerous, the pressure of the surplus purchasing power becomes

<sup>2</sup> Sir W. Beveridge, *British Food Control*, pp. 81-82; F. H. Coler, *A State Trading Adventure*, p. 118.

greater. Rents were also depressed. Wage earners may refuse to accept large reductions in real wages; but they accept a reduction in their standard of living when they are compelled to find alternative uses of their money, such as hoarding or investing in Government securities, or purchasing commodities merely because they are available. In the post-War period they may have an opportunity to disburse their hoards. The phenomenal success of the Government's borrowing policy in 1917 and 1918 may be explained by the restrictions on consumption.

Authorities can choose between competitive prices and high excess profits duties, and low (controlled) prices. I agree with Pigou that justice to the poor demanded the acceptance of the latter alternative. Cannan is not justified in his contention that the advocates of control assumed that prices were determined by cost of production rather than by supply and demand. The peculiar conditions of supply and demand placed middlemen and producers in an advantageous position, and hence the authorities attempted to bring prices down to costs. They attempt to solve the problem of deficient supplies by economy of distribution and, wherever possible, encouraging production and purchases from abroad. In the troublesome year, 1917, Clynes, the Food Minister, was inclined to put too much emphasis on profits, prices and middlemen and to neglect the all important question of costs and supplies. But the dangerous situation in 1918 brought the authorities to their senses.

In the early period of the War, the officials were inclined to point out the futility of control on the grounds that prices were determined by world conditions and that the prices of manufactured goods depended on the prices of raw materials. By the early part of 1916, the pressure to introduce a comprehensive system of interference had become irresistible. The Government had already made much progress in controlling prices by negotiation. The authorities began to set the prices of iron, steel and coke, with the result that in the second half of 1916, the prices of the mineral group remained relatively steady; but on that account, other prices fluctuated more than ever. Moreover, the reduction of shipping tonnage made necessary the restriction of imports of bulky materials and luxuries. In 1916-17, conditions became so

unsatisfactory that the Government were forced to extend control. As the prices of imported and non-controlled commodities rose, control spread rapidly. The feature of the year 1917 was the thorough and comprehensive manner in which the Government assumed the responsibility for the distribution of supplies. In 1918, similar measures were taken for the conservation of food. Textiles alone of important classes of commodities apparently escaped comprehensive measures of control; and the effects were reflected in the very rapid rise in the price of clothing. The increase of prices in the last eighteen months of the War was at a more moderate rate than in the previous two years in spite of the fact that the Government were more concerned over the scarcity of supplies. But the price level should be considered in relation to the restricted supplies, compulsory rationing and enforced hoarding of cash. Perhaps the decline in the rate of depreciation of money was fictitious. That prices rose in 1919 with the relaxation of control, was evidence of the artificial level of prices in 1918. The public now expended their hoards with a vengeance. In addition, of course, the post-War expansion of banks had an unfavorable effect on prices.

## CHAPTER II

### AN ANALYSIS OF CONTROL <sup>1</sup>

To understand the price movements of the War period, a consideration of the development, effectiveness, and significance of maximum prices is necessary.<sup>2</sup> The Government requisitioned ships at blue book rates and regulated the price of coal and sugar at an early stage of the War; but they made no attempt to institute a comprehensive system of control until 1916.

The policy of the British Government was not to fix prices below the cost of production in the manner enacted by the French Jacobins, but rather, to prevent the acquisition of excessive profits from trading in abnormal markets.<sup>3</sup> To discourage the production of particular commodities, the Food Ministry occasionally set prices below the cost of production. Thus because the production of cheese and butter required milk which was scarce and

<sup>1</sup> The two most important sources of information are the *Parliamentary Debates* and the *Board of Trade Journal*. The laws and administrative regulations relating to the control of prices and supplies were published in the latter. Frequently, the reports of the Select Committees on Public Accounts, on National Expenditures, and the reports of the Comptroller and Auditor-General throw some light on the subject. An inspection of Trade and Navigation Accounts reveals the necessity of control. The *Food Supply Manual*, the *Manual of Emergency Legislation*, *Defense of the Realm Regulations*, *Vote of Credit Appropriation Accounts* (Naval and Military Operations and Other Expenditures Arising Out of the War), *Reports of the War Cabinet for 1917 and 1918*, *Reports of the Royal Commission on Sugar Supplies and the Financial Reports*, the *Annual Appropriation Account*, *Trading Accounts*, and the *Balance Sheets of the Ministry of Food*, are all helpful.

<sup>2</sup> See L. Mises, *Theorie des Geldes und der Umlaufsmittel*, 2d edition, revised, pp. 231-32, for an unusually strong condemnation of price fixing. Pribram argues that price fixing was necessarily ineffective. K. Pribram, "Zur Entwicklung der Lebensmittelpreise in der Kriegszeit," *Archiv für Sozialpolitik und Sozialwissenschaft*, 1916-17 (43), p. 788. In the opinion of Bruins, Governments substituted consumption according to need for consumption according to ability. Brussels Conference, 1920. Paper no. 13, p. 5.

<sup>3</sup> Thus in 1920 McCurdy said that the policy of the Food Ministry had been to fix prices at a level high enough to encourage production. 126 H. C. Col. 569. The authority to control prices and the distribution of supplies was granted under the Defense of the Realm Regulations. Sections 2B, 2D, 2E, 2F, 2G, and 30A and 30 B were especially important. See *Defense of the Realm Manual* (4th ed.). Sections 30A and the more drastic 2E, provided for the State control of trade, maximum prices and rationing. E. M. H. Lloyd, *op. cit.*, pp. 61-64.

because pigs consumed much food as compared to the quantity made available by them, the prices of cheese, butter, and pork were set below the cost of production.<sup>4</sup> If pre-War profits were not excessive, prices of the manufacturer's wares were fixed at the cost of production, which included an allowance for profits at the pre-War level. Infrequently officials determined prices of units previously produced on the basis of the abnormal (higher) costs then current.<sup>5</sup> Until February, 1916, the Government had paid competitive market prices for requisitioned commodities, and profits were limited by negotiation. Acting under the D.O.R.R., the Government thereafter began to limit profits, inspect books and determine prices on the basis of the cost of production.<sup>6</sup> The problem was more difficult when the merchant as opposed to the manufacturer was concerned. If the former were prevented from selling at market prices, he was more likely to incur a loss.<sup>7</sup>

Gide comments on the limitations of control: the legislature is unable to modify prices in so far as they reflect natural causes; but profits may be limited.<sup>8</sup> Jaffé propounds the thesis that maximum prices for cereals were necessary because real incomes had fallen.<sup>9</sup> The danger of this position lay in his failure to realize that the decline in the purchasing power of income was a symptom of reduced supplies, and hence that consumption had to be curtailed. It seems to be the opinion of important officials that the civilian population of Great Britain obtained adequate supplies of food during the War, and that the calorie content had

<sup>4</sup> 103 H. C. Cols. 347-50.

<sup>5</sup> Cannan contends that price fixing was introduced on the erroneous assumption that prices were determined by the cost of production. (E. Cannan, *An Economist's Protest*, pp. 95-96.) In fact, price fixing was based on the assumption that prices were determined by supply and demand. The scarcity of supplies enabled most producers to obtain prices in excess of the cost of production. The authorities aimed to bring prices down to the cost of production, and then to offset the resulting reduction of supplies by economizing on supplies through the control of distribution. Lloyd rightly points out that high prices do not result in adequate economies of consumption. E. M. H. Lloyd, *op. cit.*, p. 290.

<sup>6</sup> *C. P. A.*, 1916, Q. 2095. In the opinion of Lever, Finance Minister of Munitions, the Government thus saved 25 to 30 per cent on the price of munitions. *Ibid.*, Q. 2819.

<sup>7</sup> E. M. H. Lloyd, *op. cit.*, pp. 53-54.

<sup>8</sup> C. Gide, "La Guerre et l'Organisation Nationale de l'Alimentation," *Revue d'Économie Politique*, 1916, pp. 8-9.

<sup>9</sup> E. Jaffé, "Die Militarisierung Unseres Wirtschaftslebens," *Archiv für Sozialpolitik und Sozialwissenschaft*, 1915 (40), p. 520.

been maintained, although they admit that there were difficult periods.<sup>10</sup>

In the opinion of Pigou and Stamp, the Government were successful in reducing profits.<sup>11</sup> That the Government were not always successful, is apparent from an inspection of income figures. The Dunlop Rubber Company obtained unprecedented profits although prices had been determined by the Government after a minute investigation of costs.<sup>12</sup> Costs could not always be investigated, for a manufacturer under certain conditions might refuse to submit his books.<sup>13</sup> Lloyd says that manufacturers usually cooperated.<sup>14</sup> The Metropolitan Carriage, Wagon and Finance Company, for example, refused to open its books to the Government, intent on determining a fair price for 3000 tanks.<sup>15</sup> An interesting controversy raged in Germany on the question whether profits from the sale of commodities at maximum prices were *Preiswucher* and *Kriegswucher*.<sup>16</sup>

The Government controlled prices and the distribution of supplies. Hence they were able to assure themselves of adequate supplies at low maximum prices. If the Government paid less than they otherwise would have, more purchasing power was available for the public, and hence prices of commodities available for the civilian population were higher. We should also consider whether the quantity of purchasing power created by the Government is determined independently of the cost of commodities and services. If prices had remained relatively high for the Government, they might have created the additional purchasing power necessary and thus raised prices for everybody, or they might have deprived the public of part of its accumulated purchasing power and thus have compelled the public to curtail its purchases.

Since high prices result in reduced consumption, maximum

<sup>10</sup> Sir W. Beveridge, *op. cit.*, pp. 313-19; F. H. Coler, *op. cit.*, p. 150.

<sup>11</sup> A. C. Pigou, "Government Control in War and Peace," *Economic Journal*, 1918, p. 370. M. S. Birkett, "The Iron and Steel Trades during the War," *R. S. J.*, 1920, p. 397.

<sup>12</sup> Meeting of January 29, 1918, reported to *L. E.*, February 2, 1918.

<sup>13</sup> The *C. P. A.* estimated that the investigations of the cost of gun ammunition would save the Government £43 million in 1917, *C. P. A.*, 1917, p. xiii, Section 2G of the *D. O. R. R.*, provides for the inspection of books: *D. O. R. R. Manual* (enlarged ed.), pp. 44-45.

<sup>14</sup> E. M. H. Lloyd, *op. cit.*, p. 46.

<sup>15</sup> *C. P. A.*, 1919, Qs. 4415-20, 4449.

<sup>16</sup> F. Terhalle, *Frei oder Gebundene Preisbildung*, pp. 87-102.

(low?) prices are not a complete blessing. Price control should be accompanied by the control of supplies; and maximum prices below market prices are not practicable unless the Government control consumption or are prepared to cover any losses of producers or traders.<sup>17</sup> If the public voluntarily or through compulsion curtails its purchase of controlled commodities, purchasing power is diverted to non-controlled markets. Hence control spreads from relatively important to relatively unimportant markets.<sup>18</sup> Roberts, the Food Minister, announced in 1919 that 85 per cent of the total food supplies of the country were bought and sold by the Government, and that the prices of 94 per cent of all commodities were controlled.<sup>19</sup> Several luxuries escaped control.

The administrative difficulties were innumerable. Consumption goods are also production goods.<sup>20</sup> If prices are not determined at every stage from the producer to the final consumer, middlemen strategically located may obtain the full advantage of control.<sup>21</sup> The administration was hampered by the difficulty of standardizing commodities,<sup>22</sup> by the virtual impossibility of ascertaining the cost of some commodities,<sup>23</sup> by the seasonal variation in prices, and, finally, by the varying cost of production for different units of the same commodities. Whereas approximately three fifths of the total output of coal were produced at a profit of 2s. 3d. per ton, one eighth was produced at a loss of 2s. a ton;

<sup>17</sup> E. Lederer, "Die Regelung der Lebensmittelversorgung während des Krieges in Deutschland," *Archiv für Sozialpolitik und Sozialwissenschaft*, 1915 (40), pp. 759-60. G. E. Bonnet, *La Politique Anglaise d'Assainissement Monétaire, 1918-22*, pp. 40-41, says that inflation remained latent during the period of maximum prices. W. Lotz (*Die deutsche Staatsfinanzwirtschaft im Kriege*, p. 29) observes that depreciation could not be measured by the controlled prices.

<sup>18</sup> Thus, by 1918, the pressure of surplus purchasing power on the free markets had become so strong that the Government set maximum prices for potable spirits. *B. T. J.*, April 25, 1918.

<sup>19</sup> Beveridge estimated that but 10 per cent of the total food supplies were not controlled. Sir W. Beveridge, *op. cit.*, p. 160.

<sup>20</sup> F. Elsas, "Einige Grundfragen der Ernährungswirtschaft im Kriege," *Jahrbücher für Nationalökonomie*, 1917 (109), p. 426.

<sup>21</sup> In 1916 the Government restricted the output of potable spirits. The Government had to increase the duty to prevent speculators from deriving very large profits. *B. T. J.*, April 30, 1919.

<sup>22</sup> The Government attempted to standardize bacon, tea, flour and several other commodities. 104 H. C. Cols. 1286-87. In 1919, the Sub-committee of the Consumers' Council expressed the opinion that standardization had been one of the beneficial effects of control. *B. T. J.*, February 6, 1919.

<sup>23</sup> 103 H. C. Cols. 347-50.

while some operators were earning 6s. per ton, others were losing 6s. per ton.<sup>24</sup> In 1918, the cost of converting a sack of flour into bread varied from 10s. to 25s.; but the Government allowed all bakers to charge 23s. per sack.<sup>25</sup>

The Government frequently found it necessary to take over the entire supply of important commodities and to regulate the price at every stage.<sup>26</sup> Where the prevention of the acquisition of large profits was likely to prove difficult, the Government frequently "pocketed" them. Lord Leverhulme complained that his company supplied the Government with glycerine at £59 10s. per ton when the market price abroad was £200-500 with the result that the Government made profits of 10 millions from the sale of glycerine purchased from Lever Brothers.<sup>27</sup>

Although the Government requisitioned ships at blue book rates, they disposed of space for private purposes at market rates.<sup>28</sup> This practice was quite general when middlemen's profits were not controlled.<sup>29</sup> A similar policy of cutting off distributive profits at the source was employed in the disposal of raw wool, a commodity almost exclusively in the possession of the Government. After they had discovered that discriminatory prices for civil and military purposes were not easily enforced, they raised the price of wool, and made refunds on purchases for military purposes.<sup>30</sup> Frequently radical price revisions were not possible, because the country was dependent on foreign supplies. A limitation of the profit to be appropriated by the middleman was then the extent of control.<sup>31</sup> The rationing of important war supplies on the

<sup>24</sup> Testimony to Coal Industry Commission, Cmd. 359, (1919) especially Qs. 101, 103, 152, 159-66.

<sup>25</sup> 107 H. C. Cols. 400-402.

<sup>26</sup> See the testimony of Mr. Wintour in behalf of the Army, *C. P. A.*, 1917, Q. 3202.

<sup>27</sup> Meeting of Lever Brothers of April 22, 1921, as reported in *Statist*, April 30, 1921; also see the report of the meeting in 1918 (*L. E.*, March 30, 1918) when Lord Leverhulme complained that the Government assumed none of the risk, did none of the work, but appropriated all the profits ordinarily accruing to the middleman.

<sup>28</sup> Testimony of Ministry of Shipping, *C. P. A.*, 1921, Qs. 2536-42.

<sup>29</sup> 96 H. C. Cols. 1354-63.

<sup>30</sup> Discussion of Navy Appropriation Account. Report of Comptroller and Auditor General, 1919, Qs. 5335-36. The Government also were anxious to maintain the export trade in wool by discouraging domestic consumption. *B. T. J.*, April 21, 1917.

<sup>31</sup> Third Report of Committee Appointed to Investigate Increase of Prices. Cmd. 8483, (1917-18).

basis of priority lists became a common practise. When the most complete control could only consist of a limitation of the profits of the middleman, the maximum control was often realized at a relatively early stage of the War. Runciman asserted that a limitation of the profits of middlemen had been effected for many important commodities as early as 1914.<sup>32</sup>

The Government were anxious not only to prevent unnecessary increases in prices, but also to encourage production. The Board of Agriculture, representing the interest of the farmers, was eminently successful in 1916 and the early part of 1917 in its policy of encouraging production by the bribe of liberal market prices.<sup>33</sup> But beginning in 1917, the Government became less generous toward the farmers. Clynes, as Food Minister, fought the industrial unrest which waxed during the period of rising prices, and he rebelled at the notoriously high profits made possible by public interference. Captain Bathhurst, his spokesman, maintained that the object of the Food Controller was to obtain adequate supplies for the poor at reasonable prices.<sup>34</sup> Clynes was concerned primarily with prices, the profits of middlemen, and the elimination of unnecessary distributors. But aroused by the alarming conditions in 1918, he began to take a greater interest in supplies. Col. Sanders, Parliamentary Secretary to the Board of Agriculture, revealed at what advantageous terms the country had obtained its *home-grown* cereals.<sup>35</sup> However, differences in quality and the abnormal shipping costs should be considered in comparing the prices of American and British wheat. It is the opinion of several officials that farmers were treated liberally.<sup>36</sup>

	Average Cost of Imported Cereals		Home-Grown	
	s.	d.	s.	d.
April to December, 1917	92	7	75	9
1918	100	10	72	10
January to May, 1919	95	5	72	9

<sup>32</sup> 96 H. C. Cols. 1335-51.

<sup>33</sup> The Government gave up a program of minimum prices in 1915 when crop reports became favorable. S. Litman, *Prices and Price Control in Great Britain and the United States during the World War*, p. 153. Cannan presents some interesting arguments against a subsidy for home-grown wheat. E. Cannan, *An Economist's Protest*, pp. 42-44.

<sup>34</sup> 90 H. C. Cols. 201-13.

<sup>35</sup> 118 H. C. Col. 74.

<sup>36</sup> F. H. Coler, *op. cit.*, p. 212.

It is apparent from a study of the history of control that as the price of any particular commodity increased beyond a point considered justifiable by the cost of production, the authorities were tempted to assume control of its price,<sup>37</sup> and thereafter, the price of the commodity in question frequently declined.<sup>38</sup> Much light is shed on the history of control by the discussion of the Indemnity Bill of 1920, an Act to provide the instructions for the Defense of the Realm Commissioners, who were entrusted with the task of estimating losses suffered by the public on account of official intervention. During the War, the Government had made effective use of the theory that any compensation for requisitioned commodities was an act of grace; but the House of Lords rejected this theory in 1920.<sup>39</sup> Sir E. Pollock, the Solicitor General, ably defended the Government's policy of control in the course of the debate in Parliament. He estimated that the Government had paid 331 millions for shipping services, which involved a saving of 350 millions; and that the Government had saved 850 millions in all through their control of the prices of insurance, shipping, munitions, leather and raw materials. Quoting Mr. Justice Greer in *Hudson Bay Co. v. Macloy*, he upheld the power of the Government to set prices under the D.O.R.R. "The power to restrict the use of the carrying power of ships to commodities that the country especially requires, and the power to control the remuneration to be given to the shipowner and to mitigate the intolerable burden of high prices caused by the War seems to me not to be beyond the powers which the Legislature contemplated might be given to the shipping controller in the interests of public safety and the defense of the realm."<sup>40</sup>

That the prices of particular commodities had been depressed as a result of official interference, became especially evident upon the removal of control. Thus the price of Cleveland no. 3 pig-iron which had long been maintained at 95s. increased to 142s. 6d.

<sup>37</sup> The War Industries Board of the United States presented a chart comparing the prices of controlled and uncontrolled commodities. It is at once apparent that commodities, later controlled, were advancing in price at a much more rapid rate than other commodities. S. Litman, *op. cit.*, p. 324. Also see P. W. Garrett, *Government Control over Prices*, pp. 419-20.

<sup>38</sup> Thus the rate of increase in prices of controlled foods in the 15 months subsequent to July, 1917, was but 25 per cent of that in the preceding three years. F. H. Coler, *op. cit.*, p. 148.

<sup>39</sup> E. M. H. Lloyd, *op. cit.*, pp. 51-52.

<sup>40</sup> 128 H. C. Cols. 1758-65.

The price of cotton seed rose from £19 to £35, of palm kernels from £26 to £42, of barley from 67s. to 95s., of oats from 52s. to 62s., of veal from 10½d. to a maximum of 3s.<sup>41</sup> If one is to judge from the price reactions in 1919, the prices of the mineral group more than those of any other group had been depressed by the authorities.

The Government did not always seem to realize that the reduction of the price of one commodity involved different considerations than reductions for many commodities. The point is that the introduction of control of one commodity may bring about the diversion of purchasing power to other markets; but the possibility is not great that the effect on prices of these commodities will be appreciable. The likelihood of marked effects on free markets is greater if several commodities are controlled. In other words, the pressure to introduce control universally increases as more commodities are controlled.<sup>42</sup> Control gradually spread until, finally, Clynes, the Food Minister, announced that only fish and a few vegetables were not controlled. Through a rather rigid system of inspection and accounting, the Government discouraged the hoarding of commodities and made an economical use of supplies. Merchants were compelled to reduce their stocks to a minimum. Many entrepreneurs complained of the enforced reductions.<sup>43</sup> In so far as these policies bore fruit in an increased provisioning of the market, a general reduction in the price level was effected by the intervention of the Government. What the Government did not always seem to realize was that purchasing power saved on one commodity, was available for other markets.<sup>44</sup> Since maximum prices were presumably lower than potential market prices for any particular commodity, the public had more purchasing power available for other markets unless it increased its consumption of the commodity in question. It was not always possible to increase the consumption of particu-

<sup>41</sup> 126 H. C. Cols. 662-63.

<sup>42</sup> However, see A. Skalweit, *Die Deutsche Kriegsnährungs-wirtschaft*, pp. 119-20, and Sir W. Beveridge, *op. cit.*, pp. 36-37.

<sup>43</sup> Meeting of Samuel Allsop and Sons of December 28, 1917. Under Government pressure, stocks were reduced from £195,000 to £92,000. *L. E.*, January 5, 1918.

<sup>44</sup> Terhalle pointed out that as prices of some commodities are fixed, the prices of non-controlled commodities increase. F. Terhalle, *op. cit.*, p. 55.

lar commodities. In 1916 and 1917, the Government had obtained control of the distribution of raw materials and manufactured commodities, and in 1918, had introduced rationing for several important food products.

Many observers have been struck by the marked diminution in the rate of increase of prices in the latter part of 1917 and in 1918. In this period, the control of markets was thorough. Thus Roberts, the Food Minister, estimated that in the first three years of the War, prices rose 3 per cent (over 1914 prices) per month, and that from July, 1917, the increase was only 2 per cent.<sup>45</sup> Confessing that its faith in voluntary economy had not been justified, the Food Ministry introduced a rather extensive system of rationing in 1918. Cannan had already criticized the Government for instituting a wasteful system of rationing sugar, and he had proposed a restoration of competitive conditions.<sup>46</sup> McCurdy later estimated that the net saving in the consumption of sugar as a result of control was 700,000 tons valued at approximately £83 million.<sup>47</sup> Complete freedom would have been disastrous, for when there is a danger of scarcity, widespread hoarding is more likely to follow. On the grounds that maximum prices were essential to the welfare of the poor, Pigou recommended price control rather than free competition and the heavy taxation of profits.<sup>48</sup> I merely mention Pigou's position to indicate that he and Cannan both were intent upon assuring the poor of adequate supplies; but rather than depend upon the level-headedness and generosity of the wealthy, Pigou would assure the poor of their requirements. Perhaps Cannan realized better than Pigou that compulsory economies were necessary, and that appreciable economies could come only from an economy of consumption on the part of the many. Moreover, the advantage of artificially low prices is lost in so far as commodities are not obtainable.<sup>49</sup>

<sup>45</sup> 115 H. C. Cols. 781-86. In computing the prices for the latter period, he made an allowance for the bread subsidy. F. H. Coler (*op. cit.*, p. 148) finds a more marked diminution of the rate of increase.

<sup>46</sup> E. Cannan, "Industrial Unrest," *Economic Journal*, 1917, pp. 464-69; also "Report on National Expenditures," *Economic Journal*, 1918, p. 103, and *An Economist's Protest*, pp. 16-26.

<sup>47</sup> 128 H. C., Col. 2288.

<sup>48</sup> A. C. Pigou, *Political Economy of War*, pp. 116-17.

<sup>49</sup> Terhalle points out that at maximum prices there was no *Ausgleich* of supply and demand. F. Terhalle, *op. cit.*, p. 83.

Prices were depressed and commodities were rationed; but the Government and the banks continued to create money and deposits. The surplus of purchasing power was hoarded in part in the form of bank deposits to provide reserves for contingencies, taxes and for postponed depreciation. A large part of the surplus was invested in war securities; does that not explain the phenomenal success of the sale of war securities in 1918? If operations had been less restricted on the stock exchange, a diversion of large supplies of cash to the stock market would have been possible. (Several Continental countries witnessed speculative excesses in the latter part of the War.) Increases in rents were restricted during the War and post-War periods and hence it might be argued that more purchasing power was therefore available for other purposes.<sup>50</sup> According to the figures of the Ministry of Labour for the cost of living, the increase in rents and rates over 1917 was but 2 per cent at the end of 1918.<sup>51</sup> But the landlord was deprived of what the tenant was saved and the same amount of money in the possession of the former would more likely be used in the purchase of securities than if distributed among the tenants.

In a later chapter, I present a history of prices in the inflation period. Here I mention a few relevant considerations. From 1914 to 1917, the increase in the price of cereals was much greater than that in meat, fish and the like (*Board of Trade Wholesale Prices*). But in 1918, the price of the former declined, and the price of the latter three increased. The index for meat and cereals (*Economist*) jumped from 961 in July, 1916, to 1299 in December, 1916. (The increase for food in the cost of living index was 40 per cent for the same period.) That is an adequate explanation of the introduction of rigid control. It is significant that the indices for minerals dropped from 942 in May to 824 in December (*Economist*). It is apparent from both the *Economist* and *Board of Trade* figures that the rise in the prices of textiles was steady

<sup>50</sup> 113 H. C. Cols. 801-5, 857. 129 H. C. Cols. 2223-35. Aftalion suggests that the control of house-rents was more likely to be successful than of most other commodities because housing accommodations could not be withheld from the market. A. Aftalion, *Monnaie et Industrie*, pp. 119-20.

<sup>51</sup> *Nineteenth Abstract of Labour Statistics of the United Kingdom*, p. 132. In the construction of the Cost of Living Index, rent was given a weight of two out of a total of twelve and a half.

and uninterrupted. The authorities evinced comparatively little interest in the prices of textiles. The effect of inaction is apparent in the cost of living figures: in the year 1918, the increase in the price of clothing was twice as great as that in the composite figure. The increase in the *Board of Trade* index number for 1918 over 1917 was 10 per cent, for the *London Economist* index 5 per cent, and for the cost of living 16 per cent. However, note the following figures from the *Economist* index:

	<i>Cereals and Meat</i>	<i>Minerals</i>	<i>Other Foods</i>	
August, 1917 . . . . .	1392	830	September, 1917 . . . .	726
December, 1918 . . . . .	1303	903	December, 1918 . . . . .	782

That is concrete evidence of the effectiveness of control in keeping prices down in a period when additional quantities of purchasing power were being created at an unprecedented rate.

Hampered by administrative difficulties and motivated by political considerations, the authorities in several instances introduced subsidies.<sup>52</sup> For the years ending March 31, 1918, 1919, and 1920, bread subsidies cost the Government 20, 50, and 50.5 millions.<sup>53</sup> According to an estimate made by Kelloway, Parliamentary Secretary to the Ministry of Munitions, the cost of the iron and steel subsidy for the 3 years ending January 31, 1919, was 48.5 millions.<sup>54</sup> The Sugar Commission reported in 1921 that a loss of 24 millions on trading in sugar by the Government would have been averted had the Government acceded to the demands of the Commission for an increase in the price of sugar.<sup>55</sup> By August 18, 1921, the last day of control, the Government had paid the railroads 301 millions for losses sustained under Government control; but a total of 143 millions for services to the Government should be deducted.<sup>56</sup> A subsidy was offered to the poor in another form. Thus in 1917, the Government made an agree-

<sup>52</sup> O. Jöhlinger ("Uebersicht über den Weltgetreidemarkt," *Jahrbücher für Nationalökonomie*, 1917 (109), discusses the subsidy system of Great Britain; see also M. S. Birkett, *op. cit.*, pp. 368-69.

<sup>53</sup> *C. P. A.*, 1921, Qs. 6389-90. That the Royal Commission on Wheat supplies lost 87 millions, is to be explained by the bread subsidy. *Trading Accounts and Balance Sheets, (Naval and Military Operations Arising Out of the War)*, Cmd. 1062 (1920), p. 106. Beveridge puts the total cost of the bread subsidy at 162 millions. *Op. cit.*, p. 302.

<sup>54</sup> 112 H. C. Col. 279.

<sup>55</sup> *C. P. A.*, 3rd Report, Qs. 4679-81.

<sup>56</sup> *C. P. A.*, 1922, Qs. 4694-95.

ment with the distributors of tea to sell 40 per cent of the Indian and Ceylon supplies at the low price of 2s. 2d.—2s. 4d.<sup>57</sup> (They were to replenish their losses by increasing the prices of better grades.)

If subsidies are introduced, market prices do not give an accurate picture; for consumers pay part of the price, and the Treasury pays the remainder. This may not be of great significance, for the consumers of the subsidized products have more purchasing power available for other markets. The problem raised by the iron and steel subsidy was relatively simple: the Government, virtually the only consumer, saved in purchasing the finished commodity the equivalent of their disbursements in payment of the subsidy. But, of course, the published prices of iron and steel were fictitious. The other subsidies were harmful: the public diverted part of the purchasing power saved to other markets, and the Government were forced to inflate further in order to finance the subsidies. If the effect of a subsidy is merely to reduce the price of the commodity in question, more purchasing power is available for other commodities, and the net change in the price level may be nil. Whether this in fact is the result will depend upon the extent to which the low prices encourage the consumption of the commodity in question, and upon the manner in which the Government raise the revenue necessary to finance the subsidy. Thus the policy of the British Government was to allow unlimited consumption of bread, with the result that the consumption of bread was in excess of the pre-War level.<sup>58</sup>

I discuss later the more important measures taken by the Government to improve the state of the markets. The market conditions were peculiarly unsatisfactory at the outbreak of the War and during the winters of 1916-17 and 1917-18. To remedy the evils caused by the failure to provision the markets adequately, the Government introduced comprehensive measures early in the War. But the complete ban on the exportation of foods was appreciably modified within a few days of its announcement. In the winter and early spring of 1916-17, the authorities introduced additional bans on the exportation of food and war

<sup>57</sup> B. T. J., March 22, 1917.

<sup>58</sup> Sir W. Beveridge, *op. cit.*, pp. 310-11.

supplies and yielded to the increasing criticisms of the Press and the labour elements and to the pressure of the submarine, to institute a thorough and comprehensive control of supplies, prices and middlemen's profits. Maximum prices became a reality. The program of the State Interventionists, which included rationing, the elimination of unnecessary middlemen, and the control of prices of virtually all commodities, was accepted by the Government in the latter part of 1917 and the early part of 1918.

Control finally encompassed every important war commodity and almost all foodstuffs. Although the Government made no pretense of controlling luxuries, a rigid control was exercised in fact through the regulation of imports and the rationing of supplies and labour.

The least complicated system of control involved the purchase of all available supplies of commodities by the Government. As the problem of obtaining adequate supplies became more difficult, public trading assumed larger proportions. Bonar Law announced during the winter of 1916-17 that expenditures for food accounted for the large excess of Miscellaneous Expenditures over estimates.<sup>59</sup> The Ministry of Food disposed of approximately £1 billion of commodities.<sup>60</sup> A large part of the trade in food supplies was administered by other organizations, *i.e.*, Board of Trade, Wheat Commission, and the Sugar Commission. Thus Roberts estimated the turnover of the Food Ministry in 1918-19 at £550 million, or £900 million if wheat and sugar were included.<sup>61</sup> The Sugar Commission purchased 37 million tons of commodities valued at £1 billion.<sup>62</sup> In 1918, Sir Worthington-Evans, Financial Secretary of the Ministry of Munitions, announced that his Ministry was purchasing and importing raw materials valued at £150 million and operated with capital valued at £435 million.<sup>63</sup> The total expenditures of the Ministry of Munitions, to March 31, 1920, were in the neighborhood of 470 millions.<sup>64</sup>

<sup>59</sup> 90 H. C. Cols. 319-20.

<sup>60</sup> Trading Accounts and Balance Sheets (Naval and Military Operations Arising Out of the War), Cmd. 1062 (1920), p. 68

<sup>61</sup> *B. T. J.*, May 6, 1919.

<sup>62</sup> *C. P. A.*, 1921, Q. 6325.

<sup>63</sup> H. C. Cols. 1182, 1191.

<sup>64</sup> Ministry of Munitions, Trading Accounts and Balance Sheets (War Services), Cmd. 1368 (1921), p. 91.

Control was an essential part of early post-War economics. A member of Parliament complained early in 1919 that the cost of living had increased concomitantly with a decline in the price level. For the public, rebounding from the system of compulsory economy, purchased more greedily than ever.<sup>65</sup> The decline in prices was temporary, and they began to rise in the spring of 1919. Disappointed by this unexpected turn of events, the public protested vociferously, a short-lived profiteering committee was appointed, and a profiteering law was passed. In order to keep prices down, the Government disposed of available supplies below their replacement cost.<sup>66</sup> Roberts, Food Minister, announced on July 14, 1919, that control of all essential foodstuffs would be continued by administrative order or by arrangement with the trades concerned.<sup>67</sup> In August, the Government gave the Board of Trade authority to investigate costs, and to determine the prices of important commodities at every stage.<sup>68</sup>

An attempt to force farmers to dispose of their crops below world prices led to acrimonious discussions in Parliament. The Government finally capitulated.<sup>69</sup> The Food Ministry again assumed control of commodities that had been subjected to speculative influences upon decontrol.<sup>70</sup> In December, 1919, Roberts announced that all domestic agricultural products except wheat would be freed from control in the first six months of 1920, but that a measure of control of food supplies would be necessary for at least three more years.<sup>71</sup> Under the Ministry of Food (Continuance) Bill of 1920 the Food Controller retained the power to regulate the distribution, storage, and sale of foodstuffs, and even the right to requisition.<sup>72</sup>

<sup>65</sup> 116 H. C. Col. 1830.

<sup>66</sup> 112 H. C. Cols. 1141-43.

<sup>67</sup> 118 H. C. Cols. 48-49.

<sup>68</sup> 119 H. C. Cols. 1697-99, 1747.

<sup>69</sup> 126 H. C. Cols. 1167-73, 1181-85, 1524-25.

<sup>70</sup> *Ibid.*, Cols. 568-69; 121 H. C. Cols. 1909-10.

<sup>71</sup> 123 H. C. Cols. 236-37.

<sup>72</sup> 132 H. C. Cols. 880-87.

## NOTE I

### HISTORY OF PRICES, 1914-19

THESE conclusions are based largely on the indices published by the *Economist* and *Statist*.

1914. The marked increase in the price of cereals was the outstanding change of the year.

1915. The decline in the price of cereals was the cause of the temporary interruption of the upward movement of prices. A shortage of meat and a sudden rise in the price of cotton, now declared contraband, were features of the year.

1916. A marked rise in prices, apparent in the closing months of 1915, continued in the early months of 1916, and soon led to the control of the prices of iron, steel and coke. The prices of the mineral group were remarkably stable in the second half of 1916, but the advance in other groups was unprecedented. The Government saved the iron and steel markets from greater disturbances, but other markets suffered more because of this interference. The authorities introduced control of the wool market late in 1916; the pressure of surplus purchasing power on the remaining free markets was therefore greater.

1917. Many important markets were subjected to control by June, and the wholesale prices of meat, butter, cheese and bread were fixed in September. The usual seasonal decline of prices occurred in the summer. In general, the prices of controlled commodities were stable, and the prices of uncontrolled commodities advanced rapidly. As the free markets became less numerous, the Government made more frequent changes in the prices of controlled commodities. The upward tendency of prices was checked to some extent in 1917, for the increase was only one half as great as in the preceding year. The increase was particularly marked for several imported commodities, namely, tea, coffee, sugar, and rice. Apparently even a government monopoly in sugar was not effective in keeping prices down. The *Statist* and the *Royal Statistical Journal* explained the high prices by the high freight charges, the shortage of foodstuffs, and the demand for war supplies. (*R. S. J.*, 1917, p. 339.) The editors of the *Economist* pointed out that index numbers were of limited significance in a period in which

changes in quality were marked, restraints on consumption were universal, and representative quotations were frequently not obtainable.

1918. Control was extended to new markets; consumption was curtailed; and subsidies were offered. Hence the upward movement of prices was moderate. Because the authorities rationed foodstuffs in 1918—the rationing of industrial raw materials had become general in 1917—the published index numbers for 1918 do not fully reflect the increase in prices. The consumer was forced to hoard or invest a part of his cash. When he was able to purchase commodities, the army of officials determined the channels of expenditure, and, moreover, they offered him commodities of inferior quality.

1919. The expansion of bank credits and bank notes was more rapid in 1919 than in any of the previous four years. A price decline in the early months of the year was followed by a rapid increase in the later months. Even attempts to reestablish control during the latter part of the year were ineffectual in preventing a further rise of prices; for an accumulation of purchasing power that had remained inactive for years or had been invested temporarily in Government securities, was now available for the purchase of supplies from stocks that were comparatively low.

## NOTE II

### HISTORY OF CONTROL

1914. August 3. A ban is put on the exportation of important war commodities. (*B. T. J.*, August 6.)

5. A ban is put on the exportation of goods of all kinds. (*B. T. J.*, August 13.)

7. The army is to be given the right to requisition food supplies during emergencies. (65 H. C. Col. 2186.)

10. A more definite interpretation of the decree of August 5 is given; all important foodstuffs are included. (*B. T. J.*, August 13.)

20. Apparently the Government realize that they have been too zealous, for they substitute, "animals, living for food," for "meats of all kinds," and erase from the list tea, vegetables, fish, and fruit. (*B. T. J.*, August 27.)

But the Government put extensive restrictions on the exportation of wool (and its products) and iron. (*B. T. J.*, September 10, October

8 and 22. Also Consolidating Proclamations in *B. T. J.*, of November 12.)

September 11. The creation of a Royal Commission on Sugar Supplies is announced.

17. The Government delegate to the Board of Trade the authority to seize articles unreasonably withheld from the market on the payment of a reasonable price. (*B. T. J.*, September 24.)

November 16. In asking for a Vote of Credit of £225 million, Asquith announces that large sums have already been expended on wheat, sugar and other necessaries. (68 H. C. Col. 257.)

1915. February 11. In Parliament the day was devoted to a discussion of the increased prices of necessities. Asquith dwelt upon the peculiar conditions of supply and demand, emphasizing in particular the subnormal transportation facilities, the unavailability of Australian wheat, and the Dardanelles situation. He scorned the proposal to fix prices. Of the score of speakers only one (Mason) dwelt on the increase of money in circulation, and only one (Clynes) argued vigorously in favor of price fixing. Asquith said, "I am not speaking with the prejudice of an old-fashioned political economist but as a practical man." (69 H. C. Cols. 776-84, 853-57.)

17. On the second day of the debate, Runciman, the President of the Board of Trade, said that private individuals could buy more cheaply than the Government, and that high prices accompanied by high wages were not undesirable. This is a dangerous doctrine, for apparently he did not realize that economies of consumption were necessary. This argument appealed to those who were critical of official interference. In the course of this debate, Snowden made a vigorous plea for the control of the price of wheat. (69 H. C. Cols. 1179, 1189, 1264-65.)

March 15. Barnes bitterly attacked the Government for their failure to consider the problem of high prices seriously, and he demanded of the Government that they tax the profits received in coal mining and fix the price of corn. (70 H. C. Cols. 1822-29.)

April 29. The increasing number of questions addressed by private members to the Government in relation to the rising prices of food reflected the rising discontent. (71 H. C. Cols. 811-16.)

June 10. Attacked for their inactivity by Sir H. Daziel during a discussion of the Board of Trade Vote, the Government replied that the price of wheat was determined by conditions in the world market. They repeated this argument in the course of almost every debate on this subject in the next two years. (72 H. C. Cols. 413-24.)

June 22. The Committee on the Home Production of Food was created. (*B. T. J.*, June 24.)

23. Lloyd George, hampered by the restrictions of labour and the withholding of supplies by contractors, threatened to assume complete control of the metal trades. (72 H. C. Cols. 1193-1204.)

July 19. The opposition criticized the Price of Coal (limitation) Bill primarily because the prices for consumers were not determined. (73 H. C. Cols. 1205-14.)

September 22. Runciman accounted for the high price of flour by the high price of wheat, the high price of eggs and butter by the reduction of supplies and the high price of meat by increased consumption. (74 H. C. Cols. 487-93.)

The discussions of 1915 were peculiarly sterile and devoid of an insight into the important issues. One important cause of the increase in prices, namely, the creation of additional purchasing power, received little attention both from the Government and their critics. (Perhaps discretion was necessary here.) In contending that the deficiency of supplies was the prime cause of high prices, the Government assumed a position that was defensible; but more often they contended that high prices resulted from high prices abroad, or the high prices of finished products merely resulted from the high prices of the raw materials. Economists underestimated the significance of deficiencies of supplies for inflation; and politicians underestimated the influence of excessive paper money and bank credit.

The list of prohibited exports became increasingly large in 1915. Additional restrictions were introduced for coal, oats, wheat, potatoes, iron, bacon, ham, pork, vegetables, wool and cotton yarn. In the second half of the year, the Government increased the number of restrictions. In particular the proclamations of May 6 (*B. T. J.*, May 13), June 2 (*B. T. J.*, June 10), July 30 (*B. T. J.*, August 5), October 19 (*B. T. J.*, October 21), November 24 (*B. T. J.*, November 25), and December 20 (*B. T. J.*, December 23) were important. That in spite of the presence of a very troublesome exchange problem the Government rigidly restricted exports, is evidence of the unsatisfactory state of the markets.

1916. The Government resisted the pressure for a revolutionary advance in the measure of control until the latter part of the year.<sup>1</sup>

<sup>1</sup> Several official committees made proposals to fix prices. Interim Report on Meat, Milk, and Bacon, Committee appointed to investigate Increase of Prices, Cmd. 8358 (1916), p. 17. Report on Wheat, Committee appointed to investigate Increase of Prices.

Churchill vigorously assailed the Government on August 22 for their failure (1) to ration commodities and (2) to reduce prices to a reasonable level. (85 H. C. Cols. 2508-19.) Pretyman replying for the Government, relied on the hackneyed argument that prices were determined by world conditions. (85 H. C. Cols. 2733-46.) The Press continued to agitate, submarines continued to be active, and the Government finally capitulated on November 15. They announced that they were prepared to demand the right to ration, and to regulate the consumption and manufacture of goods. For commodities that were under the control of the State—flour, wheat, sugar and meat—the problem was relatively simple. The Government would limit the rate of profit on the sales of other commodities. (87 H. C. Cols. 855-63, 1103-4.) The Board of Trade was entrusted with the task of regulating supplies. It might dictate the manner of use and sale, as well as determine the prices of commodities. Prices were to be based on the cost of production plus a reasonable profit. (*B. T. J.*, November 23, 1916.) The authorities acted quickly: they prohibited the use of wheat for the manufacture of beer, purchased the Australian wool crop, and gave the Board of Trade the power to take over the coal mines.

Early in the year, the Government, disturbed by the failure of consumption to fall with increasing prices, and handicapped by the lack of shipping space, had curtailed imports. (*B. T. J.*, February 10 and March 16, 1916.) The Government published lists of commodities, importable only by license. (*B. T. J.*, March 2, April 6 and December 28, 1916.) Included were bulky commodities (paper), luxuries (linens, hats, feathers) and commodities traded in exclusively by the Government (sugar, tea). At this time, the authorities limited imports of tobacco to one third of the quantity imported in the preceding year; but they soon realized that the sale of tobacco was profitable for the Exchequer and hence imports were encouraged until they were in excess of the pre-War level. (*B. T. J.*, June 8, 1916; 105 H. C. Cols. 715-16.) The prices of various grades of steel and iron products were fixed in April and those for iron were revised in August. (*B. T. J.*, April 20 and August 24, 1916.) In May, the control of all types of leather was instituted. (*B. T. J.*, June 1, 1916.) Spokesmen for the Government threatened to ration commodities. (82 H. C. Cols. 2570-71.)

A definite price policy was formulated during the year. In requisitioning war supplies, the Army, the Admiralty and the Munitions Ministry were freed from the obligation to abide by market prices. However, in setting the price of coke, bar iron and steel, the authorities

were not guided by the actual cost of production of the units purchased but rather by the current abnormal costs. The Government planned to reduce prices by discouraging speculation, and under the D. O. R. R. they prohibited trading in metals not in one's possession. (*B. T. J.*, March 2, 1916.) They issued an Order-in-Council enabling the Board of Trade to enter premises in order to make certain that supplies in excess of requirements were not being held. (*B. T. J.*, August 24, 1916.) The War Office announced that wool disposed of for civil requirements would be sold at market prices. (*B. T. J.*, August 24, 1916.) That the Government were able to enforce official prices for important commodities, is to be explained by the system of licenses by means of which trades were regulated. (*B. T. J.*, November 9, 1916.)

1917. The Government had proclaimed their conversion in 1916; they gave practical effect to their new position in 1917. Events moved rapidly in the early months of the year: the submarines were active, supplies were scarce, and industrial discontent was rife.

Perhaps the outstanding accomplishment of the year was the vigorous manner in which the Government attempted to economize supplies. Committees on supplies became more and more numerous. (*B. T. J.*, from January to March, 1917; *Statistics of the Military Efforts of The British Empire during the Great War, 1914-1920*, pp. 529-30.) The Government regulated the distribution of supplies by introducing a comprehensive system of licenses. (*B. T. J.*, January 11 and February 22, 1917.) The authorities bolstered maximum prices of milk and potatoes in the hope of encouraging production.<sup>2</sup> (*B. T. J.*, March 29, September 13 and September 20, 1917.) But in general, public policy was not so far-sighted during this period. In the gloomy days just before the entry of the United States into the War, the Government threatened to take drastic measures against hoarding; but under the pressure of a hostile public opinion, they recanted.<sup>3</sup> (91 H. C. Cols. 1528-29; 92 H. C. Cols. 1447-48; *B. T. J.*, April 12, 1917.) Requisitions, periodic censuses of supplies, limitations on trading and priority lists were all employed, in order to make the most profitable use of inadequate supplies. The Central Wool Advisory Committee proposed to ration wool for domestic purposes. (*B. T. J.*, April 26, 1917). Tanners of leather were compelled to work exclusively on Government orders (*B. T. J.*, March 15, 1917). Trading in raw cotton, timber, and cereals without license was prohibited. (*B. T. J.*, July 5, July 12, and

<sup>2</sup> The concern over the submarine warfare is apparent from the discussion of May 8, 1917, 93 H. C.

<sup>3</sup> The Food Hoarding Order of April 5 was a rather extreme measure, nevertheless. *D. O. R. R. Manual*, 4th ed., p. 290.

July 19, 1917.) The Cattle and Meat Returns Order provided for full information about supplies. (*B. T. J.*, August 2, 1917.) By September, trading licenses were required for all important war commodities. (See *B. T. J.*, April 12, 1917, for an example of the multiplicity of censuses, of requisitions, and of limitations on free trading introduced by the Government.)

If prices were fixed only at the early stages of the distributive process, distributors raised prices skyward. (*B. T. J.*, April 26, 1917; 94 H. C. Col. 573; 96 H. C. Col. 1414.) Confronted with this situation, the Government fixed retail prices. Tobacco, meat, bread, butter, cheese, tea, coffee, cocoa, bacon, ham, lard, coal, and timber were some of the important commodities for which the Government attempted to determine sales prices for the final consumer. (91 H. C. Col. 897; 92 H. C. Cols. 1444-46; *B. T. J.*, March 22, August 23, September 26, 1917.) When it became difficult to fix prices, the Government restricted profits.<sup>4</sup>

When the price of a commodity rose beyond what the authorities considered reasonable, it was generally subjected to control. Thus when the market price of beans rose to £80 per ton, they were requisitioned by the Food Ministry at £37 per ton. (*B. T. J.*, May 3, 1917.) Control spread from important to less important commodities. Tea, coffee, cocoa, beer, timber, fruits, beans, all received the attention of the authorities when their prices became excessive. (91 H. C. Col. 897; *B. T. J.*, March 29, August 30, and October 18, 1917.)

One peculiarity of the history of maximum prices was the infrequency with which changes were made. Thus the price of sulphuric acid, an important war commodity, apparently remained unchanged from February 28, 1916, to January 4, 1917; the prices of some steel products remained unchanged from July 7, 1916, to January 4, 1917. (*B. T. J.*, January 4, 1917.) By 1917, the doctrine that maximum prices should be based on costs of production of the units in question was generally accepted.<sup>5</sup> However, although costs of production were in a constant state of flux, maximum prices were changed infrequently.

The die-hards still talked of the failure of maximum prices and of the mistakes made by the administrators, but in 1917 the country witnessed a final consummation of the policy advocated by Barnes,

<sup>4</sup> Trading Accounts and Balance Sheets, Cmd. 1368 (1921). Agreement between Board of Trade and six oil companies.

<sup>5</sup> Thus the Government was allowed to requisition war materials and food-stuffs at prices to be determined by a tribunal. The prices of the tribunal were to be based on costs plus the usual rate of pre-war profits, *if not excessive*. (*B. T. J.*, March 1, 1917). Arbitration before the courts was necessary if the manufacturer or dealer was dissatisfied with the price set by the Government.

Snowden, Clynes and Daziel. (96 H. C. Debates of July 24-25, especially Cols. 1335-63.)

Extreme measures were effective. The variety and vigor of governmental action are to be gleaned from a description of measures taken in the span of a week early in 1917: The Government assumed control of the copper supply and linen yarns, set maximum prices for steel and steel scrap, determined the prices for the 1917 crops of wheat, oats, and potatoes and ordered a census of wool and wool products. (*B. T. J.*, January 4 and 11, 1917. The D. O. R. R. (2F) empowered the Food Ministry to regulate the production and distribution of foodstuffs, to requisition supplies and to determine maximum prices. (*B. T. J.*, January 18, 1917.) A statement made by Prothero, President of the Board of Agriculture, that maximum prices for agricultural products would have been minimum prices but for the influence of the Food Ministry, is evidence that the Food Ministry, representing the consumer, and intent upon obtaining sufficient supplies at reasonable prices, was becoming more powerful in national affairs. (90 H. C. Col. 145.) When the Government commandeered the wool crops, they dispensed with the middleman. (90 H. C. Cols. 831-63.) The prestige of the Food Ministry reached an apex in July with the announcement of a bread subsidy. Clynes defended the revolutionary measure on the grounds that wages had not risen as much as the cost of living. (96 H. C. Cols. 1354-63.)

In February, 1917, Lloyd George presented a very gloomy picture of prospects in the subsistence market. He estimated that 50 million tons had been imported in the twelve months before the outbreak of the War as compared to 30 million in the preceding twelve months. (90 H. C. Col. 1593.) But in August he was optimistic again. (97 H. C. Cols. 1472-74.)

1918. In the closing months of 1917, supplies were once more dangerously low, and the Government again resorted to vigorous measures. Food orders were numerous; the authorities regulated the distribution, use, and methods of manufacture. (*B. T. J.*, January 24 and February 28, 1918.) The Food Ministry, aided by local authorities, rationed important commodities. (103 H. C. Cols. 1647-51.) It had been the practice since the outbreak of the War to restrict the profits of middlemen by friendly cooperation with the trades concerned. Such cooperation had been resorted to in the sale of bread, meats, tea, sugar, cotton, leather, and several other commodities.<sup>6</sup> If the Government could not assume

<sup>6</sup> Discussing his price policy in the early years of the War, Runciman said that the Government had controlled the profits of middlemen on important food products since November, 1914. (96 H. C. Cols. 1335-51.) Also see the Third Report on Sugar, Committee appointed to investigate Increase of Prices, Cmd.

control, they enlisted the cooperation of the trade. (*B. T. J.*, March 28, 1918.) The Government also nationalized several trades.

In June, 1918, Clynes drew an enthusiastic picture of the fruits of Government intervention in the previous nine months. The Food Ministry was rationing meat, bacon, butter and margarine; it had control of markets through the control of prices or profits. A net gain was apparent in an increase of the size of rations. (106 H. C. Cols. 1761-81.) Major Astor, Parliamentary Secretary to the Food Ministry, estimated that the country would import 11.7 million tons of food in 1918 as compared to 19 million in 1913, and he added that 2 million tons had been saved by rationing. (110 H. C. Col. 2762.) To adjust the demand for cotton to the declining supplies, the Government regulated the number of machines to be operated. (*B. T. J.*, March 14, 1918.) Relative price quotations of 637 for iron, steel and manufactures thereof, and 432 for manganese ore in 1918 are significant for the history of control. Even allowing for large transport costs, the depressing effect of control on prices is apparent. An increase in the price of tea from 124 to 301 and of tobacco from 101 to 235 from 1916 to 1918, are explained in large part by the British fiscal policy.

8483 (1917-18), for a discussion of limitations of wholesalers' and refiners' profits.



## PART II

### INFLATION AND DEFLATION



## Book IV

### INFLATION

#### CHAPTER I

#### INTRODUCTION

ONE result of the financial measures taken in the early months of the War was that Other Deposits of the Bank of England increased, and remained at a higher level. The largest part of O.D. belongs to British banks; but the proportion varies. In the first few months of the War, the balances belonging to outside institutions and foreign and Dominion governments probably increased although these institutions had lost much cash in the first few weeks. The Government maintained unnecessarily large balances at the Bank in the first two years of the War. A satisfactory control of the money market by the Bank of England under these conditions was not always possible. Sales of securities or borrowing by the Bank would not have resulted in adequate losses of cash by the banks. However, the Treasury obtained a measure of control by selling Treasury bills and accepting Special Deposits. Thus rates were pegged; and the Treasury prevented further increases in rates by borrowing directly from the Bank of England.

Authority is divided concerning the contributions of issues of currency notes to the inflation during the War. In a sense, the withdrawal of notes was deflationary because banks in general purchased currency notes with balances at the Bank of England. The charge that the Government forced currency notes into circulation to meet expenses, is without merit. The regularity of the flow is a refutation of this charge. In issuing currency notes, the Government made it possible to export gold which served as a basis for inflation abroad, and thus a greater measure of inflation

was possible at home without a corresponding depreciation of Sterling abroad. The Government and the bankers pointed to the reduced production as the explanation of high prices, and the former defended their large issues on the grounds that they were based on trade needs. Under the peculiar conditions of the War period, excessive notes and deposits were necessarily diverted to the market for Government securities or to hoards. The Treasury restricted one possible use for surplus purchasing power in discouraging operations on the stock market, and another possible outlet, the commodity markets, was of less importance than usual. In contrast to the policies of the Continental authorities, use of checks was not encouraged in Great Britain. The motive on the Continent was to reduce the supplies of currency notes in circulation; in Great Britain, the demand for notes was greater because the authorities made no attempts to encourage the use of other methods of payment. Curiously enough, the purchase of securities on the Continent was adversely affected, but the credit of their notes was not affected to an equal degree. The Government thus obtained interest-free advances.

The Government were slow to realize that the rise in prices might be moderated by economizing supplies through a correct wage policy and a judicious use of taxes. High wages were unnecessarily encouraged on the assumption that the standard of living of the worker should be maintained even in the midst of an exhausting war. Authorities adjusted wages according to changes in index numbers of the cost of living. But many critics pointed out that normal supplies were not available, and hence an index number weighted according to pre-war consumption could serve only a theoretical purpose. At first, the authorities considered taxes as a means of obtaining required revenue; but eventually the emphasis was shifted to the necessity of reducing consumption. In fact, the shift was so complete that the Government were called upon to reprimand members of Parliament for assuming that the magnitude of monetary expenditures was of no significance.

The problem of appropriate Bank rates has been an important subject of discussion in the course of debates on inflation. Many hold that low rates were in large part responsible for the

inflation; but others contend that high rates would have been of no avail in a period of restricted gold movements. Too much attention has been given to this subject. To those who contend that the low Bank rate was the handmaid of a Treasury policy of cheap money, it may be replied that the high rates offered by the Government on their Treasury bills and their acceptance of unlimited Special Deposits at high rates saved the Bank rate from ineffectiveness. The cause of the low market rates was the excessive supplies of money available. The Government established a system of priority and control of the distribution of bank credit, and hence, the low rates did not encourage unnecessary expansion of bank credit. Peace industries reduced their demands to a low level. The Treasury rate was the significant rate.

During the War, the magnitude of the reserves of the Bank of England was of limited significance. Monetary and fiscal policies were not dictated by the fluctuations of the reserves in the Banking Department, but rather by the exigencies of war. In the latter part of 1914, large additions were made to the reserves of the Bank of England as a result of the influx of gold, a large proportion of which was not actually imported. In 1915-16, the Bank of England exported much gold; but the public had given up an important part of its gold and thus the reserves of the Bank were not seriously affected by the losses. In so far as the public withdrew currency notes in exchange for gold deposited with the Bank, the net effect was an increase in Public Deposits and Cash of the Bank of England (Banking Department). The Issue Department might have been forced to issue notes to the Banking Department in large quantities in exchange for this gold; but the diversion of gold to the Currency Notes Account and the exports of gold made large issues by the Bank of England unnecessary.<sup>1</sup> The loss of gold was a deflationary factor in the midst of a period of infla-

<sup>1</sup> 1. Banks deposit gold with the Bank of England.

O. D. increase; cash (Banking reserves) increases.

Public draws Currency (Treasury) Notes.

O. D. decline.

P. D. increase.

2. Gold deposited with the Bank of England is exported.

O. D. and cash (Banking Department) both fall.

3. Gold deposited with the Bank of England is transferred to the Currency Notes Account.

P. D. and cash (Banking Department) both decline.

tion. That the market was forced to borrow in the first quarter of 1915 in spite of the large advances to the Allies and Dominions, is to be explained in part by the reduction of balances at the Bank in payment for gold exported. In other words, the large advances did not result in a corresponding increase in O.D., because they involved extensive obligations abroad. In 1917-18, large issues of Bank of England notes were made. The Bank of England paid out notes from its banking reserves in the early years of the War; but when a large part of the newly mined gold of South Africa became available in 1917-18, it was able to satisfy demands for notes without reducing its reserves. Thus a policy of stable reserves was introduced in place of the policy of fluctuating reserves. The additional issues of notes were made possible by the receipts of South African gold.

The very large advances to the Allies and Dominions made in the first instance by the Bank of England, were an inflationary factor of the first importance in 1915-16. For some unexplained reason, this type of Ways and Means advance was not recorded in the traditional manner. The advances were reflected in movements in O.D. and O.S. rather than in P.D. and P.S. Hence when the Treasury in 1915 reduced its indebtedness at the Bank of England by 160 millions, P.S. were reduced by but 6 millions; and the transfer of a few hundred millions to the Bank of England in payment for war securities was accompanied by very moderate fluctuations in O.S., for the British Government were reimbursing the Bank for advances to the Dominions and Allies. The Government maintained balances appreciably in excess of 100 millions although the Treasury was heavily indebted to the Bank of England.<sup>2</sup> The large advances by the Bank of England to the Dominions and Allies in the early months of 1916 are not apparent from the weekly statements of the Bank of England, for the increase in O.S. resulting from these advances was offset by a reduction in O.S. which were earmarked against Special Deposits. From French official figures many of the details concerning the magnitude of the advances made by the Bank of England to France are revealed. These advances to France were particularly

<sup>2</sup> Hawtrey says that large balances were held by the Treasury in order to counteract the inflationary effects of other policies. R. G. Hawtrey, "Review of British Budgets," *Economic Journal*, 1930, p. 479.

harmful because more cash was put at the disposal of the British money market and because France in order to obtain many of the commodities she needed, turned to the understocked markets of Great Britain. In 1915, the market transferred cash to the Government in payment for war securities and to the Bank of England for the liquidation of pre-moratorium bills, for the repayment of advances to acceptors and for currency notes. On the other hand, the money market obtained cash as a result of the advances to the Allies and Dominions.

If my conclusions on the significance of advances to the Allies and Dominions are not tenable, I am at a loss to explain the large payments of the Treasury to the Bank, and the large fluctuations in O.D. and O.S. in the years 1915 and 1916. Moreover, there have been statements made on the subject by the British Government and by Dominion and Allied authorities. True enough, these advances, with the exception of those made to the Bank of France, were of a temporary nature; but although payment was ultimately made out of Votes of Credit, the Treasury was in debt to the Bank for large sums for relatively long periods.

1916 was a year of inflation. It is possible to obtain an insight into the direction and magnitude of movements of cash by comparing (1) the movements of cash and balances at the Bank of England of British banks with (2) the sum of the movements in O.D. at the Bank of England, currency, Bank of England notes, and gold in circulation. In 1916, the increase in Cash and Money at the Bank of England was in excess of the increase in O.D. and money in circulation. Although the direction of the flow of cash was apparently from the public to the banks, prices increased by one third.<sup>3</sup> When the total of O.D. was 121 millions, the total of cash of British banks was no less than 327 millions. Allowing for O.D. belonging to foreign banks, private accounts and the like, O.D. accounted for no more than one fourth or one fifth of the total cash of British banks. (The results would be more accurate if account were taken of (1) the inclusion of cheques in course of clearing in the cash item of the banks; (2) the possibility of large changes in O.D. between the last

<sup>3</sup> Because the increase of cash of British banks is not explained by the increase in their cash at the Bank of England (O. D.) and by the increase of money in circulation, I assume that the public was depositing cash with the banks.

Wednesday of the year and the 31st of December; and (3) the large issues of silver coins.) This was a rather abnormal distribution of the cash resources of British banks for that period. Did the banks include Special Deposits as cash?

Was the increase in prices in 1916 apparent or real? Undoubtedly paper money circulated more rapidly than gold. It is significant that bank advances declined in 1916 in spite of the low money rates. An increase in deposits of 200 millions would have been possible without any addition of cash by the banks. Bank reserves were high even if we allow for the large deposits outstanding. The increase in deposits was probably largely in current deposits, as saving deposits were consumed in the purchase of securities.

In 1917, the flow of cash was reversed. The banks placed the responsibility for purchasing public securities on the public. The year 1918 witnessed unprecedented accretions to the circulating media, which the public rather than the banks absorbed. Moreover, the reliance on Ways and Means financing of the traditional type was greater. (However, Special Deposits and departmental advances were of also greater magnitude.) British banks expanded rapidly and used up their surplus cash during the year with the result that they were compelled to borrow at the end of the year. The market borrowed by withdrawing Special Deposits, which transaction was reflected in an increase in P.S. on the books of the Bank of England. In 1918, prices rose but 5 per cent in spite of the large increases in notes and deposits. Price control was a vital consideration. The public was unable to purchase commodities to the extent that would have been possible in a free market. In 1919, the process of inflation was continued; but the control of prices and supplies was gradually given up; and the repayment of Special Deposits was an additional cause of inflation.

In a note at the end of this essay, the problem of supplies is discussed. On the basis of available figures on production, employment, military requirements, and imports and exports, it is apparent that the assumption of adequate or normal supplies during the War period, which has been made by eminent economists, is untenable.

## CHAPTER II

### OTHER DEPOSITS

IN my essay on *Ways and Means* I conclude that the inflationary effects of Ways and Means advances of the Bank of England have been exaggerated. The Treasury repaid the advances of the early months of the War by January, 1915, and did not borrow from the Bank of England in 1915 in the orthodox manner. In 1916 the direct relations of the British Government with the Bank of England did not lead to a large measure of inflation, for Special Deposits, of great importance in 1916, were larger than other Ways and Means advances from the Bank of England. By accepting Special Deposits, the Bank absorbed surplus cash. But Special Deposits are not as effective as orthodox Ways and Means, because cash received by the Bank as Special Deposits is ultimately disbursed. In referring to 1916, I have in mind the first 51 weeks. The Treasury relied on the Bank of England much more in the last week of 1916, and in the years 1917 and 1918. But even in these years, the additional advances from the Bank were not nearly as large as the increase in Special Deposits and departmental advances.

The inflationary effects of advances by the Bank of England to the Treasury have been exaggerated, but the unfavorable effects of its rediscounts of pre-moratorium bills and advances to the acceptors of bills have not been given adequate attention.<sup>1</sup> The spectacular increase in O.D. at the Bank of England in the early months of the War put the banks in a position to expand rapidly. Although the transfers necessitated by subscriptions to the War Loans of 1915 made an impression on O.D., they remained above the moderate heights of July, 1914. The large re-

<sup>1</sup> It has been estimated that the Bank of England, between the middle of August and the end of November, 1914, rediscounted bills of a value of 120 millions Sterling under Government guarantees. W. R. Lawson, *British War Finance, 1914-1915*, p. 117. The Bank of England was also prepared to lend on the security of the First War Loan issued in 1914-15. *L. E.*, November 21, 1914.

payments in 1914-15 of pre-moratorium bills discounted and of advances from the Bank of England deprived the banks of much surplus cash. Moreover, the Government recouped the Bank for losses of 28 millions incurred on these transactions. (Both O.S. and P.D. were written down.) I discuss the history of the repayments of these advances more fully in a later chapter.

For a few months in 1915 and 1916, it seemed that O.D. might decline to the pre-war level. The decline was from 111 millions in December, 1915, to 81 millions in May, 1916. The decline in O.S. was even more marked. From 111 millions in December they were reduced to 64 millions in June, 1916. Ninety millions or more of O.S. had been held by the Bank since the first month of the War; hence it is unlikely that the decline of market borrowings can explain the large reductions of 1916. (In fact, money had been plentiful, and therefore advances from the Bank of England were not large.) The repayment of pre-moratorium bills could not contribute to the reduction of O.D. and O.S., the most plausible explanation of the larger part of these movements is that the Bank began to accept Special Deposits. The banks converted their O.D. into Special Deposits; and O.S. fell because the Bank of England used them as collateral against Special Deposits. The increase in O.S. and O.D. was as marked in the second half of the year as the decline had been in the first half. With the ebb of disturbances caused by the War Loan of 1917, O.D. remained remarkably stable at 125 to 135 millions until the end of the War.

With the progress of the War, the Government learned how to economize their balances with the Bank of England and thus were compelled to borrow less from the Bank. The average of P.D. was approximately 15 millions in the years immediately preceding the War. During the War large Exchequer balances were necessary, and often because the Treasury had not learned how to collect and disburse large sums of money with a minimum of disturbance to the money market, and perhaps because it was necessary to withhold the cash from the money market as long as possible, Treasury balances were large. The Government held balances of 45 to 60 millions after the flotation of the War Loans of 1915. But they gradually reduced their balance to an average of 30 millions in 1917 and 1918 in spite of a rapidly rising price level

and increased expenditures. Because the market was able to convert excessive O.D. into Special Deposits, and because the Government held relatively small deposits with the Bank of England, the Bank was able to maintain a relatively high reserve ratio in the latter part of the War. Also, more gold was available.

The Bank of England by purchasing or selling securities might have accelerated or retarded the rate of inflation. But the Bank held a relatively small portfolio of investments. The sale or mortgaging of all investments held by the Bank of England would not have deprived the market of a large part of the cash acquired as a result of Lloyd George's financial guarantees. P.S. suffered only moderate fluctuations in 1915 and 1916; open market operations were not of great importance. An appreciable increase in P.S. occurred in the first quarter of 1915, and a corresponding decline occurred after the payments for the first loan were made. These changes are accounted for in part at least by the purchase and sales or redemption of Treasury bills. In 1917 and 1918, the acceptance and withdrawal of Special Deposits was a substitute for the sale and purchase of securities by the Bank. Of course, the initiative was with the market, although the Government and Bank might modify their rates.

The banks are commonly supposed to hold about one half of their cash with the Bank of England.<sup>2</sup> But it is not safe to infer that fluctuations in O.D. indicate proportionate fluctuations in the cash of British banks, for O.D. include many private accounts, as well as the balances of foreign and Dominion governments and banks. Macrosty estimates private deposits at the Bank of England at 7 millions.<sup>3</sup> (He includes in private deposits all deposits not belonging to British banks.) The *Bankers' Magazine* estimates that one half of the loans to the stock exchange outstanding at the outbreak of the War was repaid by 1915. Thus cash at the disposal of brokers fell, and balances of British and foreign banks increased; but O.D. remained relatively stable. Colonial and Dominion banks probably gained at the expense of British banks. Outside institutions and bill brokers

<sup>2</sup> R. H. Brand, *War and National Finance*, p. 19; also, A. W. Kirkaldy, *Industry and Finance, War Expedients and Reconstruction*, pp. 230-31.

<sup>3</sup> H. W. Macrosty, "Some Current Financial Problems," *R. S. J.*, 1922, p. 198.

received large additions of cash by rediscounting pre-moratorium bills and by borrowing to fulfill obligations on acceptances. Moreover, the balances of outside institutions increased as large loans were made to the Allies and Dominions and payments were made to foreign countries for war supplies.<sup>4</sup> Special Deposits owed their origin in large part to the unparalleled growth of cash at the disposal of Colonial, Dominion and foreign institutions. Hence the inflationary effects of the large creations of cash in the first month of the War may be exaggerated if one does not consider that a large part did not accrue to British banks. However, the balances of outside institutions were reduced by the repayment of advances that the London market refused to renew.

<sup>4</sup> *B. M.*, 1915 (100). October and November reviews.

## CHAPTER III

### WAR SECURITIES AND INFLATION

I discuss the effects of the long term war loans on the money market in an appendix. The inflationary effects of war loans have been exaggerated by writers. In 1914 and 1915 the banks purchased large quantities of Treasury bills and other war securities which were included with their Bills Discounted or Investments.<sup>1</sup> The banks bought Treasury bills in part to replace commercial bills, which were scarce during the War. With the flotation of the War Loans of 1915, Treasury bills temporarily became less popular. But by the end of 1916, a total of 1050 millions was outstanding. The Government had found it necessary to appeal to the public by offering unlimited supplies at fixed rates. The Chairman of the Board of Barclay's announced that the money market was prepared to buy all bills offered and he criticized the Government for selling to the public at unfavorable prices.<sup>2</sup> No vigorous protests against the Treasury bill policy were made in Parliament until May, 1916.<sup>3</sup> S. Samuels criticized the policy in May and Sir C. Henry protested in August.<sup>4</sup>

If banks subscribe to public securities, deposits increase ultimately. But because the profits of the creditors of the Government increase, and because accumulations of cash are made in anticipation of depreciation, renewals, taxes, and the like, part of the newly created deposits remains inactive. Moreover, as wages and prices rise, deposits are reduced by the withdrawal of cash.

<sup>1</sup> The Treasury Minute of May 31, 1899, made provisions for issues by tender and issues at fixed rates to the National Debt Commissioners or to other public or semi-public departments. A Minute of April 13, 1915, made provision for issues to the public at a fixed price. Treasury Minute, April 13, 1915. H. C. 199 (1914-16).

<sup>2</sup> *L. E.*, January 29, 1916.

<sup>3</sup> 82 H. C. Cols. 2352-54; 85 H. C. Cols. 1268-71.

<sup>4</sup> In June, 1915, McKenna, the Chancellor of the Exchequer, expressed a desire to pay off all Treasury bills, because the failure to renew was embarrassing, and because they were purchased with bankers' money. 72 H. C. Cols. 952-53.

When the public subscribes, some inflation results, for saving deposits are thus converted into current deposits. This is a criticism of the views generally held (1) that subscriptions of banks to War loans are a net contribution to inflation by the amount subscribed; and (2) that subscriptions by the public, not financed by borrowing from the banks, are not inflationary.<sup>5</sup> What is of significance and is often neglected, is that the subscribers reduce their inactive balances to a minimum; and thus what were previously hoards, now become active purchasing power. Not only do they transfer to the Government the purchasing power that would have been employed on consumption markets—the assumption is generally made that they curtail consumption by the amount that they subscribe—but they transfer to the Government what might have been idle balances. In Keynes' terminology, Thrift and Enterprise do not always keep in step.

The frequency of issue of large War loans was determined by the capacity of the short term market to absorb Treasury bills. McKenna, the Chancellor of the Exchequer, said that long term loans were issued when inflation was rampant, and the Treasury was obtaining purchasing power that did not represent savings.<sup>6</sup> Lansburgh rightly observed that it was not a question of long or short term loans, but primarily of absorbing power.<sup>7</sup>

<sup>5</sup> Cannan contends that since the poor subscribe to only a small part of the war securities issued, necessary economies in consumption are not obtained by the sale of securities. E. Cannan, *An Economist's Protest*, pp. 110-11.

<sup>6</sup> 80 H. C. Col. 1285.

<sup>7</sup> A. Lansburgh, *Die Politik der Reichsbank*, pp. 38-39.

## CHAPTER IV

### CURRENCY NOTES AND PRICES

THE contribution of the currency notes to the inflation of the War and post-War period has been a subject of acrimonious discussion, both by monetary theorists and politicians. Rist points out that in general (1) advances to the State by central banks and (2) issues of notes were strikingly similar in magnitude.<sup>1</sup> Cannan takes an extreme position in referring the high prices exclusively to the excessive issues of notes.<sup>2</sup> He also contends that the Government issued notes in order to meet their deficits.<sup>3</sup> Mason took a similar position in Parliament. Goodenough proposed a limitation of notes as a cure for inflation.<sup>4</sup> Pigou's position was moderate, for he maintained that at a certain stage, limitation of notes would be effective in stopping inflation.<sup>5</sup> Hawtrey is of the opinion that the damage was done when the law limiting issues of currency notes was made inoperative. However, in an earlier discussion, he contended that so long as credits at the Bank of England were obtainable, a limitation of note issue was useless.<sup>6</sup> Marriott took the orthodox viewpoint in Parliament. However, he criticized the contention that notes were issued according to the needs of bankers.<sup>7</sup> Grady holds that if the Bank and not the Treasury had created the currency note, inflation might have been checked after 1915, since the Bank would have been warned by its declining gold reserve of the necessity of controlling prices and wages.<sup>8</sup>

<sup>1</sup> C. Rist, "Les Banques d'Emission," *Revue d'Économie Politique*, 1921, p. 201.

<sup>2</sup> E. Cannan, "Limitation of Currency or Credit?" *Economic Journal*, 1924, pp. 53-54. Also *An Economist's Protest*, pp. 109-110; H. W. Macrosty (*Op. cit.*, *R. S. J.*, 1922, p. 203), says that currency notes were issued for fiscal purposes until the middle of 1919.

<sup>3</sup> E. Cannan, *An Economist's Protest*, pp. 115-16.

<sup>4</sup> *L. E.*, January 31, 1920.

<sup>5</sup> Letter to *L. E.*, December 27, 1910.

<sup>6</sup> See his Review of Cannan's "An Economist's Protest," *R. S. J.*, 1928, p. 95; also *Monetary Reconstruction*, 1st ed., p. 31.

<sup>7</sup> 123 *H. C. Cols.* 474-75.

<sup>8</sup> H. F. Grady, *British War Finance*, 1914-19, p. 15.

Probably the weight of authority is against Cannan. Wick- sell contends that the high prices and increased paper money were the result of a misguided discount policy.<sup>9</sup> The conclusion of the Brussels Conference was that a limitation of note issue would only aggravate the situation.<sup>10</sup> When Hahn argued that central banks might refuse to grant credit and hence to issue notes, Goldschmidt severely criticized him.<sup>11</sup> The latter maintained that the central bank is the creation of the State, and, hence, it is under compulsion to issue notes required for the successful financing of a war. According to Leaf it is inexpedient to limit issues so long as purchasing power in other forms is available.<sup>12</sup> Another authority says that increased issues were merely a symptom of the deterioration of the quality of the notes, which resulted from the loss of prestige suffered by the State.<sup>13</sup> Lieutenant Commander H. Young, in accounting for the inflation, emphasized the rapid expansion of credit; but he added that notes might be restricted to the amounts required by the existing level of credit.<sup>14</sup> Heyn writes that the State is compelled to issue the quantity of notes required to make credit liquid. As prices rise, the State necessarily manufactures more paper money.<sup>15</sup> Hahn takes a position different than the one imputed to him above in his *Geld und Kredit* where he maintains that the refusal of authorities to create necessary supplies of money would not prevent the creation of supplies demanded by the public. But he agrees that logically inflation can be explained by the increase of paper money, because in the creation of bank credit, such increases are anticipated.<sup>16</sup> He also says that to reduce notes in circulation is

<sup>9</sup> K. Wicksell, "Hinauf mit den Bankräten," *Archiv für Sozialpolitik und Sozialwissenschaft*, 1916 (41), p. 751.

<sup>10</sup> Brussels Conference, "Two Years After," p. xl.

<sup>11</sup> *Jahrbücher für Nationalökonomie*, 1918 (111), pp. 740-41. (Review of Hahn's *Von der Kriegs zur Friedenswährung*). The problem of the increase in currency notes is similar to the one that arises when a scarcity of small denominations hampers the exchange of goods for money. Small issues appear inevitably. See W. Schwinkowski, "Über Kriegs- und Notgeld im Alter und Neuer Zeit," *Jahrbücher für Nationalökonomie*, 1917 (108), pp. 628-38.

<sup>12</sup> Meeting of London, County, Westminster and Parr's, *L. E.*, February 7, 1920.

<sup>13</sup> A. Cohn, "Verhandlung über theoretische u. ökonomisch-technische Seite d. Währungsproblems," *Schriften des Vereins für Sozialpolitik*, 1925 (170), p. 289.

<sup>14</sup> 123 H. C. Cols. 476-78.

<sup>15</sup> O. Heyn, *Ueber Geldschöpfung*, pp. 63-67.

<sup>16</sup> A. Hahn, *Geld und Kredit*, pp. 105-6.

analogous to lowering the mercury in a thermometer in order to cure fever.<sup>17</sup>

Ricardo's remarks early in the nineteenth century are worth quoting. "The argument that no more is issued than the wants of commerce require is of no weight, because the sum required for such purpose cannot be defined."<sup>18</sup> Aftalion points out that fluctuations in the price level are not determined by fluctuations of notes in circulation, but he admits that anticipations of fluctuations may have important effects.<sup>19</sup>

The position taken by Cannan, Goodenough and Mason is not tenable. Pigou and Hawtrey are on strong ground, however, when they put the emphasis on the removal of the limitation of issue. A limitation of issue is a check on excessive creations of credit by the Bank of England and joint stock banks. Hawtrey has expressed himself well on that point. There is general agreement that credit should be restricted directly rather than indirectly through the introduction of a limitation on note issue. It is also clear that authorities issued notes in response to requests from the public. An accidental agreement of the fluctuations of notes and prices is of limited significance for the determination of the causes of price changes.

One might well argue that the creation of currency notes prevented further inflation. The balances at the Bank of England were reduced by the withdrawals of cash. Of course the Bank of England credited P.D. with the proceeds of the issue of Treasury notes, and these balances were ultimately transferred to accounts of banks at the Bank of England. If the Government had not obtained resources in this manner, they probably would have borrowed more from the Bank of England. Moreover, the transfer of 28.5 millions of gold from the Bank of England to the Currency Notes Account was a deflationary operation. Both notes (reserves) and P. D. were reduced.

The early issues were made for emergency purposes and remained in circulation for but a short period. The Cunliffe Committee pointed out that the country would not have required extensive recourse to advances of currency notes had not the credits

<sup>17</sup> A. Hahn, *Volkswirtschaftliche Theorie des Bank Kredits*, pp. 90-92.

<sup>18</sup> Reply to Bosanquet in *Works*, (McCulloch Edition), p. 341.

<sup>19</sup> A. Aftalion, *Monnaie, Prix et Change*, p. 217.

created by the Bank of England in accordance with the emergency legislation made possible appreciable increases of bank deposits.<sup>20</sup> With an increasing price level and the disappearance of gold from circulation, the Government created notes for more permanent use. I do not agree with Cannan,<sup>22</sup> Macrosty and Lacout who contend that the issues of currency notes were made for financial reasons primarily.<sup>23</sup> If the financial motive determined the issues, could they have been so regular? Would there not have been very large issues in 1916 and moderate ones in the second half of 1917? Only the large holdings of currency notes by the banks lead one to suspect that there may have been some pressure from the Treasury. (The large cash reserves of banks are not easily explained by increases in O.D.)

Hawtrey points out that issues of currency notes made possible the exportation of gold, and hence, inflation in the United States. Certainly, economies in the use of gold were made possible; and the value of Sterling was enhanced by the spread of inflation abroad. But the exports of gold made possible by the substitution of paper money in Great Britain, were not an important cause of inflation in the United States. The gold imports into the United States were in large part newly mined gold, and secondarily, supplies from the other belligerents. However, Great Britain would have had to retain more of the new supplies had paper money not been available to meet the increasing demands for currency under a rising price level. Hawtrey was one of the few British economists who discerned some advantage in the circulation of inconvertible paper money.

The reply of the Government to the frequent charges of inflationary finance was that the notes were issued according to trade needs.<sup>24</sup> Mason, the most unrelenting critic of the Treasury's monetary policy, earned the disfavor of Parliament. In August, 1914, the Government maintained that the redemption of

<sup>20</sup> First Report of Committee on Currency and Foreign Exchanges, 1918, paragraph 10.

<sup>22</sup> E. Cannan, *An Economist's Protest*, pp. 109, 115-16.

<sup>23</sup> H. W. Macrosty, "Some Current Financial Problems," *R. S. J.*, 1922; G. Lacout, *Le Retour à l'Étalon-Or*, pp. 28-29. Also see G. Bonnet, *La Politique Anglaise*, p. 20.

<sup>24</sup> See for example, 70 H. C. Cols. 150-54 and 201-8.

notes depended upon the action of the banks; but by February, 1915, the Treasury took measures to discourage redemption.<sup>25</sup> On a number of occasions, the Government emphasized the need of centralizing gold supplies by issuing notes.<sup>26</sup> Lloyd George, in explaining the method of issue, said in March, 1915, that the notes were issued not to meet war expenditures, but rather in response to trade demands.<sup>27</sup> During a discussion of the Finance Bill in November, 1915, Montagu, the Financial Secretary, admitted that the creation of notes was inflationary, but he added that the demand had increased as a result of the military situation, the higher wages and the larger hoards; and, moreover, the currency note policy was approved by Mr. H. Samuel, the spokesman for the City.<sup>28</sup> Acland, a spokesman for the Government, denied that the depreciation of the exchanges had been caused by the excessive circulation of notes.<sup>29</sup> Chamberlain, as Chancellor of the Exchequer after the War, still insisted that the needs of the public determined the quantity of money in circulation, but he added that the monetary requirements were determined by the magnitude of public and private expenditures.<sup>30</sup>

In accounting for the high prices, the Government usually pointed to curtailed production, consumption for war purposes, disorganized transportation, and similar causes.<sup>31</sup> In 1917, Baldwin, the Financial Secretary, referred the high prices to curtailed production and the creation of bank credit.<sup>32</sup> In 1918, Bonar Law, the Chancellor of the Exchequer, put the emphasis on the scarcity of supplies.<sup>33</sup> Committees appointed by Parliament devoted little attention to the creation of paper money and bank credit. According to the Interim Reports on the Prices of Meat, Milk and Bacon and on the Prices of Wheat and Sugar, the cause of high prices was reduced supplies.<sup>34</sup>

<sup>25</sup> *Ibid.* Cols. 150-4.

<sup>28</sup> 75 H. C. Cols. 1961-68; 101 H. C. Cols. 1450-55.

<sup>26</sup> *Ibid.* Cols. 192-97.

<sup>29</sup> 70 H. C. Cols. 154-57.

<sup>27</sup> *Ibid.* Cols. 817-18.

<sup>30</sup> 114 H. C. Col. 886.

<sup>31</sup> Litman is not well informed when he says that inflation (increase of purchasing power) has been one of the explanations most frequently employed to account for high prices. He is also in error when he says that that explanation has been used over and over again by the London *Statist*. S. Litman, *Prices and Price Control in Great Britain and United States During the World War*, p. 37.

<sup>32</sup> 92 H. C. Cols. 347-50.

<sup>33</sup> 101 H. C. Col. 1408.

<sup>34</sup> Report of Committee appointed to Investigate Increase of Prices of Commodities, Cmd. 8358 (1916) and 8483, (1917-18).

British economists have contended that decreased production was an unimportant cause of high prices. Thus Cannan, in his last edition of *Money*, maintains that production increased during the War.<sup>35</sup> Continental writers have put greater emphasis on the deficiency of supplies.<sup>36</sup> For Knapp and his School, money has no value; hence higher prices were necessarily caused by the curtailment of supplies.<sup>37</sup>

In general, bankers and politicians put the emphasis on curtailed production and supplies; but economists pointed to the excessive creations of money and credit.<sup>38</sup> In the Swedish Report of the Committee of Bankers and Political Economists, the latter concentrate their attention on the increase in notes outstanding and the low Bank rate.<sup>39</sup> Heyn<sup>40</sup> referred the high prices to the increase in consumption, and Vissering<sup>41</sup> to scarcity and hoarding of supplies. Jèze and Truchy find in the increase in purchasing power an explanation of secondary importance.<sup>42</sup> The *Board of Trade Journal* pointed out that other factors besides high profits were responsible for high prices.<sup>43</sup> In 1925, the Royal Commission on Food Prices in its First Report, commented on the widely held opinion that high prices were caused by deficiencies in supplies.<sup>44</sup>

Central banks offer varying explanations. As early as 1914, the Bank of England commented on the unfavorable effect of excessive bank credit on prices. But throughout the War, the Reichsbank denied that higher prices had been caused by increases in money.<sup>45</sup> In the Restriction Period the scarcity of commodities probably received more attention than

<sup>35</sup> E. Cannan, *Money*, 5th Ed. Rev., pp. 89-91. The subject is discussed at some length in a note at the end of this essay.

<sup>36</sup> Thus F. Eulenberg, "Die Entwicklung der Warenpreise in England," *Jahrbücher für Nationalökonomie*, 1917 (109), pp. 457-80.

<sup>37</sup> B. Moll, *Die Moderne Geldtheorien und die Politik der Reichsbank*, p. 20.

<sup>38</sup> Thus Cannan, writing in 1919, said that production was at a higher level during the War. E. Cannan, *An Economist's Protest*, p. 181.

<sup>39</sup> *B. T. J.*, August 29, 1918.

<sup>40</sup> O. Heyn, "Zum Problem der Geldentwertung," *Jahrbücher für Nationalökonomie*, 1919 (113), pp. 338-39.

<sup>41</sup> G. Vissering, "The Netherlands Bank and the War," *Economic Journal*, 1917, pp. 170-71.

<sup>42</sup> G. Jèze and H. Truchy, *The War Finance of France*, pp. 117-111.

<sup>43</sup> *B. T. J.*, May 5, 1921.

<sup>44</sup> First Report of Royal Commission on Food Prices, Cmd. 2390 (1925), paragraph 25.

<sup>45</sup> A. Lansburgh, *op. cit.*, pp. 36-37.

the excessive supplies of money as the explanation of high prices.<sup>46</sup>

At the end of this essay, I append a lengthy note to the problem of supplies, and I discuss the problem in my essay on the Control of Prices and Supplies. Here I need introduce only a few relevant considerations. An important cause of the increase in prices was the scarcity of supplies. The economies obtained through the control of exports and centralized distribution were not large enough to offset the losses suffered on account of curtailed production and reduced imports. The country was more concerned over the adequacy of supplies in 1918 than in any other year; but the increase of prices was moderate. This was only possible because prices and the distribution of commodities were controlled, and hence prices were of limited significance. Because the Government determined the distribution of commodities, the pressure of large quantities of purchasing power on the under-stocked markets was reduced. What could the public do but hoard cash and deposits, or invest in public securities? Do not maximum prices and curtailed supplies explain in part the success of continuous borrowing in the latter part of the War? The Treasury allowed the public more liberty in the purchase of a few semi-luxuries in order to collect more tax revenues. An examination of British trade figures reveals that commodities were imported primarily from the Dominions and the United States. Purchases in the latter country were paid for by borrowing and by selling securities; the purchases in the Dominions were paid for in part by meeting the foreign war expenditures of the Dominions, and in part by advances from the Dominions. Exports to the United States and the Dominions and India fell appreciably. In so far as Great Britain thus obtained supplies from these countries without giving commodities in exchange, its economic position improved, and a greater deficiency of commodities was averted.

A rather hostile attitude toward the stock exchange during the War deprived the public of a possible source of employment for its surplus purchasing power.<sup>47</sup> In the early years of the War,

<sup>46</sup> See especially, T. Tooke, *History of Prices*, II, pp. 346-48, and *Brief Observations On a Letter Addressed to Pitt by Boyd*, p. 18.

<sup>47</sup> Lawson criticizes the Government for this reason. W. R. Lawson, *op. cit.*, p. 130.

this action of the Government may have had some inflationary effects. But the Government's position was vindicated later, for the public, unable to purchase commodities, had no alternative but to hoard cash or purchase public securities. The curtailed activities on the stock exchange probably explain the very slow rate of increase in bank clearings. In fact, in 1916, the total was lower than in 1913. That is, however, not the whole explanation, for provincial clearings did not increase as rapidly as prices. Apparently deposits were not being consumed as rapidly as before the War.

By encouraging the use of non-cash payments the Continental authorities tried to keep the amount of notes in circulation at a minimum.<sup>48</sup> Great Britain, on the other hand, did not interfere in that manner, and did not encourage the use of checks. The check is widely used in Great Britain, and, in general, notes are employed only where payments by check are not convenient. On the Continent, it was hoped to introduce checks into general use and thus to economize cash. The authorities seemed to believe that to make payments without the use of notes was less inflationary than with notes.

Note the contrast in attitude toward the circulation of notes. The hoarding of notes on the Continent was at an unprecedented level throughout the War. In Germany when *Giro* money had increased ten times, and notes six times, the premium on gold was only 70 per cent. Of course, the price of gold was a rough measure of depreciation. The explanation of the moderate rate of depreciation is that the public held an unusually large part of their notes for future use.<sup>49</sup> Nevertheless, the authorities were hostile to hoarding; for as a result, the notes outstanding remained at a high level. Moreover, the public hoarded notes instead of investing in public securities.<sup>50</sup> The governments feared that these large hoards of notes might be dumped at unpropitious times with disastrous effects on prices. The hoarding of cash was not a troublesome problem for Great Britain, although the public held large

<sup>48</sup> *L'Économiste Français*, July 21, 1917.

<sup>49</sup> A. Lansburgh, *op. cit.*, pp. 18-21.

<sup>50</sup> "Les Opérations de la Banque de France," 1916, *Bulletin de Statistique et de Législation Comparée*, 1917 (81), p. 210.

inactive deposits. The relative increase in purchasing power was in much closer agreement with the relative change in price levels in Great Britain than on the Continent; but we should consider the inadequacy of index numbers in use. Mazzei observes that the English preferred to put their savings in securities, rather than in hoards.<sup>51</sup>

Hoards, both of notes and of deposits, were of relatively less importance in Great Britain than on the Continent. The prestige of the British Government was never reduced to as low a point as that of the Continental governments, and, hence, there was no wholesale preference for cash in hoards over Government securities; but on the Continent, the failure of war loans from 1917 on, was a reflection of the decline in confidence.

The civilian demand for commodities was sub-normal because workers had to be content with reduced real wages during the War; the Government took a large part of all incomes to meet their expenditures. Workers recouped their losses in part by working more hours, holding more jobs, and consuming less expensive commodities.

		<i>Increase of wages compared to July, 1914</i>	<i>Increase of Cost of Living</i>	<i>London Economist Index no. (Increase over July, 1914 Per cent.)</i>
		Per cent.		
December 31,	1914.....	1-2	10	10
	1915.....	10-15	23	41
	1916.....	20-25	46	90
	1917.....	55-76	76	126
	1918.....	95-100	103	137
	1919.....	115-120	115	186
	1920.....	170-180	149	131

In 1918, the British Government were embarrassed by a disinclination on the part of the public to exchange deposits for securities. The Government coerced the banks into reducing their rates for deposits. In Great Britain, it was a question of weighing cash deposited at advantageous terms against public securities; on the Continent the alternative was a non-interest bearing investment, currency notes. In an important sense, it was advantageous

<sup>51</sup> J. Mazzei, *Il Cambio Italiano*, p. 46.

to suffer a loss of prestige. Notes issued by the Continental governments retained a relatively high value merely because the public refused or were unable to purchase commodities and refused to purchase securities; and the governments made large savings on interest.

## CHAPTER V

### ECONOMY AND TAXATION

ALTHOUGH the British Government referred the high prices to the scarcity of supplies, they were slow to perceive that real wages could not be maintained at their pre-War level.<sup>1</sup> In the early years of the War, the Government failed to realize that the successful issue of a great war might be jeopardized by the attempt to maintain real wages; but several members of Parliament were quick to discern the danger. In the course of a debate on a Vote of Credit in November, 1915, they dwelt on the need of economy. Major Evans opposed the extension of the system of war bonuses, which inevitably result in increased consumption.<sup>2</sup> In 1916, Banbury argued that since prices were higher for everybody, workers alone should not receive compensation.<sup>3</sup> Harcourt pointed out that bonuses were not indispensable for workers for, as prices increased, they purchased less expensive commodities.<sup>4</sup> In a discussion of national expenditures, H. Samuel objected to the official figures for the cost of living because they were based on pre-War consumption budgets. On the recommendation of a committee on national expenditures, the Government appointed a committee to investigate the problem.<sup>5</sup> That committee concluded that a comparison of the cost of identical commodities in 1914 and 1918 would serve only a theoretical purpose, for there had been important changes in commodities consumed. It added that the Government were intent on obtaining an equitable distribution of supplies by making necessary adjustments in wages.<sup>6</sup>

It is pointed out in a note appended to this chapter that the

<sup>1</sup> Cannan, perhaps more than anyone else, objected to the dangerous policy of allowing workers to maintain real incomes at an undiminished level. E. Cannan, *An Economist's Protest*, pp. 178-84.

<sup>2</sup> 75 H. C. Cols. 1209 et seq.

<sup>4</sup> 85 H. C. Cols. 880-90.

<sup>3</sup> 82 H. C. Col. 1705.

<sup>5</sup> 101 H. C. Cols. 1452-53.

<sup>6</sup> Cost of Living Committee, Working Classes, Cmd. 8980 (1918), paragraph 4. (Sumner Committee.)

country suffered from inadequate supplies during the War. Important officials of the Food Ministry, however, are of the opinion that more rather than less food was available during the War than was available before the War.<sup>7</sup> It is not easy to reconcile that contention with the testimony presented in the note at the end of this chapter. However, even if we assume that Beveridge and Coler are justified in making this contention, it is probable that the conditions of supply were in part responsible for the higher prices. Scarcity was prevalent in certain periods; scarcity of many important commodities—food and other commodities—concerned the public. The extensive measures taken by the authorities were evidence of the danger of inadequate supplies. It is pointed out by officials that stocks of food were larger in 1918 than in 1913;<sup>8</sup> but one may inquire whether the explanation of the increase is not that available stocks were concentrated in 1918 and hence, that a larger part was included in the census of 1918 than in earlier years. By the early part of 1918, rationing of several important commodities had been introduced. Conditions were probably better in 1918 than in 1917. The assurance of necessary supplies through Government control made competition for available supplies less keen, and hence, the increase in prices was relatively moderate in 1918 although the rate of increase of purchasing power was more rapid than in any previous year. Deficiencies of supplies of a few per cent were quite general; and even so small a deficiency may result in marked increases in prices. Maximum prices are usually accompanied by a deterioration of quality; hence competition for commodities of normal quality was apt to result in higher prices.

Bowley is critical of those who employ constant weights in the construction of index numbers; he maintains that the weights should be based on realized consumption.<sup>9</sup> But the position that wages should rise in proportion to the rise of the price of identical qualities of commodities consumed by the working man was almost universally held. Stamp takes that position when he maintains that the poor gained little from the legal restriction of rents,

<sup>7</sup> Sir W. Beveridge, *op. cit.*, pp. 230, 310-311, 315; F. H. Coler, *op. cit.*, p. 150.

<sup>8</sup> Sir W. Beveridge, *op. cit.*, pp. 318-19.

<sup>9</sup> A. L. Bowley, "The Measurement of Changes in the Cost of Living," *R. S. I.*, 1919, pp. 347-50.

because indices for the cost of living and, hence, wages were depressed.<sup>10</sup> In maintaining that the poor were at a disadvantage because they were unable to substitute less expensive commodities, Wood took a position diametrically opposite from that taken by the Sumner Committee.<sup>11</sup> (His assumption was that before the War, the poor consumed commodities of the worst possible quality.)

The Departmental Committee on Prices reported that in September, 1916, the average increase in the cost of living of the working classes was 45 per cent, but the increase in wages was not as great. However, allowance should be made for the increase in over-time work and the shift to more profitable employments.<sup>12</sup> According to a Report of the Committee on National Expenditures (1922), the Government had been more liberal than private industry in yielding to demands for higher wages.<sup>13</sup> In Germany, the cost of a soldier's ration was widely employed as a measure for the purpose of adjusting wages. It was a compromise between a theoretical (unchanging) budget and a budget of realized consumption.<sup>14</sup> Private individuals adjusted their purchases to changing prices more rapidly than soldiers. The Germans early recognized the necessity of reducing real incomes in the midst of a period of declining supplies.<sup>15</sup>

In the early years of the War, the exclusive purpose of taxation was to raise revenue. But, as we have seen, authorities later began to consider taxation a means of reducing consumption and thus economizing supplies. In fact, the shift of emphasis to supplies was so complete that McKenna found it necessary to reprimand

<sup>10</sup> Sir J. Stamp, *Current Problems in Finance and Government*, pp. 113-14.

<sup>11</sup> F. Wood, "The Increase in the Cost of Food For Different Classes of Society Since the Outbreak of War," *R. S. J.*, 1916, pp. 502, 508.

<sup>12</sup> Report of Committee appointed to investigate Increase of Prices of Commodities, Cmd. 8358 (1916).

<sup>13</sup> Report of Committee on National Expenditures, Cmd. 1589 (1922), paragraph XVIII. According to the Survey of the Ministry of Labour, increases in wages were not as great as the increase in the cost of living. In 1918, however, workers had almost attained their pre-War level of real wages (weekly). It appears from an examination of the detailed figures that increases of wages were larger in industries controlled more or less by the Government. Engineering trades, railroads, coal mining, and shipping industries were all liberal toward their workers. *Nineteenth Abstract of Labour Statistics of the United Kingdom*, pp. 98-101.

<sup>14</sup> R. Dalberg, *Finanz-Gesundung aus Währungsnot*, p. 5.

<sup>15</sup> F. Terhalle, *Frei oder Gebundene Preisbildung*, pp. 18-19.

mand Joynson-Hicks for denying that the magnitude of monetary expenditures was of any importance; <sup>16</sup> and Bonar Law rebuked Sir A. Mond for saying that the country needed not money, but commodities and men.<sup>17</sup> Jèze, the French historian of British finance, takes the same extreme position when he writes that exploiting the Treasury in its capacity as a buyer, was not a great evil.<sup>18</sup> Perhaps the emphasis on supplies was overdone. Unnecessarily high wages and high prices for war supplies encouraged competition with the Government in the consumption of supplies, and there resulted more inflation than would otherwise have been necessary.

McKenna and Montagu pointed out as early as October, 1915, that consumption would be reduced by heavy taxation.<sup>19</sup> In November, 1915, the Prime Minister referred to the necessity of saving supplies; but he expressed himself in monetary terms.<sup>20</sup> Among economists, Bickerdike and Cannan early pointed to the necessity for a far-reaching system of taxation if consumption was to be curtailed.<sup>21</sup>

In 1917, a vigorous minority began to consider the problem of official extravagance and to make it the cardinal point of attack on the financial program of the Government.<sup>22</sup> Thus the emphasis once again was placed on money instead of supplies. The Government did not lose sight of the fact that revenues had to be raised. In 1918, their policy of restricting imports of semi-luxuries was modified. Imports of tobacco, tea, and wine were at a higher level than before the War. The motive of the Government was to raise more revenue.

A great war cannot be financed without inflation.<sup>23</sup> A strong

<sup>16</sup> 72 H. C. Cols. 698-700; The Committee of Public Accounts (1920) wrote . . . "financial considerations took a very secondary place in the minds of public servants. If any proposal had a reasonable chance of helping to win the War it was, as has been repeatedly shown in the evidence before us, held to be justified, almost regardless of cost." *C. P. A.*, 1920, IV, p. xxii.

<sup>17</sup> 75 H. C. Col. 1734.

<sup>18</sup> G. Jèze, *Les Finances de Guerre de l'Angleterre*, II, p. 97.

<sup>19</sup> 74 H. C. Debate of October 13, 1915.

<sup>20</sup> 75 H. C. Cols. 518-19.

<sup>21</sup> C. F. Bickerdike, "On Paying for War by Loans," *Economic Journal*, 1915, pp. 440-42; E. Cannan, "Industrial Unrest," *Economic Journal*, 1917, p. 463. See also P. Snowden, *State and Local Finance*, p. 39.

<sup>22</sup> Thus see 92 H. C. Discussion of Consolidated Fund Bill of 1917.

<sup>23</sup> Compare Brussels Conference, 1920. Paper no. 13, *Notes on Financial and Monetary Situation*, p. 3.

Government, however, will reduce inflation to a minimum by introducing a strong tax policy. The tax policy of Great Britain was courageous. Prion's contention that it was forced upon the Government because of the unsatisfactory condition of the capital market, is unfair.<sup>24</sup> The magnitude of taxation in Great Britain was unprecedented. McKenna's efforts were particularly effective. The Government recognized that the imposition of heavy taxes affected motivation and production adversely.<sup>25</sup> Under the onerous rates of the Income and Excess Profits Duty, borrowing from the banks for the purpose of paying taxes became common. Even Bonar Law, as Chancellor of the Exchequer, commented on the practice.<sup>26</sup> However, there is some truth in the contention of witnesses before the Colwyn Committee that the taxpayer borrowed to pay taxes merely because he postponed disagreeable payments as long as possible.<sup>27</sup> The borrowing was in reality for other purposes. Was it likely that the banks would extend *additional* credit for this purpose?

The objection to heavy taxation was particularly strong on the Continent. Bonnet contends that heavy taxation is inflationary.<sup>28</sup> Bonn maintains that it impairs saving.<sup>29</sup> Several writers held that heavy taxation is indispensable for an adequate restriction of consumption.<sup>30</sup>

<sup>24</sup> W. Prion, *Der Internationale Geldmarkt*, p. 24.

<sup>25</sup> See the criticisms of a vigorous tax policy by Heyn: Industry is deprived of capital and the wealthy do not reduce their consumption. O. Heyn, *Ueber Geldschöpfung*, p. 54.

<sup>26</sup> 93 H. C. Col. 382; 105 H. C. Cols. 704-5. Also see testimony of Colonel Pownall Before the Select Committee on Increase of Wealth (War), Q 557; G. Cassel, *World's Monetary Problems*, pp. 22-27.

<sup>27</sup> Committee on National Debt and Taxation, *passim*.

<sup>28</sup> G. Bonnet, *Les Expériences Monétaires Contemporaines*, pp. 69-70.

<sup>29</sup> M. J. Bonn, *Stabilisation of the Mark*, p. 41.

<sup>30</sup> C. Supino, *La Carta Moneta in Italia*, pp. 100 *et seq.* Also F. Neumark, *Begriff der Inflation*, pp. 39-42.

## CHAPTER VI

### BANK RATES AND THE CONTROL OF THE MONEY MARKET

ECONOMISTS in general contend that Bank and discount rates were too low during the War. Keynes, Hawtrey, Cassel, Pigou, Cannan and Rist were of that opinion.<sup>1</sup> The Reichsbank defended its low rate on the grounds that speculative profits were so large that high rates would have been ineffective.<sup>2</sup> Many held that high rates were inexpedient. Prion, however, maintained that in spite of the monetary ease, discount rates were high; they were determined by the conditions on the capital market.<sup>3</sup> Because the movement of capital was not free, Lotz doubted the expediency of a high rate.<sup>4</sup> Bonnet agreed that discount rates were of importance even in abnormal times, but the effects on securities might neutralize the beneficial effects of a change in the discount rate.<sup>5</sup> Especially after the War the London *Economist* supported the thesis that high discount rates would be of no avail. They would not deter foreigners from borrowing.<sup>6</sup> Many could see no advantage in higher rates when gold movements were not free.<sup>7</sup> With an embargo on gold shipments in effect, the market was not concerned over the strength of the reserves of the Bank of

<sup>1</sup> See R. G. Hawtrey, *Monetary Reconstruction*, pp. 30-31. The orthodox view is expressed well in the *Compte Rendu de la Banque de France*, 1915, pp. 11-12; also see R. Wolff, "Le Marché Monétaire et les Changes," *Revue d'Économie Politique*, 1926 (40), p. 300. E. Cannan (*An Economist's Protest*, pp. 280-81) made the statement in 1921 that probably the most important reason for inflation was that the Government were unwilling to pay a high rate of interest on their loans. One might inquire if the Government would have been able to borrow adequate sums at any rate in 1917 and 1918?

<sup>2</sup> A. Lansburgh, *op. cit.*, pp. 39-42.

<sup>3</sup> W. Prion, *Der Internationale Geldmarkt*, pp. 66-67.

<sup>4</sup> W. Lotz, *Die deutsche Staatsfinanz-Wirtschaft im Kriege*, p. 92.

<sup>5</sup> G. Bonnet, *Les Expériences Monétaires Contemporaines*, pp. 158-59.

<sup>6</sup> *L. E.*, October 4, 1919.

<sup>7</sup> Aretz points out that during the Restriction Period a large increase in discount rates was necessary in order to attract gold, for the expense of transmission was great. P. Aretz, *Die Entwicklung der Diskontpolitik der Bank von England, 1780-1850*, p. 15. Of course, the expenses were great during the recent War.

England. Thus the market was relieved at the announcement of a legal embargo on gold in 1919.<sup>8</sup> However, the state of the exchanges and the reserves of the Banking Department was not without influence on the policy of the Bank of England. One may reasonably take the position that a high discount rate would result in large movements of temporary funds; and, hence, since gold movements were restricted, the favorable effect on the exchanges might be greater than during normal times.

Wicksell maintains that high rates would have discouraged the purchase of foreign securities, and hence the balance of payments of belligerents would have been more favorable. He, therefore, deplores low rates. He also writes that under the gold standard a slight increase of the price level results in an increased discount rate, for the supply of cash becomes inadequate at the new price level. This is a rather doubtful point.<sup>9</sup>

The contention has frequently been made that the unrestricted issue of currency notes made it possible for the Bank of England to lend freely and maintain a low discount rate. It is interesting to recall that the Lord's Committee on the Panic of 1847 concluded that the crisis of 1847 had been brought on by the low discount rate of the Bank of England, and that the Committee complained because the Bank of England had relied exclusively on the inflexibility of the note issue instead of on changes in the discount rate.<sup>10</sup> According to Nicholson the normal checks against inflation did not function under the peculiar banking and monetary conditions of the War period.<sup>11</sup> Rist maintains that whereas the quantity of notes in circulation is normally determined by the production of gold and the international balance of accounts, during the War the central banks determined how much money was to be put into circulation.<sup>12</sup>

Perhaps too much attention has been given to the problem of

<sup>8</sup> *B. M.*, review of April, 1919 (107).

<sup>9</sup> K. Wicksell, *Vorlesungen über Nationalökonomie*, II, pp. 749-52.

<sup>10</sup> J. W. Gilbart, *A Practical Treatise on Banking*, p. 60. One of the important reasons advanced in support of the Bank Act of 1844, is that under a rigid system of note issue, changes in the Bank rate are put into effect to prevent unnecessary increases in the price level. K. Wicksell, *op. cit.*, p. 207.

<sup>11</sup> J. S. Nicholson, "Inflation of the Currency and the Rise in Prices," *Economic Journal*, 1916, pp. 433-34.

<sup>12</sup> C. Rist, "Les Banques d'Émission," *Revue d'Économie Politique*, 1921 (35), p. 201.

the appropriate Bank rate. The Government interfered in the distribution of credit directly; but, in fact, indirect control was more effective. Industries more and more were rationed in their consumption of raw materials, man power, and of virtually all instruments of production.<sup>13</sup> It became almost the exclusive business of banks to finance industries essential for carrying on the War. The Bank rate was of little significance in the determination of the borrowing policies of the war industries. In contrast to conditions on the Continent, the British Government paid their bills promptly and often anticipated payments. To some extent, the Government financed industry. On the Continent, the banks were forced to finance industry whenever governments were delinquent in their payments.

In the first quarter of the nineteenth century, the British Government were accused of inducing easy monetary conditions in order to effect a profitable conversion.<sup>14</sup> During the recent War there was some evidence of official dictation of the Bank of England rate. The only increase in the Bank rate after 1914 and before the autumn of 1919 was made in August, 1916. The occasion was an outflow of gold. Perhaps the announcement by the Government that their borrowing powers had been exhausted, is significant. McKenna said on that occasion: "Of course I cannot take any responsibility for the Bank rate, because that is a matter exclusively in the control of the Bank of England. I would like to say at once that the Governor of the Bank of England spoke to me of an advance and I entirely agreed with his action."<sup>15</sup> In 1917, the Government admitted that they were responsible for the high rate. The cost of borrowing money had been weighed against the necessity of supporting the exchanges.<sup>16</sup>

It should be recalled here that the Treasury bill rate and the rate on Special Deposits were of greater significance than the Bank rate; and the latter is of significance only in so far as it reflected the Treasury rates. The very stability of the Bank rate is evidence that it was not always a satisfactory guide. As

<sup>13</sup> McKenna stated that taxation could not hamper business enterprise, because business was wholly controlled by the Government. 105 H. C. Col. 722. A. Loria (*Le Peripizie Monetaria della Guerra*, pp. 4-5, 22) points out the significance of commercial stagnation for war finance.

<sup>14</sup> G. R. Porter, *The Progress of the Nation*, pp. 580-81.

<sup>15</sup> 85 H. C. Col. 1286.

<sup>16</sup> 95 H. C. Cols. 376-77.

has been pointed out, there were additional reasons why the Bank rate was of limited significance.

Both the Government and the Bank of England would have preferred a low rate for the Government and a high rate for the public. But that was not practicable. Hence the Government attempted to absorb surplus cash by issuing unlimited supplies of Treasury bills at high rates, and by accepting unlimited deposits (special) at relatively high rates.<sup>17</sup> The deposits were accepted from financial institutions operating in London through the intermediary of the Bank of England. Thus the market rate was maintained at a relatively high level.<sup>18</sup> The Government apparently applied pressure on private banking institutions. Early in 1915, banks had agreed not to lend balances at rates below 2 per cent.<sup>19</sup> In the latter part of 1915, Dominion and Scotch banks had agreed to abide by the practise of English banks of maintaining a minimum rate for advances of 4½ per cent.<sup>20</sup> During the greater part of the War, monetary ease was caused by the offer of excessive supplies of funds. The plenitude is apparent in the differences between market and Bank rates. The differences were as follows: 1914—£1 3s. 2d.; 1915—£1 5s. 11d.; 1916—£0 5s. 0d.; 1917—£0 6s. 8d.; 1918—£1 8s. 3d.

The British Treasury was the most important borrower on the market. Hence the rate for Treasury bills virtually determined the rate for advances for short periods. If the Government could borrow at 4 per cent, a Bank rate of 6 per cent would not be effective. On the other hand, if the Government paid 6 per cent, no one would lend at 4 per cent. Nicholson observes that changes in the rates on public securities preceded changes in the price of money.<sup>21</sup>

Undoubtedly, the difference between the Bank rate and the market rates (bills) was of less significance than usual, for the commercial bills constituted an abnormally small part of the investments available in short term money markets. A relatively

<sup>17</sup> The issue of unlimited supplies of Treasury bills in 1915 resulted in an increase in money rates. *B. M.*, 1915 (99), pp. 720-21, 787-88.

<sup>18</sup> See comments of *L. E.*, July 3, 1915.

<sup>19</sup> *B. M.*, 1915 (99), pp. 720-21, 787-88.

<sup>20</sup> *B. M.*, 1915 (100), p. 499.

<sup>21</sup> J. S. Nicholson, *op. cit.*, *Economic Journal*, 1916, p. 439. In 1918, the policy of the Government was to bring down market rates. *B. M.*, 1919 (107), p. 47.

inelastic demand from some quarters for the reduced supplies of bills probably depressed the return on them appreciably. These lenders preferred commercial bills at low rates to Treasury bills and interest-paying balances at the Bank of England at more profitable rates. The Bank rate is of significance only because it reflected the Treasury rate on bills and on Special Deposits. As has been pointed out, the Treasury controlled both the maximum and minimum rates on the market through its sales of Treasury bills at a fixed rate, its acceptance of Special Deposits, and its preparedness to borrow directly from the Bank of England when adequate supplies of cash were not forthcoming at the rates set on bills or on deposits. Under the peculiar conditions of the War, money did not flow as freely as usual between the various short term markets.

In 1916, the Government instructed banks to be guided by an official priority list in making loans. It was reported in Parliament by an influential member that joint stock banks were asked to refrain from lending at a rate below 4 per cent and that bill brokers were threatened with a 6 per cent rate if they discounted at a rate below 5 per cent.<sup>22</sup> Bonar Law announced in 1918 that he had coerced the bankers into reducing their rates to depositors.<sup>23</sup>

The demands of peace industries for banking accommodation declined rapidly with the progress of the War. At the Barclay meeting in November, 1915, the Chairman of the Board of Directors informed the stockholders that Bank credit had been largely diverted to war industries.<sup>24</sup> In 1918, Sir E. Holden declared that peace industries had been reduced to a minor position and that they had converted their assets in large part into inactive bank deposits.<sup>25</sup> Martin, before the Select Committee on the Increase of Wealth (War) in 1920, testified that the increase in deposits in his bank—and other bankers agreed—was in business accounts. Private accounts were of less importance.<sup>26</sup>

Peace industries, in the same manner as other industries, repaid their debts to the banks. Under the peculiar monetary conditions of the War period, business managers were able to ac-

<sup>22</sup> 82 H. C., Col. 2353.

<sup>23</sup> 109 H. C., Col. 674.

<sup>24</sup> *L. E.*, November 6, 1915.

<sup>25</sup> *L. E.*, February 2, 1918.

<sup>26</sup> H. C. 102 (1920), Q. 2049.

accumulate large balances and, therefore, to repay a large part of their debts to the banks. That is the explanation of a relatively moderate increase in bank advances in the midst of a period of rapidly rising prices. If allowance is made for the large advances made in conjunction with the flotation of war securities, it will be evident that the accommodation granted to war industries was not great, and that the advances to peace industries were most moderate. Bankers frequently commented on the liberated position of industry.<sup>27</sup>

However, the banks were called upon increasingly to make advances to clients who were unable to raise capital on the long term capital market because of Treasury restrictions.<sup>28</sup> An examination of prospectuses issued from 1918 to 1920 reveals that many such advances were made. A few examples follow:

The General Electric Company issued £2 million of securities in order to repay the banks for advances for capital purposes.<sup>29</sup> The British American Tobacco Co. issued £3 million of securities to repay banks for advances made since September, 1918.<sup>30</sup> Rowntree and Co. sold securities, "To extend plant and buildings, and pay off bankers' loans obtained for financing business expansion during the War."<sup>31</sup> The London Nitrate Co.,<sup>32</sup> Rubber Plantations Investment Trust,<sup>33</sup> Lyons and Co.,<sup>34</sup> also borrowed from the banks instead of borrowing on the capital market. A leading banker informed the Select Committee on Increase of Wealth (War) that a bootmaker who normally borrowed equal amounts from the capital market and the banks before the War demanded four fifths of his advances from his bank in 1919.<sup>35</sup> But these advances in the aggregate may not have been very large. In 1919, 62.6 per cent of a sample of 310 large private concerns had no overdrafts at the banks.<sup>36</sup>

Rist's statement that the trouble during the War was that commercial credit was an addition to Government credit, is not

<sup>27</sup> *L. E.*, January 27, 1917 and July 28, 1917.

<sup>28</sup> *B. M.*, 1920 (110), pp. 46-48; also see 108 *H. C. Cols.* 88-95.

<sup>29</sup> *Statist.*, March 6, 1920.

<sup>32</sup> *L. E.*, March 9, 1918.

<sup>30</sup> *Statist.*, May 24, 1919.

<sup>33</sup> *Ibid.*, December 21, 1918.

<sup>31</sup> *Ibid.*

<sup>34</sup> *Ibid.*, June 22, 1918.

<sup>35</sup> Select Committee on Increase of Wealth (War), Q. 2037.

<sup>36</sup> *Ibid.*, Further Note by Board of Inland Revenue on Possible Effects of War Levy upon Business.

in accordance with the facts.<sup>37</sup> The figures for French banks are significant.<sup>38</sup> The decline in the demands of peace industries is reflected in the reduction of current accounts (creditor) from 1914 to 1916. The figures for the four big credit institutions were:

Current Accounts (Creditors)		
Millions of Francs		
4/30/1913 . . . . 5700	12/31/1915 . . . . 3600	1917 . . . . 5960
12/31/1914 . . . . 3700	12/31/1916 . . . . 4260	1918 . . . . 6670

Prion presents the figures for German institutions. War credits were substituted for peace credits. The decline in trade credits from 1914 to 1917 was phenomenal.<sup>39</sup>

Those who are critical of central bank policy during the War, seem to be unaware of the fact that the central banks were in a weak position. The Bank of England's official rate was 5 per cent during most of the War, but the market rate was much lower. Bills were scarce and large quantities of foreign money and unusable balances of peace industries were available. The large discrepancy between the Bank and market rates was reduced in 1916 and 1917 by the happy contrivance of Special Deposits. But in 1918, the gap became abnormally large again. The desire of the Government to sell securities at a low rate was in part responsible in 1918. Of what advantage would it have been to have had a higher Bank rate? <sup>40</sup> The rate for advances may have gone up, but even with a 5 per cent rate, the Government found it necessary to instruct banks to stop lending at a rate below 4½ per cent. The rate for advances is customarily above the Bank rate; the pressure of excessive funds is apparent. The authorities interfered directly with the lending policy of the banks; this direct action was more effective than an increase in Bank rate. What concerns the critics of central banking policy is that, encouraged by the low rates, peace industries borrowed too much

<sup>37</sup> C. Rist, *op. cit.*, pp. 190-91.

<sup>38</sup> J. Lorin, "Principaux Comptes des Quatres Grandes Sociétés de Crédit Française," *Revue d'Économie Politique*, 1920 (34), pp. 622-24.

<sup>39</sup> W. Prion, *Kreditbanken*, pp. 72-75.

<sup>40</sup> In the latter part of the War and the early post-War period market rates were much lower than the Bank rate in Great Britain, and appreciably higher in the United States. The decisive factor was not the Bank rate but other monetary conditions. Joint Committee on Agricultural Inquiry: Hearings (67:1), 1921, p. 559.

from the banks. But we have seen that advances to peace industries were seriously curtailed, especially in the first few years of the War. Most important, the *Treasury* controlled rates.

Critics of central banking policy are also generally critical of the Government for offering securities at a low rate of interest; they assert that the pressure of the Exchequer explains the low Bank rate. But the offer of the British Treasury to accept all surplus funds either by selling unlimited supplies of Treasury bills, or accepting unlimited deposits, both at relatively high rates, was the measure that saved the official rate from complete ineffectiveness. These critics have a real grievance against the Treasury only in 1918.

One should look elsewhere for a tenable explanation of inflation. The supply of loanable funds was excessive. The cash balances of the banks were abnormally large because the Governments had disbursed cash obtained through direct borrowing from central banks, or because the financial community borrowed from central banks. Moreover, the demands of peace industries for banking accommodation were reduced. London was peculiarly affected by (1) the accumulation of large foreign balances, and (2) by the unprecedented reduction of bills. Foreigners accumulated balances in London either because profitable opportunities for investment were not available in their own countries, because they were unwilling to accept the loss involved in converting depreciated pounds, or because they had to make advances in order to maintain their export trade.<sup>41</sup> (They were unable to exchange their £ balances for gold.) Although Sterling exchange was supported by the retention of balances in London, it suffered indirectly from the encouragement given to inflation by the influx of foreign funds.

<sup>41</sup> Santaponte said that the cheap money policy in Great Britain could be defended on the grounds that the British could not profit from a high rate in London, because Italy and Russia could not send short term capital to England. G. Santaponte, "Il Mercato Monetario e la Guerra," *Giornale degli Economisti*, 1917 (54), pp. 211-12. Perhaps, more accurately, the rate was kept high enough to attract all available balances.

## CHAPTER VII

### RESERVES OF THE BANK OF ENGLAND

THE reserves of the Bank of England against deposit liabilities were at an abnormally low level during the War; but reserve ratios had lost their usual significance. The reserve position of the Bank improved with the liquidation of pre-moratorium bills discounted and the repayment of advances made in the early months of the War; but the reserve was reduced by the early withdrawals of gold for exportation. The United States Mint Reports reveal large receipts of British sovereigns in the early years of the War. That fact taken in conjunction with the magnitude of transfers of sovereigns to the Bank of England in 1920, indicates that the public and the banks deposited most of their gold with the Bank of England in the course of the War. In so far as the authorities substituted currency notes for gold formerly in circulation, the net effects on the books of the Bank of England were equal increases in banking reserves (cash) and P. D. This is on the assumption that the gold was not transferred to the Currency Notes Account. From this viewpoint, the substitution of currency notes was inflationary. Since the gold received by the Bank was exported for the most part, the net result was a reduction of O.D. and an increase in P.D. If the exports were made on behalf of the Treasury, the resultant statement of the Bank of England would be identical with the one published before any of these transactions had been carried through.

Gold imports, movements of gold from the banks to the Bank of England, and from the Bank of England to the Currency Notes Account, are of secondary importance for many who contend that the magnitude of the reserve is immaterial under an inconvertible standard. Credit policy was determined by the exigencies of war. But the movements of gold in these early years determined the size of the reserves in 1919 and 1920 when the state of the

reserve was an important consideration in the formulation of monetary policy.

In the second half of 1914, the reserves of the Bank of England suffered very large fluctuations:

<i>Millions of £ Sterling</i>		Percentage reserve against deposit liabilities
July 1 . . . . .	27.1	40
August 1 . . . . .	8.4	14
December 1 . . . . .	54.8	34

Large gold deposits were made abroad on the security of which the Bank of England issued notes. Thus in the latter part of 1914 the Bank of England was again able to accumulate adequate reserves in spite of the large amount of accommodation offered in the early months of the War. Gold flowed in when the London money market refused to renew short-term obligations, and Great Britain temporarily retained South African supplies. England's exports were deflationary and were reflected in losses of gold from the reserves of the Bank of England. These large gold exports were deflationary and were reflected in reductions of O.D. (and possibly P.D.) in a period in which advances to the Allies and Dominions tended to inflate them. In spite of the large receipts of gold from the banks, the trend of notes issued by the Bank was downward. In other words, the Bank of England exported the incoming gold, as well as gold previously held in the Issue Department. In so far as these outward movements took place, the repercussions were not unlike those under a gold standard. The trend of reserves was downward in the second half of 1916, both because gold was being exported, and notes were being withdrawn for circulation; hence the Bank increased its discount rate.

An understanding of the problems raised by the many conflicting movements is to be had by an examination of the banking figures of the month of March, 1915. The figures for the Bank of England were as follows:

		<i>Millions of £ Sterling</i>					Notes in Banking Reserve
		Notes Issued	Gold Coin and Bullion	P. D.	O. D.	P. S.	
February 24 . . . . .	81	62	27	118	27	103	46
March 31 . . . . .	71	52	114	90	45	140	36

What conclusions are to be drawn from these figures?

1. The increase in P. S. is not explained by borrowing on the part of the Government. That is evident both from the figures for P. D. and from the figures published in the Annual Return of Exchequer Bills Purchased by the Bank of England. March is normally the most profitable month of the year for the Treasury, and in 1915 in addition, the Treasury was receiving cash in payment for the war loan recently floated. Perhaps the Bank of England purchased Treasury bills either from the market direct or from the Government. Perhaps the Bank intended to assist the market.

2. The increase in O. S. does not necessarily mean that the market was in difficulties. Temporary advances to the Allies and Dominions by the Bank of England should have made large resources available for the market. The figures for gold and banking reserves of the Bank of England should be examined. Large gold exports were made; the necessity of making large payments abroad for the Allies was an important cause of the exports. In other words, the cash advanced to the Allies was not entirely retained at home. The increase in O. S. is not explained merely by market borrowings to meet tax payments; probably more important were the advances to the Allies and Dominions. The reduction in O. D. is explained in part by the repayment of pre-moratorium bills; the increase in O. S. occurred in spite of these repayments.

Fluctuations in Bank of England notes in circulation were moderate in 1915 and 1916. Fluctuations in the total of Bank of England notes outstanding were reflected almost exclusively in fluctuations in the banking reserve. The Bank did not seem to be much interested in the magnitude of its reserves. Beginning in 1917, appreciable fluctuations of Bank of England notes in circulation became common.<sup>1</sup> The British profited from the intervention of the United States by retaining a large part of South Africa's newly mined gold. Part of this gold was not introduced into the accounts of the Bank of England. The Bank of England now began to issue notes secured by it. Fluctuations in its bank-

<sup>1</sup> Grady's explanation that larger denominations were needed is not adequate. H. F. Grady, *British War Finance, 1914-19*, pp. 194-95.

ing reserve were relatively very moderate in 1917 and 1918. Fluctuations in Bank of England notes issued were reflected by movements of similar proportions in notes in circulation. In 1917, notes in the reserve fluctuated between 27 and 34 millions; in 1918, they fluctuated between 26 and 31 millions. The reserve ratio was even more stable. The Bank was now able to maintain relatively stable reserves by retaining a larger or smaller part of its newly manufactured notes. From a policy of stability of Bank of England notes in circulation, the Bank turned to a policy of stable reserves. The failure of the Bank to strengthen its reserve reflected a lack of interest in the magnitude of banking reserves. In 1919, the reserves began to fall once more; the Bank of England was apparently prompt in following the recommendations of the Cunliffe Committee.

Relevant figures are as follows:

		<i>Millions of £ Sterling</i>		
		Currency Notes*	Bank of England Notes Issued	Bank Notes in Circulation
1914	June .....		57	30
	December .....	20	88	36
1915	June .....		70	35
	December .....	69	70	35
1916	June .....		78	36
	December .....	121	76	40
1917	June .....		73	39
	December .....	185	76	46
1918	June .....		83	54
	December .....	206	97	70
1919	June .....		105	81
	December .....	327	109	90
1920	June .....		135	120
	December .....	320	195	133

\* Gold and Bank of England notes in the Redemption Account are deducted from the total outstanding.

True enough, the Treasury controlled the export of gold and the Bank had a distinctly limited control over the issue of notes. But the availability of South African gold and the need for notes of large denominations made it possible to maintain stable reserves in the latter period, and to issue Bank of England notes in larger quantities. To some extent, they were probably inter-

changeable with currency notes. It is not clear whether the gold policy was determined in part by the desire to maintain the reserves of the Bank of England. My opinion is that the Treasury and the Bank were concerned over the magnitude of the reserves of the Bank and the large issues of currency notes, and that in part, policy was responsible for the more stable condition of the Bank reserves in the latter part of the War, and the less rapid rate of issue of currency notes. If necessary, it was possible to provide for £5 notes.

## CHAPTER VIII

### ADVANCES TO THE ALLIES AND DOMINIONS AND THE INFLATION OF 1915-16

THE Government transferred 160 millions to the Bank of England in the weeks ending July 24 and August 7, 1915, primarily for advances to foreign, Colonial and Dominion governments and secondarily to cover advances to acceptors taken over.<sup>1</sup> On October 23, 1915, the London *Economist* estimated that the subscriptions of the banks to the recent War loans had been 150 to 200 millions, a total approximately equivalent to the advances to the Government from the Bank of England. Neither on the books of the Bank of England nor in the published accounts of the Government are these advances recorded in the traditional manner. According to the weekly returns of the Government for 1915, only a few millions of temporary advances were outstanding in the first few weeks of 1915, and they were repaid in the second and third quarters of the year. These important Ways and Means advances were made in an unorthodox manner. Large loans were made to foreign, Colonial and Dominion governments in 1914 and 1915. The Bank of England was to provide the funds in the first instance. Apparently, stipulations had been made as to when and where these funds were to be disbursed. In the agreement with France of April 30, 1915, it was provided that the French Government were to disburse one third of the credits put at their disposal in Great Britain.<sup>2</sup> Canada and the other Dominions were granted accommodation for the purpose of paying debts in Great

<sup>1</sup> According to the *L. E.* (December 18, 1915), the Government repaid 50 millions between July 18 and September 11, and 54 millions between September 12 and November 6. According to the weekly Exchequer accounts, the repayments were 96 millions for the week ending July 24, and 64 millions for the week ending August 7. (Included were about 28 millions which represented the advances to acceptors outstanding.) Possibly the larger figures include repayments on account of Treasury bills held by the Bank.

<sup>2</sup> G. Jèze and H. Truchy, *op. cit.*, pp. 305-7.

Britain.<sup>3</sup> In so far as the payments were made in Great Britain, O. D. increased. Advances of 160 millions from the Bank of England to the British Government should have been reflected in a corresponding increase in P. S. But no such change occurred. The probable explanation is that the Bank of England considered them private advances, because they were made on behalf of foreign and Dominion governments. Hence the advances were reflected in increases of O. S. and O. D. That O. S. and O. D. did not increase as much as might be expected, is explained (1) by the large repayments to the Bank of England and (2) by the foreign payments which were reflected in part by exports of gold.

The weekly statements of the Bank of England and the weekly finance accounts shed some light on this problem:

*Millions of £ Sterling*

EXCHEQUER RETURNS

Week ending	July 24	July 31	August 7
Receipts . . . . .	154.4	103.2	62.2
Expenditures . . . . .	120.2	37.7	100.2
(Includes 96.0 of repayments to Bank of England)			(Includes 64.2 of repayments to Bank of England)

BANK OF ENGLAND—WEEKLY FLUCTUATIONS

	July 21	July 28	August 4	August 11
P. D.	+56.2	+68.4	-30.6	-4.5
O. D.	-23.4	-39.1	-11.3	+0.9
P. S.	+1.4	no change	-6.3	-1.0
O. S.	+24.5	+27.6	-36.9	-7.1

Unfortunately the weekly figures of the Government and the Bank of England do not cover identical days. A few observations follow:

1. Although the Government repaid 160 millions to the Bank of England during this period, P. S. were reduced by but 6 millions. Apparently these Ways and Means advances were not included in the Bank's P. S.

2. Although the market borrowed heavily in order to pay the Government two or three hundred millions for war securities in

<sup>3</sup> Treasury Minute of November 17, 1914, H. C. 47 (1914-16). The Dominion governments were to borrow 42.25 millions from the British Government, which the Bank of England was to advance until the forthcoming War loans were floated. Their respective borrowings were (in millions of pounds): Canada, 12.0; Australia, 18.0; New Zealand, 5.25; South Africa, 7.00.

a period of a few weeks, O. S. increased but 52 millions in the first two weeks, and declined 47 millions in the next two weeks. The magnitude of the advances made in conjunction with the flotation of the war loan was concealed by the reduction of O. S. which followed immediately the Treasury's repayment of advances to the Bank of England. The Government now repaid the Bank for advances on behalf of the foreign and Dominion Governments; and P. D. and O. S. were reduced.

Apparently the authorities attempted to conceal the nature of these transactions by an irregular system of accounting. Although the Dominions and Allies profited from these advances, they were in fact made to the British Government. The latter repaid them. Nevertheless, they were not included in P. S. The repercussions were similar to those that follow the granting of traditional Ways and Means advances.

The magnitude of the advances of the Bank of England to the Allies and Dominions is not revealed by the Bank's statements.<sup>4</sup> The British Government revealed the following facts. In June, 1915, the Government were concerned over the large loans of the Bank of England to the Allies and Dominions.<sup>5</sup> In the second half of 1915, the Government reimbursed the Bank for advances to the Allies and Dominions and for losses suffered in rediscounting pre-moratorium bills. The Bank of England received 104 millions, of which approximately three quarters were for accommodation granted on behalf of the British Government to the Allies and Dominions.<sup>6</sup> From July 18, 1915, to September 11, 1915, the Bank of England advanced 45 millions to the Allies and Dominions; and from September 12 to November 6, the Bank advanced 32 millions.<sup>7</sup> All advances made after August 12 were still

<sup>4</sup> Some revelations have recently been made in the publication of the Amtorg Trading Company (*Russian Gold*, 1928) and in M. W. Bernatzky, *Monetary Policy in Russia*, and P. N. Apostol, *Credit Operations*. The latter two are published in *Russian Public Finance During the War*. As early as October, 1914, Russia had exported £8 million of gold to Liverpool. (Amtorg Trading Company, *op. cit.*, p. 12.) Russia demanded credits at the Bank of England equivalent to the amount of gold exported and agreed to ship gold only on the condition that France also would put gold at the disposal of Great Britain and that the Allies pay Russia's debts abroad. Amtorg Corporation, *op. cit.*, pp. 12-15; P. N. Apostol, *op. cit.*, pp. 305-7.

<sup>5</sup> 72 H. C. Col. 556.

<sup>6</sup> 75 H. C. Col. 1108. However, the Finance Accounts reveal total payments to the Bank of England of 160 millions.

<sup>7</sup> *Ibid.*, Cols. 1197-98.

outstanding in February, 1916. From November 7, 1915, to February 19, 1916, the Bank of England advanced no less than 66 millions.<sup>8</sup> In April all but 12 millions of these advances had been repaid.<sup>9</sup> In the years 1915 and 1916 the Bank of England's Annual Return of Exchequer Bills Purchased revealed unimportant advances to the British Government. But the advances to Allies and Dominions described above were Ways and Means, and both the Government and the Bank were aware of that fact.

The Bank began to advance cash to the Allies and Dominions in 1914.<sup>10</sup> That O.S. were maintained at a very high level in the first half of 1915—there was a gradual increase of 50 millions—is to be explained by the large advances to the foreign and Dominion Governments. It has not been satisfactorily explained why the British Government did not reimburse the Bank from March to June when P.D. were well in excess of 100 millions. The repayments by the Government in the second half of 1915 were reflected in a reduction of O.S. to the level of January. That there were no large increases in O.S. in the first three months of 1916 in spite of the large advances to foreign governments or Central banks, is probably explained by the fact that securities were withdrawn as collateral for Special Deposits. There is no evidence either in the published figures of the Bank, nor in information revealed by the Government, that the Bank made advances of this type after 1916. However, the French Government reveal that £25 million of French Treasury bills had been sold to the Bank of England by July, 1916, 55 millions by the end of September, 61 millions by the end of January, 1917, and over 70 millions by the end of July, 1917.<sup>11</sup> The Bank of England purchased smaller quantities of these French bills in the later period of the War.

<sup>8</sup> 80 H. C. Cols. 452-53.

<sup>9</sup> 82 H. C. Col 2003.

<sup>10</sup> Thus General Smuts revealed the following facts in an address before the South African House of Assembly. In September, the Imperial Government had agreed to advance £7 million to the Union Government. In behalf of the Government, the Bank of England advanced £5.995 million which obligation the British Government assumed on December 23, 1914. An additional advance of £4.4 million was required in the first three months of 1915. The Bank of England had advanced part of this loan. What is particularly interesting in this statement, is that the Government had taken over some of these advances as early as December, 1914. South Africa. House of Assembly Debates. 1st Parliament. 6th Session, Cols. 486-87.

<sup>11</sup> *Bulletin de Statistique et de Législation Comparée*, 1916 (80), pp. 330-36; 1917 (81), p. 360; 1917 (82), p. 393.

From April to July, 1917, the Bank purchased in excess of 8 millions (net); from August to October, it purchased no additional bills.<sup>12</sup> If the Bank retained these French bills, they constituted a very large part of all its O.S. Thus at the end of January, 1917, the total of O.S. was 38 millions and of French bills 61 millions. Of course, O.S. were abnormally low because they had been used as security against Special Deposits. But even if we take the normal height of O.S. during the War period—say 100 millions—the importance of this peculiar type of Ways and Means is easily seen.

Advances to the Dominions were of some importance in the first year of the War. They were cut off from the London capital market and required assistance in meeting their obligations in London. But with the progress of the War, the Allies took a larger and larger part of the total advances made by the British Government.<sup>13</sup> In the early part of 1915, the French Government estimated that their requirements abroad were no less than 250 million francs monthly; and the French Government agreed to lend Great Britain 500 millions of gold in exchange for foreign credits of 1500 millions over a period of six months.<sup>14</sup> In 1916, the French Government anticipated foreign expenditures of 600 millions monthly.<sup>15</sup> The British Government financed all the expenditures by the Allies for goods produced in Great Britain, and in addition, up to the entry of the United States into the War, a part of the expenditures in foreign countries.<sup>16</sup> In order to finance French expenditures abroad, Great Britain required Sterling in London and dollars in New York. Financing French expenditures in Great Britain was a particularly vicious form of inflation. Large advances from the Bank of England were involved and inflation in other forms was necessary in order to raise a few billions for France. It was particularly unfortunate that this additional money was being spent in Great Britain to purchase large supplies of commodities for exportation to France. The advances to the Allies were especially irksome in 1917. Financial help from

<sup>12</sup> *Bulletin de Statistique et de Législation Comparée*, 1917 (81 and 82), *passim*.

<sup>13</sup> Thus see 88 H. C. Col. 930.

<sup>14</sup> *Bulletin de Statistique et de Législation Comparée*, 1915 (77), pp. 587-88.

<sup>15</sup> *Ibid.*, 1916 (80), pp. 335-36. The situation became so critical that at the suggestion of Great Britain, France restricted the importation of luxuries.

<sup>16</sup> 96 H. C. Col. 1122.

the United States was not obtained as rapidly as had been anticipated.<sup>17</sup>

Canada's financial relations with Great Britain throw some light on the problems raised between Great Britain and its Dominions. Advances were necessary at an early stage in order to meet maturing obligations in London, and also to meet the most pressing capital expenditures.<sup>18</sup> Great Britain was prepared not only to meet Canada's expenditures abroad, but also to meet war expenditures in Canada.<sup>19</sup> But by 1915-16, the Dominion Government announced that they would consume only a minimum of British credit, and that they were prepared to finance their own war expenditures; <sup>20</sup> and the British exchange problem became so troublesome that Canada was soon forced to finance its own war expenditures.<sup>21</sup> Moreover, in order to obtain a large share of British war orders, Canada offered to finance purchases of war supplies in Canada.<sup>22</sup> Great Britain advanced cash in Europe in exchange for dollars in Canada. In the course of the War, the former became indebted to the latter for approximately a hundred million dollars.<sup>23</sup> A large part of the expenditures financed by Great Britain was for the maintenance of Canadian troops in France.<sup>24</sup> Great Britain reimbursed France with Sterling in Great Britain. Canada's balance of trade changed from a highly unfavorable to a highly favorable one in the course of the War. Thus Great Britain received large additional supplies for the prosecution of the War. The contribution was not wholly Canada's, for its balance with the United States became more unfavorable. The necessity of financing Great Britain's war expenditures in Canada made it impossible for Canada to maintain exchange parity with the United States, and in 1918, the former attempted to obtain

<sup>17</sup> 93 H. C. Cols. 1089-90.

<sup>18</sup> H. C. Canada, 1915, I, pp. 82-83. (Canadian House of Commons Debates.)

<sup>19</sup> *Ibid.*, p. 836.

<sup>20</sup> *Ibid.*, 1916, I, pp. 39-40, 815. The Canadian Treasury was informed early in 1915 that it would have to borrow elsewhere. *Ibid.*, 1918, II, pp. 1285-86.

<sup>21</sup> *Ibid.*, 1916, I, p. 808.

<sup>22</sup> *Ibid.*, 1916, II, pp. 960-69, 1810-11; 1916, I, pp. 28-29; 1917, I, pp. 31-33. Sir T. White, the War Finance Minister, has recently presented new material on the financial relations of England and Canada during the War. Sir T. White, *The Story of Canada's War Finance*, especially pp. 57-69.

<sup>23</sup> H. C. Canada, 1919, III, p. 3138; Canadian Sessional Papers, *Public Accounts*, 1918, pp xi-xiv.

<sup>24</sup> H. C. Canada, 1917, I, pp. 283-84.

permission to sell securities in New York for the purpose of improving its exchanges.<sup>25</sup> Apparently Great Britain had some objections.

The year 1915 might have been a year of contraction, for O.D. were reduced by the liquidation of pre-moratorium bills and the repayment of advances. But the market was able to retain the large supplies of cash obtained in 1914, largely because the Treasury resorted to Ways and Means financing on behalf of foreign and Dominion Governments. The Government profited from the large resources at the disposal of the banks by selling war securities to them.<sup>26</sup> Advances of 160 millions would not necessarily result in an increase of 160 millions in O.D. of joint stock banks, for some payments had to be made abroad. Moreover, a large part of the payments in Great Britain were credited to foreign accounts in London. The British banks probably received more cash from these expenditures of the Dominion and Allied Governments than they gave up in liquidating pre-moratorium bills and repaying advances. Large repayments to the Bank of England for obligations entered into in the early months of the War were made by foreign and private banks and bankers. As foreign banks received cash in London in payment for the large imports into Great Britain, they employed it to repay the advances made at the outbreak of the War.

While the Government were borrowing heavily from the Bank of England in order to finance the Allies, they were maintaining unnecessarily large balances with the Bank of England, especially in the second and third quarters of 1915.<sup>27</sup> The level of P.D. was higher in 1915 than in any other year. On 23 occasions, they

<sup>25</sup> *Canadian Monetary Times*, January 9, 1920; H. C. Canada, 1918, II, pp. 1255-56. The debt of Great Britain to Canada became so great that the United States paid part of Great Britain's bills in Canada. H. C. Canada, 1919, II, pp. 1255-58; Sir T. White, *op. cit.*, p. 57.

<sup>26</sup> It might be pointed out here that the debt to the Bank of England from the Treasury was increased appreciably during the War period as a result of the heavy interest charges on Ways and Means advances. Perhaps 50 or 100 millions of additional borrowing were necessary for this purpose. The debts incurred for the management of the public debt were probably not reflected on the books of the Bank of England. P. S. and Undivided Profits (?) would have been appreciably larger. This debt was voluntarily cancelled by the Bank of England after the War.

<sup>27</sup> Hawtrey has an interesting explanation. R. G. Hawtrey, *op. cit.*; *Economic Journal*, 1930, p. 479.

were in excess of 100 millions. The high level of P.D. was the result in part of the rather inexpert management of the two war loans. P.D. increased at the expense of O.D., which were reduced as the market made payments for war securities.

Writers are prone to exaggerate the inflationary effects of the war loans. O.D. were abnormally high as a result of the large advances made on behalf of foreign and Dominion governments; but the possibility of inflation was reduced by the loss in O.D. resulting from the transfers in conjunction with the two loans of 1914-15. The Government hoarded large supplies of cash at the expense of the banks. Other Deposits were reduced to a relatively low level by the transfer of cash in payment of subscriptions to the war loans. If reserves determine credit expansion, these loans were deflationary. The most important conclusion of this section is that 1915 would have been a year of deflation had it not been for the financial needs of the Allies and Dominions.

The banks required large balances in 1915 in order to repay advances, to obtain gold for export purposes, and to pay for currency notes. As P.D. declined to a more normal level, the banks obtained the necessary balances at the Bank of England. By the end of the year, O.S. were at a level appreciably lower than had become normal during the War. Pre-moratorium bills were largely liquidated, and advances made to the banks by the Bank of England during the course of the flotation of the Second War Loan had been repaid.

I should like to restate and amplify my position. One may be reasonably sure that important advances of a temporary nature were made by the Bank of England to the Allied and Dominion Governments, and that more permanent advances were made to the Bank of France, and possibly to the Russian State Bank. Although the advances were paid out of votes of credit, large advances were made by the Bank of England in the first instance, and although periodically repaid, large advances by the Bank were outstanding during most of the period 1914-16. It is possible that these advances were made directly to the foreign authorities, and hence that their inclusion with O.S. was justified; but the British Treasury repaid a large part of these

advances out of money appropriated for the Allies and Dominions by Votes of Credit. It is also possible that borrowings from the Bank on the part of the money market, and, possibly, State trading ventures, accounted for the increase in O.S. to a greater extent than I have supposed.

The inflationary sequence was as follows:

1. Pre-moratorium bills discounted and advances to acceptors.
2. Advances to foreign and Dominion Governments on behalf of the British Government. But the inflationary effects were reduced by the large war loans,<sup>28</sup> the large gold exports, and the increase of currency notes in circulation. From September 1 to December 29 the gold coin and bullion held by the Bank of England declined by 15.1 millions, the notes in the Banking Department declined by 19.1 millions, and currency notes in circulation increased by 38 millions; but in spite of these withdrawals which were paid for with balances at the Bank, O.D. increased from 89 millions on September 1 to 112 millions on December 29. This increase synchronized with an appreciable decline in O.S.: the decline was from 155 millions on August 11 to 93 millions on December 18. The increase to 112 millions on December 29 was in part seasonal.

Other Deposits at the Bank of England increased as the Government consumed the large balances obtained from the flotation of the Second War Loan. The market received additional cash, and was thus able to repay the Bank for part of the advances received in the early months of the War and for those received in conjunction with the sale of war securities.

The banks subscribed generously to the first two loans. Because such subscriptions supposedly result in a corresponding increase of deposits, the practise is frowned upon by economists. When the banks subscribe, their cash declines and investments rise; when the Government expend the money thus received, cash and deposits both increase. The Government thus receive purchasing power that competes with the supplies of cash already available. Public contractors in turn receive part of this additional

<sup>28</sup> The offer of the privilege of borrowing on the security of war loans and the 4 per cent Treasury bills was a proposal to inflate. 72 H. C. Col. 1325.

purchasing power. They have already borrowed from the banks in order to pay for commodities and services in anticipation of payments on Government contracts. The Government were generous debtors, frequently making payments before the fulfillment of contracts. Some objections can be raised to the position, generally held, that subscriptions of, say, 10 millions by the banks result in the creation of 10 millions of additional purchasing power. The large profits that were made on Government contracts were held in part as inactive bank deposits; and later they were in part converted into Treasury balances in payment for taxes. Additional provision for taxes, for extensions, and for delayed depreciation and renewals were made by holding larger inactive balances. Moreover, writers adhering to the above view assume that the policies of the banks were not modified in other directions by the purchase of public securities. The subscriptions of banks to war loans and the advances to war industries in anticipation of these disbursements were, in part, substituted for advances to peace industries. But, more important, is the question, would the banks have been willing to hold the large cash resources received in the course of the War without expanding their deposits proportionately? The answer of the banking witnesses to the Colwyn Committee (1926) was an emphatic no: English bankers adhere to traditional reserve ratios. If subscriptions to war loans, advances to potential lenders to the Government and to contractors had not been made by the banks, other employments for their resources would have been found. It has also been pointed out that part of the expenditures of the Government out of the proceeds of war securities was not reflected in an increase in credit balances, for depositors with debit balances received these payments.<sup>29</sup>

<sup>29</sup> A. W. Kirkaldy, *op. cit.*, pp. 220-21.

## CHAPTER IX

### 1916—INFLATION

ENGLISH banks that held 90 per cent of the total of (1) Cash at Home and at the Bank of England and (2) Money at Call and Short Notice in 1916 distinguished (1) from (2). Their Cash at Home and at the Bank of England increased by 69 millions in 1916. (Compare the movement in balances at the Bank of England and money in circulation.)

	<i>Millions of £ Sterling</i>		<i>Millions of £ Sterling</i>
Increase		Subtract	
O. D. ....	14.7	Increased gold held by the	
Bank of England notes in		Bank of England .....	1.5
circulation .....	4.4	Gold exports <sup>1</sup> .....	34.0
Fiduciary currency notes .....	63.5		35.5
Total .....	82.6		
Net excess .....	47.1		

Why was the increase in (1) Cash at Home and Money at the Bank of England of English banks (69 millions) greater than (2) the increase of the total money in circulation and of O.D. at the Bank of England (47 millions)? If we assume that all British banks held the same proportion of cash to all resources as English banks, the increase in cash of British banks was 90 millions. The above comparison is made on the assumption that all increases in O.D. accrue to British joint stock banks. But fluctuations in O.D. do not always accurately reflect fluctuations in the cash balances of British banks.<sup>2</sup> British banks may have received payments on the books of the Bank of England from brokers, and from foreign, Dominion and Colonial banks and Governments. Because money rates were high in London, and because neutrals were often unwilling or unable to receive payments

<sup>1</sup> The estimate of gold exports is based on published figures for January to July. This estimate is more likely to be an under- rather than an over-statement.

<sup>2</sup> The London *Economist* (March 24, 1917) points out that the total of O. D. is not conclusive evidence of the state of the reserves of clearing banks.

abroad, transfers of deposits may have been made by foreigners to British banks. To those who agree with Macrosty that British bankers' balances constituted over 87 per cent of O.D., the possibilities of such movements within O.D. would not seem great.<sup>3</sup> Hulftegger estimates that the balances of British banks were approximately 40 per cent of O.D. at the outbreak of the War. The former is undoubtedly nearer to the truth.<sup>4</sup> It is also probable that O.D. of foreign institutions, which were abnormally large at the end of 1915, were largely converted into Special Deposits by the end of 1916. The conclusion is that the relatively marked increase of cash of British banks is accounted for by the fact that they acquired a larger proportion of O.D. More is said below on this point.

Prices rose 34 per cent (Sauerbeck) during the year. How was that possible when the cash available outside of the banks declined? The increase of cash at the disposal of all British banks was approximately 90 millions. Since O.D. increased but 15 millions, the banks' increased holdings in currency and bank notes or gold were perhaps in the neighborhood of 75 millions, but the total increase of money in circulation was appreciably below that figure. (I am neglecting at present the possibility of transfers from outside institutions to British banks at the Bank of England.) A marked increase in prices occurred while the public was losing cash. The public continued to give up gold in exchange for currency notes. Gold was needed for remittances abroad. In accepting paper money in place of gold that was formerly hoarded, the public obtained purchasing power that circulated more rapidly than gold. Moreover, the proportion of O.D. belonging to British banks probably increased; hence their increased holdings of currency notes were not as large as seems probable at first glance. The large exports of sovereigns to the United States are

<sup>3</sup> H. W. Macrosty, "Submerged Information, Banking," *R. S. J.*, 1927, pp. 367-68.

<sup>4</sup> O. Hulftegger, *Die Bank von England*, p. 93.

The Bank of England revealed the magnitude of bankers' deposits in November, 1928. They came to 62 millions as compared to 99 millions of O. D. (*L. E.*, November 28, 1928.) Most of the former belong to clearing banks undoubtedly. Keynes points out that the clearing banks held two thirds of their reserves in notes in 1928. J. M. Keynes, *A Treatise on Money*, I, p. 60. Fluctuations in reserves may be accounted for in large part by movements of cash between the banks and the public and vice versa.

evidence that the gold holdings of the banks probably had not increased.

The increase in prices was 34 per cent, in deposits but 13 per cent, and in cash of British banks approximately 37 per cent. That British banks did not adhere tenaciously to traditional reserve ratios, is attested by the history of the year: the reserve ratio rose from 19 to 23 per cent. If Special Deposits had not been accepted during the year, the improvement might have been greater. Investments increased 4 per cent; but bills discounted rose from 100 to 194 millions. A few banks, publishing details, revealed that commercial bills were disappearing. Hence the banks probably purchased more than 100 millions of Treasury bills. Although the public absorbed almost a billion of Treasury bills and Exchequer bonds, advances of British banks declined by 4 per cent. The investments in public securities required little support from the banks. What explains the increase in deposits of 200 millions? Purchases by the banks of Treasury bills was no doubt a cause of the increase. One may infer from the rapid expansion of business profits, from the large reserves made for capital expansion, taxes and depreciation, and from the increased savings, that the increase in deposits was largely in saving deposits; but actually they were in large part consumed in the purchase of securities. The increase in prices is not easily explained by the Fisher version of the quantity theory, for neither the banks nor the public obtained additional cash adequate to explain the rise of prices. The decline of advances is significant. The influx of cash gave the banks an opportunity to expand which they did not take. Money in circulation and advances probably declined.

The banks may have redistributed their cash, for they held a rather high proportion in their vaults. With O.D. at but 127 millions and their cash at 327 millions, the balances of British banks at the Bank of England were no more than from one third to one fifth of their total cash holdings.<sup>5</sup> (Allowance is made for O.D. not belonging to British banks.) Another possibility is suggested. There have been rumors that the banks included in their

<sup>5</sup> McKenna's estimate of the cash holdings of British banks in 1914 and 1919 is of interest here. Apparently the increase in holdings of cash was at a more rapid rate for the banks than for the public. *L. E.*, January 31, 1920.

cash the Special Deposits at the Bank of England. If we estimate liberally that the British banks held 90 millions of O.D., there remain 237 millions of cash to account for. The total of currency notes and Bank of England notes in circulation was but 220 millions. If we assume that the joint stock banks held 50 millions of gold—a liberal estimate in the light of later developments—that would leave but 30 millions of paper money in circulation in addition to the gold still hoarded by the public.

The decline of advances is to be noted, and the decline in commercial bills (compared to 1914) was also significant. The purchase of Treasury bills by the banks was important because of the ensuing expansion of deposits. Probably, the increase in deposits was more largely in current deposits, for during this year of continuous borrowing an important part of saving deposits was converted into Government securities. Current deposits were maintained at a relatively high level because business had improved and prices were rising.<sup>6</sup> Under similar conditions on the Continent, the rate of increase in current deposits was very rapid. Since advances were reduced and commercial bills were scarce, it might be asked what is the explanation of this increase in deposits. Purchases of Treasury bills and other investments by the banks and the increase in cash were contributory causes. If banks purchase Treasury bills and the Treasury disburse the proceeds, deposits and securities of banks increase. This is on the assumption that these purchases are not a substitute for other methods of consuming resources.

The decline in clearings (bank) from 1914 to 1916 is not explained satisfactorily by the restriction of dealings in securities. Perhaps the proportion of current deposits was reduced, or, more likely, they were not normally active.<sup>7</sup> Otherwise, how are we

<sup>6</sup> The Chairman of Parr's explained the increase in deposits in the latter part of the War by the necessity of holding large balances in anticipation of large payments in the future. *B. M.*, 1918 (105), p. 436.

<sup>7</sup> Keynes in a capable manner discusses the relative magnitude of Current and Saving (Time) Deposits in his brilliant Treatise on Money. He contends that the proportion of Saving Deposits declined during the War. However, in my opinion, an unusually large part of Current Deposits remained inactive, for business men were accumulating large balances. The failure to verify the imple quantity theory is perhaps not unexpected. It is too late in the composition of this book to consider several cogent points made by Keynes in his treatise on money. In particular, his argument that wholesale index numbers are inadequate measures of changes in purchasing power, is convincingly put; and he gives an

to explain the moderate increase in clearings as compared to the increase in deposits and prices?

The financial year 1916 ends on the 51st week for our purposes, for in the last week of the year, preparations were made for the War Loan of 1917. Prices rose 34 per cent in 1916, deposits increased but 13 per cent, and money in circulation (outside of banks) probably declined. Direct advances from the Bank of England to the Government were of secondary importance. Advances to customers to enable them to carry war loans were not of great importance; loans and advances declined 4 per cent. The increase of cash at the disposal of British banks was marked. However, with an increase in deposits of but 200 millions, the banks would have held adequate reserves if they had obtained no additional cash during the year. The financial measures at the outbreak of the War, and the advances on behalf of Allied, Dominion and Colonial Governments, and, perhaps, to others, made inflation possible in 1915. But after the flotation of the Second War Loan (1915) O.D. declined to a low level. However, they remained appreciably above the pre-war level, although the orthodox type of Ways and Means from the Bank of England was almost entirely repaid. One explanation of the inflated level of O.D. in December, 1915, is that all pre-moratorium bills were not paid off, and an appreciable proportion of the advances to acceptors was periodically renewed. Also, advances from the Bank of England to the Allies and Dominions were still outstanding.

That the acceptance of Special Deposits was deflationary, is evident from the reduction of O.D. by 34 millions in the early months of 1916. This conclusion might not hold if banks considered Special Deposits as cash. Of course, in part the reduction was suffered by outside institutions. In the second half of the year, O.D. and O.S. were again at the higher level of December, 1915. Was this reaction caused by the withdrawal of Special Deposits, or by renewed financing by the Bank or Treasury on behalf of the Allies? Probably the Bank substituted P.S. as security against Special Deposits. Large advances were made to the Dominions important place to the relation of Savings to Investment or Thrift to Enterprise in the determination of prices. J. M. Keynes, *A Treatise on Money*, I, pp. 36-40, 57-64; Book III, Chs. 9-12; II, Book VI, Book VII, Ch. 37.

and (especially) to the Allies in 1916. The Bank purchased French Treasury bills in large quantities. If the financing of Allied Governments by the Bank or Treasury resulted in larger O.D., the effects were in part nullified by the acceptance of Special Deposits. As foreign and Dominion banks converted these resources into British securities and Special Deposits, the proportion of O.D. to the credit of British institutions increased, for Treasury payments were made in large part to British contractors, and even when made to the credit of foreign and Dominion institutions, the proceeds were in turn invested in British securities or Special Deposits. Thus they would ultimately be converted into a balance of a British bank at the Bank of England.

No large loan was floated in 1916. McKenna announced that so long as the public subscribed to short-term Government securities out of real savings, no large loan would be floated. In 1916 the public was converting its savings into short term securities; inflation was making little headway. The increase in prices is to be explained in part by deficient supplies, rather than by the creation of artificial purchasing power. The large issues of currency notes were made as a result of the high prices and to replace gold formerly in circulation.

## CHAPTER X

### 1917-19—MORE RAPID EXPANSION

THE increases in deposits, advances, and cash of British banks were greater in 1917 than in 1916; but the increase in prices was but 20 per cent. Deposits were higher by 20 per cent, and advances by 14 per cent. The latter is a more informative measure of inflation in a period in which the distribution between saving and current deposits is changing rapidly. Although Treasury bills outstanding declined, discounts of British banks increased by 60 per cent. After the flotation of the Loan of 1917, Ways and Means remained at a higher level, and the trend was upward thereafter. Approximately 70 millions of additional Currency and Bank of England notes were put into circulation. The increase of O.D. from the last Saturday of 1916 to that of 1917 was not great. The increase would have been greater had not O.D. been abnormally high in the last week of 1916 on account of the preparations for the War Loan. British banks held more cash than in 1916; O.D. had increased from 120 to 148 millions, and money in circulation had increased 71 millions. Whereas cash flowed from the public to the banks in 1916, the flow was reversed in 1917. The Government disbursed hundreds of millions in 1917 and 1918 in the purchase of commodities. Traders received in return bank deposits, which were created by the banks for the Government. Deposits increased as a result of the activities of the Government. The increase in deposits is not a satisfactory measure of inflation, because the proportion of deposits that are consumed relatively slowly probably increased. On the other hand, advances are of limited significance, because the inflation of the period was caused in large part by excessive purchases of public securities.

Movements of securities between the banks and the public may be inflationary or deflationary. The absorption of Treasury

bills in 1917 by the banks was reflected in an increase of deposits and of bills discounted. But the dumping of investments by the banks resulted in a decrease of investments and deposits. Although the War Loan of 1917 had been floated in the meanwhile, the banks held a smaller amount of these investments on June 30, 1917, than on June 30, 1916. The public absorbed the long term securities issued in 1917; but large advances were made by the banks in order to enable subscribers to pay.<sup>1</sup> The flotation of the loans of 1915 had not been accompanied by such large advances. Bonar Law announced in May, 1918, that a "big" loan was inadvisable, because the advances obtained from the banks in the course of the flotation of the last loan had not been repaid.<sup>2</sup>

The history of 1918 was not unlike that of 1917; but the Treasury relied more on continuous borrowing. The banks continued to purchase Treasury bills from the Government and the market, and did not purchase long term investments in large quantities. The latter constituted a smaller proportion of all banking assets in 1918 than in 1917.<sup>3</sup>

Approximately 120 millions of notes were put into circulation; this was easily the most impressive increase of the War period. The increase in "Cash and Money at the Bank of England" of British banks was approximately 60 millions. I estimate O.D. at 205 millions on December 31, 1918, or an increase of 56 millions. Bank of England notes in circulation were higher by 31 millions, a phenomenal advance. The public absorbed large supplies of cash during the year, for the addition to O.D. was approximately equivalent to that in Cash and Money at the Bank of England of British banks. But outside institutions may have acquired part of the additional O.D., because in the course of the year, the rate on Special Deposits was reduced. However, they probably transferred part of their deposits at the Bank of England to joint

<sup>1</sup> Fraser even attributed the decline in the rate of increase in the price level in 1917 and 1918 to the participation of the public in the purchase of public securities. Sir D. D. Fraser, "The Maturing Debt," *R. S. J.*, 1921, p. 27. The Government again offered Treasury bills by tender, with the result that the public was virtually excluded from the Treasury bill market. *B. J.*, 1917 (103), pp. 696-97.

<sup>2</sup> 106 H. C. Cols. 235-39.

<sup>3</sup> However, the banks offered generous help to purchasers of Government securities.

stock banks at high rates of interest, or invested in Treasury bills. That the banks were not holding large surpluses of cash in 1917 and 1918, is attested by the unusually large borrowings in the last week of the year from the Bank of England. The loss of surplus cash as a result of the introduction of Special Deposits, is apparent.

<i>Millions of £ Sterling</i>					
1915			1916		
O. S.	O. D.		O. S.	O. D.	
12/22/15.....	102	99	12/27/16.....	106	127
12/29/15.....	112	112	1/ 3/17.....	92	116
1/ 5/16.....	115	106			
1917			1918		
O. S.	O. D.		O. S.	O. D.	
12/26/17.....	95	124	12/25/18.....	92	149
1/ 2/18.....	106	158	1/ 1/19.....	106	215

These figures do not fully indicate the extent to which the market relied on the Bank of England, for additional resources were obtained by the withdrawal of Special Deposits. P.S. were generally pledged against Special Deposits. A phenomenal increase of P.S. from 58 millions on December 26, 1918, to 124 millions on January 1, 1919, is probably to be explained by the withdrawal of Special Deposits to meet the end-of-the-year requirements.

The public disposed of part of its holdings of Treasury bills. With profits abnormally high in 1917 and 1918, deposits were increasing rapidly, and were being converted, in large part, into Government securities. However, the increase in deposits was too rapid to satisfy the Government; hence the banks were coerced into reducing their rate for deposits. The increase in deposits was marked both in the second half of 1917 and the first half of 1918; but in the second half of 1918, it was inappreciable.

A large increase of money in circulation and in deposits was accompanied by a rise in the price level of but 5 per cent (*Economist*). Movements in the total of deposits, in money in circulation, and in banking reserves do not offer an adequate explanation of the changes in the price level. In 1916, 1917, and 1918, the correlation between fluctuations in money and deposits and the price level was not high.<sup>4</sup>

The Government disposed of several thousand millions of

<sup>4</sup> However, contrast J. S. Nicholson, *op. cit.*, *Economic Journal*, 1916, p. 439.

investments in 1917 and 1918, but a modicum of inflation resulted. The increase in bank advances was small compared to the issues of securities, and moreover, the increase is to be explained in part by the higher price level.

In 1918, as in 1917, the Government resorted to Ways and Means (Bank of England) advances more systematically and more intensively than in the earlier part of the War. But by accepting Special Deposits and borrowing on Department Ways and Means, the authorities absorbed the surplus of cash thus made available by the Bank of England. However, O.D. tended to rise in 1917 and 1918, although the increase was small in comparison with the movement in prices. Probably, O.D. were composed largely of balances of British institutions, for the balances of outside institutions were converted largely into Special Deposits and British securities. The upward tendency of O.D. is to be explained in large part by the accretions of gold and by advances from the Bank of England to the market. O.D. were reduced as a result of large withdrawals of currency notes; but that is already accounted for in large part by the increase in Department Ways and Means.

An increase in prices of 20 per cent; a large addition to deposits, and an even larger increase in advances; the discontinuance of Special Deposits; a negligible increase in money in circulation; a decline of 150 millions of Bank of England Ways and Means in the last quarter made possible by large issues of Treasury bills; an unsuccessful loan in the third quarter—these were the outstanding events of 1919.

The repayment of Special Deposits was unfortunate at this time. Occurring in the midst of a period of inflation, it was particularly undesirable, for the market thus acquired additional supplies of cash. In repaying 150 millions of advances to the Bank of England, the Government displayed courage. Although the Government sold 250 millions of Treasury bills (net), the net effect might have been deflationary. But unfortunately the reduction of Ways and Means was in large part a repayment of Special Deposits, and hence, O.D. did not decline rapidly. Of course, the Bank repaid the market's Special Deposits with cash

previously transferred by the market. But this cash might have been used to reduce the traditional type of Ways and Means. True enough, the Treasury continued to sell bills, and in so far as investors were prepared to purchase bills to replace Special Deposits, the effects of the reduction of Special Deposits were not of importance. However, such reductions of Ways and Means are to be distinguished in their effects from the reductions in the orthodox type of Ways and Means.

Cash and Money at the Bank of England of British banks increased by 50 millions; but O.D. declined by 34 millions. The increase of money in circulation was 28 millions. Perhaps with the termination of Special Deposits, the proportion of O.D. belonging to British banks increased, for they offered to accept deposits at advantageous terms from foreign holders of balances in London.

The repayment of Special Deposits handicapped the authorities in their attempts to enforce deflation. In the first quarter of the year, the Government received large revenues from taxes and from the sale of war supplies. But the banks, withdrawing their Special Deposits, were not disturbed. Although Ways and Means were reduced by 97 millions from January 11 to February 4, P.S. declined but 21 millions. The divergence in the movements of P.S. and Ways and Means is explained in large part by the withdrawals of Special Deposits, which movements were reflected in additions to O.D. and P.S. A policy of deflation was not enforceable so long as the banks held large quantities of Special Deposits or Treasury bills. Their importance is made clear by the following figures:

<i>Millions of £ Sterling</i>			
Ways and Means		P. S.	
June 7-30 .....	+317	June 4-July 2 .....	+40
July 12-August 2 .....	-498	July 16-August 6 .....	-12
October 11-November 29 .....	-215	October 8-December 3 .....	+27

The independent position of the banks is apparent from the unprecedented stability of O.S. Even in the first quarter of the year they were remarkably stable. Reports of scarcity were frequent, however.

The Victory loans were a failure: the banks were forced to purchase 100 millions of the issues. Advances increased at a more

rapid rate than in any previous year. Nevertheless, evidence of the inflationary effects of the loans is not apparent in the magnitude of deposits which were at a lower figure on December 31 than on June 30. (The Victory Loan was floated in the 3rd quarter.) A possible explanation of the stability of deposits is the sale of Treasury bills to the public by the banks, the large remittances abroad, and increased issues of currency.

## CONCLUSION

THE introduction to this book contains many of the important points made in this essay, although it does not in any sense serve as a substitute for the reading of the book. The object at this point is to bring the reader's attention to a few conclusions worthy of special emphasis.

Fluctuations in the total purchasing power are not an adequate explanation of the price history of 1914-19. In the early years of the War, the currency notes put into circulation were in large part substitutes for the gold formerly in circulation. The net addition of money was not adequate to explain the marked increase in prices 1914-16. Moreover, since the increase in cash of British banks during this period is not accounted for by the increases in O.D. and Bank of England and currency notes, I conclude that the movement of cash was from the public to the banks. Although prices increased less rapidly in 1917 and 1918 than in the earlier period, the authorities created money at a more rapid rate and cash flowed from the banks to the public. Moderate creations of cash and reductions of cash in circulation (outside of the banks) were accompanied by rapidly rising prices in the first few years of the War; and a more rapid rate of manufacture of money, and movements of cash from the banks to the public in the latter part of the War were accompanied by moderate increases in prices. What is the explanation?

An examination of available statistics reveals that supplies were below normal in 1915-16; but the scarcity was more marked in 1917-18. In the earlier period, the public disbursed their cash quickly; hence prices rose rapidly. In the latter period markets were controlled. Prices were fictitious in the sense that unlimited supplies could not be purchased at market (controlled) prices. Hence more purchasing power was diverted to security markets and hoards. Thus is explained the decline of the rate of increase of prices in 1917-18, for the increase of prices might have been

greater as a result of the great concern over supplies, the large creations of money and credit, and the demands for cash emanating from the public.

An advance by the Bank of England to the Government results in an increase in P.D., and (later) a reduction of P.D., and an increase in O.D. The inflationary effects of the orthodox type of Ways and Means advance have been exaggerated. In the early period of the War, such advances were moderate and were repaid at an early date. In the later period, they were of greater importance; but their inflationary effects are to be considered in conjunction with the deflationary effects of Special Deposits, which were accepted by the Bank of England and put at the disposal of the Government. However, when the cash thus received was expended by the Treasury, the deflationary effects were neutralized. Moreover, the receipts from the issue of currency notes were included in Department Ways and Means, and the withdrawal of notes was reflected in a reduction of balances at the Bank of England. The money market exchanged O.D. for currency notes; however, the former were replenished when the Government disbursed the cash (balances) received in payment for notes.

The activities of the Bank of England in the early months of the War and in conjunction with the 1917 War Loan led to an addition of O.D. which was maintained more or less permanently in spite of the reactions that followed soon after. The early advances of the Bank of England to the money market, the advances to the Allies and Dominions from 1914 to 1916 and the smaller advances in 1917, the accretions of gold, and large advances to the money market in the latter part of the War were the successive operations that tended to keep O.D. at a high level. Without a doubt, too much attention has been paid to the traditional type of Ways and Means. However, the latter had a particularly unfavorable effect in that the additional balances at the Bank of England were retained until the Government repaid the advances. Hence the deflationary effects of an equal quantity of Special Deposits or Department Ways and Means (withdrawals of notes, for example) were not as great as the inflationary effects of orthodox Ways and Means advances from the Government.

The loss of cash was only temporary; the market was reimbursed as soon as the Government disbursed the proceeds of these advances. By accepting Special Deposits and selling unlimited supplies of Treasury bills, the authorities obtained cash formerly at the disposal of the banks. Indirectly also they thus were responsible for a measure of deflation; for, by pegging rates, they discouraged borrowing to a limited extent.

## NOTE I

### KEYNES' INTERPRETATION OF THE INFLATION PERIOD

KEYNES' brilliant *Treatise on Money* has just appeared. His interpretation of the Inflation period is as follows<sup>1</sup>: "Thus forced transfer-ences of purchasing power in some shape or form were a necessary condition of investment in the material of war on the desired scale. The object was to curtail *general* consumption, and it would have been quite insufficient to curtail the excess consumption of the relatively rich, since their consumption, especially in times of war, is not a large enough proportion of total consumption. It was a choice, therefore, between the remaining alternatives—between lowering money-wages or letting prices rise." Thus the entrepreneurs would become, assuming the adoption of either of these alternatives, the collecting agents, so to speak, for the resources abstracted from the earners of incomes. At such a time it is necessary to divert production resources of all kinds from one employment to another on a large scale and as rapidly as possible. It would be next door to impossible to achieve this except by involving the assistance of the price mechanism, *i.e.*, by placing credit facilities at the disposal of the new employments and allowing them to bid for productive resources against the old employments, thus allowing some measure of Income Inflation. But the object, we must remember, is to let prices rise *more* than earnings; we desire primarily, that is to say, a Profit Inflation, not an Income Inflation. It is expedient to use entrepreneurs as collecting agents. Having adopted for quite good reasons a policy which pours the booty into their laps, let us be sure that they hand it over in the form of taxes, and that they are not enabled to obtain a claim over the future income of the community by being allowed to 'lend' to the State what has thus accrued to them. They (British Treasury) had got as near to the ideally right procedure as could be expected. They are only to be criticised for not applying the procedure early enough and for not following up their other taxes by a Capital Levy in 1919."

<sup>1</sup> J. M. Keynes, *A Treatise on Money*, II, pp. 170-76. What follows has been pieced together.

<sup>2</sup> Keynes makes a deserved attack on the financial purists, and then points out that it would not have been expedient to reduce money wages.

The following criticisms of Keynes' interpretation of this period are offered:—

1. The Income Inflation was greater than might be inferred from Keynes' discussion. Wage earners were remarkably successful in keeping wages up, interest rates were high, and net profits after payment of taxes remained at a high level.

2. Hence maximum prices, control of supplies and security markets, and sales of Government securities to workers, capitalists and entrepreneurs were of great importance. This is especially important if, as Keynes contends, taxation was carried as far as was practicable. I am inclined to agree with him in that conclusion, in general, although Bonar Law's régime in the latter part of the War was not characterized by a vigorous tax policy. By controlling prices, supplies, bank credit, the Stock Market and the like, the Government succeeded in diverting purchasing power to the market for their securities. Control of supplies and prices was an important adjunct to the tax power.

3. The entrepreneur did not hold the vital place in the mechanism that Keynes would have us believe. Large sales of securities were made to others. These sales were of great importance especially because vigorous taxation of the many was difficult, and the danger of excessive consumption was great. Moreover, the banks advanced credit directly to purchasers of securities and purchased securities on their own accounts. Of course, this process increased the Profit Inflation. Taxation was of secondary importance—especially taxation of the business man—compared to other methods of obtaining revenues. Moreover, one should not neglect the important revenues received in the process of introducing a state of Profit Inflation.

The large sales of securities in 1918 constituted one of the great achievements of the Treasury. Subscriptions by all classes were of importance, and without control of markets and prices, the campaign of continuous borrowing would have failed.

4. Keynes points out that limited Income Inflation was necessary in order to assure the diversion of credits required for War purposes from non-essential consumers of credit. But in part the diversion was effected through the *control* of the distribution of both bank and capital resources.

## NOTE II

## PRODUCTION AND SUPPLIES

One important cause of the high prices during the War has not been adequately investigated. Statements have been made concerning the adequacy or deficiency of supplies, but no attempt has been made to assemble the available facts.<sup>1</sup> The more important sources of information are:

Annual Statement of Trade of the United Kingdom with Foreign Countries and British Possessions, especially Volume 1, Tables 1, 2, 14, 15, and 17, and Volume 2, Tables 1, 2, 3, 4, and 10.

*Enquête sur la Production.* International Labor Office, especially Volumes 1, 2, and 3.

Board of Trade Journal.

Statistical Abstract of Great Britain.

Monthly Bulletin of Statistics of League of Nations.

Abstract of Labour Statistics of the United Kingdom.

London Economist, especially supplement of March 26, 1927.

League of Nations. Memorandum on Production.

Trading Accounts and Balance Sheets. Services Undertaken During the War in Connection with War Materials and Food Supplies. Cmd. 1368 (1921).

War Office. Statistics of The Military Efforts of The British Empire During the Great War, 1914-20.

Report of the Committee on the Cost of Living Appointed by the Parliamentary Committee of the Trades Union College.

Balfour Committee—Volume I and Final Report, 1927, 1929. Cmd. 3282.

Colwyn Committee on National Debt and Taxation. Cmd. 2800 (1927).

Memorandum on Increases in Money and Prices. Cmd. 434 (1919).

Naval and Military Operations and Other Expenditures, Arising out of the War (1920).

Vote of Credit. Trading Accounts, etc., Cmd. 1062 (1920).

What are the facts? Of significance for Great Britain is not only the production in Great Britain, but also world production. The foreign trade figures are of significance in that they give an index of the extent to which Great Britain was able to retain the fruits of its industry and

<sup>1</sup> E. Cannan, *An Economist's Protest*, p. 210; *Money*, 5th ed. rev., pp. 89-91.

to obtain supplies from abroad. A country may live on accumulated stocks temporarily.<sup>2</sup> When the State becomes a trader, large supplies are withdrawn from the commodity markets.<sup>3</sup> Dealers receive in return bank deposits; the Government creates them with the help of the banks.

A significant chart is presented in the *Enquête sur La Production* which gives the production of combustibles, minerals and metals for the important countries of the world.<sup>4</sup> Production fell rapidly in 1914, 1915 and 1918; there were signs of improvement in 1916, 1917, 1919 and 1920. But from 1916 to 1918, the production of all commodities considered in the above class, with the exception of petroleum, copper and aluminum was below the pre-war level. The decline was especially large for Europe, and, within Europe, especially for the belligerents. The production of some chemicals rose; and the production of others fell. Of the important agricultural products, the production of silk, cane sugar and rice alone increased. The production of wheat rose in 1915-16, but declined in 1916-17 and 1917-18. In the latter year, production for the world was estimated at 88 per cent of the pre-War figure. That Europe exported 44 per cent of the total exports of wheat in 1913 and exported virtually no wheat in 1917-19, is adequate testimony of Europe's impoverished condition. The relatively moderate rise of the price of wheat in Spain and France from 1915 to 1917, is evidence of the isolation of the markets.<sup>5</sup> A deficiency in any one country might result in very large increases in prices.

The production of iron in 25 countries declined rapidly in 1914, 1915 and 1918. The quantity produced in 1918 was but three quarters as great as in 1913. In 1919, the rate of production was but three fifths of the pre-war level. The proportion of the total manufactured by the European belligerents fell to about one half the pre-war proportion. The United Kingdom barely maintained its pre-war proportion of a declining total. The fluctuations in the production of cast-iron followed those of iron rather closely; the improvement in 1916-17 was marked. But the United Kingdom's proportion of the total produced was but one half of its pre-War proportion. The production of a special grade of iron and steel was approximately 10 per cent in excess of the level in 1913 and 4 per cent in excess in 1918.<sup>6</sup>

<sup>2</sup> R. Kerschagl, *Die Geldproblem von Heute*, p. 19.

<sup>3</sup> 96 H. C. Cols. 1123-27.

<sup>4</sup> *Enquête sur la Production*, II-2, pp. 911-27.

<sup>5</sup> In discussing prices, Liefman points out that Great Britain was not cut off from the rest of the world as was Germany, and hence that British prices did not deviate from world prices to as great an extent as German prices. R. Liefman, *Geldvermehrung*, pp. 108-9.

<sup>6</sup> Also see M. S. Birkett, "Iron and Steel Trade During the War," *R. S. J.*, 1920, p. 368. Much progress was made in extending the production of steel in

The production of cotton declined about 10 per cent in the years 1915 to 1918; but the decline in its consumption was greater. Although belligerent European countries now imported a larger part of the cotton imported by all countries, the total of their cotton imports declined appreciably. In fact, the world suffered from a general restriction of movements of raw materials. The production of coal was maintained at a higher relative level than that of most minerals; but the part of the total production of coal contributed by the belligerents and by the United Kingdom declined. Also, marked reductions in the production of silver and gold occurred during the War. Against this widespread decline of production is to be put marked improvements in the production of the two less important commodities, petrol and copper.

Great Britain might have improved its position by producing more, or by exporting less and importing more. There was some improvement in agricultural production; but scarcely enough to make up for the reduced imports.<sup>7</sup> The exports of coal declined; but not more than enough to make up for the curtailed production. Late in 1917, the Government announced that no more than one half of the machinery in cotton mills was to be in operation without special permission.<sup>8</sup> Spokesmen for the Government pointed out that production had fallen.<sup>9</sup> Layton informed the Colwyn Committee that Bowley estimated that soon after the War, the level of production had been reduced to 87 per cent as compared to 100 per cent in 1913. In Layton's opinion 87 per cent was too low.<sup>10</sup> The figures for tonnage entered into the United Kingdom are especially significant. The reduction by 1918 was approximately one half.<sup>11</sup> Of course, the importation of bulky commodities, paper, wood, and the like, was especially restricted. Luxuries and semi-luxuries were neither

the United Kingdom in the course of the War. *London Statist*, November 24, 1917.

<sup>7</sup>When the Food Controller assumed control of the wheat supplies, the Government announced that one sixth of the total was grown in Great Britain. 92 H. C. Cols. 1444-46. The Balfour Committee recently estimated that four fifths of the wheat and flour, and three fifths of the meat consumed in Great Britain are imported. Final Report of The Committee on Industry and Trade, Cmd. 3282 (1928-29), p. 8.

It is apparent from an examination of Tables 75 (Acreage under Crops) and 77 (Estimated Average Yield per Acre) of the Statistical Abstract of the United Kingdom from 1910 to 1924 that the great efforts of the United Kingdom in 1918 were not adequate. Perhaps the most significant table is number 74. (Quantities of British Wheat, etc., sold in Towns from which Returns are collected.) The sales in 1917 and 1918 were abnormally low.

<sup>8</sup>B. T. J., March 14, 1918.

<sup>9</sup>119 H. C. Col. 1988; 123 H. C. Cols. 481-82.

<sup>10</sup>Committee on National Debt and Taxation. *Evidence-in-Chief of Layton*, paragraphs 1-5.

<sup>11</sup>Figures are given in numbers of the *Monthly Bulletin of Statistics of the League of Nations*.

imported nor produced in normal quantities.<sup>12</sup> A spokesman of the Government estimated that imports in 1918 (in tons) would be at one half of the pre-War level.<sup>13</sup> A Trade Union Committee estimated that world production had declined by more than 15 per cent.<sup>14</sup> The number of people employed was reduced by 6.3 per cent in the course of the War, and, moreover, there were numerous substitutions of women and children.<sup>15</sup> Twenty-five and one half million tons of supplies were shipped to France for the use of the British Expeditionary Force in the course of the War.<sup>16</sup> The total of enlistments was approximately 5 millions, or 22 per cent of the male population.<sup>17</sup> (Approximately 1½ millions of additional women were employed in industry in 1918.<sup>18</sup>)

In the latter part of the War, the Government introduced a policy of encouraging the importation of semi-luxuries that yielded large revenues. Thus are explained the large imports of tea, tobacco, and wine in 1918. The public thus obtained an outlet for surplus purchasing power that could not be spent on rationed commodities, and that they would not put to use in the purchase of securities.<sup>19</sup>

A few favorable developments are to be noted. By 1917, the development of the munition industry had been so favorable that large imports from Canada and the United States were no longer necessary.<sup>20</sup> Unemployment declined to a very low figure early in the War.<sup>21</sup> Labor Unions agreed to give up restrictive practises.<sup>22</sup> In several trades—domestic service, building, etc.—large numbers of employees could be spared.<sup>23</sup> The annual expenditures on capital account of British railways was from 10-12 millions in the pre-war period; these expenditures were held in abeyance from 1914 to 1920.<sup>24</sup> At the prices of 1907, approximately £170-180 million were required to cover the expenditures for the wear and tear and renewals of British industry.<sup>25</sup> These

<sup>12</sup> See Tables 36 and 37 of *Statistical Abstract*, 1910-24, Cmd. 2620.

<sup>13</sup> 106 H. C. Col. 388.

<sup>14</sup> *L. E.*, September 11, 1920.

<sup>15</sup> *B. T. J.*, March 6, 1919.

<sup>16</sup> *Statistics of the Military Efforts of the British Empire During the Great War*, 1914-20, p. 485. The British Government imported 2.8 million tons of frozen meat in the course of the War. The British army received 1.6 millions, the French army, 9 millions, and civilians the remainder. Trading Accounts, Balance Sheets, Naval and Military Operations, Cmd. 1062 (1920), p. 93.

<sup>17</sup> *Ibid.*, pp. 363-64.

<sup>18</sup> 106 H. C. Col. 390

<sup>19</sup> The Government restricted the quantity of beer brewed. 113 H. C. Col. 2278.

<sup>20</sup> H. C. Canada, 1917, V, pp. 4953-54; *Statistics of Military Efforts of British Empire*, pp. 446-49, 474-77.

<sup>21</sup> *L. E.*, August 21, 1915; also see the table for the Percentage Unemployed at the End of Each Month, 1886-1921, in *Nineteenth Abstract of Labour Statistics of the United Kingdom*, p. 79.

<sup>22</sup> 116 H. C. Col. 1743.

<sup>23</sup> Sir G. Paish, "War Finance," *R. S. J.*, 1916, p. 270; *B. T. J.*, March 6, 1919.

<sup>24</sup> 148 H. C. Col. 724.

<sup>25</sup> A. C. Pigou, "Interest after the War and the Export of Capital," *Economic Journal*, 1916, p. 416.

expenditures were frequently delayed. It is also to be remembered that the public refrained from consuming luxuries, and that civil expenditures were reduced by the enlistment of soldiers; hence the money disbursed by the State was only in part an addition to the cash disbursed by the civil population.<sup>26</sup>

The exports of Great Britain declined during the War period. What is of significance, are the statistics of quantities rather than values. Unfortunately, figures for quantities are not available for all commodities. Great Britain's exports to the Dominions, to South America and the United States fell rapidly both in quantities and values. But its exports to the European Allies increased; and they were paid for in large part in credits.

The total of exports to the European Allies was as follows: (Millions £ Sterling) 1913—75, 1917—188, 1918—160. For France alone, the figures were: 1913—29, 1918—131. I have computed a weighted average of export prices. The figures are as follows: (1913—100), 1916—143, 1917—247, 1918—308. It is apparent that the quantity of exports to the Allies fell; but France received more commodities from Great Britain than before the War. Of all exports (values), the Allies received 14 per cent in 1913 and 32 per cent in 1918; France received 5.5 and 26.1 per cent; the Dominions and India 31 and 27 per cent; the United States 6 and 5 per cent; European neutrals 10 and 8 per cent. For the more important commodities, the decline in quantities exported was approximately 50 per cent by 1918. Important restrictions in the export trade were introduced especially in 1918. It is also worth pointing out here that the exports of important commodities did not attain pre-War levels even in 1920. Some of the more important items follow (quantities). (They are given merely for purposes of comparison):

<i>Exports</i>	<i>Quantities</i>		<i>Exports</i>	<i>Quantities</i>	
	1913	1918		1913	1918
Cotton yarn .....	210	102	Coal .....	73	32
Cotton piece goods ..	7.07	3.70	Linen manufactured		
Woolen and worsted			piece goods .....	194	70
yarn .....	124	1917 31.4	Iron, Steel and manu-		
Woolen tissues .....	106	124 .67	factures thereof ...	4.97	1.61
Worsted tissues .....	62.	31.	Spirits .....	10.1	2.94

The exports of the following commodities given in values only, declined appreciably: machinery, electrical goods and apparatus, textiles other than linens, apparel, oil, leather, paper, non-ferrous metals. The exports of ammunitions and chemicals were large in 1918.

<sup>26</sup> F. Bendixen, *Währungspolitik und Geldtheorie im Lichte des Weltkrieges*, pp. 158-59.

Imports from the European Allies declined both in quantity and value. But France's exports in values were maintained at the pre-War level. Russia's exports to Great Britain declined to almost negligible figures. The decline was especially marked in Class I (Foods, Drinks and Tobacco). Of all British imports, the Allies contributed 16.5 per cent in 1913 and 4.4 per cent in 1918. European neutrals increased their total exports (value) to Great Britain in the course of the War by but 10-20 per cent. Of course, the quantity was reduced by a large percentage. Norway made a very large advance in its export trade (values) to Great Britain; the exports (values) of the Netherlands, Denmark, and Switzerland to Great Britain were relatively steady, and Spain made some gains in the latter part of the War. The largest gains were made by the British Possessions and the United States. In the latter part of the War, the rate of increase was more rapid for the United States than for the Dominions. In 1918, Australia's exports to Great Britain declined seriously. Shipping difficulties are the explanation. But the exports of Canada, India and the United States increased in 1918 at least in proportion to the increase in the price level. South America's exports increased; but their quantity was probably one third to one half below the pre-war level every year but 1915.

The following facts pertaining to imports into Great Britain from individual countries are of interest. From Russia, all exports but flax dwindled to almost nothing. The important exports had been wheat, barley and eggs. From Australia, the quantities of wheat, beef, and butter imported were reduced appreciably; but the imports of wool were much larger from 1915 to 1917 than before the War. From the United States, large increases in imports of wheat, bacon, ham, tobacco, oils, coffee, barley, oats, maize and oatmeal are to be noted. Exports of wheat from the United States declined in 1918, but large gains were made in bacon, tobacco, coffee and oil. Argentina exported less wheat, wool, maize and beef; but its exports of hides increased. India's exports of wheat and barley declined, while rice and flax increased and exports of jute remained steady.<sup>27</sup>

An examination of quantities imported leaves one with little doubt but that Great Britain suffered from a serious reduction of imports in the War period. The increased exports from the United States made up in large part for the reduction of imports of wheat from Russia, Argentina, India and Australia. But the marked reduction of exports from the United States in 1918 left Great Britain with a serious shortage.<sup>28</sup>

<sup>27</sup> Facts in this paragraph relate to quantities.

<sup>28</sup> The shipping shortage and a deficient crop explained the reduction of exports of wheat from the United States in 1918. Canada found itself in the

The figures for imports of wheat from all countries (quantities) for 1913, 1917, and 1918 were 106, 91 and 58 millions. Imports of lambs' wool steadily declined; in 1918, they were reduced to 50 per cent of the total for 1913. Imports of butter declined rapidly in 1916-18; in 1918, imports were but two fifths as large as in 1913. The decline in imports was at least 50 per cent by 1918 for the following important imports (in addition to those mentioned): eggs, wood, meat (chilled), mutton (frozen), paper, leather, hides (other sort--undressed), margarine. In the latter part of the War, imports of fruits and vegetables were seriously curtailed.<sup>29</sup> The total quantity of meat imported was not revealed; but it is apparent from the figures for the total values that in 1918, imports were approximately as great as in 1913.<sup>30</sup> In 1917, that was probably not true. Apparently, the British Government solved both their food and shipping problem in 1918 by importing large quantities of meat that required little space per calorie. There were large increases of imports (quantities) of bacon, lard, meat (frozen), hams, and meat (preserved otherwise than by salting). Moreover, several other substitute foods were imported in larger quantities in the latter part of the War. Wheat meal and flour, rice, peas, and oleomargarine are the more important items. The imports of cotton and raw silk were only moderately reduced. Rubber, cotton seed, flax, jute also were imported in smaller quantities.

The prices of imported commodities are of interest. My weighted indices for the prices of imports are:

1916..... 153

1918.... 255

1919.... 250

The prices of a few commodities remained remarkably low throughout the War. Rubber, coffee, hops, tin, ore, and champagne are a few important examples. However, the low prices of these commodities apparently did not stimulate the public to consume much more of them. The demand for these commodities was inelastic. The public had to find other employment for large surpluses of purchasing power available in a period of control. The intervention of the Government is reflected in marked changes in prices. Thus the restriction of imports of wood resulted in a three-fold increase in the price of pulp wood in 1916 and a five-fold increase in 1918; the price of bananas jumped from 126 in 1916 to 328 in 1918.

same predicament and took measures to sell wheat to the United States. H. C. Canada, 1917, I, pp. 937-43.

<sup>29</sup> All references made so far in this paragraph are to quantities.

<sup>30</sup> The Departmental Committee on Prices complained of French and Italian competition in the purchase of frozen meat. Interim Report on Meat, Milk, and Bacon, Cd. 8358 (1916).

## Book V

### DEFLATION

#### CHAPTER I

#### INTRODUCTION

THE Government vacillated in carrying through their policy of deflation. In November, 1918, and February, 1919, Baldwin announced in a rather unconvincing manner the Government's support of the principles of the Cunliffe Report, and Chamberlain in April, 1919, pointed out that inflation was world-wide and that the Cunliffe Committee had not erred on the side of heterodoxy. The latter was more disposed to take vigorous measures in the latter part of 1919 and the early part of 1920 although he insisted that it was more important to restrict credit than issues of currency notes. In April, 1920, Baldwin expressed his disapproval of a policy of interference on the part of the Government; in May, Chamberlain boasted of the Treasury's contribution to the program of deflation; but in July he assumed no responsibility for the manner in which the banks were imposing deflation on the country; and in December, he refused to support a funding loan which might accelerate the rate of contraction. In 1921 the Government continued to deny any great responsibility for the policy of deflation, which in the eyes of the public was now associated with business depression and unemployment. At international financial conferences in 1920 and 1922, the Government were not as guarded as usual in their utterances on this subject.

Without a doubt, an important part of the program of deflation was the introduction of a limitation of fiduciary currency notes, but it was not the only or necessarily the most important factor. Before the limitation had been introduced, the Bank of

England had given up 10 millions of its reserves which were transferred to the Currency Notes Account; and in the months of greatest stringency in 1920, the Bank issued notes from its reserves when the fiduciary limit had not been reached. The transfer of Bank of England notes to the Currency Notes Reserve was determined by the Treasury. Within limits, it was perhaps possible to issue currency and Bank of England notes interchangeably.

The sequence of events was as follows. Improved business and inflation brought their own cure, because the Government collected large revenues in 1919-20, which resulted in extreme stringency on the money market. In the course of the flotation of the Victory Loan, the banks and the public had already demonstrated their inability or unwillingness to put large resources at the disposal of the Treasury. As the Government used their large receipts in March, 1920, to redeem P.S. outstanding, the public refused to renew Treasury bills with the result that advances from the Bank increased altho the total debt was reduced. Demands for accommodation from the Bank on the part of both the market and the Government forced the Bank to take defensive measures in 1919 and 1920. The Government became an accomplice of the Bank and raised the rate on Treasury bills when the market put them in an embarrassing position by refusing to renew Treasury bills. In the early months of 1920, the inevitable rise in the Bank rate was delayed because the market was able to replenish its reserves by bringing gold to the Bank without withdrawing a corresponding quantity of paper money, and by redeeming notes. Moreover, large disbursements of the Treasury and increased borrowing from the Bank enabled the market to replenish and supplement its cash resources. But in the late weeks of March and early April, large transfers of cash to the Government which were employed in part in repaying the Bank of England, a net outward movement of gold and withdrawals of currency notes by the market, made it imperative for the market to obtain additional accommodation at the Bank. The position of the Bank of England suffered as a result of large demands by the Government and the market. But even had more cash been available, the authorities

could not have approved of the incessant growth of Bank of England liabilities.

The refusal of the public to renew Treasury bills in April, 1920, was the normal process by which the market rate of discount was kept close to the Treasury bill rate. It happened whenever the market rate threatened to rise. On this occasion the seasonal excess of revenue at the turn of the financial year enabled the Government for a moment to pay off Ways and Means. The consequent stringency immediately led to fewer sales of Treasury bills, and the revival of Ways and Means restored ease. The Treasury and the Bank took this as proof that the joint stock banks could not be relied on to restrict credit by their voluntary concerted action, and accordingly they put up the Treasury bill and Bank rate.

Deposits are an inaccurate measure of deflation. But attempts to substitute a measure based on banking assets is not satisfactory. Thus it is contended that deflation was a myth because the reduction in loans and advances was offset by an increase in bills. Is this proof of the absence of deflation or does it not merely signify that the banks employed surplus resources obtained in the course of the advance of deflation in purchasing Treasury bills? The difficulty of using deposits as a measure of deflation is that the proportion between current and saving deposits varies. However, the distinction between them should not be carried too far as the latter are potential current deposits. Studies made by the Board of Inland Revenue throw some light on this problem.

In the period of deflation, the reduction in deposits was remarkably moderate. A study restricted to total deposits is not adequate. Cassel points out that prices are determined by the relatively small quantities of commodities on the market, which explains in part the moderate reduction in deposits. The character of the transactions that are reflected in fluctuations in deposits should be considered. Thus in 1920, the banks disposed of investments and put more resources at the disposal of trade. There was no net change in the total of deposits; but this was an inflationary movement. When the public purchased securities from the banks in 1921, it converted saving deposits into

investments. This conversion can scarcely be considered deflationary.

The Chancellor of the Exchequer played an important part in the determination of monetary policy. A perennial subject of discussion was the appropriate size of the floating debt. Chamberlain contended that Sterling was adversely affected by the presence of a large floating debt. Others pointed out that the convenience of the money market required large issues of Treasury bills to serve as investments in place of commercial bills now scarce. But business leaders feared that purchases of Treasury bills were at the expense of commercial advances. In 1920, the banks purchased Treasury bills from the public, and their customers thus obtained the means of repaying bank advances. From 1921 to 1925, Treasury bills outstanding were reduced by 40 per cent and the total of all bills held by joint stock banks was reduced by 48 per cent. The Government redeemed bills held by the public with the proceeds of taxes or of sales of Treasury bonds. In other words, the public made it possible for the Government to redeem their Treasury bills in this manner. The effect on the magnitude of deposits was nil. But if the bills redeemed were held by the banks, the net effect was a decline in bills and in deposits. (This is on the assumption that the banks did not purchase Treasury bonds.)

That the money market was in a continuous state of stringency from 1921 to 1925, is to be referred in large part to the Treasury policy of repaying approximately 50 millions of Bank of England advances from 1921 to 1925. The market would have suffered even more had not large transfers been made on the books of the Bank of England from outside accounts to the accounts of British banks. Stringency is also to be explained by the inelastic system of note issue of this period. The Bank of England had transferred large supplies of its notes to the Currency Notes Account, and the replenishment of its reserves by purchasing gold at a premium with notes drawn from the Treasury was not viewed with favor.

In these later years, P. D. remained at a relatively high level, for the Treasury, having renounced Ways and Means financing, prepared for unexpected payments by retaining large balances at

the Bank. Thus the repayment of Ways and Means constituted a double loss to the money market, for when the Government depended on Ways and Means advances, the retention of large balances at the Bank of England was not necessary. The Bank of England advances to the Treasury averaged 50 millions in the second half of 1920, and were at a level close to zero in 1924.

The operations of the year 1920 require additional examination. There is evidence of large sales of securities by the Bank of England or redemption of public securities held by the Bank in the last week of March, 1920. These sales or redemptions were a source of embarrassment to the market. A similar movement was evident in October. In the last week of March, the ratio of reserves against currency notes declined for the first time since August, 1919. (A seasonal decline occurred late in December.) Perhaps the Bank still had hopes of averting an increase in its rate. In the last three quarters of 1920, the reserves of the Bank of England remained at a very low level, with the result that the threat of another increase in the Bank rate was always present. Hence the transfer of 3 millions of Bank of England notes to the Currency Notes Account in the second half of 1920 was unfortunate and unwise.

It was more than a coincidence that large gold exports (net) were made in the months of greatest stringency. January to March and October. In the first four months of the year, an increase in prices occurred in spite of a decline in notes, and in the last eight months, the movement was reversed. From an examination of the figures for O. D., cash of British banks and movements in gold, currency and Bank notes, I conclude that the first half of 1920 witnessed a rapid flow of cash to the public and large transfers of balances at the Bank of England from British banks to the accounts of foreigners and to private accounts. The movement was reversed in the second half of the year.

Although market conditions were easier from 1921 to 1924 than in 1920, stringency generally prevailed. The return of 100 millions of currency notes from circulation prevented greater stringency. After 1921, the Government borrowed relatively infrequently from the Bank of England. The stringency of the years 1921-24 is to be explained in large part by the reduction of ad-

vances from the Bank.<sup>1</sup> The Treasury redeemed large quantities of Treasury bills in 1921 and 1922 which had been held both by the banks and the public. These operations also contributed to the stringency of the period, especially in so far as the bills had been held by the banks.

Department Ways and Means should be distinguished from Bank of England Ways and Means. Thus in the second quarter of 1921, the Government borrowed 39 millions from the Bank of England, but departmental advances were reduced by 41 millions. The net movement in Ways and Means was negligible, but this might conceivably be an inflationary movement—an increase in cash—of 80 millions. Deposits declined for the first time in 1922. As might be expected, the trend of O. D. was downward. In the year 1921, for example, the cash reserves of British banks increased by 3 millions although O. D. were reduced by 71 millions.

It has been assumed that the reduction of Department Ways and Means referred to above was not merely a substitution of Treasury bills, but rather was a payment for notes redeemed, or a transfer to a State Trader. The process in itself is inflationary, for the reduction involved an addition to the resources of the money market.

<sup>1</sup> In my opinion, the successful control by the Bank of England—in the years 1921-1924 at least—is to be explained in large part by the fact that as a result of the large repayments to the Bank of England by the Treasury, the money market retained inadequate supplies of cash. Keynes' emphasis on Open Market Operations as an instrument of control during this period at least, is overdone. The "Hidden Hand" was a means of relief rather than restraint. Compare J. M. Keynes, *op. cit.*, II, pp. 231-32.

## CHAPTER II

### TREASURY POLICY

By way of summary, this much may be said concerning the Treasury's part in the program of deflation. It is apparent from the expressions of opinion given below that authorities are not in agreement. But it is equally clear from official statements and official action that the Treasury intended to deflate. However, Cassel's opinion, which is quoted below, does not hold for Great Britain, for the authorities had no intention of bringing prices down to the pre-war level; they intended to raise the value of Sterling to its pre-war parity in gold, and they probably did not anticipate that the decline of prices would be as great as it proved to be. Gold deflation in the United States made the British task more difficult. On the other hand, the British authorities made the process unnecessarily painful by maintaining high rates too long. It may be pointed out here that with the resumption of the sales of Treasury bills by tender in 1921, the Bank rate once more became the significant rate.

In the opinion of Cassel deflation has to be deliberately planned. This policy of deflation has its roots in the popular idea that pre-War levels are still to be regarded as normal and that stable economic conditions can be attained only by bringing prices down to the old level.<sup>1</sup> McKenna has taken a similar position.<sup>2</sup> The *Statist* contends that deflation was determined upon by the Government and banks.<sup>3</sup> Macrosty's conclusion is that although the aim of the financial authorities was one of gradual deflation, they took no deliberative steps to induce deflation. They merely took advantage of the desire of the public to invest surplus funds

<sup>1</sup> G. Cassel, *World's Monetary Problem*, pp. 63, 67.

<sup>2</sup> Meeting of London, Joint City and Midland, *L. E.*, January 29, 1921.

<sup>3</sup> *Statist*, January 1, 1921, February 19, 1921. In commenting on the money market in 1921, the *Statist* contends that the Government took the lead in the program of deflation. *Statist*, December 31, 1921.

in Government investments.<sup>4</sup> Several witnesses before the Colwyn Committee on National Debt and Taxation, Pigou among others, absolved the Government of virtually all responsibility for the introduction of a policy of deflation.<sup>5</sup>

Are we to agree with Cassel and McKenna or Macrosty and Pigou? Cannan is equivocal. He does not contend that the Government initiated the program; but deflation would have been impossible had the Government been unwilling to redeem notes.<sup>6</sup> Clay writes that "The Government and the Bank of England are conjoined in the inquiry, because the monetary policy of the country has been determined by them in coöperation, and it is impossible for any layman to discover the degree of responsibility that they must respectively bear."<sup>7</sup>

In the opinion of Rist, the reduction of currency and the accompanying deflation were the results of a courageous fiscal policy.<sup>8</sup>

That a decline of prices would follow the inflation of the War period, was generally taken for granted. In testifying before the Committee on the Increase of Wealth (War), the representative of the Board of Inland Revenue assumed that a period of deflation was inevitable.<sup>9</sup> To many who supported the levy, it was the least painful device for bringing about the inevitable decline of prices. However, the London *Economist* criticized the After War Industrial Risks Committee for assuming too readily that a rapid fall in prices was to follow.<sup>10</sup>

The factions that were later to assail the Government for abetting deflation were not entirely averse to the policy before it had brought unfavorable economic conditions. The National Federation of Iron and Steel manufacturers had declared its

<sup>4</sup> H. W. Macrosty, "Inflation and Deflation in the United States and United Kingdom, 1919-23," *R. S. J.*, 1927, pp. 106-8.

<sup>5</sup> Committee on National Debt and Taxation. *Evidence-in-Chief of Pigou*, ch. 15; also Qs. 981-82. A similar opinion is expressed by G. Lacout, *Le Retour à l'Étalon-Or*, p. 135.

<sup>6</sup> E. Cannan, *An Economist's Protest*, pp. 392-93.

<sup>7</sup> H. Clay, *The Post-War Unemployment Problem*, p. 59. In my opinion, it is evident that the Treasury was largely responsible for the excesses of inflation and for the delays and vacillation in carrying through deflation; but the Bank was at least equally responsible for the introduction of deflation.

<sup>8</sup> J. W. Angell, *The Theory of International Prices*, pp. 298-99.

<sup>9</sup> Memorandum of the B. I. R. on the Effect of the Duty on the Yield of Income Tax, etc.

<sup>10</sup> *L. E.*, January 25, 1919.

hostility to further increases of prices.<sup>11</sup> A Joint Committee on the Cost of Living of the Parliamentary Committee of Trade Union Congresses had announced its approval of a policy of deflation.<sup>12</sup> A parallel is offered by the recent agitation for an extreme policy of deflation in France and Italy.<sup>13</sup>

In recommending that the floating debt should be redeemed, and that the maximum fiduciary issue should be determined on the basis of the maximum of the preceding year, the Cunliffe Committee proposed a policy of deflation. Confronted with a question on November 14, 1918, concerning the attitude of the Government toward the Cunliffe Report, Baldwin, the Financial Secretary, replied that "the principles which underlie that Report are sound, and are principles which should guide us, as far as we are able to adopt them, in the difficult times that lie ahead".<sup>14</sup> But in February, 1919, Baldwin was less committal: The recommendations of the Cunliffe Committee will be considered; they cannot be given practical effect until demobilization is completed. The resumption of cash payments requires adequate supplies of gold, which can only be obtained with an improvement in the export trade.<sup>15</sup>

In his financial statement of April 30, 1919, Chamberlain, Chancellor of the Exchequer, made an equivocal statement. It was apparent that he was concerned over the expansion of note issues that had occurred since February. (Business depression had been followed by a business revival.) The tenor of his remarks was as follows: Currency needs have to be satisfied by issues of currency notes; otherwise the Bank of England will lose its reserves; discount rates will be raised, and business depressed; inflation is world wide; the revival of business is the most important object in hand; a new level of world prices must be established before we can determine with exactness how much currency is required; *the Cunliffe Committee cannot be accused of having erred on the side of heterodoxy*; but if a reduction of currency is not practicable now, an attack on the underlying causes is. Expenditures should be reduced, Ways and Means repaid,

<sup>11</sup> *Ibid.*, April 10, 1920.

<sup>12</sup> *Statist*, September 11, 1920.

<sup>13</sup> B. Griziotti, *Politica Monetaria E. Finanziaria Internazionale*, pp. 5-6, 38, 59-60.

<sup>14</sup> 110 H. C. Col. 2972.

<sup>15</sup> 112 H. C. Col. 567.

Treasury bills funded, and government securities should be purchased by investors.<sup>16</sup>

Chamberlain's statement marks a departure from the principles of the Cunliffe Committee, for they considered the reduction of notes the most effective weapon of deflation. The explanation of the change in the Government's attitude from November, 1918, to April, 1919, lies in the history of business during that period. In November there were anticipations of a smooth and rapid recovery; in February, depression and unemployment; in April, undeniable signs of recovery that few Governments would have dared to disregard.<sup>17</sup>

By July, the Government seemed more disposed to grapple with the problem: "The Government fully recognise the necessity for checking the further expansion and bringing about a general contraction in the currency note issue, and a beginning has already been made by means of the recent Funding Loan, as is shown by the currency note returns for the last two weeks."<sup>18</sup> In August, Chamberlain expressed regrets at a recent increase of notes in circulation.<sup>19</sup> Lord Cecil demanded a definite statement of monetary policy from the Government; but he received a vague reply from Lloyd George to the effect that paper money had caused little trouble, and that he, nevertheless, did not belittle the importance of deflation.<sup>20</sup>

The Bank of England raised its rate in November. Since the Bank had convinced him of the necessity of this increase, Chamberlain, in order to make the increase in Bank rate effective, offered a higher rate to purchasers of Treasury bills.<sup>21</sup> Chamberlain defended his monetary policy on December 17, 1919. To those who criticized him for setting the maximum for fiduciary notes too late, he replied that credit inflation was the main problem, that a sudden contraction of credit would retard the economic re-

<sup>16</sup> 115 H. C. Financial Statement of April 30, 1919.

<sup>17</sup> Clay justly criticizes the Government for stimulating the boom by reducing the Excess Profits Duty and increasing the Floating Debt in 1919. H. Clay, *op. cit.*, p. 21. However, the outlook early in 1919 was not promising, and it would have required a very powerful Government to refrain from reducing taxes.

<sup>18</sup> 118 H. C. Col. 1814; compare E. Cannan, *op. cit.*, p. 182. Chamberlain had already announced that the Government planned to issue long term securities to replace the short term securities held by the banks. *L. E.*, June 7, 1919.

<sup>19</sup> 119 H. C. Col. 642.

<sup>21</sup> 121 H. C. Cols. 47-49.

<sup>20</sup> 120 H. C. Cols. 957, 980.

covery and, therefore, would hamper the collection of public revenues, and that a sane policy is necessarily governed by changing circumstances. He declared that since the root of the difficulty lay in credit, inflation could not be cured by introducing a violent deflation of credit.<sup>22</sup> A few days previously, he had expressed a moderate approval of the second Cunliffe Report, and a desire to abide by its recommendations; but he had found in the chaotic economic conditions of Europe a reason for postponing the fulfillment of the program recommended by the Committee.<sup>23</sup> Apparently the Treasury took the initiative for it raised the rate on bills by one per cent in October, and raised the rate again when the Bank rate was increased in November.

The rapid increase of prices in the winter of 1919-20 apparently caused the Government to assume a more aggressive attitude. Not only did they proclaim the necessity of funding the floating debt and of refraining from further borrowing, but they demanded coöperation on the part of the banks, for otherwise the banks might nullify the work of the Treasury by refusing to renew Treasury bills and extending too much credit to industry.<sup>24</sup> In March, Chamberlain made the most outspoken declaration of the Treasury's policy that had yet been made: "That brings me to the fact that I require coöperation in every quarter in order to maintain the policy on which the Government *have set their hearts, of first stopping further inflation and then beginning gradually to deflate.*" He complained that in proportion as the Government refrained from creating credit, the financial community put increasing supplies at the disposal of industry and trade, and hence that the policy of deflation demanded by the country was being jeopardized.<sup>25</sup> However, Mr. Leaf, chairman of one of the big London banks, had already announced an intention on the part of several banks to discourage illegitimate demands for credit by introducing higher rates.<sup>26</sup>

That the Government should employ surplus revenue in reducing the floating debt was the opinion of Blackett, the Control-

<sup>22</sup> 123 H. C. Cols. 479-80.

<sup>23</sup> *Ibid.*, Cols. 43-45.

<sup>24</sup> 125 H. C. Cols. 452-53.

<sup>25</sup> 126 H. C. Col. 2075.

<sup>26</sup> *L. E.*, February 7, 1920.

ler of Finance in the British Treasury.<sup>27</sup> Apparently one reason which led Chamberlain to consider the proposal for a capital levy was that he conceived it as a means for bringing about a reduction in the credit advances of the banks.<sup>28</sup> (However, he used it as a threat in order to make an increase in the Excess Profit Duty acceptable.)

Baldwin, in April, 1920, was more cautious: "Speaking for myself, and unless it be within certain very well-defined limits, I am very nervous about a government interfering in matters of currency. A government that may at one moment try and force deflation on a people may, in changed circumstances, reverse the process and lend encouragement to inflation."<sup>29</sup> However, Baldwin agreed with his superior in contending that large repayments of debts were expedient while business was thriving, while profits and taxes were high and the value of Sterling was still low. The resulting deflation, slow and moderate, will be less harmful than the rapid deflation that would otherwise result.<sup>30</sup> Baldwin's position seemed to be that deflation induced by a rapid collection of taxes and a material repayment of the public debt, was not forced. There had been important changes since Chamberlain had last spoken.

Chamberlain's dictation of banking policy was not without effect. In an answer written on May 12, 1920, he could boast that "The bankers who shared my anxieties to check credit inflation have been making efforts, at my request, to restrict their advances to customers."<sup>31</sup> The leadership that the Treasury assumed in the determination of monetary policy had already been emphasized in a statement in Chamberlain's budget speech. After discussing the peculiar monetary conditions that had led up to the increase in Bank rate of 1920, he continued: "I had no choice but to raise the Treasury Bill rate and the Bank of England simultaneously raised the Bank rate."<sup>32</sup> The Government assumed a more aggressive and outspoken attitude in 1920.<sup>33</sup>

<sup>27</sup> See his evidence before the Select Committee on the Increase of Wealth (War).

<sup>28</sup> *Ibid*, Qs. 73-76.

<sup>31</sup> 129 H. C. Col. 159.

<sup>29</sup> 127 H. C. Col. 1532.

<sup>32</sup> 128 H. C. Col. 74.

<sup>30</sup> 129 H. C. Cols. 548-49.

<sup>33</sup> An opinion commonly held was that it was futile to increase the Bank rate. Thus McKenna contended that the result would be a depreciation of

In June, the crash had occurred abroad; the outlook was not bright in the United States. Chamberlain was more restrained again: "Bankers have lent as much as they ought to lend, and indeed have exceeded the proportion which is proper in respect of their resources and commitments. That is not a situation with which you can lightly play hazardous experiments."<sup>34</sup> During a discussion of the Finance Bill, Baldwin apologized for the heavy taxes which had been levied in order to reduce the public debt, and he added that the Treasury was committed to the present policy only for the current and following year.<sup>35</sup> On the same day (July 12) Chamberlain evaluated the recent contributions of the Treasury in the moulding of monetary policy. The Chancellor had warned the banks that they could not continue to create deposits for speculative purposes. *But he assumed no responsibility for the manner in which the banks applied pressure.* He observed that the Government were subjected to criticism both when prices were rising and when prices were declining.<sup>36</sup> In September, the Bank of England was prepared to discount bills held by the market only if the proceeds were invested in British Treasury bills.<sup>37</sup> Does that not indicate the extent of the control of the money market by the Government?

When a member of Parliament inquired in October whether the Government intended to follow a recommendation of the Brussels Conference, that the Treasury should not apply pressure on the banks, the Chancellor replied that the existence of a large floating debt does not necessarily entail pressure on the part of the Government, and that, moreover, maturing obligations have been met since the early part of 1920 without causing additional inflation.<sup>38</sup> The Chancellor refused to issue a large funding loan in December, 1920, on the grounds that it might have accelerated the rate of deflation.<sup>39</sup> Deflation was mentioned with trepidation: "My policy, therefore, in that respect is to avoid renewed inflation and, *if it be in any way possible, gradually, very gradually, to deflate* as opportunity offers, and as the conditions of the time

Government securities and increased borrowing at the Bank of England. He proposed a reduction of taxes as the only effective measure. R. McKenna, *Post-War Banking Policy*, pp. 16-19.

<sup>34</sup> 130 H. C. Col. 275-76.

<sup>35</sup> 131 H. C. Col. 2098.

<sup>36</sup> *Ibid.*, Col. 2018-25.

<sup>37</sup> *L. E.*, September 11, 1920.

<sup>38</sup> 133 H. C. Col. 1974.

<sup>39</sup> 135 H. C. Col. 2496.

permit with safety; and as regards debt reduction, my policy has been that when we could redeem debt, we should redeem all the debt that we could, just because I saw that the good times would not always last and that we must try and lighten the load before the bad times came upon us.”<sup>40</sup>

In September, 1920, British representatives at the Brussels Conference were less guarded in their declaration of British policy.<sup>41</sup> Lord Cullen declared that Great Britain was intent upon reducing its currency until gold and paper were of equal value. R. H. Brand emphasized the necessity of a high discount rate, a curtailment of borrowing from the banks by the Treasury and the public, and a limitation of currency. Lord Chalmers said that the pound would be raised to parity and free transactions in gold would be introduced by a gradual reduction of currency notes and floating debt. In December, 1922, Bonar Law, the Prime Minister, made an unusually frank statement concerning the deflation policy at the Inter-Allied Conference on Reparations. Of course the occasion was one in which the economic ills of each country were likely to be exaggerated. He inquired whether it would not have been better if deflation had progressed more slowly.<sup>42</sup>

Chamberlain was less willing to dictate the policy of the Bank of England in 1921. Political wisdom prescribed that the Government should be absolved from the responsibility for a policy that in the eyes of many was accompanied by business distress and unemployment.

Sir H. Brittain: “Would not a suggestion from the Chancellor of the Exchequer be very carefully considered by the Governor of the Bank of England?”

Mr. Chamberlain: “I hope so, and believe so, so far as my opinion is worth anything in a matter of this kind. During the time I have been Chancellor of the Exchequer I have thought it

<sup>40</sup> 135 H. C. Col. 2495.

<sup>41</sup> Brussels Conference, Verbatim Record, III, pp. 17-20, 70-71. Chamberlain's reply before the Brussels Conference was less guarded than usual. “They have themselves laid down, as a cardinal feature of their own policy, the cessation of new borrowing by the British Government, and the establishment of an adequate sinking fund for the reduction of debt out of revenue, and they have taken steps to stop the inflation of currency.” Brussels Conference, Paper no. 1, “Memorial on International Finance and Currency.”

<sup>42</sup> Inter-Allied Conference on Reparation and Inter-Allied Debts. Reports and Secretaries' Notes and Conversations, Cmd. 1812 (1923), p. 34.

very desirable that I should be in close touch on such matters with the Governor of the Bank of England, but I have thought it most undesirable that I should put pressure upon him in the exercise of his discretion. I think that nothing will be better for trade than when financial conditions are so altered that the Bank rate and not the Treasury bill rate governs the price of money.”<sup>43</sup>

The problem of the next few years was to control and even to stop the progress of deflation. By the end of 1921, the downward movement of prices was virtually spent; and unemployment reached a high point early in 1921. The trend of employment was favorable from 1922 to 1925; in 1925, the percentage of unemployed was approximately one-half the maximum of 1921.<sup>44</sup> In the course of his Financial Statement of May 1, 1922, Sir Robert Horne objected to further reduction of the floating debt.<sup>45</sup> In Snowden's opinion, tax reduction had been substituted for debt reduction, because deflation had proved unpalatable to the Government.<sup>46</sup> In July, 1923, Mr. Baldwin, now Prime Minister, sponsored “non-flation,” for instability was incompatible with business expansion.<sup>47</sup> Sir W. Joynson-Hicks referred to a Government policy of “level keel.”

However, Baldwin's statement (above) is evidence that in 1923-24 the Government hesitated in carrying through their policy of deflation. In a Treasury memorandum presented to the Imperial Economic Conference of 1923, it was suggested that the return of the gold standard might be long deferred.<sup>48</sup> At the deliberations of the South African Committee on the Resumption of Gold Payments, the vacillations of the British authorities were in part responsible for the decision to stabilize South African Sterling in terms of gold rather than Sterling. Burton, the South African representative at the Imperial Economic Conference of 1923, said, “We propose to stick to sterling so long as the British policy is a gradual approximation toward the restoration of the gold standard, but we certainly

<sup>43</sup> 139 H. C. Cols. 2372-73.

<sup>44</sup> See the Commercial History and Review of 1926 in *L. E.*, February 12, 1927. Also the *Nineteenth Abstract of Labour Statistics of the United Kingdom.*

<sup>45</sup> 153 H. C. Cols. 1039-40.

<sup>47</sup> 166 H. C. Col. 576.

<sup>46</sup> 162 H. C. Cols. 2103-5.

<sup>48</sup> Imperial Economic Conference, 1923, *Canadian Sessional Papers*, 1924 (7), p. 372.

should not stick to sterling if there were a change of policy in this respect."<sup>49</sup> But the Labour Government in 1924 reaffirmed its faith in the recommendations of the Cunliffe Report and expressed opposition to a policy of inflation.<sup>50</sup>

What conclusions are to be drawn from this brief survey of the more important declarations of policy? The endorsement of the Cunliffe Report by the Government was not unqualified. Contending that the crucial problem was the amount of bank credit outstanding, they were unwilling before December, 1919, to abide by the recommendations of the Committee that currency notes be limited as a prerequisite to a limitation of bank credit. A drastic curtailment of bank credit would have followed, which could not have been agreeable to any Government. The Treasury preferred to put pressure on the banks directly rather than indirectly through a rigid limitation of currency notes. Business prospects in large part determined the monetary policy of the Government. Prepared for a smooth transition to normal conditions in 1918, they avowed their faith in the Cunliffe Committee; but in the face of depression and unemployment in the early months of 1919 and a nascent revival of industry in the spring of 1919, the Government renounced the principles of the Report. But the rapid expansion of 1919 vexed the Government, and they were not unwilling to set a maximum fiduciary issue in December, 1919; and when they encountered serious obstacles in renewing their short term obligations, they began to dictate to both the banks and the Bank of England a correct banking policy. They even discussed frankly the advantages of a slow policy of deflation. But when deflation had proceeded to a point where it called forth widespread protests, the Government withdrew and allowed the banks to carry out unhampered and with full responsibility a policy largely initiated by the Government.

I am inclined to conclude that the Government's contribution to the program of deflation was deliberate. But I do not agree with Cannan that the Government were deliberately effecting a

<sup>49</sup> Imperial Economic Conference, 1923, *Canadian Sessional Papers*, 1924 (7), p. 362.

<sup>50</sup> The Financial Secretary said, "I cannot believe that this country will ever embark on a policy of inflation, or if I may put it otherwise, would seek to do other than move steadily toward the gold standard by a healthy and sound deflation." 176 H. C. Col. 1411.

reduction of notes as late as 1921. There is much truth in Pigou's statement that the reduction of debt was merely the instrument used for effecting a policy that the economic conditions of the country made possible; and the Government's participation in the determination of a program of deflation largely preceded the date of repayment of debt. The setting of a maximum fiduciary issue; the pressure applied to the banks to curtail their speculative loans; the dictation of the increase in the Bank rate in 1920—all of these activities reflected the attitude of the Government. Doubtlessly, deflation would have come sooner or later; but it is extremely doubtful whether the progress of inflation would have been stopped so soon had it not been for the interference of the Treasury. It is indeed unfortunate that instead of proclaiming their contribution and receiving the plaudits of the country, the Government found it necessary to belittle them, and to place full responsibility on the banks. Even if we allow that the repayment of Ways and Means advances in the last week of March, 1920, was an important step in the progress of deflation, it should be remembered that the fiscal surplus was converted into a deficit in April, and that the large repayments of debt followed rather than preceded this period.

## CHAPTER III

### THE INTRODUCTION OF DEFLATION

THE Cunliffe Committee intended that the machinery of the gold standard with free export of gold as well as convertibility should be in operation as soon as the cessation of the submarine menace made the normal gold points operative. But the Government prohibited the export of gold in March, 1919. With export prohibited and the pound depreciated, most of the recommendations ceased to be applicable, but the limitation of currency notes was again recommended in the final report of the Committee and was immediately adopted by the Government.

The Cunliffe Committee proposed that the Bank of England should transfer its notes to the Currency Notes Account as additional currency notes were issued.<sup>1</sup> Cannan contends that this recommendation was made on the assumption that the divergence in value between paper and gold would disappear quickly and hence, that the increase in the Bank rate called forth by the decline in the banking reserve would result in an early importation of gold. Cannan, a critic of the Government's monetary policy, perceives in the slow rate of appreciation of Sterling the explanation of the failure of the Government to follow the recommendations of the Committee. He criticizes the authorities for not adding a Bank of England note to the Currency Reserve for every currency note issued in 1919 instead of one Bank of England note for every ten or eleven issued.<sup>2</sup> He apparently assumes that the Committee endorsed a principle that he later criticized the London *Economist* for defending, namely, that an increase in the Bank rate is of little avail if the country is not on a gold standard, or about to resume payments; or that deflation involved merely the accumulation of imported gold or note secured by it

<sup>1</sup> First Interim Report of the Committee on Currency and Foreign Exchanges, Cmd. 9182 (1918), paragraph 43.

<sup>2</sup> E. Cannan, *op. cit.*, pp. 186-87.

in the Currency Notes Account.<sup>3</sup> (Of course, the Committee assumed that an increase would be especially advantageous if it brought an early return to parity.) The Cunliffe Report contains nothing that is inconsistent with Cannan's position, that a gradual contraction of currency would result in a gradual enhancement in the value of Sterling. The final step would be the restoration of the gold standard which would be followed by gold imports. The Committee would have recommended a transfer of Bank of England notes (a decline in banking reserve), higher discount rates, and contraction of credit, if it had anticipated that it would require five years before the paper pound was raised to the value of the sovereign. It is improbable that the Committee or the Government anticipated that unrestricted gold flows would follow within a short period even if parity were reached at an early date. Undoubtedly, Cannan's criticism of the Government for not following the recommendations of the Committee early in 1919, is justified; but his explanation of the motive is not acceptable.

How were the Government to bring about deflation? Cannan proposed that the Treasury purchase currency notes with surplus revenue received from taxation and borrowing.<sup>4</sup> How the Government were to obtain currency notes rather than deposits at the Bank of England, is not revealed. A total of 2000 millions of deposits and 350 millions of currency notes was outstanding; and a very large proportion of all disbursements is made through the use of checking accounts. Nevertheless, Cannan is of the opinion that the Treasury would have had no trouble in obtaining payment in currency notes. If the Government were successful in obtaining currency notes in this manner, they could not have resisted the pressure for more cash. The banks would have held disproportionately large balances at the Bank of England if they were deprived of currency notes exclusively; they would have demanded currency notes in exchange for balances at the Bank of England. The Government yielded to the pressure in 1919 when the question arose whether more notes should be put into circulation to satisfy the requirements of increasing trade. How much more likely is it that the Government would have

<sup>3</sup> *Ibid.*, pp. 208-10.

<sup>4</sup> *Ibid.*, pp. 217, 366-67.

capitulated if they had attempted to impose the conditions on the business community proposed by Cannan?

The sequence of events is described in more detail elsewhere in this essay. Deflation was introduced when the market failed to renew Treasury bills, and the Treasury bill rate was increased.<sup>5</sup> The Bank rate was raised with the approval of the Treasury. It was relatively painless to deprive the market of cash after business depression had begun.<sup>6</sup> (The ability of industry to pay heavy taxes is another problem.) France and Italy attempted to deflate by withdrawing notes from circulation. Inflation had been almost exclusively a process of "pumping" notes into circulation; deflation required a reversal of this process. The significance of deposits is not great for these countries. But France failed, and Italy was able to carry through a policy of modified deflation only by putting Treasury balances at the disposal of the public and thus maintaining the level of loans and advances, and by issuing a special loan in order to draw notes out of hoards into circulation.<sup>7</sup> (The way to deflate was to inflate.)

Inflation was not brought about by excessive issues of currency notes, although it would have been impossible without them. No Government could have resisted the pressure for more cash; and it would have been unwise to refuse to satisfy the demand for more currency. As for the period of deflation, I agree with the French and Italian writers who contend that the *redemption of notes follows deflation*. Competition for banking funds was severe. Were the Government prepared to apply strong methods in depriving the market of banking accommodation by

<sup>5</sup> As late as July, 1920, the market was refusing to renew Treasury bills. More trouble was averted by the Bank of England's purchases of these bills. *L. E.*, July 17, 1920.

<sup>6</sup> Cannan wrote in August, 1921: "It certainly looks as if the Treasury were convinced of the desirability of a reduction and were deliberately effecting it." *Op. cit.*, p. 282. Some responsibility can be placed upon the Government for their activities in March and April, 1920. But certainly after 1920, the Government were extremely cautious about dictating to the money market. Debt reduction was a necessary part of the Government's program. The surpluses of the Treasury and the reduction of debt were possible only because deflation was already far advanced. To say that the Treasury was intent on reducing its debt, is not equivalent to saying that it was intent on deflation. The conversion of deposits into securities is not necessarily deflationary, for the deposits were inactive in large part.

<sup>7</sup> B. Griziotti, *op. cit.*, p. 62.

taking away an appreciable part of its cash reserves? Certainly official utterances reflect no such intentions. Was the Treasury likely to apply strong methods—burning notes, for example—that were apparent to everybody?

In the later years of deflation there were many critics of the policy, but in the years in which the policy was being formulated, the possibility or advisability of a policy of devaluation was seldom suggested. The attitude was not unlike that prevalent after the Napoleonic War. But Tooke refused to hold the supporters of the Resumption Act accountable for the ensuing fall in prices. "And if they had been so weakly or nefariously minded how would they have set about averting the fall, which, without some forcible intervention, was inevitable."<sup>8</sup>

Concerning the rate of deflation, a problem on which infinite differences might arise, all who ventured an opinion were surprisingly in accord. The concensus of opinion was in favour of a deflation proceeding so slowly that little distress would follow. Pigou, supporting a levy which would effect a rapid and painful operation on the monetary system, and which, therefore, would have less serious effects on industry than a long continued program of heavy taxation, was an exception. But economic systems are not so pliable that we can successfully carry through the "very, very slow deflation" of Chamberlain, "the yearly deflation of 10 per cent" of Loria,<sup>9</sup> or even a policy of non-flation, or the prevention of further inflation, as recommended by various industrial interests. Once started, the process of deflation is not easily controlled: the monetary history of numerous countries in Europe—England, Czechoslovakia, Denmark, Norway, Sweden, are but a few—offers undeniable evidence of the difficulties involved in attempting to control the rate of deflation. Perhaps the time will come when the banking authorities will be able to control bank rates, the quantity of  $n$  (money) and  $r$  (reserve ratios) in a manner to offset changes in  $K$  and  $K^1$  (balances) as recommended by Keynes; but the nicety of control required to determine the rate of deflation in 1920-24, demanded more human ingenuity than was available.<sup>11</sup>

<sup>8</sup> T. Tooke, *History of Prices*, II, p. 64.

<sup>9</sup> A. Loria, *Le Peripizia Monetaria Della Guerra*, pp. 140-41.

<sup>11</sup> J. M. Keynes, *A Tract on Monetary Reform*, pp. 85-87.

The Cunliffe Committee recommended that additional issues of currency notes (above the fiduciary limit) should be covered by notes withdrawn from the reserve of the Bank of England, and that when the total of currency notes was reduced to an amount consistent with the maintenance of a gold reserve of 150 millions, they should be retired and Bank of England notes substituted.<sup>12</sup> Reluctant to inflict the full responsibility for the future credit policy upon the banks and the Bank of England, the Committee proposed a limitation of the fiduciary issues to the maximum amount (fiduciary) in circulation the previous year, and made a definite proposal for an annual reduction of 3 per cent. The Treasury took no action on the latter proposal, but issued a Treasury Minute on December 15, 1919, making effective the recommendation for a maximum fiduciary issue.<sup>13</sup>

Why did the Bank of England not satisfy the demands for cash in the troublesome days in March and April, 1920, by calling for more currency notes, instead of drawing notes from its banking reserves? What is the explanation of the fact that 3 millions of Bank of England notes were redeemed during the last week of 1919, although there was no reduction of currency notes outstanding? Were the returned notes carefully selected by the banks in order to strengthen the reserves of the Bank of England? The Bank of England began to lose reserves in the early part of 1919. It is possible that to a limited extent the Bank was able to issue its own notes interchangeably with Treasury notes. That the Treasury took no action in spite of the fact that the Bank's reserve was becoming seriously impaired, seems to indicate that the authorities were not entirely averse to deflation in 1919, although they were not yet prepared to follow the recommendations of the Cunliffe Committee.

Cannan maintains that the policy of deflation was forced upon the banks by the limitation of note issues.<sup>14</sup> Certainly, the arguments presented in Chapter II do not support that conclusion. The Government repeatedly pointed out that the expansion

<sup>12</sup> First Interim Report of the Committee on Currency and Foreign Exchanges after the War, Cmd. 9182 (1918), paragraphs 44-45.

<sup>13</sup> Maximum Fiduciary Issues. Treasury Minute of December 15, 1919, Cmd. 485 (1919).

<sup>14</sup> E. Cannan, "Professor Cassel on Money and Foreign Exchange," *Economic Journal*, 1922, p. 509.

of bank credit was the source of the monetary evils, and that the disease should be attacked at its roots. Embarrassed frequently in its attempts to renew its floating debt by the competition of private demands for the available supplies of bank credit, the Treasury first intimidated the banks and finally dictated an increase in the Bank rate.<sup>15</sup> A few millions additional may have been available for the Government in the crucial month of April had the fiduciary limit not been fixed for 1920; however, it is doubtful whether the Government lost any revenue on account of the introduction of the fiduciary limit, for the notes in circulation in April, 1920, were not equal to the fiduciary maximum.

One might argue that the Bank of England would not have raised its rate had not the exclusive responsibility for putting more cash into circulation been put upon it by setting a maximum for the fiduciary portion of the currency notes outstanding, and had not transfers of notes been made from the reserves of the Bank of England to the Currency Note Reserve. But the immediate cause of the increase in the Bank rate in 1920 was the failure of the market to renew maturing Treasury bills. The Government had to borrow from the Bank of England, and were responsible both for an increase in the Bank rate and in the Treasury bill rate. Without a doubt, if the Bank had held a larger reserve, more accommodation to the Government and market would have been possible without an increase in the rate. However, long before April, 1920, the Government had made known their hostility to further inflation. I am inclined to agree with Keynes that the currency limit was not effective. The official attitude is well reflected by the increased elasticity allowed by the recent amalgamation of the Currency and Bank Notes (1928). *However, I do not deny that the limitation of notes was a factor in bringing about deflation; but had not large demands on the resources of the Bank been made by the Treasury and the market simultaneously, the limitation would not have been introduced or would have been ineffective.* The Bank of England was probably not a gracious lender in the winter of 1919-20. The failure of the

<sup>15</sup> The London *Economist* pointed out that a limitation of currency notes would be ineffective so long as the market could obtain cash by allowing bills to run off. *L. E.*, January 29, 1921; also see H. W. Macrosty, "Some Current Financial Problems," *R. S. J.*, 1922, p. 191.

market to renew Treasury bills was taken as evidence by the *Treasury* that the commercial banks unaided could not restrict accommodation adequately.

In the post-War period of inflation the Treasury met with many obstacles in fulfilling its financial program. The failure of the Victory Loan was the first indication that competition for available banking funds was to be strenuous. Other European countries had experienced a similar reaction on the part of the banks and public; and they had turned to the central banks for help. In a similar manner, the banks in Great Britain, pressed by trade needs, attempted to dispose of Government investments. Banks could obtain cash by redeeming Treasury bills. When the British Treasury consumed its surpluses in redeeming securities, the loss of cash suffered by industry was not great. In fact, it is possible that more resources were made available for trade.<sup>16</sup> The Government objected to the acquisition by the public of the resources now made available by the disbursement of Treasury surpluses. When the Government consumed cash in repaying the Bank of England, the banks disposed of their Treasury bills in sufficient quantities to cover the losses of cash suffered as a result of the repayment of Ways and Means.

That the Government were determined to tackle the problem of the floating debt vigorously in 1919-20, was made apparent by their announcement concerning the 455 millions of Ways and Means that were to mature in that year.<sup>17</sup> That the public was investing elsewhere profitably, is attested by a reduction of the floating debt of but 100 millions, although the 229 millions of Ways and Means (Bank of England) outstanding were repaid.<sup>18</sup> Aided unexpectedly by favorable business conditions, the Govern-

<sup>16</sup> The *Bankers' Magazine* held that the demands on the taxpayer deprived industry of liquid resources in spite of the repayment of debt. *B. M.*, 1920 (109), pp. 762-63. That is probably true in so far as the Government repaid advances from the Bank of England. But it is also possible that industry paid less in additional taxes than it received in exchange for securities redeemed.

Perhaps the Government went too far in the opposite direction in contending that the reduction of debt by 322 millions in 1920-22 gave industry funds that were unprofitable in the hands of the State. 153 *H. C. Col.* 1039.

<sup>17</sup> 115 *H. C. Col.* 184.

<sup>18</sup> 128 *H. C. Col.* 74-75. A large part of the Ways and Means advances repaid were Special Deposits, and in so far as Ways and Means repaid were Special Deposits, the market obtained additional resources. Even Pigou assumes that the repayment of advances from the Bank of England is necessarily deflationary. A. C. Pigou, *Political Economy of War*, p. 164.

ment received revenues for the year 1919-20, 170.9 millions in excess of the estimate of October, 1919.<sup>19</sup> Thus improving business and rapid inflation were necessarily followed by deflation. In the calendar year 1920, the Government were still having their difficulties. Although they had reduced their debt by 250 millions, the floating debt had been increased by 59 millions.<sup>20</sup> The Treasury obtained revenues in the fiscal year 1919-20 which might have been the cause of contraction; but the repayment of Special Deposits, and the banks' refusal to renew Treasury bills were obstacles. However, the fact that the Government were driven to the Bank of England made the former more willing to coöperate in a policy of deflation. In 1919, the Bank of England seemed disposed to institute a vigorous program of deflation, but the Government rather hesitated. The Bank had allowed its reserves to be seriously impaired; and the Government postponed the introduction of a fiduciary limit until December. In April, 1920, the Government began to use direct methods. A process of contraction, involving the reduction of the magnitude of banking resources to be placed at the disposal of the Government and the application of direct pressure on the banks, had proved unsuccessful. No doubt, the low ratio of reserves of the Bank of England was an important consideration in formulating Treasury policy, although it would have been of less significance had the Bank been allowed to draw 5 £ notes from the Government in 1919, or had the Government not introduced a limitation for 1920.

Although no limitation of note issue had been introduced before December, 1919, the authorities had in reality introduced a modified policy of restriction by paying out notes from the reserves of the Bank of England. It was possible to obtain legal sanction for notes of larger denominations; but the authorities preferred to allow the reserves of the Bank to decline to a low point, and the Bank transferred notes to the Currency Reserve, which transfers were controlled by the Treasury; the Government's attitude was also reflected in their willingness to allow gold to be exported in the period of post-War inflation.

The Treasury increased its rate on bills in October, 1919,

<sup>19</sup> *L. E.*, April 3, 1920.

<sup>20</sup> *Ibid.*, January 8, 1921.

and the Bank rate was increased in November when the bill rate was increased again. Undoubtedly, the Treasury was influenced in its policy by the difficulty of renewing its bills. Failure to sell bills at the current rate made it necessary to borrow from the Bank; and it was an indication that the banks would not restrict their other business.

By bringing much gold to the Bank of England early in 1920 and not withdrawing an equivalent amount of notes, the banks forestalled an increase in the Bank rate. On March 17, reserves of the Bank were 16 millions in excess of reserves on January 7. But a reaction set in the two following weeks: the Issue Department lost 7.2 millions of gold, the banking reserve declined 6.0 millions and the reserve ratio declined from 23+ to 18½ per cent. The market obtained relief in the first eleven weeks of the year by refusing to renew Treasury bills and from the large disbursements of the Government. The flow of cash to the Bank of England reflected in part easier monetary conditions for which the disbursements of the Treasury were in large part responsible. P. S. increased on one occasion from 55 to 68 millions, and from 54 to 87 millions on another. Nevertheless, Ways and Means were reduced. Apparently the Bank was purchasing bills to aid the Government or the market, or both. More significant was an increase of O. S. from 84 millions on February 11 to 92 millions on March 3. After a rather extended period of relative abstinence, the market appealed once more to the Bank of England. Both by redeeming notes and sending the bill brokers to the Bank, the banks were replenishing their reserves with the Bank of England. Increased accommodation required larger balances at the Bank. A desire to prevent an increase in the Bank rate may have been the motive of British banks for increasing the proportion of their reserves held with the Bank of England. (There is some latitude in the division of reserves between their vaults and the Bank of England.) However, the inflow of notes was seasonal in part at least. Exports of gold were significant, for the Treasury controlled exports.

Although O. D. increased from 132 to 173 millions, O. S. increased from 84 to 92 millions. The banks were probably in straitened circumstances if borrowing from the Bank was neces-

sary in the face of such large increases in O. D. Their balances had been increased by the redemption of currency notes. An inflow of notes in the midst of a period of deflation hampers the consummation of that policy. A limitation of notes, astutely enforced, may conceivably make the enforcement of deflation less difficult; *but if a program of deflation is once launched, the redemption of notes is not a necessary part of the program, and may be an obstacle.* It may be said that the increase in O. D. referred to above is to be explained by the maturity of Exchequer bonds.

That the market's premonitions were not groundless, is attested by a reduction of O. D. from 132 to 101 millions, and an increase in O. S. of 18 millions for the week ending March 31. In spite of the increased borrowings, the market suffered large losses of cash. The Government did not conceal their intentions. They repaid the Bank of England for Ways and Means outstanding, and the Bank's P. S. declined to a low figure of 20 millions. To encourage further inflation by putting cash at the disposal of the market, was not the intention of the Treasury.

Allowing 175 millions of Treasury bills to mature and purchasing but 111 millions of new bills, the market forced the Government to borrow from the Bank again. The Government borrowed 55 millions from the Bank in the 10 days ending April 10. For the week ending April 7, the increases in O. S. and P. S. were 16 and 39 millions respectively. A decline in the reserves of the Bank of 1½ millions in the first week of April was symptomatic of an unfortunate change in the direction of the movement of money. In the two weeks ending April 7, 14 and 9 millions more of currency notes and Bank of England notes were put into circulation. (The Bank lost 6 millions of gold in the last two weeks of March.) In allowing the Bank reserve to decline by 8 millions in the last week of March and in exporting gold, the Government seemed determined to oppose further expansion. The increase of notes in circulation was particularly inopportune. A reduction of O. D. and of the reserve of the Bank of England necessarily followed. In so far as the notes were taken from the Treasury, the danger lay in large transfers of Bank of England notes to the Currency Notes Account.

What conclusions are to be drawn from this episode? The Government were not eager to place at the disposal of the market the large supplies of cash received through tax payments, but instead deprived the market of appreciable sums by repaying advances from the Bank of England. By transferring its notes to the Currency Notes Account, by satisfying increasing demands for cash to an appreciable degree from its own tills, and by exporting gold, the Bank of England committed itself to a policy of non-inflation, or even of deflation. After the seasonal inflow of cash in the early part of the year had subsided, the banks appealed to the Bank of England for additional cash, to meet the needs of the public and the requirements for larger reserves necessitated by increasing expansion. When the banks failed to renew all of their Treasury bills, the Government had to borrow from the Bank of England; when the market required larger reserves, additional cash to replace cash transferred to the Government and additional notes for circulation, it also appealed to the Bank of England. Because the Bank was subjected to a strong pressure by the Government and the market simultaneously as a result of which its cash reserves declined both relatively and absolutely, the Bank was more prepared than ever to support the proposals for deflation now emanating from the Government. Without a doubt, the limitation of fiduciary notes under the Treasury Minute of December, 1919, made it easier to carry through a policy of deflation. However, can we not deduce from the facts that the Bank consumed an appreciable part of its reserves in transferring notes to the Currency Notes Account even before the Treasury Minute had been put into effect, that the limitation under the Minute was not a *sine qua non* of deflation? Undoubtedly, the Treasury controlled the transfer of Bank of England notes to the Currency Notes Reserve; and the Treasury probably had a decisive voice in the determination of the policy of higher rates when it became clear that the joint stock banks were not prepared to restrict credits without action on the part of the Treasury and Banks.

To those who agree with Keynes and McKenna that (1) cash resources of the banks are determined by the policy of the Bank of England and (2) that the magnitude of deposit liabilities is

determined exclusively by cash holdings, the Bank of England must indeed seem a potent agent of control.<sup>21</sup> Lord Bradbury goes further than McKenna. He contends that the Bank of England would sell securities should the banks attempt to maintain their former ratio of reserves in a period in which cash was flowing in.<sup>22</sup>

The Treasury apparently disregarded the Christmas period of 1919 in setting a fiduciary limit for 1920, and thus did not strictly carry out the recommendations of the Cunliffe Committee. The fulfillment of the program occasioned little concern from 1921 to 1923.<sup>23</sup> But the money market was disturbed in 1920 and 1924-25 by the proximity of the notes in circulation to the fiduciary limit, for the notes in excess of the fiduciary limit could not be put into circulation without a corresponding transfer from the reserves of the Bank of England. When the Bank raised its rate to 7 per cent in April, 1920, the fiduciary issue was close to the fixed limit. The fiduciary notes in circulation declined 100 millions in six years, and the fixed limit declined about 80 millions. The Government called in certain issues of currency notes in the later years of deflation; and part of these notes that remained in circulation were not included in the total outstanding. Thus the authorities introduced an additional elasticity at crucial times.<sup>24</sup> In earlier years the Bank of England held a few millions of currency notes ready for use which were included in the notes in circulation, but which were not disclosed on the books of the Bank. An additional element of elasticity was introduced by putting these notes into circulation. The quantity thus held declined rapidly beginning in the early months of 1920.

<sup>21</sup> J. M. Keynes, *op. cit.*, ch. 25; Committee on National Debt and Taxation, Q. 1936, and *Evidence*, ch. 1; also R. McKenna, *op. cit.*, pp. 85, 134. McKenna here argues that supplies of credit are unnecessarily restricted because the Bank refuses to purchase gold and securities.

<sup>22</sup> Committee on National Debt and Taxation, Q. 9180.

<sup>23</sup> Lacout observes that in so far as the reduction of notes necessitated borrowing from the Bank of England on the part of the Treasury in order to redeem currency notes, the process of deflation was hampered. G. Lacout, *op. cit.*, pp. 76-77. Perhaps, more accurately, it might be said that the rate of deflation was retarded by the effects of redemptions of notes on O. D. However, Ways and Means advances from the Bank of England became increasingly unimportant in the period in which notes were being redeemed, and as notes were redeemed, the Government sold Treasury bills held in the Notes Account.

<sup>24</sup> *L. E.*, July 31, 1920, October 9, 1920.

## CHAPTER IV

### DEFLATION AND DEPOSITS

ON the grounds that the reduction in loans, advances, and money at Call and Short Notice had been no greater than the increase in bills discounted, Macrosty contends that no deflation occurred in 1920 or 1921.<sup>1</sup> Although there is much to be said for his presentation, I am not inclined to agree. The public, seeking more profitable investments, merely exchanged their Treasury bills for long term investments; and who can say that those who disposed of bills to the banks were the merchants who were deprived of accommodation by the banks? Was not the purchase of Treasury bills by the banks an indication of the progress of deflation? The banks purchased Treasury bills with the cash received in payment for advances called in. In 1927, Macrosty argued that the decline in advances in 1921 and 1922 was offset by a decline in prices and that in stable units of purchasing power, more advances were outstanding in 1922 than in 1920; hence his conclusion that deflation was a myth. He did not find a positive proof of deflation in the reduction of deposits, which resulted from the purchase of investments by the public from the banks and the Government.<sup>2</sup> In many respects, the magnitude of advances gives a more accurate measure of deflation than deposits. But to adjust the figures for advances by an index number of prices, is scarcely defensible; for the decline in prices resulted from the deflation that is being denied. The statement that the banks received additional cash of 160 to 170 millions through the sale of bills and investments and the reduction of advances, is open to serious objections.<sup>3</sup> A reduction of deposits and an equal reduction of bills discounted, invest-

<sup>1</sup> H. W. Macrosty, "Some Current Financial Problems," *R. S. J.*, 1922, pp. 205-6.

<sup>2</sup> H. W. Macrosty, "Inflation and Deflation in the United States and United Kingdom, 1919-23," *R. S. J.*, 1927, pp. 90-91.

<sup>3</sup> *Ibid.*, p. 98.

ments and loans, were the changes involved. Attention should be focussed on the flow of deposits; it is generally known now that deflation is not reflected by any large decline in deposits.<sup>4</sup>

The fluctuations in current deposits are not necessarily of the same magnitude nor in the same direction as fluctuations in all deposits. For the interpretation of price movements and cyclical fluctuations, movements in current or saving deposits are significant rather than the movements of all deposits.<sup>5</sup> For the pre-War period, Lavington estimates that current deposits were two thirds of the total.<sup>6</sup> In 1922, Macrosty estimated in a rough manner that the proportion of saving deposits was one fifth;<sup>7</sup> but in 1927, he put them at one third of the total in good times and one half in bad times.<sup>8</sup> The Union of London and Smiths Bank, which alone of the important banks has published these figures in recent years, held current deposits of 32 and saving deposits of 16 millions in 1915, and 44 and 19 millions in 1917.

The Board of Inland Revenue in examining the accounts of 310 private traders in 1919 at the request of the Committee on the Increase of Wealth (War) found that 194 had credit balances of £4 million at their banks and that 116 had debit balances of 3.5 millions.<sup>9</sup> A somewhat similar study was made on behalf of the Colwyn Committee on National Debt and Taxation. Of private organizations (individuals, partners, and private companies) indebted to banks in 1919, 61 per cent of the units considered had credit balances in 1923, which came to 1.75 millions, and 39 per cent had debit balances, which came to 2.46 millions.<sup>10</sup> (This represented a net increase in indebtedness for these concerns since 1919; but the Board points out that private resources available but not invested in the business, were several times as great as the net indebtedness.) The conclusions to be drawn are (1) that for private traders deposits scarcely exceeded loans and advances, and hence that a large proportion of deposits was probably held

<sup>4</sup> R. G. Hawtrey, *The Gold Standard*, pp. 11-15.

<sup>5</sup> Keynes points out that changes in K and K<sup>1</sup> were more important than changes in money. J. M. Keynes, *A Tract on Monetary Reform*, p. 86.

<sup>6</sup> F. Lavington, *English Capital Market*, p. 155.

<sup>7</sup> H. W. Macrosty, *op. cit.*, *R. S. J.*, 1922, p. 183.

<sup>8</sup> H. W. Macrosty, *op. cit.*, *R. S. J.*, 1927, p. 90.

<sup>9</sup> Select Committee on the Increase of Wealth (War), Further Note on Effects on Businesses by Board of Inland Revenue, paragraphs 17, 22, 23.

<sup>10</sup> Committee on National Debt and Taxation. *Report*, paragraphs 779-83.

by non-business people or as the private resources of business men, and (2) that the banks as late as 1923 continued to finance liberally those concerns that had been heavily indebted in 1919, and perhaps even to contribute part of their permanent working capital. Perhaps deposits of companies were larger in proportion to advances than apparently was customary with private traders and private companies. Of 216 concerns reporting in both 1919 and 1923, only 34 of those with credit balances in 1919 had debit balances in 1923, and, moreover, 29 firms converted debit balances into credit balances.<sup>11</sup> It is possible that many firms with credit balances in 1919 were bankrupt in 1923 and hence were not considered in the later investigation. The excess of overdrafts over credit balances was £501,000 in 1919, and but £707,000 in 1923. Perhaps here again the results would be different if frozen credits from banks to firms in distress or to firms no longer in existence, were included in the latter year.

The reduction of money and deposits in 1921 and later years was of minor proportions in comparison to the decline of prices. The increased hoarding of cash, the necessity of maintaining large balances in troubled times, the large frozen credits outstanding, and the dumping of commodities, are the explanations of the relatively moderate decline of deposits suggested by Cassel.<sup>12</sup> These suggestions are worthy of serious consideration. Frozen credits may be reflected in inflated loans and advances, although banking tradition in England requires that they be written down as losses; and the deposits that were created when these loans were made, were probably consumed before the banks became aware of the inability of the borrower to repay. However, the deposits of others who received payment, from the original borrowers probably increased. There is a modicum of truth in Cassel's last point that the actual decline in prices is exaggerated by using quotations based on the very low prices for a relatively small quantity of commodities sold during these abnormal times. What he really contends here is that current index numbers are inaccurate instruments for the verification of the quantity theory, for the index number is constructed by using the prices of commodities actually

<sup>11</sup> Committee on National Debt and Taxation. App. XIX. (Private Traders and Their Capital Resources.)

<sup>12</sup> G. Cassel, *Money and Foreign Exchange After 1914*, pp. 244-48.

sold, not the prices of all commodities. Money not expended is left out of consideration. The Swedish Riksbank found a close correlation between retail prices and notes in circulation during the deflation period in Sweden. This was expected *a priori* because notes are used in retail channels.<sup>13</sup>

The League of Nations in one of its studies of monetary conditions uses an argument similar to one employed by Cassel. The decline of prices is necessarily greater than that of deposits, for in the compilation of price statistics, non-merchandise transactions which become relatively more important in the midst of a period of deflation, are not considered. Hence Clearing House figures give a more satisfactory index of the decline in all prices.<sup>14</sup>

In many respects, advances would be a more satisfactory measure of deflation than deposits. Advances become, in part, frozen credits, and, perhaps, a correction based on the published figures of allowances for bad debts, might be desirable.<sup>15</sup> For the purpose in hand, total deposits are almost worthless, for the distribution between current and saving deposits, which varies rapidly during such periods, is not known. No one questions the fact that current deposits become relatively less important; for in periods of depression, business men are unlikely to hold large non-interest paying balances at the banks when large advances are still outstanding. Although saving deposits will be used for a similar purpose, their reduction will be relatively smaller. Deposits decline as the public repays advances and purchases investments formerly held by the banks or issued now by the Government. But it cannot be maintained that the purchase of investments with deposits, formerly unemployed, will affect the price level. The answer to those who might reply that the possibility of the use of this purchasing power in the future is definitely destroyed by the conversion into investments, is, that the operation might easily be reversed. Saving deposits increase as industry finds difficulties in obtaining employment for its funds. It has been revealed by the American experience of the last ten years that the magnitude of deposits as well as total investments—loans, bills and securities—are determined by the magnitude of cash

<sup>13</sup> *Sveriges Riksbank Arbok*, 1921, pp. 11-13.

<sup>14</sup> League of Nations: *Memorandum on Currency*, 1913-23, pp. 31-32.

<sup>15</sup> *B. M.*, 1922 (114), pp. 143-44.

resources; but the significant movements are in the type of investment and deposit.

The distinction between current and saving deposits should not be carried too far. Both at any particular moment are unused purchasing power. The important difference is that the former are more likely to be used in the near future; but the latter are potential purchasing power, and one of the first symptoms of business recovery is the conversion from saving into current deposits. In the United States saving (time) deposits belong largely to business people. The phenomenal increase in time deposits in the United States since 1921 has been especially rapid in the New York district. A relative increase of time deposits merely means that the consumption of balances will be less rapid in the near future; but it also means that an accumulation of latent purchasing power exists which may have important effects in the future.

It is interesting to compare the development of saving and current deposits in periods of deflation for several countries where banks distinguish the two. On the whole, one would expect an even more rapid relative increase of time deposits in Great Britain, where pure savings institutions occupy an unimportant position.<sup>16</sup>

		1913—100.	<i>End of year</i>
		1919	1924
Netherlands	Sight	592	309
	Time	333	226
Spain	Sight	405	512
	Time	177	372
Sweden	Sight	610	382
	Time	239	181
Switzerland	Sight	264	248
	Time	122	130
Australia	Sight	189	192
	Time	127	165
United States	Sight	140	138
	Time	154	167

Finding relatively few profitable sources of employment for their resources and particularly concerned over the decline in advances, the banks began to invest heavily in Treasury bills in

<sup>16</sup> League of Nations. *Memorandum on Currency and Central Banks, 1913-25*, I, pp. 37-43.

1921. Was that inflationary merely because an increase in deposits was involved? Or was the conversion in 1922 of saving deposits on which the public was receiving a meagre return, into securities previously held by banks, a cause of deflation? Some banks disposed of investments in 1920 in order to have larger resources available for trading purposes.<sup>17</sup> At first deposits declined; later, as the banks substituted advances for the securities previously held, deposits increased, but probably the net effect on the total of deposits was nil. However, these operations resulted in a reduction of unemployed balances and an increase of active balances, and hence were a cause of expansion.

The sudden reversal in the balance of trade of the less industrialized countries of the world in 1920-21, South America, and the British Colonies and Dominions in particular, had an adverse effect on the magnitude of foreign deposits held in London institutions.<sup>18</sup> Probably the proportion of O.D. of British institutions increased, but transfers of cash were also made by British banks to the accounts of a few industrial countries—France and the United States for example—on behalf of countries usually holding large balances in London. Deposits of foreign banks in London, which were greater than deposits of London banks abroad, probably declined at a rapid rate; but the significance of this movement depends upon whether these deposits had been active. The balances of the Dominions and India in London were reduced to an uncomfortably low level.

The deposit figures for English banks were as follows, December 31:

<i>Millions of £ Sterling</i>	
1918.....	1583
1919.....	1874
1920.....	1961
1921.....	1975
1922.....	1834
1923.....	1822
1924.....	1913

A more detailed picture of the history of deposits is found in the monthly figures of London clearing banks. Deposits increased in 1921, declined steadily in 1922, and remained remarkably stable

<sup>17</sup> Meeting of London, Joint City and Midland Bank of January 28, 1921. *L. E.*, January 29, 1921.

<sup>18</sup> See *L. E.*, November 6, 1920, January 29, 1921, August 6 and 20, 1921.

in the next three years. In 1921, an appreciable decline in loans and advances was accompanied by an increase in deposits. The explanation probably is that on account of the scarcity of trade bills, the banks purchased large quantities of Treasury bills from the public.<sup>19</sup> The public, pressed by the banks, disposed of Treasury bills in order to obtain the cash required for repaying loans, now overdue. The public converted part of its Treasury bills into saving deposits, and consumed current deposits in repaying advances or converting into saving deposits.<sup>20</sup>

That the movements also reflected the attitude of the banks and the public toward investments, is evidenced by the decline of investments held by the banks in 1921. But the banks, unable to obtain ample portfolios of bills, substituted investments from 1922 to 1925. The public also displayed an increasing interest in long term investments because the rates on deposits were low.<sup>21</sup> For the representative concerns studied by the Board of Inland Revenue, investments had declined from £4.6 million to £3.6 million from 1919 to 1923; and for the 51 firms with a debit balance at the banks in both years, the decline was from 2.5 to 1.5 millions.<sup>22</sup> Of course, investments of traders had suffered a greater reduction from 1919 to 1921.

English banks make advances by creating deposits, and also grant overdrafts. By the former method the total purchasing power put at the disposal of the individual is immediately reflected in an increase of deposits, and hence the expansive tendencies are rather exaggerated; by the latter method overdrafts are converted into deposits and advances only as the overdraft or credit is consumed. (The deposits are transferred to other accounts of the bank granting the accommodation or to other banks.) Lavington, Macrosty and a committee of the Royal Economic Society have pointed out some of the pitfalls involved.<sup>23</sup> If overdrafts were a constant part of the total of advances, the

<sup>19</sup> The *L. E.*, January 21, 1922, accounted for the increased demand for Treasury bills by the decline in advances.

<sup>20</sup> Thus Brunner Mond had an overdraft of £820,000 at the bank in 1921, and a cash balance of £1,214,000 in 1922. Meeting of June 16 reported in *Statist*, June 24, 1922.

<sup>21</sup> See the statement of the Chairman of Williams, Deacons Bank, *L. E.*, February 2, 1924.

<sup>22</sup> Committee on National Debt and Taxation. Appendix XIX.

<sup>23</sup> F. Lavington, *op. cit.*, p. 136. H. W. Macrosty, *op. cit.*, *R. S. J.*, 1922, p. 187.

problem would not be so perplexing. In recent years, various authorities have been discussing the increased stake in industry held by the banks, and it is frequently said that industry is being financed more and more by overdrafts.<sup>24</sup>

Bortkiewicz has recently said that inflation is a temporary process, which is spent with the exhaustion of reserves; but deflation, involving transfers to savings accounts, may well be interminable.<sup>25</sup> In the opinion of Bonnet, a country will not suffer violent deflation. More credit will be granted and the rapidity of circulation will increase, as the experiences of Czecho-Slovakia, Greece, and other countries attest; or the public will oppose by refusing to renew maturing bills, in the manner that the French did recently.<sup>26</sup>

Deposits decline with (1) transfers of cash to the Government which the Treasury employs either to replenish its balances or reduce its debt at the Bank of England; (2) repayments to the banks of advances outstanding; and, finally, with (3) the withdrawal of cash. Unless the danger of strangling business is to be incurred, the first process should be a very gradual one, for cash transferred to the Government is drawn from the reserves of the banks. It is not possible to employ a large part of deposits in repaying bank advances in a period in which the traders clamour for more accommodation. When they begin to extricate themselves from the difficult position of the early months of deflation, and when attempts to hold commodities interminably are given up, some loans are repaid; but the results are not startling. Banks do not always write off their bad debts; frequently they set aside special contingency funds. In a period of deflation, contraction is carried through by transfers to less active deposit accounts and to the Government, rather than by the reduction of loans and advances and deposits.

<sup>24</sup> *B. M.*, 1921 (112), p. 533. *L. E.*, October 18, 1924. The *Bankers' Magazine* frequently harped upon the permanency of some loans outstanding. Two London banks attempted to save Dunlop by advancing £950,000. *Statist*, February 12, 1921. Keynes also comments on the increased popularity of the overdraft method of borrowing and the fluctuating proportions of deposits and overdrafts. *J. M. Keynes, op. cit.*, I, pp. 41-43.

<sup>25</sup> V. Bortkiewicz, "Verhandlung über die theoretische und ökonomisch-technische Seite des Währungsproblems," *Schriften des Vereins für Sozialpolitik*, 1925 (170), pp. 272-73.

<sup>26</sup> G. Bonnet, *Expériences Monétaires Contemporaines*, pp. 78-80.

One cannot easily infer probable movements in the price level from changes in the total of deposits. Cannan expresses one of the difficulties well when he says that deposits are purchasing power not being used.<sup>27</sup> One must be content with the type of solution suggested by Hawtrey or Keynes, namely, that attention should be diverted to the flow of deposits, rather than to the quantity. We might expect to find a closer correlation between clearings and price movements. But even here the correlation is not high. Perhaps the explanation is largely that only merchandise quotations are covered by the price indices, and that non-merchandise transactions account for a great part of all clearings. The prices of the latter are relatively stable. A correlation is not necessary if *flow* is taken to mean total of incomes.

Keynes points out that the explanation of the decline of prices in the deflation period is to be found neither in holdings of cash, deposits, nor in changes in the reserve ratio, but rather in changes in  $K$  and  $K'$ , the balances of cash and deposits. Hence he is critical of a banking policy that fails to take into account the fluctuations in  $K$  and  $K'$ .<sup>28</sup>

<sup>27</sup> E. Cannan, *op. cit.*, pp. 224-26.

<sup>28</sup> J. M. Keynes, *A Tract on Monetary Reform*, pp. 83-87.

## CHAPTER V

### PUBLIC FINANCE AND DEFLATION

THE Government dominated the money market in the early post-War period. In 1919, the Treasury had outstanding approximately 1000 millions of floating debt, was raising 800 millions by taxation yearly, and was confronted at short intervals with the trying task of paying off, renewing, or converting large amounts of maturing debts. The Colwyn Committee on National Debt and Taxation has commented on the practise of attaching peculiar conditions of redemption to each particular loan, which hampered the Treasury in the management of the debt in the post-War period. Holders of some issues were allowed to turn in their securities in payment for Excess Profits duty and Estate duties; one loan was provided with its own depreciation fund; and two with provisions for an automatic sinking fund. The motives of the Government in attaching special funds to individual loans are comprehensible; but did the Government sufficiently consider that they would be seriously hampered in carrying through a policy of debt reduction, because surplus revenues were in large part mortgaged? Moreover, the rate of repayment of floating debt was reduced by the diversion of resources to the reduction of foreign debts.<sup>1</sup>

The question of the appropriate size of the floating debt has been the subject of much discussion. Of course, the conventional view is that the maintenance of a large floating debt is both unsound and dangerous. In June, 1919, Chamberlain condemned the practise of perpetuating a large floating debt, which was making difficult the restoration of stability of the exchanges and was making necessary increased issues of currency notes.<sup>2</sup> Chamberlain took a similar position in February, 1920; but he was less

<sup>1</sup> H. C. 141. Financial Statement of April 25, 1921. Also *L. E.*, April 3, 1921.

<sup>2</sup> 116 H. C. Cols. 1728-29.

hostile in October when he expressed the opinion that a large floating debt does not necessarily involve inflation and pressure on the banks.<sup>3</sup>

The problem received much attention during the sessions of the Colwyn Committee. Brand,<sup>4</sup> Pease,<sup>5</sup> and Keynes,<sup>6</sup> among others, opposed the rapid redemption of a form of indebtedness which constituted a profitable form of investment for the money market, and which also provided the Government with advances at a very reasonable rate. In the opinion of Lord Bradbury, the investment needs of the banks should not dictate the financial policy of the Treasury.<sup>7</sup> A view, widely held, was that the banks would increase their advances as securities were redeemed by the British Government.<sup>8</sup> Miss Kock says that the danger of non-renewal of Treasury bills was not great, because trade bills were not to be had.<sup>9</sup>

In his testimony before the Colwyn Committee, McKenna maintained that, although the banks did not invest equal percentages of their total resources in securities and loans, they all held approximately equal percentages of both of these assets to all their assets. Government securities were purchased only as a substitute for advances.<sup>10</sup> But from the evidence of the banker, Bell, who testified that Treasury bills were merely a stop-gap until industry was prepared to borrow, and Sir J. Martin, the representative of the British Chamber of Commerce, who was uneasy about the competition of Treasury bills with industrial advances, it can be gleaned that banking and industrial interests were not in agreement on this point.<sup>11</sup>

While trade and industry were competing strenuously with the Government in 1919 and 1920 for the resources at the disposal of the banks, the question whether the banks would renew matur-

<sup>3</sup> 125 H. C. Cols. 452-53; 133 H. C. Col. 1974.

<sup>4</sup> Committee on National Debt and Taxation. *Report*, paragraphs 102-103. Also *Evidence-in-Chief*, ch. 2.

<sup>5</sup> *Ibid.*, *Evidence-in-Chief of Mr. J. B. Pease*, ch. 11.

<sup>6</sup> *Ibid.*, *Report*, paragraph 98.

<sup>7</sup> *Ibid.*, *Evidence-in-Chief of Lord Bradbury*, ch. 11, Niemeyer told the Committee that the exigencies of public finance, not the requirements of the money market, accounted for the large floating debt outstanding. Qs. 8705-6.

<sup>8</sup> *Ibid.*, *Evidence-in-Chief of Prof. A. W. Kirkaldy*, ch. 4.

<sup>9</sup> K. Kock, *A Study of Interest Rates*, p. 178.

<sup>10</sup> Committee on National Debt and Taxation, Qs. 1757-60.

<sup>11</sup> *Ibid.*, Qs. 2981-90; *Evidence-in-Chief of Sir J. Martin*, ch. 8.

ing Treasury bills, was a constant source of worry for the Government. Chamberlain's complacency in the latter part of 1920 merely reflected the more comfortable position of the Treasury; for the banks, now sobered by the process of deflation, were more content to retain their portfolios of public securities. But if the fear subsided temporarily, it did not die. A reduction of banking reserves, without a corresponding diminution of the demands of trade and the Treasury upon the banks, followed the deflation of 1920-1921. Because British bankers tenaciously adhere to a conventional reserve ratio, and because they were hampered in their attempts to obtain additional cash by the rigid limitation of note issues and by rather heavy gold outflows, monetary stringency was long sustained; and both the Government and the business community were subjected to serious disturbances whenever one or the other required more than its normal share of the limited resources available. A study of the market conditions, week by week, reveals a stringency that was peculiarly persistent, and strange as it may seem, it was reduced only with the return to the gold standard. The scarcity of cash and the almost perpetual indebtedness of either the market or the Government to the Bank of England were the salient features of the period. Strangely enough, this is true although market rates were usually far below the Bank rate.

What are the possible explanations? The currency system was inelastic, even as compared to the pre-war period; for the system was deprived of the elasticity resulting from free gold movements. A virtually free gold market was established in 1919. Exports were limited to current receipts from South Africa; but in the deflation period, the total exported was considerably above the current imports. (Great Britain had accumulated imports from South Africa in 1917 and 1918, which were now exported.) Fiduciary limits were set for currency notes. By taking advantage of a technicality, the limitation was disregarded on one or two occasions. Other countries were outbidding Great Britain for the new supplies of gold; and gold movements were still restricted in many countries. The capacity of other countries to absorb gold did not necessarily depend on their adherence to the gold standard. The United States, it is true, was on a gold standard, and was

the most successful bidder. Gold prices were relatively high in Great Britain during part of the period of deflation; but that was not the important factor. Policy principally determined the magnitude and direction of gold. The Bank of England refused to purchase gold at a premium, because it anticipated that its note would soon be equivalent in value to a sovereign. Banks could hardly be expected to purchase gold at a premium and receive in return balances (in an equivalent number of paper pounds) at the Bank of England.<sup>12</sup> If the Bank of England had offered a premium for gold—as the Bank of France recently did—imports might have been encouraged, and additional Bank of England notes or balances at the Bank would have been created.

Another fact of significance was the loss of banking reserve incurred by the Bank of England in transferring its notes to the Currency Notes Account. Particularly in 1920 were these transfers important; but their effects were felt for several years. A loss of £1 Sterling from the Bank of England reserve was equivalent to a loss of £2 or £3 Sterling of cash for the money market.

Although the deflation period was one of relatively low money rates, it was a period of persistent stringency; however, the market and the Government learned by experience that they could call upon the Bank of England for accommodation at reasonable rates. It is rather extraordinary that under these circumstances reductions of the Bank rate were accompanied by reductions of the market rate. The cash resources of the market had been reduced to such an abnormally low level that in spite of the depression, the accommodation of the Bank of England was indispensable. The gradual decline in market rates would have been impossible without the assurance that the coöperation of the Bank of England could be enlisted. If the Bank was unwilling to encourage expansion by importing gold at a loss, it was willing to lend generously at reasonable rates.

From 1921 to 1925, the Government repaid 50 millions of Ways and Means advances from the Bank of England. The mar-

<sup>12</sup> In November, 1920, the Bank of England made a peculiar purchase of gold abroad at the pre-War price. *L. E.*, November 20, 1920.

ket thus lost an amount of cash equal approximately to a quarter of the normal cash reserves of British banks. The stability of O.D. concealed the transfers of cash by outside institutions.<sup>13</sup> (The process was gradual, and hence was not reflected by large fluctuations in O.D.) Since imports of gold other than newly mined gold were unprofitable, large foreign payments were made on the books of the Bank of England. Moreover, many countries had debts to repay in London as a result of the trade reversal of 1920-21. Balances of the Dominions in particular declined to a low point. From 1921 to 1924, the joint stock banks held a larger part than usual of the total of O.D. outstanding. Moreover, British banks had acquired large balances in London in 1919 with the repayment of Special Deposits. South African gold was used in part to pay British Government debts abroad; and the O.D. of British banks were replenished as South Africa consumed newly acquired balances in paying its debts. The permanent transfer of 50 millions of cash to the Government was only possible because foreign countries and the Dominions replenished the balances of clearing banks when they refrained from shipping gold, and because the banks required less cash than usual in a period of trade depression and declining prices.

The danger of a refusal on the part of holders of Treasury bills to renew them and thus force the Treasury to borrow from the Bank of England, was not great in the opinion of many.<sup>14</sup> They contended that by floating a large loan, the Bank and the Government could bring the market to terms. Keynes feared that with the revival of trade, the public would dispose of its holdings of public securities, and hence the Government would then have to rely upon the receipts from issue of currency notes.<sup>15</sup> With a revival of business, the public may refuse to renew its Treasury bills; but since public revenues increase with improved business conditions, I doubt whether the results of non-renewal are likely to be calamitous.

<sup>13</sup> The London *Economist* inquires concerning the distribution of O. D. as between banks and private individuals. *L. E.*, December 30, 1922.

<sup>14</sup> *L. E.*, April 8, 1922; R. G. Hawtrey, "Keynes: A Tract on Monetary Reform," *Economic Journal*, 1924, pp. 233-34; E. Cannan, "Limitation of Currency or Limitation of Credit?" *Economic Journal*, 1924, pp. 60-61.

<sup>15</sup> J. M. Keynes in Reconstruction Number of *Manchester Guardian Commercial*, 1922, sec. 1, p. 4.

The total debt outstanding remained relatively stable after January, 1921, in spite of the repayments by the Treasury. The explanation is that the nominal value of several issues was increased as a result of conversions. But the total interest charge was reduced; and the magnitude of the floating debt was reduced. Treasury bills outstanding declined from 1100 to approximately 550 millions, and Ways and Means from 450 to 200 millions; the improvement was especially marked for Bank of England Ways and Means. The fluctuations in the latter were greater than for Department Ways and Means. From 1919 to 1924, these two variables moved in the same direction 137 times, and in opposite directions 78 times; but large fluctuations were generally in the same direction. When resources were required for short periods of time, the Treasury frequently borrowed from departmental sources. From 1922 to 1925, the Treasury obtained its revenue without resorting to advances from the Bank of England to an appreciable degree. The monetary stringency of the post-War period is in large part to be referred to the loss of cash suffered by the money market as a result of the reduction of the Treasury's indebtedness to the Bank of England. No particular significance is to be attached to fluctuations in departmental advances.

I have compared the movements of Bank of England Ways and Means and Public Deposits in a chart which is not presented here. Of particular interest are (1) the parallelism of the two curves and (2) the relative stability of Public Deposits which indicates that Government receipts were hastily disbursed. (But when P.D. were above normal, Ways and Means were generally below normal.) Several high points occur when preparations were being made for the payment of interest on war loans. P.D. were especially high in the first quarter of the year, in which period the Treasury receives large receipts from taxation. The uniformly low level of P.D. and the high level of Ways and Means from June, 1920, to the end of 1921, reflect the unstable state of the Government's finances. When Bank of England Ways and Means were high, P.D. were generally low. The reduction of Ways and Means was deflationary in a double sense, for not only were market resources employed to repay Ways and Means,

but with the disappearance of Ways and Means (Bank of England), the Government were not so easily able to dispose of P.D. in excess of normal requirements. In other words, when Bank of England Ways and Means are at a minimum, the market is deprived of more cash than is to be inferred from the quantity of Ways and Means repaid. Moreover, the Government hold large balances to avert the danger of indulging again in an undesirable practise. If the Treasury is not borrowing from the Bank, it holds large resources at the expense of the market.

With a view to minimizing the disturbances caused by transfers to and from the Exchequer, the Government and the Bank of England, in the course of a decade of relatively heavy transfers, improved the technique for reducing the uneasiness felt by the money market. The synchronization of receipts and expenditures, the preparation for heavy disbursements by increasing Public Deposits, the prevention of monetary ease in the midst of a period of heavy disbursements by selling Treasury bills, and many other measures were taken.<sup>16</sup>

Although Treasury bills outstanding remained relatively stable over the year 1921 as a whole and trade bills became increasingly scarce, the investments of clearing banks in bills were about 100 millions more in January, 1922, than at the end of 1920.<sup>17</sup> To repay bank advances and pay taxes and other debts, the business community disposed of a large part of its holdings of Treasury bills. The banks were anxious to find a profitable employment for their resources to replace advances and trade bills, now that the latter were rapidly disappearing. The repayment of advances merely reflected the effectiveness of deflation: traders were not finding profitable employment for their cash. They employed their surplus cash (deposits) and their Treasury bills in repaying advances.

From January, 1921, to January, 1925, the net reduction of bills held by London clearing banks was approximately 45 per cent (from 440 to 240 millions), and the net reduction of Treas-

<sup>16</sup> *L. E.*, February 10, 1923, June 9, 1923.

<sup>17</sup> Macrosty estimates that British banks held 100 millions of Treasury bills at the end of 1920, and 200 millions at the beginning of 1922. H. W. Macrosty, *op. cit.*, *R. S. J.*, 1922, p. 191. Considering that trade bills outstanding declined very rapidly, I am of the opinion that the increase was appreciably greater.

ury bills outstanding was approximately 42 per cent (1100 to 640 millions). In general, the banks seemed to have followed similar policies, although the composite character of bills discounted, and the failure of all banks to include Treasury bills with their bills discounted, obscure the facts. Macrosty rightly observes that the holdings of Treasury bills by all the banks can not be deduced from the distribution of trade and Treasury bills of the twenty-three banks that distinguished the two in 1920, for only one large bank revealed its holdings. From this one instance, it seemed to Macrosty that Treasury bills constituted a smaller proportion of the bills of the large banks. (If all banks held the same proportion of Treasury bills as the twenty-three banks, total holdings in 1920 would have been 200 millions.)<sup>18</sup> Macrosty does not consider that some banks included Treasury bills as investments.

Pigou pointed out that the market could obtain more cash by refusing to renew Treasury bills.<sup>19</sup> Hence he recommended that the floating debt be funded. If the bills redeemed were those held largely by the banks and the cash received from taxes and the sales of securities was obtained from the public, the banks would suffer a reduction of the asset Bills, and the liability Deposits. Their ratio of reserves against deposits would be higher. Pigou said later that, whether the reserve ratio would decline to the previous level, depended largely on the requirements of trade for accommodation.

Bills held by British banks were reduced by 200 millions from January 1, 1921, to January 1, 1925; and the Treasury bills outstanding were reduced by 460 millions. Fewer trade bills were available in 1925. For London clearing banks, the proportion of bills to all assets fell from 22 per cent in January, 1922, to 13 per cent in January, 1925. In the marked reduction of Treasury bills and Ways and Means (Bank of England in particular) is found one of the most significant results of deflation. (Writers frequently refer to the reduction of floating debt, as if the type of floating debt extinguished is of no consequence.) The market turned over about 50 millions of cash to the Government, which was employed in repaying Ways and Means advances from the

<sup>18</sup> H. W. Macrosty, *op. cit.*, p. 179.

<sup>19</sup> A. C. Pigou, *Political Economy of War*, pp. 162-65.

Bank of England. If the Government had not obtained this cash, what would the position of the money market have been? Probably, it would have repaid more of its debt to the Bank of England and thus consumed part of its balances. Perhaps, if traditional reserve ratios are adhered to as tenaciously as many believe, they would have expanded on the basis of the increased supplies of cash.

The public sold its Treasury bills in the first years of deflation in order to repay bank advances, and in the later years, in order to obtain more profitable investments. In so far as the public subscribed to long term bonds and the Government redeemed Treasury bills held by the public with the cash thus received, there was no net deflation; but if the Government redeemed bills held by the banks, a reduction in bank deposits was the result. The banks prevented deflation to some extent by purchasing Treasury bonds as their Treasury bills were redeemed. The process by which the public subscribed to Treasury bonds and the Treasury redeemed Treasury bills held by the banks, was deflationary only if the banks did not adhere to a traditional reserve ratio. A similar problem arises in relation to the Bank of England's reserve, for its reserve position improves when O. D. are consumed. However, one of the peculiarities of the policy of central banks is the equanimity with which they observe relatively large fluctuations in reserves.

Investments of London clearing banks declined in the first half of 1921, rose during 1922, and gradually declined from 1923 to 1925, as the banks substituted loans and advances. But the proportion of investments to all assets remained relatively stable. There was an increase from 17 to 19 per cent from January, 1922, to January, 1923, and a decline to 16 per cent from January, 1924, to January, 1925. From the middle of 1922 to the beginning of 1923, the Midland Bank reduced its investments by almost one half; Lloyd's waited until 1924 before it began to dispose of securities on a large scale. In July, 1923, Lloyd's investments were 24 per cent of its total assets, and Midland's were but 10 per cent. The value of data of this kind for purposes of comparison is impugned somewhat by the lack of uniformity in accounting methods. Thus when investments depreciated from

1914 to 1920, some banks wrote down the investments directly, while others established special contingency funds.

The two important Parliamentary committees that considered the problem of a capital levy devoted much of their attention to its probable deflationary or inflationary effects. The circumstances under which both committees sat naturally coloured their recommendations. Sharing a rather universal opinion concerning the inevitability and perhaps even necessity of deflation, the 1920 Committee endorsed a levy, largely as an effective instrument of deflation; but before the Colwyn Committee began to take testimony, deflation had taken its toll, and other reasons had to be found for approving a levy.

Large transfers of cash to the Government in payment for the levy would not necessarily result in deflation, for the cash received would be employed in the main, to redeem securities in the hands of the taxpayers. The monetary strain might be reduced both by accepting cash in installments, and by accepting securities instead of cash. Because the levy could be assessed only upon individuals, rather than upon corporations, the danger of the contraction of loans covered by collateral would not be great; for only one third, approximately, of all securities were in the possession of individuals and approximately one billion Sterling were used as collateral for loans.<sup>20</sup>

The interesting question was raised whether bank advances increased as a result of the very rapid issues of government securities after 1914.<sup>21</sup> Lord Bradbury condemns the practise which in his opinion, is becoming increasingly popular, of making advances which otherwise would not have been made, merely because the potential borrower has the necessary collateral.<sup>22</sup> McKenna, however, suggests that the distribution of loans, rather than the total to be advanced, is determined by the collateral available.<sup>23</sup>

<sup>20</sup> See Committee on National Debt and Taxation, Q. 5250.

<sup>21</sup> *Ibid.*, *Evidence-in-Chief of Professor Macgregor*, ch. 16; *Evidence-in-Chief of Trade Union Congress*, ch. 19.

<sup>22</sup> *Ibid.*, Qs. 1765-67.

<sup>23</sup> *Ibid.*, Qs. 9182-83.

## CHAPTER VI

1920

PERHAPS the Bank of England indulged in open market operations from 1915 to 1919; but it is difficult to trace the movements in the published accounts of the Bank. For Bank of England and Department Ways and Means were not distinguished, and discrepancies in the movements of Ways and Means (Government figures) and Public Securities (Bank of England) may easily be explained by fluctuations in Special Deposits and direct purchases from the Government. By 1920, Department Ways and Means were distinguished from Bank of England Ways and Means, and Special Deposits were repaid. However, the history of open market operations since 1920 is not fully known, for weekly figures concealed important movements during the week and the weekly figures of the Government and the Bank of England do not cover the same days. With these reservations, a few observations are made below.

Lord Bradbury maintains that when the banks receive more cash from the Government than they had transferred to them, and the cash is put at the disposal of debtors of the Bank who now repay the the Bank, the Bank may purchase securities in order to offset the last restrictive measure.<sup>1</sup> In the early years of deflation, the Bank of England on its own behalf or on behalf of the Government frequently purchased Treasury bills of early maturities in order to prevent extreme ease upon the payment of interest on war loans.<sup>2</sup> The market thus lost more cash in purchasing bills than it received for bills redeemed; and the excess was covered by payments of war loan interest. The Bank provided the market with part of the cash required for paying taxes. The

<sup>1</sup> Committee on National Debt and Taxation, Q. 9180. Compare McKenna, *Ibid.*, Q. 1760.

<sup>2</sup> *L. E.*, December 2, 1922.

Treasury later used part of this cash to redeem war securities; but the market was deprived of the use of these additional balances by the previous intervention of the Bank of England. Coöperating with the Bank of England, the big joint stock banks began to purchase Treasury bills in order to relieve the market in periods of stringency.<sup>3</sup> Large transfers to the Government by the money market and the reverse movements give more scope for open market operations as an instrument for preventing excessive stringency or ease; but it does not follow that they are of greater significance for the important problems of control.<sup>4</sup>

There is evidence in the published figures of the Bank of England for 1920 of a rather aggressive attitude on its part in inducing deflation. On several occasions earlier in the year, the Bank helped the market by disposing of P.S. I have already referred to them.

<i>Week ending</i>	<i>P. S.</i>	<i>Millions of £ Sterling</i>	<i>B. of E. Ways and Means</i>
March 24.....	+ 33		March 20-21..... +27.0
March 31.....	-25.0		

Does it not seem that the market was subjected to an annoying pressure emanating from the Bank of England? An appreciable increase in Ways and Means, usually accompanied by a corresponding increase in P.S., was now attended by a marked decline in P.S. The Bank either disposed of securities to the market or failed to renew securities in its portfolio. At this time the effects of either operation were unfortunate for the market.

The history of open market operations is interesting.<sup>5</sup> Throughout 1920, marked discrepancies that would lead one to suspect open market operations, were infrequent. The outstanding instance has been described. The only other noteworthy instance occurred early in October when the market was uneasy; perhaps the Bank was responsible.

<sup>3</sup> L. E., September 1, 1923.

<sup>4</sup> Compare J. M. Keynes, *op. cit.*, II, pp. 230-32.

<sup>5</sup> Ricardo suggested that the Bank of England might dispose of Exchequer bills in order to prevent the continuance of redundancy. (D. Ricardo, "Plans for the Establishment of a National Bank," *Ricardo's Works* (McIlloch's edition), p. 512.) According to Lord Overstone, the Bank of England in 1836, intent upon selling securities to the market in order to reduce the circulation of money, induced the Government to raise the rate of interest on Exchequer bills. Lord Overstone, *Tracts and Other Publications*, p. 18.

*Weeks ending October 6 and 13*

P. S. +41.8

*October 1 to 9*

W. & M. +68.3

Appreciable discrepancies also occurred in May and July when Ways and Means fell and P.S. declined moderately.

The Bank of England transferred 1 million of its notes to the Currency Notes Account in the week ending March 31, 1920; but the ratio of gold and Bank of England notes to currency notes declined .2 of 1 per cent. Strengthened by a policy, consistently carried out since August, 1919, of replenishing the Currency Notes Reserve with Bank of England notes, the reserves behind the currency notes were increased from 8.4 per cent in August, 1919, to 10.2 per cent on March 24, 1920. The upward tendency received a temporary setback only in the week ending December 24, when 9½ millions of additional notes were put into circulation, and the reserve ratio declined .1 of 1 per cent. Is the renouncement in March, 1920, of a policy adhered to during the difficult months since August, attributable to a faint but persistent hope that an increase in the Bank rate might yet be averted, or merely to a desire to prevent a further reduction of its reserve, already sadly depleted?

The maintenance of adequate reserves by the Bank of England continued to be a subject of concern in the second quarter of 1920. Fifteen millions of notes of the Bank of England were put into circulation, primarily at the expense of its banking reserve; for the Issue Department obtained only 5 millions additional of gold. That of a total increase of 40 millions in circulation, 15 millions were contributed by the Bank of England, is evidence of a desire on the part of the authorities to bring back normal conditions under which additional cash is drawn from the reserves of the Bank of England. The threat of another increase in the Bank rate rose ominously on June 30, when, with the Government and the market borrowing simultaneously, the reserve ratio of the Banking Department fell to 8½ per cent.

The history of the last two quarters of the year was in large part a repetition of the second quarter. Both the joint stock banks and the Bank of England had inadequate cash reserves. Employing the cash received from sales of Treasury bills, the Government repaid part of their advances from the Bank of England.

When a policy of deflation has been in operation for several years, and loans have been liquidated in part, banks do not easily find profitable employment for their resources. A reduction of banking reserves to a low level may be effective in assuring the continuance of the process of deflation. An early revival is thus prevented. Therein lies the difficulty for the banks. Their earning assets have been reduced; but their cash balances may also have been reduced. Monetary stringency results because the banks attempt to recover part of their losses by expanding to the limit on the basis of reduced reserves. They suffer from a monetary stringency when the Bank of England takes measures to prevent further expansion; and adverse balances at the Clearing House are the penalty for uneven expansion between banks.

The reserves of the Bank of England remained precariously low throughout the year. On August 4, they were reduced to  $10\frac{1}{4}$  per cent of deposit liabilities, and the currency notes outstanding were within one million of the fiduciary limit. The Treasury called in the First and Second issues, and issued notes beyond the fiduciary limit by including a few millions of these issues with the notes redeemed although they had not been withdrawn from circulation. By August, the Treasury began to redeem notes and the Bank of England began to issue notes on the basis of incoming gold.

The tension in the money market increased after the Bank rate was raised in 1920. In 1920, the Bank of England transferred 15 millions of its notes to the Currency Notes Account; the transfers of the second quarter of the year were particularly onerous and were largely responsible for the stringency during the remainder of the year. For the week ending June 30, the reserve of the Bank of England declined from 20 to 15 millions, and the reserve ratio from 16 to  $8\frac{1}{2}$  per cent. A transfer of 3 millions to the Currency Notes Account as a result of which the reserves against currency notes increased from 11 to 11.7 per cent, accounted in part for the losses suffered by the Banking Department. In the second quarter, the Bank of England lost 9.7 millions of its reserve, of which 7.8 millions were transferred to the Currency Notes Account. Although the progress of inflation was stopped by the increase in the Bank rate early in April, the de-

mand for additional cash continued unabated for six months. One may inquire whether the uneasiness suffered by the money market and caused in part by the transfers of Bank notes to the Currency Notes Account, was a necessary accompaniment of deflation. To make deflation doubly sure, was it essential to deprive the banking system of this additional cash in 1920 and 1921, and thus prevent a revival of economic activity? Did the English policy of deflation differ fundamentally in the unnecessarily long period during which the brakes were applied, from the American policy of which many have been critical? The market suffered from inadequate monetary supplies from 1920 to 1925, because among other reasons, the Bank of England transferred its notes to the Currency Notes Account in 1920 in exchange for currency notes which were put into circulation. Deflation was assured by placing Bank of England notes in the Currency Note Reserve. The fixing of a fiduciary limit was not the *sine qua non* of deflation; but the authorities thus made an early revival less likely. Curiously enough, although the increase in the Bank rate was announced on April 15, the reserves of the Bank of England increased 1.2 millions in the week ending April 14, which was equivalent to an addition of  $2\frac{1}{2}$  per cent of the deposit liabilities.

The significance of the movements of Treasury bills outstanding lay not in the net change for the year, which was relatively unimportant, but in the rapid changes over rather short intervals. The reductions of 64 millions in the eventful week ending April 7 and of 59 millions for the week ending October 9 when the market again became apprehensive of a further increase in the Bank rate, were two of the most significant movements.

Although Great Britain was not on a gold standard in 1919 and 1920, restrictions on gold movements were not rigid, and the exportation of gold was observed with much trepidation by the market and with much interest by the Bank of England. The Government resumed the publication of the figures for exports and imports of gold in July, 1919. Net imports were large in the third quarter of 1919, and imports were virtually equal to exports in the last quarter. Net exports were particularly large in the first 4 months of 1920 and in October, 1920; but the excess

of exports was probably not greater than the excess of imports in 1919.

The South African banks received cash in London in payment for gold; in 1919 and the early part of 1920, they were meeting with difficulties in transferring their cash balances to South Africa, and hence the London money market received the use of part of these balances. The inflation of the latter part of 1919 was doubtlessly in part caused by these large gold imports. However, only a small part of the gold received in 1919 reached the Bank of England in that year. The direction of the movement of gold was reversed in 1920. The Bank of England gained 36 millions, and net exports were 42 millions. Of course, the British banks received bank notes or credits in return for gold deposited with the Bank of England, and the South African banks received deposits at the Bank of England for the gold shipped by their clients. Was it a coincidence that the more important exports of gold were made in the first four months of the year when the continual monetary stringency finally culminated in an increase in the Bank rate, and in October, the month in which great apprehension existed lest another increase in the Bank rate should be forthcoming? The explanation of the failure of the Bank of England to enter on its books all the gold imported from 1917 to 1919 may be that the Government purchased and retained part of it; for much gold was exported on behalf of the Government in the early post-War years. If the Government shipped large supplies of gold formerly hoarded, the market was not likely to become concerned over the exports. The banks deposited their gold with the Bank of England in the course of the year 1920.

The foreign exchanges were decontrolled early in 1919. The rate of depreciation was relatively moderate from February to June, but rapid from June to December, when the value of Sterling in dollars depreciated to a low point of 3.81 dollars. The decline continued in January and February, 1920, but there was a favorable reaction in March and April, possibly explicable by the gold movements. In the third quarter of the year, the drop was precipitate; but in the fourth quarter, when dollar exchange declined to 3.44, the drop was less rapid.

Prices increased  $13\frac{1}{2}$  per cent in the first four months of the year, and declined  $22\frac{1}{2}$  per cent from the new peak in the last eight months of the year. The net movement in currency notes outstanding for the year was inappreciable, and throughout the year, the correlation of fluctuations in notes outstanding with those in prices or exchange rates was not close. Notes in circulation declined in the first four months of the year and increased in the last eight months; but the movements in the price level were in the opposite direction. In March and April, £ Sterling exchange appreciated; and in November, it depreciated; the fluctuations in the internal value of money were in the opposite direction. Ricardo's rigid statement of the relationship of the quantity of money and its value, which would not be accepted by the staunchest quantity theorist to-day, is certainly not supported by the history of 1920.<sup>6</sup>

The movements of cash in the calendar year 1920 are not easily explained. British banks lost 19 millions or  $5\frac{1}{2}$  per cent of their cash, and banks reporting for June 30, 1920, lost 40 millions, or 15 per cent for the year ending June 30, 1920. The relevant figures are given below:

*Bank of England Statement—Millions of £ Sterling*

	Month	6	7	12	6	12	1
	Day	25	2	31	30	20	5
	Year	19	19	19	20	20	21
O. D. ....	138	167	181	176	176	155	
Bank of England notes issued..	104	105	100	135	145	145	
Notes in the Banking Department of the Bank of England .....	29	25	17	15	12	13	
Bank of England notes held outside of the Bank of England .....	75	80	92	120	133	132	
Fiduciary issue of currency notes at nearest date .....		314	323	315	320		
Imports or exports of gold for year ending .....				+29.1	-41.9		

<sup>6</sup> "During the same period the average price of gold was £4. 10s.—exceeding the mint price by nearly 17 per cent, and proving a depreciation of the currency of nearly 15 per cent. A diminution, therefore, of 15 per cent in the amount of bank circulation in 1800, should on the principle of the committee, raise it to par, and reduce the market price of gold to £3 17s. 10½d. D. Ricardo, "High Price of Bullion," *op. cit.*, p. 300.

It is necessary to interpolate in order to obtain the essential figures. The increase of O. D. for the year ending June 30, 1920, is not certain, because preparations were being made for the flotation of the Victory Loan in June-July, 1919. The interpolated figure is probably reasonably accurate though the period was abnormal and the fluctuations during the week ending July 2, 1919, were large. For the year ending June 30, 1920, the increases in O. D., in Bank of England and fiduciary currency notes in circulation, were 18, 40, and 1 millions respectively. (Since the fiduciary issues of currency notes, rather than the total, are compared, fluctuations in the Bank of England notes held in the Currency Notes Account have been allowed for.) A total of 41 millions of additional money was put into circulation. Assuming that one half of the additional O. D. was obtained by British banks, the total increase of money in circulation and cash of British banks was 50 millions. Although the increase of money in circulation and of O. D. (for British banks) was approximately 50 millions for the year ending June 30, 1920, their Cash at Home and at the Bank of England was reduced by 40 millions. Allow for the relatively unimportant banks not reporting on June 30 and the loss of cash would be even more than 40 millions. The increase in money in circulation is over-stated by 30 or 35 millions, however, for the banks gave up their gold in the early months of 1920. A rapid flow of cash to the public and a transfer of balances from British banks to other accounts on the books of the Bank of England, are the more likely explanations of the discrepancy that remains.<sup>7</sup> Dominion banks were accumulating large balances in London. Since gold movements were restricted, foreign creditors were accepting payment in London.

For the calendar year 1920, the reduction in O. D. was 12 millions (interpolated), in gold held by joint stock banks 30 millions, in fiduciary currency notes 3 millions; and there was an increase of Bank of England notes in circulation of 44 millions. Including one half of the reduction in O. D., the net increase of cash at the disposal of the banks and public in 1920 was 5 millions. That increase is to be compared with a loss of Cash and Money at the Bank of England of 19 millions. The direction of

<sup>7</sup> *L. E.*, September 25, 1920. (Scarcity caused by transfers to Australian banks.)

the movement of cash from the banks to the public and (or) from the accounts of British banks to outside accounts at the Bank of England suggested for the year ending June 30, 1920, was apparently reversed in the second half of 1920. For the year, the banks lost more cash than might be deduced from the figures for money in circulation and O. D., but the discrepancy was much smaller than for the year ending June 30, 1920.

## CHAPTER VII

1921—1924

THE process of deflation continued into 1921-22. Notes, prices, deposits, loans, advances, Treasury bills, and Ways and Means outstanding, all declined. Particularly in 1921 were the movements violent. Deposits increased slightly in 1921; but the proportion of inactive deposits increased. If the public had not deposited large quantities of notes with the banks, the deposits of the banks and the balances of the banks with the Bank of England would have been appreciably smaller. If the Government were not under the necessity of redeeming approximately 100 millions of notes during the years of deflation, less public borrowing would have been necessary, the banks would have retained smaller balances at the Bank of England, and a more vigorous deflation would have been enforced.

The money market was usually uneasy. In 1921, when balances at the Bank of England had increased with the redemption of currency notes, the stringency was not as marked as in 1922. By selling Treasury bonds, the Government redeemed maturing Treasury bills; and by employing budgetary surpluses, which were especially large in the first quarter of the calendar year, they repaid Ways and Means advances. In the second quarter of 1921, the market allowed Treasury bills to mature, and the Treasury was forced to borrow from the Bank of England.

The reliance on Ways and Means advances was sporadic in 1922 and 1923. Provided with inadequate balances at the Bank of England for that reason (among others), the market was in a continual state of fear; and the dictum that either the market or the Government had to be in debt with the Bank was widely accepted. In the annual report for the year 1922, the Chairman of Alexanders' Discount Company complained that in a period of declining money rates, frequent appeals to the Bank of Eng-

land were necessary.<sup>1</sup> If the banks had been content to hold the small reserves during the War that were held in 1922, inflation would have been possible during the War without recourse to advances from the Bank of England.<sup>2</sup> Baldwin attributed the large budgetary surplus of 1922-23 to the improvement in trade, rather than to deliberate policy, and replied to those who feared lest these surpluses might embarrass the money market, that as they accrued, they would be applied to the extinction of debt as provided by the Finance Act of 1920.<sup>3</sup> The Government had announced a change of policy from debt reduction to tax reduction in their financial statement of 1922-23; but their revenues were in excess of estimates.<sup>4</sup>

The Government collected revenues in excess of current requirements which were used in part to repay advances from the Bank of England. The Government also sold bonds and used the proceeds to redeem Treasury bills. In subscribing to the Treasury bonds, the public exchanged inactive deposits for long term investments. Only because inactive deposits might become active, can this be considered deflationary. In so far as the public exchanged bills for bonds, no deflation was involved. The banks also exchanged the former for the latter.<sup>5</sup> Perhaps a slight deflation was thus introduced because the banks were inclined to hold larger cash reserves with the loss of the relatively liquid Treasury bills. In purchasing Treasury bills from the public, the banks stopped the progress of deflation. During a period in which Treasury bills outstanding declined 115 millions and in which trade bills were rapidly declining, English banks increased their holdings of bills by more than 100 millions. In the early years of deflation, the banks pursued a vigorous policy along these lines.

The Government redeemed Treasury bills rapidly in the second half of 1921; and throughout 1922 they obtained large sur-

<sup>1</sup> *L. E.*, January 20, 1923; also see *L. E.*, August 26, 1922.

<sup>2</sup> The bankers justified the reduction of cash reserves on the grounds that they now held an unusually large portfolio of short dated securities. *Manchester Guardian Commercial*, 1922 (sec. 11), p. 671; *B. M.*, 1920 (110), p. 259.

<sup>3</sup> 162 *H. C. Cols.* 1722-23.

<sup>4</sup> 153 *H. C. Cols.* 1030-31, 1039-40; 162 *H. C. Cols.* 1723-25. The Government had made provisions for borrowing in order to meet statutory obligations for the redemption of securities. *L. E.*, May 6, 1922.

<sup>5</sup> See report of Lloyd's meeting in *L. E.*, February 3, 1923.

pluses and disposed of long term securities.<sup>6</sup> On the subject of the inevitability of deflation following upon a reduction of Treasury bills, there was disagreement between McKenna, on the one hand, who insisted that the reduction of Treasury bills was the cause of the decline of deposits, and the editors of the *London Economist* and Pigou, on the other, who maintained that Government finance was merely a channel, and that economic conditions made unprofitable the substitution of other deposits for those consumed.<sup>7</sup>

The failure of writers to distinguish Bank of England Ways and Means from Department Ways and Means is particularly unfortunate for a study of the deflation period. The banks lost cash as the Government repaid advances from the Bank of England; but as Department Ways and Means were reduced, the market obtained additional cash. Thus in the second quarter of 1921 the Government borrowed 39 millions from the Bank of England, and Department Ways and Means declined 41 millions. The net change in Ways and Means was negligible, but the net effect was that the market obtained 80 millions of additional cash. If the large quantities of currency notes had not been withdrawn from circulation, recourse to advances from the Bank of England would probably not have been necessary. The banks turned in currency notes; the Government borrowed from the Bank of England in order to obtain the cash necessary for redemption. In redeeming the notes, the Treasury was repaying Department Ways and Means which were in part securities in the Currency Notes Account. That the Department Ways and Means were exclusively or almost exclusively securities placed in the Currency Notes Account, is not easily proved. That contention is not easily reconcilable with (1) the movement of the Department Ways and Means in the later years of the period under consideration and (2) with the increase of 67 millions of Department Ways and Means in the second half of 1921 when the total of securities in the Currency Notes Account remained relatively stable. Possibly, a reduction of Treasury bills of 163 millions included withdrawals of bills from the Currency Notes

<sup>6</sup> However, a funding loan was floated in May, 1921, and was unsuccessful. *L. E.*, June 4, 1921.

<sup>7</sup> *L. E.*, October 20, 1923.

Account for which the Treasury substituted 67 millions of promissory notes, similar to those given to the Bank of England. Department Ways and Means were in large part advances from the Currency Notes Account, but other items were included. (The problem of Department Ways and Means is discussed more fully in the essay on Ways and Means.)

In 1921, the movements in money in circulation and O. D. on the one hand, and Cash and Money at the Bank of England on the other, were not closely related. The increase in the latter was 3 millions; but O. D. declined 71 millions, fiduciary currency notes 42 millions, and Bank of England notes in circulation 6 millions. Perhaps the losses of O. D. were suffered especially by foreign and Dominion banks and by private accounts. The sudden reversal in the balance of trade suffered by the Dominions and South America resulted in a reduction of their balances in London. The public apparently deposited much cash, and it is also possible that the banks now held less cash in their tills.

The money market was chronically uneasy beginning in 1922, the year in which financing by Ways and Means was definitely relegated to an unimportant rôle in Government financing.<sup>8</sup> Although transfers to the Treasury were unusually large in the first quarter of the calendar year, the market was comfortable only in that quarter in 1922. The Government required the aid of the Bank of England in the second quarter; the Treasury was indebted to the Bank of England in three weeks of this quarter according to the weekly Finance accounts; but in the third quarter, it was free of such indebtedness in all but three weeks.

The Government redeemed (net) 300 millions of Treasury bills in the first half of 1922, although the total reduction was but 240 millions in the entire year.<sup>9</sup> It has been estimated that 100-200 millions of these bills had previously been in the possession of the banks, and it was McKenna's opinion that the public held virtually no bills at the end of 1922.<sup>10</sup> Deposits declined for the first time in 1922. The reduction of 160 millions for the year was

<sup>8</sup> *L. E.*, April 29, 1922.

<sup>9</sup> McKenna estimates that the banks held from 100 to 200 millions of these bills. *L. E.*, January 27, 1923.

<sup>10</sup> *Monthly Review* of London, Joint City and Midland Bank for January, 1923.

no less than  $5\frac{1}{2}$  per cent of the total. The banks lost cash, and they purchased 87 millions of investments in excess of investments that matured. To the extent that the banks substituted Treasury bonds for Treasury bills, less liquid long term securities were substituted for the Treasury bills, and hence proportionately more cash was required. The *Bankers' Magazine* contends that if the reduction of deposits and the redemption of Treasury bills had been a strain on the banks, the banks would not have purchased Treasury bonds.<sup>11</sup>

The trend of O. D. was downward: The weekly average for the first half of 1921 was 121 millions, and for the first half of 1922, 124 millions; for the second half of 1921 the average was 126 millions, and for the second half of 1922 111 millions. The reserves of the Bank of England, still abnormally low and unstable in 1921, attained a more normal level and suffered less violent fluctuations in 1922. Either because its reserve was low, or because there was no necessity for strengthening the reserve against currency notes, the Bank of England did not transfer notes to the Currency Notes Account in 1921, and in 1922 contributed but 1.8 millions.

Loans from the Bank of England to the Treasury were outstanding on only one occasion from January 27 to June 2, 1923. However, the independence maintained in the first half of the year did not continue into the second half, for on 19 occasions throughout the year, the Treasury was indebted to the Bank. Other Deposits were at a relatively low level throughout the year, and, on three occasions, fell below 100 millions. Monetary stringency apparently did not follow the reduction of O. D., for on none of these three occasions was scarcity evident. The weekly average of O. D. was  $110\frac{1}{2}$  and 109 millions for the successive half years.

With public revenues and expenditures, Ways and Means, and Treasury bills all reduced to a relatively moderate level, the payments of interest on war loans made a marked impression on the

<sup>11</sup> *B. M.*, 1923 (116), pp 413-14. The loss of cash was irreparable if the surplus revenue was employed to repay the Bank of England. However, the fact that the banks purchased Treasury bonds was an indication that surplus resources were available either because cash was received from the redemption of Treasury bills, or because the demand for bank accommodation was reduced.

money market in 1923 and 1924.<sup>12</sup> If the Bank of England, and to some extent, the big banks had not interfered, the disturbances would have been more vexatious. Extreme monetary ease would have followed upon the payment of interest.<sup>13</sup>

In 1923 and 1924, the banks disposed of long term investments and to a lesser degree, of Treasury bills. Deposits were not reduced because trade began to improve.

The reserves of the Bank of England remained at a low level and suffered appreciable fluctuations. A study of the reserves of the Bank and fluctuations in Bank rates reveals that the Bank rate was changed when reserves were abnormally low or high. A study of the monthly averages of the weekly figures of the Bank of England reveals that the trend of O. D. was upward in 1921, relatively stable from 1923 to 1925, and downward in 1922. The Treasury consumed surpluses in redeeming securities held by the public and the banks, and, also in repaying the Bank of England. Cash used for the latter purpose was permanently lost to the market. Hence O. D. declined in 1922.

The parallelism of movement is not between O. D. and O. S. as might be expected but between O. D., which are in large part clearing bankers' balances at the Bank of England, and P. S., which include advances to the Government and investments of the Bank in public securities. A probable explanation is that as the Treasury borrows on Ways and Means, P. S. increase, and because the P. D. thus created are almost immediately converted into O. D., the correlation between O. D. and P. S. is high. The significant fact is that Ways and Means advances from the Bank of England are almost immediately reflected in increases in O. D.

Now it may be wise to consider the movement of Bank and market rates in the post-war period. The difference between the rate for fine commercial bills and the Bank rate was 1½ per cent in 1919, but was reduced to ½ of 1 per cent when the bill and the Bank rate were increased in November, 1919. The Bank of England, disturbed by the large differences between the market and Bank rate, gradually reduced its rate from 7 per cent

<sup>12</sup> *L. E.*, December 29, 1923. The Chairman of Liverpool and Martin's Bank pointed out early in 1924 that the level of money rates depended on the magnitude of public expenditures and revenues. *L. E.*, February 2, 1924.

<sup>13</sup> *L. E.*, December 2, 1922; January 3, 1925.

early in 1921 to 3 per cent in July, 1922. Perhaps the downward movement of the market rate was accelerated by the expectations of further reductions in the Bank rate.

The market rate followed closely the Treasury bill rate until the tender system was reintroduced in 1921; but the Treasury bill rate in turn was determined largely by market conditions. The increase of the difference between the deposit and Bank rate from the customary  $1\frac{1}{2}$  per cent to 2 per cent was the result of the interference of the Government; but the maintenance of that large difference, after the conditions that had made the introduction expedient had disappeared, reflected the newly acquired strength of the joint stock banks. In the first half of 1919, the second half of 1921, and most of 1922, the difference between the deposit rate and the rate on commercial bills, which is a fairly accurate measure of the profitableness of banking, was abnormally low. During the remainder of the period of deflation, the difference was larger.

Some light is shed on the deflation period by a study of the fluctuations in the individual assets and liabilities of the joint stock banks. The direction of changes is, in general, similar, but there are significant differences in degree.

The percentage reduction of deposits from the maximum varied. (The minimum was reached between January, 1922, and March, 1924.)

Midland .....	8 per cent
Lloyds .....	6 per cent
Barclays .....	13 per cent
Provincial .....	11 per cent
Parr's .....	33 per cent
All .....	13 per cent

A transfer of foreign deposits to newly established foreign institutions explains, in part, the relatively marked decline for Parr's.

*Loans and Advances—Per Cent*

	Maximum Decline	Date of Minimum	Increase from Minimum to April, 1925	Relation of April, 1925, to Previous High Point
Midland .....	9	February, 1922 .....	23	+ 3
Lloyds .....	18	September, 1922 .....	48	+18
Barclays .....	20	January, 1923 .....	17	— 6
Parr's .....	31	August, 1923 .....	30	—12
Provincial .....	19	June, 1922 .....	10	— 8
Others .....	11	August, 1922 .....	10	— 2
All .....	18	September, 1922 .....	23	— 1

*Proportion of Loans and Advances to Deposits—Per Cent*

	January, 1921	January, 1923	January, 1925
Midland .....	53	52	54
Lloyds .....	43	36	48
Barclays .....	47	41	47
Parr's .....	43	36	44
Provincial .....	49	46	53
Others .....	45	44	50
All .....	46	43	50

*1921-25—Important Items in Relative Magnitude.\**

	Deposits	Invest- ments	Bills Dis- counted	Loans and Advances	Money at Call	Reserve Ratios	Accep- tances
Midland ...	1	5	4	1	6	1	1
Lloyds ....	2	1	1½	3	4	4	2½
Barclay ...	3	2	3	2½	2	2	5½
Parr's .....	4	3	1½	5	1	5	2½
Provincial .	5	4	5	4	5	3	5½
Others .....	6	6	6	6	2	—	4

\* This table gives an indication of the magnitude (relative) of the deposits and various assets of the large banks over the period 1921-25. Thus if Midland is given the first place under deposits, it is because over that period it had larger deposits (per cent of total) than any other bank. But its Money at Call was not as large (relatively) as that of any of the other large banks. Variations in ranking for the same bank are an indication of different policies in distributing assets.

## SUMMARY OF BOOK V

IN the Introduction I refer to the more important points made in this book. The discussion of the attitude of the Government is summarized there. It is also pointed out that although the limitation of currency notes was of significance, the decisive factors were the failure of the banks to renew their Treasury bills, an outward movement of gold, and transfers of notes from the reserves in the Banking Department to the Currency Notes Account even before the limitation of fiduciary notes had been introduced. Moreover, the Bank of England could not continue to lend increasing amounts to both the Government and the market. It is also pointed out that the recommendation of the Cunliffe Committee that Bank of England notes be transferred to the Currency Notes Account in order to maintain notes within the fiduciary limit, was not premised on the assumption of an early return to the gold standard. Deflation could not be achieved merely by redeeming currency notes. No Government would have had the courage to enforce deflation in that manner; the reduction of purchasing power is necessarily made in deposits as well as notes. After depression had once set in, the reduction of notes was painless. The Bank of England early in 1919 reversed the policy of maintaining stable reserves and began to satisfy the demand for cash by paying out notes from its reserves in the Banking Department. The market was apparently aware of the necessity of replenishing the reserve of the Bank of England, because in the last week of 1919 it was increased by 3 millions, although the currency notes outstanding were not reduced. The Treasury's vigorous efforts to reduce its floating indebtedness were not always successful. Surplus revenues were of limited advantage when the market refused to renew its Treasury bills. The money market's failure to coöperate convinced the Treasury of the necessity of a dear money policy. The Treasury carried through its major debt-repaying activities after deflation had set in. The inevitable

was delayed in the early weeks of the year 1920 by the flow of cash to the Bank. But in February and early March the market was borrowing; and in three weeks an increase in O. D. of 41 millions was not adequate and the market had to borrow additional resources.

The extent of the reduction of deposits is then discussed. In a period of rapid changes, the proportion between saving and current deposits may be appreciably modified. Cassel uses an ingenious explanation in pointing out that the advance in prices is exaggerated, because it applies to the relatively few commodities sold. A reduction of deposits results from the conversion of deposits into public securities; but the decline of inactive deposits should not result in a reduction of prices. On the other hand, the substitution of advances for securities in 1919-20 was inflationary although no net increase of deposits was involved. From 1922 to 1925, both the public and banks evinced a growing interest in the purchase of public securities. Deposits decline with (1) transfers of cash to the Government which the Treasury employs either to replenish its balances or reduce its debt at the Bank of England, (2) repayments of advances to the banks and (3) withdrawals of cash. The process of deflation exhausts itself in transfers to savings accounts and to the Government rather than in repayments of loans and advances not replaced by other advances.

The next chapter is devoted to study of the relation of public finance to deflation. In particular, it is pointed out that the magnitude of the floating debt has been widely discussed. The question was raised whether Treasury policy should be affected by the desire of the banks to substitute Treasury bills for trade bills and whether investments in Treasury bills are at the expense of other accommodation given by the banks. The loss of 50 millions of cash in the years 1921-25 through the reduction of Ways and Means was probably the most important explanation of the stringency of that period. Losses of reserves to the Currency Notes Account and the failure to obtain adequate replenishments of gold from current supplies are also to be considered. Peculiarly enough, a period of declining money rates and depression was characterized by persistent stringency and continual borrowing

on the part of the money market and at least sporadic borrowing by the Government. The reduction of cash reserves had been more than ample in comparison to the reduction of liabilities. A loss of cash equal to one quarter of the banking reserves of the country was only possible because British banks repeatedly replenished their cash at the expense of the Dominions and foreigners through transfers made by the latter through the Bank of England. When P. D. were low, Ways and Means were generally high. The reduction of Ways and Means contributed to deflation in a double sense: Cash was lost with the repayment of Ways and Means, and P. D. were kept at a moderately high level because borrowing by Ways and Means now was frowned upon by critics. From 1921 to 1925, the reduction of all bills of banks was apparently in proportion to the reduction of Treasury bills outstanding. But the policies of large and small banks were not similar. The process by which the Treasury redeemed Treasury bills held by the banks with the proceeds of Treasury bonds purchased by the public was deflationary. However, banks might have substituted other investments or advances for the bills. A similar problem arises in relation to the Bank of England's ratio which improved with the reduction of P. D. and O. D. But central banks do not accept reserve ratios as an infallible guide to policy.

The last two parts are devoted to a more detailed study of the monetary policy of the years, 1920-24. In the last week of March, 1920, the ratio of cash in the Currency Notes Account to notes outstanding declined for the first time since August. (The Christmas period was the only exception.) Perhaps the Bank and Treasury vacillated in the policy of gradually strengthening the reserves against notes. Of 40 millions of cash taken by the market in the second quarter of 1920, the Bank of England contributed 15 millions. A loss of reserves of 10 millions was suffered for the most part after the Bank rate had been raised early in April. On June 30, the Bank's ratio of reserves was but  $8\frac{1}{2}$  per cent and another increase in the Bank rate appeared probable. In that week, the Bank transferred  $3\frac{1}{2}$  millions of its reserves to the Currency Notes Account. Out of a loss of 10 millions in the second quarter, 8 millions are accounted for by transfers to the

Currency Notes Account. One may inquire whether the resulting stringency during the remainder of the year and during later years was necessary. The authorities made less likely an early revival by the introduction of a fiduciary limitation of notes. On several occasions, the fiduciary limit was disregarded.

In the later years of deflation, the stringency was relieved by the large quantities of notes redeemed. That the Government borrowed from the Bank of England in the years 1921 to 1924, is to be explained in part by the necessity of redeeming these notes. Cash supplies were so low that either the Government or the market was usually indebted to the Bank. The Treasury announced that it would immediately disburse any surpluses of cash for the purpose of repaying public debt. In the second half of 1921 and in the year 1922, the Treasury redeemed large quantities of Treasury bills. In so far as these bills were held by the banks, a reduction of deposits resulted. McKenna argues that the reduction of Treasury bills was the cause of the reduction of deposits; Pigou argues that Government finance was only the channel, and had economic conditions been favorable, advances would have been substituted for bills.



PART III  
EXCHANGES AND GOLD POLICY



## Book VI

# FOREIGN EXCHANGES AND MONETARY POLICIES

## CHAPTER I

### INTRODUCTION

IN the early years of the War, the foreign exchanges were one of the most troublesome problems confronting the British Government. The control of supplies and prices was introduced among other reasons to strengthen Sterling. Frequently the authorities stimulated the exportation of commodities that were required at home in order to obtain foreign money; and one object of the control of imports was to control the demand for dollars. Gold exports were a source of strength both because the demand for dollars was reduced and because inflation was stimulated abroad. In a period of uncertain transportation, many attributed the depreciation to the movement of gold points.

Under the system of pegging enforced from 1916 to 1919, British exporters were penalized and importers received a bounty. The Government's policy was far-sighted as the exporters were in general private citizens and the most important importers were the Government or their agents. Pegging was also advantageous because exports were discouraged in 1916 when the Government had not yet fully realized the necessity of discouraging exports. In purchasing dollars Great Britain did not gain the difference between the pegged price of dollars and the price that would have been obtained under conditions of non-interference, because American banks created a large part of the dollars advanced to Great Britain and, therefore, pegging was followed by higher prices in the United States. Moreover, prices were higher in the United States as a result of the large exports to the Allies, and hence more dollars were required to purchase identical supplies.

It has sometimes been contended that the policy of pegging was unwise because imports were unnecessarily encouraged, but the Government's control of imports and their distribution became increasingly vigorous with the progress of the War.

The advantage of acquiring large supplies of dollars at a price close to parity, which were consumed in the purchase of supplies in America, was that more supplies were made available for carrying on the War, and these dollars were obtained without recourse to additional inflation in the United Kingdom. The public exchanged securities, saleable in New York, for Exchequer bonds and other Government securities. In so far as the latter would have been purchased in any case, that is, in so far as investors were inclined to hold a definite quantity of securities, the sale of dollar securities was responsible for a measure of inflation, because savings available for other purposes were reduced.

A few other advantages of pegging may be pointed out. A high valued pound was necessary for the retention of confidence in British finance both at home and abroad. Also, the British were able to obtain more dollars for their outstanding capital obligations in Sterling; and, finally, the artificially high value of Sterling in terms of dollars made it advantageous for neutrals to sell to Great Britain at relatively low prices in the period during which large arbitrage profits were still possible.

One object of inter-Allied borrowing was to support the exchanges of the Allies. America was generous in lending for the purpose of purchasing American goods. It is not easy to discover to what extent the dollars advanced to the Allies were employed in the purchase of American commodities, because dollars advanced for the purpose of purchasing Sterling were in part consumed in the purchase of American commodities. The main subject of contention between America and its European Allies was the use of dollars for reimbursement purposes, that is for the transfer of dollars received by one of the European Allies to another in payment for commodities purchased in the latter's country, or even the use of dollar balances in payment for commodities purchased elsewhere than in the United States. The American Government also made large disbursements of dollars in exchange for Allied currencies needed for American military

expenditures in Europe. In the early post-War period the United States continued to make liberal advances to the Allies. The necessity of financing large exports was the motive. But the Government soon withdrew from the banking business, and private financial interests withdrew after they had extended a few billion (dollars) of credit.

British exchanges depreciated at a rapid rate with the removal of control in 1919. Great Britain financed the imports of other European countries as well as its own. Thus France used its Sterling balances to make payments in New York, and neutrals replenished their New York balances by transferring balances accumulated in London during the War. The accumulation of these balances in London had been a source of strength for Sterling in 1914-18; but the withdrawal contributed to the depreciation of Sterling. Likewise, the renewal of the practise of financing foreign trade by drawing Sterling bills was a depressing factor; but the reduction of such bills had been a bullish factor in 1914-15. Perhaps the trade reversal suffered by the Dominions in 1920 had an unfortunate effect on Sterling, for the Dominions probably used part of their London balances to meet obligations elsewhere. However, Great Britain was the most important creditor nation of the Dominions. The withdrawal of Special Deposits by foreign countries was one method by which they forced Great Britain to pay their debts. Of course, the unfortunate political history of Europe during this period was reflected in the downward course of Sterling. Political events have repercussions on the exchanges, among other reasons, because the public associates certain economic movements with them. If the anticipated changes do not occur, the political events have only a temporary effect. Rapid depreciation on the Continent led Europeans to transfer balances to London. To interpret the fluctuations of Sterling in 1921-24, it is necessary to consider price movements, the budgetary situation, political and speculative factors, and economic conditions abroad. The courageous budgetary policy of Great Britain was followed by a reduction of prices at home. A remarkable appreciation of the exchanges in 1922 was common to England and several neutral countries; and possibly the depreciation in Central Europe contributed to the appreciation of

Sterling. In the same manner, the depreciation in Latin countries in 1924 was a bullish factor for Sterling. The recovery of European exchanges was hampered by the repayment of Europe's unfunded indebtedness to the United States. Hawtrey has demonstrated that the fluctuations in prices in the United States go a long way toward explaining fluctuations in the value of Sterling in the years 1921-24. Other explanations are not to be neglected, however.

The Purchasing Power Parity doctrine has not been received with favour on the Continent where it has been widely held that the balance of payments was the only tenable explanation of exchange movements. That interpretation is to be expected in the light of the difficulties faced by the Continent in coping with the exchange problem. Bendixen, Knapp, Bonn, Nogaro and others adhere tenaciously to the balance of payments interpretation. Mises is an extreme adherent of the Parity doctrine, and Hahn takes a midway position. Empirical tests have not offered satisfactory evidence of the validity of the theory. Actual exchange rates are as likely to be below as above the parity level. We expect more violent depreciation of paper currencies abroad than at home because we are accustomed to compare paper currencies with gold currencies and neglect to compare paper currencies with paper. The Economist of the League of Nations makes an allowance of 10 per cent for inaccuracies and obstructions in comparing actual and parity quotations; but of course, an adjustment of that magnitude should not be made in periods of moderate and of extreme depreciation.

The English have in general supported the Parity doctrine; but frequently they have offered sound criticisms. In particular they have emphasized the difficulty of determining the groups of commodities to be considered and the practical difficulty of distinguishing price movements caused by changes in general economic conditions from those caused by monetary factors. Keynes' treatment is especially able. Other authorities have not always heeded his warning to allow for changes in the terms of Trade.

European countries have shown a tendency to stabilize the external rather than the internal value of their currencies first and also to stabilize at the external value. Financial authorities

have been more inclined than Cassel to assume that internal fluctuations follow external fluctuations. However, that is not the only explanation of their method of procedure. The control of the foreign value of a currency is easier, because foreign help may be enlisted, and because central banks—especially in Central Europe—were not in a strategic position, and, hence the control of internal prices, difficult in any case, was especially difficult at this time. Stabilization at the higher external value (compared to internal) or at the lower external value was beset with difficulties as the experiences of Great Britain or Germany attest.

## CHAPTER II

### EARLY PROBLEMS

BEFORE the United States entered the War, the foreign exchanges were one of the most troublesome problems confronting the British Government.<sup>1</sup> In making advances to the Dominions, the Treasury in November, 1914, warned them that only under exceptional circumstances were the credits to be used outside of the United Kingdom.<sup>2</sup> In July, 1915, Runciman, the President of the Board of Trade, said: "The foreign exchanges are of more anxiety to us than almost any other problem at the present time."<sup>3</sup> McKenna said that the ability of Great Britain to aid the Allies was limited by its capacity to convert Sterling into dollars.<sup>4</sup> Rather than incur obligations in dollars for oil required for military purposes, the Navy postponed the purchase of oil from December, 1916, to March, 1917, and thus incurred the risk of paying much higher prices.<sup>5</sup> The gravity of the problem of the exchanges was revealed many years later by Bonar Law, an important member of the Coalition Government.<sup>6</sup> The Government objected to foreign remittances made for the purpose of investing abroad, and in fact, objected to the retention abroad of income accruing abroad.<sup>7</sup> Nicholson contends that the Exchequer was

<sup>1</sup> In the early months of the War, Sterling exchanges were strong. In January, 1915, the Government announced that remittances from New York to London were on a normal basis again. Thereafter the problem was to remit from London to New York. *Manual of Emergency Legislation*, Financial Edition, p. 160. The United States had 200 million dollars of debts maturing in London at the outbreak of the War. Report of Federal Reserve Agent, 1915, in *Annual Report of Federal Reserve Board*, 1915, p. 183. (This is but an estimate.)

<sup>2</sup> Treasury Minute of November 17, 1914, on Advances To His Majesty's Self-Governing Dominions, H. C. 47 (1914-16).

<sup>3</sup> 73 H. C. Col. 1218.

<sup>4</sup> 88 H. C. Col. 944.

<sup>5</sup> C. P. A., 1919. 3rd Report Trading Accounts and Balance Sheets (Navy Appropriation Account), Cmd 1064 (1920), Qs 1437-54.

<sup>6</sup> 159 H. C. Col. 3233. The day before the United States entered the War, the British Government prepared a memorandum for Poincaré in which they announced that all their resources had been used up.

<sup>7</sup> *B. M.*, 1916 (101), p. 763.

concerned from the very beginning exclusively with the exchange problem.<sup>8</sup> In defending the increase in the Bank rate in 1916, McKenna emphasized the necessity of setting a rate high enough to encourage the offer of foreign credits.<sup>9</sup> Special Deposits were accepted at first in order to support the exchanges.<sup>10</sup>

The explanation most commonly associated with the depreciation of the exchanges, is that the balance of trade or of payments was unfavorable.<sup>11</sup> Exports declined more than imports. In an essay on Control, I refer to the policy of restricting exports of commodities required for civilian or military consumption. However, the Government stimulated the exportation of commodities wherever they could be spared.<sup>12</sup> The unfavorable effects of the export policy were neutralized in part by the relatively complete ban on the exportation of capital. Moreover, the exportation of commodities not needed for domestic purposes was encouraged. Thus the Government distributed gold required for the manufacture of pottery because it was to be exported.<sup>13</sup> The Central Wool Advisory Committee recommended that in order to conserve commodities for military purposes and to maintain the export trade, the Government ration the distribution of wool.<sup>14</sup> However, in 1917, the Parliamentary Secretary of Shipping admitted that the import trade had become of more importance than the export trade.<sup>15</sup>

In the early period of exchange depreciation Vissering offered an explanation that contained a modicum of truth. Undoubtedly, the movement of the gold points was an acceptable explanation when the exchanges were depreciated 4 per cent; but, for a depreciation beyond the cost of shipping gold, another explanation is required; and there is no doubt that in the early years of the

<sup>8</sup> J. S. Nicholson, *War Finance*, p. 29.      <sup>9</sup> 85 H. C. Col. 1286.

<sup>10</sup> *L. E.*, January 20, 1917. The Chancellor of the Exchequer was anxious to repay the floating debt in order to remove one disturbing influence on the exchanges. 116 H. C. Cols. 1728-29.

<sup>11</sup> Thus see the Report of the Bank of France for 1915 in the *Bulletin de Statistique et de Législation Comparée*, 1916 (70), pp. 229-30. Also see the discussion of the interesting experience of Argentina where the exchanges depreciated appreciably below parity even though its currency notes were covered by a reserve of gold of more than 80 per cent. *B. T. J.*, December 8, 1921, and *Overseas Trade Report on Argentina*, September, 1921, pp. 13-14.

<sup>12</sup> Lloyd discusses the measures taken to stimulate the export trade. *E. M. H. Lloyd, Experiments in State Control*, pp. 265, 275-76.

<sup>13</sup> S. Montagu, *Bullion Letter*, January 25, 1917.

<sup>14</sup> *B. T. J.*, April 26, 1917.      <sup>15</sup> 92 H. C. Cols. 1413-19.

War, the former explanation was not confined to its proper limits.<sup>16</sup> Gold points are not of great significance when the Treasury has a monopoly of the insurance business, and sets the price of shipping gold high enough to make shipments unprofitable at the rate of exchange fixed by the Government.

Mawas, the French historian of the British exchanges, does not accept the unfavorable balance of trade as the explanation of depreciation. He points out that although the balance was improving from 1915 to 1917, the exchanges continued to depreciate, and that although 1920 witnessed a marked improvement in the balance of trade, the exchanges depreciated rapidly, and finally, that all adverse balances are necessarily liquidated by increased borrowing.<sup>17</sup>

In a later essay, I discuss more fully the gold movements of the War period, the cost of insuring and transporting gold, and the relationship between the value of the paper pound, the gold pound, and gold bullion. Large shipments of gold were made to the United States in 1915 and 1916. Sterling was doubly strengthened by the shipments of gold, for the British exported gold instead of purchasing dollars on a market provisioned with rather scanty supplies of dollars; and the gold exported made possible a further expansion of credit in the United States. As more deposits were created in the United States, the dollar declined in value, and hence a further depreciation of Sterling was averted.<sup>18</sup> Great Britain was not always disposed to ship gold; and neutrals frequently complained of their inability to convert Sterling into gold. But they found it profitable to convert Sterling, which was overvalued in dollars, into dollars for which they could obtain gold; and this process finally led to an embargo on gold exports in the United States.<sup>19</sup>

<sup>16</sup> G. Vissering, "The Netherlands Bank and the War," *Economic Journal*, 1917, p. 174. Also see "Økonomiske Oversigter Danmark, Juli, 1914-Januar, 1915," *Nationaløkonomisk Tidsskrift*, 1915, p. 86; also C. O. Henriques, "Danmarks Finansielle Forhold Til Udlandet," *ibid.*, 1916, pp. 520-21. Dumping of Sterling by enemy countries was of some importance in the early months of the War.

<sup>17</sup> A. Mawas, *Le Système Monétaire et le Change Anglais depuis la Guerre*, p. 283.

<sup>18</sup> R. G. Hawtrey, *Monetary Reconstruction*, pp. 34-35.

<sup>19</sup> *Annual Report of Federal Reserve Board*, 1918, pp. 54-55.

## CHAPTER III

### PEGGING

THE program of pegging the exchanges has been widely discussed, and has generally been condemned. Pigou, in an able discussion of the problem, points out that the policy was likely to result in rising prices in the United States and declining prices in Great Britain, for imports to Great Britain were encouraged, and hence more supplies were made available in the latter country.<sup>1</sup> In his opinion Sterling was maintained at the relatively high level because transportation facilities were inadequate; otherwise, larger purchases in America would have been stimulated by the low prices. In Bonnet's opinion, the goal of England's monetary policy was the maintenance of the exchanges above their natural level.<sup>2</sup>

The pegging of the exchanges has been subjected to criticism quite generally on the ground that the policy unnecessarily encouraged large imports.<sup>3</sup> However, that the British Treasury was able to purchase \$4.76 for one pound instead of say, \$3.50, may have been a decided advantage since the success of the Allied cause depended on the capacity of Great Britain to pay for imports from America. With the progress of the War, the Government became the most important, and almost the exclusive importer, and moreover, controlled the distribution of commodities imported on private account. But the export trade, increasingly restricted and controlled, remained in private hands. Hence the result of pegging the exchanges was not only that imports were obtained more cheaply and that exports were discouraged, but also that the export trade, almost exclusively in the hands of private individuals, was taxed and importers—that is, the Government—received a bounty.

<sup>1</sup> A. C. Pigou, "Some Problems of Foreign Exchange," *Economic Journal*, 1920, pp. 466-67.

<sup>2</sup> G. Bonnet, *La Politique Anglaise d'Assainissement Monétaire*, p. 47.

<sup>3</sup> E. S. Furniss, *Foreign Exchange*, pp. 128-29.

Great Britain successfully pegged its exchanges at \$4.76 because J. P. Morgan and the British Government and, later, the American Government, were able to contribute an adequate supply of dollars to prevent the dollar from rising above  $\frac{1}{4}$  76 part of the pound. But it does not follow that Great Britain gained the difference between \$4.76 and the rate that would have obtained under competitive conditions: for in so far as the dollars received by Great Britain in this manner were replaced by additional dollars created *ad hoc* by American banks, prices were higher and the Allies had to offer more dollars for their supplies. Moreover, the resulting scarcity of supplies made prices higher in the United States.

One other advantage of pegging may be pointed out here. Neutrals other than the United States, found it especially profitable to export commodities to the United Kingdom, because the Sterling received for their exports was quoted at a high value in terms of dollars, and at a low (market) value in terms of their currencies. Hence until the dollar was depressed in terms of the peseta and other neutral currencies to a value commensurate with Sterling-peseta, say, and Sterling-dollar exchange. Great Britain could obtain necessary commodities from neutrals at advantageous prices. Neutrals converted their Sterling into dollars and the dollars into their own currencies.

In the opinion of Pigou, one result of the pegging of the exchanges might be an increase of imports and hence of supplies, which might lead to lower prices than would have prevailed otherwise.<sup>4</sup> Except for the first six or twelve months of the period of the control of the exchanges, it is not at all clear that imports were above the level necessary to satisfy the indispensable requirements of the British people. Is not the favorable effect of the exchange policy on the price level to be explained by the fact that the Government obtained purchasing power required for the purchase of these commodities abroad instead of having additional purchasing power created at home? Dollars were obtained in large part by exchanging British Exchequer bonds for securities that could be sold in New York. But only in so far as the former

<sup>4</sup> A. C. Pigou, *op. cit.*, *Economic Journal*, 1920, pp. 466-68. Pigou points out, however, that the transport facilities were inadequate and import restrictions were enforced.

holders of securities that were disposed of in the United States purchased securities that they would have purchased in any case, might the process be considered inflationary. Investors who deemed it expedient to hold only a definite quantity of public securities reduced their later purchases. In my opinion, the latter were a small minority. However, the large supplies of dollars put at the disposal of the Allies were responsible for a measure of inflation in the United States. Particularly was this true after the United States entered the War. Large credits advanced by Argentina and other countries were in large part paid by drawing on New York balances.<sup>5</sup>

In pegging the exchanges, the British Treasury was able to convert each £ Sterling into \$4.76, whereas without public interference, the £ would have fallen to a much lower level. That exports were thus discouraged, was not undesirable in a period when the problem of obtaining sufficient supplies was becoming increasingly difficult. The Government, steeped in liberal traditions, was slow to introduce a vigorous system of control of exports; and, perhaps, one of the important advantages of pegging lay in the resultant reduction of exports in 1915-1916. Pegging could scarcely have been justified had the result been a stimulus to the importation of large quantities of unnecessary imports. Pigou perceives in the limitation of transportation facilities the check to these undesirable imports.<sup>6</sup> The Government restricted imports, assumed complete control of the distribution of the most important imports, and discouraged the consumption of luxuries. By borrowing from American bankers, by purchasing securities in Great Britain saleable in the United States, and finally by borrowing from the American Government, the British Government obtained dollars in the United States, which were employed to meet obligations incurred in dollars. Great Britain, a country with large capital investments abroad of which both principal and interest were payable in Sterling, was saved from important losses by the maintenance of a relatively high value for Sterling. Moreover, if Sterling had been allowed to depreciate abroad as much as at home, there would have resulted a loss of confidence in the

<sup>5</sup> *Federal Reserve Bulletin*, 1921, p. 1404.

<sup>6</sup> A. C. Pigou, *Political Economy of War*, pp. 183-85.

London money market and in Great Britain's ability to finance the War; and the maintenance of the value of Sterling at home, and the financing of the War at home would have been more serious problems.

The Treasury has issued a report that describes the history of the mobilization of securities for the purpose of maintaining the exchanges. As the problem became more acute, the Government took more vigorous action. In July, 1915, the Treasury instructed the Bank of England to purchase and transmit securities to New York; the Treasury sent circular letters on the subject to all banks and trust companies in December, 1915; a penalty tax of 2s. was announced in May, 1916, on all securities required by the Government and not voluntarily sold to the Government; and, finally, in January, 1917, the Treasury was given the power to acquire securities and to dispose of them.<sup>7</sup> A proposal, similar to the one adopted, was broached several times before the Government took favorable action. In his financial statement of May 4, 1915, the Chancellor of the Exchequer criticized a similar measure that in his opinion would have resulted in a depreciation in the value of securities.<sup>8</sup>

American authorities have also published some interesting data on the sales of securities in the United States. From February, 1918, to June, 1919, they purchased approximately 800 millions (dollars) of securities on foreign account, and in June, 1919, held approximately 2 billions (dollars) of securities for foreigners in addition to 1700 millions for the British Government. Of the latter, approximately two thirds were Sterling securities.<sup>9</sup> Moreover, the Foreign Exchange Division of the Federal Reserve Board has revealed the facts concerning purchases and sales of exchange in the eighteen months of American control of the exchanges. More than one half of the total sales was in Sterling.<sup>10</sup>

Against any losses suffered because imports were encouraged, the following advantages are to be weighed: (1) increased confidence in British finance at home; (2) increased confidence abroad; (3) the receipt of large payments on capital account at

<sup>7</sup> Report of American Dollars Securities Committee, H. C. 212 (1919).

<sup>8</sup> 71 H. C. Col. 1016.

<sup>9</sup> *Federal Reserve Bulletin*, 1922, pp. 532-33.

<sup>10</sup> *Ibid.*, pp. 162-65; also *Annual Report of Federal Reserve Board*, 1919, pp. 47-48.

the rate of 4.76 dollars for each pound Sterling; (4) the reduction of exports when the Government had not yet learned that a rigid restriction of exports was necessary. Countries that stabilize their currencies are not disposed to give them too high a value, among other reasons, because of the danger of excessive demands for redemption, and because of the fear of unnecessarily stimulating the import trade. But neither of these dangers was of importance from 1916 to 1919.

The United States assumed the responsibility for making a large part of the payments for the imports of the Allies,<sup>11</sup> and was soon compelled therefore to prohibit the exportation of gold, with the result that neutral exchanges appreciated. Canadian credits to Great Britain, together with the greater dependence of Canada upon the United States for its imports, resulted in a depreciation of the Canadian dollar in terms of the American dollar.<sup>12</sup>

That the British Government spared no efforts in attempting to maintain the value of the exchanges, is known. The Allies shipped part of their gold to London; the British Government frequently shipped gold to the United States when exchange quotations were not satisfactory. The export price of coal was maintained above the domestic price. (The necessity of supporting Sterling was an important consideration here.) The mobilization of securities saleable in New York, the closing and restriction of activities on the London Stock Exchange, and, of course, the large official loans from the United States in the last eighteen months of the War—these were important measures taken to support the exchanges. Not only were imports restricted directly, but through their fiscal policy,<sup>13</sup> through the restriction of consumption,<sup>14</sup> and through the nationalization of the distributive trade, the Government controlled imports indirectly. Great Britain did not find it necessary to introduce the minute control of the exchanges

<sup>11</sup> Russia was not satisfied with Great Britain's efforts to support the rouble. M. W. Bernatzky, *Monetary Policy* (in *Russian Public Finance during the War*), pp. 431-34.

<sup>12</sup> E. L. S. Patterson, "N. Y. Exchange in Canada," *Journal of the Canadian Bankers' Association*, 1918-19, pp. 191-93.

<sup>13</sup> 74 H. C. Cols. 351-52.

<sup>14</sup> L. Jones pointed out that a restriction of imports would not improve the condition of British exchanges if consumption were not restricted. *Ibid.*, Cols. 389-93.

that hampered Continental traders during the War. However, under the Defense of the Realm Regulations, the British were prohibited from remitting abroad for the purpose of purchasing securities or any property other than merchandise, and from purchasing foreign currencies for speculative purposes.<sup>15</sup>

<sup>15</sup> *B. T. J.*, December 27, 1917.

## CHAPTER IV

### INTER-ALLIED BORROWING

GREAT BRITAIN had to make payments abroad in behalf of its Allies. British credit was used to obtain dollars for France and Italy. Mussolini reminded Great Britain that out of 10 milliards of lire advanced to Italy by Great Britain, 2½ and 1 milliards had been expended for British freights and British coal. The French and Italian exchanges were pegged.<sup>2</sup> However, the former were not pegged as effectively as the British. The Italian exchanges were pegged even less effectively.<sup>3</sup> Great Britain made large advances to France: the British Treasury intervened because France could not obtain adequate supplies of foreign currencies from private sources.<sup>4</sup> In 1915, the French Government complained that they could not afford to ship gold, and that their securities were of a domestic nature, and hence could not be used to pay foreign debts.<sup>5</sup>

A document published by the Committee of the Judiciary of the United States Senate on Loans to Foreign Governments throws much light on the state of the foreign exchanges from 1917 to 1919.<sup>6</sup> The American Treasury apparently granted advances rather graciously for the payment of commodities purchased in

<sup>1</sup> Inter-Allied Conference on Reparations and Inter-Allied Debts, Cmd. 181. (1923), pp. 37-38.

<sup>2</sup> Nogaro points out that there were market and official exchange quotations in France from 1917 to 1919. B. Nogaro, *Modern Monetary Systems*, p. 53.

<sup>3</sup> *Cenni Statistici*, 1918, pp. 64-65.

<sup>4</sup> Correspondence with Allied Governments Respecting Reparation Payments by Germany. *State Papers*. Memorandum by Marquess Curzon, Cmd. 1943 (1923) p. 63.

<sup>5</sup> *Bulletin de Statistique et de Législation Comparée*, 1915 (77), p. 586.

<sup>6</sup> Foreign Loans and Authority for Making Same. Senate Judiciary Committee (67:2), 1921. In the Hearings on Refunding of Obligations of Foreign Governments (Senate Finance Committee) the origin of the above document is revealed. Senator Reed's Secretary ransacked six chests of papers from which he collected the most relevant material for publication in the above volume. The Secretary of State objected to their publication on account of their confidential nature. Refunding of Obligations of Foreign Governments: Hearings Senate Finance Committee (67:4), 1923, part 4, p. 71.

the United States.<sup>7</sup> Large advances were made to support the Allied exchanges; but they were granted grudgingly.<sup>8</sup> A British Treasury official, frequently had to assure the American Treasury that credits would not be used for that purpose.<sup>9</sup> Apparently the British and American Treasuries agreed that the foreign expenditures of the other Allies were to be financed equally by the United States and Great Britain.<sup>10</sup> In April, 1918, McKenna suggested to the British Government that the United States lend to France and Italy directly instead of indirectly through advances to Great Britain. He said that the United States was advancing money necessary for expenditures in the United States and for the support of Sterling exchange.<sup>11</sup> The United States objected to this proposal for reasons easily understood.

Senator Owen said that the early advances were made on the condition that the credits be used for the purchase of commodities in the United States. But Great Britain requested American cooperation in paying for commodities purchased in neutral countries,<sup>12</sup> and the American Government made large payments for purchases in neutral countries. In 1917, the American Government agreed to advance 250 million dollars monthly to finance exports from Canada to the Allies.<sup>13</sup> Assistant Secretary of the Treasury, Crosby, testifying before the Senate in June, 1918, said that loans were in excess of the expenditures of the Allies in the United States, but the exact proportion was not easily established because some credits were used to absorb Sterling exchange in

<sup>7</sup> Thus Rathbone explained to Blackett, the British Treasury representative, that the policy of the United States announced early in 1918, was not to be concerned over the magnitude of the advances to any particular country. They should be adequate to meet the needs of the country in the United States. Letter of Rathbone to Blackett, November 18, 1919. *Foreign Loans*, p. 67. Also see Hearings before Finance Committee of Senate (65:3), 1918, part 4, p. 115. Also see *Federal Reserve Bulletin*, 1917, pp. 730-31, which gives the dates and amounts of advances to Great Britain in the first half year during which these advances were made.

<sup>8</sup> The British became over-optimistic about the exchange problem when the United States entered the War. *B. M.*, 1917 (103), pp. 719-20.

<sup>9</sup> Memorandum of British Treasury of December 26, 1918; *Foreign Loans*, pp. 22-23.

<sup>10</sup> Letter of February 4, 1919, from Rathbone to Alliata. *Ibid.*, pp. 348-49.

<sup>11</sup> 105 H. C. Cols. 722-24.

<sup>12</sup> Federal Reserve Foreign Bank: Hearings, Senate Banking and Currency Committee (65:2), 1918, pp. 8-9. Mr. Harding stated that it was necessary in the early months of 1918 to purchase 40 million dollars of £ Sterling bills per week to support the British exchanges. W. P. G. Harding, *Formative Period of the Federal Reserve System*, p. 101.

<sup>13</sup> F. M. Surface, *Grain Trade during the War*, pp. 277-78.

New York, and part of these credits was consumed in payment for commodities purchased in the United States.<sup>14</sup> McAdoo informed the Ways and Means Committee that credits were absolutely necessary in order to enable the United States to dispose of its commodities.<sup>15</sup> Chairman Kitchin of the Ways and Means Committee said that loans granted under the First Liberty Loan Act were to be used exclusively for the purchases of commodities in the United States.<sup>16</sup> Mr. Mellon later announced that advances of the American Government before the Armistice had been made primarily to pay for American goods; after the Armistice, the object had been to pay for supplies purchased in the United States and to liquidate contracts.<sup>17</sup> In his statement of August 24, 1922, the Secretary of the Treasury said that the obligations had their origin almost exclusively in purchases in the United States, and that the attitude of the Treasury was that the country obtaining commodities was responsible for the payment.<sup>18</sup> Mr. Crisp of the Debt Funding Commission pointed out that of the 1600 millions advanced to Italy, all but 80 millions had been expended in the United States for supplies.<sup>19</sup> By November, 1919, the Allies had put approximately 1500 million dollars at the disposal of the United States to meet expenditures in Europe. The necessity of borrowing was thereby reduced.<sup>20</sup>

In 1926, Mellon revealed much interesting information con-

<sup>14</sup> Loans to Foreign Governments: Senate Judiciary Committee (67:2), 1921, p. 349. Assistant Secretary of the Treasury Rathbone estimated that the Allies had borrowed 7685 million dollars up to the end of 1918, and had expended 9200 millions. They had securities in New York and also had repaid advances of 394 millions out of the proceeds of loans. Fifth Liberty Bond Bill: Hearings, House Ways and Means Committee (65:3), 1919. The Secretary of the Treasury also pointed out that the published figures for expenditures for the purpose of supporting British exchanges were misleading, for in the early period of the War dollars consumed in the purchase of all commodities but munitions and sugar, as well as remittances of Sterling by France, had been included. *Annual Report of the Secretary of the Treasury, 1919-20*, pp. 70-71.

<sup>15</sup> Second Emergency Bond Issue: Hearings, House Ways and Means Committee (65:1), 1917, p. 59.

<sup>16</sup> Fifth Liberty Bond Bill: Hearings, House Ways and Means Committee (65:3), 1919, p. 44.

<sup>17</sup> Foreign Debt Funding Legislation: Hearings, House Ways and Means Committee (69:1), 1926, p. 1.

<sup>18</sup> *Federal Reserve Bulletin*, 1922, p. 1025.

<sup>19</sup> Foreign Loans, Senate Judiciary Committee (67:2), 1921, pp. 72-73. However, the Italian Government apparently paid for all wheat purchased abroad with dollars borrowed in the United States. *Camera dei Deputati. Relazioni della Commissione Parlamentare d'Inchiesta per le Spese di Guerra*, pp. 401-3.

<sup>20</sup> Annual Report of the Secretary of the Treasury on the State of the Finances, 1917-18, p. 39; also *ibid.*, 1918-19, p. 66.

cerning the advances to the Allies. The figures for France are complete and significant.<sup>21</sup>

*Credits Established in Favor of France*

Millions of dollars	4-6-17	1-1-18	7-1-18	12-1-18	7-1-19	Total
	to 12-31-17	to 6-30-18	to 11-30-18	to 6-30-19	to 11-1-20	
Established credits	1285	380	780	407	195	3049
Cash advances	1130	525	355	625	331	2966
Expenditures	1082	849	781	924	501	4196
Dollar payments by U. S. for foreign cur- rencies (Subtract)	—	322	370	333	20	<u>1045</u>

*More Important Expenditures—Millions of Dollars*

Munitions	827	Reimbursements	1046
Exchange and Cotton	807	Interest	269
Foodstuffs	295	Maturities	290
Tobacco	41	Relief	143
Other Supplies	277	Silver	6
Transportation	33	Miscellaneous	4.1
Shipping	122		

Perhaps the leading cause of disagreement arose over the dollars used for reimbursement of creditors other than Americans. The United States objected to the employment of American credits, which had been granted to France and Italy, for the reimbursement of Great Britain for purchases made on behalf of France and Italy. Although the United States protested against the use of dollar credits in this manner, the Allies continued to indulge in the practise. The United States particularly objected to the reimbursement of Great Britain with American dollars for purchases in the British Empire. The United States also advanced money to Great Britain which was in turn advanced to Italy and France with the provision that it be employed in purchasing commodities in the United Kingdom.<sup>22</sup>

The American Government paid Great Britain for expenses

<sup>21</sup> French and Yugoslavian Debt Settlement: Hearings, House Ways and Means Committee (69.1), 1926, p. 38. Clementel pointed out that France was borrowing 100 million dollars per month, but her excess of imports was 300 millions per month. E. L. Dulles, *The French Franc, 1914-28*, pp. 101-2.

<sup>22</sup> Thus in the spring of 1918 the United States definitely refused to make reimbursements for any British expenditures on behalf of France within the British Empire and for all expenditures in neutral countries by Great Britain on behalf of France.

Letter of Rathbone to Blackett of November 18, 1919, Foreign Loans: Senate Judiciary Committee (67:2), 1921, pp. 13, 67.

Also see protest of March, 1919, of Secretary of the Treasury Carter Glass to Mr. De Billy, French High Commissioner. *Ibid.*, pp. 289-91.

incurred in transporting American troops. The U. S. Treasury usually did not repay the Allies for expenditures in Europe on behalf of the United States by charging the expenditures against cash to be advanced to the Allies. However, the United States advanced 250 million dollars late in 1918 to Great Britain to meet new commitments of Great Britain in the United States until July 1, 1919, against which Great Britain advanced a corresponding sum to the United States in London.<sup>23</sup>

The character of the transactions between Great Britain and France is revealed by a document published by Assistant Secretary of the Treasury Wadsworth. The total of the claims of the British Treasury against France for dollar reimbursements for 1918-19 was in excess of a thousand million dollars.

*Millions of Dollars*

Cereals .....	345	Freight and Insurance .....	250
Sugar .....	59	Ministry of Munitions .....	99
Arbitrage .....	51	Miscellaneous .....	54
Meat .....	152		

France had already paid Great Britain 926 million dollars out of advances granted by the United States Treasury, although the United States Treasury was willing to allow a maximum of but 889 millions for reimbursement purposes.<sup>24</sup>

Credits granted to France by the United States were used to purchase supplies in the United States on behalf of the French Government, to make payment for private purchases in the United States through the agency of the Bank of France—presumably the Bank reimbursed the French Government in France—and finally to make payments elsewhere. The United States objected to the use of dollar credits for the last two purposes.<sup>25</sup> France obtained dollars in payment for expenditures in France on behalf of the American expeditionary forces. The United States exchanged dollars in the United States for francs in France, which the latter used to repay debts abroad. In the dark days of 1918 when Clemenceau made a special plea for strength-

<sup>23</sup> *Ibid.*, pp. 13, 20-21.

<sup>24</sup> Refunding of Obligations of Foreign Governments: Hearings, Senate Finance Committee (67:4), 1923, part 4, pp. 148-49. Wadsworth Exhibit, no. 8.

<sup>25</sup> Foreign Loans: Senate Judiciary Committee (67:2), 1921, pp. 262-63; article by Tardieu, translated from the *L'Illustration*.

ening the gold reserve of the Bank of France, the United States advanced dollars to France in exchange for francs, and also renewed maturing obligations.<sup>26</sup> In October, 1918, the American representative in Paris, Crosby, advised the American Treasury to be generous in advancing dollars to France; otherwise the purchase of francs by the United States might result in an appreciable loss of gold. The agreements with France included a singular provision to the effect that dollar credits could not be drawn on if the dollar fell below parity.<sup>27</sup>

Italy's position was not unlike France's; but it was probably not as strong. The Italian Treasury expressed satisfaction at the low rate at which the lire had been pegged because the Government would not have been able to maintain it at a higher level.<sup>28</sup> Similar problems concerning dollar reimbursements arose as those already discussed. American officials complained that the Italian Treasury drew on the American Treasury without warning. Leffingwell regretted that the American Treasury could not support Italian exchanges more effectively.<sup>29</sup>

In the post-War period Europe's needs were still great; but the authority of the American Treasury to make advances was questioned. The Judiciary Committee suggests that illegal advances were made.<sup>30</sup> However, large credits that had been granted before the Armistice were still available.<sup>31</sup> Great Britain withdrew its support of Italy and France—to obtain concessions at the Peace Conference, it is suggested—and hence a greater burden was placed upon the United States.<sup>32</sup> America was disposed to make advances to cover expenditures in the United States; and the Treasury pointed out that England could obtain

<sup>26</sup> Letter of November 18, 1919, from Rathbone, Assistant Secretary of Treasury to Blackett. *Ibid.*, p. 65.

<sup>27</sup> *Ibid.*, pp. 265-66.

<sup>28</sup> Davis to Rathbone, December 4, 1918. *Ibid.*, pp. 332-33. Italy established an Exchange Institute in New York to support its exchanges. *Federal Reserve Bulletin*, 1918, p. 624.

<sup>29</sup> Supplementary Bond Legislation: Hearings, House Ways and Means Committee (65:2), 1918, pp. 29-30.

<sup>30</sup> Foreign Loans: Senate Judiciary Committee (67:2), 1921, pp. 3-10.

<sup>31</sup> Secretary Glass estimated that 4.23 billion dollars had been advanced by the American Government from the Armistice to Jan., 1920. Extending Credit to Germany: Hearings, House Ways and Means Committee (66:2), 1920, pp. 6-7.

<sup>32</sup> Letter of N. Davis to A. Rathbone of December 5, 1918. Foreign Loans: Senate Judiciary Committee (67:2), 1921, pp. 333-34.

dollars by selling wool and marine transportation, by taking over dollars at the disposal of France, and by borrowing from private sources.<sup>33</sup> In August, 1919, the British Treasury had an unfunded indebtedness of 380 million dollars, payable abroad, but only 50 millions were available on the exchange market with the possibility of obtaining 130 millions on the future. Additional advances were granted.<sup>34</sup> Leffingwell had announced in February, 1919, that the Treasury policy was to restrict advances to foreign governments and to resume normal relations as soon as possible, but that it was necessary to continue to lend temporarily.<sup>35</sup> Rathbone also perceived the necessity of continued lending on the part of the Government. He anticipated that the banks would do their utmost, but they did not possess adequate supplies of gold. The advances were to be employed exclusively to purchase commodities in the United States.<sup>36</sup> Carter Glass, the Secretary of the Treasury, presented an even stronger plea. We have a stake in Europe; the financing of exports is absolutely necessary.<sup>37</sup> However, in May, 1920, Secretary Glass announced that the Government could not continue to act as bankers.<sup>38</sup> In the same month, the War Finance Corporation which had the authority to advance a billion dollars to finance the American export trade, suspended its activities. It had advanced but 46 millions.<sup>39</sup> Private credits that have been estimated as high as 4 billions were outstanding.<sup>40</sup> Europe's credit was not good. Even the much touted Edge Act had not resulted in large advances.<sup>41</sup>

American exchange was affected adversely by the advances granted to the Allies. Neutrals found it profitable to exchange

<sup>33</sup> *Ibid.*, pp. 23-24.

<sup>34</sup> Letter of August 29, 1919, from B. P. Blackett, British Treasury representative. *Ibid.*, pp. 57-58.

<sup>35</sup> Fifth Liberty Bond Bill: Hearings, House Ways and Means Committee (65:3), 1919, pp. 90-93. He also announced that advances to Great Britain were to be determined by the requirements of the United States in London.

<sup>36</sup> *Ibid.*, 1919, pp. 38-40.

<sup>37</sup> *Ibid.*, pp. 16-17.

<sup>38</sup> Extending Credit to Germany: Hearings, House Ways and Means Committee (66:2), 1920, pp. 7-9.

<sup>39</sup> War Finance Corporation: Hearings, House Banking and Currency Committee (66:3), 1920, part 2, p. 13.

<sup>40</sup> *Ibid.*, pp. 8-9, 19. These estimates have been frequently criticized.

<sup>41</sup> Amendment to Federal Reserve Act: Hearings, Banking and Currency Committee (66:2), pp. 33-40.

their Sterling for dollars, which were then exchanged for their own currencies.<sup>42</sup> They found this round-about method of remittance profitable so long as the dollar-peseta (for example) quotations were not adjusted to dollar-Sterling, and Sterling-peseta quotations. Spaniards sold their commodities for many pounds, obtained dollars at a cheap price in Sterling, and then obtained pesetas at advantageous rates. The pressure of these remittances finally depressed the value of the dollar.<sup>43</sup> (Several neutrals refused to accept American gold at par.) Moreover, the task of supporting Allied exchanges would have required gold shipments of a magnitude that even the United States could not afford. The United States attempted to strengthen its exchanges by borrowing from Spanish banks as well as by selling Liberty bonds payable in foreign currencies.<sup>44</sup> Assistant Secretary of the Treasury Leffingwell contended that the exchange problem had been troublesome even before the embargo had been introduced. The authorities strengthened dollar exchange by purchasing Swiss francs at artificially low prices, by obtaining unlimited credits from India, and loans from Argentina and Spain.<sup>45</sup> The Secretary of the Treasury had been given the necessary authority by the Second Liberty Bond Act.<sup>46</sup>

When the United States entered the War, British Treasury officials were inclined to become too sanguine over the improvement in the exchange conditions. But by January, 1918, the War Office, disturbed by the state of the exchanges, pointed out that imports from the Dominions were preferable to imports from neutrals.<sup>47</sup>

The significance of British war finance for the American exchanges is apparent from the figures for exchange transactions

<sup>42</sup> The purchases of Sterling from neutrals by the United States were in excess of the purchases of Sterling by neutrals. *Annual Report of Federal Reserve Board*, 1918, pp. 54-55. Moreover, Great Britain provided an appreciable part of the Sterling disposed of in New York. *Ibid.*, pp. 53-54.

<sup>43</sup> Federal Reserve Foreign Bank: Hearings, Senate Banking and Currency Committee (65 2), 1918, pp. 8-9, 25-26, 240-41.

<sup>44</sup> *Ibid.*, pp. 32, 40-41, 211.

<sup>45</sup> Supplementary Bond Legislation: Hearings, House Ways and Means Committee (65'2), 1918, pp. 30-32.

<sup>46</sup> *Federal Reserve Bulletin*, 1918, p. 961.

<sup>47</sup> *B. T. J.*, January 10, 1918. Perhaps the introduction of sales of British Treasury bills in New York in August, 1917, is explained by the fact that Great Britain was not receiving an adequate supply of dollars. *Federal Reserve Bulletin*, 1918, p. 940.

published by the Federal Reserve Board. From February 21, 1918, to June 25, 1919, American dealers purchased 11.77 billion dollars of exchange of which more than half was in Sterling payable in Great Britain.<sup>48</sup> In 1918, 72 per cent of purchases and sales by dealers were for Great Britain.<sup>49</sup> Whereas the United States purchased 1600 millions of foreign exchange in arbitrage transactions from other countries, it sold but 1300 millions.<sup>50</sup>

<sup>48</sup> *Federal Reserve Bulletin*, 1922, p. 164.

<sup>50</sup> *Ibid.*, 1919, p. 48.

<sup>49</sup> *Ibid.*, 1918, p. 53.

## CHAPTER V

### DEPRECIATION, 1919-1920

EXCHANGES of debtor nations might suffer if it were true, as has been contended, that banks were unwilling to lend to foreigners during the War.<sup>1</sup> Undoubtedly, loans were frequently not renewed.<sup>2</sup> In the refusal to renew foreign loans, and in the reduction of Sterling bills, are to be found two important reasons for the relatively favorable position of the British exchanges in the early months of the War, and, perhaps, throughout the War.<sup>3</sup>

With the progress of the War, creditor countries accumulated large balances in London for which they could find no profitable employment at home; and as Sterling depreciated, they found it expedient to retain their balances in London. But if the retention of foreign balances was a favorable factor from 1915 to 1918, their withdrawal was harmful in 1919 and 1920. When large imports of necessities from America became indispensable, and an adequate supply of dollars was not available, Continental creditors consumed their balances in London in remitting to the United States. The results on the British exchange<sup>4</sup> were rather disastrous. In the post-War period, Great Britain borrowed from the United States, and in turn granted credits to Europe. Mawas criticizes the estimates of the Board of Trade for the balance of payments of Great Britain for 1919 and 1920, because these short term transactions were not considered.<sup>5</sup> The division of Foreign

<sup>1</sup> *L'Économiste Français*, October 30, 1915.

<sup>2</sup> I have appended to this essay a brief note on Bills. The refusal to renew bills was without doubt an important factor in strengthening Sterling in the War period; but the renewed financing by bills on a large scale in 1919 and 1920 depressed Sterling. Late in 1919, American banks and importers were attempting to withdraw balances from French banks, and Continental countries in turn were using their London balances to pay bills in America. *Volkswirtschaftliche Chronik*, 1919, p. 834. Also see *L. E.*, September 18, 1920, and November 13, 1920.

<sup>3</sup> Many foreign countries complained of the necessity of repaying Sterling bills and of paying immediately for imports. C. O. Henriques, *op. cit.*, pp. 518-19. Also see *Industry and Finance*, edited by A. W. Kirkaldy, p. 24.

<sup>4</sup> *L. E.*, November 13, 1920; *Federal Reserve Bulletin*, 1921, p. 1263.

<sup>5</sup> A. Mawas, *op. cit.*, p. 271.

Exchanges of the Federal Reserve Board which controlled remittances from February, 1918, to June, 1919, pointed out that balances of the Allies in New York were reduced rapidly after the Armistice; and neutral balances were replenished by transfers from Allied countries.<sup>6</sup>

With the unpegging of the exchanges in 1919, the depreciation of the British exchanges once again became a subject of concern for the British Government.<sup>7</sup> Pigou's explanation of the depreciation was that Great Britain was selling on credit and purchasing for cash, a procedure which had already been condemned by the Cunliffe Committee.<sup>8</sup> There is much truth in Pigou's contention. Thus British traders and banks accumulated large balances in Roumania, which could not be withdrawn without the permission of the Roumanian Government.<sup>9</sup> On all contracts for supplies purchased in Great Britain before June, 1920, the British Treasury had agreed to make the necessary payments on behalf of the Allies.<sup>10</sup> But the adverse balance of trade, which came to 375, 275, 180, 210, and 344 millions on successive years from 1920 to 1924 inclusive, and 134 millions in 1913, was at the uncomfortably high figure of 663 millions in 1919. Perhaps the main difficulty was that Great Britain was importing too much. In accounting for the depreciation of Sterling, the London *Economist* put much emphasis on the excess of imports and on inflation at home: The cure suggested was economy and increased taxation.<sup>11</sup> In the Speech from the Throne, it was said that the depreciation of the exchanges had been caused by the large imports of food.<sup>12</sup> European balances in the United States, estimated at approximately 900 million dollars in December, 1918, were wiped out by the end of 1921, at which time the United States had a credit

<sup>6</sup> *Federal Reserve Bulletin*, 1921, p. 1402.

<sup>7</sup> Keynes writes that only in 1919 and 1922 were exchange movements non-seasonal. In 1919, the withdrawal of foreign credits by America depressed Sterling. J. M. Keynes, *A Tract on Monetary Reform* (English ed.), p. 111.

<sup>8</sup> A. C. Pigou, "Some Problems of Foreign Exchange," *Economic Journal*, 1920, pp. 467-69. The trade situation was similar in Europe from 1814 to 1817. T. Tooke, *History of Prices*, II, 1838 ed., pp. 8-9.

<sup>9</sup> *Overseas Trade Report on Roumania*, April, 1922, p. 19.

<sup>10</sup> *C. P. A.*, 1921, Q. 4153.

<sup>11</sup> *L. E.*, September 13, 1919. The editor of the *Volkswirtschaftliche Chronik* pointed out that countries with moderate depreciation found increasing obstacles in selling their goods. *Volkswirtschaftliche Chronik*, 1920, p. 1119.

<sup>12</sup> 125 *H. C. Col.* 8.

balance of over 3 billion dollars in Europe.<sup>13</sup> The decline in the value of the franc and the mark in the latter part of 1920 has been attributed to the failure to renew credits by Americans and British.<sup>14</sup> If we are to judge by the general tendency in Europe to introduce restrictions on the export of capital in 1919 and 1920, large balances were transferred to America.<sup>15</sup>

Not only did Great Britain sell to Europe on credit, but it financed large purchases in America on behalf of Europe.<sup>16</sup> The depreciation of the British exchanges in the second half of 1920 was largely caused by the handicap which Great Britain suffered in settling accounts on behalf of Europe.<sup>17</sup> In disposing of large supplies of securities on the London Stock Exchange and in employing London balances for repaying their American loans, the French made the task of maintaining Sterling more difficult.<sup>18</sup>

Anderson also accounted for the depreciation of Sterling by the fact that Great Britain was financing Europe. The United States dumped francs and lires on the London market. However, he also points out that Americans were holding Sterling for speculative purposes, and that the English banks were borrowing in New York on behalf of their customers.<sup>19</sup> A German writer suggested that large export credits were advanced to Germany be-

<sup>13</sup> Estimates of unfunded debts to America have been subjected to much ridicule. The above estimate was made by Friday in the *Manchester Guardian*, Reconstruction Number, 1922 (1), pp. 19-21. The Federal Reserve Board estimated that the United States accumulated unfunded credits of 1350 millions (dollars) in 1919 and 1730 millions in 1920. *Federal Reserve Bulletin*, 1921, p. 1263.

<sup>14</sup> *Volkswirtschaftliche Chronik*, 1920, pp. 1135-36, 1147-48.

<sup>15</sup> Brussels Conference Paper no. xi, *Exchange Control*, pp. 3-7.

<sup>16</sup> *L. E.*, November 13, 1920. Also see E. M. Friedman, *International Finance and Its Reorganization*, p. 409.

<sup>17</sup> Compare *Annual Report of Federal Reserve Board*, 1920, p. 29. There was an interesting provision in a loan agreement drawn up in 1919 between the Allies and Argentina, which allowed Argentina to draw on the Allies before the maturity of the loan if the quotation of the peso was not above 40d. and if the Argentine Government did not transfer these balances to the United States. Tornquist and Co., *Business Conditions in Argentina*, Report no. 144, 1919, p. 4.

<sup>18</sup> *B. M.*, 1919 (107), p. 522. Annual Report of Bank of France for 1919 in *Bulletin de Statistique et de Législation Comparée*, 1920 (87), pp. 247-51. The London *Statist* comments on the heavy dumping of securities on the British market in 1920. *Statist*, February 5, 1921.

<sup>19</sup> B. M. Anderson, "Three and a Half Billion Dollar Floating Debt of Europe to the United States," *Chase Economic Bulletin*, October, 1920. In March, 1920, the Guaranty Trust Company suggested a gold embargo, because the United States was paying Europe's debts. "Gold Situation," *Guaranty Trust Bulletin*, March, 1920.

cause the export nations had accumulated large supplies of raw materials which they could not sell at home.<sup>20</sup>

If the necessity of financing European trade was an important cause of the depreciation of Sterling in 1919 and 1920, other equally valid causes should not be neglected. The movement of balances from London, resulting in part from the termination of the system of Special Deposits, was an unfortunate factor; however, in part, these balances were consumed in meeting the obligations discussed above.<sup>21</sup> Apparently, in order to be in a position to repay the "Africs" in 1920, the British Treasury accumulated large balances in New York.<sup>22</sup> The large imports referred to above were an important cause of the depreciation.

Europeans used balances accumulated in London during the War to liquidate debts incurred in the United States in 1919 and 1920. In a memorandum dated December 26, 1918, the British Treasury drew attention to the danger: The strain on £ Sterling depends upon the balance of indebtedness between the United States and the rest of the world.<sup>23</sup> Early in 1920, Blackett complained of the scarcity of dollar exchange,<sup>24</sup> and American banks began to restrict accommodation for the purpose of financing the export trade.<sup>25</sup>

Perhaps the best indication of the seriousness of the depreciation of Sterling in the early post-War period is to be found in the large amount of time and energy which Parliament devoted to the problem. In discussion of problems of all kinds, the repercussions on the foreign exchanges were usually discussed at great length and with much warmth. To reduce the pressure on the exchanges, Geddes proposed in March, 1919, to place rigid restrictions on the importation of manufactured goods.<sup>26</sup> The Profiteering Act dealt

<sup>20</sup> A. Lansburgh, "Zur Frage der deutsche Rohstoffsversorgung," *Die Bank*, 1920, pp. 246-48.

<sup>21</sup> The increasing importance of speculation is evident in the large increases in transactions on the stock exchange in the second half of 1919. *Federal Reserve Bulletin*, 1922, p. 165.

<sup>22</sup> 126 H. C. Col. 910. The Chancellor of the Exchequer announced in May, 1922, that 275 millions of foreign debt had been paid off in three years. In 1920-21, the reduction was 117 millions. 141 H. C. Financial Statement, April 25, 1921, and 153 H. C. Col. 1025.

<sup>23</sup> Foreign Loans: Senate Judiciary Committee (67:2), pp. 22-23.

<sup>24</sup> Letter of Blackett of February, 1920. *Ibid*, p. 72.

<sup>25</sup> *Federal Reserve Bulletin*, 1920, p. 217.

<sup>26</sup> 113 H. C. Cols. 955-56.

only with high profits earned at home; <sup>27</sup> the Government approved of the large profits earned at the expense of the foreigner by the Imperial Tobacco Company and Coats and Company.<sup>28</sup> While coal was being subsidized at home, it was disposed of at fabulously high prices abroad through the intervention of the Government.<sup>29</sup>

The Government renewed the restrictions on the exportation of capital in order to protect the exchanges.<sup>30</sup> Lloyd George, describing the trade and industrial position in August, 1919, devoted much time to a careful analysis of the balance of trade and balance of payments in 1919, as compared to the pre-War period and drew the gloomy conclusion that the current adverse balance of trade was five times as great as in 1913.<sup>31</sup> Chamberlain justified a Finance Bill which included provisions for increasing the duty on tea and motor spirits, as well as several new duties, on the grounds that to prevent further depreciation of the exchanges, aggressive measures were necessary.<sup>32</sup> Embarrassing questions relating to the exchanges were a constant source of annoyance to the Government in 1919 and 1920. Increased production, decreased consumption, and the granting of private credit abroad were the specifics proposed by Baldwin for effecting an improvement in the exchanges.<sup>33</sup> The subject was considered important enough to be discussed in the Speech from the Throne, in which the depreciation of the foreign exchanges was explained by the heavy importation of food.<sup>34</sup>

Undoubtedly, Great Britain was affected by the widespread speculation in the German and other Central European currencies in the years 1919 and 1920. The big Berlin banks had twice as large a total of *Fremde Geld* (deposits, etc.) at the end of the year as at the beginning. Large influxes of foreign money were considered an important cause of this increase.<sup>35</sup> German industries were forced to take protective measures against foreign

<sup>27</sup> 119 H. C. Col. 923.

<sup>29</sup> 118 H. C. Cols. 77-93.

<sup>28</sup> 125 H. C. Cols. 1268-69.

<sup>30</sup> Pigou proposed to continue the ban on the exportation of capital and to control imports in order to strengthen the exchanges. A. C. Pigou, *op. cit.*, *Economic Journal*, 1920, pp. 470 *et seq.*

<sup>31</sup> 119 H. C. Col. 1984.

<sup>33</sup> 118 H. C. Col. 1808.

<sup>32</sup> 117 H. C. Cols. 1685-88.

<sup>34</sup> 125 H. C. Col. 8.

<sup>35</sup> "Die Berliner Grossbanken im Jahre 1919," *Die Bank*, 1919, pp. 436-44; "Die Bessering der deutschen Valuta," *ibid.*, 1920, pp. 320-22.

investors.<sup>36</sup> On the other hand, Germans were exporting capital at a rapid rate, especially in 1919.<sup>37</sup> European countries, with exchanges depreciating more rapidly than Sterling—Germany, Spain, etc.—were supporting Sterling by retaining balances in London.<sup>38</sup> Probably, on the whole Sterling was affected adversely.

The rapid inflation of 1919 and 1920 would normally have been accompanied by the depreciation of Sterling in New York; but the advance of inflation in the United States was rapid during this period, and hence we cannot offer the inflation in Great Britain as an important explanation of the depreciation of the exchanges except in the latter part of this period.<sup>39</sup> By the use of a rigid discount policy, a few European countries—Sweden is a notable example—saved themselves in these years from the unfortunate effects of inflation.

There is a modicum of truth in the thesis advanced by Bickerdike that the fall of the exchanges tends to be cumulative, because the public awaits further drops before disposing of securities, or cancelling orders for imported commodities.<sup>40</sup> Many other factors might have been responsible for the depreciation of Sterling. In addition to those already mentioned, there were the failure of the Funding Loan, the pressure of the foreign debts, the removal of restrictions on payments abroad, and the rapid increase in the value of the dollar in 1920.

The political situation both in Great Britain and in Europe was reflected in the movement of the exchanges.<sup>41</sup> Chamberlain referred to a European-dollar exchange, and Crump pointed out that as the dollar appreciated, all European currencies depre-

<sup>36</sup> "Die Eindringen Ausländischen Kapital in das deutschen Wirtschaftsleben," *ibid.*, 1920, pp. 106-11.

<sup>37</sup> "Betrachtungen über Vorgänge im deutschen Geldwesen," *ibid.*, 1919, pp. 492-93.

<sup>38</sup> *Brussels Conference*, 1920, Verbatim Record, p. 81, Evidence of Marquis de Cortina of Spain.

<sup>39</sup> Loria put the emphasis on excessive issues of paper money and the introduction of a ban on the exportation of the precious metals. A. Loria, *op. cit.*, pp. 80-81. Hawtrey pointed out the necessity of considering the change in the value of the dollar in 1920 and the ensuing period of deflation, "Comments on N. E. Crump's Review of Recent Foreign Exchange Fluctuations," *R. S. J.*, 1921, p. 427.

<sup>40</sup> C. F. Bickerdike, "The Instability of Foreign Exchange," *Economic Journal*, 1920, pp. 118-22.

<sup>41</sup> See E. Friedman, *op. cit.*, pp. 333-34, for an emphatic statement of the relation between political events and fluctuations in the value of currencies.

ciated.<sup>42</sup> Gregory agreed with Crump that the explanation of the depreciation of European exchanges was to be found in the lack of confidence in the European political situation.<sup>43</sup> The Federal Reserve Board, in attempting to account for the fluctuations of the exchanges, placed much emphasis on the same factor.<sup>44</sup>

W. A. Brown presents an excellent discussion of Sterling exchange in 1919-20.<sup>45</sup> He points out that Sterling suffered from operations on the Continent beyond the control of Great Britain. Although large exports of gold were made from the United States, Sterling was strengthened during this period by a depreciation of the American dollar. This is obscured somewhat by the more rapid rise of prices in Great Britain. Brown also points out that gold movements from the United States tended to depress Sterling because part of the gold was paid for with Sterling.

<sup>42</sup> N. E. Crump, "Review of Recent Foreign Exchange Fluctuations," *R. S. J.*, 1921, pp. 426-42. In fact the parallelism of movement between British and other European exchanges was remarkable throughout the post-War period. The movements were *closely* similar for Great Britain, Netherlands and Switzerland, and similar for other Western European countries. The important exception was the failure of the franc and lira to increase in value in 1922-25. League of Nations: *Memorandum on Currency and Central Banks*, 1913-25. Tables, vol. 2, pp. 5-15.

<sup>43</sup> N. E. Crump, *op. cit.*, pp. 446-47.

<sup>44</sup> *Annual Report of Federal Reserve Board*, 1920, pp. 29-31.

<sup>45</sup> W. A. Brown, Jr., *England and the New Gold Standard*, 1919-26, ch. 3.

## CHAPTER VI

1921-1924

CONTINENTAL exchanges continued to depreciate in 1920 and 1921. Depreciation of the £ was temporarily halted in the last months of 1920, an appreciable improvement was effected in 1921, and a phenomenal appreciation occurred in 1922. The European exchanges were relatively stable in relation to the dollar in 1921,<sup>1</sup> and actually appreciated in 1922, according to the index numbers of European exchanges compiled by the Federal Reserve Board. The value of the Board's index numbers has been questioned. Hopes were not fulfilled in 1923, but the gains of 1924 were beyond the expectations of most experts.<sup>2</sup>

For an explanation of the appreciation of the £ abroad, one should not neglect the relative movement of prices in the United States and Great Britain. A courageous policy of debt reduction in Great Britain inspired confidence. Rist and Lacout point to the financial policy as the source of the renewed confidence that was responsible for the appreciation;<sup>3</sup> but the reduction of debt, or, what might be called the deflation policy, also had a direct effect on the exchanges through its effect on price levels.

In attempting to explain the history of the exchanges in the

<sup>1</sup> *Annual Report of Federal Reserve Board*, 1921, pp. 81-82.

<sup>2</sup> See the able discussion of this period in Chapters VII and VIII in Brown's book. W. A. Brown, Jr., *op. cit.* In 1922, the rise in prices in the United States, the movement of European balances from the United States to London, and the funding of America's short term credits, were favorable factors. In 1923, money rates were higher in the United States, large investments were made in dollar securities on account of the earlier appreciation of Sterling, and there were a number of unfavorable political developments.

<sup>3</sup> G. Lacout, *Le Retour à l'Étalon-or*, p. 97. C. Rist, *La Déflation en Pratique*, pp. 38-39. Nogaro emphasizes the discount policy and the psychological advantage of a vigorous fiscal policy. The sequence of events was not in accord with that required by the parity doctrine. B. Nogaro, *Modern Monetary Systems*, pp. 71-76. Also see J. M. Angell, *Theory of International Prices*, pp. 295-99. The *Federal Reserve Bulletin* offers a similar explanation. *Federal Reserve Bulletin*, 1923, pp. 335-36.

post-War period, writers dwell upon the political situation, and with more than any other variable, they attempt to correlate exchange movements with favorable or unfavorable political occurrences.<sup>4</sup> Writers who attack the problem in this manner, are not easily dislodged from their position. But they may justly be criticized for not advancing beyond a discussion of the superficial aspects of the problems, for exchanges do not depreciate merely because the political situation becomes less attractive, but rather because that new political condition will be accompanied by increasing inflation, exportation of capital and the like. Of course the economic changes that are popularly associated with political changes are often not realized; it may then be contended that the market guessed wrongly, or a new political situation developed which prevented the realization of the economic events demanded by the previous political situation. Undoubtedly, the fluctuations in the value of Sterling brought on by changes in the political complexion are not to be explained entirely in this manner. The increase or diminution of confidence is not to be explained exclusively by the calculation of ensuing changes in the economic system; and the speculative factor, which has played so important a part in the recent history of Continental exchanges, becomes increasingly important in the midst of rapid political changes. Keynes contends that speculation can have only a temporary influence unless prices, trade, or the credit position is affected.<sup>5</sup> That does not mean that the speculative factor is not of great importance. It operates through the movements of capital and anticipatory or delayed remittances. For relatively long periods of time, the movements may be in one direction, as is evident from a study of German monetary history from 1919 to 1924, or French history from 1922 to 1926 and 1926 to 1928, or British history from 1921 to 1922 and 1924 to 1925.

The Federal Reserve Board attributes the improvement of Sterling in May, 1921, to the settlement of the Reparations question; the improvement from July to October, 1921, to the settlement of the coal strike and the exportation of gold; the appreciation of the closing weeks of the year to the limitation of

<sup>4</sup> Thus see *B. M.*, 1924 (117), and 1925 (119), monetary reviews.

<sup>5</sup> J. M. Keynes, *op. cit.*, pp. 112-13.

Armaments Conference and the Dublin negotiations.<sup>6</sup> It was anticipated that these political changes would be followed by an improvement in economic conditions. The Government would be more likely to balance their budget without recourse to inflation, to obtain a surplus of revenue for the repayment of public debt, and to attract capital to London.

Although Baldwin, the President of the Board of Trade, was pessimistic in 1922 concerning the position of British export trade, the state of employment and the onerous system of taxation that was absorbing supplies of indispensable floating capital, the foreign exchanges appreciated at an unprecedented rate.<sup>7</sup> Perhaps the *Bankers' Magazine* was justified in maintaining that the improvement in the second half was speculative; the validity of its contention was strengthened by a reaction in 1923 that might be attributed to the unfortunate developments on the Continent.<sup>8</sup>

The decline of 1923 is popularly associated with the Ruhr invasion and with the victory of the Labour Party in British politics; and the favorable reaction in 1924 with the consummation of the Dawes Plan and the overthrow of the Labour Government. It was pointed out that large quantities of securities were being purchased in New York with Sterling or New York balances.<sup>9</sup> Where confidence lags, balances move.

British exchanges were affected by economic movements abroad. Perhaps Great Britain profited more or less from the unfavorable turn in the balance of payments suffered by agricultural countries in 1920-21, which was reflected in a transfer of balances to London. The sudden reversal was experienced by almost all predominantly agricultural countries and probably accounted for an increased demand for several European currencies and for dollars. Many creditors probably withdrew their newly acquired balances, but the net effect was probably an increase in the demand for £ Sterling.

<sup>6</sup> *Annual Report of Federal Reserve Board*, 1921, pp. 81-82. The exportation of gold was a factor of importance during most of the post-War period. Brown contends that the diversion of gold to India in 1922 was unfortunate for Sterling. W. A. Brown, Jr., *op. cit.*, pp. 161-62. But England received in exchange for this gold Sterling which was used to pay foreign debts.

<sup>7</sup> 153 H. C. Cols. 2417-25.

<sup>8</sup> *B. M.*, 1923 (115), pp. 70-74.

<sup>9</sup> *Barclay's Monthly Review*, especially May, October and December, 1923. Also see *L. E.*, July 7, 1923, and November 29, 1924, and *Federal Reserve Bulletin*, 1924, pp. 120-21.

Depreciation, temporarily halted, increased again in the latter part of 1922 in both France and Italy; the progress of depreciation was alarmingly rapid in Central Europe and Russia. The resultant movement of balances from the Continent to London was an important factor in the rapid upward movement of Sterling in 1922.<sup>11</sup> Austria, Hungary and Czecho-Slovakia were in the midst of a program of stabilization that may have had a depressing influence on Sterling, since they obtained large temporary advances; but the proceeds of these loans were retained in large part in London. The writer of the periodic articles on the money market in the *Jahrbücher* says that balances were transferred to England, Czecho-Slovakia, and Finland, and were taken out of Central Europe, France and Belgium.<sup>12</sup>

In 1923, inflation and depreciation advanced rapidly in Germany, France, and Poland. Confidence in Europe waned, and balances were transferred to New York.

Confidence was renewed in 1924. Large subscriptions to securities floated in New York were made by Englishmen; but in the opinion of bankers, London obtained cash as a result of these flotations.<sup>13</sup> Bonnet minimizes the effects of the improvement in the British balance of trade, and refers the appreciation of 1924 and 1925 to the increased confidence resulting from a courageous financial policy.<sup>14</sup> The London *Economist* is critical of the Board of Trade figures for the balance of payments in 1924, and contends that much capital was borrowed for short periods.<sup>15</sup> A marked depreciation of the franc in the latter part of 1923 and early part of 1924 was a bullish factor for Sterling.

The relatively high discount rate in London, the return of the Conservatives to power, the absorption of securities in New York, the repatriation of English capital—these are the explanations offered by the London *Economist* for the appreciation of 1924.<sup>16</sup> It

<sup>11</sup> *Volkswirtschaftliche Chronik*, 1923, p. 443. In 1921, the Bank of France was aroused by the movements of balances in French banks belonging to foreigners. "Les Opérations de la Banque de France, 1921," *Bulletin de Statistique et de Législation Comparée*, 1922 (91), p. 129. *Federal Reserve Bulletin*, 1922, p. 1028.

<sup>12</sup> Large gold movements were an important factor in 1922 in the opinion of the Federal Reserve Board. *Annual Report of Federal Reserve Board*, 1922, pp. 13-14.

<sup>13</sup> *Monthly Review of Midland Bank*, especially December, 1924, and January, 1925. Also see *Federal Reserve Bulletin*, 1923, pp. 335-36.

<sup>14</sup> G. Bonnet, *Les Expériences Monétaires Contemporaines*, pp. 31-34.

<sup>15</sup> *L. E.*, January 31, 1925.

<sup>16</sup> *Ibid.*, November 29, 1924.

is significant that the Banco d'Italia complains in its report for 1924 that the introduction of currency reforms elsewhere affects countries of moderate financial strength adversely.<sup>17</sup>

In 1924, the United States coöperated with Great Britain. Purchases of securities aggregating \$500,000,000 were made by the reserve banks over a period of eight to nine months, with the result that market rates in the United States were reduced. Governor Strong frankly told the Banking and Currency Committee that among other objects, the aim was to reduce the differences between the London and New York rate and thus to render assistance to Great Britain.<sup>18</sup> Governor Strong also said that one object of the liberal credit policy was to enable Europe to resume gold payments.<sup>19</sup> He defended the Federal Reserve System for granting a credit to the Bank of England.<sup>20</sup>

The movement in unfunded foreign credits of the United States was not favorable to the appreciation of Sterling in 1922-24. Thus it has been estimated that the unfunded credits to Europe were reduced by 375 and 215 million dollars in the years ending June 30, 1922 and 1923. These returns are based on figures of several hundred important banks. Foreign deposits in 68 American banks increased from 505 to 721 millions in 1924.<sup>21</sup> Also, Central Europe was competing with Great Britain for available balances.<sup>22</sup>

It is frequently forgotten that exchange rates involve more than one country, and hence any measure taken by one country, which brings about an improvement of the exchanges, necessarily results in a reduction of the value of other currencies. The writer of the money article in the *Volkswirtschaftliche Chronik* describes the various methods employed in 1924 to improve the exchanges or, at least, to prevent depreciation. Great Britain introduced a vigorous discount policy; Holland, Sweden and Argentina exported gold; Germany, France, Belgium, Holland, Austria, Hun-

<sup>17</sup> *Banco d'Italia Report*, 1924, pp. 8-9.

<sup>18</sup> Strong Bill, Stabilization: Hearings, House Banking and Currency Committee (69:1), 1926, I, pp. 336-37.

<sup>19</sup> *Ibid.*, p. 476.

<sup>20</sup> *Ibid.*, pp. 501-9.

<sup>21</sup> Strong Bill, Stabilization: Hearings, House Banking and Currency Committee (69:1), 1926, II, p. 826.

<sup>22</sup> "Einzelschriften zur Statistik des deutschen Reichs." *Die deutschen Banken*, 1924-26, p. 22.

gary, Czecho-Slovakia, Japan and other countries borrowed abroad; Germany rationed credit; Czecho-Slovakia regulated the exchange market.<sup>23</sup> What is advantageous for one country is often disadvantageous for another.

*To conclude.* In commenting on the causes of the fluctuations in Sterling in 1921-24, the writer may seem to have emphasized unduly non-monetary causes. Hawtrey has clearly pointed out that the appreciation of 1922 and the early part of 1923, the depreciation in the next year, and the appreciation of the latter months of 1924 and the early months of 1925 are to be accounted for in large part by the fluctuations in prices in the United States. On the other hand, we should also consider the history of British prices. Prices declined more rapidly in Great Britain in the last few months of 1920 and in 1921, rose more rapidly than prices declined in the United States in the 1923-24 period referred to above, and in the 1924-25 period, prices declined in England to the same extent that prices rose in the United States.

Many of the non-monetary factors referred to in the discussion in this chapter are of uncertain significance; and price movements in large part explain the non-monetary movements.

<sup>23</sup> "Die Entwicklung des internationalen Geldmarktes 1923," *Jahrbücher für Nationalökonomie*, 1924 (122), pp. 352-61.

## CHAPTER VII

### PURCHASING POWER PARITY AND MONETARY POLICY

I AGREE with Robertson that Cassel's theory of the foreign exchanges has served a useful purpose.<sup>1</sup> The Bullionists, a century ago, supported a position similar to Cassel's; but the politicians, Tooke, and others emphasized the adverse balance of payments as the important cause of the depreciation of the exchanges; and the position of responsible statesmen in the Great War was not unlike that of their predecessors.<sup>2</sup> Cassel, in demonstrating that the depreciation of the exchanges was not a phenomenon independent of the internal monetary conditions, revealed to the authorities that causes, other than speculation, the loss of foreign investments, and the like, may have been responsible for the unfortunate position of the exchanges. In subjecting his theory to the rigid test of empirical verifications, Cassel has revamped, modified, and conceded until Miss Van Dorp accuses him of having abandoned his earlier position;<sup>3</sup> and, in the introduction to the French edition of Cassel's *Money and Foreign Exchange After 1914*, Cassel takes a position fundamentally different from Ricardo's.<sup>4</sup>

Early critics disagreed with Cassel on the causal and time relationships.<sup>5</sup> They maintained that fluctuations in the external value preceded those in the internal value, that move-

<sup>1</sup> D. H. Robertson, "Taussig: International Trade," *Economic Journal*, 1928, pp. 277-78.

<sup>2</sup> T. Tooke, *op. cit.*, IV, pp. 132-33. W. Blake made a significant statement of the theory a century ago. "Observations on the Principles which Regulate the Course of Exchange," in McCulloch's *Tracts*, p. 23.

<sup>3</sup> E. C. Van Dorp, "Abnormal Deviation in International Exchanges," *Economic Journal*, 1920, p. 412.

<sup>4</sup> A. Posé, "La Théorie de la Parité des Pouvoirs d'Achat et les Faits," *Revue d'Économie Politique*, 1926 (402), p. 1009.

<sup>5</sup> I am rather doubtful whether the causal relationship from prices to exchanges is a necessary part of the theory as it is generally stated. Compare E. L. Dulles, *op. cit.*, pp. 21-22, 26-27 and J. W. Angell, *op. cit.*, pp. 186-87.

ments of capital and trade, and speculation all had repercussions on the internal value of the currency, and that these international movements were not determined by fluctuations in the internal value of the currency. They could point to Germany where exchange depreciation preceded internal depreciation, where in the later stages of depreciation, internal prices were adjusted to the changing quotation of the dollar, where the pressure on the exchanges resulting from the demand for dollars and pounds for the payment of Reparations seemed to the casual observer to be the only weighty explanation of the precipitate decline of the mark. In concentrating upon the speculative factors, the balance of trade, the balance of payments, and the like, the German and French writers were emphasizing the factors in the situation to which their attention was most easily brought. The Germans, who witnessed the continual depreciation of the mark that resulted from the large purchases of necessities abroad and from the heavy payments to the Allies, and the French, who, unable to explain the large fluctuations in the value of the franc by movements in price levels or in the balance of payments, emphasized the speculative movements of short term capital, found it easy to label Cassel and his supporters as "doctrinaire."

Comparatively unhampered by unfavorable conditions in the foreign exchange market, the British, who were the first to present the Purchasing Power Parity doctrine, accept it quite generally. In order to improve the exchanges, it was necessary, in the opinion of the Cunliffe Committee, to strengthen Sterling at home. Pigou, Keynes, Cannan and the editors of the *Economist* accept the doctrine in its essentials, although they revise and amplify. (More recently, Keynes has denied the validity of the theory.)<sup>6</sup>

Nevertheless, the most searching criticisms of the doctrine have emanated from Englishmen. Flux inquires whether traded or non-traded commodities or both are to be included in the index numbers employed in applying the theory. He points out that the index numbers of Great Britain and the United States reflect the changes in the value of the cur-

<sup>6</sup> J. M. Keynes, *A Treatise on Money*, I, p. 89.

rency for internal purposes, rather than for external purposes.<sup>7</sup> In the opinion of Keynes, general index numbers are acceptable only on the assumption that the prices of goods not entering into foreign trade move in the same direction and with the same intensity as international commodities. In applying the doctrine to a discussion of stabilization, Pigou excludes non-traded commodities and would determine the proper level of stabilization by a comparison of prices of traded commodities and an allowance for speculative factors. Certainly if interpreted in that manner, the parity doctrine is not of great importance.<sup>8</sup> Keynes criticized the application of the doctrine on the grounds that index numbers were based primarily on the prices of unsheltered commodities, equal in price everywhere; and Gregory, who defended the available index numbers, replied that few commodities are to be found, the prices of which are not influenced by changes in the prices of traded commodities.<sup>9</sup>

However, on the whole Keynes is a defender of the theory.<sup>10</sup> He presents an admirable statement, well balanced and concise.<sup>11</sup> The revamped theory is, however, far removed from Cassel's statement of it. Most of the difficulties arise from the necessity of including non-traded commodities. Otherwise the doctrine would be little more than a truism. Keynes is well aware of the assumptions on which the general index number is used. On the validity of the assumption of movements of similar proportions between traded and non-traded commodities, depends in large part the acceptance of Cassel's theory. Why should fluctuations in the exchanges be determined by fluctuations in prices, or why should external and internal values move harmoniously unless the movements of prices of non-traded and traded commodities are similar? Moreover, the recent monetary history of Great Britain and other countries is evidence of the fact that the prices of traded

<sup>7</sup> A. W. Flux, *Foreign Exchanges*, ch. 3; also R. S. J., 1921, pp. 449-50.

<sup>8</sup> A. C. Pigou, *Political Economy of War*, pp. 168-73.

<sup>9</sup> T. E. Gregory, *The First Year of the Gold Standard*, pp. 15-16.

<sup>10</sup> I should say *was* a defender, for as this book goes to press, I note that Keynes now writes that the Doctrine has been illegitimately extended "to the Purchasing Power of money itself." His emphasis on the dissimilarity of movements of different types of index numbers or groups of commodities, necessarily forces him to this conclusion. J. M. Keynes, *A Treatise on Money*, I, pp. 72-73.

<sup>11</sup> J. M. Keynes, *A Tract on Monetary Reform*, pp. 90-97, also see J. W. Angell, *op. cit.*, pp. 186-89.

commodities are frequently not adjusted to fluctuations in the external value of a currency, even after the lapse of a few years.

Aftalion presents the Continental viewpoint well. French experience has not vindicated the Purchasing Power Parity doctrine.<sup>12</sup> One cannot conclude from an accidental agreement of internal and external values that the latter are explained by the former. He also criticizes the balance of payments school: accounts always balance; the important question is the manner in which they balance. The speculative factor is of greater importance than ever before. Economic and political events can bring about a loss in confidence and thus affect the external value. The psychological factor is of importance; it operates both qualitatively and quantitatively. Professor Allyn A. Young and Miss Dulles, interested in the French experience, put much emphasis on the speculative factor. The movement of balances, the sale of securities, and even the anticipation or postponement of purchases of and payments for commodities are all considered as speculative factors.<sup>13</sup>

The subject is discussed in an interesting manner in the *Memorandum on Currency* (1913-23) of the League of Nations.<sup>14</sup> It is conceded that it is impossible to make accurate allowances because indices are constructed differently and because other inaccuracies are met with. The difference between the actual exchange rate and the rate estimated on the basis of purchasing power parity for countries with relatively stable exchanges, suggests that the error is no greater than 10 per cent. Can we be certain that the discrepancy of 10 per cent reflects the inaccuracies, or may there not have developed a change in normal relations? Also, of what significance is the relatively small divergence for currencies close to parity for a doctrine that is applied fundamentally when monetary conditions are abnormal? Does it necessarily follow that an allowance of only 10 per cent is to be made when the exchanges are depreciated 80 per cent and are fluctuating wildly?

<sup>12</sup> A. Aftalion, *Monnaie, Prix et Change*, pp. 241, 250-65, 70-71, 279-82, 292-93, 310.

<sup>13</sup> E. L. Dulles, *op. cit.*, pp. xiii-xiv, 37-42. Compare A. Aftalion, *op. cit.*, p. 310.

<sup>14</sup> League of Nations: *Memorandum on Currency, 1913-23*, p. 42.

It is observed in this Memorandum that deviations are larger when depreciation is greater, and, contrary to current opinion, that exchanges are as frequently above the purchasing power parity level as below. Does not a popular misconception arise here because economists fail to consider that between any two countries, exchange depreciation for one results in exchange appreciation for the other? The popular practise of comparing all currencies to the gold dollar, is unfortunate because the relation between paper and gold currencies receives exclusive attention, and the relation between paper currencies, particularly important with most countries of the world on a paper standard, is neglected.

Keynes warns us against one pitfall: the apparent deviation from a parity level may in fact be accounted for by changes in normal relationships.<sup>15</sup> But others have not escaped this pitfall. Even Professor Kemmerer makes an error when he advises South Africa to return to a gold standard on the grounds that the price level (gold prices) in South Africa was the lowest in the world and hence a further reduction in prices would be unnecessary.<sup>16</sup> It may well be that a country that was finding great difficulties in exporting its most important commodities (gold and diamonds) might have suffered a loss of economic strength. In 1922-24, several central European countries had price levels (in stable currencies) that were appreciably below 100 (base of 1913).<sup>17</sup> Economists pointed out that external depreciation had advanced more rapidly than internal depreciation, and that these countries were disposing of their goods at ruinously low prices. But it was not entirely a question of rapid depreciation at home. The normal price level had fallen relative to that of other countries.<sup>18</sup> The bargaining position of these countries was affected adversely. Throughout the world, the rise in the prices of agricultural com-

<sup>15</sup> See the discussion in League of Nations: *Memorandum on Currency and Central Banks*, 1913-25, I, pp. 8-9. The underlying assumption seems to be that the Terms of Trade before 1914 have been maintained.

<sup>16</sup> *Resumption of Gold Payments by the Union of South Africa*, Report, paragraphs, 20-22. Also see W. A. Brown, Jr., *op. cit.*, pp. 56-57.

<sup>17</sup> The Federal Reserve Board recently divided European countries into two groups, one of which included countries that passed through a period of extreme depreciation. In no instance did a country in that group have a price level above 150 (Base 1913); and in no instance did a country in the other group have a price level below 150. *Federal Reserve Bulletin*, 1925, pp. 677-78.

<sup>18</sup> Consider the low prices (gold) of commodities in France in 1926-27. A. Aftalion, *Monnaie et Industrie*, pp. 50-55.

modities since 1917 has not been as marked as that in other commodities. That is a symptom of a loss of economic strength by agricultural countries.

Many attempts have been made to test the doctrine.<sup>19</sup> According to an investigation made by Ollivier, the deviations from parity were not marked where depreciation was moderate; but where depreciation was far advanced, deviations were very large. He arranges a number of countries in order of internal and external depreciation at regular intervals in 1920-21 and finds that if each country is ranked in order of internal and external depreciation, the position of each country in 1920 was identical for both series in 87 out of 138 instances, and in 1921, for 66 out of 150 countries. Ollivier considers the correlation high; but this is a rough measure of correlation.<sup>20</sup> Posé, in a study of post-War monetary conditions, concludes that the doctrine is confirmed only by the history of Great Britain, where, however, the exchanges were appreciably above the parity level from 1921 to 1923.<sup>21</sup> In the opinion of Fanno, English exchanges were close to the theoretical parity level after the removal of control, except for the years 1920-21. The possibilities of large deviations from parity over relatively long periods have been realized in wartime Germany under conditions of isolation, in Italy when the export trade was seriously impaired, and in Great Britain when exports to Scandinavian countries were prohibited. Large deviations were possible under restricted conditions.<sup>22</sup> Germany's exchange history from 1914 to 1924 can scarcely be explained by the doctrine. France's and Italy's experiences in the same period are satisfactorily explained in this manner only if we use Keynes' presentation of the theory which makes of it a relatively long time theory. Thus we have a theory developed to explain abnormal monetary experiences which applies only over long periods.<sup>23</sup>

<sup>19</sup> The significance of empirical tests depends in part upon whether the causal relationship is a necessary part of the theory. Thus Aftalion says that an agreement between internal and external values is not proof of the validity of the doctrine. *Monnaie, Prix et Change*, pp. 278-82.

<sup>20</sup> M. Ollivier, "Le Change et le Prix," *Revue d'Économie Politique*, 1922 (36), pp. 420-47.

<sup>21</sup> A. Posé, *op. cit.*, pp. 987-1013.

<sup>22</sup> M. Fanno, *Inflazione Monetaria e Corso dei Cambi*, pp. 86-98.

<sup>23</sup> The League of Nations' study of prices and exchanges offers little comfort to the supporter of the doctrine. League of Nations: *Memorandum on Currency*

Continental writers were inclined to emphasize the influence of the balance of payments, and they have sometimes gone to absurd lengths. Elster, a disciple of Knapp, who has always insisted that changes in the balance of payments exclusively determine exchange fluctuations, contends that movements in prices are determined by fluctuations in the supply of and demand for exchange. To prove that exchanges are not influenced by the internal price level, he points out that before the War the mark could buy as much as the dollar.<sup>24</sup> Bonn's position, although not so extreme, is, however, scarcely defensible: <sup>25</sup> "In other words, the price of foreign bills of exchange at any time is determined by the status of the foreign debt at that time: If there is a balance on the credit side of the ledger, prices will fall even though there has been an increase in circulation."

Bendixen, a well-known nominalist, makes the ingenious but scarcely defensible point that foreign currencies are bought merely to make payments, and hence the external value of the currency is determined by the internal price level. Bendixen minimizes the significance of political and speculative factors.<sup>26</sup> In the opinion of Diehl, the Brest-Litovsk Treaty, which was followed by an appreciation of the external value of the mark was an announcement of a favorable change in the balance of payments.<sup>27</sup>

A more moderate position is taken by Hahn.<sup>28</sup> The balance of payments is a relevant consideration, but fluctuations in the balances are possible only because they have been preceded by changes in prices. But he concedes that in so far as exchanges are affected by items in the balance of payments other than the balance of trade, internal prices are determined by the prices of the foreign exchanges. At a later stage, he explains movements in the balance of payments by fluctuations in the quantity of money.

and *Central Banks*, 1913-24, pp. 40-41. Also see *Memorandum on Currency*, 1913-22, pp. 35-30. Of fifteen countries studied, eight had currencies consistently undervalued. Keynes' results for France, Italy, and Great Britain are not convincing. *Op. cit.*, pp. 103-5.

<sup>24</sup> K. Elster, *Die deutsche Valuta*, pp. 11-17, 36-37.

<sup>25</sup> M. J. Bonn, *Stabilisation of the Mark*, p. 38.

<sup>26</sup> F. Bendixen, *Währungspolitik und Geldtheorie im Lichte des Weltkrieges*, p. 170.

<sup>27</sup> K. Diehl, *Über Fragen des Geldwesens*, pp. 43, 44. Also see pp. 1-5, 21.

<sup>28</sup> A. Hahn, *Geld und Kredit*, especially pp. 7-8, 13, 23-24.

The flight from the mark was the result of large issues of money. The discrepancy between the internal and the external value of the mark in the post-War period, which has perplexed the defenders of Cassel's position, is explained by the reduction of exports, legal prohibitions and technical difficulties. To accelerate the rate of depreciation, additional issues of notes are not necessary; a diversion of purchasing power to the exchange market is adequate.<sup>29</sup>

Mises takes an extreme position. An excess of imports is impossible without the stimulus of a reduction in prices; if indispensable commodities are imported in large quantities, dispensable commodities will not be imported, and the exportation of dispensable commodities will be encouraged.<sup>30</sup> Mazzei contends that the balance of payments can have only a temporary effect.<sup>31</sup> The absurd lengths to which the parity doctrine can be carried and the misinterpretation from which it may suffer, are well illustrated by Stuart's discussion in which he maintains that if the purchasing power of 1000 marks in Germany and 30 florins in Holland were equal, the mark and the florin would be of equal value.<sup>32</sup>

In his study of German war finance, Rist adheres to a parity doctrine; but in his later study of deflation, he pays more attention to the balance of payments.<sup>33</sup> The phenomenal rise of Sterling is explained by the increased confidence that followed upon a courageous budgetary policy. Was the change in emphasis the result of the impression made by the chaotic history of the franc in the interim? To Bonnet, the sequence appears to be appreciation of the exchanges, increase in prices, and increase in note issues.<sup>34</sup>

Marshall's statement before the Gold and Silver Commission is not without interest to-day. If the external value of the rouble declined on account of the waning confidence of foreigners in Russia and remained relatively stable at home, the value of the rouble would remain low only until the exporters tried to dispose

<sup>29</sup> A. Hahn, *op. cit.*, pp. 32-38.

<sup>30</sup> L. Mises, *Die Geldtheoretische Seite des Stabilisierungs-Problems*, p. 40.

<sup>31</sup> I. Mazzei, *Il Cambio Italiano*, pp. 23-24.

<sup>32</sup> C. A. V. Stuart, "Die Valutafrage," *Jahrbücher für Nationalökonomie*, 1920 (114), p. 222.

<sup>33</sup> C. Rist, *Les Finances de la Guerre de l'Allemagne*, p. 179.

<sup>34</sup> G. Bonnet, *Expériences Monétaires Contemporaines*, pp. 119-22.

of their bills. As prices had remained unchanged in Russia, importers would be unwilling to pay more for roubles. But if disturbances are caused by fluctuations in the supply and demand for bills, which result from a withdrawal of capital from Russia, for example, exporters may then obtain a genuine bounty.<sup>35</sup> Marshall, however, was discussing traded commodities only.

Authorities who accept the parity doctrine, frequently assume a fatalistic attitude toward price movements, which is also applied to periods when most countries are on a gold standard. Prices rise in one or more countries, and through the effects of the increase on the exchanges and gold movements, the rise spreads. Frequently the process is not carefully thought out. It is not pointed out that in the absence of gold movements, the rise would not spread unless some particular country adopted a similar policy of expansion independently. Otherwise, exchange appreciation is an alternative; and this alternative is accepted by many countries.

In the early years of the War, Great Britain defended its monetary policy on the grounds that inflation was world-wide.<sup>36</sup> Later, Macrosty suggested that price increases in the United States were necessarily followed by increases in Great Britain.<sup>37</sup> Hawtrey has described the process of inflation spreading from country to country, and has pointed out that it was possible for Great Britain to pursue an isolated policy.<sup>38</sup> It may be stated here that the smaller the country, the more difficult it becomes to pursue an isolated policy in a period of inflation.<sup>39</sup>

Ricardo presents the orthodox position well in his chapter on the Tax on Gold. ". . . but while money is the general medium of exchange, the demand for it is never a matter of choice, but always of necessity. You must take it in exchange for your goods, and, therefore, there are no limits to the quantity which may be forced on you by foreign trade, if it falls in value, and no reduc-

<sup>35</sup> A. Marshall, *Official Papers*, pp. 173-74.

<sup>36</sup> Compare H. S. Foxwell, *Papers on Current Finance*, pp. 241-44.

<sup>37</sup> H. W. Macrosty, "Inflation and Deflation in the United States and United Kingdom, 1919-23," *R. S. J.*, 1927, p. 101.

<sup>38</sup> R. G. Hawtrey, "Keynes: A Tract on Monetary Reform," *Economic Journal*, 1924, pp. 29-30.

<sup>39</sup> *Final Report of the Irish Banking Commission*, 1926.

tion to which you must not submit if it rise.”<sup>40</sup> Cannan also takes an extreme position. “The currency policy of a single nation can no longer affect the purchasing power of its money except in the trifling degree in which it can affect the purchasing power of bullion in the world, by slightly increasing or decreasing the total demand for it.”<sup>41</sup> Wieser, however, contends that national conditions should play a rôle in the determination of prices, and that authorities should not defend the lack of vigor in their price policy on the grounds that prices are determined by world conditions.<sup>42</sup> Cannan and Ricardo both have in mind conditions under a gold standard when national policies have not been of fundamental importance in the formulation of a price policy.

To sum up the discussion of the Parity doctrine: English experts seem to be increasingly critical; Continental writers have been skeptical from the beginning. The latter are inclined to overemphasize the significance of speculation, movements of balances and capital, and the like, and to minimize the relation of these movements to price fluctuations. The results of attempts at verification have not been consistent. Keynes’ most recent statement has perhaps been unduly critical. Hawtrey’s position, as presented in the chapter on the Foreign Exchanges in the third edition of his *Currency and Credit*, is more sympathetic, and on the whole, better balanced. He attaches some significance to the problem of the relation of the external value of the currency to the prices of traded commodities, and even to the movement of general price levels. However, he is not blind to the possibility of deviations from the parity level. The difference between the two comes down to the point that Keynes puts the emphasis on dissimilarities of movements in the prices of traded and non-traded commodities, and Hawtrey is more aware of the similarities in the price movements of the two groups. Also, Hawtrey seems to think that in putting the emphasis on *changes* in the rates of exchange, Cassel to some extent overcomes the diffi-

<sup>40</sup> D. Ricardo, *Works* (McCulloch’s edition), p. 115.

<sup>41</sup> E. Cannan, *An Economist’s Protest*, pp. 404-5. The *Remmerer-Vissering Report* has a similar statement. *Report on Resumption of Gold Payments in South Africa*, paragraph 31.

<sup>42</sup> V. Spitzmüller, “Die Sozialen Wirkungen der Währungsverhältnisse,” *Schriften des Vereins für Sozialpolitik*, 1923 (170), p. 113.

culty of the wide divergence between the price levels of home traded products in the two countries.

On the whole, Continental countries have carried through their stabilization projects by controlling the exchanges rather than the internal price level. However, the more powerful central banks introduced systems of rationing of credits and notes. But frequently, the explanation of these restrictions is that adequate supplies of currency were not available. The emphasis was placed on the external value because control of internal prices was not easy. Banking systems had been left in a weak condition as a result of the extreme depreciation; hence internal control was made difficult.<sup>43</sup> Moreover, foreign coöperation (and foreign speculation) might be used to support the external value.

Stabilization programs are easily upset by external influences. Stabilization generally comes as the culmination of many favoring circumstances. The appearance of some unfavorable circumstance is therefore more likely than usual. A political mishap, a crop failure, or a loss of confidence by foreigners, may prove disastrous.<sup>44</sup>

Countries that announced a program of deflation, soon discovered that if favoring economic conditions were present, external appreciation would advance at too rapid a rate; prices would be adjusted too slowly. The smaller the market for a currency the more effective are the activities of foreign speculators.<sup>45</sup> The recent history of Norway and Denmark is an excellent example.<sup>46</sup> The rise is likely to be at a very rapid rate if the country in question has no rival claimant for speculative funds. Perhaps

<sup>43</sup> F. Eulenberg, *ibid.*, p. 97. He points out that the banks had suffered as a result of the inflation. *Overseas Trade Report on Germany*, 1925, p. 10; League of Nations: *Memorandum on Currency and Banking*, 1913-23, p. 9.

<sup>44</sup> Poland, Yugo-Slavia and Belgium all had unfortunate experiences. T. E. Gregory, *op. cit.*, pp. 111-16. *Overseas Trade Report on Yugo-Slavia*, 1923. L. Franck, *Stabilisation Monétaire en Belgique*, pp. 30-59.

<sup>45</sup> In a few months the Greek drachma appreciated from 420 to 120 per dollar, largely as a result of a favorable tobacco crop and rumors of a refugee loan. *Overseas Trade Report on Greece*, July, 1923, p. 16. Also see *Bank of Finland Monthly Bulletin*, January, 1924, pp. 24-29.

<sup>46</sup> See *Overseas Trade Report on Sweden*, 1922, p. 10; 1923, p. 12; *Monthly Review of Midland Bank*, December, 1925, to January, 1926; "Norges Betalingsbalance, 1923 og 1924," *Statistiske Meddelelser*, 1925, pp. 488-90; "Private Aktiebanker i 1925," *ibid.*, 1926, pp. 459-60; League of Nations: *Memorandum on Currency and Central Banks*, 1913-25, I, pp. 60-61.

that accounts for the sensational rise of the Czecho-Slovakian crown in the early days of the stabilization era. The success of France is to be referred in no small measure to the fact that the French withdrew their balances from abroad and that the prices of French securities had been reduced to a low level.<sup>47</sup> The rise of the franc would have been less spectacular otherwise, for the franc market is relatively large. Perhaps the French Committee of Experts later regretted its recommendation for stabilization at a value above the current external value, for the rapid appreciation and influx of balances were embarrassing to the Bank of France.

Several Continental countries raised the external value of their currencies which had depreciated to an extremely low point, above the low values current before stabilization.<sup>48</sup> They also averted internal inflation either just before or after stabilization. Countries that had not suffered from advanced depreciation sometimes faced different problems. If they introduce a program of deflation, the external value generally rises more rapidly than the internal value. It becomes necessary then to depress internal prices to a point corresponding to the high external value.

A deliberate policy of inflation would be dangerous for a country that had not been inflating for some time. Germany, for example, had to introduce a deliberate policy of inflation in 1923 in order to bring the internal value of its currency down to the new stabilization level, which corresponded to the low external value. If internal inflation is considered necessary, it is well to introduce it in the early stages of monetary reform.

In programs of monetary reform, authorities have not always applied the Purchasing Power Parity doctrine, and, moreover, developments were not always easily explained in terms of this doctrine. Countries in Central Europe and, later, France and

<sup>47</sup> *Die Bank*, 1928, pp. 446-48. A. Aftalion, *Monnaie et Industrie*, pp. 34-35. The authorities attempted to divert the flow of capital in 1928 by raising the embargo on the exportation of capital. But this was interpreted as a sign of strength and hence the flow was increased. "Banque de France," *Compte Rendu*, 1928, pp. 4-5.

<sup>48</sup> V. Spitzmüller, *op. cit.*, p. 110; F. Gaertner, "Die Stabilisierung der Oesterreichische Krone," *Schriften des Vereins für Sozialpolitik*, 1923 (165), pp. 65-68. The Austrians adopted a similar policy a century ago. V. Hofman, *Die Devaluierung der Oesterreichischen Papiergeldes im Jahre 1811*, p. 4. The programs of the French and Italians were similar. *Rapport du Comité des Experts*, 1926.

Italy, fixed their exchange rates and anticipated that internal values would soon be adjusted to external values. On the whole, the evidence points to the conclusion that these countries were disposed to accept the external value as a better guide to the proper valuation of a currency. Gregory has pointed out that there are evils if stabilization is effected either at the higher external value or at the higher internal value.<sup>49</sup> Continental authorities have condemned a program of stabilization that necessitates internal inflation to bring about the adjustment of internal to external values.<sup>50</sup> On the other hand, adjustments of that type have been made with less difficulty than the necessary reduction of prices in Great Britain, Norway and Denmark.<sup>51</sup> Hawtrey, writing before the recent British experience, proposed stabilization at high external values in order to assure wage earners adequate wages;<sup>52</sup> but high wages may be undesirable during a period of unfavorable economic conditions. Of course adjustments of prices may not be necessary, because normal relations may have changed.

It was decided by the authorities of Great Britain that fluctuations of Sterling abroad could be controlled by controlling internal monetary conditions. English tradition pointed in that direction. Ricardo had said, "I cannot help thinking that there is no unfavorable exchange which may not be corrected by a diminution in the amount of the currency, and I consider this to afford a proof that the currency must be redundant for a time at least."<sup>53</sup> The Cunliffe Committee proposed to bring about an appreciation of Sterling abroad by reducing the amount of currency in circulation. In the opinion of Pigou, it was necessary to withdraw currency notes; later he suggested that the reduction of the currency might have a greater effect on the external than on the internal value.<sup>54</sup> Perhaps as later events proved, the au-

<sup>49</sup> T. E. Gregory, *op. cit.*, pp. 16-19.

<sup>50</sup> M. Palyi, "Verhandlungen über die theoretische und ökonomisch-technische Seite des Währungsproblems," *Schriften des Vereins*, 1925, (170), pp. 252-53. V. Spitzmüller, *op. cit.*, pp. 109-10.

<sup>51</sup> The *Federal Reserve Bulletin* observes that in 1924 the rise in European exchanges was general; but a corresponding rise in internal values did not occur. *Federal Reserve Bulletin*, 1925, pp. 195-96.

<sup>52</sup> R. G. Hawtrey, *op. cit.*, pp. 88-89.

<sup>53</sup> *Ricardo's Letters to Malthus*, XII.

<sup>54</sup> A. C. Pigou, *Political Economy of War*, pp. 174-75; "Some Problems Foreign Exchange," *Economic Journal*, 1920, p. 470.

thorities were too optimistic about the ease of adjustment; the difficulty was that Sterling appreciated too rapidly abroad. But important authorities, *e.g.*, Baldwin and Barclay's Bank, were aware of the difficulty; but they would not delay the program of stabilization on that account.<sup>55</sup>

<sup>55</sup> The Bradbury Committee was aware of the difficulty. *Monthly Bulletin of Barclay's Bank*, February, 1925; 170 H. C. Cols. 1083-90, and G. Bonnet, *Expériences Monétaires Contemporaines*, pp. 164-65; *Monthly Review of Midland Bank*, February, 1925.

## NOTE I

### PRICES AND EXCHANGES, 1914-1924

THE following survey of the history of prices and exchanges is based on the daily exchange quotations, 1914-21, published by Diessen, and the price and exchange statistics published by the League of Nations in its various publications.

In general, the upward movement of prices was more marked in Great Britain than in the United States, the Dominions and neutral countries. But in the Netherlands, the rise was more rapid than in Great Britain even in the early years of the War. In Australia, the increase was at a more rapid rate in 1915, and in Sweden and Japan it was more rapid than in Great Britain in the latter part of the War and in the early post-War period. In general, prices in non-belligerent countries rose more rapidly than in Great Britain in 1918.

The reduction of prices was greater and more rapid in Great Britain than in its Dominions or in neutral countries. In the United States, prices declined more rapidly than in Great Britain in 1920. In the first year of deflation, the decline was more precipitate in Sweden and Denmark than in Great Britain. In Australia, prices in 1922 and 1923 remained at a level (1913 base) approximately 20 or 30 per cent above the British level. But in 1924, the discrepancy was reduced appreciably, for prices rose in Great Britain and dropped in Australia. In 1922, prices had risen in Australia while they had declined in Great Britain. Generally speaking, the price movements of the Dominions and neutrals in the post-War period were in the same direction but of less intensity than in Great Britain. One should distinguish movements from the average of one year to that of the next year, from movements from December to December. For example, the increase in average prices in Great Britain for 1922 over 1921 was marked, but from December, 1921, to December, 1922, the increase was moderate.

There are several significant examples of independent price policies. When Great Britain introduced deflation in earnest, many countries refused or were unable to follow, with the result that Sterling appreciated. On the whole, the less advanced countries economically did not follow. Japan, Spain, Portugal, Denmark, Norway and several South

American countries suffered from exchange depreciation during this period. Central Europe, France and Italy faced fiscal problems which made continued deflation impossible. Price histories were not always similar even for countries that in general had a political and economic history similar to Great Britain's. Thus prices were relatively stable in the Netherlands and Switzerland in 1922 although their exchanges appreciated at a more rapid rate than Great Britain's. In 1923, prices declined in the Netherlands, Sweden and Egypt, and were stable in South Africa, although they rose in Great Britain.

As might be expected, Sterling depreciated in the period in which the rise in prices was relatively rapid in Great Britain, and appreciated when the rise was more rapid abroad or the decline less rapid. But all major fluctuations in the exchanges are not to be explained in this manner.

In the early months of the War, Sterling was strong in some markets and weak in others. In general, the fluctuations in Sterling of the currencies of European neutrals were similar. Exchange quotations were determined by monetary and economic conditions in neutral countries as well as in Great Britain. Hence fluctuations of neutral exchanges were not always in the same direction. Thus, Spanish exchanges (in Sterling) appreciated while Swiss and Swedish exchanges depreciated in January and February, 1915. In April and May, Swedish and Swiss exchanges rose (depreciation of Sterling) while Spanish exchanges suffered a marked decline. The marked decline in Swedish exchanges in November and December, 1917, was not equalled by the other neutrals. However, Sweden had had a notable appreciation in October. In 1916-17, Sterling acquired a measure of stability, especially evident in the Dutch and Norwegian exchanges. In fact, fluctuations in the Dutch exchanges (Sterling) were less extreme than in those of other neutrals throughout the War. A study of the Dutch figures gives the impression of support for Sterling by artificial methods.

Sterling was weak in 1915, but was stronger in 1916. A recovery was made from May to July. France apparently received strong support in 1916. In the latter part of the year, Sterling began to decline again in European markets. After the United States entered the War, the support of Sterling in neutral markets seems to have been withdrawn. It declined rapidly except that in terms of Sterling, the peseta depreciated in July and August, 1917, and the Swedish currency fell in value in November and December. With the exception of a speculative rise in April, the lira continued to fall in terms of Sterling; but the franc apparently received more support. The decline of the Swedish kroner

from October, 1917, to January, 1918, was probably caused by inflation in Sweden.

Neutral exchanges in terms of Sterling continued to appreciate through May, 1918. In June, however, the turn of events at the Front was reflected in an appreciation of silver. The quotations for the lira and franc were much higher in July and August. On the whole, prices rose more rapidly in Great Britain in 1918 than in neutral countries.

Sterling was unpegged in March, 1919. The franc and lira depreciated in terms of Sterling throughout the year. Neutral currencies depreciated from May to July. Perhaps the weakness of these currencies was a source of strength for Sterling, for large transfers of capital to London were effected. However, neutrals also used balances in London to remit to New York. In the second half of 1919, the exchanges of European neutrals in terms of Sterling appreciated. Perhaps England had been over-zealous in financing the foreign trade of neutral Europe. But the necessity of remitting to New York forced neutrals to consume London balances in an attempt to save their currencies from depreciating in New York. This was the first opportunity to put the large supplies of cash acquired since 1914 to advantageous use. The movement in neutral exchanges was reversed in the early months of 1920. South American currencies, which on the whole had been strong through the War and early post-War period, began to decline in value under the pressure of deflation in Great Britain. Late in 1920, fluctuations of Sterling in New York and Montreal were dissimilar for the first time. In November, an appreciation of 13 cents in Montreal was accompanied by an appreciation of but 3 cents in New York.

The peculiarity of exchange movements in the post-War period was that almost all the exchanges of the world followed Sterling rather closely in its irregular climb to parity. Even South American countries, unable to pursue a vigorous policy of deflation, suffered from periods of appreciation and depreciation, which if less violent, were strikingly similar to the movements in Sterling. European countries—Spain, Norway, Denmark—that were unable to follow Great Britain closely had a favorable movement (dollar exchange) in 1921-22, an unfavorable movement in 1923, and a favorable movement in 1924-25. The correlation was strikingly close between London on the one hand and Amsterdam, Berne and Stockholm on the other. The rise of the currencies of the three neutral countries was somewhat sensational. Their currency policies were not more courageous; but speculative influences operating on the currency of a small country are more likely to be effective.

## NOTE II

## BILL MARKET

Even before the War, many observed that foreign bills were disappearing, and that cash transactions were being substituted.<sup>1</sup> Central banks had for many years used bills of exchange payable abroad as a means of controlling the exchanges and movements of gold.<sup>2</sup>

Bills are not exclusively foreign. Therefore caution is necessary in using the figures for bills when drawing conclusions concerning movements of foreign bills. (In fact, Treasury bills are included in Bills Discounted of most British banks.) According to the general manager of a London joint stock bank, the bill portfolio of British banks was composed in large part of local trade bills.<sup>3</sup> He also informed the National Monetary Commission that banks do not grant acceptances to London customers.<sup>4</sup> Hence, bankers' bills—as distinguished from trade bills—were in large part foreign bills. German banks grant acceptances to customers grudgingly: they find competition makes it necessary, although it is not as profitable to discount a bill as to make an advance.<sup>5</sup>

The bill market was adversely affected by the Great War. Merchants, disturbed by the unstable conditions of the War, and concerned over the instability of the exchanges, demanded cash payments.<sup>6</sup> Bank advances were substituted for bills. Canadian exporters now drew bills on London infrequently, and instead borrowed from the banks directly.<sup>7</sup> From 1914 to 1916 French importers were unable to induce exporters to draw bills on them.<sup>8</sup> From July, 1915 to January, 1916, the value of

<sup>1</sup> Testimony of A. Bogie, General Manager of Commercial Bank of Scotland. *Interviews*, National Monetary Commission, pp. 180-81; also W. Prion, *Dus deutsche Wechseldiskontogeschäft*, p. 205.

<sup>2</sup> Holdings of foreign bills of Swiss banks, in so far as they have been revealed, have been on the increase since the eighties, although the tendency was downward in the ten years preceding the War. Unfortunately, holdings of all foreign bills are not disclosed. A. Jöhr, *Die Schweizerischen Notenbanken*, pp. 408, 454-55. The Bank of Japan was increasing its portfolio of foreign bills before the War. O. M. W. Sprague, *The Banking System of Japan*, pp. 198-99.

<sup>3</sup> The holdings of domestic bills of Swiss banks were ten times as great as of foreign bills just before the War. A. Jöhr, *op. cit.*, pp. 454-55.

<sup>4</sup> *Interviews*, National Monetary Commission, p. 91.

<sup>5</sup> Franz estimated that 80 per cent. of all bills held by German banks were bankers' acceptances. *Miscellaneous Articles on German Banking*, National Monetary Commission, pp. 83-84.

<sup>6</sup> W. Lotz, *Deutsche Staatsfinanz-Wirtschaft im Kriege*, p. 89.

<sup>7</sup> *Commercial and Financial Chronicle*, March 18, 1916.

<sup>8</sup> *L'Économiste Français*, May 20, 1916.

foreign bills held by the Bank of Netherlands was reduced from 20.2 millions guildens) to 4.3 millions.<sup>9</sup>

By applying D. O. R. R. 41D and 41DD, the British Government discouraged the unrestricted use of trade bills; these provisions were not repealed until August, 1919.<sup>10</sup> In its extensive trading operations the Government dispensed with trade bills. When the meat business was commandeered by the Government, the English, Scottish, and Australian Bank complained of the loss of business.<sup>11</sup> At the annual meeting of the London and Liverpool Bank of Commerce, the Chairman said, "The Government controls every article of importance. They have either taken the trade out of the hands of the trader or are controlling it through them. Their method of financing the movement of the controlled article is entirely different."<sup>12</sup>

Also as a result of the War, the London market was deprived of large quantities of bills formerly drawn by enemy countries. The competition of the United States, the large transactions between Governments, the curtailment of foreign trade, and the amalgamation movement in banking, were also responsible for the reduction of Sterling bills.<sup>13</sup> A large part of all bills were drawn to finance British import trade, which suffered because of the War, and which was taken over in large part by the Government.

Fortunately for the banks, they were able to replace commercial bills with Treasury bills; especially during the War, they found the latter a profitable source of investment.<sup>14</sup> In the post-War period, the Government redeemed Treasury bills. Deprived of a profitable employment for their resources because of the decline of commercial bills in 1921 and 1922, the banks now purchased Treasury bills from the public to replace bills redeemed by the Government.<sup>15</sup>

The marked reduction of bills in the early years of the War left the money market with surplus resources available for the Government;

<sup>9</sup> G. Vissering, "Netherlands Bank and the War," *Economic Journal*, 1917, p. 162.

<sup>10</sup> *B. T. J.*, October 2, 1914.

<sup>11</sup> Meeting of November 1, 1916. *L. E.*, November 4, 1916.

<sup>12</sup> *L. E.*, February 9, 1918.

<sup>13</sup> J. Sykes, *Amalgamation Movement in British Banking, 1825-1924*, pp. 173-75. Sykes points out that absorption of foreign banks, increases in Telegraphic Transfers and unwillingness on the part of the large banks to guarantee and purchase more than a moderate amount of bills guaranteed by one firm, were all tending to curtail the supplies of bills.

<sup>14</sup> Brand put the bills outstanding in 1914 at 300 millions. R. H. Brand, *War and National Finance*, p. 49. Also see F. Lavington, *English Capital Market*, p. 128.

<sup>15</sup> Barclay's Meeting, January 25, 1922, *L. E.*, January 28, 1922; Meeting of London, Joint City and Midland, January 23, 1923, *L. E.*, January 27, 1923. Committee on National Debt and Taxation, *passim*.

and the substitutions of direct for indirect advances to the Government can scarcely be considered inflationary. To disregard the effects of the decline of bills, is to exaggerate the inflation of the early years of the War; and the rapid decline in the commercial bills outstanding in 1921-22 was one of the most important symptoms of deflation.

From an examination of the figures and reports of individual banks, it becomes apparent that bills were reduced to a very low level in 1915, became somewhat more plentiful in 1916 and fluctuated moderately in 1917 and 1918. Advances were frequently substituted for bills. Three discount houses held but 33 millions of bills at the end of 1914, as compared with 43 millions the previous year. The *Bankers' Magazine* points out that finance bills were at a low level, export firms were discouraging the use of acceptances, and foreigners were not borrowing from London.<sup>16</sup> According to Wyse, half of the bills circulating in London before the War arose from trade in which Great Britain was not a party. In his annual address to the shareholders, Mr. Goodenough, Chairman of Barclays, estimated that the totals of bills of exchange held by that bank were 14, 10 and 23 millions at the end of 1914, 1915 and 1916. They were mainly bankers' and Treasury bills.<sup>17</sup> The scarcity of trade bills was especially troublesome in 1915, and by 1916, the banks had purchased large supplies of Treasury bills. The quantity of bills was not always an adequate index for the purpose of comparing the amount of financing by bills, because shipping was sub-normal, and the quantity held was affected by the time required for remittance.

The supply of bills increased rapidly in 1919 and the first half of 1920; but the second half of 1920 and 1921 witnessed just as phenomenal a decline: trade bills at intervals were disposed of at more favorable prices than Treasury bills. From the middle of 1922 to 1924, the quantity of trade bills outstanding increased steadily.

Concerning the marked improvement in 1919 and 1920 there can be little doubt. The chairmen of several big London banks commented on the conspicuous increases for 1919. The Union Discount Company, overstocked with large quantities of fine trade bills, resorted to increased rediscounting. Although discounts of British banks declined in 1920, their holdings of commercial bills were much larger. (Treasury bills had been sold.) The *Bankers' Magazine* commented on a further contraction in the early months of 1922; but the *London Economist* estimated that the increase in commercial bills was approximately 50 per cent. The Chairman of the National Bank of Egypt early in 1921

<sup>16</sup> *B. M.*, 1915 (99), p. 231.

<sup>17</sup> Barclay's Meeting, January 24, 1917, *L. E.*, January 27, 1917.

attributed the decline of bills outstanding to the fall of prices, the loss of export trade, and to the fact that customers had accumulated such large balances that they were able to finance themselves without drawing bills.

D. Spring-Rice, an authority on the subject, announced, in 1923, that bills outstanding had increased to the level of 1914, at approximately 350 millions; and that joint stock banks had guaranteed 175 to 200 millions of bills outstanding in 1923 as compared to 50 millions in 1914.<sup>18</sup> The attainment of the pre-War position was especially gratifying, because with New York in a creditor position, finance bills had largely disappeared.<sup>19</sup>

If foreign or Dominion banks hold large balances in London, they are more likely to employ Telegraphic Transfers than bills, but if balances are low, the banks are more likely to substitute bills for T. T. Thus the English, Scottish and Australian Bank explained that the decline of bills in 1918 was to be accounted for by the wider use of T. T. stimulated by the accumulation of large cash balances in London.<sup>20</sup> The Bank of New South Wales accounted for the increase of bills in 1920-21 by the reduction of sales of T. T.<sup>21</sup>

An interesting development can be gleaned from the figures for advances on foreign bills by the Bank of Japan. The tendency to borrow on their security instead of discounting them in London or elsewhere was probably an important factor in reducing the supplies of bills. Thus the figures for advances on foreign bills by the Bank of Japan were:<sup>22</sup>

*Millions of Yen*

1914 .....	46	1920 .....	77
1915 .....	21	1921 .....	76
1917 .....	199	1922 .....	206
1918 .....	444	1923 .....	233
1919 .....	358		

The trend in the bill market is revealed to some extent by a study of bank statements and annual reports to the stockholders of important London banks, and of foreign and Dominion banks established in London.<sup>23</sup> Thus bills of exchange held by the Standard Bank of South

<sup>18</sup> *B. M.*, 1923 (115), pp. 423-24.

<sup>19</sup> *L. E.*, November 11, 1918.

<sup>20</sup> Franck, the Governor of the Bank of Belgium, observes, in 1927, that because of the instability of credit, the increased supplies of cash available and the improved banking organization, bills outstanding are at a lower level. *L. Franck, Stabilisation Monétaire en Belgique*, pp. 108-9.

<sup>21</sup> *L. E.*, July 16, 1921.

<sup>22</sup> *Quarterly Report on Financial and Economic Conditions in Japan*, May, 1923, p. 18.

<sup>23</sup> The total of bills held by English banks does not throw a great deal of light on this problem, because most banks include Treasury bills with Bills

Africa declined 50 per cent in 1914.<sup>24</sup> The Bank of New South Wales reported that its investments in bills receivable in London were at a lower level in 1916 than 1914, for wool and wheat had been paid for in cash.<sup>25</sup> However, several banks reported that the supply of bills on the market was appreciably greater in 1916.<sup>26</sup> There was apparently a change from the lethargic conditions of 1915. The bills payable of the Canadian Bank of Commerce had declined by about 67 per cent in 1915. Canada was becoming an exporting and creditor nation.<sup>27</sup> The Bank of New South Wales, and the Union Bank of Australia acquired more bills payable as a result of the great demands for exchange in 1915.<sup>28</sup>

The English, Scottish, and Australian Bank accounted for a large decline of bills in 1918 by the wider use of Telegraphic Transfers;<sup>29</sup> the Bank of New South Wales accounted for the increase in 1920 by an increase of transactions in bills available in London.<sup>30</sup> Almost all the banks reported increased holdings for 1919 and 1920. Thus see the reports of Parr's, and of the London, Joint City and Midland, and of the Union Discount Company.<sup>31</sup> Bills were scarce in 1921 and 1922,<sup>32</sup> but by 1923, large increases were reported.

Discounted and because all banks do not distinguish discounts from advances. In 1914, banks holding 60 per cent of all discounts and advances distinguished discounts from advances, and in 1924, approximately 85 per cent of all discounts and advances were distinguished. The most serious difficulty is that the relative proportion of Treasury and commercial bills is not known. The totals of bills discounted in so far as they are revealed were (from banking numbers of *L. E.*):

*Millions of £ Sterling*  
*December 31*

1914.....	88	1920.....	329
1915.....	63	1921.....	442
1916.....	119	1922.....	301
1917.....	183	1923.....	281
1918.....	307	1924.....	238
1919.....	263		

The reduction in 1915 is to be referred to the decline of commercial bills; the increase during the War to purchases of Treasury bills; the decline in 1919 to large sales of Treasury bills; the increase in 1920 to large purchases of commercial bills; and the decline in 1922-24, which would have been greater had not the banks purchased Treasury bills from the public, to the reduction of Treasury bills.

<sup>24</sup> *L. E.*, April 24, 1915.

<sup>26</sup> *Ibid.*, April 29, 1916, July 29, 1916.

<sup>25</sup> *Ibid.*, July 28, 1917.

<sup>27</sup> *L. E.*, April 24, 1915, February 5, 1916.

<sup>28</sup> *Ibid.*, July 15, 1916, August 5, 1916.

<sup>29</sup> *Ibid.*, November 16, 1918; also see *Report of London and Brazilian Bank*, April 27, 1918.

<sup>30</sup> *Ibid.*, July 16, 1921.

<sup>31</sup> *Ibid.*, February 7, 1920, January 31, 1920, January 22, 1921; *B. M.*, 1921 (112), pp. 16-17.

<sup>32</sup> The decline in bills has been attributed to the reduction of prices and of export trade, the large credit balances of customers and hence the absence of any need for financing by bills, and, finally, to business stagnation. *L. E.*, April 9, 1921, May 14, 1921.

If the development of an American acceptance market was not as rapid as many had hoped, much progress was made nevertheless in the first ten years of the history of the Federal Reserve System.<sup>33</sup> In October, 1915, American bankers suggested to Sir Edward Holden that English banks guarantee bills drawn by their customers on American banks in dollars, for in that manner 225 to 300 millions of dollars of bills would be outstanding at all times, which would constitute an advance to Great Britain. In its annual report for 1915, the Federal Reserve Board expressed disappointment at the slow development of the market for dollar bills.<sup>34</sup> But a marked improvement was apparent by the end of 1917. The Federal Reserve banks held 278 millions of acceptances by the end of 1917.<sup>35</sup> The Boston Federal Reserve Bank commented on the rapid development of the acceptance business, especially for the financing of import trade.<sup>36</sup> The New York Federal Reserve Bank reported that there were from 400 to 500 millions of dollar acceptances outstanding at the end of 1917, and that the largest development was in domestic transactions and trade between the United States and the Orient.<sup>37</sup>

Optimistic reports were plentiful in the post-War period. In 1919, there was a large increase in bills drawn to finance import trade with South America and the Orient.<sup>38</sup> The New York Federal Reserve Agent, in his Annual Report for 1921, made an estimate of the quantity of the prime commercial bills endorsed by bankers that were in circulation in the open market: End of year

	Millions of Dollars					
	1916	1917	1918	1919	1920	1921
Bills circulating . . . . .	250	450	750	1000	1000	600
Percentage held by						
Federal Reserve Banks	51	61	40	38	26	19

The New York Federal Reserve Bank purchased 2573 millions of bills in 1920 and 1364 millions in 1921, of which 103 millions were for foreign banks in 1920, and 311 millions in 1921.<sup>39</sup>

<sup>33</sup> Frederick said, in 1918, that the Sterling bills were still the most popular. *Ibid.*, December 21, 1918. He estimated that 210 millions of dollar acceptances drawn to finance foreign trade were outstanding at the end of 1918. *Federal Reserve Bulletin*, 1919, pp. 21-22. The London *Economist* made a similar statement in 1920, but admitted that large quantities of bills other than Sterling were on the market. *L. E.*, May 22, 1920.

<sup>34</sup> *Annual Report of Federal Reserve Board*, 1915, pp. 3-4.

<sup>35</sup> *Federal Reserve Bulletin*, 1918, p. 11.

<sup>36</sup> *Annual Report of Federal Reserve Bank of Boston*, 1916, pp. 9-10; 1917, pp. 8-9.

<sup>37</sup> *Annual Report of Federal Reserve Board*, 1917, p. 261. *Annual Report of Federal Reserve Bank of Boston*, 1917, pp. 8-9.

<sup>38</sup> *Annual Report of Federal Reserve Board*, 1919, p. 319.

<sup>39</sup> *Annual Report of Federal Reserve Board*, 1921, pp. 509-10.

At the end of 1924, the holdings of acceptances were larger than at any time since 1920. Exports of agricultural products were financed in large part by dollar bills.<sup>40</sup> In June, 1924, the London, Joint City and Midland Bank contended that Sterling bills were still used more frequently than any other type of bill.<sup>41</sup> At the end of 1925, 775 million dollars of acceptances were outstanding. The Federal Reserve Bank purchased 527 millions of export bills and 631 millions of import bills.<sup>42</sup> By 1928, the Federal Reserve Board estimated that one billion (dollars) of dollar acceptances were outstanding.<sup>43</sup>

#### SUMMARY OF NOTE 2

A reduction of foreign trade, the changes in the methods of financing it, and increased control by the Government resulted in a marked diminution of the supplies of Sterling bills. In 1914 and 1915, financial institutions were hampered by the scarcity of bills, but later they purchased large supplies of Treasury bills with satisfactory results. As trade improved in 1919 and 1920, the banks disposed of Treasury bills and purchased trade bills. But in 1921 and 1922, the supplies of the latter were once more below normal. By 1924, an appreciable improvement had been effected. The reduction of bills in the early part of the War and in 1921-22 was a source of strength for Sterling, and the net creation of bills in 1919-20 and 1923-24 was a source of weakness. Sterling bills are now relatively less important than in 1914. Foreign institutions are more inclined to finance foreign trade independently of British help, and New York has become a much more important bill market.

<sup>40</sup> *Annual Report of Federal Reserve Board*, 1924, pp 5-6.

<sup>41</sup> *Monthly Review of Midland Bank*, June, 1924.

<sup>42</sup> *Ibid.*, p. 8.

<sup>43</sup> *Federal Reserve Bulletin*, 1928, p. 562.

Book VII  
GOLD POLICY

CHAPTER I  
ECONOMIES

AFTER the War, Leffingwell, an American Treasury official, praised Great Britain for courageously using its gold.<sup>1</sup> However, although the British Empire had 98 millions (Sterling) of gold concentrated in banks and official depositories in 1914, it had 223 millions in 1919.<sup>2</sup> Great Britain had increased its supplies more rapidly than any of the Dominions. The Governor of the Bank of England admitted that because South Africa was in the danger zone, that country had no alternative but to accept British terms for the purchase of South African gold from 1914 to 1919.<sup>3</sup> Argentina protested at the unwillingness of belligerents to ship gold; and the large Argentine balances in London are evidence that Great Britain was an offender.<sup>4</sup>

The Bank of England mobilized the gold resources of the country and exported gold when the exchanges depreciated. The authorities did not make the appeals that were frequently made in France and Germany with a view to obtaining all available gold supplies from the public and the banks. A large part of the gold supplies of the joint stock banks was not transferred to the Bank of England until after the War. In the early years of the War, the Government may have applied some pressure, for it has been

<sup>1</sup> Fifth Liberty Bond Bill: Hearings, House Ways and Means Committee (65:3), 1919, p. 92.

<sup>2</sup> S. Montagu and Co., *Bullion Letter*, February 19, 1920. [Hereafter referred to as *Montagu Letter*.]

<sup>3</sup> Report of Committee on Indian Exchange and Currency (Babington-Smith Committee) 1919, Q. 2554. [Hereafter referred to as Indian Currency Committee.] Also see Committee on Embargo of Specie (South Africa), Q. 2203.

<sup>4</sup> Banco de la Nacion, 1916; Tornquist and Co., *Business Conditions in Argentina*, no. 192.

estimated that the banks placed £20 million of gold at the disposal of the Bank of England in August, 1915.<sup>5</sup> The London, Joint City and Midland Bank announced that it had transferred all its gold to the Bank of England except the minimum amount necessary for its safety. But the *Bankers' Magazine* seemed to be doubtful whether all banks had been equally generous.<sup>6</sup> Transfers were apparently made to the Government directly as well as to the Bank of England.<sup>7</sup>

Early in 1915, Lloyd George, concerned over the abnormal excess of merchandise imports over exports expressed a fear lest the supply of gold might be inadequate: however, he hoped to replenish the country's supplies with imports from South Africa.<sup>8</sup> The Treasury announced that if large gold shipments should become necessary, a committee of American and British bankers would be appointed to study the problem.<sup>9</sup> Chamberlain and McKenna<sup>10</sup> both emphasized the necessity of using gold. The very large shipments of 1915 and 1916 are evidence of the sincerity of their announcements. However, the Treasury was more cautious in 1916 than in 1915. Weber's contention that the goal of England's monetary policy during the War was the preservation of its gold supplies, is on the whole not justified.<sup>11</sup>

Great Britain did not ship all of its gold. Compared to the other European countries, England was in a relatively strong position because it had control of South African supplies and could sell securities abroad as well as borrow large sums. In 1920, after the joint stock banks had transferred the remainder of their gold to the Bank of England, the supplies at the Bank of England were larger than those at the disposal of all British banks before the War. It is apparent from the defense offered for the American lending policy by American Treasury officials that Great Britain was hesitant about exporting its gold after 1916.<sup>12</sup>

<sup>5</sup> *L. E.*, January 29, 1916.

<sup>6</sup> *B. M.*, 1915 (99), p. 499.

<sup>7</sup> Meeting of London, Joint City and Midland Bank, 1915.

<sup>8</sup> 69 H. C. Cols. 916-17.

<sup>10</sup> 70 H. C. Cols. 192-95.

<sup>9</sup> *B. T. J.*, January 21, 1915.

<sup>11</sup> A. Weber, *Depositenbanken und Spekulationsbanken*, p. 30.

<sup>12</sup> When Leffingwell supported a proposal to increase post War advances to Great Britain, he probably voiced the sentiment of Great Britain when he said that a further loss of gold would be disastrous to British credit. Fifth Liberty Bond Bill: Hearings, Ways and Means Committee (65:3), p. 93. He added, however, that submarine dangers had made further shipments dangerous. Argentina

English officials feared lest confidence in its credit and paper money structure be impaired.

The authorities used every conceivable substitute for the export of gold. Thus the acquisition of foreign credits was one method of economizing it. Later, the system of Special Deposits made withdrawals less advantageous for neutral countries. A consideration of the trade relations of Great Britain with the Dutch East Indies, throws some light on British gold policy. In 1914-15, the Java Bank on the one hand and the Bank of England and Lloyd's on the other contracted that the latter would hold gold in trust for the former, which would be exported at the request of the former. The Java Bank converted its London balances into Dutch balances in part, and requested the Bank of Netherlands to accept these deposits of Sterling at parity. In 1915-16, the agreement with the Bank of England was modified and the British authorities were allowed to convert the gold into British Treasury bills. However, the Bank of Java was assured of reconversion at a fixed rate and of the free disposal of its gold.<sup>13</sup> In 1916-17, the agreement to convert into Treasury bills or, possibly, into balances in Amsterdam, or into gold, was renewed. In fact, Great Britain shipped some gold. Later the Dutch East Indies agreed to accept payment from the English Sugar Commission in bills drawn on English banks, which might be converted into gold.<sup>14</sup> The Dutch East Indies found great difficulties in financing its export trade when gold embargoes became universal in 1917. Japan alone allowed the Bank of Java to earmark gold.<sup>15</sup> It is not generally known that Canada issued notes covered by British securities held in London, in order to save the Imperial Government from the necessity of exporting gold. The Imperial Government deposited £11 million of securities with the Bank of Montreal in London against which the Dominion issued \$50 million of notes.<sup>16</sup>

retained very large balances in Great Britain until 1918. Tornquist and Co., Report no. 139 (September, 1917).

<sup>13</sup> De Javasche Bank, "Aanteekeningen Bij De Statistieken," *Economisch-Statistische Berichten*, September 20, 1916, pp. 589-91.

<sup>14</sup> "Financiering Van Den Indischen Export," *ibid.*, October 17, 1917, pp. 770-71.

<sup>15</sup> Java Bank, *Annual Report*, 1917-18, p. 19.

<sup>16</sup> *H. C.*, Canada, 1919, I, p. 634.

A study of Great Britain's financial relations with India throws light on the British gold policy.<sup>17</sup> The financing of India's export trade and of important military expenditures in India and Mesopotamia, was a troublesome problem. Normally exchange banks would have imported gold which would have been exchanged for rupees, if the Government were unwilling to sell Council bills in quantities sufficient to satisfy all trade requirements. But the unavailability or expensiveness of gold gave the Government the power to determine how many rupees were to be put into circulation.<sup>18</sup> Unfortunately they were hampered by the rising price of silver and the distrust of paper money, and in spite of repeated protests, Great Britain refused to allow India to import more than inappreciable supplies of gold.

<sup>17</sup> See the discussion in the chapters on India.

<sup>18</sup> Even for gold that was available the official acquisition price was low enough to make the offer of gold to the Government unprofitable. W. A. Brown, Jr., *England and the New Gold Standard*, pp. 22, 30.

## CHAPTER II

### GOLD TRANSACTIONS WITH FRANCE

THE French were less willing to export gold than the English. Perhaps the explanation is that their needs were greater, and they feared that they would be unable to replenish their reserves. In the annual report for 1915, the Governor of the Bank of France announced that the Bank was opposed to the exportation of gold, on the grounds that the safety of French banking would be jeopardized.<sup>1</sup> But France's foreign credits were exhausted by the second half of 1915, and, therefore, the temptation to export gold was greater.<sup>2</sup> In February Lloyd George had announced that France and Russia would export gold to Great Britain when the British gold reserve was reduced to a designated point.<sup>3</sup> Apparently, France and Russia were not anxious to make this agreement.<sup>4</sup> Ribot announced in May, 1915, that in order to obtain 1.5 billion francs of credit abroad, the French Government had agreed to ship 500 millions of gold to Great Britain. Later, similar agreements involving larger sums were made. Russia exported £68 million of gold to Great Britain from 1914 to 1916; but these movements are not apparent from the figures published by the British Government. France continued to be concerned over the magnitude of its gold reserves.<sup>5</sup> In the dark days of

<sup>1</sup> *Compte Rendu de la Banque de France*, 1915, p. 11; also see *L'Économiste Français*, October 30, 1915, for a discussion of the exchange problem before the Economic Society.

<sup>2</sup> G. Jèze and H. Truchy, *The War Finance of France*, pp. 297-300.

<sup>3</sup> 69 H. C. Col. 917. Also see H. Asquith's *Memoirs*, II, p. 130. He comments on the unwillingness of the Allies to ship their gold to London.

<sup>4</sup> In the "Projet de Budget de l'Exercice 1923," the minister presented a summary of these transactions. (*Bulletin de Statistique et de Législation Comparée* 1922 (91), especially p. 868.) See also Ribot's "Exposé des Motifs," *ibid.*, 1916 (80), pp. 322-37; and C. Rist's summary in "Les Dettes Interalliées et les Réparations," *Revue d'Économie Politique*, 1926 (40), pp. 279-80.

<sup>5</sup> The pressure put upon the French public to give up gold was so great that a paper dollar became more valuable than a gold dollar. Governor Harding, before the Senate Committee on Currency and Banking, Hearings (65:2), 1918,

1918, Clemenceau made an urgent request of the United States to ship gold to France; in October, 1918, the American Treasury agreed to advance dollar credits to strengthen the position of the Bank of France.<sup>6</sup>

The gold sent to Great Britain by France during the War has been the subject of a long and bitter controversy between Great Britain and France. The controversy is evidence of the fact that countries still put a rather exaggerated importance on the necessity of maintaining large gold supplies. France has always maintained that gold was merely a loan from the Bank of France to the Bank of England, and that as soon as the loans given in exchange were repaid, the gold was to be returned. Great Britain has maintained that it could not return the gold because it had already been shipped to the United States. In one of the discussions on reparations, Poincaré and Bonar Law participated in an acrimonious discussion on this subject. Law insisted that the gold was to be returned only when the entire debt of France to Great Britain had been repaid. Poincaré replied that the memorandum on which Law based this claim was not binding, for it had been signed only by Keynes and Law.<sup>7</sup> An agreement has been made which on the whole vindicates France's position, and as the French Treasury has acquired large balances abroad, it has repaid British advances and has received its gold.<sup>8</sup> According to the agreement of 1926, France is to pay interest on a debt of £53.5 million against which Great Britain is to retain £53.5 million of gold previously remitted to London by the

p. 354. M. V. Bernatzky "Die Zusammenbruch der russischen Wahrung," *Schriften des Vereins*, 1924 (165), p. 41.

<sup>6</sup> Foreign Loans, Senate Judiciary (67:2), 1921, p. 65. Also see letters of Rathbone to Blackett and Crosby to Tardieu, *ibid.*, pp. 267-70. Perhaps that is the explanation of the repayment to France in 1918 of part of the gold deposited with the Bank of England. French and Jugo-Slavian Debt Settlements: Hearings, House Ways and Means Committee (69:1), 1926, p. 23.

<sup>7</sup> Poincaré insisted that the loss of gold would put the Bank of France in a bad light. The French delegation contended that the provision of the Calais Agreement was that £50 million of gold were to be returned when the French debt of £150 million was repaid. In 1917 and 1919, the British Government attempted to modify the agreement, but without success. Inter-Allied Conferences on Reparations and Inter-Allied Debts, State Papers, Cmd. 1912 (1923), pp. 162, 174-77.

<sup>8</sup> England paid interest on an advance included in the commercial debt which was equivalent to the gold deposited and shipped to the United States. The Bank of France repaid £7 million in 1918 and £10 million in 1923. French and Jugo-Slavian Debt Settlement: Hearings, House Ways and Means Committee (69:1), 1926, pp. 23-24; also see *L. E.*, April 2, 1927.

French Government.<sup>9</sup> Italy also made an agreement with Great Britain which provided for the return of the gold deposited during the War.<sup>10</sup>

In recent years, the Amtorg Corporation has accumulated documentary evidence of the financial relations between Russia and Great Britain in the War period, and P. N. Apostol has also presented much additional information.<sup>11</sup> It is revealed that Russia exported £8 million of gold to Liverpool in October, 1914, that Russia refused to transfer gold to Great Britain unless France made a similar sacrifice, and that advances to Russia for making foreign payments were not to be determined by the amount of gold given up by Russia. These authorities give the details concerning shipments and destinations. Russia obtained a non-negotiable credit from England, which was included with its "Gold Held Abroad," and which served as cover for notes. In all, Russia transferred two fifths of its gold reserves to the Allies during the War.

Perhaps it should be pointed out here that two distinct types of transactions were involved. The Bank of France pledged gold with the Bank of England, in return for advances, which gold was never used and has since been returned to the Bank of France. Disagreement arose largely over the gold provided by the Bank of France in conjunction with the advances made by the British Government to the French Government. In the agreement of 1926, it was provided that the French Government might claim repayment of the gold loan against payments of Sterling obligations to the British Government. This privilege is of little practical significance, for it means merely that the French Government may convert a designated amount of Sterling into gold annually.

<sup>9</sup> Agreement for Settlement of War Debt of France to Great Britain, Cmd. 260 (1926), p. 4.

<sup>10</sup> Accordo Concluso Il 27 Gennaio Fra Il Regno D'Italia Ed Il Regno Unit Della Gran Bretagna, paragraph 7.

<sup>11</sup> Amtorg Trading Company, *Russian Gold*, especially pp. 6-15; P. N. Apostol *Russian Public Finance during the War*, pp. 204-311.

## CHAPTER III

### WAS ENGLAND ON A GOLD STANDARD?

WAS Great Britain on a gold standard during the war? In the opinion of Hawtrey, Great Britain maintained convertibility into gold; but its exportation was hampered by difficulties of transportation and official interference.<sup>1</sup> Foxwell pointed out that there was no premium on gold, although its movement was not free.<sup>2</sup> Loria was of the opinion that Great Britain could not long maintain its hybrid system; a lapse into inconvertibility was almost certain to follow.<sup>3</sup> Cannan, alone, was outspoken during the War in declaring that convertibility was a myth, and that Great Britain was not on a gold standard.<sup>4</sup> He was supported to some extent by the Cunliffe Committee which pointed out that the gold standard was no longer effective.<sup>5</sup> The Committee pointed out that the obstacles interposed by the War to the export of gold prevented the gold standard from working normally.

The accepted theory is that notes were convertible into sovereigns, but since the sovereigns could not be exported or melted, there was no demand for converting paper money into sovereigns. But the facts do not justify this conclusion. The notes were not *in fact* convertible. Early in the War, the Government made their position clear in prohibiting the disbursement of gold by public departments,<sup>6</sup> in applying pressure on employers who paid wages in gold,<sup>7</sup> and in bringing pressure to bear upon banks that persisted in paying out gold.<sup>8</sup> Especially significant were the difficulties encountered by the jewelers and dentists. At first the latter

<sup>1</sup> R. G. Hawtrey, *The Gold Standard*, p. 90.

<sup>2</sup> H. S. Foxwell, *Papers on Current Finance*, pp. 223, 228.

<sup>3</sup> A. Loria. *Le Peripezie Monetaria della Guerra*, pp. 82-83. See also an opinion expressed by S. Lewinsohn, *Histoire de l'Inflation*, pp. 351-52.

<sup>4</sup> E. Cannan, *An Economist's Protest*, pp. 114-16.

<sup>5</sup> First Interim Report of the Committee on Currency and Foreign Exchanges after the War, Cd. 6182 (1918), paragraph 9.

<sup>6</sup> 73 H. C. Col. 2127-28.

<sup>8</sup> 74 H. C. Col. 442.

<sup>7</sup> *B. T. J.*, October 7, 1915.

drew sovereigns from the banks; but even before the Government prohibited the melting of coins, the banks had begun to refuse to give gold for paper.<sup>9</sup> The Bank of England began to ration gold for dentists and jewelers, and it is significant that during a period when convertibility was *presumably* maintained, a price in excess of £6 an ounce was being paid to the Bank of England.<sup>10</sup> (The mint price is approximately 77s. 9d.) A prohibition of imports of gold into Egypt by the Commander-in-Chief of the Egyptian expeditionary force, is also significant.

But the Government insisted that the notes were convertible. McKenna, the Chancellor of the Exchequer, made a strong statement on this point in July, 1915,<sup>11</sup> and the Financial Secretary made a similar statement in November.<sup>12</sup> However, I can find but one official comment in the later War years on this subject. Bonar Law, the Chancellor of the Exchequer, broke the silence by defending a high Bank rate on the grounds that it was necessary to maintain a gold standard in England.<sup>13</sup> The right to convert was perhaps not infringed; but in the light of official interference, laws against melting and obstacles on exports imposed by the conditions of war, who will say that convertibility was in fact of any significance? The notes *were* inconvertible.

In August, 1916, the melting of sovereigns was made punishable by a maximum penalty of a fine of £100 and six months of detention or both.<sup>14</sup> The penalty was increased in 1920.<sup>15</sup> No doubt, the very large exports in the years 1915-16 were the occasion for this legislation. It is significant that the publication of the details of gold movements was stopped at the same time.<sup>16</sup> It is not probable that the public was receiving appreciable supplies of gold as late as 1916. Perhaps the object of the legislation was to curtail private sales for industrial consumption and to reduce the temptation to hoard gold. It is also apparent from the figures for gold sovereigns received at the United States Mint that

<sup>9</sup> *Montagu Letter*, January 13, 1916.

<sup>10</sup> 95 H. C. Col. 1766. Falk puts the maximum price for legal purchases as high as six pounds. O. Falk, "Currency and Gold Now and After the War," *Economic Journal*, 1918, p. 43.

<sup>11</sup> 73 H. C. Col. 2267.

<sup>13</sup> 93 H. C. Cols. 376-77.

<sup>12</sup> 75 H. C. Cols. 1183-84.

<sup>14</sup> 85 H. C. Col. 503; *B. T. J.*, August 3, 1916.

<sup>15</sup> 134 H. C. Cols. 1321-23.

<sup>16</sup> *Montagu Letter*, August 3, 1916.

the public and the banks had given up large supplies of sovereigns by the autumn of 1916.

The facts concerning the exportation of gold are not clear. According to the Cunliffe Committee, the Government refused to insure gold shipments on private account.<sup>17</sup> But Montagu, the Financial Secretary, in a written answer to a Parliamentary question on November 10, 1915, announced the official rate of insurance for gold shipments in moderate amounts.<sup>18</sup> Perhaps the Cunliffe Committee had in mind a later period. On at least three occasions in 1915 and 1916, McKenna denied that the Treasury was interfering with the free exportation of gold.<sup>19</sup> Mawas says that the Government prohibited shipments on private account in October, 1915, because the exportation became profitable when Sterling was quoted at \$4.62.<sup>20</sup> An announcement of the intention to prohibit gold exports appeared in the *Commercial and Financial Chronicle*.<sup>21</sup> I find no other evidence in support of Mawas' statement, although there is some significance in McKenna's statement of February, 1916, that gold could not be profitably exported any longer. Sterling had rebounded to \$4.765,<sup>22</sup> which was approximately the price at which it was stabilized early in 1916. Did the Government set this rate because it was a rate that would inspire confidence, or because exports on private account were unprofitable at that rate? Or, perhaps, that was unnecessary as the Government could fix an insurance rate that would make exports unprofitable. However, private insurance companies that were unwilling to insure gold shipments, might have reconsidered had it been possible to earn large profits.

<sup>17</sup> First Interim Report of the Committee on Currency and Foreign Exchange after the War, Cd. 9182 (1918), paragraph 8.

<sup>18</sup> 75 H. C. Cols. 1183-84.

<sup>19</sup> 76 H. C. Col. 1826; 80 H. C. Col. 515.

<sup>20</sup> A. Mawas, *Le Système Monétaire et le Change Anglais*, p. 199.

<sup>21</sup> *Commercial and Financial Chronicle*, October 30, 1915.

<sup>22</sup> 75 H. C. Cols. 1183-84; 80 H. C. Col. 515. The President of the Netherlands Bank estimated that the cost of insurance for gold shipments from The Netherlands to Great Britain was frequently in excess of 3 to 4 per cent. *Bank of Netherlands Report*, 1915-16, p. 11. The Vice-President of the Guaranty Trust Co. told the Senate Committee on Banking and Currency in 1918 that the cost of shipping gold to Spain was from 2 to 15 per cent. Federal Reserve Foreign Bank: Hearings (65:2), p. 209. A shipment of £250,000 from London to Buenos Aires in 1915 was made at a cost of 1.4 per cent. *De Economist* (Netherlands), 1915, p. 1016. According to Governor Harding, the shipping and insurance charges for a shipment of £25,000 from the United States to Spain in 1918 would come to approximately 12 cents per £ Sterling or 2½ per cent. W. P. G. Harding, *Formative Period of the Federal Reserve System*, pp. 96-97.

The exchanges depreciated rapidly from August to December, 1915. Profits were to be made by exporting gold, and large exports were made, especially in October, November, and December. In answer to frequent complaints that the Government were interfering with gold exports, McKenna both in November and December denied that the Government had taken any action. However, the Government restricted the exportation of gold by discouraging the conversion of notes into gold; numerous complaints were made that gold could not be obtained in exchange for notes.

Cannan points out that when paper money is convertible into sovereigns and sovereigns are not exportable, both sovereigns and paper money may depreciate in terms of bullion.<sup>23</sup> A writer during the Restriction Period pointed out that the price of *exportable* gold would be very high if people refrained from melting and exporting gold.<sup>24</sup> In criticizing Ricardo's theory of gold movements, Blake accounted for the exportation of gold by the emergence of a difference between the price of bullion and coin.<sup>25</sup> Loria maintains that a discrepancy between the price of gold in coins and in bullion will be temporary, because illegal melting and exporting will follow.<sup>26</sup> The situation in Great Britain seems to have been unique. Thus in Switzerland where the exportation of gold had been forbidden, gold was surreptitiously exported when the premium on the dollar reached 7 per cent.<sup>27</sup> South Africa, enjoying neither the economic isolation of Great Britain, and, perhaps, not having as great a stake in the final outcome of the War, suffered from large losses of its gold coins, especially on account of clandestine sales to India. The losses were so large in 1919 and 1920 that gold payments were suspended. Clandestine exports to India was especially profitable because the people of India were now prepared to pay very high prices for gold.<sup>28</sup> The greatest gold producing country in the

<sup>23</sup> E. Cannan, *An Economist's Protest*, pp. 239-40.

<sup>24</sup> *Letters to Thompson*, pp. 67-69, 128-29.

<sup>25</sup> W. Blake, "Observations on Principles Which Regulate the Course of Exchange," in *McCulloch's Tracts*, pp. 39-41.

<sup>26</sup> A. Loria, *op. cit.*, p. 80.

<sup>27</sup> League of Nations: *Memorandum on Currency*, 1913-23, p. 138.

<sup>28</sup> Report of Royal Commission on Indian Currency and Finance, 1926, App. LXIX. [Hereafter referred to as Commission on Indian Currency.] E. Cannan, "South African Currency," *Economic Journal*, 1920, p. 521; H. Strakosch, *South African Currency*, pp. 10-16.

world was forced to import £5 million of gold from 1914 to 1919 and 2 millions in 1920 through the National Bank of South Africa, and 4 millions through other channels.<sup>29</sup> Russia paid a premium of 45 per cent in order to prevent gold from being exported clandestinely.<sup>30</sup>

I am not inclined to agree with Cannan and others that both the paper money and sovereigns were depreciated in terms of gold bullion. Currency notes and sovereigns were not of equivalent value at home; both sovereigns and bullion were appreciated in terms of paper money at home. It was difficult, if not impossible, to obtain gold for paper at home, as the experiences of the jewelers attest. Paper and gold coins were equally acceptable in payment for goods purchased merely because official pressure or the patriotism of the public resulted in the withdrawal of gold from commodity markets. The receipts of sovereigns at the United States Mint reveal that the public gave up a large part of its sovereigns early in the War. Under such circumstances, commodity prices quoted in terms of gold were not known. Gold sovereigns were not less valuable than gold bullion for export purposes. The laws against melting are of little significance here, because sovereigns could be exported as profitably as bullion, and an examination of the United States Mint Reports will reveal that sovereigns as well as bullion were exported. From the viewpoint of the English debtor who had to remit abroad, paper pounds were generally as valuable as bullion and sovereigns, because the value of Sterling in dollars and official insurance rates were fixed in a manner to make the exports of gold on private account unprofitable. Thus we can explain the unprofitableness of gold exports to the United States. But when the British exchange depreciation was in excess of a few per cent and creditor nations were willing to accept unlimited gold imports, it was more profitable to ship gold than to remit by purchasing exchange with currency notes, or with balances at the bank. One may inquire why Great Britain did not lose all of its gold to

<sup>29</sup> *Official Year Book of the Union of South Africa*, 1926-2: p. 651; and the meeting of the shareholders of the National Bank of June 29, 1921, reported in *London Economist*, August 7, 1921. This episode is discussed more fully in a chapter on South Africa.

<sup>30</sup> *Montagu Letter*, April 27, 1916.

Spain, Switzerland and other countries that were willing to accept unlimited supplies at par or a small discount when their currencies had appreciated from 10 to 30 per cent in terms of Sterling. Possible explanations are (1) inability to obtain gold for private shipments; (2) refusal to insure such shipments on the part of the Government, or (3) high official rates for insurance. When the Government mobilize available gold supplies and determine the magnitude of exports, private institutions are deprived of the advantages of free gold movements.

That there were but infrequent complaints of different prices in gold and in paper, and that quotations of gold at a premium aside from sales for industrial purposes were uncommon, are evidence of the success of the Government in mobilizing gold both for domestic and foreign purposes.<sup>31</sup> Foreign countries were not equally fortunate. Germany prohibited the sale of gold at a premium; but surreptitious sales and melting continued.<sup>32</sup> In Italy<sup>33</sup> and Russia<sup>34</sup> official quotations for gold were announced. The Austro-Hungarian Bank modified its buying price for gold according to fluctuations in its market price.<sup>35</sup>

<sup>31</sup> The Government's control was strengthened by restricting licenses for the importation of gold that was not to be placed at the disposal of the Bank of England. 81 H. C. Col. 1073; 97 H. C. Col. 571.

<sup>32</sup> W. Lotz, *Die Deutsche Staatsfinanz-Wirtschaft im Kriege*, pp. 84-85; E. Friedman, *op. cit.*, p. 279.

<sup>33</sup> Reprint of Speech of M. P. Carcano, Finance Minister, in *Bulletin de Statistique et de Législation Comparée*, 1916 (80), p. 146.

<sup>34</sup> M. V. Bernatzky, *op. cit.*, pp. 36-37.

<sup>35</sup> A. Popovics, *Das Geldwesen im Kriege*, pp. 148-49.

## CHAPTER IV

### BRITISH GOLD AND THE UNITED STATES, 1917-19

THE entry of the United States into the War affected the British gold policy. Large imports were available from South Africa, but the British Government did not continue to make large shipments of gold to America. Hence the Bank of England began to issue notes covered by incoming gold, and thus a more rapid increase of issues of currency notes was averted. No doubt, the Government's desire to substitute Bank of England notes for currency notes may explain the retention of large supplies of gold. Another factor to be considered is that submarines were more numerous than ever. Nevertheless, in the light of the rapid depreciation of Sterling in terms of neutral currencies, and in the light of the difficulties encountered by the British Government in obtaining necessary credits from the American Government, it is surprising that more of this gold was not put at the disposal of neutral countries and the United States. Even if the submarine danger was great, the deposits of gold to the account of foreign countries was an accepted practise, and in fact part of the notes issued by the Bank of England was being made on the security of such cover. Montagu and Company wrote that but £6.3 million of gold had been imported in the first five months of 1916, and 22.9 millions in the corresponding months of 1914. The reduction is to be explained by the popularity of the practise of depositing South African gold to the credit of Great Britain elsewhere than in the United Kingdom.<sup>1</sup> The gold thus accumulated from 1917 to 1919 was used profitably in the post-War years. Apparently at least £10 million of South African gold were coined in Australia for the British Government in 1918 and shipped to the United States.<sup>2</sup> Leffingwell commented on the growing practise

<sup>1</sup> *Montagu Letter*, June 22, 1916.

<sup>2</sup> *Annual Report of Deputy Master and Comptroller of the Royal Mint*, 1925, pp. 8-9. In July, the New York Federal Reserve Bank received 5 million dollars from Ottawa on behalf of the Bank of England. *Montagu Letter*, July 24, 1918.

of earmarking gold in New York which was thus made available for reserve purposes.<sup>3</sup>

There is some evidence of exports of gold from Australia and Canada to the United States, both on behalf of Great Britain, and of exports from Great Britain to Spain. Montagu and Company, however, wrote that gold was exported to the United States only.<sup>4</sup> The important neutrals and the United States have revealed that British exports were at a minimum from the latter part of 1917 to the end of the War. The retention of new supplies of gold by Great Britain was only possible because the United States advanced the necessary credit. Great Britain thus took a step toward the gold exchange standard. The Bank of England was issuing notes secured in fact by American credits. The privilege of issuing Bank of England notes in 1917-18 secured by gold in place of currency notes secured by Treasury bills, was very valuable. It is not clear to what extent the gold was actually shipped from South Africa to Great Britain.

What was the attitude of the United States toward this episode? First, by way of introduction, I present a summary of the official attitude toward gold.<sup>5</sup> It has been the policy of the Federal Reserve System to adjust its gold supplies to its policies rather than vice-versa. Hence, it is not of great importance that much gold is hoarded as a reserve against notes.<sup>6</sup> When supplies of cash were plentiful, the authorities opposed proposals to make more reserves available by crediting checks immediately, and by allowing banks to include cash in their own vaults as reserves.<sup>7</sup> As early as 1914, the Board took measures to sterilize incoming

<sup>3</sup> Supplementary Bond Legislation: Hearings, House Ways and Means Committee, 1918 (65:2), p. 34.

<sup>4</sup> *Annual Report of Deputy Master and Comptroller of the Royal Mint*, 1925, pp. 8-9. *Montagu Letter*, July 24, 1918.

<sup>5</sup> See K. Hermann, *Die Zukunft des Goldes*, pp. 32-44, for an interesting discussion of Federal Reserve gold policy. Also see P. Warburg, *The Federal Reserve System*, I, appendices 21, 24, 25.

<sup>6</sup> L. D. Edie, "Gold Economics and Stable Prices," *Journal of Political Economy*, 1929, pp. 10, 17-19, 28-30. Edie also contends that the economics of reserves under the Federal Reserve System are illusory, because the banks merely created additional credits as more gold became available. But was the extent of inflation during the War determined by the cash reserves available or by the necessities of war?

<sup>7</sup> Strong Bill, Stabilization: Hearings, House Banking and Currency Committee (69:1), 1926, part I, pp. 556-57. The Federal Reserve Board requested the power to compel banks to hold reserves in excess of their requirements. W. P. G. Harding, *op. cit.*, pp. 74-75.

gold.<sup>8</sup> In 1916, the authorities were still confident that they could prevent injurious effects from large imports.<sup>9</sup> Strong has insisted that the System would demand legislation to protect itself against the harmful effects of excessive supplies of gold.<sup>10</sup> After America's entry into the War, the Board endeavored to economize gold. In the post-War era, there were changing policies. Responsible officials contended that the restraining action of the Reserve Banks in 1919-20 was taken to protect the system rather than the reserve.<sup>11</sup> However, the policies were determined by the reserve position to a greater extent in 1919-20 than at any other time. When large supplies of gold arrived from abroad, the Board announced that the Reserve Banks were holding it in trust for Europe.<sup>12</sup> Surplus gold was hoarded or put into circulation.<sup>13</sup> Reserve officials are anxious to be relieved of the responsibility of determining monetary policy independently of the size of their gold reserves.<sup>14</sup> Mr. Miller even contends that it is impossible for one country alone to maintain the gold standard.<sup>15</sup> The problem of surplus gold holdings is becoming less acute. In the 11 months ending July 31, 1928, the United States exported (net) approximately about 600 million dollars of gold.<sup>16</sup> The American witnesses before the Indian Currency Commission of 1926 were rather skeptical about America's surplus.<sup>17</sup>

<sup>8</sup> Joint Agricultural Inquiry: Hearings (67:1), 1921, II, p. 450.

<sup>9</sup> *Montagu Letter*, January 13, 1916; *Commercial and Financial Chronicle*, November 4, 1916; *Annual Report of Federal Reserve Board*, 1910, pp. 2-3. There is evidence of vacillation on the part of the Board.

<sup>10</sup> Strong Bill: Hearings, 1926, part 1, pp. 442-43.

<sup>11</sup> *Ibid*, pp. 440-41.

<sup>12</sup> Joint Agricultural Inquiry. Hearings (67:1), 1921, II, p. 527; *Annual Report of Federal Reserve Board*, 1923, p. 20. Also contrast Strong's testimony before the Young Commission in 1926 and before a Congressional committee later. Commission on Indian Currency, 1926, Qs. 15229, 15293, 15381. Strong Bill: Hearings, 1926, part 1, pp. 298, 476.

<sup>13</sup> Thus Governor Strong points out that in a period in which we imported 1.5 billions of gold, Federal Reserve credit outstanding was reduced from 3.4 to 1.2 billions. Strong Bill. Hearings, 1926, part 1, pp. 470-71. Compare B. M. Anderson Jr., "Cheap Money, Gold, and Federal Reserve Bank Policy," *Chase Economic Bulletin*, August, 1924, pp. 7, 20-21, and A. Aftalion, *Monnaie et Industrie*, pp. 94-98. Also see Commission on Indian Currency, 1926, Q. 15381. The policy of impounding gold was introduced in 1917. Joint Agricultural Inquiry: Hearings, II, pp. 479-80. In its Annual Report for 1926, the Federal Reserve Board seriously considered the effect of withdrawals of gold on the domestic credit situation. *Annual Report of Federal Reserve Board*, 1926, pp. 14-16.

<sup>14</sup> Commission on Indian Currency, 1926, Q. 15381.

<sup>15</sup> Joint Agricultural Inquiry: Hearings, II, pp. 490-91.

<sup>16</sup> *Balance of International Payments of the United States in 1928*, p. 51.

<sup>17</sup> Undoubtedly, their testimony was coloured by a desire to employ their surplus reserves for the benefit of Europe. Governor Strong again referred to the

Authorities to-day are less concerned about the large reserves of gold in the United States. One writer contends that the United States acquired gold in the War and post-War periods at a less rapid rate than before the War.<sup>18</sup> Even if true, that point loses its full significance if we consider that gold has been taken out of circulation, and that important economies have been introduced as a result of new banking legislation. The retention of large supplies of gold has been possible only because the gold has been impounded.<sup>19</sup> Responsible officials have made it clear that there has been no attempt to stabilize prices. However, the argument that fluctuations in prices were larger than before the War, is not convincing proof of non-interference, for price movements were moderate if one considers the very large gold movements.

What was the attitude of the United States from 1917 to 1919? American bankers discovered soon after America's entry into the War that unrestricted gold exports could not be permitted. Secretaries McAdoo and Leffingwell announced that the United States had too much gold; but the ensuing measures belied their words.<sup>20</sup> First, an embargo on exports was introduced. Secondly, the Government discouraged the practice of earmarking gold in the United States.<sup>21</sup> McAdoo in a letter of September, 1918, to the Chairman of the Ways and Means Committee, requested that the President be empowered "to investigate, regulate or prohibit not only the exportation or earmarking of gold or

subject of surplus gold before the Strong Committee a year or two later. Commission on Indian Currency, 1926, Qs. 15077, 15082, 15229, 15293, 15381; also Appendix 83. Strong Bill: Hearings, 1926, part 1, p. 298. The Federal Reserve Board expressed pleasure at England's restoration of the gold standard, which would make further large imports of gold into America unnecessary.

<sup>18</sup> L. Edie, "The Rate of Increase of the Monetary Gold Stock of the United States," *Journal of Political Economy*, 1928, pp. 500-68.

<sup>19</sup> Anderson's position that the authorities have aimed to make the fullest utilization of gold supplies, is not the accepted one. B. M. Anderson, Jr., *loc. cit.*

<sup>20</sup> Second Emergency Bond Issue. Hearings, House Ways and Means Committee (65:1), 1917, pp. 59-60; also Fifth Liberty Bond Bill: Hearings, House Ways and Means Committee (65:3), 1919, pp. 92-93.

<sup>21</sup> Supplementary Bond Legislation: Hearings, House Ways and Means Committee (65:2), 1918, p. 34. *Montagu Letter*, October 25, 1917. Abolition of the Sub-Treasuries. Hearings, House Banking and Currency Committee (66:2), 1920, p. 25. The control of gold supplies by the Federal authorities in 1917-18 was perhaps as rigid as that of any European country. Thus the American Mining and Smelting Company produced 50 million dollars' worth of gold, but nevertheless was forced to purchase a few millions of gold in the open market at a premium of 47 per cent. Federal Reserve Foreign Bank: Hearings, Senate Banking and Currency Committee (65:2), 1918, p. 296.

silver coin or bullion or currency, but also the hoarding or melting thereof.”<sup>22</sup> The actual control of available supplies of gold was rigid.<sup>23</sup> In 1918, McAdoo appointed a Committee to report on the advisability of giving a bounty to gold miners. Fortunately, the War ended before the Committee reported. It reported against the granting of a bounty, and criticized the miners’ contention that the rate of credit expansion in war times is determined by the magnitude of gold supplies.<sup>24</sup> Compare this with Edie’s statement that the economies of gold reserves under the Federal Reserve System were illusory, because they merely resulted in the creation of more credit.<sup>25</sup> It is worth recalling that the Pittman act was an act “to conserve the gold supplies.”<sup>26</sup>

It is apparent that the United States was not satisfied with the magnitude of its gold supplies. Why, then, was not a larger part of the South African supplies demanded? When Leffingwell early in 1919 defended a proposal to give more credits to Europe, he maintained that the United States did not want any of England’s gold; however, he added that the submarine dangers had made further imports during the War inadvisable.<sup>27</sup> It is significant that several shipments were made from the British Dominions to the United States on behalf of England. Moreover, the Federal Reserve Banks retained 50 millions (dollars) of earmarked gold with the Bank of England in 1918.<sup>28</sup> A very important factor was the attitude of the English authorities who probably fought staunchly to retain the gold, for a strong gold position was indispensable for the retention of faith in its banking and monetary system. Its position was dangerous in 1917 and 1918. The pressure Great Britain brought to bear on France in 1917 for a modification of the Calais Agreement reflected its anxiety over the magnitude of its reserves.

America continued to be cautious in 1919. The embargo on

<sup>22</sup> Supplementary Bond Legislation: Hearings, House Ways and Means Committee (65:2), 1918, p. 6.

<sup>23</sup> Federal Reserve Foreign Bank: Hearings, *loc. cit.*

<sup>24</sup> Protection of Gold Reserves: Hearings, House Ways and Means Committee (66:2), 1918, pp. 5-6.

<sup>25</sup> L. E. Edie, *op. cit.*, *Journal of Political Economy*, 1929, p. 10.

<sup>26</sup> Bill to Amend Pittman Act: Hearings, Committee of Currency and Banking (66:2), p. 3.

<sup>27</sup> Fifth Liberty Bond Bill: Hearings, House Ways and Means Committee (65:3), 1919, pp. 92-93.

<sup>28</sup> *Montagu Letter*, July 24, 1917.

gold was removed with great trepidation.<sup>29</sup> Before it was removed, India was questioned concerning its future policy.<sup>30</sup> According to Sir L. Abrahams, the United States embargo was lifted only on the condition that India would be reasonable.<sup>31</sup> Before the embargo was lifted in June, 1919, the authorities had granted licenses for the exportation of 138 million dollars of gold.<sup>32</sup> In March, 1919, the Bank of Java obtained permission to earmark gold in the United States.<sup>33</sup> Mr. Miller points out that although 322 millions of gold (net) were exported in the years 1919-20, banks in the Reserve System lost but 125 millions.<sup>34</sup> From June 1 to December 31, 1919, which was the period of large exports, the exports were (net) 302 millions; but losses would have been much larger if the Federal Reserve Banks had not included 173 millions deposited in London with their reserves.<sup>35</sup> In December, 1919, Secretary of the Treasury Glass thought it inadvisable to have any of Europe's gold; <sup>36</sup> but in May, 1920, he criticized Europe for maintaining embargoes on gold exports.<sup>37</sup>

<sup>29</sup> In December, 1918, the Federal Reserve Board expressed the opinion that peace adjustments might not disturb the current distribution of gold; and in January, 1919, the Board warned the world against one sided gold movements. *Federal Reserve Bulletin*, 1918, p. 1165; 1919, p. 8.

<sup>30</sup> Indian Currency Committee, 1919, Q. 97.

<sup>31</sup> *Ibid.*, Qs. 1069-70.

<sup>32</sup> Loans to Foreign Governments: Senate Document no. 86 (67:2), 1921, p. 75.

<sup>33</sup> *Java Bank, Annual Report*, 1919-20, p. 29.

<sup>34</sup> Joint Agricultural Inquiry: Hearings (67:1), 1921, II, pp. 479-80.

<sup>35</sup> *Annual Report of Federal Reserve Board*, 1919, p. 52. Compare *Federal Reserve Bulletin*, 1920, p. 668.

<sup>36</sup> Relief of European Populations: Hearings, House Ways and Means Committee (66:2), 1920, p. 24.

<sup>37</sup> Extending Credit to Germany: Hearings, House Ways and Means Committee (66:2), 1920, pp. 7-9.

## CHAPTER V

### GOLD MOVEMENTS

DURING the War, Australia deposited gold in Melbourne to the credit of the Bank of England and received credit immediately for as much as 97 per cent of the deposit. Insurance premiums were so high that shipments were not profitable; but large payments were due in London.<sup>1</sup> By the end of 1914, a total of £1.37 million had thus been received.<sup>2</sup> A similar arrangement between Canada and Great Britain was advantageous to Canada as well as to Great Britain, for early in the War, Canada was concerned over the possibility of large losses of gold.<sup>3</sup> As late as 1918, £6 million of gold were received in India from Natal, China and Japan for the Bank of England.<sup>4</sup> Apparently, Canada accepted gold from Russia as well as from South Africa on behalf of the Bank of England. Thus in May, 1916, it was reported that £8 million had been shipped from Russia via Asia to Canada.<sup>5</sup>

Great Britain controlled the distribution of the gold produced in South Africa during the War period. The history of this control requires some attention. It was known that the Bank of England accepted gold deposited in Ottawa, Bombay, Johannesburg, Melbourne, and Sydney.<sup>6</sup> Gold shipments from South Africa were abnormally low in 1914 and 1915 and the Bank of England issued notes secured by gold deposited in South Africa. In 1914, South Africa retained approximately £15 million of gold on behalf of the Bank of England.<sup>7</sup> By March, 1915, the Bank of Eng-

<sup>1</sup> *Australasian Insurance and Banking Record*, February 20, 1915.

<sup>2</sup> Commonwealth of Australia. Parliamentary Papers, Sessions 1914-15-16-17, vol. 5. *Fifth Annual Report of High Commissioner in the United Kingdom*, p. 10.

<sup>3</sup> *Aust. Ins. and Bank. Record*, November 21, 1914.

<sup>4</sup> *Montagu Letter*, March 7, 1918.

<sup>5</sup> *Ibid.*, March 18, 1916.

<sup>6</sup> *Aust. Ins. and Bank. Record*, October 21, 1914.

<sup>7</sup> *L. E.*, February 13, 1915; *Montagu Letter*, September 16, 1915. General Smuts announced that £14 to £15 million of gold had been stored in South African banks for the Government on behalf of the Bank of England. South Africa, House of Assembly Debates. 6th Session, Col. 474.

land held £18 million of gold in Ottawa.<sup>8</sup> Apparently, from 1914 to 1919 the Ottawa Mint received approximately 1.2 billion dollars of gold on behalf of the Bank and the Imperial Government.<sup>9</sup> Most of this gold was shipped from South Africa directly or indirectly.<sup>10</sup> The Canadian Minister of Finance refused to reveal the details of the movements of the gold belonging to the Imperial Government.<sup>11</sup>

W. A. Shaw, in a recently published volume, makes an attempt to unravel some of the obscure points. He finds it difficult to reconcile (1) an estimate of the Cunliffe Committee of £123 million for gold held outside of the Bank of England at the outbreak of the War with (2) the holdings of the Bank of England of 150 millions in 1926. Great Britain had exported 120 millions (net) in the intervening period. Hence he concludes that 270 millions of gold were in circulation or held by the banks before the War.<sup>12</sup> Grady's explanation is more acceptable. He estimates Great Britain's loss of gold (net) at 15 millions; but according to the official figures, exports were in excess of imports by 120 millions. The explanation is that gold received but not imported was excluded from the customs figures.<sup>13</sup>

It was understood that after the embargo was raised, licenses would be granted only for gold received from South Africa.<sup>14</sup> But the exports were in excess of the imports for the years 1920-

<sup>8</sup> *Montagu Letter*, April 1, 1915.

<sup>9</sup> *B. T. J.*, October 10, 1918, and June 12, 1919; also see *U. S. Mint Report*, 1920, pp. 165-66. Bonar's figures are apparently based on an official Canadian estimate. J. Bonar, "The Mint and the Precious Metals in Canada," *R. S. J.*, 1921, p. 242.

<sup>10</sup> The Finance Minister announced early in 1916 that the Canadian Government had handled much gold for Great Britain. *H. C. Canada*, 1916, I, p. 658.

<sup>11</sup> *H. C. Canada*, 1919, I, p. 614. But more recently, a Finance Minister published a small book, which revealed for the first time many of the details. Sir T. White, *The Story of Canada's War Finance*.

<sup>12</sup> W. A. Shaw, *Currency, Credit and the Exchanges*, pp. 31-34. Official figures now reveal that Shaw is in error. *Statistical Abstract*. Cmd. 3767, p. 384.

<sup>13</sup> H. F. Grady, *British War Finance, 1914-19*, pp. 48-50.

<sup>14</sup> A new agreement was made with the South African gold miners in July, 1919, which provided that all gold not required for domestic purposes was to be shipped to Great Britain and sold to the highest bidder. *Journal of the Institute of Bankers in South Africa*, 1919-20, p. 185. The South African miners were given 9 weeks in which to dispose of their gold outside of England. Interim Report of Low Grades Mine Commission, Annexure A. (South Africa.) Also see *B. M.*, 1920 (111), pp. 203-4. The quotations for gold on the open market during this period (1919 to 1925) were for supplies for which a license to export was obtainable. The remainder was put at the disposal of the Bank of England at parity or sold for industrial purposes.

24 by 90 millions (Sterling), and in excess of the imports from South Africa by 138 millions. Probably, the excess is explained by the fact that Great Britain had available large supplies of gold received in the years 1917 to 1919. It is more difficult to explain why all the exports were recorded by the customs officials, although a large part of the gold received during the War was not actually imported. In the post-War period, South Africa published figures for the exports of gold to the United Kingdom of previous years. For example, South Africa presumably exported £51 million of gold to Great Britain in 1918. Certainly at least part of this gold was put at the disposal of Great Britain in South Africa or Canada. It therefore appears that the customs officials included gold as exported which had never been imported into Great Britain. If this gold were shipped to Great Britain after the War and then exported, net exports would not have increased. It is probable that Great Britain imported appreciable quantities of gold from South Africa in the War years, for the United States Mint Reports reveal that large quantities of bullion refined in Great Britain were imported into the United States in 1915-17.

Canadian and American official statistics reveal only small imports directly or indirectly from the Transvaal. In fact, very small imports from the United Kingdom are recorded by Canadian customs officials. But according to figures published in the Canadian Year Book, Canadian banks held 4½ millions (dollars) in British coins in 1914 and 29½ millions in 1918. Probably some British coins were received from the United States. Finance Minister White later revealed that Canada had received on behalf of Great Britain, 491 millions (dollars) of gold exported from Great Britain, 353 millions from South Africa and 253 million dollars from Russia.<sup>15</sup>

From 1920 to 1924, the excess of gold exported over gold imported in Great Britain was £90 million, and the excess of exports over imports from South Africa was 138 millions. (These figures are from British sources.) Licenses were supposedly granted only for gold received from South Africa.<sup>16</sup> The explanation probably is that large supplies of gold which were accumu-

<sup>15</sup> Sir T. White, *op. cit.*, p. 40.

<sup>16</sup> *B. M.*, 1920 (109), pp. 203-7.

lated in South Africa and elsewhere from 1917 to 1919 were exported from 1920 to 1924. Apparently licenses were required for the disposal of gold by Englishmen whether the gold was held in Great Britain or abroad. All losses were thus included in the customs figures.

The following figures (United States Mint Reports) are significant:

<i>Gold Received in the United States</i>				
<i>Millions of Dollars</i>				
<i>Bullion Refined in</i>				
	<i>Great Britain</i>	<i>Canada</i>	<i>British Coins</i>	<i>French Coins</i>
1915 .....	41	17	218	—32
1916 .....	256	126	87	50
1917 .....	275	61	22	60

Imports of gold from Canada in successive calendar years beginning 1915 were 219, 579, 552, 46 and 35 millions of dollars. The only imports from Great Britain were 109 and 57 millions in 1915 and 1916. White's figures are not easily made consistent with the above. He reveals that Canada received 491 million dollars in gold from Great Britain, 353 millions from South Africa, and 253 millions from Russia. The bullion refined in Canada that was received at the United States Mints, accounts for part of the South African gold. According to the United States Mint Reports, approximately 900 millions of British gold (British coins or bullion refined in Great Britain) were received in the United States, of which all but 150 millions was received via Canada. Apparently, the United States imported gold from Canada in excess of the gold received by Canada from Great Britain, South Africa and Russia, for the United States imported 1400 millions of gold from Canada and the latter imported but 1100 millions from these three countries. Undoubtedly, Canadian gold accounts for part of the difference. It is also clear that British, French and Canadian money or bullion received at the United States Mint were several hundred millions below the total imports of the United States from Great Britain and Canada.

Although the United Kingdom exported only 166 millions (dollars) of gold to the United States from 1915 to 1917, the United States Mint received 572 millions in bullion refined in the United Kingdom, 327 millions of British coins, and 110 millions

of French coins (1916 and 1917) all of which had probably been exported from Great Britain to the United States via Canada. The United States Mint received 733 millions (dollars) of British bullion and money in excess of the exports from the United Kingdom to the United States. (I am not including the French money.) Exports from Canada for these years were 1200 millions or thereabouts in excess of Canadian bullion and money received at the American Mint. Apparently a large part of the South African gold was shipped to Great Britain, where it was refined and then shipped to Canada. Only in 1916 were large quantities of bullion which had been refined in Canada received in the United States. Apparently, direct shipments from South Africa to the United Kingdom were larger than is commonly supposed.

The very large shipments of British coins are significant. Great Britain coined little gold throughout the War except in 1915 when for some reason or other, approximately £21 million were minted. Since it is estimated that the banks (excluding the Bank of England) and the public held approximately £120 million of gold before the War, the public apparently gave up most of its gold, which ultimately was sent to the United States. (That is on the assumption that the banks and the public held equal shares.) It will be remembered that the banks deposited 20 or more million with the Bank of England in 1915, and gave up the remainder after the War. Perhaps that explains the absence of appeals to the public to give up their hoards of gold. The public voluntarily exchanged its gold for currency notes. The French coins were probably sent by Great Britain and had been received from France under the Calais Agreement. Apparently the British authorities used the gold advanced by France, even as Bonar Law had contended in his dispute with Poincaré in 1922-23.

## CONCLUSION TO BOOK VII

In the early years of the War, Great Britain exported gold to strengthen its exchanges; but it also adopted many expedients for curtailing losses. In the latter part of the War, Great Britain retained a large part of the annual production of South African gold and issued notes on the security of gold which had not been imported into Great Britain. Thus American credits enabled Great Britain to accumulate gold and to issue Bank of England notes secured by gold, instead of Treasury notes. The dangers of the submarine are not an adequate explanation of the retention of large supplies of gold by Great Britain. The United States was granting credits grudgingly and would gladly have accepted gold in the United States or earmarked in Great Britain. Neutral exchanges were depreciated as much as 30 or 40 per cent, and gold exports would have strengthened Sterling in these markets. Great Britain's anxiety to retain gold in the latter part of the War is revealed by its disputes with France over the Calais Agreement.

Great Britain did not remain on a gold standard during the War: notes were not convertible into gold, and the Government threatened employers or banks that paid out gold; and industrial consumers of gold paid a large premium for it. Gold sovereigns and currency notes were not of equal value. The authorities were successful in mobilizing gold and hence a two-price system was averted. Sovereigns were not depreciated in terms of gold bullion. A large part of Great Britain's exports of gold was in sovereigns. Hence the accepted theory that currency notes and sovereigns were of equal value, but that both were depreciated in terms of bullion, is erroneous both because notes and sovereigns were not equal in value and the latter was not depreciated in terms of gold bullion. In control of both the insurance business and the exchange market, the Government set insurance rates and the price of Sterling at a level that made private exports of gold to the

United States unprofitable after the early part of 1916. Hence for the purpose of making foreign remittances, a paper pound was as valuable as a gold pound. It might be contended that in this artificial manner, the exchanges were maintained within the gold points, and hence that there was no incentive to demand gold for currency notes. In other words, the Government protected the system against losses of gold not by refusing to pay out gold, but by making the private export of gold unprofitable. The State continued to export gold for the purpose of strengthening the exchanges. But if this explanation is acceptable for dollar exchange, it is not acceptable as an explanation of neutral exchanges. Sterling was frequently depreciated as much as 30 or 40 per cent in terms of neutral currencies, and neutrals were prepared to accept additional supplies of gold. That more gold was not exported, is to be attributed to restrictions of gold movements, control of supplies by the Treasury, and exorbitant rates on insurance.

Satisfactory conclusions are not to be drawn from the published figures for exports and imports in the War and post-War period concerning the net movement in the gold supplies held by Great Britain. The difficulty is that exports have been exaggerated, for gold not included by customs officials when imported, has been included when exported. A large excess of gold exports in the post-War period seems to be inconsistent with the announced Treasury policy. The probable explanation is that gold purchased from South Africa was accumulated during the War and early post-War period, and hence exports were in excess of the current receipts from South African mines. The United States Mint Reports reveal that the British public—not the banks—gave up virtually all of its sovereigns in the early years of the War.

SUMMARY, PARTS I TO III



## SUMMARY, PARTS I TO III

DISTURBED by the outflow of cash, the Bank of England on August 1, 1914, requested permission to issue notes in excess of the legal limit. In the early days of the emergency, the withdrawals of cash were not at the expense of the reserves of the banks, because the banks had strengthened their position by forcing the market to borrow from the Bank. However, it is to be remembered that the position of the banks would have been stronger had they not exchanged balances for notes and gold. In the later months of 1914, the Bank of England replenished its reserves by accepting gold abroad. The Other Deposits of outside institutions operating in London were replenished at first by these transfers of gold, but the newly acquired balances were drawn upon in order to meet commitments in London.

On August 5, the Government announced a plan for rediscounting pre-moratorium bills under a public guarantee. The banks and bill brokers rediscounted freely: they thus acquired more cash than they needed because they accepted the opportunity to be freed of the contingent liabilities involved in holding or endorsing bills. The increase in Other Securities was surprisingly moderate in the light of the large advances to the market before August 1, the large quantity of bills rediscounted, which has been estimated at 120 millions, and the advances to acceptors of 50 to 60 millions. The explanation is that these advances were successive. Undoubtedly, the proceeds of the rediscounts under the Treasury guarantee were used in part to repay advances made before August 1. Moreover, as some bills were rediscounted, others were paid off. When no other method of settlement was possible, recourse was had to the acceptor; and it is evident from the magnitude of advances to the acceptors that approximately one half of the bills was repaid out of the resources of the acceptors or other endorsers.

Remittances to London to meet maturing bills in the first two

or three months of the War, constituted an added source of strength for Sterling. Repayments of advances from the Bank of England to acceptors after 1915 were not large, and it is evident from a perusal of the post-War Finance Accounts and bank statements that many institutions did not meet their obligations to the Government until after the War. Where the Bank of England did not receive payment from the acceptor, the Government reimbursed the Bank. The Treasury paid the Bank 25-30 millions in 1915 on account of these transactions. Losses were in fact smaller than had been anticipated; and the Government later obtained from the acceptors part of the cash expended in 1915.

Foreign and Dominion banks lost cash in the early days of the War when London refused to renew credits. But the rediscounting of bills, the advances to acceptors, the rapid repayment of advances by stock brokers, and the deposit of gold abroad strengthened their position. If one is to conclude from the reports of Colonial and Dominion banks, the stock exchange repaid virtually all of its indebtedness in the first six months of the War. It is not clear where the market obtained this cash. Perhaps the joint stock banks put part of their surplus resources at the disposal of the stock market.

Great Britain introduced a moratorium on bills of exchange on August 3, and in a few days extended it to many other types of contracts. Great Britain, a creditor country, had little to gain from a moratorium in its relations with foreign countries, but had much to lose if its action was to be an occasion for the introduction of similar measures on the part of debtor nations. However, the United States, the most important debtor nation, did not follow Great Britain's example. Germany had large balances in London and was indebted to London for the financing of German trade. Remittances between Germany and Great Britain were prohibited under provisions relating to trading with the enemy. A few important countries had prohibited remittances before August 3. Thus Russia began to issue Ukases by July 27. When a few leading countries declare moratoria, it becomes very difficult for other countries to refrain. Traders are unable to collect foreign debts, and hence may be unable to remit abroad. Countries that

are not far advanced economically will probably introduce moratoria regardless of the example of their creditors. However, European neutrals might have been able to resist the pressure had moratoria not become general. This is apparent both from the late date at which several countries introduced moratoria and from the similarity of regulations. In general, Great Britain's lead was probably not an important factor in stimulating other countries to adopt like measures. Moreover, authorization of suspension of payments did not frequently result in the refusals to remit. Responsible debtors usually met their obligations. Perhaps the early depreciation (in Sterling) of the exchanges of neutral countries is evidence of the honesty of foreign creditors.

The facts relating to Department Ways and Means are obscure. In 1914, departments investing over 300 millions in public securities had but a few millions of Ways and Means advances on their books. Their holdings were not larger in 1919. Departmental advances were probably in large part securities deposited in the Currency Notes Account. However, early in the War, other securities were placed in the Currency Notes Account. Early in 1915, no departmental advances were outstanding; but the Currency Notes Account held from 5 to 15 millions of securities. In 1919, the Treasury began to publish weekly figures for Department Ways and Means. The seasonal fluctuations are strikingly parallel to those for Securities in the Currency Notes Account; but the magnitude of the fluctuations of departmental advances was greater. The Bank of England publishes an annual statement of Exchequer bills purchased. If we deduct the figures given in the above statement from the "Other Advances" given in the weekly finance account for the day nearest to the fifth of January, we obtain the figures for departmental advances. If the departmental advances for January 5 of each year are compared to the total of securities held in the Currency Notes Account, it will be apparent that there was a close agreement in 1916 and 1917, and as the notes outstanding increased at a very rapid rate, other securities (Treasury bills?) were put into the Currency Notes Account:

	<i>Millions of £ Sterling</i>	
	Securities in Currency Notes Account	Department Ways and Means
1915 .....	20	0
1916 .....	65	65
1917 .....	118	114
1918 .....	188	116
1921 .....	330	219
1922 .....	283	174
1925 .....	244	195

Special Deposits were of great importance. Large disbursements by the British Government in 1915 resulted in the accumulation of large foreign balances in London. Also, the Government were concerned over the excessive supplies of domestic credit available at rates low enough to stimulate unnecessary consumption of credit by non-essential industries. Market rates were 1 or 2 per cent below the Bank rate. Special Deposits were a mechanism for absorbing the surplus supplies of cash for the use of the Government. When the pressure on the exchanges was reduced by America's entry into the War, the rate on Special Deposits of foreigners was reduced. But the exchanges became troublesome again, and more advantageous rates were offered to foreigners in 1918. However, the rate for deposits of domestic institutions was kept down. The authorities apparently thus voluntarily surrendered their control of the money market. But the lapse was not fatal, for the Government by controlling the distribution of supplies, capital and men, and by applying pressure on the banks, retained a fair measure of control of the distribution of credit. The Treasury was thus enabled to borrow more cheaply in 1918. By redeeming Special Deposits in 1919, the Government gave a stimulus to inflation at an especially inopportune time. The withdrawal of deposits by foreigners may have had a detrimental effect on the exchanges; but the joint stock banks offered advantageous terms to foreigners. Apparently large foreign balances were retained in London after 1919.

Foreign and Dominion banks continued to purchase Treasury bills and make advances to brokers in London. But neutral countries made large contributions to the Bank of England's Special Deposit Account. The British bank of Commerce, an institution transacting business in London but drawing resources from

<i>Millions of £ Sterling</i>		
	Money at Call and Short Notice	Treasury Bills
1917 .....	.825	...
1918 .....	7.73	12.2
1919 .....	15.0	1.8

the Scandinavian countries, published some significant figures. Its Money at Call and Short Notice consisted primarily of deposits with the Bank of England. According to an investigation conducted by the Bank of Switzerland, Swiss banks deposited 100 million francs with the Bank of England in 1918. Scandinavian banks held large balances in England. The excess of foreign assets over foreign liabilities of all Norwegian banks was 13, 340 and 212 million kr. in July, 1917, December, 1918, and December, 1919, respectively. Norwegian banks had deposits of £22 million in London in 1919. Swedish banks had an excess of foreign assets over foreign liabilities of 98 millions kr. in 1914, 484 millions in 1918, and 554 millions in 1919.

The *Bankers' Magazine* estimated in 1919 that deposits of foreign institutions with the Bank of England had reached 150 millions, and Sir Edward Holden referred to advances of the London and Midland Bank of 50 millions to the Government through the Bank of England and otherwise, in addition to the investments in public securities. I have made an estimate of Special Deposits outstanding early in January of each year. It is assumed that when 100 millions of Ways and Means advances from the Bank of England and no Special Deposits were outstanding, 100 millions of P.S. were held by the Bank of England in addition to other public securities held as investments by the Bank. (An allowance is made for the latter on the basis of public securities held when no advances to the Government were outstanding.) The estimate of Special Deposits is obtained by taking the difference between P.S. actually held and P.S. that would have been held had there been no Special Deposits outstanding. The Bank of England generally earmarked P.S. against Special Deposits, and hence the increase of Special Deposits was accompanied by a reduction of P.S. (Just before the Victory Loan was floated, Special Deposits were much larger than on January, 1919.) The results are as follows:

*Millions of £ Sterling*

Exchequer Bills Purchased by the Bank of England January 5	P. S. on the Books of the Bank	P. S. Held as Invest- ments	P. S. on As- sumption of No Special Deposits	Special Deposits	
1916 . . . .	0	33	33	0	
1917 . . . .	46	79	40	79 or more	65
1918 . . . .	150	65	40	190	125
1919 . . . .	246	94	30	276	182

During the years 1916 to 1918, the advances from the Bank of England other than Special Deposits were not as large as Special Deposits. Hence, it is my opinion that the inflationary effects of Ways and Means advances have been exaggerated. By accepting a Special Deposit, the Bank of England apparently deprived the market of cash almost as effectively as it flooded the market when it created a Ways and Means advance of the traditional type. However, the creation of orthodox Ways and Means results in a permanent addition of cash; but the acceptance of a Special Deposit results in a loss of cash only until the Government disburses the cash thus received. If we exclude from consideration advances to foreign and Dominion governments, which were not treated as Ways and Means advances by either the Government or the Bank of England, we may conclude that by borrowing on Ways and Means, the Treasury deprived the money market of more cash than the Treasury put at its disposal; but unfortunately, the cash created by borrowing in the orthodox manner from the Bank was a more or less permanent addition, and the cash taken from the money market by accepting Special Deposits or departmental advances was lost only until the Treasury disbursed it. Hence, a residuum of inflation remained; but the inflationary effects have been exaggerated. Although the advances of the Bank to bill brokers and acceptors in the early months of the War and to the Allies and Dominions, which were made with injurious effects in 1915 and 1916, were in fact advances on behalf of the Government, they were not treated as Ways and Means advances by the Bank of England. The portfolio of P.S. was at such a low level in 1917 that the Bank pledged Other Securities against Special Deposits.

The net effect of the Bank's advances to the Government was not as great as might be inferred from a consideration of

	<i>Millions of £ Sterling</i>		
	(1)	(2)	(3)
	Advances from the Bank of England (Includes Special Deposits)	Advances Minus Special Deposits	Special Deposits
January 5, 1916 . . . . .	0	0	0
1917 . . . . .	46	-19	65
1918 . . . . .	150	25	125
1919 . . . . .	246	64	182

column 1. However, the inflationary effects of the *disbursements* of the cash received through the acceptance of Special Deposits should not be neglected. Special Deposits were much larger than Other Advances from the Bank of England to the Treasury in the latter part of the War. Sales of Treasury bills at fixed rates were an alternative method of raising cash, similar in its effects to the acceptance of Special Deposits. By selling unlimited supplies of bills and accepting unlimited deposits, the Treasury obtained control of money rates. If the public was unwilling to lend adequately at official rates, the Treasury always had the alternative of borrowing directly from the Bank. Because the Treasury thus deprived the money market of cash and pegged rates, the acceptance of Special Deposits, unlike the orthodox type of Ways and Means, was deflationary.

Throughout the War, the Government kept rents down to the pre-War level and restricted activities on the stock exchange. Hence the purchasing power available for commodity markets was increased. Prices of scarce and uncontrolled commodities increased. The Government might have encouraged operations on the stock exchange and thus have provided an outlet for purchasing power. England might have had a period of rapidly rising prices on the stock market similar to that in several continental countries in 1917 and 1918. But the authorities might thus have discouraged the sale of public securities. By the middle of 1917, the public had but two important alternative uses for their surplus cash, hoarding or investing in public securities. The British Government were more fortunate than Continental authorities in that cash was not widely hoarded. However, in the first half of 1918, a period of adversity at the Front, and a period in which the banks were offering liberal terms to depositors, the British Gov-

ernment dictated a reduction of the rate on deposits. Control of prices and of the distribution of commodities was now far enough advanced to enable the Government to determine within limits the quantity of money to be disbursed on commodity markets. In 1918, the Government introduced the policy of encouraging large imports of a few semi-luxuries, namely, tobacco, tea and wine, as a means of obtaining large tax revenues. Thus the public obtained an additional outlet for its purchasing power. Perhaps the most conspicuous achievement of the British Exchequer was the phenomenal success of the sales of war securities in the last eighteen months of the War. The stock exchange was controlled; commodities were rationed; prices were kept down. Was there any other outlet but the security market?

Prices did not rise as rapidly in 1917-18 as in 1915-16. Particularly in 1918 was the upward movement surprisingly moderate. Supplies were at a low level in 1917-18. Deposits and currency notes increased at a more rapid rate than in previous years. In a sense official prices were fictitious, for the introduction of subsidies for bread, iron and steel, and sugar depressed the prices of these commodities. What the consumer failed to pay, the taxpayer paid; but the Government, on the other hand, made profits in trading in other commodities, and hence other prices were maintained at an artificially high level. Moreover, one result of the depression of the prices of subsidized commodities was that more money, as a rule, was diverted to other markets. However, neither the subsidies nor concealed taxes constitute an adequate explanation of the price movement of 1918. Prices were reduced as a result of the intervention of the Government. Low prices stimulate more buying; but the Government controlled the distribution of supplies. The pressure of the surplus of purchasing power was apparent in the increased consumption of such commodities as tea and tobacco. Under such conditions, the Treasury was able to borrow surplus cash with a minimum of inflation. Of course, the price level loses its full significance when the public is prevented from purchasing commodities freely, and when the quality of commodities is not maintained.

No adequate attempt has yet been made to find out

whether supplies were deficient in the War period. If scarcity prevailed, more emphasis should be put on the scarcity of supplies as an explanation of inflation. The insufficiency of supplies during the War was an important cause of the high prices; and prices would have been even higher had not the Government regulated both prices and the distribution of commodities. A small deficiency of supplies results in a more than proportionate increase in prices; and balances are consumed rapidly in attempts to procure necessary commodities. Production declined almost everywhere. In the *Enquête sur la Production* are presented a few significant charts on the world production of raw materials and agricultural products. The decline was marked for almost every important cereal and raw material; and the reductions were especially large in 1918. The imports and consumption of raw materials were at an abnormally low level throughout the world, as was production in Great Britain. The withdrawal of 5 or 6 million workers, the failure to maintain plants at pre-War efficiency, and the scarcity of raw materials were all inconducive to production. Immediately after the War, it was estimated that production was approximately 20 per cent below normal; and the United Kingdom was not receiving adequate supplies from abroad to make up for the deficiencies. In the balance of trade is to be found the most important explanation of the scarcity of supplies, although Great Britain profited from a marked reduction of exports. Important sources of supplies were lost as a result of the War. The exports of wheat from Russia, Argentina, India and Australia declined. Large imports from the United States and Canada were substituted in the early years of the War; but in 1918, imports of wheat were at approximately one half the pre-War level. More meat was imported, because it required less space per calorie. It is significant that very large exports of bacon, lard, ham, and chilled meats were made from the United States to Great Britain in 1918. In so far as quantities were revealed, it appears that the imports of meat alone of all the staples were maintained at a normal level during the War. Argentina exported less wheat, maize and beef to the United Kingdom, and Australia exported less wheat, beef and butter. But the latter's exports of wool were larger. On the whole, imports (quantities) from the

Dominions and the United States were more than maintained during the War period. From European neutrals, with the possible exception of Norway, the reduction in quantities imported was marked; from Russia all exports but flax were reduced to insignificant figures. Spain's exports increased appreciably in the latter part of the War. The large imports from the United States and the Dominions were especially advantageous because payment was made by the sale of securities, by advances, and by the deposit of cash in London which was retained. Thus Great Britain obtained commodities without the necessity of creating additional purchasing power. Balances of the Dominions were in large part invested in British Treasury bills, and American securities were exchanged for British war securities by their British owners. England's exports to America and the Dominions dropped strikingly. But unfortunately its exports (quantities) to the European Allies were maintained at approximately the pre-War level. Moreover, it is to be remembered that the favorable change in the balance of payments with the Dominions did not result in a net gain of supplies, for their war expenditures abroad were financed by Great Britain.

The money market received ample cash resources in the early months of the War by rediscounting pre-moratorium bills and borrowing under a Government guarantee. That Other Deposits and Other Securities of the Bank of England were not reduced in the years 1915 and 1916, is to be explained by the introduction of a peculiar type of Ways and Means financing. The British Government made advances to the Allies and Dominions beginning in 1914; the Bank of England frequently was the intermediary. The Government did not reveal the character of these transactions until the Treasury repaid the Bank in the second half of 1915. Moreover, these transactions were not recorded in an orthodox manner, for they were reflected in an increase of O.S. All such advances made after August, 1915, were still outstanding early in 1916. The repayment by the money market of the advances made in the early months of 1914 was concealed by the increase of advances to the Allies and Dominions. The Bank made large advances to them in 1915 and in the early months of 1916. Al-

though they apparently were not of great significance after 1916, the French Government reveal that in 1916 and 1917 the Bank of England held large quantities of French Treasury bills. In fact, they sometimes constituted more than one half of the total of O.S. at intervals. These advances were as inflationary as Ways and Means advances to the Government. One peculiarity of the loans to the Allies and Dominions was that large advances were made while the balances of the British Government at the Bank of England were in excess of 100 millions.

The authorities have been subjected to much criticism for approving a policy of low money rates and thus inducing inflation. There is ample evidence that the Government were influential in determining the Bank rate. Moreover, the Government applied pressure on the banks and bill brokers when the latter made loans at low rates. Low market rates were imposed in 1918 in order to encourage the sale of war securities under advantageous conditions. But before 1918, only the unlimited sale of Treasury bills and the acceptance of Special Deposits at high rates saved the Bank rate from losing all its significance. A higher Bank rate would have been of little avail when the market rate was 1 or 2 per cent below the Bank rate. Many have argued that high money rates are of no avail in a period of restricted gold movements. However, the attraction of foreign balances by the introduction of higher rates may have a more beneficial effect on the exchanges than in normal times, for with restricted gold movements, the movement of foreign balances is effected through the purchase of exchange exclusively.

Low bank rates were considered harmful because they encouraged the consumption of bank credit by non-essential industries. But this could not have been a serious consideration in 1917 and 1918. According to eminent bankers, the requirements of peace industries were reduced early in the War. In addition to interfering directly, the Government controlled the distribution of credit indirectly through their control of raw materials, capital and man-power. However, the banks were called upon to offer additional accommodation in so far as they made advances to replace loans which had been previously made on the capital market; but war industries obtained these advances in large part.

The statement is frequently made that banking policy during the War was not determined by the size of banking reserves. However, the size of the reserves of the Bank of England in 1919 was partly determined by fluctuations in reserves during the War. Their magnitude was an important factor in the determination of monetary policy in 1919 and 1920. In the early years of the War, there were wide fluctuations in the reserves of the Bank. Movements in Bank of England notes issued were in large part reflected in variations of reserves in the Banking Department. In other words, notes of the Bank outside of the Bank of England remained relatively stable in 1915 and 1916. But in 1917, there was a significant change. In 1917 and 1918, reserves were remarkably stable, absolutely and relatively, although the Bank issued large quantities of notes. Issues and redemptions were now mostly reflected in fluctuations in the holdings of the public. When the public demanded Bank of England notes in 1915 and 1916, the authorities preferred to draw them from the reserves of the Bank rather than to issue Treasury notes of large denominations. In 1917 and 1918, the Bank had an opportunity to replenish its reserves by retaining a large part of the notes issued on the security of South African gold. But the authorities continued to evince little interest in the size of the Bank's reserves. In allowing reserves to decline from 30 to 20 millions in 1919 the authorities made the first vigorous attack on inflation.

The joint stock banks acquired large reserves in the course of the War. However, they did not adhere to traditional reserve ratios. Thus in one year, their reserves against deposit liabilities increased from 19 to 23 per cent. One may easily be misled by an examination of the figures for Other Deposits, for the balances of British joint stock banks at the Bank of England constitute a varying part of O.D. Thus in the early days of the War, the balances of foreign, Dominion and Colonial institutions declined as London refused to renew maturing bills. But in the course of the next few months and through 1915, outside institutions acquired a larger part of the O.D. They held large quantities of bills that the Bank of England rediscounted, and they had made large advances to brokers which were now called in. Although these ad-

vances were repaid generally in 1914 and 1915, the London balances of these institutions increased as the British Treasury made advances to Dominion and to foreign governments, and as the Government made purchases abroad. These balances were invested in part, and held at the Bank of England and other banks. With the introduction of Special Deposits, the O.D. of foreign institutions were probably reduced disproportionately. In 1916, the increase in cash of British banks was 90 millions, but the *excess* of (1) new issues of currency and Bank of England notes, and the increase in O.D. *over* (2) the net exports of gold and the increased gold held by the Bank of England, was only 45 millions. Is it possible that in a year in which prices were rising rapidly, cash was flowing from the public to the banks? Or were balances at the Bank of England being transferred from outside accounts to the credit of British banks? Or is it possible that British banks were including Special Deposits with their cash?

The inflationary effects of the Government's borrowing policy have frequently been exaggerated. After the public paid for war securities purchased in 1915, the reserves of the banks were once more reduced to a safe level. The absorption of unprecedented issues of Treasury bills and other securities by the banks in the first three years of the War did not result in an equivalent creation of additional purchasing power, as has generally been contended. It should not be assumed that the banks did not modify their lending policy elsewhere, and, moreover, when the Government disbursed their cash, contractors repaid advances, the public demanded more currency, and business men hoarded deposits in order to provide for future taxes, renewals, depreciation and the distribution of profits. The results were that deposits were reduced and the public was more inclined to hoard them.

Subscriptions to war securities by the public without the aid of the banks might have resulted in inflation, for inactive deposits were thus converted to a large extent into active deposits. Is that not one explanation of the relatively moderate increase in deposits as compared to the increase in the price level during the greater part of the War? The public converted its saving

deposits into war securities; and when the cash thus obtained was transferred to contractors, current deposits were increased, although the latter were not as active as in normal times.

The purchases of war securities by the banks were especially important in 1915 and 1916. But in 1917 and especially in 1918, the British banks withdrew their support and put the responsibility for the purchase of securities on the public. They were willing to help finance the purchases; but the risks of depreciation were now taken by the public. In the latter part of the War, the British Treasury was not hampered to the same degree as Continental countries by the refusal of the public to purchase securities. The latter compelled central banks to purchase securities not otherwise saleable.

The English authorities took the first step toward deflation in 1919 in paying out 10 millions of notes from Bank reserves instead of drawing currency notes. The Treasury Minute providing for the limitation of fiduciary currency notes was not published until December 15, 1919. When the Cunliffe Committee published its report late in 1918, the Government accepted its findings. But the revival of business early in 1919 made the Treasury extremely cautious. Chamberlain reminded the House that the Cunliffe Committee had not erred on the side of heterodoxy and his understudy, Baldwin, was also cautious. However, the rapid spread of inflation aroused many protests; moreover, the Treasury was finding the competition of trade for banking accommodation rather unpleasant. Hence the Government were more anxious to cooperate in a policy of deflation by the latter part of 1919. Increases in the bill and Bank rates were followed soon after by an announcement of a limitation of fiduciary currency notes. The check to expansion was only temporary. In the first three months of 1920, the Bank of England transferred notes to the Currency Notes Account, the Government continued to be troubled by the threat of non-renewal of Treasury bills, and the country lost gold at a rapid rate. In the week preceding the fatal week of April 7, 1920, when the Bank rate was raised to 7 per cent, the reserve ratio against currency notes declined for the first time since August, 1919. (The only exception occurred in

the midst of the seasonal increase of notes at the end of the year.) Did the Bank of England still hope to avert an increase in the Bank rate?

When the depressing effects of deflation began to be felt, the Government attempted to put the sole responsibility upon the Bank of England. Their hope was that deflation would proceed gradually, very gradually. Anxious to repay as much debt as possible while prices were still relatively high, the Treasury applied large surpluses to the extinction of debt. In their less guarded moments, the spokesmen for the Government were outspoken about their debt-reduction and deflation policy. In the latter part of 1922 and 1923, the authorities lost courage and they attempted to substitute a tax-reduction for a debt-reduction policy. But in the years 1922-23, revenues were larger than had been anticipated.

From 1921 to 1924, the Government frequently were able to substitute departmental advances for advances from the Bank of England. The fluctuations of the two variables were in similar directions 137 times, and in opposite directions 78 times; but the large movements were generally in the same direction. An examination of statistics of Department Ways and Means reveals that the redemption of currency notes may be embarrassing. Thus in the second quarter of 1921, the Government borrowed 39 millions from the Bank of England; but departmental advances declined 41 millions. However, in the second half of 1921, departmental advances were increased by 67 millions, while notes outstanding remained relatively stable.

In the course of the years 1921 to 1924, the Government repaid 50 millions of advances from the Bank of England. How was this possible? These large net transfers of cash to the Government were made in spite of the fact that the banks replenished their balances by turning in 100 millions of currency notes. The intensity of the movement can be gleaned from a study of the fluctuations in the monetary circulation and O.D., in contrast with the fluctuation in cash and money at the Bank of England of British banks. It is almost inconceivable that in one year (1921) currency notes outstanding and O.D. should have been reduced by 119 millions and the cash of British banks should

have increased. Perhaps large balances were being placed to the credit of British banks by outside institutions. The influx of foreign balances was an effective substitute for imports and purchases of gold. London's favorable position in the deflation years brought repercussions similar to those under a gold standard. Perhaps the banks were also holding more cash in their tills. The marked loss of cash was not felt more by the market because the banks required smaller cash reserves on account of the reduction in prices and in bank credit. The market suffered an additional loss of cash because the Government renounced Ways and Means financing as a permanent feature of their financial program; the Treasury, therefore, had to hold larger balances if it was to be prepared to meet all demands without borrowing from the Bank.

The Government redeemed approximately 100 millions of currency notes and in this manner reduced either Treasury bills outstanding or Department Ways and Means. The capacity of the market to add to its cash reserves by turning in currency notes made the enforcement of deflation more difficult. The Treasury's ability to impose deflation by applying surpluses to the extinction of domestic floating debt was impaired by the necessity of redeeming other types of securities at home and abroad. Unfortunately, many issues were provided with compulsory sinking and depreciation funds. However, the repayment of foreign debts probably had repercussions similar to those that followed the exportation of gold or the repayment of Bank of England Ways and Means. The Treasury obtained foreign assets or gold in exchange for P.D. which were then replenished by the market. In the deflation period, the authorities redeemed approximately one half of the Treasury bills outstanding, and by the end of 1922, the public held virtually no Treasury bills. The public disposed of them in order to repay bank advances, and the money market was more disposed to offer high prices for bills. In so far as the public subscribed to Treasury bonds and the Government consumed the cash thus received in purchasing Treasury bills in the possession of the banks, the net effect was deflationary. But the banks had the opportunity of substituting other securities or advances.

One of the peculiar features of the money market in the years 1921 to 1924 was a chronic state of stringency. The repayment of Bank of England Ways and Means was an important cause. The cash of British banks had been reduced relatively more than their deposit liabilities. They operated with unusually small cash reserves and were frequently forced to borrow from the Bank of England. In 1921, their position was strengthened by the influx of currency notes; but beginning in 1922, they were in a continual state of uneasiness. The imposition of a rigid limitation of currency notes in a period in which gold imports were not available, deprived the country of a possible source of relief. On several occasions, the Treasury issued notes in excess of the fiduciary limit by excluding notes that were called in but were still in circulation. The Bank of England might have purchased gold at a premium; but this policy has been subjected to severe criticism ever since it was attempted more than a century ago. The reserves of the Bank of England remained abnormally small and unstable in 1921 and gave the market many uneasy moments. But in 1922 its position was improved by the influx of Bank of England notes.

In the early years of the War, the foreign exchanges were one of the most vexatious problems confronting the Government. A day before the United States entered the War the British Government had prepared a memorandum for Poincaré in which they announced that all their foreign resources were consumed. By borrowing and selling securities abroad, the British Government maintained Sterling at \$4.76 during the years 1916-18. The result of pegging was not only that imports were obtained more cheaply and that exports were discouraged, but also that the export trade, almost exclusively in the hands of private individuals, was taxed and the import trade, controlled and operated by the Government in large part, was favored. It does not follow that Great Britain gained the difference between \$4.76 and the rate that would have obtained under competitive conditions, for in so far as the additional dollars received by Great Britain were replaced by dollars created *ad hoc* by American banks, prices were higher and the Allies had to offer more dollars for their supplies. The artificially high value of Sterling did not stimulate unnecessary imports

on a large scale, because England imported only indispensable supplies. A great advantage of pegging was that large supplies of commodities were obtained without inflation at home. Only in so far as the former owners of securities disposed of in the United States reduced their purchases of other securities, might the process be considered inflationary. Increased confidence in Sterling, the receipt of \$4.76 for each £ Sterling received on capital account, and the discouragement of exports when the Government had not yet introduced a rigid control of exports—these were additional advantages of pegging.

After the United States entered the War, the Government made large advances to the Allies for war purposes. It is not easy to distinguish advances to finance exports of American commodities from advances made for the purpose of purchasing Sterling. For part of the latter was in fact used to pay for commodities purchased in the United States. Apparently, the United States was anxious to make all advances necessary to finance the exports of American commodities; but advances made for other purposes were made grudgingly. The Allies argued bitterly over the question of reimbursement credits. The American Treasury was strongly opposed to the use of dollar credits by France to make payments for commodities purchased in Great Britain. In the post-War period, the American Government continued to make large advances to the Allies, although the legality of these advances has been questioned. Aroused by the necessity of fostering the export trade, the American Government used every possible means to encourage the extension of advances to Europe. But when the credit of Europe had fallen to a low point, the American Treasury withdrew from the banking business, and urged private institutions to grant the necessary credits.

The depreciation of the British exchanges in 1919-20 was partly caused by the unfavorable balance of trade of European countries. But the payments made by Great Britain for the Continent were not advances exclusively, for Continental countries had accumulated large balances of cash and securities in London during the War which they now converted into dollars. The accumulation of balances in London had been a bullish factor during the War, but the consumption of these balances was a bearish factor

in 1919-20. Also, if the reduction of Sterling bills resulted in increased demands for Sterling in the early months of the War, the renewed financing with Sterling bills put an additional strain on Sterling in 1919-20. More attention should be given to the unparalleled excess of imports of Great Britain in 1919-20 as a factor in the depreciation of Sterling.

From 1921 to 1924, political and speculative factors received a great deal of attention. Of course, exchanges do not fall merely because the political situation appears less promising, but rather because the political change will be accompanied by increasing inflation, exportation of capital and the like. It is true that the economic changes that are popularly associated with political changes are often not realized, and therefore, it may be contended that the speculators guessed wrongly, or the political situation changed. The rise or fall of confidence is not to be referred entirely to the calculation of ensuing changes in the economic system; the speculative factor which has played so important a part in the recent history of Continental exchanges, becomes increasingly important in the midst of rapid political changes.

Great Britain profited from the unfavorable turn in the balance of payments of the Dominions and South America, which resulted in a transfer of balances to London. Depreciation in France, Italy, Russia and Central Europe in 1922 was not without significance for Sterling in that year. The price and fiscal history of Great Britain from 1922 to 1924 was an important factor in the improved position of Sterling; and the price history of the United States goes a long way toward explaining the fluctuations in Sterling.



## APPENDICES



## APPENDIX I

### LONDON MONEY MARKET

WHAT is the strength of the London money market to-day as compared to 1914? Foreigners have moderated their confidence in a money market which required a moratorium, and a currency which required pegging.<sup>1</sup> However, the depreciation of Sterling and the embarrassing demands for dollars to pay large debts abroad, had rather unexpected effects. Foreigners found it profitable to retain in London the large balances accumulating in their favor especially because the British Government offered advantageous terms for their use, and also because there was the possibility of obtaining a profit with the appreciation of Sterling.

The competition of Berlin and Vienna, which was felt by London banks before 1914, has been of secondary importance since the War.<sup>2</sup> German banks in South America and the Orient were not only estranged from their parent organizations during the War, but had to write down heavy losses as a result of unprofitable transactions in German marks in the post-War period.<sup>3</sup> However, a recent investigation of the German banks operating abroad reveals that they have recouped a large part of their losses, and have even advanced beyond their position of 1914 in some respects. Their resources are larger; and they are just as completely controlled by the parent banks, although they have assumed foreign names.<sup>4</sup>

<sup>1</sup> Vissering commented on the premium on Dutch currency in 1915, which he attributed to the fact that Amsterdam was usurping London's position. Transactions were being consummated in gulden because Netherlands had refused to declare a moratorium. G. Vissering, *Netherlands Bank and the War*, I, pp. 42-43.

<sup>2</sup> Gilbert, in one of his reports on Reparations, comments on the absence of bills in the German market, and on the direct financing by the banks, which has been substituted. Reparation Commission XVII. *Report of Agent General for Reparation Payments*, December 10, 1927, pp. 112-13. Also see the official study, *Die Deutschen Banken*, 1924-26, p. 21, where it is pointed out that acceptances have virtually disappeared. The Disconto-Gesellschaft in its Annual Report for 1926, says that the financing of foreign trade is only possible with the help of foreign friends; bills are drawn in dollars and pounds. *Deutsche Volkswirt*, 1927, p. 747.

<sup>3</sup> L. Lange, *Expansion und Volkswirtschaftliche Bedeutung deutschen Überseebanken*, pp. 13-14.

<sup>4</sup> H. Richter, "Die Bilanzen der deutschen Überseebanken." *Die Bank*, 1928, pp. 603-14. The German control is unimpaired, and the assets are larger than before the War; but mark acceptances are of little importance.

The London agencies of Austrian and German banks, whose main business was to accept bills, and whose total assets were £23.4 million before the War, were closed by the British Government.<sup>5</sup> With the exception of continuing the ban for a period of ten years and of Anglicizing the London agency of one of the Austrian banks,<sup>6</sup> virtually no action has been taken to determine the future policy of the British Government toward these banks.

An appreciable part of all bills accepted in London were acceptances of these German and Austrian institutions. Germany took vigorous steps to establish the popularity of the mark bill. They could report progress by 1914. Lange estimates that 60 per cent of the bills held by the Deutsche Bank before the War were drawn in Sterling and 40 per cent in marks.<sup>7</sup> One should also consider the proportion of mark bills to the total of foreign bills in all countries, for foreign banks were more likely to hold only Sterling bills. Prion, who admits that London's supremacy was unchallenged in 1907, refers it to the relative stability of Sterling which disposed people to hold their balances in London; and also to the universality of London bills, which made them easily negotiable. An indication of the losses suffered by Berlin banks owing to the closing of the London agencies, is to be gleaned from the fact that acceptances (in marks) of the three large banks operating in London decreased from 1213 millions on June 30, 1914, to 512 millions on December 31, 1915, and their holdings of bills declined from approximately 800 millions on June 30, 1914 to 450 millions in December 31 1914.<sup>8</sup>

The future of the London money market depends in part on the official attitude toward foreign banks operating in the market.<sup>9</sup> Because foreign agencies did not reveal the magnitude of assets held in London

<sup>5</sup> See *Enemy Banks (London Agencies)*, Report of Sir William Plender to the Right Honourable Chancellor of the Exchequer, Cmd. 8430 (1917), for a discussion of the activities of enemy banks (London Agencies).

<sup>6</sup> *British Overseas Trade Report on Austria*, July, 1922, p. 13.

<sup>7</sup> L. Lange, *op. cit.*, p. 12. Before the War, Franz pointed out that Germany still had to use £ bills in financing its trade with some countries in South America and with all of Asia and Australia. *Miscellaneous Articles on German Banking*, p. 81. Riesser concluded that in a majority of cases, German exporters and foreign exporters to Germany, did not have to draw in Sterling. J. Riesser, *German Great Banks and Their Concentration*, pp. 431-32.

<sup>8</sup> W. Prion, *Kreditbanken*, pp. 76-78; also see A. Lansburgh, *Die Berliner Grossbanken im Jahre 1927*, Die Bank, 1928, pp. 203-4. Lansburgh points to the high discount rates and the instability of the mark as the explanations of the scarcity of mark bills.

<sup>9</sup> Lange emphasizes the necessity of reopening London branches. L. Lange *op. cit.*, pp. 30-31. Devisen holdings in London of the Swiss National Bank were fairly stable in the years preceding the War, but the holdings in Paris and Berlin were on the increase. A. Jöhr, *op. cit.*, p. 349. (The movement is not decisive, however.)

and because there was the danger of heavy withdrawals of gold, Brand objected to them.<sup>10</sup> Wyse, however, feared that a hostile attitude toward the establishment of foreign banks in London would necessarily result in a diminution of Sterling bills because their popularity is dependent upon the coöperation of these banks.<sup>11</sup> Robinson, who has recently made a careful study of foreign banking in London, concludes that the British banks have usurped the work previously done by the German banks, and that foreign institutions operating in London are not operating at their normal efficiency.<sup>12</sup> Undoubtedly, the British banks have expanded their foreign exchange business at a very rapid rate; previously, foreign institutions provided London with a large part of its foreign exchange facilities. Although New York State laws discriminate against foreign banks operating in New York, the number of such institutions has increased.<sup>13</sup> To avert the losses resulting from the inequitable treatment, some of them have established themselves in New York through subterfuge. That development does not enhance London's relative position.

Even before the War, British banks were criticized because of their conservative methods of banking. Impelled by an unfounded fear of German competition, and an unwarranted admiration of German banking methods, the critics of British banking became more numerous and their criticisms became more bitter. These criticisms have been in part responsible for the unparalleled development of foreign banking by British banks in recent years, and for their enterprise in undertaking the foreign exchange business which had been controlled by foreign banks before the War. Europe, in a rather depressed economic state, was anxious to accept the coöperation of British banks. The banks of the United States also became interested in foreign banking; and Canada and France entered the competition; but British banks were most successful of all in establishing a deposit business in foreign centers.

At an early stage of the War, Runciman, President of the Board of Trade, threatened to create new banks if the existing institutions did not become more adventurous.<sup>14</sup> Critical of the activities of joint stock banks, he later defended the proposals for the establishment of the British Trade Corporation.<sup>15</sup> That banking facilities were inadequate,

<sup>10</sup> R. H. Brand, *War and National Finance*, pp. 22-24.

<sup>11</sup> R. C. Wyse, "The Future of London as the World's Money Market," *Economic Journal*, 1918, pp. 387-90.

<sup>12</sup> L. R. Robinson, *Foreign Credit Facilities in the United Kingdom*, pp. 35-42.

<sup>13</sup> *Annual Report of Federal Reserve Agent of New York*, 1918, p. 341. (Published in *Annual Report of Federal Reserve Board.*)

<sup>14</sup> 77 H. C. Cols. 1360-61.

<sup>15</sup> 93 H. C. Cols. 1841-52.

was the opinion of a sub-committee of the Advisory Committee to the Board of Trade on British Trade After the War.<sup>16</sup> A departmental committee of the Board of Trade reported that the facilities of the joint stock banks were inadequate in the electrical, shipbuilding and marine engineering, textile, and engineering trades.<sup>17</sup> An idea of the weaknesses commonly imputed to the joint stock banks can be obtained from a study of the charter of incorporation of the British Trade Corporation, which allowed that institution to grant financial assistance for long periods of time, to assist in obtaining orders abroad for British manufacturers, to make advances for enlargements of works, and to make foreign banking connections.<sup>18</sup> That the Government found it necessary to grant export credits, is considered a reflection on the banks.<sup>19</sup>

The farmers were not satisfied that they were getting adequate help from the banks. A sub-committee of the Reconstruction Committee reported that the banks were not sufficiently decentralized, and hence the farmers did not receive ample accommodation.<sup>20</sup> However, the Committee on Agricultural Credit of 1923 did not complain on this score. The indebtedness of the farmers to the Big Five was in excess of 46 millions, of which 26 millions had been obtained for long periods of time.<sup>21</sup> An important witness before the Agricultural Committee had already said that the farmers were receiving more credit than ever from the banks.<sup>22</sup>

On other grounds, also, the banks have been criticized. The Committee on Banking Amalgamations voiced the protest of local governments, which were finding it more difficult to obtain adequate credit facilities. This Committee reported in favor of amalgamations although it suggested safeguards against the further elimination of competition; but many classes were deeply aroused by the menace of monopoly.<sup>23</sup> Weber contends that the British banks were purchasing securities which would not have been accepted 60 years ago, and that they were lending

<sup>16</sup> British Trade After the War. Report, especially paragraphs 6, 32. Cmd. 8181 (1916).

<sup>17</sup> B. T. J., March 14, 1918.

<sup>18</sup> British Trade Corporation: Petition of Promoters, Deeds of Settlement, etc. Cmd. 8567 (1917).

<sup>19</sup> See Report C. P. A., especially Qs. 1481, 1586-96, 1600.

<sup>20</sup> Ministry of Reconstruction. Agricultural Policy Sub-Committee. Report and Summaries of Evidence, Cmd. 9079 (1918), p. 56.

<sup>21</sup> Committee on Agricultural Credit. Cmd. 1810 (1923).

<sup>22</sup> Royal Commission on Agriculture (Interim Report Minutes of Evidence, Cmd. 365), Q. 8100, 1919.

<sup>23</sup> Report of Treasury Committee on Banking Amalgamation, Cmd. 9052. Also see criticisms of Webb and Addis given in H. Withers, *War-Time Financial Problems*, pp. 164-71.

freely on the security of commodities, and were lending more frequently by overdraft.<sup>24</sup>

British banks have been subjected to much criticism for operating with inadequate capital resources. Long before the War, the proportion of capital to all liabilities began to decline, and continued to decline during the War.<sup>25</sup> The capital resources of British banks are small as compared to German and Dominion banks. In recent years, the premises of British banks have frequently been carried on their books at a value as high as their banking capital. In the post-War period, the banks made an attempt to increase their capital. But frequently the increase was mythical because large reserves were converted into capital. Capital created in this manner did not constitute an increase of resources, although frequently the reserves had not previously been revealed. Of course, in so far as the banks accumulated more reserves, they were adding to their capital resources; but the conversion of reserves into capital involved no net gain. Without a doubt, the large increase in reserves accounts in part for the moderate rate of increase of capital. Banks accumulated reserves out of profits. On the whole, they followed a conservative policy in apportioning their earnings.<sup>26</sup> Earnings are not always revealed. Some banks accumulate reserves before disclosing profits, some put aside reserves after revealing their profits, and the same banks frequently alternate both methods.

One important cause of the relative reduction of capital resources was the amalgamation movement. The market value of the securities of the larger banks was generally so high that they could purchase the shares of the smaller banks on terms which resulted in a net reduction of capital. (This was true in general except for the last few amalgamations.) The reduction was fictitious, for the capital resources were not reduced. The depreciation of securities both before and during the War was another important cause of the reduction of the proportion of capital liabilities.

Two other points require comment here. The ratio of profits to total resources has declined steadily. That is to be explained in part by the

<sup>24</sup> A. Weber, *Depositbanken und Spekulationsbanken*, 3d ed., pp. 176, 212-13.

<sup>25</sup> From 1894 to 1913, capital liabilities of British banks increased 5 per cent, deposits and current accounts 65 per cent, and cash and money at call 107 per cent. *B. M.*, January, 1915 (99), *passim*. The ratio of capital to all liabilities was 7.9, 5.0, 6.4 and 6.3 per cent in 1914, 1919, 1922 and 1924 respectively. The capital liabilities of smaller banks were relatively larger. Figures from London *Economist*, Banking Numbers.

<sup>26</sup> From 1914 to 1924, English banks paid out from 46 to 79 per cent of their earnings (in so far as they were disclosed) in dividends. The important joint stock banks of England and Wales made but nine changes in their rates of dividend from 1919 to 1924; and most of these changes were nominal. Compiled from London *Economist*.

reduction of capital liabilities; but it is also a symptom of increasing banking efficiency and of banking services at lower cost to the community. Both during the War and post-War periods, the profits of banks would have been reduced had not Government securities been available for purchase. The importance of banks for financing industry has dwindled; the magnitude of investment operations has increased. If one is to generalize from banking policies in 1919-20, one would conclude that the banks will always be prepared to substitute advances to industry for their investments in Government securities when industry requires additional accommodation.<sup>27</sup>

Under the provisions of the Bank Act of 1844, the reserve against notes of the Bank of England was separated from the reserve against deposits. Hence the system became peculiarly sensitive to moderate reductions in banking reserves; Palgrave rightly contends that fluctuations in the Bank rate were more numerous than they otherwise would have been. However, the difficulty was not only that the reserves were divided, but also that the proportion segregated as reserve against notes was too large. If much larger reserves were required against notes under the Federal Reserve System, the reserves against deposits would be smaller and hence the banking system would suffer more from losses of gold and from frequent changes of rates. On the other hand, the requirements of large reserves makes it possible for a country to retain more gold; and hence a relatively large reserve against notes permanently held may be accumulated without reducing the banking reserve. In other words, the accumulation of large reserves is one method of hoarding gold. Since this additional gold does not affect prices, it is retained. A transitional period, during which the additional reserves are acquired, may be a difficult one.

In 1888, Marshall testified before the Gold and Silver Commission that the banking reserve was inadequate; and he recommended that a reserve of 20 millions above current business requirements be obtained.<sup>28</sup> What Marshall had in mind for Great Britain, has been accepted by American banking officials. They have sterilized part of the gold imported. Foxwell criticized the banks for holding inadequate reserves.<sup>29</sup> In the nineties, the question of inadequate gold reserves was

<sup>27</sup> McKenna's evidence before Committee on National Debt and Taxation. Q. 1760. Also see R. H. Brand, *Evidence-in-Chief*, ch. 7.

<sup>28</sup> "Testimony before Gold and Silver Commission," *Official Papers by Alfred Marshall*, p. 110.

<sup>29</sup> H. S. Foxwell, *Papers on Current Finance*, pp. 6-7.

the subject of much comment.<sup>30</sup> Palgrave's discussion of this subject is well known.<sup>31</sup>

Complaints of lack of control of the market by the central bank were common not only in Great Britain, but in Continental countries. In the course of the deliberations of the Commission on the German Bank Inquiry of 1908, many criticized the Reichsbank for having failed to control the market rate.<sup>32</sup> Palgrave has criticized the Bank of England for holding inadequate reserves and he has pointed out that the Bank of England holds a dwindling proportion of the total bills on the market.<sup>33</sup> Lavington concludes that there is no close connection between Bank and market rate, and that changes in Bank rate are frequent because reserves are small.<sup>34</sup> More recently, Lord Bradbury said that the Bank of England has strengthened its control by the acquisition of a larger portfolio of short term securities.<sup>35</sup> Commenting on the Bank Act of 1844, Gilbert 75 years ago made reference to the increasing aggressiveness of the Bank of England, which was beginning to purchase bills instead of long term securities.<sup>36</sup> Keynes now comments on the ideal system of control exercised by the Bank of England in recent years.<sup>37</sup>

The attitude of India is evident in the following pertinent facts: its eagerness to establish a gold standard free from the control of London; the desire to control the sale of Council bills from India instead of from London; the lack of faith in the stability of the British monetary system among the representatives of India's banking and mercantile classes.<sup>38</sup> South Africa was prepared to accept the recommendations of

<sup>30</sup> G. H. Pownall, "The Insufficiency of Our Cash Reserves and of Our Central Stock of Gold," *Economic Journal*, 1892, p. 535; H. S. Foxwell, "Mr. Goschen's Currency Proposals," *Economic Journal*, 1892, pp. 139-43; A. Crump, "One Pound Notes and the Metallic Reserve of the Bank of England," *Economic Journal*, 1892, p. 161.

<sup>31</sup> R. H. I. Palgrave, *Bank Rate and the Money Market in England, France, Germany, Holland, and Belgium, 1844-1900*, pp. 38-47.

<sup>32</sup> German Bank Inquiry, I. The Commission was largely concerned with the problem of strengthening the position of the Reichsbank. The necessity of increasing its capital and accepting large interest-paying deposits was discussed at length.

<sup>33</sup> R. H. I. Palgrave, *op. cit.*, pp. 38-47, 67. Also see chs. 9 and 10.

<sup>34</sup> F. Lavington, *The English Capital Market*, pp. 161-64.

<sup>35</sup> Commission on Indian Currency, 1926, Q. 14224.

<sup>36</sup> J. W. Gilbert, *A Practical Treatise on Banking*, pp. 91-92.

<sup>37</sup> J. M. Keynes, *A Treatise on Money*, II, pp. 231-32.

<sup>38</sup> See the testimony of almost every witness before the Young Commission, who represented Indian business and financial interests. The 1919 Commission recommended stabilization in terms of gold, rather than Sterling. Indian Currency Committee, paragraphs 55-57. Also see *Overseas Trade Report for India, 1924-25*, pp. 28-29.

the Kemmerer-Vissering Commission, which proposed to bind the South African pound to gold, rather than to the English pound.<sup>39</sup> On the other hand, Australia and Egypt have linked their currencies to the English pound more securely than ever.<sup>40</sup>

Countries recently attempting to stabilize or raise the value of their currencies to pre-War parities, have observed conditions in New York with more interest than formerly. This was especially true of Germany, Austria, and Czecho-Slovakia. Sweden, however, was unwilling to return to a gold standard, unless Great Britain resumed payments first. The greater participation of New York in stabilization loans is significant.

The French have never competed strenuously with the British in the financing of foreign trade. However, it is not true, as is commonly supposed, that the Bank of France does not discount foreign bills. Beginning in 1904, the Bank of France began to discount foreign bills, in order to encourage foreign trade, but these purchases have never been made on a large scale. A movement was set on foot during the War to stimulate France's participation in the financing of foreign trade.<sup>41</sup> But in a period in which deposits increased, the deposits of banks largely interested in foreign business declined.<sup>42</sup> It seems that the banks lost much foreign business.

The most serious competition that London faces is that emanating from New York.<sup>43</sup> Although New York had not made great progress in financing trade in which the United States is not a party, the increased popularity of dollar bills and the development of an acceptance market are not to be overlooked. Frequent transfers of balances from London to New York are also of significance.<sup>44</sup> With the introduction of restriction on transactions in London, Japan found the exchange facilities which New York offered more attractive; hence, Japan transferred large balances to New York.<sup>45</sup> Canada, Italy, and the Nether-

<sup>39</sup> *Resumption of Gold Payments in South Africa*, paragraphs 16, 30.

<sup>40</sup> Thus see Imperial Economic Conference, 1923. *Canadian Sessional Papers*, 1924, VII, pp. 352-54, 371-72.

<sup>41</sup> The Société d'Économie Politique de Paris devoted a session to the discussion of such problems as the need for a bank for granting export credits and rediscounting foreign bills. The *Économiste Français* complained of the inadequate facilities for financing foreign trade and deplored the reliance on London, August 18, 1917.

<sup>42</sup> J. Lorient, "Les Banques," *Revue d'Économie Politique*, 1923, p. 175.

<sup>43</sup> See the notes on Bills appended to the chapter on Foreign Exchanges. Correspondent relations were established frequently with the New York Federal Reserve Bank. See *Annual Report of Federal Reserve Board*, 1918, pp. 339-40. The Board also comments on the large purchases from the United States which were paid for with dollars previously accumulated in New York. *Ibid.*, p. 56.

<sup>44</sup> *U. S. Mint Report*, 1920, p. 182.

<sup>45</sup> S. Y. Furuya, *Japan's Foreign Exchange and Her Balance on International Payments*, p. 67.

lands have, in recent years, also expanded their activities in foreign banking.<sup>46</sup>

The United States has become of increasing importance as a gold center and holds larger balances of foreigners than any other money center. Its large exports of capital have been reflected in increasing foreign balances. The importance of the London money market relative to New York has been reduced as a result of the fact that its gold supplies are inadequate.

#### CONCLUSION

The London money market does not occupy as important a position to-day relatively speaking as before the War. New York has acquired more prestige. Dollar bills are now of some significance; the gold standard is more strongly entrenched; and New York as a money center has profited from the development of the United States as a capital exporting nation. On the other hand, Berlin's position is not as strong as it was in 1913. Its foreign banks have regained much lost ground; but mark bills are not as popular as they were before the War, and British banks have begun to operate aggressively in foreign countries.

Great Britain also suffers from elements of weakness in its system. The Dominions are not as anxious to maintain close banking and monetary relations with London as they have been. British banks have recently been severely criticized for their lack of venturesomeness, for giving inadequate accommodation to farmers, and for operating with inadequate capital resources. Recent additions to capital liabilities have been obtained in large part by converting reserves into capital. The complaint that the English banking system has inadequate cash reserves has been revived. The trouble is not only that the reserves of the Bank of England are distributed over two departments, but also that the Note Department requires a large part of the available supplies of gold.

<sup>46</sup> For comments on Canada's expansion, see *B. T. J.*, June 30, 1921; for comments on Italy's activities, see *Brussels Conference, Review of Two Years*, *passim*. The Netherlands has become increasingly favorable to the rediscounting of bills of foreign banks. *Report of the Bank of Netherlands, 1927-28*, p. 20.

## APPENDIX II

### WAR LOANS AND THE MONEY MARKET <sup>1</sup>

#### *Section 1. Introduction*

IN an important sense, the First War Loan, which was floated in 1914-15, was a deflationary measure: The British banks lost cash in effecting the necessary transfers. The public subscribed to it out of savings, and the borrowing of the market from the Bank was moderate indeed. The Treasury had to contend with rather unfavorable monetary conditions in floating the Second War Loan in 1915. The market was prepared for the First Loan because it had received large accretions of cash as a result of the extensive advances made by the Bank of England in the early part of the War. To prepare the market for the flotation of the Second Loan, the Treasury reduced its inflated balances and borrowed from the Bank of England. When large payments were received, the Government repaid the Bank and redeemed Treasury bills that had been issued in previous months. The Treasury was inclined to hold large balances and had not yet learned how to adjust expenditures to receipts nicely.

The Treasury prepared for the flotation of the War Loans of 1917 by discontinuing the sales of Treasury bills, by borrowing from the Bank of England and by accepting Special Deposits. The flow of cash was more concentrated than in the course of the Second Loan. Nevertheless, the Government balanced receipts and expenditures remarkably well and the market was saved any embarrassment by withdrawing Special Deposits.

The British Government on four occasions issued large loans. The Government can reduce the disturbances on the money market that are likely to accompany the flotation of a large loan either by borrowing from the Bank of England in anticipation of large receipts or by disbursing the proceeds as soon as they are received. Undoubtedly, the first method is more easily adopted although its introduction is not likely to reduce disturbances to a minimum.

<sup>1</sup>The material in this appendix was obtained for the most part from the *Finance Accounts* and the London *Economist*.

*Section 2. First War Loan, 1914-15*

In September, 1914, the Bank of England did not seem to be pleased at the prospect of making large advances to the Government; but in November, the Bank was compliant. The explanation of the change in attitude may lie in the promise of a large loan in the near future. The preparations for the First War Loan were elaborate. The important inflationary measures undertaken by the Government and the Bank of England in the early months of the War were in effect preparatory measures. From October 28 to December 2, 1914, Other Deposits increased from 127 to 168 millions. The more important movements that account for this increase in Other Deposits were as follows:

	<i>Millions of £ Sterling</i>
1. Increase of gold in Note Department.....	9.4
2. Disbursements of the British Government.....	
a. Increase in Public Securities.....	11.9
b. Decrease in Public Deposits.....	12.4
3. Increase in Other Securities.....	8.2
	41.9

The Government received payments for the loan over a period of about four months, December, 1914, to March, 1915. The more important receipts were as follows:

	<i>Millions of £ Sterling</i>	<i>Amount</i>
7 days      December 12, 1914 .....		68.0
12 days     December 31, 1914 .....		18.2
9 days      January 9, 1915 .....		38.0
7 days      January 23, 1915 .....		16.0
“            February 27, 1915 .....		18.0
“            March 6, 1915 .....		22.5
“            March 13, 1915 .....		26.5

In all, 296 millions were received. Only inappreciable transfers were made in the last two weeks of March; but the market lost 47.7 millions in paying for Exchequer bonds.

The figures of the Bank of England for the more important weeks are given on the next page.

On December 9, the Government had a balance of 45 millions at the Bank of England as compared to 12.6 millions on December 2 and an average of 18.7 millions for the ten preceding weeks. Other Deposits were reduced to 120.9 millions as compared to an average of 144.2 millions for the ten preceding weeks. In December and January, the Treasury seemed to be unable to bring its highly inflated balances down

		<i>Millions of £ Sterling</i>				
		P. D.	P. S.	O. D.	O. S.	
1914	December 2.....	12.6	31.3	168.0	113.1	
	December 9.....	45.0	12.0	120.9	117.6	
	December 16.....	43.2	12.0	122.7	116.5	
	December 23.....	37.5	14.8	115.4	103.3	
	December 30.....	26.9	14.8	128.1	106.2	
1915	January 6.....	23.8	14.8	133.3	108.9	
	January 13.....	44.8	18.1	116.1	108.2	
						Reserves in Banking Department
	March 10.....	50.1	27.1	129.8	127.0	42.5
	March 17.....	70.9	30.0	100.4	115.7	42.4
	March 24.....	92.0	35.4	93.1	126.6	40.0
	March 31.....	113.7	44.6	89.7	140.0	35.7

to a normal level. Advances from the Bank of England were not large, and, therefore, one possible method of reducing the Treasury's balance was not available. The advances to the Dominions are to be considered, however. In the midst of the period in which payments were being made for the War Loan, the market apparently reduced its indebtedness to the Bank. It is possible, however, that the reduction of O. S. was the result of a repayment by the British Government on behalf of the Dominions. Public Securities (P. S.) were reduced to 11.9 millions for the week ending December 9 and 14.8 millions for the week ending January 6. No orthodox advances from the Bank of England to the Treasury were outstanding on January 5, and hence an indication is to be had concerning holdings of P. S. as investments by the Bank. Other Securities were reduced as a result of repayments by the British Government, and, probably, as a result of payments to the Bank by acceptors; hence we cannot be sure that the money market did not borrow in order to pay for subscriptions to the War Loan.

The movements in March were spectacular. The market apparently borrowed from the Bank; O. D. fell to a low point; and although the Government had substantial balances at the Bank, P. S. increased. As the Government did not borrow directly from the Bank in 1915-16 (January 5 to January 5), the explanation of the increase in P. S. may lie in its purchase of Government securities. The Treasury issued 50 millions of Exchequer bonds in the early part of March although its balances were large, and March is the month of largest receipts. Perhaps an unfortunate experience in February accounts for the added caution. In the week ending February 27, the disbursements of the Government were in excess of 50 millions although the average for the five preceding weeks had been but 17.5 millions. The Government thereupon issued 20 millions of Treasury bills, although but 15 millions of

bills were redeemed. The average of P. D. was 40.8 millions for the first ten weeks of the year and 123.7 millions for the ten weeks beginning March 31. In spite of these large hoards, the market was not uncomfortable. It is not easy to account for the increase in P. S. Possibly the Bank purchased securities from the Government or the market, because it anticipated that the market might encounter difficulties in making payments on war loans in March, a month of large tax payments. It seems improbable that the Bank would put additional resources at the disposal of the market when its control had already been jeopardized by the large creations of cash in the early period of the War. Nevertheless, regardless of whether the Bank purchased securities direct from the Government or from the market, the net effect was that more resources were made available for the market; and the Government held unnecessarily large balances.

*Section 3. Second War Loan, 1915*

The conditions on the money market in the summer were not as favorable as those that attended the flotation of the First Loan. The reserves of the Bank of England were low early in the year; March witnessed a marked decline. By June, London observed the exchange market with misgivings, and the large exports of gold were disconcerting to the money market. That the Bank was troubled by these losses, is apparent from the failure of the Treasury to transfer appreciable supplies of gold to the Currency Notes Account after March.

The preparations were again thorough. Within 6 weeks, P. D. were reduced from 132 to 53 millions (July 14), and O. D. increased from 84 to 158 millions. The large accumulation of P. D. earlier in the year may be considered as part of the preparation for the flotation of the Second War Loan. Although the Treasury replenished its balances by issuing Treasury bills and by borrowing on Ways and Means (issues of currency notes?), they were reduced at a rapid rate. It is not easy to justify a policy of anticipatory borrowing which made it necessary to hoard very large balances for a few months.

Approximately 600 millions were received in payment for the Second War Loan, a sum twice as large as that received from the flotation of the First Loan. Also, the concentration of receipts was appreciably greater. Thus the Government received but 77 millions in the two weeks ending December 5 as compared to 333 millions in the 3 weeks ending August 7. The Treasury now adjusted its expenditures to receipts in a more expert fashion. The totals of P. D. were 53, 109, 177 and 147 millions in successive weeks, but within two weeks they were

reduced to 103 millions. I present below the relevant figures for the more important weeks of the period under consideration:

		<i>Millions of £ Sterling</i>							
Receipts from 25-45 Loan		Expenditures		P.D.	O.D.	O.S.	P.S.		
July	17....	28.5	25.5	July	14....	53.	158	140	52
	24....	178.5	120.0		21....	109	135	105	53
	31....	95.0	38.0		28....	178	96	102	53
August	7....	60.0	100.0	August	4....	147	84	155	47

The Government's program was facilitated by the repayment of large advances from the Bank of England and by the redemption of Treasury bills issued in the second quarter of the year. The fluctuations in P. D. were not as extreme as they had been earlier in the year:

		<i>Millions of £ Sterling</i>		
Receipts		Expenditures		P.D. (correspond- ing week)
August	14.....	15.0	28	143
	21.....	51.0	56	103
	28.....	5.0	30	134
September	4.....	48.5	47	138
	11.....	14.0	38	130
	18.....	32.0	46	122

The market borrowed little if at all to finance the necessary payments on the First War Loan; but an increase in O. D. from 140 millions on July 17 to 192 millions on July 31, is evidence of large borrowings in conjunction with the flotation of the Second Loan. O. D. were more stable in the latter period. They had declined from 168 millions early in December, 1914, to 90 millions on March 31. After an initial decline from 158 millions on July 17 to 96 millions on July 31, they remained remarkably stable. The only large movements were an increase from 85 to 125 millions and a decline to 89 millions in successive weeks in August-September. From March to May, the continual transfers to the Government and the unparalleled accumulation of balances by the Government, forced the banks to borrow from the Bank of England. But the Government disbursed receipts quickly in the second half of the year, and O. S. were reduced from a maximum of 192 millions on July 28 to 148 millions on August 11, and declined to a low point of 93 millions on December 8. The rate of public expenditures was rapid enough to enable the market to repay the Bank; but the reduction in O. D. is also to be explained by the repayments to the Bank by the British Government of advances made to the Allies and Dominions.

#### *Section 4. War Loan of 1917*

The Government assumed the responsibility of preparing the money market for this loan by discontinuing the sale of Treasury bills, by bor-

rowing heavily from the Bank of England in the traditional manner, and by accepting Special Deposits with the coöperation of the Bank of England. By accepting Special Deposits, the Government deprived the money market of the cash which had been put at its disposal when the Government disbursed cash borrowed from the Bank of England.

The initial transfers were not made until the week ending February 17; but the Treasury redeemed (net) 165 millions of Treasury bills in the six preceding weeks and borrowed 281 millions on Ways and Means. P. S. increased from 62 millions on January 3 to 212 millions on February 7, which accounts for an advance in O. D. from 116 to 226 millions. A phenomenal reduction in O. S. from 92 millions on January 3 to 36 millions on January 31 is explained by receipts of Special Deposits against which the Bank pledged O. S. The market apparently began to borrow in the week ending February 21. O. S. rose by 49, 24 and 80 millions in successive weeks. However, the market may also have withdrawn Special Deposits which would account for an increase in O. S.

The Government balanced revenues and expenditures remarkably well:

Week ending	<i>Millions of £ Sterling</i>					
	Temporary Advances	Receipts from War Loans	Total Revenues	Total Expenditures	Reduction in Treasury Bills of Supply	Reduction in Temporary Advances
February 3.....	58		90	90	47.5	
February 10.....	42		115	115	40	2
February 17.....		324	353	353	100	211

The rapidity with which cash was received was even more phenomenal than in the course of the flotation of the preceding loan. In four weeks beginning February 17, the market transferred 638 millions to the Government in payment for subscriptions to the War Loan. The Treasury repaid 335 millions (net) of Treasury bills and 296 millions of Temporary Advances. Although the Government received 737 millions from all sources in a period of four weeks, O. D. declined but 119 millions. However, O. S. increased from 39 to 165 millions—a maximum of 196 millions had been reached—P. S. were reduced from 212 to 24 millions. Expenditures lagged behind receipts in the week ending March 10 with the result that the market borrowed heavily, and P. D. increased by 73 millions for the week ending March 7. These movements were reversed in the following weeks.

The money market was not seriously disturbed by the flotation of the 1917 loan. An observer of the London *Economist* reported the first signs of stringency on February 17; the Bank of England was prepared to lend generously at  $5\frac{1}{4}$  per cent. More than the previous loans, the

proceeds of this loan were used to redeem short term securities; and the Treasury could carry through this very large financial operation with a minimum of disturbance because it could redeem Treasury bills, which were reduced from 1093 millions on January 6 to 454 millions on April 14. The banks purchased a smaller part of this issue than of previous issues. The public, on the other hand, had to make payments in excess of the cash received from the redemption of Treasury bills. Hence deposits declined, and the decline would have been greater if the banks had not made advances to enable customers to hold the new securities. It had been the object of the Government to encourage the banks which had surplus resources, to invest heavily in the early loans.<sup>2</sup> Their investments were not necessarily a cause of inflation, as they might have put these resources at the disposal of trade. However, advances to industry and trade were more likely to result in increased production. The large subscriptions of the banks to war loans are not proof of their failure.<sup>3</sup> The investments of the banks in the Victory Loan, however, may be explained as an attempt to extricate the Treasury from a difficult situation.<sup>4</sup>

#### *Section 5. Victory Loan, 1919*

The preparations were along the same lines as those of the 1917 War Loan. The decline in Treasury bills outstanding was 408 millions, and the increase in Ways and Means was 473 millions. In so far as the increase in Ways and Means was in departmental advances and in Special Deposits, the market lost rather than gained cash. However, the market was prepared to withdraw Special Deposits when transfers of cash to the Treasury might become troublesome.

The results were disappointing. The Treasury received 164, 113 and 107 millions in successive weeks beginning the week ending July 18, and received but 60 millions additional. The repayment of Special Deposits in the course of the flotation of the loan, and an increase in all forms of floating indebtedness of approximately 900 millions were evidence of buoyant hopes. It is not surprising that the market remained at ease. The announcement of the renewal of the sale of Treasury bills during the first week in which payments were received on account of the Victory Loan, was an admission of failure.

<sup>2</sup> 68 H. C. Cols. 372-75.

<sup>3</sup> Compare K. T. von Echeberg, *Die Kriegsfinanzen*, p. 51.

<sup>4</sup> *L. E.*, July 26, 1919. In 1917, there was apparently little pressure on the banks. *B. M.*, 1917 (103), p. 485.

**MONETARY PROBLEMS OF THE  
DOMINIONS AND INDIA**



## INTRODUCTION

THE problems which the Dominions and India had to face were similar. Their goal was not to maintain stable prices but rather to maintain parity with Sterling. But the road to inflation was not as smooth for them as for more advanced countries. They were not willing to give up banking traditions—to operate with small reserves. Although several of them are important gold producing countries, their gold was put to other uses than that of strengthening their monetary systems. Australia alone was able to retain large quantities of gold for that purpose. South Africa suffered from troublesome losses of gold coin so long as its notes were convertible; and Great Britain was not prepared to allow South Africa to replenish its reserves with gold produced in South Africa. India's perplexing problem was to finance its large export trade and military expenditures. Paper money in very large quantities was not acceptable, and adequate supplies of silver were not available. Hence India accumulated excessive balances of cash in London and inadequate balances in India. The banks responded rather tardily to the plea of the Government to operate with small reserves. Although Egypt also had to face perplexing problems, the authorities solved them easily, because the public accepted paper money without hesitation. South Africa's war expenditures were relatively small. By operating with smaller reserves and creating currency notes, the banks provided the necessary expansion.

Australia on the whole carried inflation further than South Africa or India. Hence the problem of remitting homeward (to Australia) and that of the distribution of banking resources between Australia and Great Britain, were less troublesome. Australia's domestic expenditures for war purposes were of secondary importance; and it obtained large quantities of Sterling in exchange for heavy exports of wool and wheat; and the Sterling was converted into local currency almost automatically.

Both the upward and downward movements of prices were more moderate in the Dominions and India than in Great Britain. The accumulation of large balances in London which were not easily converted into domestic currency, and which, when remitted, were frequently converted into deposits, is an important consideration. Exchanges were apparently stable; however, the stability was frequently fictitious because the banks refused to do business. Another reason for the moderate rise of prices in the Dominions was that the prices of agricultural compared with manufactured commodities declined throughout the world. The upward movement of prices was more moderate in South Africa than in India. Undoubtedly, South Africa suffered greater economic losses during the War than most countries far removed from the battlefields; but South Africa seemed to be more restrained than other Dominions and Colonies in converting Sterling balances into local currency. The Government in India introduced a vigorous fiscal policy in the inflation period, which prevented a greater rise of prices, and took inflationary measures in the midst of the period of falling prices, which made contraction more difficult. The Dominions frequently pursued isolated policies especially after the War. Australia restricted the issue of notes as early as 1918. India sacrificed exchange stability to price stability on several occasions in the post-War period.

PART IV

INDIA



## Book VIII

# INDIA'S MONETARY PROBLEMS BEFORE 1914

## CHAPTER I

### INTRODUCTION

Book VIII is condensed on account of the need of economizing space. The author assumes an acquaintance with India's currency system. It is hoped that the contributions in the Book are adequate to make worth while the task of reading of this highly technical Book; but the reader primarily interested in recent problems may omit reading it.

India suffered less from the monetary upheavals of the second half of the nineteenth century than most countries. In the fifties and sixties, the rise in prices resulting from increased supplies of gold spread to India; but although the increase was marked, it was retarded by the appreciation of silver in terms of gold and by the inadequate facilities for minting.<sup>1</sup> The West accepted increased supplies of gold and exported silver to the East. India's balance of payments became increasingly favorable; but the large supplies of silver received were inadequate. A money economy was being introduced in remote parts of India; the public was inclined to hoard the new supplies of rupees; and the mints could not turn out adequate supplies of them.

India was more fortunate in the last quarter of the 19th century than in the preceding generation. Technical advances contributed to the depression of prices in western Europe. India was saved from the depressing effects of declining prices by remaining on a silver standard. A depreciation of silver made relatively stable prices possible in India in spite of the scarcity of gold

<sup>1</sup> Thus from 1845 to 1866 the gold price of silver was much more steady than the gold price of British commodities. (*Economist Index*.) Gold and Silver Commission. Evidence and Appendices, Cd. 5099 (1887), App. V by Mr. Barbour.

elsewhere and the important technical advances. The influx of silver into India was not as great as had been anticipated, because prices in India were rapidly adjusted to the world value of silver and because silver had not depreciated in terms of commodities. The public was apt to infer from the depreciation of silver in terms of gold that silver had also depreciated in terms of commodities. Commodities imported from England into India declined in price approximately as much as the English price level declined during this period although England was on a gold and India on a silver standard. Perhaps the explanation is that transportation costs were drastically reduced and that the decline of all prices in England was not as great as the decline of exported commodities.

The Government of India as well as the India Office play a peculiar part in the administration of the monetary system of India. The absence of a central bank places upon them the responsibility for any guidance of the money market. No agency exists that can enforce contraction. The task would be difficult even if there were a central bank, because a policy of contraction might be seriously hampered by the disbursement of rupees drawn from hoards. The Government's capacity to impose contraction is distinctly limited. Their activities are fiscal rather than monetary. The collection of large revenues may bring about the necessary stringency, especially if the cash thus received was formerly hoarded and if large amounts of Councils are not outstanding. But the influence of the Government through their control of sales of Councils is only temporary. The Government are the largest purchaser of Sterling. By making timely purchases they may control the exchange market within limits. By borrowing in London or by transferring resources from London to India, they may reduce the pressure on the exchange market and thus prevent a depreciation of the rupee below the gold points. The danger of supporting a currency by borrowing abroad lies in the fact that the unhealthy conditions are not treated at the source. Prices may remain too high in India. The pre-War system of India had at least one advantage over other monetary systems that were dependent upon money centers: the Government rather than the banks did the borrowing and it was more profitable to retain

cash in London than in India. Temporary movements of balances to distant India were not as a rule profitable. If the former borrow, they use the proceeds in large part to pay debts in London and do not introduce further inflation in India by transferring the additional revenues to India. Ultimately there might be no difference if the banks monopolized the exchange business, for the cash borrowed in London would be used to pay debts in London; but for relatively long periods of time, additional cash might be available in India if the banks borrowed. Conditions in India would tempt banks to transfer balances when the Indian Treasury might not be tempted.

The Indian System of 1914 was far removed from that temporarily introduced in 1893 and definitely established in 1899. The system introduced in 1899 was not a gold nor even a Sterling exchange standard. Undoubtedly, the Government were anxious to maintain the stability of the rupee; the procedure contemplated was not to offer Sterling, but rather to reduce the supplies of rupees by reduced sales of Councils. The Gold Standard Reserve (G.S.R.) was not in existence, and in the early years of its history, it was considered a Treasury balance rather than a reserve.<sup>2</sup> The Government refused to undertake the obligation of redeeming rupees for gold or Sterling, and anticipated that gold would increasingly be used for monetary purposes. Later the failure of the public to absorb and use gold led the Government to introduce the policy of adjusting the magnitude of sales of Council bills to the capacity of the public to absorb gold. Moreover, the authorities took an increasing interest in the effects of sales of Councils on the Indian and London money markets. The failure to introduce gold into common use made it necessary to depend on resources in London to assure the stability of the rupee. Hence the policy of transferring reserves and fiscal balances to London received increasing attention.

It is evident that in the years 1898-1914 the Government in India did not give adequate attention to the question of the proportion of reserves to be held in gold and silver. In particular, long continued drains of silver vexed the Government on several occasions. Hawtrey presents a brilliant analysis of

<sup>2</sup> I shall describe the origin of this reserve later.

these drains. He is critical of the official explanation that the famines accounted for the absorption of rupees. He contrasts the pre-stabilization period when appreciation of gold abroad was followed by depreciation of the rupee, with the system after 1898 when depreciation of gold abroad was followed by the movement of rupees into hoards. "A proclivity for hoarding and a slowness in reacting to changes of prices would make India not less but more sensitive to currency movements elsewhere."<sup>3</sup> In other words, currency movements elsewhere may be followed by abnormally large movements of silver and gold to India because the absorption of rupees in hoards retards the rise of prices. It is also true, however, that prices rose rapidly in the years in which rupees were imported in large quantities.<sup>4</sup>

Authorities have usually held that the magnitude of India's reserves should be determined by its balance of payments. The loss of reserves suffered in 1907-09 has been taken by some writers as an indication of losses that may be anticipated for the future. The tendency to put the emphasis on the balance of payments rather than on the amount of money in circulation, is easily explained. It is not that these officials and writers frequently do not realize that the balance of payments is related to the price level; but they are probably aware of the difficulties of making any adjustment of monetary supplies within a reasonable time that will correct the movement of commodities and capital. Agricultural and debtor countries suffer from sudden reversals of the balance of payments, which are caused both by reductions in exports of a few staple crops and the refusal of creditor countries to renew credits in periods of stress. The unfavorable movements are cumulative, for the first signs of an upheaval are accompanied by speculative transfers of capital. Authorities perhaps are also aware that the proportion between money issued and money in circulation is not constant. The Government may be anxious to reduce the amount of money in circulation; but their efforts may be thwarted by the release of currency from hoards. The absence of an organized money market and of a powerful

<sup>3</sup> R. G. Hawtrey, *Currency and Credit* (2nd ed.), pp. 436-48.

<sup>4</sup> F. J. Atkinson, "Rupee Prices in India, 1870 to 1908," *R. S. J.*, 1909, p. 550.

central bank makes any attempts to enforce a policy of contraction exceptionally difficult in India.

India's system of reserves is also peculiar. The balances of the Treasury ought not to be considered as reserves unless they are in excess of fiscal requirements. The Paper Currency Reserve is available for the purpose of meeting obligations in London only to a limited extent, for it is unsafe to hold more than a small part of this reserve in gold. The reason is that the paper currency is redeemable in silver.<sup>5</sup> It cannot be freely used in London for the purpose of satisfying the demand for rupees in India, for the reserve is then replenished with Sterling or gold in London. Only if purchases of silver are made within a reasonably short time, may the reserve be used for this purpose rather freely. The disturbance caused by large withdrawals of gold from the London money market for the purpose of earmarking gold for the Paper Currency Reserve (P. C. R.), is a deterrent to the free use of the P. C. R. to satisfy demands for rupees. The use of the P. C. R. is carefully regulated by statutory provisions; it must not be consumed; but its composition may be changed. It is possible to substitute Indian securities for Sterling consumed; Sterling securities were replaced by Indian securities in the post-War period. Part of the P. C. R. may thus in fact be consumed.

The G. S. R. may be used freely for the purpose of meeting an adverse balance of payments. But even this reserve has singular characteristics. It has been too commonly assumed that it was a fund to be plundered for fiscal purposes. It may be conjectured that this theory has long since been exploded; however, a few years ago, the Finance Member announced that the most appropriate use of the G. S. R. was to satisfy the requirements of the Government for Sterling. The Government may use the specious argument that purchases of Sterling for fiscal purposes may depress the value of the rupee, and hence the object of plundering the G. S. R. is not fiscal but monetary.

India's reserve position is not as strong as might be inferred from a consideration of the magnitude of its reserves, because it

<sup>5</sup> Throughout this chapter, the discussion is based on conditions before 1914. However, the introduction of a Gold Bullion Standard has not fundamentally changed the system in operation before 1914.

is necessary to divide the reserves between England and India. Stability of the rupee requires conversion into silver as well as into gold. Perhaps in the past too much emphasis has been put on the advantage of retaining gold in London over that of retaining it in India. Hawtrey rightly points out that gold held in India performed the essential function of redeeming rupees.<sup>6</sup> However, this argument may be carried too far. If gold is released by India in London, India makes an important contribution to the monetary ease which is a prerequisite for an increase and renewal of advances in London and thus for an improvement of its balance of payments. On the other hand, gold held in London rather than in India, is sometimes unavailable because large withdrawals may embarrass the London money market. It is necessary to consider the effects on London because stringency in London is felt in India. One should bear in mind that a reduction of money through redemption does not necessarily result in contraction of the total monetary supplies in circulation, and that contraction in turn may be introduced too tardily to bring about desirable changes in the balance of payments.

In 1893, India's mints were temporarily closed to silver and after an experimental period of five years, they were permanently closed. From 1898 to 1914, the gold exchange standard worked satisfactorily; but during the War, it collapsed as did most currency systems. Recently, India has introduced a gold bullion standard.

In the period immediately following the gold discoveries in Australia and California, the possibility of introducing a gold standard in India was seriously discussed; but the Home Government were not sympathetic.<sup>7</sup> The only concession made was to allow the Government to accept sovereigns;<sup>8</sup> but because the price set was too low, this provision was of no practical importance. In the late fifties and in the sixties, India was a dumping

<sup>6</sup> R. G. Hawtrey, *op. cit.*, p. 378.

<sup>7</sup> See especially East India (Gold Currency). Resolution and Correspondence, H. C. 79 (1865), pp. 80, 130-33. International Monetary Conference, 1881. Copy of Correspondence, H. C. 449 (1881). Harrison discusses this controversy from an historical viewpoint. F. C. Harrison, "The Past Action of the Indian Government with Regard to Gold," *Economic Journal*, 1893, pp. 56-60.

<sup>8</sup> In 1852, the Government had announced that they would not accept sovereigns at the legal price. East India (Sovereigns). Correspondence, H. C. 368 (1865), p. 1.

ground for large quantities of silver exported by western countries which had been inundated with gold. India's imports of silver were especially large in the sixties because it exported large supplies of cotton at high prices and imported much capital. Authorities were troubled by the scarcity of silver rupees which was in part responsible for the agitation for a gold standard. To satisfy the demand for additional money, Wilson introduced a note system in the sixties similar to the English system; but the public was not disposed to use paper money. Gold was shipped to France, England and other countries for the purpose of obtaining silver.<sup>9</sup> France in particular shipped silver to India for gold. The absorption of silver by India prevented a greater depreciation of it in the third quarter of the nineteenth century. Undoubtedly, India's willingness to accept it had contributed to its appreciation in terms of gold in the fifties.

<sup>9</sup> See East India (Gold Currency) Resolutions and Correspondence, H. C. 79 (1865), pp. 8, 14, 71-75.

## CHAPTER II

### PRICES IN EUROPE AND INDIA IN THE LATTER PART OF THE NINETEENTH CENTURY

THE rise of prices in India in the latter part of the nineteenth century was at a rapid rate. Railroads were built rapidly, and India's cotton was sold at fabulously high prices in the midst of the American Civil War. Councils were disposed of at an unprecedented rate. It is necessary to anticipate a later discussion of Council bills. The Government sell Council bills for Sterling in order to meet their obligations in London; additional sales are frequently made to satisfy demands for rupees. Undoubtedly, the rapid rise of prices in this period accounts for the early date (as compared to Europe) at which prices began to decline in India.

Prices declined rapidly after the late sixties. The decline was in part a reaction from the speculative increase of the preceding decade. In 1876, the Government of India once more considered the possibility of monetary reform, but the introduction of a gold standard was not proposed, and an apprehension was expressed lest India aggravate the unfavorable conditions resulting from the appreciation of gold. The Government suggested an increase in the silver content of the rupee.<sup>1</sup> The Government now took the position that the depreciation of silver had been caused by an appreciation of gold, and hence that the refusal to accept silver was not the proper solution: a refusal to accept silver would result in falling prices.<sup>2</sup> This was one of the few occasions on which the Government seemed to consider price policy. Thus a solution that was accepted twenty years later was rejected at this

<sup>1</sup> East India (Value of Silver). Letter from the Government of India dated the 13th day of October, 1876, no. 368, etc. H. C. 449. (1893), paragraph 28. The Government considered but rejected a proposal to close the mints. *Ibid.*, p. 19.

<sup>2</sup> Copy of Papers Received from India on the Silver Question, H. C. 120 (1877), p. 4.

time on the grounds that if the cause of depreciation of silver lay in gold, a change in silver policy should not be made. India now took an important part in the struggle for bimetallism. The Government in India began to urge Great Britain to assume the leadership in a movement for the introduction of international bimetallism. In the publications of the Gold and Silver Commission of 1888 is included a correspondence between the Treasury, the India Office and the Government of India on this subject. In 1886, the Government in India entered a strong protest because the British Treasury refused to take action for introducing international bimetallism. The Government in India now also expressed the opinion that the mints might have been closed to silver in 1878.<sup>3</sup>

In the last quarter of the nineteenth century, prices declined in Europe. India fortunately remained on a silver standard until 1893, with the result that India's monetary standard was not closely tied to British or Continental standards. The consensus of opinion is that from 1873 to 1886, prices remained relatively stable in India.<sup>4</sup> Marshall concludes that over the period 1863-1881, the net change was negligible.<sup>5</sup> But there was a large increase followed by a marked decline in the early years of this period. The extent of the fluctuations revealed is dependent in part on the type of index number used. Thus the peak in the late seventies, revealed by Atkinson, is to be referred to the excessive weight allotted to food.<sup>6</sup> The results obtained also depend on the period selected as a base. Thus Palgrave points out that a decline for the period 1864-84 is revealed only if the years of highest prices are selected for the base period.<sup>7</sup> Vakil and Muranjan, critical of index numbers previously used, construct a new index.

<sup>3</sup> Gold and Silver Commission. First Report, Evidence and Appendices, Cd. 5099 (1887), App. XII, pp. 354-57.

<sup>4</sup> Depression of Trade and Industry. Third Report of Royal Commission, Cd. 4797 (1886), App. C, pp. 399-400, 425-26; Report of Indian Currency Committee, 1893, Correspondence, Letter to Government of India, October 5, 1892, Cd. 7060, II (1893), App. III; F. J. Atkinson, "Rupee Prices in India," *R. S. J.*, 1903, p. 105.

<sup>5</sup> Indian Currency Committee, 1898. Index and Appendices to Evidence, Cd. 9376 (1899), App. LXIV.

<sup>6</sup> F. J. Atkinson, *loc. cit.*

<sup>7</sup> Depression of Trade and Industry. Third Report of Royal Commission, Cd. 4797 (1886), App. B, p. 331.

They conclude that prices declined 32 per cent from 1866 to 1883.<sup>8</sup> Their results are to be explained by the fact that 1866 was the year of highest prices in India. From 1873 to 1883, a decline in prices is not so easily revealed.

Prices of imported commodities declined. Marshall says that in the period of falling prices up to 1892 the prices of imported commodities at Calcutta declined in proportion to the decline of prices (gold) in London.<sup>9</sup> Such an agreement is unexpected since the price of silver (in terms of gold) had declined during this period. In his spoken evidence, Marshall goes even further when he points out that prices of imported commodities in Calcutta declined more rapidly than gold prices in London.<sup>10</sup> Perhaps the explanation of that anomaly is that economies of transportation were of more weight in the determination of movements of prices than the depreciation of silver. Moreover, the general price level in Great Britain probably did not decline as rapidly as prices of traded commodities. Representatives of the Government in India, and Atkinson, Marshall and Narain all agree that the net change in prices of India's exportable commodities was not large from 1873 to the late eighties.<sup>11</sup> Undoubtedly, any increase in the price of exports was not large enough to offset the decline in the price of imports.<sup>12</sup> In the period 1873-86, the price of food was reduced as a result of the improved transportation and economies of production. In 1886, Langley estimated that the purchasing power of rupees in terms of wheat had increased 17 per cent.

India fortunately had not adopted a gold standard and hence was able to pursue a monetary policy that was more or less independent.<sup>13</sup> Until the late eighties, the tendency of prices in India

<sup>8</sup> C. N. Vakil and S. K. Muranjan, *Currency and Prices in India*, p. 323.

<sup>9</sup> Indian Currency Committee, 1898. Index and Appendices to Evidence, Cd. 9376 (1899), App. XCIV.

<sup>10</sup> Indian Currency Committee, 1898. Evidence, II, Cd. 9222 (1899), Q. 11, 772.

<sup>11</sup> F. J. Atkinson, *op. cit.*, p. 105; Indian Currency Committee, 1898, Cd. 9376 (1899), App. LXIV. B. Narain, "Exchange and Prices in India, 1873-1924," *Weltwirtschaftliches Archiv. Chronik*, 1926, pp. 257-58.

<sup>12</sup> Pierson wrote that but one of five important exports was priced higher in 1881 than in 1865-69. Undoubtedly, this result is to be explained by the use of the base period 1865-69. Gold and Silver Commission. Second Report, Minutes of Evidence and Appendices, Cd. 5248 (1888), App. VII, p. 256.

<sup>13</sup> Depression of Trade and Industry. Third Report of Royal Commission, Cd. 4797 (1886), App. C, pp. 418-19.

was downward but not nearly at so rapid a rate as in the West.<sup>14</sup> The silver standard, which Europe and the United States had found unsatisfactory, was a blessing for India.<sup>15</sup> It thus shared with Europe the phenomenal economic advance which in large part made possible the depression of prices; but India did not suffer from the depressing effects of falling prices. Darwin was in error when he wrote that if India had remained on a gold standard, it would have suffered from declining prices and would not have obtained the compensation of increased production,<sup>16</sup> for India profited from the world-wide economic advance. It is not easy to obtain an accurate picture of the trend of prices in India, both because of the irregular effects of crop failures and because of the differences between seaboard and inland prices. However, we can be certain that the influx of silver counteracted the effects of increased supplies of commodities with the result that the general trend of prices was not far from stable.

Bagehot had predicted that the decline in the gold price of silver would be followed by large imports of silver into India, which would prevent its further depreciation.<sup>17</sup> Nasse contended as late as 1881, that the East would absorb all supplies of silver; but he added that the vital question was at what price.<sup>18</sup> Bagehot was criticized freely when his prediction was not fulfilled.<sup>19</sup> He had failed to take into consideration the possibility of a decline in gold prices. Marshall warns us of the danger of confusing a depreciation of silver in terms of gold with a depreciation in terms of commodities.<sup>20</sup> Bagehot had assumed that

<sup>14</sup> Darwin made the interesting suggestion that prices expressed in the metal not used in a country should also be considered in arriving at conclusions concerning stability. Thus prices of commodities expressed in gold as well as silver should be considered for India. L. Darwin, "Stability of Gold and Silver Prices in Recent Years," *R. S. J.*, 1899, p. 349.

<sup>15</sup> The Indian official, Chapman, commented on the happy effect on Indian prices of the reduction in the value of silver. Gold and Silver Commission. Final Report, Minutes of Evidence and Appendices, Cd. 5512 (1888), Q. 10,233.

<sup>16</sup> L. Darwin, *op. cit.*, p. 354.

<sup>17</sup> Report from the Select Committee on Depreciation of Silver. Proceedings, Evidence, etc., H. C. 338 (1876), Qs. 1368, 1379. Gold and Silver Commission. Final Report, II, Cd. 5512 (1888), paragraph 60.

<sup>18</sup> E. Nasse, "Zwei Schriften des Finanzsecretärs der britischindischen Regierung über die Silberfrage," *Jahrbücher für Nationalökonomie*, 1881 (36), p. 345.

<sup>19</sup> Gold and Silver Commission. First Report, Evidence and Appendices, Cd. 5099 (1887), Qs. 2608, 2622; *ibid.*, Final Report, II, Cd. 5512 (1888), paragraphs 60, 67; Indian Currency Committee, 1898. Evidence, II, Cd. 9222 (1899), Q. 11,791.

<sup>20</sup> *Ibid.*, Q. 11,773.

silver would depreciate first in Europe as a result of which it would be relatively more valuable in the East, and therefore it would be shipped to the East until prices rose sufficiently to make further movements unprofitable. Perhaps the criticism of Bagehot has been carried too far, for authorities fail to consider that important economies of production affected India and thus tended to bring prices down.<sup>21</sup>

The Gold and Silver Commission pointed out that exports of silver to India were not large enough to prevent a marked depreciation in its world value, both because gold prices had declined and because India's foreign indebtedness had increased rapidly after 1870.<sup>22</sup> Lexis said that India's export trade should have been stimulated because silver retained a relatively high value there. India's advantage was lost because exporters were forced to reduce prices in order to meet foreign competition.<sup>23</sup> Thus, an Englishman could obtain many rupees for Sterling and hence might find it more profitable than usual to purchase Indian goods; but that advantage was lost because prices had been reduced in the West and hence Indian prices had to be reduced. What Lexis failed to consider, is that India also made great economic advances during this period, and hence large price reductions were possible without any loss of the advantage by the exporter. Moreover, he does not make his position clear. Perhaps what he had in mind was that the Indian exporter, who was under pressure to reduce prices, could not bring prices down sufficiently, and hence lost the advantage that exporters might have obtained from the relatively favorable terms under which foreigners might have purchased silver.

Marshall also discusses this problem. His general position is

<sup>21</sup> Compare note by Mr. Barbour in Final Report of Gold and Silver Commission. Cd. 5512 (1888), pp. 141-42. It has been contended that the adjustment required by the decline in the gold value of silver was made by a reduction of prices in Great Britain rather than by an increase of prices in India, for the resistance to change was less powerful in the former country.

<sup>22</sup> Gold and Silver Commission. Final Report, II, Cd. 5512 (1888), paragraphs 6c, 67.

<sup>23</sup> W. Lexis, "Die Währungsfrage und die englische Untersuchungs-Kommission," *Jahrbücher für Nationalökonomie*, 1888 (50), pp. 330-31; Gold and Silver Commission. Second Report, Evidence and Appendices, Cd. 5248 (1888), App. VII.

The Gold and Silver Commission presents a similar view: English exporters had to reduce their prices because Indian importers were not receiving more rupees and hence could not afford to pay as much in Sterling as formerly. Gold and Silver Commission. Final Report, II, Cd. 5512 (1888), paragraphs 89-93.

that Indian exporters received no great advantage from the depreciation of silver, and he points to the small movements of silver to India as proof of his contention. He argues that if gold appreciates and the price of silver (in gold) declines, the gold price of wheat will also decline.<sup>24</sup> Silver prices of commodities will be equal throughout the world. If we assume that a gold country has a given amount of gold and a silver country a given amount of silver and the use of transfers on the books of banks and other methods of economizing cash, and business conditions and the like are given, gold prices in one and silver prices in the other are determined. If the gold price of silver is different than that sustained by general circumstances of demand and supply for gold and silver, a flow of one or both metals will occur.<sup>25</sup>

Marshall suggested that by dividing the purchasing power of gold in England in terms of commodities by the price of silver in terms of gold, we could obtain the purchasing power of silver in India.<sup>26</sup> The value of this method may be questioned. We may thus obtain silver prices in England; but an index number for India would include different commodities and weights than an English index number; and for purposes of comparison from year to year, such price indices for India would be even less trustworthy. Darwin has pointed out that from 1865 to 1888 silver prices in Great Britain did not fluctuate as silver prices in India.<sup>27</sup>

Marshall apparently approved of the silver standard for India. He held that the evils of the fluctuations of the exchanges were exaggerated.<sup>28</sup> In his opinion, it was fortunate for India that Great Britain was on a gold standard and India on a silver standard, for had India been on a gold standard, reduced prices would have been accompanied by reduced wages.<sup>29</sup> Although the economies of production were not as great in India as in Great

<sup>24</sup> Gold and Silver Commission. Final Report with Evidence and Appendices, Cd. 5512 (1888), Qs. 9735, 9744, 10,160.

<sup>25</sup> *Ibid.*, Q. 10,161. Pierson came to a similar conclusion. He contended that the failure of wages to rise was not an indication of the gain to producers resulting from the depreciation of the rupee, for wages would have been reduced had the rupee not depreciated. *Ibid.*, Second Report, Cd. 5248 (1888), App. VII, p. 256.

<sup>26</sup> *Ibid.*, Final Report, Cd. 5512 (1888), Q. 9737.

<sup>27</sup> L. Darwin, *op. cit.*, p. 364.

<sup>28</sup> Commission on Depression of Trade and Industry. Third Report, Cd. 4797 (1886), App. C, p. 424.

<sup>29</sup> Indian Currency Committee, 1898. Evidence, Cd. 9222 (1889), Q. 11,785.

Britain, important economies, especially in transportation, were introduced there, and hence it may be held that Marshall carried his point too far. That is to say, the economic conditions of India justified higher real wages in India. Thus, the local produce consumed in India declined in price more than other groups of commodities.<sup>30</sup> Moreover, the fetters of custom are stronger in India than in Great Britain, and hence wages would be more likely to remain at a high level when prices were declining. Ambedkar makes the doubtful point that workers in India suffered a reduction of real wages from 1873 to 1893, for wages did not rise with prices. He also contends that the entrepreneur suffered in England because of the rise of real wages.<sup>31</sup> He fails to consider that great technical advances were being made, and also his conclusions concerning the trend of prices and wages in India are not acceptable.

Almost all authorities agree that in the period beginning 1886, prices began to rise in India. O'Connor, the Indian official, is an important exception.<sup>32</sup> Marshall said that the rise corresponded to the fall in the price of silver.<sup>33</sup> Vakil and Muranjan express a similar idea inaccurately when they write that the production of silver overtook that of commodities.<sup>34</sup> The increase from 1886 to 1893 is not to be explained entirely by increased supplies of silver. A speculative movement in the west, which was reflected in a temporary increase of gold prices from 1887 to 1891, had repercussions in India.<sup>35</sup> The result was increased sales of Council bills on India, which made large imports of silver necessary. Moreover, the public presented increased supplies of silver at the mints because it suspected that they would soon be closed.<sup>36</sup>

Prices declined in Europe in the last quarter of the century because, among other reasons, supplies became more plentiful

<sup>30</sup> Commission on the Depression of Trade and Industry, 1886. Third Report, Cd. 4797 (1886), App. B, p. 331.

<sup>31</sup> B. R. Ambedkar, *The Problem of the Rupee*, pp. 112-13. Indian Currency Committee, 1898. Evidence, I, Cd. 9037 (1898), Qs. 887-96.

<sup>32</sup> Indian Currency Committee, 1898. Evidence, Cd. 9037 (1898), Q. 997.

<sup>33</sup> Indian Currency Committee, 1898. Index and Appendices to Evidence, Cd. 9376 (1899), App. LXIV.

<sup>34</sup> *Op. cit.*, p. 318.

<sup>35</sup> F. J. Atkinson, "Rupee Prices in India," *R. S. J.*, 1903, p. 105.

<sup>36</sup> F. J. Atkinson, "Rupee Prices in India," *R. S. J.*, 1909, p. 522.

as a result of the improvement of transportation and the introduction of more economical methods of production. Monetary supplies did not increase as rapidly as the need for money. Old methods of economizing the use of money had not been extended in the seventies and eighties as widely as had been expected and new methods were of no great importance. Many countries adopted the gold standard, and central banks were hoarding gold in large quantities. In particular, the absorption of gold by the United States and Germany troubled Europe. The large hoards accumulated by central banks were not an indication of surplus supplies; it was rather a cause of the inadequacy of supplies and declining prices.<sup>37</sup>

<sup>37</sup> Keynes points to the large accumulation of gold by the Bank of England from 1890 to 1896 as evidence of the plenitude of gold. Many witnesses before the Gold and Silver Commission were also perplexed by the increased supplies of gold by central banks in the last quarter of the nineteenth century in a period when gold supplies were inadequate. J. M. Keynes, *A Treatise on Money*, II, pp. 164-65.

## CHAPTER III

### MONETARY REFORM 1893 TO 1898

THE depreciation of the rupee was related to the decline in the price of silver. India is a large country and is dependent on domestic production for its necessities, and, therefore, internal transactions are much more important than external transactions. The depreciation of the exchanges made relatively stable prices possible. But, unfortunately, fiscal problems have always been given too much weight in the formulation of India's monetary policy. The Government were vexed that they had to offer increased supplies of rupees to obtain Sterling. That the increased number of rupees could purchase a larger quantity of commodities in Great Britain was not considered. The problems of the Government in India were relatively simple compared with those of a government that had to make payments in an appreciating currency to meet internal as well as external obligations. On one occasion, the Government of India revealed that they were aware of this type of problem. They argued that although the adoption of a gold standard by India would result in an appreciation of gold, the burden on India would not be as great as on western countries, for large rupee obligations were outstanding.<sup>1</sup> Sir T. Farrer pointed out that although more rupees were required, India profited in that the amount of labor necessary to produce commodities had been reduced.<sup>2</sup> Marshall also was of the opinion that the Government's plight was not as bad as it seemed. Railroad rates might be increased in so far as the problem was one of a depreciation of rupees in India.<sup>3</sup> In so far as gold had appreciated, payments on capital account in London

<sup>1</sup> Indian Currency Committee, 1893. Correspondence between the Government of India and the Secretary of State Laid by Him before the Committee. Letter of August 2, 1892, Cd. 7060, I (1893).

<sup>2</sup> Gold and Silver Commission. First Report, Evidence and Appendices, Cd. 5099 (1887), Q. 2622.

<sup>3</sup> *Ibid.*, Qs. 9807-8.

were more burdensome; but more rupees could be obtained than would have been possible if the rupee had appreciated as much as Sterling. Moreover, the purchasing power of rupees in London remained unimpaired, and better services were obtainable in London for Sterling of increased purchasing power.<sup>4</sup>

The Government grasped the opportunity to be relieved of the disagreeable task of increasing rupee revenues to meet obligations in Sterling, by closing the mints to silver in 1893.<sup>5</sup> Many witnesses before the Herschell Committee objected to the introduction of a gold standard on the grounds that the result would be an appreciation of gold. If gold had continued to appreciate and silver to remain relatively stable in terms of commodities, the exclusion of silver would have been unwise. But fortunately, gold began to depreciate, and silver continued to depreciate, both in terms of commodities. A continuance of the old policy probably would have brought more rapidly rising prices in India than in the west. By 1893 the Government could point to the increasing prices of food as an additional reason for reform.<sup>6</sup>

In 1893, the authorities announced a plan for raising the value of the rupee. Their plan was to reduce the supplies of rupees by restricting the sales of Council bills. They began to hoard rupees which normally would have been disbursed in redeeming Council bills.<sup>7</sup> The Government proposed to reduce the silver in the P. C. R. to a minimum figure, to accept gold at the ratio of fifteen rupees per sovereign, and to issue notes against gold.<sup>8</sup> The Government had fixed a maximum rate, but unfor-

<sup>4</sup> *Ibid.*, Qs. 10,144-45.

<sup>5</sup> The attitude of the Government officials was revealed before the Commission of 1893. Indian Currency Commission, 1893. Report, Qs. 903-5. Also *ibid.*, Correspondence between the Government of India and Secretary of State. Letter of Government of India, July 12, 1892, Cd. 7060, II (1893), App. III; Evidence, II, Cd. 7062 (1893), Qs. 2821, 2827-30. However, Chapman, a former official, objected to tampering with a currency system on behalf of a minority. *Ibid.*, App. III, p. 654. Sir R. Giffen has put well the argument that the fiscal aspects were stressed too much. Indian Currency Committee, 1898. Evidence, II, Cd. 9222 (1899), Qs. 1049-60, 10,082.

<sup>6</sup> Indian Currency Commission, 1893. Further Papers, Correspondence, etc., Cd. 7098 (1893-04), p. 18.

<sup>7</sup> *Ibid.*, p. 5; East India (Currency). Correspondence Respecting the Proposals on Currency Made by the Government of India, Cd. 8840 (1898), paragraphs 2-4.

<sup>8</sup> Indian Currency Commission, 1913. Appendices to Interim Reports, Cd. 7070 (1914), pp. 240-43; Indian Currency Commission, 1899. Report, Cd. 9390 (1899), paragraph 18.

unately not a minimum rate for the rupee.<sup>9</sup> Hence the public was unwilling to exchange gold for rupees since it was uncertain of the amount of gold it would obtain later for its rupees.<sup>10</sup> It has been stated that the public was misled into believing that a minimum rate had been established; hence the failure of the Government to maintain the rupee at 1s. 4d. from 1893 to 1895 aroused doubts concerning the success of the program.<sup>11</sup> The Government later pointed out that speculators had transferred cash to London in the hope of transferring back to India in the future when the rupee might be further depreciated, and that plans for reducing the notes in circulation were being frustrated by the influx of rupees from hoards and from abroad.<sup>12</sup>

Prices declined from 1893 to 1898. More will be said about this period later. From 1899 to 1913, prices rose rapidly. The increase was probably at a more rapid rate than in Great Britain, Germany and the United States. However, the relative increase in India was probably no greater than in the west if the period 1894-98 is used as a base instead of 1890-94.<sup>13</sup> Critics of India's monetary system blame the Government for the increased prices because the latter disposed of excessive supplies of Councils. More will be said about this episode later. Other critics point to the inconvertibility of rupees, the redundancy of the currency and the like.<sup>14</sup> Howard offers a strong defense of the fiscal and monetary policies of this period. In his opinion, abnormal conditions abroad and the unfavorable agricultural conditions in India explain the rise of prices.<sup>15</sup> The conclusions of the Datta Committee are similar; but they have been ridiculed by Indian writers.<sup>16</sup>

<sup>9</sup> The maximum rate was fixed provisionally. Indian Currency Commission, 1893. Further Papers, Correspondence, etc., Cd. 7098 (1893-94), p. 19.

<sup>10</sup> Indian Currency Committee, 1898. Index and Appendices to Evidence Taken before the Committee Appointed to Inquire into Indian Currency, Cd. 9376 (1899). Memorandum by W. W. Carlisle, p. 42; also Indian Currency Committee, 1898. Evidence, Cd. 9037 (1898), Q. 2573-86.

<sup>11</sup> *Ibid.*, Cd. 9376, (1899), p. 42.

<sup>12</sup> East India (Currency). Correspondence, etc., Cd. 8840 (1898), paragraph 4. Also see J. S. Nicholson, "Indian Currency and Gold Exchange Standard," *Economic Journal*, 1914, p. 239.

<sup>13</sup> B. Narain, *op. cit.*, p. 266.

<sup>14</sup> Vakil and Muranjan criticize the exchange policy, *op. cit.*, pp. 327-29; F. J. Atkinson, *op. cit.*, R. S. J., 1909, pp. 523, 561-69; B. Narain, *op. cit.*, p. 290; P. A. Wadia, "The Gold Standard and the Gold Exchange Standard," *Indian Journal of Economics*, 1926-27, p. 73.

<sup>15</sup> H. F. Howard, *India and the Gold Standard*, pp. 118-34.

<sup>16</sup> H. L. Chablani, *Indian Currency and Exchange*, pp. 145-51.

On the whole, the authorities were successful in raising the value of the rupee from 1893 to 1898. The favorable results were unexpected by able students of India's monetary system.<sup>17</sup> The reduction of sales of Councils and the failure of imports of gold to attain estimated figures were reflected in monetary stringency.<sup>18</sup> It has been pointed out that the stringency was especially marked in the money markets controlled by European banks, because they were exporting capital to London.<sup>19</sup> They succeeded in depressing the rate for Councils in 1893. The Government have been criticized because they yielded too soon; they might have maintained the value of the rupee by borrowing more in London in 1893-94.<sup>20</sup> The Government attributed their ultimate success to the contraction of the currency.<sup>21</sup> However, the Fowler Commission pointed out that capital movements, a depreciation of gold, and increased exports of commodities contributed to the appreciation of the rupee.<sup>22</sup> O'Connor emphasizes as important, the movement of cash from commercial centres to the interior.<sup>23</sup> Undoubtedly, the South African gold discoveries were a fortunate event for the Government in India.

<sup>17</sup> An expert, Harrison, predicted failure. The contraction would be very slow. A vacillating policy in relation to Council bills and the dislocation of trade with China had caused a depreciation of the rupee. F. C. Harrison, "The Indian Currency Question," *Economic Journal*, 1894, pp. 264-68.

<sup>18</sup> Indian Currency Committee, 1898. Index and Appendices to Evidence, Cd. 9376 (1898), p. 19; also, Memorandum by Anderson and Ross, p. 66; East India (Currency) Correspondence, Cd. 8840 (1898), paragraph 9.

<sup>19</sup> Indian Currency Committee, 1898. Evidence, Cd. 9037 (1898), Q. 1815; also Cd. 9376 (1899), pp. 66-67.

<sup>20</sup> *Ibid.*, Qs. 2573-86.

<sup>21</sup> East India (Currency) Correspondence, Cd. 8840 (1898), paragraph 2.

<sup>22</sup> Indian Currency Committee, 1898. Report, Cd. 9390 (1899), paragraphs 45-46.

<sup>23</sup> Indian Currency Committee, 1898. Evidence, Cd. 9037 (1898), Q. 989.

## CHAPTER IV

### NATURE OF THE SYSTEM

IN 1899, the Secretary of State for India announced that a permanent rate of 1s. 4d. had been established for the rupee, that the mints were to be closed permanently and that the sovereign was to be legal tender.<sup>1</sup> It was anticipated that the country would have an adequate supply of rupees during periods of inactive business, and that gold would be imported during periods of business expansion.<sup>2</sup> The system as planned in 1899 was far removed from the system in operation in 1914. The Government's criticism of Lindsay's proposals was evidence of their attitude toward a gold exchange standard.<sup>3</sup> Visible gold is necessary to inspire confidence; a system secured by a few millions of gold in London would be unstable, and the liability to convert unlimited supplies of rupees should not be accepted.<sup>4</sup> It was the proposal of the Government to raise and maintain the value of the rupee by introducing a policy of contraction.<sup>5</sup> The process was not in accordance with the theory of the exchange standard. The authorities were to obtain additional gold and reduce the supplies of rupees. Perhaps the only tie with Sterling provided by law was the provision making the Sovereign legal tender at 15 Rs. Sterling was protected against depreciation by an undertaking (Administrative Act) to convert sovereigns into rupees, but the rupee was not protected, because the Government did not guaran-

<sup>1</sup> East India (Currency). Copy of Dispatch of the Secretary of State, Dated July 25, 1899. Cd. 9421 (1899), p. 4.

<sup>2</sup> Indian Currency Committee, 1898. Evidence, I, Cd. 9037 (1898), Qs. 3185-209.

<sup>3</sup> Keynes distinguishes between an Exchange Standard and Exchange Management. It may be pointed out here that the Government planned to introduce what Keynes designates as Exchange Management. It was only in the latter part of the War that authorities began to realize that India had a Sterling Exchange (Keynes' Exchange) Standard and not a Gold Exchange (Keynes' Exchange Management) Standard. Compare J. M. Keynes, *A Treatise on Money*, I, pp. 18-19.

<sup>4</sup> Indian Currency Committee, 1898. Report, Cd. 9390 (1899), paragraphs 53, 59.

<sup>5</sup> *Ibid.*, paragraphs 22, 43, 44.

tee the conversion of rupees into Sterling. Authorities pointed out that Governments do not usually redeem overvalued silver. The Government probably intended to control the value of the rupee through their control of sales of Council bills. The P. C. R. was not to be used for any purpose other than that of redeeming notes. The G. S. R. had not been created. Hence, India could depend only on its balances in London or its credit in London to maintain the value of the rupee. On the other hand, Sterling might depreciate because the authorities had not made adequate provisions for procuring silver. The amount of silver in the P. C. R. was limited and India was dependent on Treasury balances for any additional silver.

The Government adopted a policy of not selling Councils below  $\text{rs. } 3 \frac{29}{32}d.$  although they have at times sold Councils below this theoretical gold point; and by administrative acts they have announced that they would sell rupees without limit at  $\text{rs. } 4 \frac{1}{8}d.$ , thus assuring the maintenance of the value of Sterling.<sup>6</sup> However, Sir L. Abrahams contends that this guarantee applies only so long as rupees in the Treasuries are available, and he also maintains that sales against rupees in the P. C. R. are made only under exceptional conditions.<sup>7</sup> The Chamberlain Commission does not refer to these restrictions.<sup>8</sup> In practise, the Government have purchased silver, issued notes against silver and gold, and have redeemed Council bills with rupees drawn from the P. C. R. and G. S. R. Hence the notification has been fully carried out. The price for Telegraphic Transfers on India is modified according to money rates in India.<sup>9</sup> Critics of India's pre-War system frequently contend that the rupee was inconvertible.<sup>10</sup> Thus Wadia writes that additional currency is provided immediately, but there are no provisions for contraction.<sup>11</sup> When the authorities

<sup>6</sup> Indian Finance and Currency Commission, 1913. Evidence, I., Cd. 7069 (1914), Q. 115.

<sup>7</sup> *Ibid.*, Qs. 471-74.

<sup>8</sup> *Ibid.*, Final Report, Cd. 7236 (1919), paragraphs 10, 31, 32.

<sup>9</sup> *Ibid.*, Appendices to Interim Report of the Commissioners, I, Cd. 7070 (1914), pp. 221-22.

<sup>10</sup> O. T. Barrow pointed out in 1913 that in 1897-98 the notes in circulation were reduced from 30 to 23 crores. Indian Finance and Currency Commission, 1913. Evidence, I, Cd. 7069 (1914), Qs. 3164-65.

<sup>11</sup> P. A. Wadia, "The Gold Standard and the Gold Exchange Standard," *Indian Journal of Economics*, 1926-27, pp. 69-73.

introduced the gold exchange standard, they refused to undertake the obligation to redeem rupees in gold. They were critical of the Lindsay scheme, because it involved unlimited convertibility of the rupee into Sterling. However, the Secretary of State announced that the Government in India were prepared to use gold coins freely for the support of the exchanges.<sup>12</sup> When the Government of India refused to pay out gold and sell Reverse Councils in 1907-08, the Secretary of State induced the Government to modify their policy,<sup>13</sup> and in 1913 the Chamberlain Committee recommended that the authorities make known their intentions of offering Reverse Councils in periods of exchange weakness.<sup>14</sup> Officials have always been reluctant to accept the obligation to redeem rupees for Sterling, and the conversion of Sterling into rupees is provided for by a notification rather than by statutory provisions.<sup>15</sup> Howard, an official, says that the Government had not acknowledged any obligation to meet the demand for rupees before 1900.<sup>16</sup> The nature of the development of India's system from 1899 to 1914 has been in accordance with Lindsay's plans rather than the Government's. Gold coins have not been generally used, and hence they have not been available for the purpose of converting rupees.<sup>17</sup> The Chamberlain Commission (1913) has given a final blow to the proposal of the Fowler Committee for the introduction of gold currency in India. The Commission has pointed out that the public has not been inclined to use gold and contends that gold put into circulation would be withdrawn from reserves.<sup>18</sup> Lindsay proposed that rupees be made convertible into Sterling held in London and that

<sup>12</sup> East India (Currency). Copy of Dispatch of the Secretary of State, Dated July 25, 1899. Cd. 9421 (1899), p. 4. The Fowler Committee also disapproved of the Lindsay proposals, but recommended that gold reserves be available in periods of exchange weakness. Indian Currency Committee, 1898. Report, Cd. 9390 (1899), paragraphs 53, 59.

<sup>13</sup> Indian Finance and Currency Commission, 1913. Appendices to Interim Report, I, Cd. 7070 (1914), App. V, pp. 164-68.

<sup>14</sup> Indian Finance and Currency Commission, 1913. Final Report, Cd. 7236 (1914), paragraph 101.

<sup>15</sup> *Ibid.*, Evidence, II, Cd. 7237 (1914), Qs. 9446-51.

<sup>16</sup> H. F. Howard, *op. cit.*, p. 10.

<sup>17</sup> Indian Currency Committee, 1898. Evidence, I, Cd. 9037 (1898), Qs. 3305-8, 3360, 3389-90.

<sup>18</sup> Indian Finance and Currency Commission, 1913. Report, Cd. 7236 (1914), paragraph 63. Abrahams, Under-Secretary of the India Office came to the same conclusion. Indian Finance and Currency Commission. Evidence, I, Cd. 7069 (1914), Q. 9492.

they should not be redeemed with resources taken from Treasury balances.<sup>19</sup> The growth of reserves held in London has been in accordance with the suggestions of Lindsay. Moreover, the obligation to redeem rupees in Sterling has been assumed in a manner suggested by Lindsay.

Lindsay estimated that a reserve of £10 million in London would be adequate to assure the stability of the system. He suggested that the magnitude of the reserve should be limited to the amount of cash that the Indian money market might conceivably lose before foreign capital was imported.<sup>20</sup> This angle has been rather neglected. The emphasis has rather been shifted to the balance of trade or the balance of payments. Abrahams,<sup>21</sup> Keynes,<sup>22</sup> Sir J. Meston<sup>23</sup> and the Chamberlain Committee<sup>24</sup> were of the opinion that the magnitude of the reserve should be related to the adverse balances anticipated rather than to the rupees in circulation. They neglect to consider the relation between the balance of payments and the rupees in circulation. The loss of Sterling in 1907-08 has been taken as an indication of the losses that might be anticipated. Abrahams rightly contends that it is not expedient to prepare for a catastrophe that may not occur more often than once in fifty or a hundred years.<sup>25</sup> The reversal of 1920-21 shows Lindsay to have been right. It became apparent that India could not afford to lose at home an amount of cash equivalent to the Sterling that might be consumed in meeting an adverse balance of payments. That experience did prove that Abrahams, Keynes and others were justified in putting the emphasis on the magnitude of the adverse balance. The adverse balance was of greater importance than the price level because the authorities did not allow the necessary contraction to take place;<sup>26</sup> but the adverse balance was in part the result

<sup>19</sup> Indian Currency Committee, 1898. Evidence, Cd. 9037 (1898), Qs. 3389, 4058-64.

<sup>20</sup> *Ibid.*, Qs. 3382, 3390.

<sup>21</sup> Indian Finance and Currency Commission, 1913. Evidence, I, Cd. 7099 (1914), Q. 778.

<sup>22</sup> B. R. Ambedkar, *The Problem of the Rupee*, p. 201.

<sup>23</sup> Indian Finance and Currency Commission, 1913. Evidence, II, Cd. 7237 (1914), Q. 9492.

<sup>24</sup> *Ibid.*, Final Report, Cd. 7236 (1914), paragraph 70.

<sup>25</sup> Indian Finance and Currency Commission, 1913. Evidence, I, Cd. 7069 (1914), Qs. 598, 603.

<sup>26</sup> Abrahams allowed that some relief might be given by contraction. *Ibid.*, Q. 603.

of an increased price level. Lindsay's prediction of the limitations of contraction had proved justified; but because the degree of contraction was limited, the adverse balance of payments was a more important factor in determining the magnitude of reserves than he had anticipated.

Many have pointed out in recent years that the Indian Currency System functions in a manner similar to a gold standard.<sup>27</sup> When gold is exported from a country on a gold standard, a corresponding reduction of the money in circulation should be made. The Bank Act of 1844 was based on this principle. Fullarton and others have pointed out, however, that the relation between gold movements and money in circulation is not always close. The Indian system as introduced in 1898 would probably have functioned in a manner similar to the English system; but currency notes or rupees would have been put into circulation as well as gold.<sup>28</sup> The maintenance of the P. C. R. did not involve a departure from this principle, for the redemption of notes merely involved a substitution of silver or gold for notes. The Government anticipated that rupees would remain in circulation exclusively in periods of depression or inactivity, and that gold would be imported in periods of expansion.<sup>29</sup> Gold imports were unexpectedly large in the first five or six years of the operation of the new system.<sup>30</sup> It should be emphasized, however, that the Government had no plans for a gold exchange standard in 1898. Provision was not made for the accumulation of Sterling, nor for the expansion and contraction of rupees in accordance with fluctuations in holdings of gold or Sterling.

The creation of the G. S. R. marked a departure from the principles commonly associated with a gold exchange standard. The India Office considered the G. S. R. as a reserve fund to meet debts in London when the price obtainable for Council bills was

<sup>27</sup> Lindsay considered the similarity to the gold standard as one of the advantages of his scheme. Indian Currency Committee, 1898. Evidence, Cd. 9037 (1898), Qs. 3305-8, 4056.

<sup>28</sup> Indian Finance and Currency Commission, 1913. Cd. 7236 (1914), paragraphs 24, 105.

<sup>29</sup> Indian Currency Committee, 1898. Evidence, Cd. 9037 (1898), Qs. 3185-204.

<sup>30</sup> Indian Currency Committee, 1898. Report, Cd. 9390 (1899), paragraph 40. Indian Finance and Currency Commission, 1913. Appendices to the Interim Report of the Commissioners, I, Cd. 7070 (1914), pp. 248-49.

not satisfactory. Hence Sterling might be consumed without any reduction of cash in India, or rupees might be borrowed from the G. S. R. and put into circulation without any addition of Sterling resources. The transfer of part of these reserves from London to India or vice-versa seems to be consistent with the principles of the exchange system. Thus in 1908-09, the Government transferred large reserves to London, which involved a transfer of rupees from the P. C. R. and the G. S. R. to the Treasury balances in India, and transfers of Sterling in London from the balance of the India Office to the P. C. R. and G. S. R. The rupees were then put into circulation to redeem Councils which had been disposed of for the purpose of replenishing these reserves in London. The net effect was an increase in Sterling and an increase in rupees in circulation. The Government may accumulate a large Sterling balance by selling Councils freely or by borrowing in London. A corresponding increase of rupees in circulation does not take place. This is inconsistent with the theoretical requirements of the gold exchange standard. The Government may *later* transfer resources from London to India by purchasing silver with cash drawn from the balances of the India Office and by issuing notes against rupees coined or putting coined rupees into circulation.<sup>31</sup> More money is thus put into circulation in India, in spite of the fact that Sterling is being consumed. The creation of the G. S. R. removed one inducement to inflate, for as a result of its introduction, the profits derived from putting rupees into circulation were segregated, and though the Secretary of State considered the G. S. R. as part of the Treasury's balances, it was not considered as cash at the disposal of the Treasury to the same extent as was cash received in payment of taxes.

The quantity of money in circulation was not adjusted to fluctuations in gold (or its equivalent Sterling) as closely under India's pre-War system as under a gold standard. Private and public hoards are of great importance in India and exercise a most disturbing influence on the price level. Consider the effects of rupees taken out of hoards in 1893 and the large additions to

<sup>31</sup> Indian Finance and Currency Commission, 1913. Evidence, I, Cd. 7069 (1914), Q. 974.

hoards in the War period.<sup>32</sup> The Government have not been willing, since the middle of the nineteenth century, to deposit their cash with banks, and hence the receipt of cash by the Treasury is frequently accompanied by extreme stringency because the resources are frequently not returned to the money market within a reasonable time. In recent years, the relations between the Treasury and the banks have improved, and hence the effects of the collection of revenues have been less unfavorable.

There has been a great deal of discussion concerning the automatic nature of the Indian Currency System. Authorities have generally argued that the system was automatic before the mints were closed to silver; but that when the public was deprived of the right to determine the amount of money in circulation, it lost its automatic feature.<sup>33</sup> The assumption that either the British or French monetary system is automatic, is not tenable. One need only consider that before the War France hoarded large supplies of gold, which were thus prevented from exerting any marked influence on the price level. In reality, no country has an automatic system. The criticism of the Indian system arises from the fact that the Government by closing the mints, apparently obtained the authority to determine the number of rupees put into circulation. Doubt concerning the restraint practised by the Government arises because the G. S. R. is accumulated out of profits arising from the coinage of rupees. However, after the G. S. R. was created, the Government were under no great temptation to coin rupees in excess of the needs of trade.

Nicholson has expressed the popular view well: The quantity of rupees coined depends on the demand for remittances in London, the offer of gold for rupees and the estimate of the Govern-

<sup>32</sup> F. C. Harrison, "The Indian Currency Question," *Economic Journal*, 1894, p. 268.

<sup>33</sup> Sir J. Lubbock said that the system was not automatic because currency did not contract as trade declined. Indian Currency Committee, 1898. Evidence, II, Cd. 9222 (1899), Q. 11,049. Barclay made the criterion of an automatic standard an influx of silver in proportion to the excess of exports *Ibid.*, Q. 11,545. Sir R. Giffen and Sir T. Farrer said that an automatic standard was one which provided for free coinage. *Ibid.*, Qs 10,326, 12,179-80.

In the seventies, the Government in India argued that a sound system of currency is automatic, and that no Government can undertake to determine how much legal tender currency should be put into circulation. Copy of Papers Received from India on Silver Question. II. C. 120 (1877), p. 20.

ment concerning trade and banking needs. Hence he concludes that the system is not automatic.<sup>34</sup> Various Indian writers are critical of the Indian system because, as they diagnose the system, the Government determine the number of rupees put into circulation.<sup>35</sup> Keynes contends that the Government do not determine the quantity of rupees put into circulation, because the public has the alternative of shipping gold.<sup>36</sup> If the India Office refuses to sell Council bills, gold which is exported to India is exchanged for rupees. However, elsewhere Keynes says that the Government may curtail the demand for Sterling by modifying the rates for Council bills.<sup>37</sup> The Chamberlain Commission does not discern any difference between the right to import sovereigns and the right to have gold coined.<sup>38</sup>

The Indian system is similar to other monetary systems in that the balance of payments plays a very important part in the determination of the amount of money in circulation. It was provided that sovereigns would be legal tender at 15 Rs. per £, that rupees would be given in exchange for sovereigns and that paper money would be issued against silver and gold retained in Treasury balances in India or in London. If exports of commodities are at a high level, if the influx of capital is large, and the Government's debts in London are not large, sales of Council bills may be inadequate and banks export gold to India. The Government may be compelled to purchase silver with Sterling drawn from their balances in London in order to obtain rupees required for the purpose of converting sovereigns. The result is not in accordance with the theory of India's system. Gold accumulates in the P. C. R., and in addition, Sterling, obtained from profits of coinage, accumulates in the G. S. R. in London, and thus gold and Sterling resources accumulate more rapidly than money in circulation. When gold is not available, the Government have a more effective control of the amount of money in circulation. In 1893, the public refused to import gold because it was anti-

<sup>34</sup> J. S. Nicholson, "Indian Currency and Gold Exchange Standard," *Economic Journal*, 1914, p. 239.

<sup>35</sup> C. N. Vakil and S. K. Muranjan, *Currency and Prices in India*, p. 326.

<sup>36</sup> J. M. Keynes, *Indian Currency and Finance*, pp. 109-11.

<sup>37</sup> Indian Finance and Currency Commission, 1913. Report, Cd. 7236 (1914), paragraph 66.

<sup>38</sup> *Ibid.*, Evidence, I, Cd. 7069 (1914), Qs. 6589-95.

pated that the rupee would depreciate; in the recent War, gold was not available; and from 1920 until recently, the low official valuation of sovereigns made the importation of gold unprofitable.

It is perhaps peculiar to agricultural countries that they have large debts (net) outstanding abroad. It is especially peculiar to India, because in addition to large capital obligations, India makes large payments for pensions and salaries in London. If the foreign payments made, for example, by Argentina are large and result in a depreciation of the peso, that is unfortunate. The Government, however, do not assume the responsibility for the instability unless a weak fiscal policy has resulted in higher prices and an unfavorable balance. By contrast, the Government in India's responsibility for the currency system and the balance of payments is taken for granted. Their foreign obligations constitute a large part of the country's debt. If the system is automatic as officials of the India Office contend, the India Office's concern over the sales of Council bills is difficult to understand. They fear that exports of gold to India may jeopardize the success of their sales of Councils<sup>39</sup> and, for the same reason, they object to a central bank operating in London,<sup>40</sup> and to advances by the Government in India;<sup>41</sup> and they insist that it is necessary to purchase bills in excess of immediate requirements lest Sterling should not be available later. Any operation that makes more rupees available in India and hence is reflected in a reduced demand for Councils, is frowned upon by the India Office. The stability of the system is endangered if the banks or the Government are unable to purchase Sterling in sufficient quantities without raising its price (in rupees) above the gold points. Undoubtedly, the India Office's anxiety arises from the possibility that the Government may not be able to sell a sufficient quantity of Council bills to meet their debts in London, and that, hence, they may be faced with the problem of borrowing, or selling rupees below the gold points.

The risks of borrowing in London or of consuming London

<sup>39</sup> Indian Finance and Currency Commission. Evidence, I, Cd. 7069 (1914), Q. 921.

<sup>40</sup> *Ibid.*, Appendices to the Interim Report of the Commissioners, I, Cd. 7070 (1914), p. 425.

<sup>41</sup> *Ibid.*, Evidence, II, Cd. 7237 (1914), Q. 11,158.

balances instead of selling Councils, are manifold.<sup>42</sup> If Councils are sold, the Treasury generally redeems them with rupees received from taxes or loans. Stringency is not averted, because although the number of rupees remains unchanged, a transfer from taxpayer to exporter is involved. If the Government collect the rupees required for the purchase of Sterling and then refrain from selling Councils because the price is not satisfactory, even greater stringency is felt. Keynes, who takes the position that the India Office does not determine the amount of money put into circulation through its control of sales of Councils, would not deny that the Government exercise some control over the supplies of money in circulation. If rupees are not collected in India for the purpose of redeeming Councils because the Government are able to obtain Sterling in some manner other than by selling Councils, India does not suffer from the contraction, which is a prerequisite for the improvement of the balance of payments. That is the great risk involved in obtaining Sterling by borrowing.

That the balance of payments plays so important a part in the determination of the amount of money put into circulation, is unfortunate. It is especially unfortunate for India where domestic transactions are more important relatively speaking than in most other countries, and where the banking system does not contribute the elasticity necessary, in addition to that contributed by gold movements.

The Government may increase or decrease the supplies of rupees available by transferring reserves from London to India or vice-versa. Thus the Government may draw Sterling from the P. C. R. and G. S. R. in London and replenish these reserves in India. The net effect is contraction in India and a reduction of Sterling or gold resources, which is in accordance with the theory of the exchange standard; but it is not in accordance with the theory of an automatic standard. Contraction was thus carried through on a large scale in the post-War period. The opposite process of inflation is also in accordance with the theory of the gold exchange standard, for more rupees are put into circulation, and Sterling and gold resources increase correspondingly. The

<sup>42</sup> Indian Finance and Currency Commission, 1913. Appendices to Interim Report, I, Cd. 7070, pp. 15-16. Sir L. Abrahams enumerates possible methods of replenishing balances in London.

rupees are taken from the reserves in India, and Sterling and gold are accumulated in London. Thus the authorities introduce a measure of inflation. This process was carried through in 1908-09 and 1916-19.

During the fifteen years before the War, the new system was gradually evolved and improved. Many unforeseen problems arose, most of which were solved satisfactorily. In the early years, the authorities were perplexed by the large influx of gold, which ultimately was absorbed in the P. C. R., and which aroused doubts concerning the capacity of the Government to redeem paper currency in silver. Many now were assured of the stability of the rupee and hence were willing to accept 15Rs. for a sovereign; the importation of gold is probably to be explained in part by the restrictions on sales of Councils, which made it necessary to remit to India in some other manner. Moreover, the public absorbed large supplies of rupees. The Government had not anticipated that the gold imported would find its way into the P. C. R. instead of into circulation. Concern over the composition of the P. C. R. resulted in the establishment of the G. S. R. It was anticipated that the G. S. R. would be composed in large part of gold which could not safely be held in the P. C. R. It was also to contain silver, which was to be exchanged for gold.

## CHAPTER V

### COUNCIL BILLS

PERHAPS the subject that has aroused the most bitter controversy concerning India's monetary policies, has been the sale of Council bills. The West suffered from rising prices in the fifteen years preceding the War, and India's prices rose even more rapidly. Officials have been severely criticized, because it has been held that excessive sales of Councils caused the rise of prices.

The sale of Council bills is the method by which the India Office sells rupees for Sterling. India usually has an excess of exports over imports, but has large obligations to meet in London. The Government in particular make large payments in London. The exchange banks purchase export bills in India which they either rediscount on the London market or hold until maturity. They reimburse the exporters by purchasing Council bills with Sterling that had been received for export bills, or with rupees that had been received from importers.

The sales of Council bills are a subject of concern to both the London and the Indian money markets. Restricted sales result in a temporary stringency in India. Many who contend that the Indian system is automatic, hold nevertheless that if the India Office restricted sales of Councils to the amount required to obtain Sterling for meeting their obligations in London, stringency would result. Increased sales do not always mitigate the stringency, because all markets are not relieved by the sale of bills.<sup>1</sup> Even if gold imports are stimulated, stringency will pre-

<sup>1</sup> Indian Finance and Currency Commission, 1913. Cd. 7236 (1914), paragraphs 143-44, 150; *Ibid.*, Evidence, I, Cd. 7069 (1914), Q. 241. *Ibid.*, Appendices to the Final Report, Cd. 7238 (1914), pp. 703-4. Moreover, the large fluctuations in rates over the year require other measures. The Government in India proposed that the Presidency banks be given access to the London money market; but the exchange banks objected. *Ibid.*, Appendices to Interim Report, Cd. 7070 (1914), pp. 357, 397, 425-26, 442, 490, 500.

vail until the gold becomes available. Remittance by drawing telegraphic transfers may be preferable for that reason. Moreover, the added expense of shipping gold may be a deterrent to additional remittances. Those who argue that the system is automatic, neglect this point. A low price for Councils may encourage remittances to India. On the other hand stringency may result if the Government, having prepared for large sales by accumulating rupees in their Treasuries, withhold them from circulation because a satisfactory price for Councils is not obtainable. Gold may be shipped to India later, which will be exchanged for rupees accumulated in government hoards. Another important cause of stringency in India is that the withdrawal of gold from London causes stringency there, and hence exchange banks are less disposed to rediscount Indian exporters' bills because they can then borrow in London only at unfavorable rates.<sup>2</sup>

The Bank of England is the agent of the India Office. The latter accumulates large balances in London. Stringency in India may be caused by restricting sales of Council bills, and stringency in London may be caused by remitting to India through the P. C. R. instead of by borrowing from the G. S. R.<sup>3</sup> in India. When Treasury balances in India are at a low level and the demand for Councils is great, the Treasury may continue to sell Councils by redeeming them with rupees in the P. C. R. and G. S. R. The Bank of England is not pleased if stringency is caused by the accumulation of gold in the P. C. R. or if monetary ease is caused by lending large balances of the India Office in London.<sup>4</sup> A restriction of sales may result in stringency in London; but large sales which are reflected in increased balances at the disposal of the India Office, contribute to monetary ease. In the nineties, a Governor of the Bank of England said that the Bank would never earmark gold for the India Office;<sup>5</sup> but of late, the Bank has requested the India Office to increase its earmarked gold: the

<sup>2</sup> Indian Finance and Currency Commission, 1913. Evidence, I, Cd. 7069 (1914), Q. 179.

<sup>3</sup> If the India Office remits through the P. C. R., it is necessary to substitute gold in London (not securities or balances) for silver withdrawn in India from the P. C. R.

<sup>4</sup> Indian Finance and Currency Commission, 1913. Evidence, II, Cd. 7237 (1914), Q. 10,193. *Ibid.*, I, Cd. 7069 (1914), Qs. 3464-70.

<sup>5</sup> Indian Currency Commission, 1898. Evidence, II, Cd. 9222 (1899), Q. 12,815.

Bank would thus be relieved of the responsibility of replenishing India's gold supplies.<sup>6</sup>

In the management of the sales of Council bills and of the balances of the India Office, the authorities are faced with important political problems. How far should the interests of India be sacrificed to those of the London money market? Sir F. Schuster, a member of the Finance Council of the Secretary of State, said that the interests of India necessarily receive exclusive consideration.<sup>7</sup> It has been pointed out that if India's interests are to be protected, it is necessary to weigh the effects of its monetary policy on the London money market.<sup>8</sup> India is affected by stringency in London. Perhaps on occasions the India Office has given too much thought to the condition of the London money market. Its strong defense of the exchange banks as against the Presidency banks or a contemplated central bank, and its preference at times for remitting to India through the G. S. R. to remitting through the P. C. R., point to that conclusion.<sup>9</sup> Is it wise to place the responsibility of lending India's balances in London upon London bankers, who could not fail to give the London money market too much thought?<sup>10</sup>

The Government's estimates of the magnitude of sales of Council bills are not determined entirely by their Sterling requirements. If the demand for rupees is in excess of the supplies put on the market through the sale of Councils, gold may be exported to India and exchanged for rupees. The India Office may regulate sales in such a manner as to maintain proper fiscal and monetary balances in London and in India.<sup>11</sup> The policy of selling Councils has become more and more liberal. Anticipated as well as current requirements for Sterling are considered. Offi-

<sup>6</sup> Testimony of A. C. Cole for the Bank of England. Indian Finance and Currency Commission, 1913. Evidence, I, 7069 (1914), Qs. 3405, 3406, 3462.

<sup>7</sup> *Ibid.*, Evidence, II, Cd. 7237 (1914), Q. 11,213.

<sup>8</sup> *Ibid.*, Evidence, I, Cd. 7068 (1914), Qs. 6185-87.

<sup>9</sup> See especially Indian Finance and Currency Commission, 1913. Appendices to Interim Report, Papers Relating to a Proposal to Establish a Central Bank in India 1899-1901, Cd. 7070 (1914), p. 425.

<sup>10</sup> Perhaps it is significant that the Bank of England first fixes a rate to be obtained for advances of the Secretary's balances and then lends as much as possible at that rate. Cd. 7237 (1914), Qs. 10, 362-64. Sir L. Abrahams contends that only India's interests are considered in the management of reserves. *Ibid.*, Evidence, I, Cd. 7069 (1914), Q. 627.

<sup>11</sup> *Ibid.*, Qs. 113-16. Appendices to Interim Report, Cd. 7070 (1914), App. VII, Memorandum on Council Bills, pp. 218-21.

cials have contended that sales are not justified if they do not at least yield Sterling required for fiscal purposes in the near future.<sup>12</sup> Merchants of India have frequently criticized the Government for thus putting at the disposal of London, resources that are taken from the Indian tax-payer.<sup>13</sup> If the cash transferred to London is needed in the near future to meet Sterling requirements, an early transfer is desirable because cash can be more profitably invested in London. The India Office has frequently seemed needlessly concerned over the problem of selling adequate supplies of Councils. Although it is frequently contended by officials that sales are not made in order to prevent India from obtaining gold, responsible officials have admitted that they have feared that too much gold might ultimately be absorbed by the Indian branch of the P. C. R. and thus might prove a source of embarrassment to the Government.<sup>14</sup> The authorities then might be compelled to export gold accumulated in the P. C. R. in India, and to replenish the P.C.R. with rupees taken from the Treasury balances. The shipment of gold both to and from India would be an unnecessary expense. The often repeated charge that Councils are disposed of at favorable prices and in unnecessarily large quantities in order to deprive India of gold demanded by the public, is without foundation. The absorption of gold by the public in the fifteen years before the War has not been equal to the imports during that period.<sup>15</sup> Thus the gold in the P. C. R. constituted 34.5, 20.5 and 56 per cent of the total reserve in 1907, 1908 and 1913.<sup>16</sup>

In 1898, Sir H. Waterfield, Financial Secretary of the India Office, presented an interesting memorandum on the history of the method of remitting from India to London. As early as 1813, a method similar to the one employed in recent years had been adopted, and the experience and investigations of the nineteenth century convinced the Government that the sale of Council bills was the most satisfactory method of remitting to London.<sup>17</sup> It

<sup>12</sup> Indian Finance and Currency Commission, 1913. Evidence, II, Cd. 9237 (1914), Q. 9452.

<sup>13</sup> *Ibid.*, Appendices to the Interim Report, Cd. 7070 (1914) p. 551.

<sup>14</sup> *Ibid.*, p. 218.

<sup>15</sup> *Ibid.*, p. 15.

<sup>16</sup> *Ibid.*, pp. 248-49.

<sup>17</sup> Indian Currency Committee, 1898. Index and Appendices to Evidence Taken before the Committee Appointed to Inquire into Indian Currency, Cd. 9376 (1899), Memorandum by Sir H. Waterfield, pp. 24-25.

is rather significant that the Council bill policy has not attracted much attention until recently. Before the mints were closed to silver, the Government did not seem to be much concerned over the possibility of being unable to sell adequate supplies of bills. The explanation may be that since the Government were not committed to a policy of stable exchanges, they reasoned that the worst misfortune that might befall them was a further drop of the external value of the rupee, which was not as great an evil as a decline of the exchanges below the gold points after 1898. When the authorities have once committed themselves to a policy of stable exchanges, a depreciation below the gold points is a great misfortune. Moreover the India Office before 1893 was not concerned particularly with the demands by traders in London for more rupees than had been placed at their disposal through the sale of Councils, determined exclusively by the needs of the Treasury—because the exchange banks might export silver to India if sales of Councils were inadequate. These exports of silver did not cause stringency in London as did the gold exports and the earmarking of gold which have been necessary to supplement sales of Council bills since 1893. Before 1893, whenever the Government sold Council bills in excess of the amount required to obtain necessary supplies of Sterling, it was an occasion for comment. Thus large sales were made during the Civil War to accommodate trade. In the eighties and nineties sales were not frequently in excess of Sterling requirements.<sup>18</sup>

Several authorities including Gibbs,<sup>19</sup> the Governor of the Bank of England, and Marshall,<sup>20</sup> were of the opinion that increased sales of Council bills in the seventies and eighties were reflected in reduced imports of silver into India. Marshall said that commodities and Council bills competed with silver, and if commodities or Councils were cheaper, they were used as a means of remittance rather than silver. This is a rather unfortunate method of expressing the point. A more convincing manner of putting it is to say that when India had large obligations to meet

<sup>18</sup> Indian Finance and Currency Commission, 1913. Evidence, I, Cd. 7069 (1914), Q. 1331.

<sup>19</sup> Gold and Silver Commission. First Report, Evidence and Appendices, Cd. 5099 (1887), Q. 3030.

<sup>20</sup> *Ibid.*, Final Report, Cd. 5512 (1888), Qs. 10,173, 10,176.

in London, large sales of Councils were made, and instead of accepting silver, India paid debts in London. One gets the impression from Marshall and others that the Government attempted to control silver movements through their control of sales of Councils.<sup>21</sup> Large sales may have resulted in transfers of rupees from taxpayers to exporters and thus have reduced imports of silver; but except in so far as the Government added to their London balances, the explanation of sales was that Sterling was required to meet London obligations.

In 1898, Sir J. Westland, an important official, testified that the magnitude of sales of Council bills was determined by the excess of revenues over expenditures in India. He added that the India Office sold as large supplies as possible subject to the maintenance of a minimum balance of eight crores in India.<sup>22</sup> This was an early statement of a policy that had not yet been carried through. From 1893-94 to 1912-13, the budgets provided for sales of £335 million of Councils and the India Office actually disposed of 407 millions. Of the total sales, 31 millions were made for the purpose of transferring part of the P.C.R. and G.S.R. to London. The excess of sales over estimated requirements gives a rough indication of the sales made to accommodate trade. The excess of actual sales was especially large in 1905-07 and 1909-13.<sup>23</sup> In seven of these twenty years, however, the market did not purchase as large quantities as the Government had planned to sell at the beginning of the fiscal year.<sup>24</sup> The explanation of the Secretary of State's preparedness to sell bills in excess of current fiscal requirements is that the authorities had learned a lesson early in the twentieth century. Trade demands for remittances, which had not been satisfied by sales of Councils, were then met by exports of gold to India, with the result that excessive supplies of gold were accumulated in the P.C.R. In 1899, the

<sup>21</sup> Gold and Silver Commission Final Report, Cd. 5512 (1888), paragraph 16.

<sup>22</sup> Indian Currency Committee, 1898. Index and Appendices to Evidence, Cd. 9376 (1899), Memorandum by Sir J. Westland, paragraph 10.

<sup>23</sup> Howard argues that the high prices in India before the War were caused by world-wide conditions as well as conditions peculiar to India. Monetary policy was not to be criticized as the explanation of high prices. H. F. Howard, *op. cit.*, pp. 118-27.

<sup>24</sup> Indian Finance and Currency Commission, 1913. Appendices to Interim Report of the Commissioners, Cd. 7070 (1914), App. I by Sir L. Abrahams, pp. 12, 82.

India Office suggested to the Government in India that so long as the market for Councils was favorable, as large sales as possible should be made; otherwise the public might import more commodities and the demand for rupees would be reduced.<sup>25</sup> Sales of Council bills began to increase noticeably in 1902. Atkinson points out that in the years 1903-04 to 1906-07, 58 crores of rupees (£39 million) more were required to cover India's favorable balance of merchandise and of gold and silver than in the previous four years.<sup>26</sup> Howard pointed out that in the years 1905-10, the average sales of Councils minus sales of Reverse Councils were equivalent to the excess of exports over imports.<sup>27</sup> This is not proof of restraint on the part of the Government in selling bills, because invisible items are not considered.

The Royal Commission of 1913, which was asked to pay particular attention to the problem of Council bills, concluded that the main object of these sales was to obtain £26 million annually to defray the expenses of the Government in London.<sup>28</sup> The Commission also approved of the accumulation of large balances in London, on the grounds that surplus cash should be transferred there.<sup>29</sup> They affirmed that bills had been sold in recent years to meet trade needs and to avert stringency in India, that the magnitude of sales was determined in part by monetary conditions in London, that the India Office stopped movements of gold to India when it appeared that the gold might not be absorbed, and finally, that Councils had been sold for the purpose of transferring reserves to London.<sup>30</sup>

Abrahams, Permanent Under-Secretary of State for India, does not go as far as the Commission in defense of the Council policy. In his opinion, the theory that the requirements of trade determine sales, is 90 per cent true.<sup>31</sup> Another official defends the policy of selling bills at a price which makes imports of sover-

<sup>25</sup> Indian Finance and Currency Commission, 1913. Appendices to Interim Report, Cd. 7070 (1914), App. I by Sir L. Abrahams, p. 64.

<sup>26</sup> F. J. Atkinson, "Rupee Prices in India, 1870 to 1908." *R. S. J.*, 1909, pp. 546-47.

<sup>27</sup> H. T. Howard, *op. cit.*, p. 76.

<sup>28</sup> Indian Finance and Currency Commission, 1913. Report, Cd. 7236 (1914), paragraph 176.

<sup>29</sup> *Ibid.*, paragraphs 131-33.

<sup>30</sup> *Ibid.*, paragraphs 10, 31, 32, 143, 144, 174-76.

<sup>31</sup> *Ibid.*, Evidence, I, Cd. 7069 (1914), Q. 116.

eigns unprofitable.<sup>32</sup> W. B. Hunter, a banker, contends that the original object of selling Councils, namely, to remit to London for fiscal purposes, is now (1913) of secondary importance. Sales are determined by the necessity of averting gold movements and of preventing stringency in London and India.<sup>33</sup>

Various criteria may be used in determining the magnitude of sales. Thus the Government may aim to maintain a minimum or maximum balance in London and India. Sales may be determined by commitments in Sterling, or by the capacity to sell bills in London or to redeem them in India. If the Government sell in excess of their immediate requirements, they may reduce their debts in London, purchase silver in anticipation of future needs, or accumulate large balances in London.<sup>34</sup> In 1898, the India Office began to sell telegraphic transfers on India. In 1900, the practice was stopped, but in 1904 it was renewed and in 1906 it was announced that the price was to be increased if the rate of interest in India rose above a designated point.<sup>35</sup> The authorities who control the policy of selling Councils are increasingly disposed to consider the monetary conditions in both India and London in determining their policies.

The Government redeem Council bills with rupees which are usually drawn from the Government's Treasuries. The capacity to redeem Councils depends therefore on the revenues raised by taxation and borrowing. It is possible that the trade demand for rupees may exhaust the supplies available in the Treasuries. The Government will probably then draw rupees from the P.C.R. and replenish the P.C.R. in London out of the proceeds of sales of Councils; the net result of this operation is a transfer of part of the P.C.R. from India to London. Such transactions occur only in abnormal times, because the transfer of a large part of the P.C.R. to London is dangerous. Most of the reserve against notes should be held in India. The Government may also obtain additional resources for redeeming Council bills by purchasing silver with Sterling drawn from their London balances or from

<sup>32</sup> Indian Finance and Currency Commission, 1913. Appendices to Interim Report, I, Cd. 7070 (1914), pp. 218-20. (App. VII on Council bills.)

<sup>33</sup> *Ibid.*, II, Cd. 7071 (1914), App. XXIV, pp. 591-95.

<sup>34</sup> *Ibid.*, Appendices to Interim Report, Cd. 7070 (1914), App. VII, pp. 222-24.

<sup>35</sup> *Ibid.*, pp. 221-22.

the G.S.R. In the course of a rather heated controversy between the India Office and the Government of India in the years immediately preceding the panic of 1907, the former opposed vigorously the issue of Councils against rupees in the P.C.R., and the latter objected to issues against loans from the G.S.R. The India Office, which governs from London, was perhaps too much interested in the London money market. In order to remit through the P.C.R. it was necessary to earmark gold, and the London money market could not spare the gold. On several occasions, the India Office refused to heed the request of the Government in India to earmark gold for the P.C.R.<sup>36</sup> The composition of the P.C.R. is strictly regulated; if silver is withdrawn, an equivalent quantity of gold must be substituted or currency notes must be taken out of circulation. But the G.S.R. may be plundered.

The rise in prices in India from 1898 to 1914 was not caused by excessive sales of Council bills. They are sold in response to a demand on the part of those who have obligations to meet in India. If the Government had restricted sales of Councils to the amounts required to obtain Sterling for fiscal purposes, or if they had purchased Sterling on the exchange market from exporters or banks, importers of India's commodities and foreign capitalists would have shipped gold to India to pay part of their debts. Even if the India Office did sell bills in excess of Sterling requirements, the net effect was that rupees were collected from taxpayers and transferred to exporters of commodities and importers of capital. If the Government had restricted their sales, the taxpayers might have temporarily retained more rupees, and the Government might have been compelled to purchase silver for the purpose of converting imported gold into rupees. Hence, temporarily more rupees may remain in circulation if remittances to India are made by shipping gold, than if remittances to India are made by purchasing Council bills, which are redeemed with rupees taken from the taxpayer. The vital question is whether the rupees are collected from the taxpayer or purchased on the silver market; perhaps the taxpayer is more likely to suffer—at least temporarily—if remittances are made by sales of Council bills. If

<sup>36</sup> Indian Finance and Currency Commission, 1913. Appendices to Interim Report, I, Cd. 7070 (1914), pp. 136-40, 146-51.

gold is convertible into rupees, the Government do not control the quantity of rupees put into circulation, because of the fact that they determine the policy of selling Councils. It is only when gold is not available as, for example, during the War, or when the legal price of gold is put below the current value, as in the five or six years after 1920, that the Government control the amount of new money put into circulation. In other words, as long as India remains on a gold exchange standard and maintains stable exchanges, prices will be largely determined by prices in Great Britain. A rise in prices in Great Britain is equivalent to a depreciation of Sterling, and if the rupee is to be worth  $1/15$  of the sovereign, its value must be adjusted roughly to the changed value of the sovereign. India will sell more and purchase less, and, therefore, India will obtain a larger quantity of money as a result of a change in the balance of payments, which will make higher prices possible. The additional money may be obtained by increased sales of Council bills or imports of gold. The additional rupees put into circulation may be obtained in part at the expense of the taxpayer. The Government may use Treasury balances in London with which to purchase silver, and since more than 15 Rs. are coined out of each £ Sterling, profits are made which are accumulated in the G.S.R. The people of India pay for that part of the silver which is purchased in London with Sterling drawn from the balance of the Secretary of State for India, but, of course, the taxpayer does receive £1 Sterling for each 15 Rs. coined; and only in so far as unnecessarily large balances are accumulated in London, may it be held that the taxpayer suffers.

There have been periods in which the Government raised the value of the rupee by restricting the sale of Council bills, but these periods have been abnormal. Thus from 1893 to 1898 and 1922 to 1926, the authorities increased the value of the rupee and depressed prices in India by curtailing sales of Councils and by obtaining advances of Sterling. But the value of the rupee was not fixed during these periods, and the alternative method of remittance, namely, the shipment of gold, was not profitable. Critics of the India Office's Council bill policy before the War ought to approve of a policy of exchange instability and price stability.

If the authorities refuse to convert sovereigns into rupees at 15 Rs. per sovereign, the enforcement of a policy of restriction of sales of Councils depresses prices in India. But frequently the critics of the policy of 1898-1913 are also critical of India's policy in the seventies and eighties when exchanges were stable and prices unstable. They presume that both price and exchange stability can be attained. Jevons, at least frankly expresses a preference for price stability over exchange stability for the period since 1914.<sup>37</sup> Even so able an economist as Nicholson exaggerates the discretionary authority of the Government under the pre-War system.

<sup>37</sup> H. S. Jevons, *The Future of Exchange and the Indian Currency*, p. 52.

## CHAPTER VI

### RESERVES

THE P.C.R. is similar to the reserve of the Note Department of the Bank of England. Periodically, the fiduciary issue is increased. The reserve is held largely in India and should be composed largely of silver. There should be no grounds for doubt concerning the ability of the Government to redeem notes. Hence it is necessary to hold silver coins in the reserve rather than bullion. The magnitude of the fiduciary issue is based on an estimate of the notes that will remain in circulation permanently. The P.C.R. has been used for several purposes in addition to that of redeeming notes. Rupees in the P.C.R. have been paid out for gold in order to prevent an appreciation of the rupee. Part of the reserve has been transferred to London and has been held as earmarked gold, both for the purpose of facilitating purchases of silver and of supporting the rupee in periods of weakness.<sup>1</sup> In the War period, the Government issued rupees out of the P.C.R., thus transferring a dangerously large part of the reserve to London, and were forced to accept Treasury bills in London instead of earmarked gold. Moreover, large issues of notes were made on the cover of temporary securities. By introducing emergency measures of this nature, the Government postponed the date of appreciation of the rupee. In the period of deflation, the authorities consumed a large part of their Sterling, and instead of cancelling the notes, paid them out again and substituted Indian securities created to replace Sterling securities that had been disposed of in London.<sup>2</sup>

The origin of the G.S.R. goes back to the early part of the twentieth century. Hampered by the lack of elasticity in the P.C.R. and the restrictions put upon its use, the Government

<sup>1</sup> Indian Finance and Currency Commission, 1913. Appendices to the Interim Report, I, Cd. 7070 (1914), p. 257.

<sup>2</sup> H. S. Jevons, *op. cit.*, pp. 14-15.

in India proposed to the India Office the creation of a new reserve. It was determined at an early date that most of this reserve should be kept in London. At first the silver held in the G.S.R. was considered indispensable because the silver in the P.C.R. was inadequate. But more recently, the Government have been criticized for retaining silver in the G.S.R. These criticisms are not justified, because the gold standard requires the conversion of gold into silver as well as silver into gold. There have been long discussions concerning the constitution of the London branch of the reserve. The question, whether a quick conversion of securities and advances to bill brokers and others into cash is possible, has been raised. The Chamberlain Commission has recommended that the reserve be held in London. Because the object of the reserve is to prevent appreciation as well as depreciation, rupees are required in India; hence this was not a judicious recommendation.<sup>3</sup> The War was to make that evident.

The Treasury balances, the P.C.R. and the G.S.R. are the three reserves which India draws on to meet demands for rupees and Sterling. They are not one reserve as the Chamberlain Commission states.<sup>4</sup> Thus the P.C.R. was created for the purpose of assuring the convertibility of notes. It cannot be consumed in meeting fiscal obligations or in redeeming Council bills. In the early part of the twentieth century, the Government in spite of great pressure refused to allow banks to borrow from the P.C.R. When the G.S.R. was first proposed, the Government of India suggested that it should constitute a branch of the P.C.R.; but the India Office refused to approve of a composite reserve.<sup>5</sup> Strangely enough, the India Office later contended that the Treasury balances in London were part of the P.C.R.<sup>6</sup> The G.S.R. was long considered merely an appendage of the Treasury.<sup>7</sup> The Treasury's assumption was that when Council bills could not be sold at satisfactory prices, the Treasury might draw Sterling from the G.S.R. to meet its obligations in London. But after 1908-09, of-

<sup>3</sup> Indian Finance and Currency Commission, 1913. Report, Cd. 7236 (1914), paragraphs 27, 90.

<sup>4</sup> *Ibid.*, paragraph 9.

<sup>5</sup> Indian Finance and Currency Commission, 1913. Evidence, I, Cd. 7069 (1914), Q. 548; *Ibid.*, Appendices to Interim Report, Cd. 7070 (1914), pp. 118-20, 127.

<sup>6</sup> *Ibid.*, pp. 136-37.

<sup>7</sup> *Ibid.*, p. 169.

ficials began to consider the G.S.R. as a reserve rather than as a Treasury balance.<sup>8</sup> The Government in India stated the new position clearly in 1912 when they announced the procedure that was to be followed in the future: the Treasury should use its balances both in London and India and if they are inadequate, it should remit through the P.C.R.; the G.S.R. should be considered as a reserve, and should be used if the Treasury balances are consumed and if a further redistribution of resources in the P.C.R. is not possible.<sup>9</sup>

Perhaps the most difficult problems are to obtain a satisfactory distribution of reserves between London and India, and to determine the most effective composition of the reserve. The greater part of the P.C.R. is needed in India since the primary object of the reserve is to assure the convertibility of notes. Recent accumulations of gold in London are justifiable only on the grounds that silver may be more quickly procured by transferring part of the gold portion of the reserve to London. That the accumulation of gold in London thus incidentally contributes to the maintenance of the gold standard, is an advantage; but gold should not be retained in the P.C.R. in London merely for the purpose of assuring the stability of the rupee in Sterling. The public is more likely to demand silver than gold for its notes—I refer to the pre-War system. Hence adequate supplies of silver should be held in India, and provisions should be made for quickly replenishing the supplies with silver purchased in London. In the early years of this century, authorities were concerned over the large supplies of gold accumulated in the reserve. The G.S.R. was created as a result. The Government in India requested that the India Office obtain additional rupees for redeeming Council bills, by remitting through the P.C.R.—that is, by purchasing and earmarking gold in India with the proceeds of sales of Councils. Thus, rupees are taken from the P.C.R. in India, and Sterling in London is substituted. However, the India Office was slow to comply, and

<sup>8</sup> Thus Abrahams, Under-Secretary of State for India said in 1913 that the gold in the G. S. R. as contrasted with the gold in the P. C. R. is used only in difficult times. Indian Finance and Currency Commission, 1913. Evidence, I, Cd. 7069 (1914), Q. 721. Also see Evidence, II, Cd. 7237 (1914), Q. 9077, and Report, Cd. 7236 (1914), paragraphs 39-41.

<sup>9</sup> *Ibid.*, Appendices to Interim Report, Cd. 7070 (1914), pp. 197, 205.

instead borrowed rupees from the G.S.R. in India.<sup>10</sup> The Government in India complained that silver was shipped to India in excess of the country's requirements.<sup>11</sup> The large amounts of silver obtained in the years 1905 to 1907 at the expense of the gold in the reserve, were in part at the expense of indispensable supplies of gold. The net result of the loss of gold in the P.C.R. as well as in the G.S.R. in the years 1907-09, was that the Government became more interested in building up an adequate gold reserve than in accumulating an adequate silver reserve. Unfortunately when the Great War broke out, the amount of gold in the reserves was large. The scarcity of silver during the War was felt much sooner as a result.

From 1909 on, the Government in India were anxious to increase the gold contents of the reserves both in London and India. Large losses of gold had been suffered in the reversal of the balance of payments of 1907-08. They even suggested a suspension of sales of Council bills so that more gold might accumulate in India, and a renewal of sales later for the purpose of replenishing the gold reserves in London. The India Office objected on the grounds that a suspension of sales was not necessary to effect the first purpose, and that the loss of gold would result in stringency in London.<sup>12</sup> However, the Government in India had objected to an increase of the gold branch of the reserve at the expense of the silver branch.<sup>13</sup> In determining the amount of gold to be held in the reserves, the authorities usually started with the assumption that a designated minimum amount must be held in silver, but that the remainder might be held in gold.<sup>14</sup> Although the Government in India objected to the substitution of gold for indispensable supplies of silver, they were anxious to substitute gold for securities held in the G.S.R., for this change involved a transfer of reserves from London to India.

Conflicts in the management of the reserves arise between the Government of India and the India Office. The former are more concerned with local monetary conditions, and hence strive to

<sup>10</sup> Indian Finance and Currency Commission, 1913. Appendices to Interim Report, I, Cd. 7070 (1914), pp. 148-51.

<sup>11</sup> *Ibid.*, App. V, p. 197.

<sup>12</sup> *Ibid.*, Appendices to the Interim Report, I, Cd. 7070 (1914), App. V. on G. S. R., p. 187.

<sup>13</sup> *Ibid.*, p. 183.

<sup>14</sup> *Ibid.*, Evidence, I, Cd. 7069 (1914), Q. 1679.

prevent stringency in India. On the other hand, the India Office's first thought seems to be for the provision of an adequate supply of Sterling; hence they have requested that the authorities in India pay out gold and thereby redeem the rupees in circulation in the hope that the market for Council bills would improve as a result of the stringency caused by the contraction.<sup>15</sup> When the Government of India proposed the replenishment of the Sterling part of the reserves, the India Office suggested that the operation be effected by shipping gold from India rather than by selling Council bills.<sup>16</sup> However, large sales of Council bills were made after 1908 for the purpose of transferring reserves to London. Perhaps the most bitter dispute over monetary policy arose over the questions (1) whether Council bills that could not be redeemed out of ordinary resources, should be redeemed out of rupees in the P.C.R. and the reserve be replenished in London by earmarking gold; or (2) whether they should be redeemed with rupees drawn from the G.S.R., which in turn might be replaced by silver purchased in London or with securities created *ad hoc*. The India Office's preference for the latter method was dictated by a desire to prevent any unnecessary stringency in London, which might affect India adversely.<sup>17</sup> The Government in India were more disposed to accumulate gold in India than was the India Office.<sup>18</sup> The Government suggested that in periods of expansion silver could be transferred from the G.S.R. to the P.C.R. in exchange for gold in the P.C.R., and when the stringency had passed, the process might be reversed.<sup>19</sup> Thus the Government would manage both reserves as one reserve to a limited degree. The Government in India argued that a withdrawal of rupees from the G.S.R. in India against an investment in London was objectionable, because the intention of transferring Sterling to the G.S.R. in London was evidence of the availability of resources which might be converted into rupees.<sup>20</sup> As we shall see in the next Book, conflicts between the India Office and the Government in India also arose after 1914.

<sup>15</sup> Appendices to Interim Report, Cd. 7070 (1914), App. V, p. 164.

<sup>16</sup> *Ibid.*, p. 133.

<sup>17</sup> *Ibid.*, especially pp. 136-40.

<sup>18</sup> *Ibid.*, p. 184.

<sup>19</sup> *Ibid.*, App. V, p. 199.

<sup>20</sup> *Ibid.*, p. 199.

## Book IX

### INDIA'S MONETARY POLICY SINCE 1914

#### CHAPTER I

#### THE BALANCE OF PAYMENTS AND GOLD

DURING the War, India's exports were large and its imports were not at their normal level. An important official expressed the opinion that exports not essential for war purposes were large in spite of the fact that the Government intervened for the purpose of diverting to the Allies supplies required for carrying on the War.<sup>1</sup> In the early months of the War, India was allowed to borrow in London in order to repay advances that were not renewed, and the Government disposed of Reverse Councils which were redeemed with Sterling drawn from the London branch of the Gold Standard Reserve.<sup>2</sup> But thereafter, India was refused access to the London capital market, and moreover, had little occasion to borrow. One of Great Britain's difficult problems was to finance large imports from India. The problem was especially perplexing because the British authorities refused to allow India to import much gold.

India imported but £26 million of gold from 1914 to 1919, as compared to 92 millions from 1909 to 1914.<sup>3</sup> Private imports were negligible.<sup>4</sup> The gold imported subsequent to June 29, 1917, was acquired by the Government.<sup>5</sup> Large imports of gold were

<sup>1</sup> Indian Exchange and Currency Committee, 1919. Report, Cmd. 527 (1920), Qs. 197, 283-84. [Hereafter this will be referred to as Indian Currency Committee, 1919.]

<sup>2</sup> Memorandum by the Secretary of State for India. Cmd. 8034 (1914-16). India. *Financial Statement and Budget*, 1915-16, pp. 4-5.

<sup>3</sup> Indian Currency Committee, 1919. Report, paragraph 14.

<sup>4</sup> Reports on the Administration of the Mints at Calcutta and Bombay for the Year 1915-16, p. 1; 1917-18, p. 1.

<sup>5</sup> Reports on the Administration of the Mints at Calcutta and Bombay for the Year 1917-18, p. 1. The Government acquired 21 millions of rupees of gold in 1917-18.

received and shipped for the Bank of England, and India imported appreciable quantities on its own account.<sup>6</sup>

The Governor of the Bank of England requested that gold be used to cover the deficits of the Empire. He objected to imports from the United States on the grounds that the United States in turn would demand gold from Great Britain. In his opinion, gold ought to be used to strengthen the exchanges.<sup>7</sup> In his financial statement for 1917-18, the Finance Member of the Government in India said that the importation of gold was contrary to the interests of the Empire.<sup>8</sup> In the latter part of the War, India's appeals were more numerous and forceful. Thus on July 7, 1917, the Government of India demanded of the Secretary of State for India that the embargo on gold shipments from the United States to India be raised, and that he discontinue the sales of Council bills, or the inconvertibility of the rupee was imminent.<sup>9</sup> In payment for large disbursements in India and Mesopotamia, India accepted Sterling in London.<sup>10</sup> The United States was not satisfied with the high exchange quotation of the rupee, which had resulted in part from strengthening Sterling by putting dollars at the disposal of Great Britain. The American Treasury requested permission to export gold to India and made applications for liberal rupee credits. Concessions were obtained because the United States had silver at its disposal which the British Empire needed badly.<sup>11</sup> England grudgingly allowed India to put sovereigns of the Bank of England into circulation and to import sovereigns from Australia; but the amounts involved were not large.<sup>12</sup>

Little gold was put on the market in India with the result

<sup>6</sup> *Ibid.*, 1914-15, p. 1; 1918-19, p. 1; 1919-20, p. 1; India. *Report on the Operations of the Currency Department*, 1918-19, p. 5. Indian Currency Committee, 1919. Report, Qs. 2526-44.

<sup>7</sup> *Ibid.*, Qs. 2526-30, 2544.

<sup>8</sup> India. *Financial Statement and Budget*, 1917-18, pp. 4-5.

<sup>9</sup> Indian Currency Committee, 1919, Appendix I by M. M. Gubbay and Appendix II. Testimony of Sir L. Abrahams, pp. 81-83.

<sup>10</sup> For an example of the method of financing purchases from India, see Report of Indian Wheat Committee for 1915 and 1916, Cd. 9090 (1918), p. 7, and App. L.

<sup>11</sup> Loans to Foreign Governments: Senate Judiciary Committee (67:1), 1921, pp. 66-67; Supplementary Bond Legislation. Hearings, Ways and Means Committee (65:2), 1918, p. 30.

<sup>12</sup> Testimony of the Governor of the Bank of England. Indian Currency Committee, 1919, Qs. 2618-20; Reports on the Administration of the Mints at Calcutta and Bombay for the Year 1918-19, p. 1.

that gold was currently sold above the legal price of 15 rupees per sovereign. Gold disposed of at a premium was not available for monetary purposes. The premium was reduced to negligible proportions temporarily and the strain on the silver market was reduced by putting several millions of gold into circulation.<sup>13</sup> In direct transactions with the United States and Japan, India obtained an appreciable quantity of gold.<sup>14</sup> Foreigners were excluded from the Council market and hence could remit to India only by shipping gold and silver. The Indian authorities reimbursed the Bank of England for its advances of gold by putting Japanese gold at its disposal.<sup>15</sup> Canada had made an agreement to exchange gold for rupees just before the embargo was lifted in 1919.<sup>16</sup> Only temporary relief was afforded by putting gold into circulation, for gold was soon quoted at a premium again. Even when the value of the rupee rose above 1s.4d. the market quotation for the sovereign remained above 15 Rs.

In the course of the War, gold was smuggled into India, especially from South Africa. Private imports of gold were prohibited in June, 1917, unless tendered to the Government, and the price of gold was set so that it would be no more profitable to import gold than to purchase Council bills.<sup>17</sup> In the post-War period, free sales on the London market were re-established. There is evidence that the British Government objected to purchases made on behalf of India;<sup>18</sup> but the Indian Government became an important purchaser of gold, which was resold at Indian bazaars at a large profit.<sup>19</sup> Beginning in the latter part of 1919, the Government

<sup>13</sup> Indian Currency Committee, 1919, Q. 179.

<sup>14</sup> *Ibid.*, Qs. 1069-70.

<sup>15</sup> *Ibid.*, Q. 186.

<sup>16</sup> *Montagu Letter*, August 28, 1919.

<sup>17</sup> Indian Currency Committee, 1919, App. I, p. 5. The exchange banks transferred cash to India by exporting gold to India. However, these movements were determined by the profitableness of purchasing gold as compared to that of purchasing Council bills. In general, the banks maintained an even keel. They bought export bills in proportion to their sales of £ Sterling for rupees. *Narrative of Finance Member Introducing Financial Statement*, 1920-21, pp. 17-18. Keynes says that Council bills were sold at a price which made the importation of gold by the banks unprofitable. Indian Currency Committee, 1919, Q. 2747.

<sup>18</sup> Thus Sir W. Meyer, former Finance Member of the Government in India, revealed that the British Government had objected to the offer of high prices of gold by India. *Ibid.*, Q. 3323.

<sup>19</sup> The Government began to sell gold to the public again in September, 1919. The object was to bring the premium on gold down in order to make the new ratio (10Rs. = £1) effective, and to curtail the importation of gold and thus remove a disturbing factor on the exchange market. (This was a later aim no

stimulated the importation of gold by setting a price which included an allowance for the premium of gold over Sterling.<sup>20</sup> South African authorities viewed with envy the gains of the Government in India on gold sold publicly. Speculation was rife as to how rapidly sales would reduce the price of sovereigns to 15 rupees.<sup>21</sup> The demand for the gold was determined in part by the appreciation of the rupee in £ Sterling as compared to the appreciation of the dollar in Sterling. In periods when Sterling depreciated in terms of dollars and appreciated in terms of rupees, purchases were reduced.<sup>22</sup> In 1920, the legal price of sovereigns was changed from 15 rupees to 10 rupees. Temporarily, they were to be redeemable at 15 rupees. That only a moderate quantity was redeemed can be explained by the high market price of gold.<sup>23</sup> Whenever Sterling appreciated in terms of dollars in 1922-24, the Indian demand for gold rose.<sup>24</sup> Gold became a cheap commodity because the rupee was quoted at 1s. 6d. as compared to the pre-War price of 1s. 4d., and the prices of other luxuries were above the pre-War level.<sup>25</sup> More recently the public has tended to hoard gold and redeem other types of money.<sup>26</sup>

Official prohibitions were removed during the fiscal year 1920-21. The problem of the most appropriate method of regulating gold imports aroused much discussion. Mr. Lucas, Financial Secretary of the India Office, proposed a compromise between unlim-

doubt.) *Operations of the Currency Department 1920-21*, p. 17. Sir L. Abrahams also reveals that the United States lifted the embargo on gold in 1919 with the understanding India would restrict its imports. Hence free importations were not advisable; moreover, the importers would have made very large profits. Indian Currency Committee, 1919, Qs. 1063, 1069-70.

<sup>20</sup> Royal Commission on Indian Currency and Finance, 1926. Report, Evidence and Appendices, Cmd. 2687 (1926), App. III, p. 13. [Hereafter designated as Commission on Indian Currency, 1926.]

<sup>21</sup> Indian Currency Committee, 1919, Memorandum B. of Sir. L. Abrahams, pp. 61-62.

<sup>22</sup> H. S. Jevons, *Future of Exchange and Indian Currency*, p. 148.

<sup>23</sup> Commission on Indian Currency, 1926, App. III, p. 14.

<sup>24</sup> Restrictions on the private import of gold had been removed in June, 1920. Commission on Indian Currency, 1926, App. III, p. 16.

<sup>25</sup> *Overseas Trade Report on India, 1924-25*, pp. 16-17. The price of gold in rupees was lower than the pre-War price; but the prices of other luxuries were from 70 to 170 per cent in excess of the pre-War level. The very large imports of gold, which were in excess of the pre-War level, are thus explained. Also see Commission on Indian Currency, 1926, App. LXX, p. 461.

<sup>26</sup> Thus in 1926 and 1927, 11.07 and 6.124 lakhs of sovereigns and half sovereigns were absorbed; but only 4.06 lakhs of all kinds of money were absorbed in the first year, and 16.92 lakhs were taken out of circulation in the second year. *Report of Controller of the Currency, 1926-27*, pp. 28-30.

ited imports, which would arouse hostility abroad, and no imports which would endanger convertibility. He proposed an agreement with foreign powers.<sup>27</sup> Sir L. Abrahams favored the use of gold for monetary purposes and for the guarantee of the convertibility of the rupee. In his opinion the Government ought to import the gold and sell sovereigns at a price which would correspond to the legal price of the sovereign.<sup>28</sup>

<sup>27</sup> Indian Currency Committee, 1919, App. XV, pp. 87-92.

<sup>28</sup> *Ibid.*, App. XVI, pp. 96-98.

## CHAPTER II

### THE BALANCE OF PAYMENTS AND THE MECHANISM OF PAYMENT

GREAT BRITAIN had a large unfavorable balance of trade to meet in India and, moreover, the Allies had to finance large war expenditures in Mesopotamia through India. Exports from the Allies to India were reduced materially. How was Great Britain able to make the necessary payments? Large payments were made in Great Britain. If Great Britain had purchased rupees to meet all its obligations to India, the pound would have depreciated in terms of rupees at an early stage. But fortunately for Great Britain, the conditions in the gold and silver markets made large purchases of these metals inexpedient; and a rapid creation of paper rupees was not considered safe.<sup>1</sup> Hence a very large part of the Sterling balances belonging to India was retained in London by the Government, banks and traders; and part of this Sterling did not serve as cover for notes issued in India.<sup>2</sup>

Exporters required payment for their commodities. Military disbursements had to be made in rupees in India.<sup>3</sup> The retention of large balances in Great Britain without at the same time depriving the Indian creditor of his cash was made possible by the transfer of a disproportionately large part of the Gold Standard and Paper Currency Reserves (P.C.R.) of India and of the Indian

<sup>1</sup> The metallic reserves constituted 79 per cent of the notes outstanding early in 1914 and but 38 per cent in 1918. The Government raised the fiduciary limit of currency notes several times. Indian Currency Committee, 1919, paragraph 28.

<sup>2</sup> The Indian authorities announced that they had not followed the recommendation of the Chamberlain Commission to hold one half of the Gold Standard Reserve in gold because it would have been embarrassing to Great Britain and because it would have been unprofitable. *Ibid.*, Qs. 5629-30.

<sup>3</sup> For example, in 1915-16, the Secretary of State disposed of 16½ millions of Council bills. He obtained 7½ millions (£) of the rupees necessary to meet these bills from the Gold Standard Reserve in India, and 5.3 millions from the Paper Currency Reserve. Of course, these reserves were replenished in London. *India. Financial Statement and Budget, 1916-17*, pp. 30-31.

Treasury balances to London.<sup>4</sup> Rupees were paid out in India and pounds Sterling were received in London. The stability of the currency system was endangered by this redistribution of reserves.

The P.C.R., which should have been held largely in silver rupees in India, was transferred in large part to London, and by the end of the War was composed for the most part of Sterling securities. The Gold Standard Reserve (G.S.R.) was established in order to protect the rupee against both depreciation and appreciation. When it is composed of gold or Sterling securities for the most part, the reserve does not fulfill its purpose of protecting against an appreciation of the rupee.<sup>5</sup> If the authorities had been able to convert Sterling balances and reserves in London into gold in India, they would have taken an important step toward exchange stability; gold might have been substituted for rupees to an appreciable extent, and thus the scarcity of rupees would have been less troublesome. That this method of conversion was not practicable was unfortunate. The failure to obtain gold for Sterling has led to an agitation in recent years to hold a larger part of the gold reserves in India.<sup>6</sup> In March, 1927, the Treasury held 22.32 lakhs of the Paper Currency Reserve (P.C.R.) in gold in London.<sup>7</sup>

In issuing currency notes secured by Sterling, the Government transferred to India in one year the equivalent in rupees of £19 million Sterling, and in purchasing silver and coining rupees, they transferred £16 million additional.<sup>8</sup> Thus the Treasury consumed its cash in London in purchasing silver, and in replenishing the P.C.R. in London to replace rupees drawn from the reserve in

<sup>4</sup> These balances were held largely in securities. Indian members of the Council protested against the transfer of gold to London. *Financial Statement and Budget, 1917-18*, pp. 366-68.

<sup>5</sup> Sir L. Abrahams, an authority on the subject, estimated in 1913 that a reserve (Gold Standard) of £25 million was adequate. However, the experience of the next few years was to prove that in spite of the large accumulations of the War period, the rupee might depreciate. Indian Currency Committee, 1919, Qs. 5618, 5626.

<sup>6</sup> Indian Currency Committee, 1919, paragraphs 81-85. Denning, Controller of the Currency, informed the Young Commission that there was a strong popular opinion in favor of retaining gold reserves in India. He contended that gold retained in India could be used to meet demands in India and the Government could borrow from the Bank of England on its security. Commission on Indian Currency, 1926, Qs. 1217-20.

<sup>7</sup> *Report of Controller of the Currency, 1926-27*, p. 13.

<sup>8</sup> *India. Financial Statement and Budget, 1918-19*, pp. 10-11.

India for the redemption of Council bills. The Finance Member estimated that in 1916-17 the Government could transfer to India £22½ million received in London for war expenditures and 33 millions received by the sale of Council bills. Transfers in excess of the above total were effected by drawing 33 millions from Treasury balances in India, 19 millions from the P.C.R. and by putting 19½ millions of additional silver into circulation.<sup>9</sup> Consider the problem of the balance of payments in this connection. The Controller of the Currency estimated that a favorable balance of 90,27 lakhs was liquidated by the sale of 47,07 lakhs of Council bills (the highest figure in 10 years), by the purchase of 23 to 25 lakhs of British war securities and other investments, and by the overbuying of rupees on the part of the banks.<sup>10</sup>

In 1918-19, the Indian Government had the following important liabilities (in addition to ordinary expenditures) to meet in India.<sup>11</sup>

<i>Millions of £ Sterling</i>			
War outlay recoverable .....	73	They were financed by:	
Excess of Treasury bills redeemed over Treasury bills sold .....	11	War Loan .....	37
Council bills .....	21	Surplus of revenue over expenditure, etc. ....	13
Cost of military stores not yet allocated .....	13	Issue of Currency Notes against additional investments .....	25
Rupee credits to Federal Reserve Board .....	11	Receipts from sales of Reverse Councils .....	5
	—	Reduction of balances .....	5
	141	Receipts from silver purchased....	56
			141

(Total includes fractional parts and small items are omitted)

### A summary of the trade balance of India follows:

Average for the Years 1914-15 to 1918-19	Lakhs of Rupees
Balance of Trade—Excess of merchandise exports .....	+76,34
Total visible balance .....	+65,54
Council bills sales .....	—34,96
Sterling transfers .....	+ 5,50
Balance of remittances .....	—30,14
Total visible balance in favor of India .....	+35,40

(The difference between the first and second figures in the above column is accounted for by additional imports of gold and silver.)

This is not a complete picture, for some invisible items are excluded. Apparently, one half of the excess of exports was paid

<sup>9</sup> *India. Financial Statement and Budget*, pp. 9-11.

<sup>10</sup> *L. E.*, December 29, 1917.

<sup>11</sup> *Introducing Financial Statement*, 1919-20, pp. 12-13. Also see *L. E.*, March 8, 1919.

for by purchasing Council bills. India thus received Sterling in London and the exporter obtained rupees by redeeming Councils. Part of these rupees was received from the public in payment for taxes and subscriptions to loans. The average excess of exports of private merchandise was 72,84 lakhs from 1910 to 1915 and 91,86 lakhs from 1915 to 1920.<sup>12</sup> In the British Board of Trade Journal appears the following estimate for the 51 months of warfare: <sup>13</sup>

*Millions of £ Sterling*

Excess of exports .....	213.0	Council bills and T. T. paid in	
Reverse Councils redeemed in		India .....	110.5
London .....	13.7	Balance in favor of India .....	83.5
Net imports of Treasure			
(private) .....	30.3		

The balance in favor of India is to be set against imports of gold and silver by the Government, the increase of London balances of India and the reduction of India's debt.

Of significance for the money market is a comparison of the net absorption of currency as compared to the sales of Council bills: <sup>14</sup>

	Currency Lakhs	Equivalent in Millions £	Council Bills Millions £	Councils Minus Reverse Councils
1913-14 .....	26,08	17.4	31	31.0
1914-15 .....	4,29	2.8	7	-1.7
1915-16 .....	20,92	14.0	21	16.1
1916-17 .....	50,88	34.0	32	32.0
1917-18 .....	59,34	39.8	35	35.0
1918-19 .....	99,52	66.3	22	10.7

It is apparent that a large part of the currency absorption, especially for 1918-19, is to be accounted for in some other manner than by the relative magnitude of credit and debit items as given in the balance of accounts and by the magnitude of sales of Councils. War expenditures in India, higher prices, and hoarding by the public account in part for the unprecedented demands for currency. The declining importance of Councils as an explanation of the absorption of currency, is significant. This table is evidence of the inadequacy of a system in which monetary supplies are determined by the balance of payments.

<sup>12</sup> *Overseas Trade Report on India, 1924-25*, p. 26.

<sup>13</sup> *B. T. J.*, May 15, 1919. The Government in India imported large supplies of silver and gold for the purpose of redeeming £110 million of Council bills.

<sup>14</sup> Indian Currency Committee, 1919, Apps. II, XI.

Sir L. Abrahams sums up the history of India's war finance as follows: The Government in India made advances of £240 Sterling to Great Britain in 5½ years. Of the Sterling received in Great Britain, 80 millions were consumed in the purchase of silver, and 54 millions in the purchase of British Treasury bills deposited in the P.C.R. Moreover, the Government in India made a war contribution of £100 million, which was not paid in full. Indian balances in London became so large that a special reserve of £20 million was created in London. The Government in India issued war loans in India to cover expenditures in India, and put Council bills drawn on the proceeds of these loans at the disposal of the British Government.<sup>15</sup> A large part of the silver purchased by India was received from the United States under the terms of the Pittman Act. Great Britain reimbursed the United States out of credits granted by the American Treasury, and it appears that these advances were additional to those granted on other considerations.<sup>16</sup> Thus Great Britain converted a part of its debt to India into an advance from the United States.<sup>17</sup> However, the United States requested 40 million dollars of gold from Great Britain, which was to be shipped to India in payment for rupee credits advanced to the United States; Great Britain was thus to repay part of the advances under the Pittman Act.<sup>18</sup> The Federal Reserve Board announced in June, 1918, that adequate supplies of rupees were available to satisfy war requirements.<sup>19</sup>

The Government in India made large expenditures in India on behalf of the Imperial Government for wheat and for other military purposes, and accepted payment in London. In what manner were the necessary rupees obtained in India? This is the fiscal

<sup>15</sup> Indian Currency Committee, 1919, Qs. 5505, 5583-88, 5594-99, 5602-5.

<sup>16</sup> The debt incurred in the purchase of silver was dealt with separately in the arrangement of 1923. Arrangements for Funding British Debt to United States, Cmd. 1912 (1923).

<sup>17</sup> The British Treasury in a memorandum dated December 26, 1918, requested additional credits in order to enable the Government to purchase silver still available under the Pittman Act. These advances were to be in addition to other loans. Loans to Foreign Governments. Senate Judiciary Committee (67-2), 1921, pp. 22-23. In a letter from Assistant Secretary of the Treasury Rathbone to Blackett of the British Treasury (November 18, 1919), the American Government demanded that advances under the Pittman Act should be given special consideration, because the magnitude of these advances had been determined by the capacity of India to purchase silver. *Ibid.*, p. 66.

<sup>18</sup> Reading Letter of May 28, 1918, referred to in letter from Rathbone to Blackett, November 18, 1919. *Ibid.*, pp. 66-67.

<sup>19</sup> *Federal Reserve Bulletin*, 1918, p. 624.

problem and is related to the monetary problem discussed above. Increased taxation and local loans, including the £100 Sterling War Contribution and issues of notes on the security of Treasury bills, were the more important sources of revenue.<sup>20</sup> The War Contribution was especially advantageous for the Imperial Government, because it made possible the reduction of the bloated Indian balances in London; but the monetary stringency was accentuated by these transfers to the Government in India. Temporary relief was afforded by the expenditure of this money by the Government; but the process was repeated and taxes and loan revenues were increased. The Government announced that the cash thus received was immediately disbursed for military expenditures or was used to redeem councils.<sup>21</sup> The revenue was received from all quarters and the proceeds were disbursed almost exclusively in military channels or in export markets. Domestic industries not of a military nature and non-essential export industries received little consideration in the process of financing industry and trade.

India received large payments in Sterling. In part, the accumulation of Sterling represented advances to Great Britain by India for the purpose of carrying on the War; but all Sterling received was not retained. India had to make large payments on capital account to British creditors, and England had to make large payments for silver purchased for India.<sup>22</sup> From 1915 to 1920, the Government purchased 325 million ounces of silver in the market as compared with but 532 millions from 1900 to 1914.<sup>23</sup> A summary of the cash transactions of the Secretary of State for India for the year 1918-19 reveals the character of these operations:

<i>Millions of £ Sterling</i>		
Payments on capital transactions	22.4	Received by India from Great
Purchases of silver .....	43.7	Britain in London for disburse-
Payment of India's War Contri-		ments for the purpose of carry-
bution .....	33.4	ing on the War .....
		82.9
		Net receipts from sales of Council
		bills .....
		15 8

<sup>20</sup> The Government in India pointed out that subscriptions to the War Loan would enable India to dispose of commodities on credit. Otherwise export trade would be restricted. In other words, the Government in India thus received rupees to finance British expenditures in India. *Financial Statement and Budget, 1917-18*, pp. 11-12.

<sup>21</sup> *Operations of Currency Department, 1918-19*, pp. 12-13.

<sup>22</sup> *Ibid.*, loc. cit.

<sup>23</sup> B. R. Ambedkar, *The Problem of the Rupee*, p. 219.

If exporters could be restrained from transferring to India more than the minimum part of the cash received for their commodities, the scarcity of rupees would not be felt so keenly. Important arrangements were concluded by the British Government with Indian exporters which provided that they were not to withdraw from London more than a designated part of their receipts.<sup>24</sup>

Banks coöperated in the task of obtaining the most economical distribution of cash between London and India. The exchange banks operate in India and elsewhere. The Government urged them to purchase as many export bills as possible, and even guaranteed them against losses in converting Sterling into rupees later.<sup>25</sup> It is rather difficult to understand why so much attention was given to the distribution of cash held by the banks. Undoubtedly, the banks were cautious in buying export bills; their purchases were largely determined by the quantity of Council bills that they were allowed to purchase. Because supplies of rupees were scarce, they hesitated to make any commitments that required the payment of rupees in India. Perhaps they might have been less cautious, for they retained large hoards of cash in the difficult days of 1917 and 1918. What in fact limited their purchases of exporters' bills, was the available supplies of Councils; the supplies sold were determined by the capacity of the Indian Government to obtain and put into circulation rupees that would be accepted at their full nominal value. The Controller of the Currency commented on the failure of the exchange banks to purchase more Sterling bills in 1918-19. In the first six months of the year, their purchases of Sterling bills were in excess of their sales of Sterling by 12 millions; in the second half of the year, sales exceeded purchases by 10 millions.<sup>26</sup> (In the latter period, reduced exports resulted in a demand for Reverse Councils and a discontinuance of the sale of Councils.) That the banks were able to purchase Sterling bills in excess of sales in the first half of the year, is probably to be explained by the increase of

<sup>24</sup> Thus tea purchased by the Food Controller was paid for by depositing 60 per cent in India and 40 per cent in Great Britain. Indian Currency Committee, 1919, Q. 4705.

<sup>25</sup> *Ibid.*, paragraph 21. In 1918-19, the banks received 5.01 lakhs in Treasury bills for overbuying rupee bills. *Operations of Currency Department, 1918-19*, p. 8.

<sup>26</sup> *Ibid.*, p. 6.

deposits in India. The Government proposed that the banks operate with minimum cash reserves in India and grant as much accommodation as might be safely granted.

The following observations are made for the inflation period on the basis of the facts published in "Statistical Tables Relating to Banks in India."

1. Government deposits of the three Presidency banks fluctuated in a rather moderate manner.

2. The deposits of the Presidency banks, exchange banks and joint stock banks did not increase rapidly before 1917, in which year there was an increase of approximately 40 per cent. The increase was inappreciable in 1918; in 1919 it was approximately 30 per cent, and in 1920 about 10 per cent. The general trend for the three types of banks was similar; but the movements in 1918

	<i>R 100,000</i>		
	Presidency Banks	Exchange Banks	Joint Stock Banks
1917 .....	67.71	40.0	31.2
1918 .....	50.98	46.4	40.6

were not similar. Perhaps the decline in the deposits of Presidency banks is to be explained by the fact that they operated in the big cities, and that their depositors were local merchants who were disturbed by the uncertain political events of 1918 and withdrew large deposits.

3. The figures for cash reserves are of much interest. In the troublesome years of 1917 and 1918, the banks increased their

	<i>Ratio of Cash to Deposits</i>								
	1913	1914	1915	1916	1917	1918	1919	1920	1925
Imperial Bank (3 Presidency banks) .....	36	46	34	35	45	29	31	30	21
Exchange Banks									
A. Operating to a consider- able extent in India .....	19	28	19	25	40	20	35	30	13
B. Operating abroad for the most part ..	17	26	41	35	160	44	67	58	15
Larger joint stock banks— hold very large part of total reserves and assets of all joint stock banks .....	18	21	22	24	25	23	21	23	19

reserves both absolutely and relatively. The increase was especially marked for exchange banks operating mainly abroad, and rather small for joint stock banks.

The stringency of 1917 was caused in part by the hoarding of banks. Thus the cash balances of Presidency banks, exchange banks and the important joint stock banks were approximately 100,230 and 25 per cent higher in 1917 than in 1916. In 1918, the banks began to reduce their hoards. Undoubtedly the reduction was not entirely voluntary.

	Cash Holdings		
	R 100,000 Presidency Banks	Millions of £ Sterling Exchange Banks	R 100,000 Joint Stock Banks
1916 .....	17.27	7.6	6.03
1917 .....	33.77	25.3	7.65
1918 .....	17.07	11.4	9.49
1919 .....	23.62	22.5	12.17

In 1916, the problem of obtaining necessary supplies of currency for domestic purposes became more troublesome, and the Government soon began to restrict the sales of Council bills. The position of the exchange banks was strong. They obtained large supplies of rupees, because they had access to the Council market. There was an increase of sales in 1917 to provide India with more rupees, although the cash of exchange banks had increased approximately 200 per cent and their deposits had increased but 40 per cent. Apparently, the banks might have purchased more bills from exporters and depended less on Council sales. They were most cautious. In 1918 when a reduction of cash by more than 50 per cent was accompanied by an increase of deposits of approximately 15 per cent, the exchange banks displayed more courage in purchasing export bills. The increase in deposits is not an accurate measure of the increased accommodation granted, for deposits would have been larger had not large withdrawals of cash been made. The increase in banking reserves during this period of stringency is an argument against the separation of banking from currency reserves and of banking from monetary policy. There has been much agitation for a coordinated policy.

## CHAPTER III

### COUNCIL BILLS

THE Council bill policy of the India Office has often been criticized. In the latter part of the War the India Office did not have to sell Councils in order to obtain the required supplies of Sterling.<sup>1</sup> Sterling received in payment for disbursements of rupees in India would have more than sufficed to meet India's needs in London.<sup>2</sup> But Council bills were sold at an unprecedented rate in order to finance the exportation of commodities essential for carrying on the War. Herein lay one great advantage of Council bills: Whatever rupees were available in India could thus be used primarily to finance exports. It might be asked, however, whether a more direct control of Indian banking might not have led to a more extensive use of banking resources for war purposes, for one result of the system of rationing Councils was that the banks felt at liberty to utilize any other resources—obtained through acceptance of deposits, for example—in financing non-essential industries.

In selling Council bills, the Government in India virtually determined the quantity of rupees in circulation.<sup>3</sup> When the India

<sup>1</sup> The Finance Member announced that sales of Council bills were not necessary in 1917-18 to meet Treasury needs in London. However, trade needs were not being met by disbursements in India for military purposes. Hence the country would rely on withdrawals from the Paper Currency Reserve to meet trade needs. India. *Financial Statement and Budget*, 1917-18, p. 9.

<sup>2</sup> Thus from 1915-16 to 1920-21, the Government in India received £140 million in London through the sale of Councils and £303 million in payment for war expenditures. H. S. Jevons, *Money, Banking and Exchange in India*, p. 196.

<sup>3</sup> In 1918-19, India disbursed 16 crores on behalf of the Federal Reserve Bank of New York. This was an outlay in addition to those required by the sale of Council bills. (*Operations of Currency Department*, 1918-19, p. 6.) The contributions of the Government to the financing of the export trade are not measured merely by the sales of the Council bills. Thus in 1918-19 the excess of exports was estimated at 86½ crores. The Government remitted 23.8 crores by selling Council bills; remittances on account of T. T. drawn on India from Persia and Mesopotamia totalled 15.6 crores; disbursements for the Federal Reserve Banks came to 16 crores. (*Ibid.*, p. 16.)

Office began to limit weekly sales in 1916, it virtually announced that the price of rupees would remain 16d. but unlimited amounts would not be available.<sup>4</sup> Because the market could not obtain necessary supplies at 16d., the competition for available supplies was bound to result in an appreciation of the rupee. But official interference temporarily prevented the appreciation. Importers and exporters were patriotic and hence did not make private agreements. The notification to accept sovereigns at 15 rupees was not of practical importance, for gold was not easily obtained. The authorities restricted sales of Councils because they feared that they might not be able to redeem them.<sup>5</sup> The public could choose between purchasing Councils and shipping gold, but supplies of both were inadequate.

The Government in India refused to act in the capacity of a note bureau in the same manner that the Swedish Riksbank objected in 1916 and the German Reichsbank more recently. The occasion of the Government's objection was the peculiar monetary conditions in India and abroad. The price of silver rose so that the cost of the bullion value of the rupee was in excess of its monetary value.<sup>6</sup> The Government hesitated to pump currency notes into circulation rapidly. If we are to judge from the large issues of notes in 1918, the authorities underestimated the capacity of the public to absorb paper money.

In the latter part of 1916, the Government reduced the weekly quota of Councils from 260 lakhs to 80 lakhs. The latter total was a compromise based on trade needs and Treasury capacity to redeem.<sup>7</sup> The fiscal operations of India at home were an important factor in determining the magnitude of sales of Councils. A sale of Councils and the accompanying increase in Sterling balances did not result in a corresponding addition to the currency

<sup>4</sup> Because sales were limited, it may be held that the price of Councils was fictitious. Testimony of Sir L. Abrahams, Indian Currency Committee, 1919, Qs. 46-52; Commission on Indian Currency, 1926, App. III.

<sup>5</sup> *Financial Statement and Budget, 1918-19*, pp. 10-11. In the Financial Statement for 1917-18, the Finance Member admitted that sales of Council bills would be determined by the ability of the Government to procure silver and by the distribution of reserves and balances between London and India. *Ibid.*, p. 146.

<sup>6</sup> C. N. Vakil and S. K. Muranjan, *Currency and Prices in India*, p. 108; H. S. Jevons, *Money, Banking and Exchanges in India*, pp. 205, 213.

<sup>7</sup> Indian Currency Committee, 1919, Qs. 44-45.

in circulation in India, for an important part of the currency put into circulation was received in payment of taxes or Government securities. Hence additional sales of Councils might be necessary to satisfy trade needs.

The currency movements for the years 1913 to 1927 were as follows: <sup>8</sup>

<i>Lakhs of Rupees</i>				
	Grand Total	Gold	Silver	Paper
1913-14 .....	23,84	+16.43	+ 5.43	— 2.86
1914-15 .....	— 3,08	+ 6.83	— 6.65	— 4.49
1915-16 .....	+18,40	— 0.43	+ 8.59	+ 6.10
1916-17 .....	+48,79	+ 0.37	+34.70	+18,64
1917-18 .....	+53,15	+11,00	+28.18	+13,42
1918-19 .....	+100,01	+ 5.20	+44.12	+53,67
	Grand Total	Sovereigns and Half Sovereigns		
1919-20.....	36.07		—3.32	
1920-21.....	—35,96		—4.38	
1921-22.....	1,67		2.78	
1922-23.....	3,74		9.43	
1923-24.....	22,32		6,74	
1924-25.....	15,67		14,53	
1925-26.....	4,06		11.07	
1926-27.....	—16,62		6.24	

The point made above may be repeated here. Additions of currency are to be explained in part only by sales of Council bills. In the period of restricted sales, additions of money in circulation were greater than ever.

The accepted theory until the years preceding the War was that the Government sold Council bills primarily to procure £ Sterling to meet expenditures in London; <sup>9</sup> but the India Office was also interested in the requirements of trade and exchange stability. During the War, large quantities of rupees required for the purpose of redeeming Councils were obtained by purchasing silver in London with cash drawn from balances of the India Office. In 1922-23, the authorities had to dispose of Treasury bills in order to procure rupees to redeem Council bills.<sup>10</sup> When the Government create rupees *ad hoc* in order to redeem Councils, they in fact inflate in order to meet expenditures abroad. In 1924

<sup>8</sup> From the reports of the Controller of the Currency. Also see Commission on Indian Currency, 1926, App. III.

<sup>9</sup> The Babington-Smith Committee proposed that the India Office should sell Council bills only to obtain the Sterling required for fiscal purposes. Indian Currency Committee, 1919, paragraphs 61-62.

<sup>10</sup> *Operations of Currency Department*, 1922-23, p. 13.

and 1925, the Government were forced to sell Councils in order to prevent an appreciation of the value of the rupee.<sup>11</sup> But in the years 1921 to 1923, the Government withheld Council bills in order to strengthen the exchanges. They refused to sell at the low rate of 1s.4d., and paid their debts in London with cash received in payment for War expenditures incurred on behalf of Great Britain, with cash drawn from London balances and from the two monetary reserves, with the proceeds of advances in London, and with the profits received in transferring cash in London to India at favorable rates of exchange.

<sup>11</sup> Commission on Indian Currency, 1926, Q. 11,710-11.

## CHAPTER IV

### PRICES 1914-1920

THE increase and decline of prices in India were much more moderate than in most countries. From 1914 to 1920, the increase in prices in the United Kingdom was approximately 200 per cent, and in India but 100 per cent. The decline in 1920-21 was 35, 38 and 11 per cent in the United States, Great Britain and India respectively.<sup>1</sup>

The Indian monetary policy has been approved by monetary reformers as an excellent example of the attainment of price stabilization at the expense of exchange stabilization.<sup>2</sup> However, the Indian monetary experience was not particularly novel.<sup>3</sup> Many other countries in the War period refused or were unable to follow the lead of the belligerents. In so far as they converted their foreign balances into securities or merely accumulated balances which were not employed as cover for notes, they were pursuing independent monetary policies. In fact, India was pursuing an involuntary policy of isolation. India would have financed all its export trade and have employed newly acquired *devisen* as security for additional notes had the authorities deemed it expedient to issue more notes, or had the banks been content to lend more liberally, or had more silver and gold been procurable for monetary purposes. Only the inability to procure adequate supplies of rupees forced the Government first to limit the sales of Councils, and then to allow the rupee to appreciate. There is little evidence that the policy of India was to sacrifice external

<sup>1</sup> Commission on Indian Currency, 1926, App LXIX.

<sup>2</sup> Sir L. Abrahams told the Babington Smith Committee in 1919 that India should continue to pursue a policy of price stability similar to that which had been in vogue since 1893. Indian Currency Committee, 1919. Memorandum by Sir L. Abrahams, pp. 64-65.

<sup>3</sup> The British Treasury put all the Dominions and Colonies in one class. Prices in Great Britain had advanced by one third in one year, and fell by more than one half in the following year. The Dominions were not prepared to follow. Imperial Economic Conference, 1923, *Canadian Sessional Papers*, 1924, VII, p. 372.

stability to internal stability, although some authorities were aware that prices might be kept down by allowing the exchanges to appreciate.<sup>4</sup> The rise of prices in India was moderate compared to the rise in Great Britain; but it was not more moderate than the rise in several other countries.

	<i>Prices</i> <sup>5</sup>		
	India	U. K. Sauerbeck	Value of Rupee in Pence
1873 .....	100	100	24.50
1896 .....	110	55	14.26
1914 .....	147	77	16.05
1915 .....	152	97	16.01
1916 .....	184	123	16.13
1917 .....	100	158	16.37
1918 .....	225	174	17.49

From 1873 to 1896, India suffered from exchange depreciation rather than from declining prices. From 1914 to 1918, Indian prices rose 50 per cent, and British prices rose 130 per cent. But the Indian exchanges appreciated only 9 per cent. The more moderate increase in Indian prices is not to be explained by exchange appreciation apparently; however, it should be remembered that the exchanges were controlled, and that unlimited supplies of rupees could not be obtained at the official quotations. But the restrictions on dealings do not fully explain the relatively low external value of the rupee. If free trade relations had existed, the exports of India would have continued to increase so long as prices in India remained relatively low, or to put it in another way, so long as the exchanges did not appreciate in proportion to the decrease in the value of the rupee in India as compared to the decrease in the value of Sterling in England. How are we to explain the failure of prices to rise more in India, or the rupee to appreciate more? Its favorable balance of exports and payments increased. Normally, the result would have been an influx of purchasing power into India which would have raised prices and reduced exports. But because it became difficult to transfer cash to India on account of the peculiar monetary conditions, it became necessary to accumulate balances abroad. India's exports did not increase as much as might be expected in the light of its relatively low export prices, because its export trade

<sup>4</sup> *Overseas Trade Report on India*, 1921, pp. 214-15.

<sup>5</sup> Indian Currency Committee, 1919, App. III.

was controlled in the interest of the Empire. The control of the Council bill market by British authorities enabled them to restrict exports to other countries effectively. The relatively low prices in India in the War period may also be accounted for in part by the relatively moderate increase in prices of agricultural commodities throughout the world.

Additional light is thrown on this problem by the following table: <sup>6</sup>

	<i>Price Indices</i>	
	1914	1918
Food grains .....	132	161
Imports .....	105	265
Exports .....	126	137
Great Britain—all commodities .....	110	240
India—all commodities .....	147	225 (from Statistical Abstract of India)

That the increase in prices of imported commodities was approximately as great as the increase in the general price level of Great Britain, is an indication of the inadequacy of the explanation that India withstood the pressure of rising prices by allowing its exchanges to appreciate. However, the scarcity of imported commodities probably contributed to the increase in their prices, and the increase of all prices in Great Britain was not as great as for its exports. Great Britain, the main source of supplies, restricted exports rigidly. The very moderate increase in the price of India's exports is to be explained in part by price regulation, in part by poor marketing conditions, and in part by the world-wide decline of agricultural prices as compared to the prices of manufactured goods.<sup>7</sup> The prices of food grains peculiar to India, which are non-traded commodities, were determined in large part by local conditions. The increase of their prices was phenomenally low; even the increase of money outstanding was greater.

That brings me to another aspect of the price history of India.

<sup>6</sup> Indian Currency Committee, 1919, paragraphs 47-48.

<sup>7</sup> The export of wheat on private account was prohibited early in 1915. India. *Financial Statement and Budget*, 1915-16, p. 204. In 1910, the Government announced the introduction of a policy of restriction of trade in foodstuffs and articles required for war purposes, and stimulation of exports to the Allies *Ibid.*, 1916-17, p. 2. The object of the control of exports of wheat was to prevent an increase of prices beyond a moderate level, and to assure an export market. Report of Indian Wheat Committee for 1915 and 1916, Cd. 9090 (1918).

Much money was hoarded, especially because supplies of commodities were limited, and because the popular luxuries, gold, piece goods and the like were not available. In the second place, the more rapid increase in the prices of some international commodities (imports) resulted in a diversion of a disproportionately large quantity of purchasing power to those markets. Undoubtedly imports were reduced to a low level; but the reduction resulted in increased hoarding of money. The relatively moderate increase of prices in India from 1914 to 1918 is to be explained only in part by exchange stability; the moderate increase in the prices of domestic and export commodities, which resulted in part from the peculiar domestic conditions, is also to be considered. Moreover, as has been pointed out above, India hoarded large balances abroad.

India was cut off from its usual sources of supplies of manufactured goods. The rise in prices would have been even more moderate if the weights used in the construction of India's index numbers had been adjusted to changes in consumption. A country that consumes manufactured commodities only to a limited degree would, under the conditions of 1914-18, necessarily suffer from a less marked increase in prices than a country more advanced economically. On the other hand, allowance should be made for the increase in prices caused by the reduction of supplies resulting from a policy of relatively unrestricted exports and restricted imports.<sup>8</sup> The authorities restricted exports of several important commodities. A study of the figures for the exportation of wheat to the United Kingdom reveals large reductions, which are to be explained in part by the disorganization of the shipping trade.

The correlation between fluctuations in monetary supplies and prices is not high for India.<sup>9</sup> Although large quantities of rupees were coined and put into circulation in 1916, the more impressive additions of later years were largely hoarded.<sup>10</sup> From 1913 to

<sup>8</sup> In the latter part of 1918, India took action to prevent excessive exports of necessities to the Allies, *Report on Operations of the Currency Department, 1918-19*, pp. 1-2. Also see *Introducing Financial Statement, 1919-20*, p. 5. In 1917-18, the exports of cereals to the Allies were 50 per cent in excess of those of the previous year. *Ibid.*, pp. 2-3.

<sup>9</sup> However, compare H. S. Jevons, *The Future of Exchanges and the Indian Currency*, pp. 40-44.

<sup>10</sup> *Ibid.*, p. 37; C. N. Vakil and S. K. Muranjan, *op. cit.*, p. 337.

1916, the increase in prices was especially moderate. Vakil and Muranjan explain the increase of that period by the increase of deposits and by a more rapid turnover of money and deposits.<sup>11</sup> They estimate that the increase in prices from 1913 to 1920 was twice as great as the increase in circulation.<sup>12</sup> Their conclusion does not seem to be consistent with what has been said above in relation to increased hoards. Silver rupees were hoarded; but paper money now constituted a much larger part of the money in circulation. Before the War a banking official revealed how much more rapidly the paper money circulated than silver rupees. That the rupee did not appreciate as much as might have been anticipated by those who adhere to the Purchasing Power Parity doctrine, is generally known. Thus, Narain pointed out that in June, 1917, the rupee would have been quoted at 2s. if its value had been determined by the relative price movements in Great Britain and India; but its current value was 1s. 4 7/32d.<sup>13</sup> Although the Purchasing Power Parity doctrine does not offer an adequate explanation of the fluctuations in the value of the rupee from 1914 to 1924, Narain errs in attributing the fluctuations entirely to the increased price of silver and to the balance of trade.<sup>14</sup>

The difficulties of the Government in India are to be referred to (1) the war expenditures for the Imperial Government, (2) the needs of industry for increased supplies of currency, and (3) monetary stringency caused by various factors in addition to those already mentioned. Relief was obtained by purchasing silver and gold, by borrowing in India, and by increased taxation. In addition, the Government obtained an advance of 18 crores from the Presidency banks.<sup>15</sup> It is apparent that the fiscal activities of the Government were an important factor in the monetary stringency.

In the Dutch East Indies, conditions were somewhat similar. Its difficulties largely arose from the restrictions on gold exports in the latter part of the War which made the financing of its

<sup>11</sup> *Ibid.*, p. 335.

<sup>12</sup> *Ibid.*, p. 337.

<sup>13</sup> B. Narain, "Exchange and Prices in India, 1873-1914," *Weltwirtschaftliches Archiv*, 1926, *Chronik*, p. 271.

<sup>14</sup> *Ibid.*, p. 279.

<sup>15</sup> *India. Financial Statement and Budget, 1920-21*, pp. 5-6.

export trade difficult; besides, the export trade was hampered by the scarcity of ships. In fact, so effectively was the export trade crippled, and monetary supplies kept out, *that prices declined in 1917*. The trade balances are of interest. The favorable balances during the War period were moderate; exports increased at an unprecedented rate in the post-War period.<sup>16</sup>

*Balance of Trade—Millions of Guildens*

1913.....	+ 213
1916.....	+ 448
1917.....	+ 300
1918.....	+ 121
1919.....	+ 1427
1920.....	+ 1029
1921.....	—13
1923.....	+ 729

<sup>16</sup> *Bank of Java, Report 1924-25*, p. 36.

## CHAPTER V

### PRICES IN THE DEFLATION PERIOD

IN the post-War era, there is more evidence of an attempt to control prices. Thus when the Government in India accepted the recommendation of the Babington-Smith Commission to stabilize the rupee in terms of gold, the Finance Member contended that it was necessary to set a high price for the rupee on the grounds that the current high level of prices in India ought not to be maintained permanently.<sup>1</sup> The Young Commission has published an interesting correspondence between the Secretary of State for India and the Government in India Finance Department which was carried on from October, 1924, to March, 1926.<sup>2</sup> The latter proposed stabilization at 1s. 6d.; the former proposed a policy of unstable exchanges and stable prices.

In 1924-25, the Government followed a definite price policy. By allowing the external value of the rupee to appreciate, India maintained relatively stable prices in 1923-24 while prices were rising elsewhere. In 1924-25, the movement was reversed.<sup>3</sup> But in the important period of 1919-21 only the forces of circumstances made possible a moderate rise and decline. The attempted stabilization of the rupee at 2s. in gold in 1920 preceded an unfortunate drop in Sterling; hence the rupee was stabilized at a dangerously high figure in terms of Sterling. An appreciation of Sterling and an unfavorable turn in the balance of payments followed. Undoubtedly, the attempted stabilization of the rupee at 2s. encouraged speculative transfers of capital to London.<sup>4</sup>

<sup>1</sup> India. *Financial Statement and Budget*, 1920-21, p. 3.

<sup>2</sup> Commission on Indian Currency, 1926, App. XCVIII.

<sup>3</sup> *Ibid.*, Qs 108-15 India. *Financial Statement and Budget*, 1925-26, pp. 117-18.

<sup>4</sup> Mr. Hailey, the Finance Member, admitted that the generous offer of Reverse Councils resulted in excessive remittances. India. *Financial Statement and Budget*, 1921-22, p. 5. In the course of the discussions of the 1920-21 Budget, many objections were raised against the high exchange rates and the sale of Reverse Councils. *Ibid.*, 1920-21, pp. 72-74, 81-82. Mr. Hailey approved of the

The Government in India have been severely criticized for their sales of Reverse Councils in 1920, which, however, did not prevent the uninterrupted decline of the rupee from 2s. in gold to 1s. 2d. in Sterling.<sup>5</sup> Sterling had been acquired for the most part at 15 Rs. and was disposed of at a loss. India's policy was unique. Other countries refused to allow unrestricted gold movements in the midst of the upheaval of 1920-21. Spain, Japan, Argentina and other countries suffering from the sudden reversal of the balance of payments retained their gold. But although the authorities disposed of their Sterling, they were no more successful in stemming the decline of the rupee—in fact were less so—than were other countries in preventing the further depreciation of their currencies.<sup>6</sup> However, the value of no other currency had been raised to a premium of 50 per cent over gold. That the rupee continued to depreciate in spite of the generous sales of Reverse Councils, is explained in part by the fact that payments had to be made to meet large commitments of the past. Adequate supplies of Sterling were not available. Even if the reduction of currency that is required by the theory of the gold exchange standard had been effected, it is highly improbable that prices would have declined adequately and promptly enough to bring about the required adjustment of the balance of payments without which the stability of the rupee could not have been maintained. The restricted imports during the War and the impetus given by the high exchange rate resulted in excessive purchases of commodities and speculative transfers.<sup>7</sup>

sales of Reverse Councils on the grounds that the rupee would have depreciated more had the exchanges not been supported by the sales of Reverse Councils. *Ibid.*, pp. 234-38. Apparently, the authorities raised the price of Sterling tardily, for at one time, exporters were selling their Sterling at a price 3d. in excess of the official price. *Ibid.*, 238-39.

<sup>5</sup> In the Legislative Council it was contended that Reverse Councils should not be sold unless the balance of trade were unfavorable. H. L. Chabiani, *Indian Currency and Exchange*, p. 80. Of course, the criterion should be the balance of payments, not the balance of trade.

<sup>6</sup> The authorities had boasted in 1917 of an accumulation of Sterling greater than the losses in any two successive years since 1899. India. *Financial Statement and Budget*, 1917-18, p. 10.

<sup>7</sup> F. H. Lucas, Financial Secretary of the India Office, anticipated the difficulty that prices might not be adjusted easily to a 2s. rate. However, he was optimistic because India held a reserve of £80 million which was adequate to meet withdrawals 7 times as large as those of 1914-15. Indian Currency Committee, 1919, Q. 4466. We have learned from the experience of 1920-21 that exchange stability is endangered more by the inability to reduce the supplies of currency drastically in India and the absence of a close relation between con-

Although there was a great demand for Councils from April to December, 1919, the demand fell off suddenly in January, 1920. Many took advantage of the high quotation of the rupee to remit to England in anticipation of needs.<sup>8</sup> With the decontrol of English exchange in March, 1919, the price of silver soared; and the India Office raised the price of Councils correspondingly.<sup>9</sup> Prices of commodities were not being adjusted rapidly enough to the increased value of the rupee; but the price of the latter was being adjusted promptly to the increased price of silver. Exports became rather high-priced and imports low-priced.<sup>10</sup> In the War period, India had profited from the pegging of the British exchange because it had obtained many dollars for Sterling consumed in the purchase of silver. In other words, the high price of Sterling had protected India to some degree from the injurious effects of the high price of silver. India was also protected from arbitrage transactions, which might have enabled foreigners to depress the price of rupees by purchasing Sterling with rupees, for the rupee market was open only to Great Britain. But India suffered losses as a result of the speculative decline of the £ Sterling, which had led to higher prices for silver and to a greater appreciation of the rupee than was necessary in order to maintain relatively stable prices for the period 1919-20.

When the Government sold Reverse Councils, they did not withdraw a corresponding quantity of rupees.<sup>11</sup> The authorities drew on the Sterling balances of the Indian Treasury to satisfy the demands for Sterling, and the Treasury balances were replenished in India. But the cash thus received was put at the disposal of the money market.<sup>12</sup> Moreover, the Treasury was hav-

traction and price reduction, or between the latter and a relatively quick improvement in the balance of payments than by the retention of inadequate balances in London.

<sup>8</sup> *Introducing Financial Statement, 1920-21*, p. 2.

<sup>9</sup> Indian Currency Committee, 1919, paragraphs 17-19.

<sup>10</sup> *B. T. J.*, November 25, 1920. It is to be emphasized that the rupee had been under-valued in the years 1915-18; and the net effect of the movements of 1919-20 was for the most part to raise the rupee to a value consistent with British and Indian prices.

<sup>11</sup> The deflationary effect was greater because more rupees were required in order to purchase Sterling during a period in which the rupee had depreciated. India. *Financial Statement and Budget, 1920-21*, p. 4.

<sup>12</sup> The Finance Member described the procedure as follows: Secretary of State's balances were drawn upon as long as they were available. The rupees received were not lost to the money market because the Government deposited cash with

ing difficulties in paying its debts, and hence borrowed currency notes that had been exchanged for Sterling.<sup>13</sup> The Government also borrowed rupees from the G. S. R.<sup>14</sup> Both in the periods of inflation and in the early part of the period of deflation, the Government's fiscal policies made possible the moderate extent of the fluctuations in the value of the rupee. In the former period, officials withdrew large quantities of rupees from circulation by introducing a vigorous tax and loan policy; in the latter period, they prevented stringency by putting rupees received for Sterling into circulation again. (India's deficits from 1914 to 1920 have been put at the moderate total of 49 crores by the Inchcape Committee.<sup>15</sup>) India's rather antiquated fiscal system was reflected in a discouraging reduction of receipts in the period of economic depression in 1920-21. Whereas the maintenance of stable monetary relations with Great Britain required deflation, India's fiscal position made inflation necessary.<sup>16</sup> However, the failure to withdraw more currency notes from circulation is not to be explained exclusively in this manner. The authorities did not dare to deprive the country of the large supplies of cash that were exchanged for Sterling.<sup>17</sup> Largely as a result of this experience, various authorities have concluded that Sterling balances should not be in excess of the equivalent of rupees that can safely be taken out of circulation in India. But one aspect of this problem is neglected by these authorities. India requires large supplies of Sterling in order to maintain the stability of the rupee, for large foreign payments are necessary.

An insight into the financial history and policy of the early

the Presidency banks. But with the depletion of the Secretary of State's balances, drafts were drawn on the P. C. R. which necessitated the accumulation of rupees in reserves. *Introducing Financial Statement*, 1920-21, pp. 17-18.

<sup>13</sup> Legislation was introduced to make the substitution of rupee securities legal. *Operations of the Currency Department*, 1920-21, pp. 19-20.

<sup>14</sup> Commission on Indian Currency, 1926, Q. 248.

<sup>15</sup> C. N. Vakil and S. K. Muranjan, *op. cit.*, p. 337.

<sup>16</sup> The Treasury was disturbed by its inability to renew its floating debt. A failure to renew resulted in additional issues of notes. In 1919-20, the Government issued 20 millions additional of notes because they were unable to sell adequate supplies of Treasury bills. *Introducing Financial Statement*, 1920-21, pp. 25, 35.

<sup>17</sup> Commission on Indian Currency, 1926, Qs. 248, 603, 847-48. Jung says that the abandonment of gold points may be preferable to contraction beyond a certain point. He considers a reserve of 25 crores more than adequate. *Ibid.*, Qs. 252-60. Kisch, Financial Secretary of the India Office, says that a reserve of 50 crores is more than enough. *Ibid.*, App. LXX, pp. 458-59.

part of this period is to be had from a statement of the Secretary of State on the transactions in Sterling and in rupees in 1919-20.<sup>18</sup> In the first nine months, business was at a high level, and the demands for Councils were heavy; in the last three months, a reaction set in.

1919-20  
(Fiscal Year)  
*Millions of £ Sterling*

<i>Liabilities—Main Items *</i>	<i>Assets—Main Items</i>	
Net expenditure chargeable to revenue .....	Reduction of cash balances .....	1
Capital outlay .....	Withdrawal from Special Reserve .....	7
Payments for silver .....	Transfer to Home Treasury from investments on behalf of Paper Currency Reserve .....	13
Payments for gold .....	Recoveries from War Office.....	61
Payments on war loan to Home Government .....	Council bills .....	31
Sterling transfers on London ..		
Total .....		113

*Rupee Transactions*  
*Crores*

<i>Liabilities</i>	<i>Assets</i>	
Recoverable war expenditure ....	Reduction of cash balances.....	5
Council bills .....	Credits of silver purchased by Secretary of State .....	23
Transfers to currency (P. C. R. in India) against withdrawals by Secretary of State of British Treasury bills held in reserve .....	Gold .....	39
Capital outlay and discharge of debt .....	Sterling drafts on London .....	18
	Excess of revenue over expenditure .....	14
	Rupee loans .....	21

\* Three crores equal £2 Sterling. Discrepancies are to be explained by the fact that transactions in rupees frequently relate to different operations. Thus Sterling receipts from sales of Council bills are in excess of rupee liabilities for that item. The explanation is that the redemption requires time.

Of particular interest are the following facts: The Government disposed of large quantities of Reverse Councils as early as 1919-20, as is evident from the Sterling liability (above), Sterling transfers on London. The transfers to the Home Treasury from the investments on behalf of the P. C. R. in London are explained by a transfer of cash from the Treasury balances to the Currency Note Reserve in India, and a reverse movement in London. In other words, the Government satisfied the demand for Sterling by withdrawing Sterling from the P. C. R. in London and replenishing it in India with rupees drawn from fiscal balances. For the year, the sales of Councils and Reverse Coun-

<sup>18</sup> *Introducing Financial Statement, 1920-21, p. 23.*

cils were roughly equivalent; but the Councils were disposed of in the earlier months of the year. In the first ten months of the calendar year of 1920, the Government disposed of 51 crores of Reverse Councils and contracted currency at home by 39 crores. But the authorities did not continue this process of deflation, for they feared that trade might be affected adversely. Moreover, the banks did not coöperate—perhaps fortunately—in a program of deflation. Their deposits were 209 crores at the end of 1919 and 223 crores at the end of 1920. The withdrawal of cash from hoards also made it difficult to carry through a program of deflation.<sup>19</sup> In 1919-20 and 1920-21, the Government sold 55½ millions Sterling of Reverse Councils. At first Sterling was drawn from the Secretary of State's balances. Since the Treasury thus received rupees in India which were put at the disposal of the money market, these operations did not result in any marked contraction. But the Government soon drew £47 million (69 crores of rupees) from the P. C. R. in England. Approximately one half of the rupees received for this Sterling drawn from the P. C. R. was reissued on the security of Treasury bills; the net contraction was Rs. 35 crores.<sup>20</sup> The policy of contraction was continued in 1921-22 and 1922-23.<sup>21</sup>

A summary of the balance of payments for the years 1921-22 to 1923-24 is given below.<sup>22</sup> Averages for three years ending 1923-24:

	<i>Lakhs of rupees</i>		
Balance of Trade (Private) .....	+52,49	+1,44,88	+1,55,18
Gold (Private) .....	—13,93	— 29,19	— 73,78
Silver (Private) .....	—11,79	— 18,38	— 20,06
Total visible balance of trade .....	+26,37	+ 96,23	+ 61,06
Council bills and T. T. ....	—15,45	— 33,39	— 56,35
£ transfers on India .....	+ 9,42		
Balance of remittances .....	— 6,30	— 34,18	— 57,14
Total visible balance of accounts .....	+19,08	+ 62,05	+ 3,92

The history of the later post-War years was not unlike that of 1921. The Government were unable to support a program of deflation whole heartedly because deficits were large. For 1920-21, the Government anticipated liabilities (Ways and Means)

<sup>19</sup> Commission on Indian Currency, 1926, Qs. 10844-45, 110°.

<sup>20</sup> *Ibid.*, App. X. Mr. Denning points out that sales of Reverse Councils are frequently not followed by contraction at home.

<sup>21</sup> *Ibid.*, App. III, p. 17.

<sup>22</sup> *Overseas Trade Report on India, 1924-25*, p. 26.

of 46 crores; actually they came to 96 crores. Unexpected were losses of 28 millions incurred in the sales of Reverse Councils, and rather large railroad expenditures. These liabilities were covered for the most part with the proceeds of a rupee loan (30 crores), the creation of Treasury bills to cover currency notes (33 crores), a reduction of cash balances (15 crores) and advances from the War Stores Suspense Account (14 crores).<sup>23</sup>

In the years 1918-23, the total of *deficits* was 100 crores, which the Government covered by creating 31 crores of paper money and by borrowing 69 crores additional.<sup>24</sup> In 1922-23, *liabilities* were in excess of ordinary revenues by 106 crores. The Government proposed to cover the *deficits* by borrowing in India and London.<sup>25</sup> The result of large deficits was that at best they could pursue a policy of moderate contraction until August, 1923; they withdrew currency notes in paying off Treasury bills held in the P. C. R., and in disposing of Sterling securities. Sterling requirements were met out of the proceeds of repayments from the British War Office, large loans in London and by the transfer of reserves to India.<sup>26</sup>

<sup>23</sup> *Budget of Government of India for 1921-22*, pp. 20-21.

<sup>24</sup> *Ibid.*, 1923-24, pp. 6-7.

<sup>25</sup> *Ibid.*, pp. 15-16.

<sup>26</sup> Commission on Indian Currency, 1926, Q. 5.

## CHAPTER VI

### CONCLUSION

ALTHOUGH India's export trade remained at a high level and its import trade was sadly crippled, the advance of inflation was relatively moderate from 1914 to 1918. Normally, the rise of prices in Great Britain would have been followed by large exports from India, the accumulation of large balances in London, and, finally, the conversion of Sterling into local currency. India's export trade did not increase as much as might be anticipated from a consideration of the movement of prices and the rupee-Sterling exchange, for the authorities controlled the export trade. But more important, as a result of the unavailability of gold, the rising price of silver, and the danger of pumping paper money into circulation too rapidly, supplies of currency in India were at a low level. The scarcity of local currency was reflected in a reduction of the export trade, for its financing requires adequate supplies of rupees. In the Dominions, the banks made important contributions both to the financing of the export trade and to inflation by operating with smaller reserves; but Indian banks were reluctant to carry on in a similar manner before 1918. The Government aggravated the stringency by introducing a vigorous tax and loan policy. Trade and industry, and in particular the non-export industries, suffered from an acute monetary stringency. The authorities did not voluntarily offer price stabilization to the country. That the prices of imported commodities increased approximately as much as prices in Great Britain, is evidence of restricted imports. Because the prices of imported commodities increased at a relatively rapid rate, reduced supplies of money were probably available for other markets, and hence the increase in the prices of exportable and domestic commodities was more moderate. However, it should also be taken into consideration that the quantity of imported commodities was reduced.

The monetary policy of India since 1920 may be summarized as follows. Early in 1920, the rupee was stabilized at 2s. in gold as compared to the statutory rate of 1s. 4d. in Sterling, which had been introduced in 1899. The sovereign was to be redeemed for 10 rupees instead of 15 rupees. This change is not to be condemned—as one writer argues—on the grounds that the rise in the price of silver was speculative, for although the increase in the price of silver made a change in the value of the rupee necessary, the stabilization at the increased value was justified on other grounds. Prices had not increased in India as promptly nor to the same extent as in England, and authorities were justified in anticipating a continuance of the discrepancies of the War period. The same writer contends that it was an error to stabilize the rupee at 2s. when the current value of the sovereign in India was above 15 rupees.<sup>1</sup> But the price of the sovereign was affected by the restriction of imports of gold and by the official control of the gold market. A proper value for the rupee in terms of sovereigns or Sterling is not to be obtained from an examination of the artificial conditions of the gold market in the War and early post-War period.

By using their Sterling balances, the Government attempted to maintain the 2s. rate; but an unfortunate reversal of the balance of payments occurred. The Chamberlain Commission had criticized the Government for not having used their Sterling and gold in 1908. Unfortunately, speculators who were skeptical of the Government's ability to maintain a 2s. rate, began to remit to London, and the monetary and fiscal conditions in India made adequate contraction impossible. It is extremely doubtful whether contraction of currency in India commensurate with the loss of Sterling would have resulted in a reduction of prices, both adequate and prompt enough to bring about a reversal of the unfavorable balance of payments. The experience of 1920-21 confirms the theory of British authorities that the magnitude of reserves should be a function of the balance of payments rather than of the money in circulation. Undoubtedly, authorities were embarrassed by the withdrawal of rupees from hoards, which made possible higher prices, an increased demand for Sterling,

<sup>1</sup> B. R. Ambedkar, *The Problem of the Rupee*, p. 205.

and which would have made any great contraction difficult. Perhaps the Government may be criticized for consuming valuable cash balances in London after it once became apparent that successive sales of Reverse Councils were not proving effective. It is possible that the refusal to sell Reverse Councils might have been followed by a reduction of speculative movements of capital to London. But it should be remembered that later the repatriation of this capital was a source of strength for the rupee.

At first, the Government redeemed Reverse Councils out of the Treasury balances in London. Although the cash obtained by the Treasury for Reverse Councils was deposited with the Presidency banks and thus put at the disposal of the money market, the procedure was not devoid of an element of deflation. Later in the year 1920, the Treasury redeemed Reverse Councils with Sterling drawn from the P. C. R. in London. A corresponding quantity of rupees was not withdrawn from circulation in India, because the Government provided for the replacement of approximately one half of the Sterling consumed with Treasury bills.<sup>2</sup> Although fiscal deficits made an uninterrupted policy of deflation impossible, the Government on the whole carried through a policy of deflation from 1920 to 1925. Gold was not available for monetary purposes, because importers of sovereigns could obtain only 10 rupees in exchange for them.<sup>3</sup>

In 1920, the Currency Notes Act provided for a gradual reduction of the notes covered by securities which had been created during the War. Although the provisions of this Act were not fully carried out and although in the next few years, notes outstanding increased, the increase was more than offset by a reduction of silver rupees in circulation.<sup>4</sup>

By restricting sales of Council bills, the authorities improved the market for rupees and thus in fact pegged the rupee. They obtained necessary supplies of rupees by borrowing in the early years of deflation and by transferring reserves from London to India in later years.<sup>5</sup> They thus were able to raise the value of

<sup>2</sup> H. S. Jevons, *op. cit.*, pp. 14-15.

<sup>3</sup> C. N. Vakil and S. K. Muranjan, *op. cit.*, pp. 486-87.

<sup>4</sup> H. S. Jevons, *op. cit.*, pp. 16-20, 57.

<sup>5</sup> *Ibid.*, pp. 120-25; C. N. Vakil and S. K. Muranjan, *op. cit.*, pp. 493-98; East India (Budget), 1927-28, H. C. 85 (1927), pp. 125-26.

the rupee to 1s. 6d. in Sterling, and finally to 1s. 6d. in gold. The Finance Minister of the Government in India announced that the most effective use of the G. S. R. was as part of the Treasury balances in London so that sales of Council bills might be dispensed with, and Sterling might be obtained from it.<sup>6</sup> In the early part of the century, the India Office had considered it part of its fiscal balance in London, which might be used when Councils could not be sold at profitable rates. But by 1914, it was generally recognized that the object of the reserve was to assure the stability of the rupee. Now it is assumed that the reserve fulfills both of these functions.

The fiscal point of view has been too prominent in the formulation of Indian monetary policy. When the Government finally succeeded in maintaining the 1s. 6d. rate, they announced that no economies in public expenditures had been obtained by raising the value of the rupee.<sup>7</sup> The net effect of the recent discussion of reform has been the adoption of a gold bullion standard, the demonetization of the sovereign, and the transfer of reserves to India.<sup>8</sup>

The decline of prices in the deflation period was moderate. Authorities attempted to reduce fluctuations in prices. The Government were in part responsible for the depreciation of the exchanges and for the relatively moderate decline of prices. Business depression brought fiscal difficulties, and the Government, unable to dispose of Treasury bills on the market, reissued currency notes on the security of newly created Treasury bills. In the period of inflation, the Government had deprived the market of purchasing power; in the period of deflation, the Government at intervals increased the currency. That is in contrast to the monetary history of Great Britain. Authorities in India also learned that the magnitude of Sterling balances was not an indication of the extent to which *deflation* might be carried in India. In the face of stringent monetary conditions, no Government

<sup>6</sup> H. S. Jevons, *op. cit.*, p. 127.

<sup>7</sup> East India (Budget), 1926-27, H. C. 108 (1926), p. 121; 1927-28, H. C. 85, (1927), pp. 257-60.

<sup>8</sup> Sir J. B. Brunyate, "Indian Currency Committee," *Economic Journal*, 1926, pp. 662-63; G. F. Shirras, "Future of Gold and Indian Currency Reform," *Economic Journal*, 1927, p. 245.

would have dared to deprive India of a quantity of circulating media equivalent in value to the Sterling consumed in 1920-21. The Treasury's financial position was further impaired by the necessity of selling at 10 rupees or thereabouts, Sterling which had been purchased at approximately 15 rupees.

Whereas other countries facing a similar reversal in the balance of payments, gave up any pretense of meeting obligations abroad in any manner other than by incurring more obligations, the Government in India continued to dispose of India's large Sterling balances by selling Reverse Councils; and as the large sales were unsuccessful in curtailing the demand, the Government gradually raised the price of Sterling. A further depreciation of the rupee was averted by acquiring necessary supplies of Sterling which were borrowed in London, by consuming cash which was received in payment for war expenditures, and finally by transferring reserves to India.

India has suffered from instability of the exchanges at several intervals since the gold exchange standard has been introduced. Ambedkar, therefore, concludes that there is something radically wrong.<sup>9</sup> But that conclusion does not necessarily follow. Agricultural countries dependent on a few crops, heavily indebted abroad and handicapped by a backward fiscal and banking system, suffer frequently from monetary disturbances. India, in addition, is handicapped by the prevalence of hoarding. The relation between money issued and prices is therefore not close.<sup>10</sup> Perhaps that fact explains why authorities have discerned a close relation between exchange depreciation and an unfavorable balance of trade or payments, rather than between money and exchanges. Even the experiences of the War and post-War period are not proof of the failure of the Indian system. The relative stability of prices as compared with other countries was an advantage, and it was not always accidental, as some writers contend.<sup>11</sup> Sir L. Abrahams, the brilliant official of the India Office, said before the War that preparations should not be made for

<sup>9</sup> B. R. Ambedkar, *The Problem of the Rupee*, p. 197.

<sup>10</sup> *Ibid.*, pp. 192-200; C. N. Vakil and S. K. Muranjan, *op. cit.*, p. 331.

<sup>11</sup> P. A. Wadia, "The Gold and Gold Exchange Standard," *Indian Journal of Economics*, 1926-27, p. 73.

a catastrophe that may occur only once in 50 or 100 years.<sup>12</sup> India's difficulties since 1914 are to be laid in large part to the unfortunate depreciation of Sterling in terms of gold, and a rise in the price of silver, both of which could scarcely have been anticipated.<sup>13</sup> On the other hand, India had the good fortune of being able to put more currency notes into circulation than was deemed possible before the War. The theory of the gold exchange standard requires that as gold or Sterling is consumed, rupees should be withdrawn. This theory is supposedly derived from the practise in countries on a gold standard; but in recent years it has become evident that there is no close relation between gold movements and money in circulation. In India, a similar objective would be futile, because movements into and out of hoards and fluctuations in the Treasury's balances would upset the nice mechanism.

Perhaps one criticism may be raised against India's System. There is friction between the India Office which is rather too much interested in the exchange banks and in the London money market, and the Government in India which is more keenly aware of the needs and temper of the people in India. Occasionally, perhaps, the former have not considered the interests only of India. But on the whole, a very complicated and difficult monetary system has been managed well.<sup>14</sup>

<sup>12</sup> Indian Currency Commission, 1913. Evidence, I, Cd. 7069 (1914), Q. 603.

<sup>13</sup> As a result of the depreciation of Sterling, the public has become aware that India's standard from 1893 to 1927 was a Sterling exchange standard rather than a gold exchange standard. Abrahams had pointed out before the War that the two standards had not been differentiated. *Ibid.*, Q. 559.

<sup>14</sup> See especially Appendix V (G. S. R.), Memorandum on P. C. R. by Newmarck, and Appendix VII (Council bills), of Appendices to the Interim Report of the Commissioners (1913), Cd. 7070 (1914), and the Appendix on the P. C. R. Cd. 7070.



PART V

SOUTH AFRICA, AUSTRALIA, AND EGYPT



## Book X

# SOUTH AFRICA'S MONETARY POLICY SINCE 1914

## CHAPTER I

### INTRODUCTION

BEFORE the War, notes were issued by commercial banks under regulations prescribed by three separate laws covering different territories. Two prescribed reserves of one third in gold.<sup>1</sup> The Currency and Banking Act of 1920 prescribed uniform reserves for all banks issuing notes.<sup>2</sup> In 1917, the issue of 10 shilling notes had been made legal.<sup>3</sup> In 1922, the commercial banks were deprived of the privilege of issue.<sup>4</sup> In the latter part of 1914, the export of gold bullion and specie to foreign European ports was prohibited, and in 1917, the export of gold to any destination was prohibited except under license.<sup>5</sup> Notes were convertible into gold during the War. The result was that the banks lost much gold, which they had paid out in exchange for notes, and which in part was then clandestinely exported.<sup>6</sup> The reduction of money and deposits resulting from the loss of gold undoubtedly explains in part the relatively moderate depreciation of South African currency. In 1919, a Gold Conference was called by the Government for the purpose of discussing the disappearance of sovereigns

<sup>1</sup> D. A. Ijsselstijn, *Étude sur le Régime Monétaire et Bancaire de l'Afrique du Sud*, pp. 36-37, 88-89.

<sup>2</sup> E. H. D. Arndt, *Banking and Currency Development in South Africa, 1652-1927*, p. 420; also see Union of South Africa: *Summarised Report of the Proceedings of the Gold Conference, 1919* (U. G. 18-'20), p. 15.

<sup>3</sup> Union of South Africa. Act No. 7, 1917. (To provide for the issue of bank notes of the denomination of ten shillings. . . .)

<sup>4</sup> *Resumption of Gold Payments by the Union of South Africa* (Kemmerer-Vissering Report), p. 541.

<sup>5</sup> Proceedings of Select Committee on Embargo on Export of Specie, p. xxxvi; *Resumption of Gold Payments in South Africa*, App. XVIII; E. H. D. Arndt, *op. cit.*, p. 811.

<sup>6</sup> Report of Select Committee on Embargo on Export of Specie, Qs. 427-28; *ibid.*, p. vii.

and the depreciation of the English pound in terms of the South African pound. The Conference adopted resolutions in favor of a free gold market and the removal of the embargo on gold. Jaegger criticized the Government's monetary policy severely. In his opinion, South Africa was in a stronger position than Great Britain, and hence should not share the depreciation of Sterling in terms of dollars. The South African pound might easily be maintained at \$4.86, a price at which the English pound would be depreciated 13 per cent in terms of the South African pound. The result would be that sovereigns would be obtained more cheaply, and hence exporters would not lose in disposing of their bills.<sup>7</sup> In 1920, the Committee on the Embargo of Specie came to conclusions unlike those of the Gold Conference. The result of the acceptance of the Committee's recommendation was the continuance of the embargo and the introduction of inconvertibility. However, the Committee was opposed to the issue of notes on the security of Treasury bills.<sup>8</sup> Bankers and gold producers wielded a decisive influence then, and also the following year at the Currency Conference held at Pretoria when it was proposed to extend the period of inconvertibility to 1925.<sup>9</sup> On February 26, 1924, the Minister of Finance announced that the South African Government would not necessarily wait until Great Britain restored the gold standard. The Union would restore it either when the gold certificate became convertible under Act 31 of 1920 as amended by Act 22 of 1923 or when the price of gold declined to the former parity of £3 17s. 10½d.<sup>10</sup> However, the Government vacillated, for on March 20, 1925, they announced that they

<sup>7</sup> Reynolds, representing the banks, contended that the removal of the embargo would discourage the influx of capital, depress the export trade, and deprive the miners of a large part of their premium. Compare Jaegger's and Reynolds' position. The latter frankly proposed inconvertibility as the only protection against losses suffered as a result of the leakage of gold.

<sup>8</sup> Report of the Committee on Embargo of Specie, p. x.

<sup>9</sup> *Ibid.*, p. 142; Report of Currency Conference Held at Pretoria, 1921, Clauses I, V; S. Evans, "La Renaissance de l'Or," *Revue Économique Internationale*, 1929 (4), p. 322. *Gold Conference*, 1919 (U. G. 18-20), especially pages 1-8, 14-15.

<sup>10</sup> House of Assembly Debates (Union of South Africa), 1924, I, p. 453.

The Pretoria Conference of 1921 had recommended that South Africa restore the gold standard; but on account of the unusual economic and monetary conditions, it reluctantly proposed the extension of the period of inconvertibility from 1923 to 1925. In the meanwhile, the embargo on gold should be raised. It also made a proposal for the automatic return to a gold standard if the price of gold dropped to the normal level. Union of South Africa, Report of the Currency Conference Held at Pretoria, October, 1921, paragraphs 1-6. (U. G. 9-22.)

were not prepared to resume payments although the Kemmerer-Vissering Report recommending the restoration of the gold standard had been published in the meanwhile.<sup>11</sup> On May 18, 1925, the Government announced that England's resumption made it advisable for South Africa to resume payments earlier than had been anticipated, and faithful to their metallist traditions, they provided for the redemption of notes in gold at home.<sup>12</sup>

<sup>11</sup> House of Assembly Debates, 1925, IV, pp. 1203-4.

<sup>12</sup> *Ibid.*, pp. 3350-51.

## CHAPTER II

### THE INFLATION PERIOD

SOUTH AFRICA contributed to the success of the Allies. But its expenditures abroad were financed in large part by advances in London from the Imperial Government. Hence compared with Australia, Canada, and India, South Africa's problems of war finance were relatively simple. Its balance of trade became increasingly favorable, largely because imports were restricted.<sup>1</sup> However, South Africa suffered a loss of economic strength because the price of its most important export, gold, was fixed and because the vital diamond industry was adversely affected by the War. Fluctuations in value of the South African pound were moderate before 1919. That the banks controlling the exchange market announced changes rather infrequently, is puzzling in the light of a price history that was not closely similar to Great Britain's.<sup>2</sup> South Africa did not attempt to pursue an isolated monetary policy; but nevertheless the increase of its price level was remarkably moderate until the end of the War.<sup>3</sup> The advance of prices in Great Britain and elsewhere made South Africa's sale of products abroad profitable. As a result of the War and the close relations of South Africa with Great Britain, the former's export trade flourished. The gold and diamond industries did not share

<sup>1</sup> The Minister of Finance was doubtful whether South Africa's favorable trade balance in 1918 was more than adequate to cover its shipping and capital obligations. Gold Conference, 1919 (U. G. 18-'20), p. 5.

<sup>2</sup> However, Kemmerer expresses the opinion that the fluctuations of South African prices were closely similar to those of English prices. Resumption of Gold Payments in South Africa, Qs. 3001-2.

<sup>3</sup> Lehfeldt pointed out that the parity doctrine could not be verified by a study of prices and exchanges of South Africa, because the price level in South Africa was not clearly defined. He also pointed out that the quotations for gold are not considered in the construction of South Africa's index number. *Ibid.*, Q. 4240. The moderate rate of increase of prices in South Africa is, therefore, more surprising. In the opinion of the Committee on the Embargo of Specie, the removal of the embargo on gold in South Africa and the appreciation of Sterling to \$4.86 would not necessarily result in a reduction of prices corresponding to the current depreciation of British Sterling in dollars. *Report*, p. vi.

in the improvement of the export trade. However, because of the unsatisfactory conditions in the gold and diamond industries, South Africa's trade position was not as favorable as that of any of the other Dominions or India. South Africa could not obtain payment in gold, and hence had to be content with accumulations of balances, principally in London.<sup>4</sup> Though notes were convertible into specie during the War, the embargo made it possible to issue notes in excess; however, convertibility was not a myth, and the possibility of raising the embargo and of more numerous conversions of paper into gold was a restraining influence. The export trade of South Africa was financed with difficulty; in 1919 and 1920, exporters frequently complained of the failure of banks to finance their trade. In the course of the War, the ratio of cash against liabilities of banks operating in South Africa declined approximately 50 per cent. The banks could replenish their holdings of cash only by importing gold at a loss; <sup>5</sup> they, therefore, frequently refused to purchase export bills, for the purchase of bills involved commitments of cash payments. In 1920, the discount on British Sterling attained a maximum of almost 8 per cent. The embargo of gold and the capacity of banks to operate with abnormally low reserves enabled South Africa to carry through a modicum of inflation and to prevent its currency from appreciating further in terms of Sterling.

<sup>4</sup> E. C. Reynolds, Managing Director of the National Bank of South Africa, expressed it thus. The Government induced the banks to finance foreign trade liberally, and to operate with a small gold reserve; hence they accumulated large balances in London. Committee on Embargo of Specie, Qs. 858-59. At the end of the War, there was apparently some pressure put on the banks to hold larger reserves against liabilities. A. W. Carruthers of the Statistical Office made the following estimate of the balance of trade and the balance of payments. Resumption of Gold Payments in South Africa, App. IX. Also see *Gold Conference, 1919* (U. G. 18-'20), p. 5.

*Millions of £ Sterling*

	Balance of Payments	Balance of Visible Exports
1917 .....	31	53
1918 .....	— 1	19
1919 .....	31	53
1920 .....	— 37	— 7
1921 .....	1	16
1922 .....	— 4	13
1923 .....	1½	23¼

The first column gives an indication of the large balances that were accumulated in London during the inflation period.

<sup>5</sup> Gold Conference, 1919 (U. G. 18-'20), pp. 6-7.

The statements of South African banks reveal the following facts: <sup>6</sup>

	<i>Millions of £ Sterling</i>	
	<i>March 31</i>	
	<i>1913</i>	<i>1920</i>
Notes in circulation .....	2.3	9.3
Deposits—Sight .....	22.6	57.9
Deposits—payable after notice .....	21.6	36.2
Gold coin and bullion .....	8.1	7.6
Per cent of Reserve against deposits .....	17.5	7.3

In the War period, the fluctuations in London-Johannesburg exchange, in so far as they are revealed, were surprisingly moderate. Before the War, the buying rate on London T. T. was generally at a discount of approximately one half of one per cent. In 1914, quotations were changed rather frequently but were maintained at approximately the same figure. For 1915, 1916 and 1918, no quotations are available. In 1917, only one quotation was given. In the latter part of 1919, the discount on British Sterling assumed large proportions, and by May, 1920, reached a maximum of 8 per cent. The discount disappeared by August 4, 1920, and British Sterling rose to a premium in the latter part of 1920 and the early months of 1921. From 1921 to 1924, the London exchanges were generally at a discount of a few per cent.

The contrast in the history of British and South African prices during the War was marked; and the contrast was especially great for non-imported and retail commodities. It is probable that the normal price level of South Africa relative to Great Britain declined.<sup>7</sup> The Government appointed a Cost of Living Commission which reported that the increase in retail prices over the pre-War level had been 25 per cent in November, 1917, and 41 per cent in August, 1918; but the increase of rents had been but 3 per cent. The Government in their terms of reference emphasized the possibility of regulating prices, suspending import duties and supplementing stocks; but no reference was made to the increase of currency supplies.<sup>8</sup> The prices of commodities in agricultural countries did not increase as rapidly as the prices of

<sup>6</sup> *Resumption of Gold Payments in South Africa*, Annexure XI.

<sup>7</sup> Lehfeldt observes that the real ratio of exchange (Terms of Trade) of South Africa may have changed as much as 10 per cent. *Resumption of Gold Payments in South Africa*, Qs. 4241-44.

<sup>8</sup> Union of South Africa, Cost of Living Commission (U. G. 55-'18), pp. 1, 6, 34.

commodities in countries more advanced economically. There were additional reasons for the relatively slow upward movement of domestic prices in South Africa, namely, the fixed price of gold in Sterling, and a loss in economic strength that resulted from the difficulties of marketing its two most important exports, gold and diamonds. (Of course, the price of gold was not considered in the construction of index numbers.) But that is not the whole explanation. The failure to remit homeward the proceeds of the large exports—relative to imports—resulted in large accumulations of balances in London, and hence a relatively moderate addition to purchasing power at home. In so far as the facts relating to the balance of payments are known, they are consistent with this conclusion. One bank lost 13 millions of its London balances as a result of the sudden reversal in the balance of payments in 1920.<sup>9</sup> The Finance Minister referred the large accumulations of Sterling in London to the advances from the Imperial Government for war purposes.<sup>10</sup> In so far as the unequal rise of prices in both countries is not explained by changes in the Terms of Trade, it might be expected that the exchanges would have reflected the dissimilar developments.

Most of South Africa's expenditures for war purposes were apparently made in Africa, which accounts in part for the large accumulations of balances in London.<sup>11</sup> The Under-Secretary of the Treasury estimated early in 1920 that South Africa had expended £29 million in the course of the German West and East African campaigns. In addition the Defense Ministry had disbursed £12.5 million for the Imperial Government; and the latter had expended £10 million in Africa through their own agents.<sup>12</sup>

<sup>9</sup> *Resumption of Gold Payments in South Africa*, Qs. 2134-41. Mr. Gibson surmises that the other large bank also used up Sterling balances of 13 millions. The large export of capital when British Sterling was quoted at a discount was in part responsible for the reversal. He points to the reduction of deposits in South Africa as evidence of the capital exportation. Q. 2156. Normal balances in London were not available again until the middle of 1922. The banks had used up their London balances by July, 1920. Q. 2026. A balance of £4.5 million was considered normal by one of the two large banks. Q. 2038.

<sup>10</sup> Farrer, the Secretary for Finance, testifying before the Select Committee of Public Accounts in 1920, estimated that 21 millions had been advanced by the Imperial Government, and he revealed that large balances were then held in London. Select Committee of Public Accounts (South Africa), 1920, Q. 131.

<sup>11</sup> By September, 1914, the Imperial Government had agreed to advance £7 million to the Union Government. South African House of Assembly Debates, 1st Parl. 6th Session, Cols. 486-87.

<sup>12</sup> Select Committee on Public Accounts (South Africa), 1920, Qs. 3075, 3077.

The strain on the banking and monetary system was increased by the creation of purchasing power in South Africa for war purposes, and by the conversion of London balances into South African balances. Apparently, approximately only one third of the war expenditures by the South African Government was made abroad.<sup>13</sup> The intention of Great Britain was to advance cash required for carrying on the War to South Africa in London.<sup>14</sup> But the Imperial Government could not carry through this program.

The exchanges were *apparently* relatively stable; they were not as stable as might be inferred from the published quotations.<sup>15</sup> Quotations were frequently nominal. Complaints were numerous that the banks refused to purchase exporters' bills.<sup>16</sup> The banks defended their conservatism on the grounds that their balances in London were excessive. They refused to risk conversions into South African pounds later at a loss.<sup>17</sup> The manager of one of the large banks referred the stability of the exchanges to the unwillingness of the banks to increase their London balances.<sup>18</sup> In other words, the stability was fictitious; the banks were refusing to do business at quoted rates. During the War period, the difficulties of transferring resources to South Africa were not disastrous, for reserve requirements in South Africa were lax. But in the post-War period, business was expanding rapidly, gold was being exported clandestinely in appreciable quantities, and the banks were chastened by the possibility of an early resumption of payments.

<sup>13</sup> Select Committee on Public Accounts (South Africa), 1920, Q. 3082.

<sup>14</sup> Statement of Minister of Finance in House of Assembly, December 3, 1915. *Journal of Institute of Bankers in South Africa*, vol. 12, pp. 301-3.

<sup>15</sup> Kemmerer is puzzled by the stability of South African exchange in the light of the large fluctuations in \$-£ exchange. *Resumption of Gold Payments in South Africa*, Qs. 600-2.

<sup>16</sup> Committee on Embargo of Specie, Qs. 427-28, 1929-30.

<sup>17</sup> Committee on Embargo of Specie, Q. 1545. *Resumption of Gold Payments in South Africa*, Qs. 2003-4, 2027, 2159.

<sup>18</sup> *Ibid.*, Q. 2003. Under pressure, Gibson, General Manager of the Standard Bank of South Africa, revealed the magnitude of the London balances of his bank in 1923 and 1924. They fluctuated around 6 millions. He pointed out, however, that the latter were the balances of the branches in 14 countries, and that the more significant figures were published under "due to and from the outside Head Office and branches." *Ibid.*, App. XIV. Reynolds, Managing Director of the National Bank of South Africa, pointed out that the position of the South African banks in relation to their London offices, was more significant than the relative magnitude of assets and liabilities in South Africa. Committee on Embargo of Specie, Q. 1178.

The monetary policy of South Africa was determined in large part by the necessities of war finance. Notes were convertible into gold; and the banks lost much gold that was exported surreptitiously.<sup>19</sup> In order to replenish their cash reserves, the banks, supported by the Union Government, attempted to obtain gold sovereigns from England. But the British authorities restricted exports of gold to South Africa to small amounts.<sup>20</sup> The South African banks paid out large quantities of gold, especially after the peg of the British exchanges was removed in 1919.<sup>21</sup> Gold sovereigns were more likely to be exported when Sterling was quoted at \$3.50 than when it was pegged at \$4.76. It was pointed out by a witness before the Committee on Embargo of Specie that if the embargo were removed and if convertibility were maintained, gold would be exported so long as the price of gold was higher anywhere than in South Africa. The demand from India was especially feared.<sup>22</sup> The above named Committee had a choice between lifting the embargo or introducing inconvertibility. A widespread fear of the effects of free gold movements was largely responsible for the adoption of the latter alternative; the banks were especially vigorous in their denunciations of a system of convertibility which made necessary large imports of sovereigns at a loss.<sup>23</sup> However, there is evidence that the banks were recouping their losses by paying low prices for exporters' bills.<sup>24</sup>

The South African banks had to face the problem of remitting homewards the proceeds of large exports during a period in which imports were restricted. During the period in which the British Government controlled the disposal of South African gold supplies, South African banks accumulated large balances in London. They were encouraged by the Union Government to

<sup>19</sup> There is evidence that banks were attempting to obtain large gold reserves at the expense of one another. Their gold holdings fluctuated considerably. Committee on Embargo of Specie, Q. 3398.

<sup>20</sup> *Ibid.*, Q. 854.

<sup>21</sup> *Ibid.*, Q. 1880. The banks lost almost £3 million of gold from April, 1918, to March, 1920. *Ibid.*, Report, pp. vii-viii.

<sup>22</sup> *Ibid.*, Report, pp. vii-viii. Also *Gold Conference*, 1919 (U. G. 18, 20), p. 13.

<sup>23</sup> The Pretoria Congress had previously reported in favor of raising the embargo on gold exports, and establishing a mint in South Africa. *Journal of the Institute of Bankers in South Africa*, 1919-20, pp. 270-71.

<sup>24</sup> Sir Abe Bailey pointed out that the charge of 8 per cent imposed for converting Sterling into local currency was excessive, and that the banks were thus passing on the costs of the leakage of gold. Committee on Embargo of Specie, Qs. 1155-56.

expand liberally on the basis of inadequate gold reserves, and hence they encountered no great obstacles in transferring cash from London to South Africa.<sup>25</sup> But with the termination of the War, the losses of gold became more annoying, both because they were larger, and because expansion of bank credit was at a much more rapid rate.<sup>26</sup> Larger balances were accumulated in London both because of the difficulty of remitting homeward—reserves were inadequate—and because it was safer to hold balances in London, now that it became possible to convert balances in London into gold.<sup>27</sup> Of course, the gold was sold at a premium. The banks objected to the removal of the embargo, for as a result of the emergence of a premium over the English pound, they would suffer losses in transferring large balances in London to South Africa.<sup>28</sup> The scarcity of cash in South Africa forced the Government to introduce more liberal provisions for the issue of notes in 1920.<sup>29</sup> In 1923, the Government proposed to allow the issue of notes on the basis of Treasury bills.<sup>30</sup>

<sup>25</sup> Committee on Embargo of Specie. Testimony of E. C. Reynolds, Managing Director of National Bank of South Africa, Q. 854.

<sup>26</sup> The reserves of gold coin and bullion against deposit and note liabilities declined from 17.5 to 7.4 per cent from the end of 1913 to March, 1920. *Ibid.*, Q. 2706; also see Q. 971.

<sup>27</sup> Compare evidence of J. P. Gibson, Manager of Standard Bank of South Africa. *Ibid.*, Qs. 1885-86.

<sup>28</sup> *Ibid.*, Q. 70.

<sup>29</sup> *Journal of Institute of Bankers in South Africa*, 1920-21, pp. 400-401.

<sup>30</sup> *Ibid.*, 1922-23, p. 545.

## CHAPTER III

### STABILIZATION

THE Kemmerer-Vissering Commission of 1924-25 recommended that South Africa resume payments in gold, whether Great Britain did or did not resume payments.<sup>1</sup> However, most of the important witnesses were opposed to an independent resumption on the part of South Africa.<sup>2</sup> The producers anticipated that they would lose if the premium on gold disappeared, for they would receive a smaller number of South African pounds for their gold and would not be compensated by a reduction of costs.<sup>3</sup> Prominent bankers thought that they would lose their gold reserves; they pointed out that an increase in the bank rate would not attract balances, for South Africa had no market for short term capital; they contended that in restricting fluctuations in the price of Sterling to the range of the gold points, authorities

<sup>1</sup> The representative of South Africa at the Imperial Economic Conference of 1923 said, "We propose to stick to Sterling so long as the British policy is a gradual approximation toward the restoration of a gold standard, but we certainly should not stick to Sterling if there were a change in policy." Imperial Economic Conference, 1923, *Canadian Sessional Papers*, 1924, VII, p. 362.

<sup>2</sup> See the testimony of Gibson representing the Standard Bank, of Clegg of the South African Reserve Bank, and of Sir E. Wallers, representing the mine owners. Professor Lehfeldt's testimony on the whole was rather reserved; but he seemed to prefer stability in relation to Sterling. Evans, on the other hand, was the most important witness who favored an immediate resumption of gold payments. Richards writes that 19 of 27 witnesses favored the restoration of the gold standard; 4 favored linking the African pound with Sterling conditionally, and 4 favored an unconditional tie. This statistical summary is not an adequate digest of the testimony of the witnesses. C. S. Richards, "Kemmerer-Vissering Report and the Position of the Reserve Bank of the Union of South Africa," *Economic Journal*, 1925, p. 561.

<sup>3</sup> Sir Evelyn Wallers, testifying on behalf of the Chamber of Mines and the gold producers, pointed out that if South Africa resumed specie payments before Great Britain, the gold miners would lose 3 of the 31 millions received annually in London and transferred to South Africa. Lower costs would only in part make up the difference. Q. 1262. (He estimated that of a total yield of £44.6 million, 13 millions would be retained in London.) Also see Qs. 1287-91. W. H. Clegg, the Governor of the South African Reserve Bank, took the more general position that prices are adjusted tardily to changes in the external value of a currency, and hence he objected to the resumption of gold payments and the external appreciation of the South African pound. *Resumption of Gold Payments in South Africa*, Qs. 2997-3000.

would lose control over the demand for remittances.<sup>4</sup> Their contention that the Ricardian theory of gold movements was not applicable, was justified in a period when gold movements were restricted in almost every country. In support of their position, the bankers could point to the very large losses of foreign balances in 1919-20. When both prices and exchange quotations move sluggishly, when foreign balances are not very large, and when the growth of indebtedness may be cumulative both on commodity and capital account, a total loss of foreign balances may result before the necessary adjustments in prices and exchanges are made. The late Professor Leffeldt emphasized the necessity of maintaining stable exchange relations with Great Britain, the largest exporter to South Africa, and its most important market.<sup>5</sup> The strongest point made by those in favor of a resumption of payments was that England was wavering in its adherence to the principles of the Cunliffe Committee.<sup>6</sup>

In the course of the deliberations of the Imperial Economic Conference of 1923, the British Treasury presented a memorandum on the operation of Dominion and Colonial monetary systems, in which it held that the normal method of maintaining adequate reserves before the War was to rely on London balances at the Bank of England and on advances in London. Australia and South Africa exported gold only because they were gold producing countries. According to the British Treasury, the system broke down in 1919-21 because prices in Great Britain rose by one third and fell by one half in successive years, and the Dominions refused or were unable to introduce movements of equal magnitude.<sup>7</sup> That is not exactly accurate. In general, the upward price movement in the latter period of inflation was similar to the British movement of 1919-20. In the period of deflation, the exchanges of the Dominions and India depreciated because their London balances were inadequate and because they refused or rather were unable to contract adequately at home.

<sup>4</sup> Resumption of Gold Payments in South Africa, Qs. 2047, 2112-18, 2122-28, 2134-41.

<sup>5</sup> *Ibid.*, Qs. 4329-48.

<sup>6</sup> *Ibid.*, Qs. 4329-48. Evidence of S. Evans, Qs. 708-10; also App. X (a). Kemmerer against Leffeldt maintained that there was more danger of fluctuations in relation to a manipulated pound than in relation to gold. *Ibid.*, Qs. 4321-23.

<sup>7</sup> Imperial Economic Conference, 1923, *op. cit.*, p. 372.

Both the upward and downward movement of prices were appreciable from 1919 to 1921, though the latter movements were not as large as the British movement. The increase of prices from 1918 to 1920 was almost as rapid as in Great Britain, and the reduction of notes was as large, and the reduction of deposits even greater; but the reduction of prices was on a smaller scale. A somewhat greater reduction of prices in 1920-21 would not have prevented the depreciation of Dominion exchanges. The London balances were consumed in meeting past commitments; a more precipitate drop in prices would have been reflected in a strengthening of London balances in the future. In the period of rising prices, prices in the Dominions would have risen more if they had not accumulated large balances in London, and if these balances had not been converted largely into deposits rather than notes when transferred homeward. When the cash reserves at home were reduced to a low point—considered low even for a period in which convertibility was restricted and embargoes were in vogue—and when the replenishment of reserves by importing gold was not possible, British Sterling depreciated. The explanation is that the banks refused to convert British pounds into South African pounds. The problem was not only one of adequate cash reserves, but also one of a proper distribution of resources between England and South Africa.

The British Treasury suggested that under peculiar conditions similar to those of 1924, the Dominions and India might adjust the quotations of their currencies in relation to British Sterling rather than accumulate or deplete London balances by restricting or expanding credit.<sup>8</sup> However, the extent of exchange fluctuations was not very large except in 1919 and 1920 when the exchanges (South African) fluctuated from 7½ per cent discount to 8 per cent premium. The banks changed their quotations infrequently and tardily; the conditions in the exchange market were reflected more accurately in the refusal to buy or sell. In the years 1922 to 1924, the main difficulty was that the systems of note issue were inelastic. Hence balances were accumulated in London which were not easily transferred to the Dominions. It even became necessary to borrow at home where capital was

<sup>8</sup> Imperial Economic Conference, 1923, *op. cit.*, p. 358.

scarce, instead of in London; but the stringency of the money market was thus increased.<sup>9</sup> Australia and New Zealand were well disposed toward a plan for issuing notes on the security of Imperial Treasury bills.<sup>10</sup> But South Africa, anxious to assure adequate markets for its gold, dissented;<sup>11</sup> and the representative of the British Government disapproved of the plan on the grounds that the regulation of internal credit conditions as well as of currency conditions would have been required to assure exchange stability under this plan.<sup>12</sup> The Treasury proposed a plan for the creation of notes on the security of Sterling, with provisions for additional issues by rediscounting with the central bank and by borrowing Treasury balances.<sup>13</sup>

An examination of banking figures for South Africa throws some light on its monetary policy. An analysis of the figures reveals the following facts:

1. The increase in total assets or liabilities of banks operating in South Africa was at a moderate rate during the War. The percentage increase over 1913 was 30 in 1917, and 50 in 1918; the corresponding increases in deposits were 44 and 73 per cent. However, more significant are the increases of the banks' assets and deposits in the Union. The increases were 9 and 40 per cent for the total, and 42 and 71 per cent for deposits. The increase in commercial deposits in 1917 and 1918 (over 1913) for the United Kingdom was 63 and 96 per cent. In 1919, the increase in deposits of South African banks was 138 per cent (compared to 1913); for deposits of these banks in South Africa, the increase was 136 per cent; in the United Kingdom, the increase of deposits was 124 per cent. The decline in South Africa in 1920-21 was appreciable, while in the United Kingdom, the total of deposits was higher in 1921 than in 1919. The reduction of all deposits of South African banks was 15 per cent at the end of 1921, and of deposits in the Union, 20 per cent.<sup>14</sup>

On the whole, the increase in deposits in South Africa was not as great as in the United Kingdom. However, the comparison is

<sup>9</sup> Compare Imperial Economic Conference, 1923, *op. cit.*, p. 356.

<sup>10</sup> *Ibid.*, pp. 352-56.

<sup>12</sup> *Ibid.*, pp. 357-58.

<sup>11</sup> *Ibid.*, pp. 360-61.

<sup>13</sup> *Ibid.*, p. 373.

<sup>14</sup> Compare League of Nations: *Memorandum on Banking and Currency*, 1913-25, I, pp. 41, 46.

not without defects, for similar series are not to be obtained. The large balances that were accumulated abroad were for the most part converted into deposits rather than into notes. (It should be remembered that notes were substituted for gold in large part.) The conversion into deposits was possible because the banks operated with smaller reserves. The asset, Balances Due by Branches, Offices and Other Banks, was reduced from 35 to 15 millions from 1919 to 1921; and deposits in the Union declined from 80 to 64 millions—a reduction closely similar in absolute figures. Payments in London were made by drawing on deposits in South Africa.

Recently banks operating in South Africa have tended to increase their business outside of South Africa more rapidly than in South Africa.

*Millions of £ Sterling*

	Assets	<i>Idem</i> —but Only Assets in South Africa
1913 .....	59	44
1919 .....	124	70
1926 .....	110	57

Of significance also is the magnitude of assets in South Africa as compared to the liabilities. In 1913 and 1914, there was little difference. But note the figures in later years:

*Millions of £ Sterling*

	Assets	Liabilities
1917 .....	48	62
1918 .....	61	76
1919 .....	70	103
1921 .....	76	87
1926 .....	57	61

What is the explanation? From 1917 to 1919, the banks were unable to convert foreign balances into cash in South Africa, and hence accumulated disproportionate supplies of cash abroad (London, etc.) and made payment in South Africa by giving a deposit credit.<sup>15</sup> Hence liabilities in South Africa relative to assets increased in the latter part of the War. The increase in

<sup>15</sup> The Standard Bank of South Africa complained as early as 1915 of the inadequate return received on the large balances accumulated in London. But the rates for more permanent investments were high. The accumulation of balances in London was made necessary by the restriction of gold movements. *Journal of Institute of Bankers in South Africa*, 1915-16, pp. 90-92.

assets and the reduction of liabilities in 1920-21 is explained by the large advances to exporters in South Africa, and by the remittances in payment for excessive imports; payments for exports were reflected in a reduction of deposits.<sup>16</sup> In London, the Cash, Investments and Money at Call of South African banks were reduced and liabilities were increased.

The total of cash assets was unexpectedly stable. Most of the cash was apparently held in South Africa. Balances in London and elsewhere were apparently advanced on the stock market or invested in securities.<sup>17</sup> In 1920-21 South African banks acquired an appreciable addition of cash. Their holdings increased from 8.7 to 15.5 millions, of which 7.3 and 13.6 millions were held in South Africa. (Included in the 13.6 millions were 6.5 millions held with the Reserve Bank.) The South African public has been critical of the large balances held in London by South African banks. Governor Clegg of the Reserve Bank replies by pointing out that the balances will be reduced if South Africa demands sovereigns or if the country imports more commodities.<sup>18</sup>

<sup>16</sup> Thus in 1920, deposits of South African banks declined from 107 to 102 millions; but the decline in South Africa was 10 millions. The banks advanced £9.5 million additional in South Africa and sold investments of £8.6 million held outside of the Union. *Journal of Institute of Bankers in South Africa, 1920-21*, pp. 484-86.

<sup>17</sup> The Chairman of the National Bank of South Africa announced in June, 1921, that his bank had disposed of a large part of its securities in London. *Ibid.*, 1921-22, p. 137.

<sup>18</sup> Meeting of South African Reserve Bank May 15, 1928. *Ibid.*, 1928-29, pp. 44-46.

It was anticipated that the establishment of a mint in South Africa and the disappearance of the premium of the South African pound over the British pound would result in the accumulation of balances in South Africa rather than in London. Annual Report of the South African Reserve Bank for year ending March 31, 1925, *Federal Reserve Bulletin*, 1925, pp. 678-79.

## Book XI

# AUSTRALIA AND EGYPT

## CHAPTER I

### THE AUSTRALIAN MONETARY PROBLEM IN RELATION TO THE FISCAL

THE feature of the Australian monetary system since 1914 has been the inelasticity of note issue. Australia was an important gold producing country, and before the War it depended upon its new accretions of gold to satisfy the demand for more currency. The author of the Treasury Memorandum in 1923, however, contends that before the War the supply of notes in circulation in Australia was determined by the magnitude of its Sterling balances.<sup>1</sup> Australia was unable to borrow in London during the greater part of the War. The British Government made some concessions early in the War; they made advances for war purposes to the Commonwealth Government, which the latter put at the disposal of the Australian States, and permitted the Commonwealth Government to put their London balances at the disposal of the States.<sup>2</sup> In other words, Great Britain in the midst of a war advanced Sterling to the State Governments of Australia. In the early period of the War, the Commonwealth Treasury was confronted with serious financial problems in London; and advances to the State Governments from the proceeds of loans made by the British Government and from their own resources, involved *ad hoc* creation of paper money in Australia.<sup>3</sup>

<sup>1</sup> Imperial Economic Conference, 1923, *Canadian Sessional Papers*, 1924, VII, p. 373.

<sup>2</sup> Commonwealth of Australia. Parliamentary Debates, vol. 75, pp. 1340-1.

<sup>3</sup> The Prime Minister expressed it thus early in 1915: 'The Government had intended to borrow from the Notes Fund to finance war expenditures; but now that the British Government had been so generous, the Australian Government would borrow from the Notes Fund to finance the expenditures of the States.'

In a period of increased issues, the value of the notes was maintained to some extent by inducing banks to hold a minimum quantity.<sup>4</sup> In an attempt to concentrate the country's gold supplies, the Government gave the banks the privilege of exchanging their gold for notes and of borrowing twice as many notes additional. Moreover, as compensation for subscribing to Government securities, they might borrow additional notes from the Notes Board.

The Government had large war expenditures to meet, which were financed for the most part out of the proceeds of loans.<sup>5</sup> The banks purchased a large part of these issues, but not without the help of the Notes Board. In the early months of the War Great Britain made large advances to Australia for war purposes because Australia's balances in London had been depleted;<sup>6</sup> but in 1915, the British Treasury announced that Australia would have to finance its own war expenditures.<sup>7</sup> However, Great Britain continued to make large advances. Australia's war expenditures were made principally in Australia; hence the problem of obtaining British Sterling was not troublesome after 1914.<sup>8</sup> In fact, except for the early months of the War, the main difficulty was that Australia accumulated embarrassingly large balances in London. The British Treasury usually paid for exports of wool

*Ibid.*, vol. 76, pp. 2302-5. A total of £31.1 million of advances was made to the States before June 30, 1917. Approximately £20.0 million were taken from the Notes Fund, £7.5 million were raised in London, and £3 million in addition were obtained out of the proceeds of British War Loans. *Ibid.*, vol. 82, pp. 834-35. In his Budget Statement of September, 1921, Sir Joseph Cook estimated that the States had received £22.4 million from the Notes Fund and £16.75 million from London. *Ibid.*, vol. 93, p. 4660.

<sup>4</sup> *Ibid.*, vol. 76, pp. 2421-22.

<sup>5</sup> Mr. Watts, Acting Prime Minister, summarized the history of war revenues thus in June, 1919. The Government raised £188.4 million from war loans, and borrowed £47.5 million direct from Great Britain, as well as £70.0 million for the purchase of munitions and the maintenance of Australian troops overseas. *Ibid.*, vol. 88, p. 10052.

<sup>6</sup> *Ibid.*, vol. 76, p. 2420. Australian gold producers also deposited gold to the credit of the Bank of England in exchange for Sterling in London. Com. of Aust. Parliamentary Papers, Session 1914-15-16-17, vol. 5. Fifth Annual Report of High Commissioner in the United Kingdom, p. 10.

<sup>7</sup> *Ibid.*, vol. 77, pp. 5129-31.

<sup>8</sup> In a Statement of July 21, 1915, the Government announced that war expenditures raised no great exchange problem because three quarters of the expenditures were made in Australia; but in March, 1917, it was estimated that out of 79 millions of war expenditures, 32 millions were required for the payment of troops in Europe. *Ibid.*, vol. 81, pp. 11020-21. Australia's debt to Great Britain was £28.5 million on June 30, 1917, and it was anticipated that the debt would be £58.2 million on June 30, 1918. *Ibid.*, vol. 82, p. 836.

and wheat before delivery was made.<sup>9</sup> Moreover, Great Britain did not press for payment of obligations incurred by Australia. The result was that Australian banks accumulated large balances in London, and the Commonwealth Government accumulated unhealthy balances in London and Australia.<sup>10</sup> Australian banks made advances before Australian farmers exported their crops; the banks could borrow notes from the Notes Board on the condition that when the British Government paid them for Australia's wheat and wool, they would transfer an equivalent amount to the account of the Commonwealth Government in London. In this manner, the latter acquired pound Sterling required to meet war and other expenditures; and, as exports increased, more money was pumped into circulation.

In the post-War period, there were many uncomfortable moments for the Australian Government. The British Government faced an embarrassing financial position at home and, therefore, pressed Australia for payment of its debt. The Australian public clamored for a higher price for its wool in a rising market; the Commonwealth Government were accused of having made a bad bargain in their contracts with the British Government for the disposal of Australian staples. A special envoy was dispatched to London to discuss these problems. The difficulty was not that Sterling was not available, but that the Australian wool growers, rather than the Government, possessed it. The Treasury suggested that the farmers accept Australian bonds for their wool instead of Sterling; otherwise, inflation would be necessary. Mr. Hughes, the Prime Minister, painted a roseate picture of the future: large London balances of Australian institutions which had been put at the disposal of the short term money market temporarily, were available, and additional cash would be obtained in London in payment for increased exports disposed of at higher prices.<sup>11</sup> But even as this prediction was being made, the trade reversal of 1920-21 had begun.

<sup>9</sup> See Financial Statement of March 6, 1917, for the financial terms of these agreements. Com. of Aust. Debates, vol. 81, pp. 11024-25; also see vol. 95, pp. 7868-69, for a summary of the wheat agreements.

<sup>10</sup> *Ibid.*, vol. 82, pp. 52-53. The Treasury had cash balances of £23 million on June 30, 1916, and £37.7 million on March 31, 1917. The Government were apologetic for their large balances. *Ibid.*, pp. 836-37.

<sup>11</sup> *Ibid.*, vol. 92, Cols. 2525-30.

In the post-War period, the characteristic feature of the monetary system was rigidity. Gold movements were restricted as they had been during the War. The large imports and reduced exports of commodities in 1920-21 resulted in large losses of London balances. Payments for exports had been anticipated, and gold production had declined.<sup>12</sup> But in the later years, balances became embarrassingly large again, especially as a result of the renewed borrowing in London. It became difficult to transfer balances to Australia, because the Notes Board restricted issues rigidly. A policy of restriction had been introduced in October, 1918.<sup>13</sup> Stringency prevailed to such an extent that the States were forced to borrow in Australia rather than in England because the conversion of British Sterling into local currency was beset with difficulties.<sup>14</sup> Thus the stringency in the Australian money market was accentuated. The Government and the Commonwealth Bank attempted to reduce it by holding small cash balances and by lending freely.<sup>15</sup> The banks and the Government thus introduced an element of elasticity into the system.<sup>16</sup> As a result of the trade reversal of 1920-21, British Sterling was quoted at a premium in the second half of 1920 and the early months of 1921; but it was soon quoted at a discount again.<sup>17</sup> The persistent state of stringency resulted in an agitation for more liberal provisions for note issue. The price decline in 1920 and 1921 was accentuated by the large accumulation of important staples in Australia. Mr. Hughes in a ministerial statement of April 28, 1921, announced that the equivalent of twice the annual crop of wool had accumulated and that the 1920-21 clip was still to be accounted for.<sup>18</sup> The Notes Board pursued a restrictive policy. Thus it refused to issue notes on the security of gold imported from Japan.<sup>19</sup> Gold supplies,

<sup>12</sup> *Australasian Insurance and Banking Record*, October 21, 1920.

<sup>13</sup> *Ibid.*, October 21, 1922.

<sup>14</sup> Imperial Economic Conference, 1923, Canadian Sessional Papers 1924, VII, p. 356.

<sup>15</sup> *Com. of Aust. Debates*, vol. 106, p. 1275.

<sup>16</sup> *Aust. Ins and Bank. Record*, January 22, 1923.

<sup>17</sup> The Treasurer of the Commonwealth announced in September, 1921, that demand drafts on Australia were quoted at a discount of 27s. 7d., which was the lowest quotation on record since 1905. *Com. of Au.L. Debates*, vol. 97, p. 11587. The London exchanges apparently attained a premium of 50s. *Aust. Ins. and Bank. Record*, December 20, 1920.

<sup>18</sup> *Com. of Aust. Debates*, vol. 95, pp. 7868-69.

<sup>19</sup> *Ibid.*, vol. 106, p. 1275.

newly mined, were not available as security for note issues, because the gold was sold at a premium.<sup>20</sup>

In 1924, a bill was proposed to allow the issue of currency on the basis of securities in London.<sup>21</sup> Senator Greene, in an able defense of the bill pointed out that the banks had accumulated from 30 to 35 millions in London although their normal balances were not in excess of 10 millions, and although in the last four years imports had been in excess of exports by 33 millions, and new borrowings had been approximately equivalent to payments on capital account. (Had there been a speculative movement of balances?) He also was of the opinion that the restriction of gold movements accounted for the deficiency of currency.<sup>22</sup> In introducing the Commonwealth Bank Bill, Dr. Page, the Treasurer of the Commonwealth, gave a very able summary of the monetary history of the preceding 10 years. He pointed out that the banks' ratio of legal tender against liabilities had fallen from 70 to 30 per cent from 1915 to 1922. During the years of inflation, they could have obtained additional cash, for they borrowed only a small part of the additional notes that they were entitled to as compensation for purchasing securities. They might have exchanged all their gold for notes and borrowed twice as many notes additional; but they availed themselves of the latter privilege sparingly. Twenty eight millions of notes had been issued to the banks for the financing of State works of which twenty two millions were lent to the State. Moreover, gold purchased with credits established by the issue of notes was transferred to the Note Reserve.<sup>23</sup>

Exchanges moved sluggishly. The rates were determined by the large banks, and changes were made infrequently. One may conclude from the rather stable quotations that the Australian-British exchange was almost always close to parity. However,

<sup>20</sup> Mr. Bruce before the Imperial Economic Conference, 1923, Canadian Sessional Papers, 1924, VII, p. 356.

<sup>21</sup> Such proposals had been made frequently. See *Aust. Ins. and Bank. Record*, November 21, 1922.

<sup>22</sup> Com. of Aust. Debates, vol. 107, pp. 2762-64. The editor of the *Australasian Insurance and Banking Record* commented on the scarcity of notes during the export season owing to a policy of restriction and suggested that the note issue be temporarily increased. Gold was being disposed of at a premium. *Aust. Ins. and Bank. Record*, October 21, 1922.

<sup>23</sup> Com. of Aust. Debates, vol. 106, pp. 1266-68.

restrictions on dealings are to be considered as well as the quotations.<sup>24</sup> The published quotations were relatively steady after the first months of the War. Since the exchanges were apparently stable, it might be concluded that prices fluctuated in about the same manner as British prices. But the rise in the War period was moderate in Australia. The British Treasury referred the abnormal fluctuations of the exchanges from 1919 to 1924 to the failure of the Dominions to allow prices to increase one third and decline one half in successive years. Great Britain had suffered from a rise and decline of prices of this proportion. When gold is not available, and when the increases of credit are not an adequate substitute, exchanges fluctuate in an extreme manner.<sup>25</sup>

Gold movements were restricted in Australia, although large exports were made in 1915 in order to support the exchanges. The banks were anxious to make further shipments when it was cheaper to remit by shipping gold than by purchasing exchange; but the Government refused to allow further shipments on the grounds that the gold was needed as security against the notes.<sup>26</sup> Parity with British Sterling was maintained by introducing inflation in Australia.

In 1925, the British exchanges appreciated to parity in terms of dollars; but the Australian exchanges remained at a premium of 3 per cent in terms of British Sterling and it became profitable to export gold to Australia, a gold producing country. It was possible to obtain immediate payment for such shipments on account of a concession which had been introduced in 1915 for an entirely different purpose.<sup>27</sup>

One of the peculiarities of the Australian monetary policy was the relatively indifferent attitude which authorities displayed

<sup>24</sup> Thus in 1921, the English, Scottish and Australian Bank refused to purchase export bills. *Aust. Ins. and Bank. Record*, January 21, 1922.

<sup>25</sup> Imperial Economic Conference, 1923, Canadian Sessional Papers, 1924, VII, p. 372.

<sup>26</sup> *Aust. Ins. and Bank. Record*, February 21, 1916, and March 21, 1916. However, even for 1916-17, exports were large. The total was 11.61 million as compared to £2.68 million in 1914-15 and £10.58 million in 1915-16. Canada and the United States received most of this gold. *Ibid.*, May 21, 1918, and Com. of Aust. Debates, vol. 79, pp. 7700-701. The submarine danger made it necessary to earmark gold for the Bank of England after April, 1917, instead of shipping it. C. C. Faulkner, *The Commonwealth Bank of Australia*, p. 213.

<sup>27</sup> Report of Deputy Master and Comptroller of Royal Mint (Great Britain) 1925, p. 8, *Aust. Ins. and Bank. Record*, 1927, p. 195.

toward the distribution of resources between London and Australia during the greater part of the War. The problem that usually concerned the Australian Government was not whether money should be raised in Australia or in London, but how many millions should be borrowed. Early in the War, the exchange problem was a source of annoyance. That explains in part why the Commonwealth borrowed heavily from the British Government on behalf of the State Governments. Even as late as 1918, the Commonwealth obtained the consent of Great Britain to a loan of £5 million for the States.<sup>28</sup> The Australian banks and Governments had already accumulated large balances in London. Apparently the facilities for converting into local currency were adequate. The War Loan Bill No. 3 (May, 1916) is of interest. The Commonwealth Government asked for authority to borrow £25 million in the United Kingdom; they required cash which they might not be able to obtain at home. The British Government even agreed to allow the use of part of the proceeds by the State Governments.<sup>29</sup> In 1917, the Government proposed to raise 80 millions (War Loan Bill No. 2), which included 26 millions for the repayment of the British Government for money expended on Australian troops. The Commonwealth Government did not refer to the problem of remitting to London. On August 8, 1917, Sir J. Forrest said that it was necessary for Australia to borrow *in Australia*.<sup>30</sup> In comparing these transactions with similar ones in the other Dominions, one is struck by the *relatively* unimportant part played by the problem of transferring cash from Melbourne to London, and vice versa.

However, the Government took a greater interest in the transfers involved in financing the important exports from Australia. It was necessary to arrange for the financing of wheat, wool and other commodities of a value of 77 millions in the year 1917-18. In the War and early post-War period the Commonwealth Bank transferred 437 millions to primary producers in payment for agricultural pools sponsored by the Government.<sup>31</sup> The Treasury agreed to advance a maximum of £24 million of notes to the

<sup>28</sup> Com. of Aust. Parliamentary Papers. Sessions 1917-18-19, vol. 4. Conference of Treasurers held in Melbourne, July, 1918, p. 16.

<sup>29</sup> Com. of Aust. Debates, vol. 79, pp. 8174-80.

<sup>30</sup> *Ibid.*, vol. 82, pp. 835-36.

<sup>31</sup> C. C. Faulkner, *op. cit.*, p. 162.

banks, and any bank accepting an advance was to deposit an equivalent amount of cash with the Bank of England. In August, 1918, the Government requested the banks to transfer to Australia the cash received for the wool crop of the 1918-19 season; and the Treasury was prepared to advance 20 millions in notes for this purpose.<sup>32</sup> Thus the Government obtained Sterling for war expenditures and the banks obtained the resources necessary for credit expansion. The Government introduced inflation in Australia to obtain cash to cover war expenditures in Europe. British resources were employed to purchase Australian products; and the Sterling thus obtained was used to pay Australian debts in London and elsewhere. In 1919, however, the Government found themselves with inadequate balances in London, and the Treasurer of the Commonwealth of Australia complained in June, 1919, that because of the unfavorable exchange conditions, it had been impossible for some time to make the necessary transfers from Australia.<sup>33</sup> It is characteristic of the history of Australian War Finance that Australia's discomfiture in 1919 was caused by a deficiency of cash resources of the Treasury rather than by inadequate balances in London. If the Government had been disposed to create currency in Australia for fiscal purposes, the Treasury could have obtained the Sterling required, for the banks were having difficulties in transferring resources to Australia. The Treasurer had suggested that the wool exporters accept Australian bonds in payment.<sup>34</sup>

In the years 1920 and 1921, the authorities became concerned over their small foreign balances and the difficulties of remitting to London. Hence on that account, they preferred to borrow abroad; but even more important, there was more capital available in London. However, when the Government's Loan Account was overdrawn in London, they borrowed in Australia once more.<sup>35</sup>

<sup>32</sup> Com. of Aust. Debates, vol. 86, pp. 6338-39.

<sup>33</sup> *Ibid.*, vol. 88, pp. 10052-53.

<sup>34</sup> *Ibid.*, vol. 92, pp. 2526-30.

<sup>35</sup> *Ibid.*, vol. 93, p. 4457.

## CHAPTER II

### THE NATURE OF THE AUSTRALIAN MONETARY SYSTEM

BEFORE the War, Australia was an important gold producing country. Exports of gold constituted one eighth of all exports as compared to one fiftieth or thereabouts at the present time.<sup>1</sup> When prices were rising and business was thriving, Australia retained a large part of its annual production of gold, and sometimes converted London balances into gold and imported it.<sup>2</sup> But adjustments were made to a greater degree by the first method than by the second. In 1924, the British Treasury in its report on Dominion monetary policy rather over-emphasized the part that was played before the War by fluctuations in the London balances.<sup>3</sup>

During the War, the Government placed an embargo on the exports of gold, refused to pay out sovereigns for gold bullion deposited, and as a rule refused to convert currency notes into gold.<sup>4</sup> The Treasury borrowed currency notes from the Notes Board; banks obtained special facilities for borrowing notes, and they operated with small reserves. Moreover, exports of gold were abnormally low and imports abnormally high. Thus the authorities obtained the increased cash required in a period in which prices were rising and the production of gold was declining. The Commonwealth Government exported gold on behalf of the British

<sup>1</sup> *Aust. Ins. and Bank. Record*, 1925, p. 253. Thus from 1901 to 1913, Australia imported 17 millions and exported 150 millions of gold. For the five years ending June 30, 1919, the corresponding figures were 10 and 38 millions, and for the five years ending 1924, 144 thousand and 105 millions. *Ibid.*, pp. 90-01.

<sup>2</sup> *Ibid.*, 1927, p. 100; D. B. Copland, *Monetary Policy and Its Application to Australia*, p. 524; D. B. Copland, "Australian Banking and Exchange," *Economic Record*, 1925, p. 18.

<sup>3</sup> Tocker minimizes the significance of gold movements for the regulation of New Zealand's exchanges before the War. A. H. Tocker, "Monetary Standards of New Zealand and Australia," *Economic Journal*, 1924, pp. 565-66.

<sup>4</sup> R. C. Mills and F. C. Benham, *The Principles of Money, Banking and Foreign Exchanges*, 2nd ed., pp. 40-41; C. C. Faulkner, *op. cit.*, p. 205; H. E. Teare, *Digest of Australian and New Zealand Banking and Currency Legislation*, p. 74.

Government, but in the latter part of the War the former became less compliant and refused to ship sovereigns to India and South Africa unless gold bullion was received in payment.<sup>5</sup> Mills and Benham write that Australia's price history since 1914 is to be explained almost exclusively by domestic conditions.<sup>6</sup> But I doubt the validity of that contention. Inflation abroad did not result in exports of gold in the same manner as before the War; but the necessity of financing the War resulted in inflation in Australia as well as in Great Britain. In so far as additional gold was not available, increased notes had to be manufactured and more deposits had to be created.<sup>7</sup> Moreover, banks were more disposed to expand in Australia because they were accumulating large balances in London.

It has been pointed out above that the scarcity of cash was a source of inconvenience after the War.<sup>8</sup> Although the embargo on the export of gold was not entirely removed until 1925, the gold producers were allowed to sell their gold under competitive conditions beginning early in 1919. These sales effected under a co-operative marketing scheme were profitable from 1919 to 1924.<sup>9</sup> Because the Australian pound was generally at a premium, the gold producers usually obtained a price in excess of the London price even allowing for the cost of converting into Australian currency. But the favorable conditions of sale contributed to the monetary stringency of the period, for Australia was thus deprived of its gold.<sup>10</sup> Exports of gold and the policy of restriction enforced by the Notes Board resulted in acute stringency.<sup>11</sup> Although the Board was allowed to issue notes on the security of trade bills, its use of this privilege was guarded.<sup>12</sup> Its conces-

<sup>5</sup> C. C. Faulkner, *op. cit.*, p. 214.

<sup>6</sup> *Ibid.*, p. 45.

<sup>7</sup> H. E. Teare, *op. cit.*, p. 74.

<sup>8</sup> See A. H. Tocker, *op. cit.*, pp. 570-73, for a criticism of the restrictive policy of the Notes Board.

<sup>9</sup> E. C. Dyason, "Gold Marketing," *Economic Record*, 1928, pp. 96-100; H. E. Teare, *op. cit.*, p. 75.

<sup>10</sup> Visible supplies of gold increased only from 46 to 54½ millions from 1914 to 1925. From 1919 to 1924, Australia imported but one seventh of one million and exported £19.4 million. *Aust. Ins. and Bank. Record*, 1925, pp. 90-91.

<sup>11</sup> But Mills and Benham hold that the policy of the Notes Board was not as restrictive as has been contended. R. C. Mills and F. C. Benham, *op. cit.*, pp. 208-10. However, see D. B. Copland, "The Commonwealth Bank of Australia," *Economic Journal*, 1925, p. 146.

<sup>12</sup> *Ibid.*, p. 145.

sions to traders were niggardly. In 1924, the responsibility for note issue was transferred to the Commonwealth Bank, which proceeded to reverse the policy of the Notes Board, and to take advantage of the newly acquired privilege of issuing notes against assets in London.<sup>13</sup> Moreover, with the restoration of the gold standard, gold became available, and, hence, one week after the introduction of the gold standard, the banks were compelled to sell British Sterling at or near par again.<sup>14</sup> The Prime Minister predicted that the removal of the embargo on gold would facilitate the financing of exports.<sup>15</sup>

Economists have been puzzled by the relative stability of British-Australian exchanges in the light of price movements that were not similar. Copland argues that the stability was the result of the long established relation between British and Australian banking and the prevalence of the traditional view that the Australian and British pound are identical currencies. Expansion and contraction of credit and currency were carried through as in the pre-War days.<sup>16</sup> He comes closer to the truth when he writes that bankers refused to purchase export bills rather than charge a price much above normal for converting British Sterling into Australian Sterling.<sup>17</sup> He rightly points out that the Purchasing Power Parity doctrine is not confirmed by the history of the British-Australian exchanges since 1914.<sup>18</sup> Relatively stable prices were quoted because the banks refused to sell unlimited supplies of Australian currency, and hence the market price was in a sense fictitious. If local currency had not been rationed, exporters and others requiring local currency would have competed for available supplies and the Australian pound would have appreciated in terms of British Sterling. The more important part played by

<sup>13</sup> *Aust. Ins. and Bank. Record*, 1920, pp. 539, 938-39; D. B. Copland, *op. cit.*, 1925, pp. 147-48.

<sup>14</sup> *Aust. Ins. and Bank. Record*, 1925, p. 445.

<sup>15</sup> *Ibid.*, p. 338

<sup>16</sup> D. B. Copland, *Monetary Policy and Its Application to Australia*, pp. 523-24; D. B. Copland "Australian Banking and Exchange," *Economic Record*, 1925, p. 23. Tocker presents a similar argument. New Zealand's system is automatically regulated through exchange operations. The legal regulation of note issue is not operative. Movements of specie were too restricted to explain the stability of the exchanges. The maximum range of exchange rates from 1903 to 1919 was but  $1\frac{1}{8}$  per cent. A. H. Tocker, *op. cit.*, p. 564.

<sup>17</sup> D. B. Copland, "Notes on Australian Exchange," *Economic Journal*, 1925, p. 640.

<sup>18</sup> D. B. Copland, *Monetary Policy and Its Application to Australia*, p. 520; D. B. Copland, "Notes on Australian Exchange," *Economic Journal*, 1925, p. 640.

London balances is also to be considered, for the cash accumulated in London which Australians accepted in place of cash in Australia, did not have so direct and so prompt an effect on prices as gold imported.<sup>19</sup> Relatively low prices in Australia may prevail for long periods of time because they are not accompanied by increased imports of gold and higher prices.

An additional point of importance remains to be made. Australian exports rose in price even less than prices in general in Australia; and the reduction of export prices was more marked than the reduction of all prices.<sup>20</sup> The relative decline of export prices was symptomatic of a loss of economic strength for Australia. The Commonwealth disposed of its staples under less advantageous conditions than formerly.

The prices of traded commodities are determined by world conditions; but the world market was disorganized during the years 1915-21. Australia was isolated and was dependent upon British shipping. Its wool and wheat were sold at prices dictated by the British Government. Moreover, the prices of agricultural commodities declined throughout the world; and even under more normal circumstances, marked increases of sales would not necessarily have followed. The magnitude and distribution of sales were determined by war conditions. Normally, low prices are followed by increased exports and an influx of gold, or if gold and substitutes are not available, exchanges appreciate. In so far as Australia sold more as a result of low prices, it did not receive additional cash (or London balances) in proportion, for additional cash received had to be employed to cover war expenditures in Europe or had to be employed to replace funds that would have been obtained from the London money and capital market in normal times. Australia's low prices were in part the result of the peculiar conditions of the agricultural market, and of Australia's isolated position; but they also were a necessary result of its loss of bargaining power, which had been caused by the necessity of selling more commodities to meet war and capital obligations.

Australia has had an interesting monetary history since 1925.

<sup>19</sup> Mills and Benham observe that the balances in London contributed to the stability of the exchanges. R. C. Mills and F. C. Benham, *op. cit.*, pp. 205-6.

<sup>20</sup> D. B. Copland, *Monetary Policy and Its Application to Australia*, p. 518.

Early in that year the Government announced that banks importing gold would be allowed later to export an equal amount of gold.<sup>21</sup> The Government were desirous of restoring the gold standard even if Great Britain did not set an example.<sup>22</sup> Australia's monetary policy since 1925 has not been determined independently of the position of the London money market. Authorities have withdrawn minimum supplies of gold from London and have borrowed in New York rather than London in order to assure London the advantage of stable conditions.<sup>23</sup> The Commonwealth's coopération in 1925-26 made Great Britain's task easier. Expansion of bank credit and higher prices resulting from higher tariffs, large exports and extensive borrowing abroad have been made possible by more liberal provisions for issuing notes on the security of London balances. Australia has been handicapped in the same manner as Great Britain because its cash resources have been relatively inadequate. The stringency in the Commonwealth was temporarily reduced by large gold imports in 1925.<sup>24</sup> Stringency was also reduced in England with the restoration of a gold standard. Deposits in Australia had increased at a much more rapid rate than cash from 1914 to 1924.<sup>25</sup> An attempt has been made to overcome the handicap of deficient supplies of cash by substituting notes and London balances for gold, and by concentrating gold supplies at the Commonwealth Bank.<sup>26</sup> Other banks have begun to hold clearing balances at the Bank, and the Commonwealth Bank has been criticized for expanding too rapidly and thus losing the surplus cash obtained in this manner.<sup>27</sup> In the last year or two, Australia has been embarrassed by large losses of cash in London. The exchange banks have rationed Sterling, and hence Australia has in fact gone off the gold standard. The Commonwealth Bank has received the authority to compel

<sup>21</sup> *Aust. Ins. and Bank. Record*, 1925, p. 171. According to the *Federal Reserve Bulletin*, the Commonwealth Bank was authorized to export gold provided reserves were not reduced below the level of January, 1925. *Federal Reserve Bulletin*, 1925, p. 233.

<sup>22</sup> *Ibid.*, 1925, p. 253.

<sup>23</sup> *Ibid.*, 1925, pp. 519-803; D. B. Copland, *Monetary Policy and Its Application to Australia*, p. 17.

<sup>24</sup> *Aust. Ins. and Bank. Record*, 1925, p. 715.

<sup>25</sup> A. H. Tocker, *op. cit.*, pp. 569-71; *Aust. Ins. and Bank. Record*, 1926, pp. 615-66.

<sup>26</sup> *Ibid.*, 1926, p. 435.

<sup>27</sup> *Ibid.*, 1927, pp. 103, 189, 278.

banks to transfer their gold to its vaults.<sup>28</sup> Australia's terms of trade improved in the years 1922 to 1927, but more recently they have been less favorable. Internal prices, costs and incomes have not declined as rapidly as export prices. It is now necessary to bring costs down and the exchanges up and discourage the importation of commodities.<sup>29</sup>

The large banks operating in Australia also operate elsewhere. Hence their assets in Australia are not equivalent to their liabilities. The former are generally in excess of the latter. Much light is thrown upon the movement of balances between London and Melbourne by comparing the magnitude of banking assets and liabilities in Australia, or of advances and deposits in Australia. Thus the movement of deposits in the second half of 1914 and the early part of 1915 is explained by the transfer of resources to London.<sup>30</sup> Several banks refused to negotiate bills on London because they had lost much cash in London.<sup>31</sup>

In 1915 and 1916, Australian banks continued to encounter difficulty in meeting their London debts; but their position in London was stronger. Their stronger position is more apparent from their holdings of bills receivable than from the relative magnitude of liabilities and assets. In 1917, large balances were accumulated in London, as a result of the improvement of the export trade. The figures for the December quarters were: <sup>32</sup>

	Millions of £ Sterling	
	Imports	Exports
1914 .....	72	65
1915 .....	69	61
1916 .....	81	73
1917 .....	62	81
1918 .....	77	81

<sup>28</sup> See A. J. S. Baster, "A Note on Australian Exchange," *Economic Journal*, 1930, pp. 469-70; D. B. Copland, "Recent Developments in Australian Exchange," *Economic Record*, 1930, pp. 46-50. Baster is critical of the exchange banks because they have not increased the price of Sterling adequately. He neglects the problem of the unfavorable price history, and he does not seem to realize that under the gold standard, exchange fluctuations are limited. Moreover, rationing of exchange may have the desired effects.

<sup>29</sup> D. B. Copland, *Credit and Currency Control*, especially pp. 29-35, 76-77, 105-11, 127-31; also see D. B. Copland, "The Australian Problem," *Economic Journal*, 1930, pp. 640-42.

<sup>30</sup> *Aust. Ins. and Bank. Record*, May 21, 1915, and August 21, 1915.

<sup>31</sup> *Ibid.*, March 20, 1915. Report of meeting of Union Bank of Australia for year ending August 31, 1914.

<sup>32</sup> *Ibid.*, March 21, 1918; March, 1920. The rapid accumulation of balances in London was reflected in an increase in deposits of 16 millions. Exporters received cash in Australia (deposits) and the banks received cash in London.

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<i>Millions of £ Sterling</i>			
	Liabilities	Assets	Excess of Assets
1913 .....	179	196	18
1914 .....	186	208	21
1915 .....	203	221	17
1916 .....	204	224	20
1917 .....	222	227	5

The deposit figures for the years 1918-21 were as follows:

<i>Millions of £ Sterling</i>		
	Commercial banks	Commonwealth
1918 .....	218	51
1919 .....	248	32
1920 .....	270	25½
1921 .....	253	25

The decline in 1921 was caused in part by the loss of foreign balances.<sup>33</sup> The excess of assets in 1921 was 34 millions, and in 1922, 20 millions. An increase in foreign balances for the year is reflected in the reduction of the excess of assets.<sup>34</sup> In 1918, the totals were 319 (assets) and 301 (liabilities). In 1919, the totals of liabilities and assets were 315 and 304 millions respectively. London balances were at an unprecedented height. But in 1920, when Australian banks had consumed a large part of their London balances, Australian assets were much higher at 370 millions and liabilities were at 338 millions. Advances had increased from 207 millions to 270 millions. Large advances were necessary to finance increased imports, and in order to enable exporters to hold their commodities.<sup>35</sup> The excess of assets was reduced in the years 1921-22, and from 1923-1925 remained stable; but by 1927 the excess was 36 millions, a rather large figure. It was officially estimated that in a period ending June 30, 1927, Australian balances in London had been reduced by 36½ millions.<sup>36</sup>

Deposit figures for the years 1914-19 were: <sup>37</sup>

<sup>33</sup> *Aust. Ins. and Bank. Record*, February 21, 1922.

<sup>34</sup> As foreign balances increase, exporters and others obtain additional deposits in Australia. More is said on this point later.

<sup>35</sup> *Aust. Ins. and Bank. Record*, February 21, 1921.

<sup>36</sup> *Ibid.*, 1928, p. 127. Copland presents an interesting study in which he concludes that there is a close relation between bank credits and the balance of international payments and between London funds and the excess of deposits over advances. D. B. Copland, "Australian Banking and Exchange," *Economic Record*, 1925, pp. 21-22. Tocker arrives at a similar conclusion for New Zealand. A. H. Tocker, *op. cit.*, pp. 562-63.

<sup>37</sup> *Aust. Ins. and Bank. Record*, February 21, 1921.

*Millions of £ Sterling*

	Ordinary banks	Commonwealth
1913 .....	171	1.5
1914 .....	178	3.6
1915 .....	192	10.0
1916 .....	192	30.0
1917 .....	208	23.0
1918 .....	218	51.0
1919 .....	248	32.0

Surprisingly moderate was the increase in deposits during the War period. The increase for the private banks was 25 per cent; and even including the Commonwealth Bank, the increase was but 55 per cent. Perhaps the more inclusive figures are the more significant, because the Commonwealth Bank was not a central bank in the true sense of the word, and it carried a large part of the burden of war finance.

Copland concludes that the essentials of the new system are adequate balances in London and adequate facilities for creating notes in Australia.<sup>38</sup> He suggests an automatic system by which notes are withdrawn and prices reduced when drafts are sold and London balances are reduced. Gold movements were relatively unimportant in the years 1925-27;<sup>39</sup> the Commonwealth Bank has endeavored to reduce them. Thus recently the charge for buying and selling T.T. was reduced in order to make gold shipments less profitable.<sup>40</sup> Tocker, in an interesting study of the monetary system of New Zealand and Australia, approves of a similar plan. He proposes a system under which monetary supplies in London and Australia expand and contract automatically with fluctuations in the net balance of payments.<sup>41</sup> He says that deposits are not determined by advances, but rather are related to the magnitude of London balances; when London balances are reduced, deposits are reduced. Tocker errs in assuming that the orthodox view is that deposits always increase when more advances were made.<sup>42</sup> In fact deposits of less advanced countries are reduced and advances increase in the early period of depression. In Australia and South Africa, a reduction of deposits in

<sup>38</sup> D. B. Copland, "Notes on Australian Exchange," *Economic Journal*, 1925, p. 647.

<sup>39</sup> *Aust. Ins. and Bank. Record*, 1927, pp. 1-2.

<sup>40</sup> O. B. Copland, *op. cit.*, 1925, p. 648.

<sup>41</sup> A. H. Tocker, *op. cit.*, pp. 556, 564.

<sup>42</sup> *Ibid.*, pp. 560-61.

1920-21 was accompanied by a reduction in London balances, and an increase of deposits had been accompanied by an increase of London balances in 1915-17 and 1919-20. There is apparently some correlation between these two variables, but it requires careful analysis to determine the causal relations. The financing of foreign trade constitutes an important part of the banking business of these countries. Capital movements between London and the Dominions are also reflected in banking figures. Deposits and exports both increase when business is thriving. Expansion of trade and industry at home and borrowing abroad are accompanied by increased exports, deposits and London balances. It therefore does not follow that deposits are determined by the magnitude of London balances; they both fluctuate with the fluctuations in foreign trade and business activity. In so far as conditions in sheltered industries differ from those in non-sheltered industries, fluctuations in these two variables are not likely to be of similar proportions.

In the chapters on India, criticisms of an automatic system have been presented. Such standards are based on an erroneous conception of the manner of operation of the pre-War British system. Australia is not hampered by large movements of private and public hoards as India has been. In the War and post-War period, Australia's failure to expand and contract in the manner demanded by the supporters of the automatic system made it possible for Australia to maintain relatively stable prices. It has been revealed by the monetary history of the last fifteen years that agricultural countries are unable to pursue a policy of deflation in the manner of countries more advanced economically. If Australia suffers from a drought and if exports are reduced, London balances may be consumed. Deposits will probably not decline in the same proportion, and may well increase. London balances are considered as cash—especially since 1925 when the Commonwealth Bank began to issue notes on the security of London balances—and hence a reduction of deposits equivalent to three or four times the cash consumed in London may be required. Relatively large losses or accretions of London balances of countries dependent on a few staples and on foreign capital markets, occur at frequent intervals. The introduction of a corresponding con-

traction at home will not be attempted. The attempt to make a central bank of the Commonwealth Bank with authority to re-discount is evidence of the misgivings with which the authorities view the automatic system.

## CHAPTER III

### EGYPT

EGYPT is not part of the British Empire; but because of its close financial relations to London, its monetary problems are similar to those of the Dominions.

Egypt's monetary system is unique. Before the War, seasonal needs were met by importing foreign gold coins, which were evaluated according to an official tariff.<sup>1</sup> Egypt exported gold when the export season was over and the tourists had gone; but England did not receive back as much gold as it had previously sent to Egypt, and India obtained much more than it had sent.<sup>2</sup> By exporting and importing gold, Egypt was saved the expense of coinage and the expense of hoarding throughout the year gold that was needed but a few months.<sup>3</sup> Thus imported gold contributed the necessary elasticity; the use of paper money was not popular and the creation of deposits was not of much importance.<sup>4</sup> Egyptian banks also operated in Europe; hence additional resources could be obtained from the European offices. The result was that the need of a central bank for the purpose of granting rediscounts was not great.<sup>5</sup>

The system worked smoothly as a rule. Occasionally a rapid accumulation of credits by exporters might result in a scarcity of gold. The importation of gold required time, and hence banks might refuse to purchase export bills. In 1899 and 1906, unexpectedly large exports at favorable prices brought much embarrassment to the banks.<sup>6</sup> But the stability of the exchanges was not

<sup>1</sup> E. Antonini, *Le Crédit et La Banque en Égypte*, p. 12. P. Arminjon et B. Michel, "La Circulation, Le Crédit et Leurs Instruments," *Revue d'Économie Politique*, pp. 448-50.

<sup>2</sup> L. Polier, "La Circulation de la livre Sterling dans le système monétaire Égyptien," *Revue d'Économie Politique*, 1915 (29), pp. 10-24.

<sup>3</sup> E. Antonini, *op. cit.*, pp. 14-15.

<sup>4</sup> *Ibid.*, p. 14; P. Arminjon, "Les Enseignements de la Crise Financière Égyptienne," *Revue Économique Internationale*, 1900 (1), p. 286.

<sup>5</sup> J. Misrahi, *La Banque Nationale d'Égypte*, p. 34.

<sup>6</sup> *Ibid.*, pp. 62-64. P. Arminjon et B. Michel, *op. cit.*, pp. 451-52.

thus endangered. It is only necessary to restrict purchases of London bills until gold can be imported. The banks did not refuse to exchange foreign currencies for local currencies; they temporarily refused to finance the export trade. When the demand for Sterling remittances was great, gold was exported and London balances were consumed.<sup>7</sup> It had been suggested that the banks be allowed to issue notes secured by gold in England.<sup>8</sup> In the War period, the country obtained increased elasticity by issuing notes on the security of gold and Sterling in London. Observers were struck with the elasticity of the new system as well as with its stability; but they were satisfied with stability in terms of Sterling, which, of course, had depreciated in terms of gold.<sup>9</sup> In the period of deflation, Egypt suffered from a sudden and large reversal in the balance of payments, which was reflected in a reduction of balances in London. Egypt was deprived of 60 per cent of its monetary circulation in 1920-21.<sup>10</sup> That this was possible, is to be explained by the extreme elasticity, the absence of any great fiscal problem, and the important part played by foreign trade in the determination of the monetary circulation.

Egypt's monetary system during the War was more closely tied up with the British system than ever. The Egyptian Finance Minister said that the bond was so close that the Egyptians were unable to free themselves.<sup>11</sup> Fluctuations in Egyptian exchange in the War and post-War periods were of smaller dimensions than during normal times when the exchanges fluctuated within the gold points.<sup>12</sup> However, there were brief periods when the fluctuations were very large.<sup>13</sup>

The features of the economic history of Egypt during the War were large cotton exports at high prices during the last three years of the War, large military expenditures by Great Britain in Egypt and neighboring countries, and restricted imports.<sup>14</sup> In

<sup>7</sup> J. Misrahi, *op. cit.*, pp. 35-36.      <sup>8</sup> P. Arminjon et B. Michel, *op. cit.*, p. 523.

<sup>9</sup> M. L. G. Roussin, "Le Régime Monétaire Actuel de l'Égypte," *L'Égypte Contemporaine*, 1924, pp. 96-97.

<sup>10</sup> E. Antonini, *op. cit.*, p. 20.

<sup>11</sup> Kemmerer-Vissering. Commission on Resumption of Gold Payments in South Africa, Q. 3021.

<sup>12</sup> Recueil de Documents Officiels. *Notes by Financial Adviser*, 1916, p. 103.

<sup>13</sup> Thus in June, 1919, £ Sterling was quoted at 116.5. Indian Currency Committee, 1919, Qs. 1346-47.

<sup>14</sup> *Ibid.*, Qs. 1311-12.

he early period of the War, Egypt was embarrassed by the difficulties of renewing maturing debts in London.<sup>15</sup> But as the War progressed, Great Britain found increasing difficulties in paying for large exports from Egypt and for other expenditures for war purposes in Egypt and neighboring countries.<sup>16</sup> At first the Egyptian banks attempted to import gold; but apparently they met with obstacles.<sup>17</sup> Hence it became necessary for exporters to convert their bills into local currency notes or bank deposits.<sup>18</sup> The law required a reserve of 50 per cent against notes in gold.<sup>19</sup> As the National Bank of Egypt issued additional notes to exporters on behalf of the Government, it converted exporters' bills and other claims on London into gold in London, which the Bank of England earmarked for the National Bank of Egypt. When gold became scarce, the Bank of England substituted Treasury bills.<sup>20</sup> The Egyptian people accepted with equanimity the paper currency instead of the gold to which they were accustomed.<sup>21</sup> Other banks also acquired the privilege of converting balances into local currency; <sup>22</sup> otherwise, the National Bank would have been placed in a peculiarly favorable position. Egypt's position was not unlike India's. Heavy military expenditures and large exports had to be financed in Egypt. Fortunately, its silver problem was not as serious nor of as great importance as India's. The latter accumulated Sterling balances that could not be converted into domestic currency; but Egypt's Sterling or gold served as security for corresponding supplies of Egyptian currency. Egypt's trade relations were primarily with Great Britain. As British prices rose, Egyptian prices rose. Great Britain paid for its cotton with Sterling in London, which was then converted into local currency. The system functioned more smoothly than the gold

<sup>15</sup> *Recueil de Documents Officiels. Notes by Financial Adviser, 1915*, pp. 115-17.

<sup>16</sup> The excess of exports added to the military expenditures came to £10 million in 1915, £17 million in 1916, £18 million in 1917, £25 million in 1918 and 40 million in 1919. E. Antonini, *op. cit.*, p. 39.

<sup>17</sup> The Government also expressed dissatisfaction with the activities of foreign banks operating in Egypt. They restricted the operations of their Egyptian ranches and held insufficient cash in Egypt. *Notes by Financial Adviser, 1915*, p. 131-32.

<sup>18</sup> *Ibid.*, pp. 121-22.

<sup>19</sup> *Status De La National Bank d'Égypte*, Article 5, 1920.

<sup>20</sup> *Notes by Financial Adviser, 1917*, pp. 76-77.

<sup>21</sup> Indian Currency Committee, 1919, Q. 1361.

<sup>22</sup> *Ibid.*, Q. 1303. (Evidence of Governor of National Bank of Egypt.)

standard of pre-War days. Sterling was converted into deposits as well as into notes, and Egyptian banks accumulated large resources in London.<sup>23</sup> Authorities expanded or contracted Egyptian currency in a manner demanded by the price fluctuations in Great Britain. The Financial Adviser wrote in 1915 that there was no danger of over-issue, for the notes were issued only in response to legitimate needs and the authorities had made ample provisions for redemption by the sale of foreign exchange. Parity with gold as indicated by the foreign exchanges was to be maintained. Although the object of maintaining parity with Sterling was virtually achieved, as the Adviser points out, Egypt did not maintain parity with gold; and the maintenance of parity with Sterling was not an adequate safeguard against over-issue.<sup>24</sup> Egypt's monetary supplies were determined by the conditions of its foreign trade to an extent that was unknown in any other country. That the inflation during the War was not at a much more rapid rate, may be explained by the practise of hoarding notes and the refusal of authorities to issue notes for fiscal purposes.

Some authorities have argued that Egypt's favorable balance or increase in wealth during the War period can be measured by the increase in currency notes and bank deposits outstanding.<sup>25</sup> The maximum addition by the end of 1919 was put at £150 million. The High Commissioner estimated that one third was represented by notes, one third by deposits in banks and another third by investments.<sup>26</sup> Rather significant was the retention by the Government of a fiscal reserve of £4.6 million in 1913, a maximum of £17.1 in April 1, 1919, to March 31, 1920, and £3 million in 1920-21.<sup>27</sup>

<sup>23</sup> *Notes by Financial Adviser*, 1916, pp. 95-96.

<sup>24</sup> *Ibid.*, 1915, pp. 122-23.

<sup>25</sup> The Adviser pointed out that capital could not be used in Egypt as the economic resources required for capital expansion were not available. *Ibid.*, 1917, pp. 68-70.

<sup>26</sup> Report by His Majesty's High Commissioner on Finances, Administration and Condition of Egypt and Soudan, 1920. Cmd. 1487 (1921), p. 20.

<sup>27</sup> *Ibid.*, p. 26.

PART VI  
BIBLIOGRAPHY, WITH COMMENTS



## BIBLIOGRAPHY, WITH COMMENTS

I HAVE divided this bibliography into three sections. Section I includes serial publications of importance. In Section II, I have listed all official documents, not already included. It includes all publications issued by Governments or by bodies representing one or more Governments, or reports issued by Committees appointed by Governments. Section III consists of all books and periodical articles. (The abbreviations for names of periodicals are given at the end of this note.)

I have attempted to give titles in abbreviated form whenever possible, and I have omitted page references of periodical articles and places of publication. The space has been put to better use in giving a few brief comments on publications when they may be helpful. The policy in making comments is as follows: In general, I have omitted comments when the book is very well known on the assumption that comments would not serve any important purpose; and also when an adequate summary commensurate with the amount of material, would require too much space, or because a comment of a few lines could not do justice to the interesting, unusual or significant facts or ideas. The comments infrequently constitute a summary; more frequently they give a few of the significant ideas contained in the book, or emphasize the contribution or viewpoint of the author. An asterisk before a title indicates that the item is considered of importance; in general, I used as a basis the value of the item to my study and to other studies on British monetary policy. This bibliography is not complete. I have omitted a large number of items that proved to be of little value.

ABBREVIATIONS USED IN SERIAL PUBLICATIONS IN  
THE BIBLIOGRAPHY

<i>A.E.</i>	<i>Annali di Economisti</i>
<i>A.E.R.</i>	<i>American Economic Review</i>
<i>A.S.S.</i>	<i>Archiv für Sozialwissenschaft und Sozialpolitik</i>
<i>B.A.</i>	<i>Bank Archiv</i>
<i>C.E.B.</i>	<i>Chase Economic Bulletin</i>
<i>D.B.</i>	<i>Die Bank</i>
<i>D.V.</i>	<i>Deutsche Volkswirt</i>
<i>E.J.</i>	<i>Economic Journal (British)</i>
<i>E.R.</i>	<i>Economic Record (Australian)</i>
<i>E.S.B.</i>	<i>Economisch-Statistische Berichten</i>
<i>E.T.</i>	<i>Ekonomisk Tidskrift</i>
<i>G.E.</i>	<i>Giornale degli Economisti</i>
<i>J.C.B.</i>	<i>Journal of Canadian Bankers Association</i>
<i>J.E.</i>	<i>Journal des Économistes</i>
<i>J.I.B.</i>	<i>Journal of the Institute of Bankers (British)</i>
<i>J.N.S.</i>	<i>Jahrbücher für Nationalökonomie und Statistik</i>
<i>J.P.E.</i>	<i>Journal of Political Economy</i>
<i>J.S.S.</i>	<i>Journal de Statistique Suisse</i>
<i>J.S.S.P.</i>	<i>Journal de la Société Statistique de Paris</i>
<i>N.M.C.</i>	<i>National Monetary Commission</i>
<i>N.T.</i>	<i>Nationalökonomisk Tidskrift</i>
<i>Q.J.E.</i>	<i>Quarterly Journal of Economics</i>
<i>R.C.E.</i>	<i>Revista de Ciencias Económicas</i>
<i>R.E.</i>	<i>Revista Económica</i>
<i>R.E.P.</i>	<i>Revue d'Économie Politique</i>
<i>R.N.E.</i>	<i>Revista Nacional de Economía</i>
<i>R.deP.E.</i>	<i>Revista de Política Económica</i>
<i>R.B.</i>	<i>Rivista Bancaria</i>
<i>R.S.</i>	<i>Riforma Sociali</i>
<i>R.S.J.</i>	<i>Journal of the Royal Statistical Society</i>
<i>S.M.</i>	<i>Statistike Meddelelser</i>
<i>S.V.S.</i>	<i>Schriften des Vereins für Sozialpolitik</i>
<i>Z.S.S.</i>	<i>Zeitschrift für Schweizerische Statistik</i>

## SECTION I

### IMPORTANT SERIAL PUBLICATIONS <sup>1</sup>

- Australia, Commonwealth of. *Parliamentary Debates*, 1914-1925.  
*Australasian Insurance and Banking Record*, 1914-1928.  
*Bankers' Magazine* (London), 1914-1925.  
*Board of Trade Journal* (Great Britain), 1914-1920.  
*Bulletin de Statistique et de Législation Comparée*, 1914-1924.  
Canada, Dominion of. *House of Commons Debates*, 1914-1924.  
*Commercial and Financial Chronicle*, 1914-1918.  
*Economist* (London), 1914-1928.  
*L'Économiste Français*, 1914-1917.  
Great Britain. *Reports of the Deputy Master and Comptroller of the Mint*, 1914-1927.  
Great Britain. *Hansard's Parliamentary Debates*, 1914-1925.  
Great Britain. *House of Commons, Parliamentary Papers*, 1914-1926.  
League of Nations: *Monthly Bulletin of Statistics*, 1926-1927.  
(Other publications are given separately.)  
*Statist* (London), 1914-1928.  
Union of South Africa. *Journal of the Institute of Bankers*, 1914-1929.  
*U. S. Mint Reports*, 1914-1928.  
*Volkswirtschaftliche Chronik in Jahrbücher für Nationalökonomie und Statistik*, 1914-1926.  
*Wirtschaft und Statistik*, 1921-1928.

## SECTION II

### OTHER DOCUMENTS

*Abolition of the Sub-Treasuries*: Hearings, House Banking and Currency Committee, (66:2), 1920.

Desire of foreigners to earmark gold so that they might issue notes on the security of gold.

<sup>1</sup> When items are enumerated separately, serial publications are not given. (Thus *Deutsche Volkswirt*, *Economic Journal*, and so forth, are omitted here.)

*Abstract of Labour Statistics of the United Kingdom, Nineteenth.*  
Cmd. 3140, (1928).

Especially useful for facts concerning production.

*Accordo Concluso il 27 Gennaio fra il Regno d'Italia ed il Regno Unito della Gran Bretagna.*

Provisions for return of gold deposited with the Bank of England during the War.

*Advances to His Majesty's Self-Governing Dominions.* Treasury Minute, November 17, 1914. H.C. 47. (1914-16.)

*Agricultural Credit*, Report of the Committee on. Cmd. 1810, (1923).

*Agricultural Inquiry, Joint Commission of.* Hearings. (67:1), 1921. (2 volumes.)

Memorandum on Treasury relations with New York Federal Reserve Bank. Summary of gold and discount policy of Federal Reserve System. Ratio of reserves declined in the United States from 1917-20; but the ratio increased in the United Kingdom from 1918-20.

*Agricultural Output of England and Wales 1925.* Report on Inquiries in Connection with Census of Production Act of October, 1906. Cmd. 2815. (1927).

*Agriculture, Royal Commission Report on.* Minutes of Evidence, Cmd. 345, 365, 391, 445, (1919).

Adequacy of accommodation by banks. Price control. Profits.

*Alleged Combines among the Manufacturers of Sewing Cotton.* Findings and Decision of Committee Appointed to Inquire into Cmd. 563, (1920).

Output.

*American Dollars Securities Committee*, Report. H.C. 212, (1919).

Detailed history of legislation, securities deposited, purchased, etc.

*Aret 1922. Statistik-økonomisk bedømt Konjunkturoversikt* 613-33. S.M. 1922 (Norway).

Excellent summary of economic developments in important countries in 1921-22. Similarity of conditions.

*Argentina. Censo Bancaria de la Republica Argentina.* 1925. Dirección General de Estadística de la Nación. Informe no. 21.

Marks great advance in banking statistics for South America. Divides loans according to class of recipient—commerce, industry, etc. Also estimates the distribution of im-

portant assets, and liabilities between foreign banks, Banco de la Nacion, and others.

*Argentina, Economic Position of, During the War.* U. S. Department of Commerce. 1920.

Argentina agreed not to draw on Great Britain if the peso rose above 50 d. (par: 48-48½). Argentina had advanced large credits to the Allies.

*Argentina. Veinte Años de Estadística Bancaria de la República Argentina.* Dirección General de Estadística de la Nación. 1927.

*Australia, Board of Trade Report on, for the Year 1914.* Cmd. 8090, (1915).

Gold reserve of 40-50 million pounds for population of five millions.

—, —, *Budget Papers Presented to the Parliament of Commonwealth of.* Sessional Papers. 1914-24.

Details of balances of the Government in London and Australia.

—, —, *Commonwealth of. Development and Migration Commission.* Interim Report on Gold Mining Industry of Western Australia. 1927.

Reduction in production attributed in large part to higher costs. Clash of interests between owners who want quick returns and the nation. Bounties already given by the State. Consolidation is necessary.

—, —, *Official Yearbook of.* 1924, 1928.

Estimates on basis of trade and capital items of funds available abroad for transmission to Australia.

—, —, *Report of the British Economic Mission.* 1929.

Branch banks of Commonwealth Bank do private banking business primarily, and hence should be separated from Home Office.

*Austria, Financial Reconstruction of.* Report to the League of Nations. W. Layton and C. Rist. 1925.

Effects of monetary policy on public revenues. Weakness of control of Central Bank. Speculative movement of balances.

*Balance of International Payments of the United States* 1928, 1929. U. S. Department of Commerce.

Movements of capital for short periods of time related to movements of other items in the balance of payments. Large balances in New York the result of the "back-wash" of more permanent capital advances.

- \* *Bank Amalgamations*, Copy of Report of Treasury Committee on. Cmd. 9052, (1918).

Disapprobation of further amalgamations where there is not involved an appreciable extension of territory. More recent amalgamations where capital liabilities have been increased as a result of union, distinguished from earlier type.

- \* *Bank of England*. Applications of First Lord of the Treasury. January 5, 1914, to January 5, 1915. H.C. 123, (1915). Similar documents from 1915 to 1920.

The effects on foreign exchanges of borrowing from the Bank. Terms of contracts given. Protests of Bank of England. Basis of determination of interest rate paid by the Government.

- \* ——. Exchequer Bills and other Governmental Securities Purchased. H.C. Papers. 1914-24.

The details of bills purchased by periods.

- \* ——. Note Issue. Correspondence between Treasury and Bank of England. H.C. 370, (1915).

Application for right to issue additional notes early in August, 1914.

- Banks (Official Auditing) Act*. Bills. February, 1921.

Bill providing for periodic examination of British banks by the Board of Trade.

- Brazil. Commercio Exterior do Brasil*. Directoria de Estadística Commercial. 1927.

Description of foreign assets held.

- Britain's Industrial Future*. Report of the Liberal Industrial Inquiry. 1928.

All of Great Britain's gold now available for external purposes. Necessity of international coöperation to avert large fluctuations in the value of gold.

- British Debt, Arrangements for Funding to United States*. Cmd. 1912, (1923).

Great Britain can offer American bonds in payment and anticipate payment of principal.

- British Trade after the War*. Cmd. 8181, (1916).

More liberal treatment of British industry by banks necessary.

- British Trade Corporation*. Copy of Petition, Charter, etc. Cmd. 8567, (1917-18).

- Brussels Conference*. Paper no. 1. Memorial on International Finance and Currency. 1920.

Declaration of deflation policy by Chamberlain.

- . Paper no. 11. Exchange Control. 1920.

Exchange regulations introduced widely in 1919 and 1920. The object was to prevent the importation of luxuries or the exportation of capital, and to avert losses on account of evaluation of fiscal responsibilities. Capital movements not regulated by discount rates.

*Brussels Conference*. Paper no. 13. 1920.

Bruins recommends a policy of deflation. Money market is comfortable because adjustment of income is slow in period of inflation. Pantaleoni points out that the reversal of inflation would be unwise. Gide distinguishes high prices from inflation.

*Brussels (International) Financial Conference*. Proceedings. 1920.

\* ——. Verbatim Report. 5 volumes. 1920.

Position of British Government on deflation.

\* *Brussels Financial Conference*. Recommendations and their Application. Review of Two Years. 1922.

Reduction of currency unaccompanied by other measures, is inadequate. Measures progress in the reduction of debts and paper money. Danger of floating debt. Points out that foreign debts are usually estimated on the basis of parity of exchange. Also important transactions are excluded from consideration. Progress in reduction of expenditures and increase in taxes. However, reduction of prices should be considered.

*Camera dei Deputati*. Relazioni della Commissione Parlamentare d'Inchiesta per le Spese de Guerra. 1923.

Italy paid for all wheat acquired through the Wheat Executive with dollars borrowed in the United States.

*Canadian Government Advances*. Treasury Minute. November 14, 1918. Cmd. 9234, (1918).

Cancellation of equivalent amounts of debts from Canada to Great Britain and vice-versa.

*Capital Issues, Regulations Substituted for Regulation 30F of D.O.R.R. as to*. Cmd. 97, (1919).

—, Treasury Instructions. Cmd. 99, (1919).

Previously a question of economy of capital; now a question of exchanges. Refunding of foreign loans to be allowed as matter of course.

CLÉMENTAL, M., *Inventaire de la Situation Financière de la France*. 1924.

*Coal Industry Commission*. Report and Evidence. Cmd. 359, (1919).

\* *Colwyn Committee on National Debt and Taxation*. Report, Appendices and Evidence. Cmd. 2800, (1927).

Relation of industry to the banks. Taxation and inflation. A levy and deflation. How far is banking policy determined by reserves? The future of prices. Should the magnitude of a floating debt be determined by other than fiscal requirements?

*Commercial and Industrial Policy after the War.* Final Report. Cmd. 9035, (1918).

*Company Law Amendment Committee,* Report of the. Cmd. 9138, (1918).

The desirability of importing capital.

*Cost of Living, Joint Committee on the.* Final Report by Parliamentary Committee. Trades Union Congress. 1921.

*Cost of Living. Working Class.* Report of Committee Appointed to Inquire into Actual Increase since June, 1914. Cmd. 8980, (1918).

Same commodities included in budgets of 1914 and 1918 would serve only a theoretical purpose.

*Currency and Bank Notes Act.* Treasury Minute. August 6, 1914. Cmd. 7836, (1914-16).

*Currency and Bank of England Note Issues.* Report of the Committee. Cmd. 2393, (1924-25).

Although the necessary adjustment of prices has not yet been made, the Committee recommends a return to the gold standard; otherwise the exchanges may depreciate to a level corresponding to the internal value, and, possibly, lower. Fiduciary limitation was enforced in the fall of 1924 without inconvenience.

\* *Currency and Foreign Exchanges, Committee on.* Final Report. Cmd. 464, (1919).

Greater emphasis on exchange conditions than in Interim Report.

\* *Currency and Foreign Exchanges, Committee on.* Interim Report. Cmd. 9182, (1918).

Would not recommend putting responsibility on banks; hence advocates a fiduciary limit of currency notes. Accumulate a reserve of 150,000,000 pounds before determining the proper total of currency notes. Repayments of banks by Government.

*Currency Note Certificates, Provision for.* Treasury Minute. July 19, 1915. Cmd. 8024, (1915).

*Currency Notes. Provision for Investment Reserve Account.* Treasury Minute. May 3, 1915. Cmd. 7918, (1915).

— . Treasury Minute. July 21, 1920. Cmd. 849, (1920).

- Currency Notes.* Treasury order of June 11, 1920. Called in currency notes of First and Second issues, which were no longer legal tender. To be included with cancelled notes on recommendation of Treasury.
- Defense of Realm Losses, Royal Commission on.* Third Report. Cmd. 9181, (1918).  
Losses caused by requisitions.
- \* *Defense of Realm Manual.* Fourth and Sixth Edition. 1917-18.  
Regulations of prices, supplies and exchanges.
- Depreciated Exchanges and International Trade, Report on.* U. S. Tariff Commission. 1922.
- Depreciation of Silver.* Report from the Select Committee, Proceedings, Evidence, etc. H. C. 338, (1876).  
Discussion of gold and silver policies. Gold movements. Problem of silver exports to India.
- Deutsche Bank. License.* Copy. Cmd. 8398, (1916).
- Deutscher Jahrbücher* 1927.  
Statistical summary of assets and liabilities of Central Banks. 1923-26.
- Die Deutschen Banken 1924 bis 1926.* Einzelschriften zur Statistik des deutschen Reichs. No. 3.  
Large cash reserves in 1924 as compared to 1926. "Kreditoren" of increasing importance. Movements of foreign deposits.
- Disposal and Liquidation Commission.* Progress Report. Cmd. 1412, (1921); Cmd. 1640, (1922); Cmd. 1918, (1923); Cmd. 2106, (1924).  
Monetary stringency and rate of disposal.
- Documents on European War.* Canadian Sessional Papers. 1914.  
Letter of Prime Minister of Canada in which he points out that financing of Canadian export trade has been seriously hampered by inability of banks to withdraw funds from London.
- Dominions. Royal Commission on Food and Raw Material.* Requirements of the United Kingdom. Memorandum and Tables. Cmd. 8123, (1914-16).
- Dormant Bank Balances.* Report and Evidence before Select Committee. 1919.  
Governor of Bank of England: We would be glad to have more private accounts.
- Economic Position of the United Kingdom, 1912-18.* Department of Commerce. Miscellaneous Series, no. 96. 1919.

*Edge Bill. Incorporating an Institution to Engage in International or Foreign Banking:* Hearings, Senate Banking and Currency Committee, (66: 1), 1919.

Support European exchanges and hence American export trade.

*Egypt.* Report of His Majesty's High Commissioner on Finances, Administration and Condition of Egypt and Soudan, 1920. Cmd. 8430, (1916).

Reduction of notes rather than of deposits.

*Emergency Bond Issue, Second:* Hearings, House Ways and Means Committee, (65: 1), 1917.

Credits to Europe from the United States absolutely necessary, for goods cannot be allowed to rot.

*Enemy Banks.* (London Agencies.) Report of W. Leaf and R. V. Vassar Smith, Cmd. 8455, (1917).

——. Copy of Report of Sir William Plender. December 16, 1916. Cmd. 8430. (1916).

——. Reports. Cmd. 8889, (1917).

\* *Enquête sur la Production.* International Labour Office.

Volume 2, Parts 1 and 2, are excellent on production and supplies in the War period. Volume 3 contains valuable material on imports and distribution of supplies. Volume 5, Part 1, contains a useful summary of stabilization schemes, capital movements and the like.

*Estimates, Select Committee on.* First Report. H.C. 96, (1924).

Shipping liquidation. Exchanges.

*European Currency and Finance.* Commission of Gold and Silver Inquiry, United States Senate. Foreign Currency and Exchange Investigation. 2 Volumes. 1925.

*Excess Profits Duty.* Proposals as to Stocks, etc. Cmd. 8623, (1917-18).

——. Reliefs. Cmd. 753, (1920).

*Extending Credit to Germany:* Hearings, House Ways and Means Committee, (66: 2), 1920.

Secretary Glass: United States should not be called upon to rectify the exchanges of the less taxed nations of the World.

*External Debt.* H.C. 142. 1919-21.

*Federal Reserve Act, Amendment to:* Hearings, Senate Banking and Currency Committee. (66: 1, 2, 3), 1919-21.

Export credits repeatedly renewed. The lack of provisions for borrowing by foreigners on long-time market.

*Federal Reserve Bank of New York. Annual Report.* 1915-27.

*Federal Reserve Banks, Brokers Loans*: Hearings, Senate Banking and Currency Committee, (70: 1), 1928.

*Federal Reserve Board. Annual Report.* 1914-28.

\* *Federal Reserve Bulletin.* Monthly. 1914-28.

\* *Federal Reserve Foreign Bank*: Hearings, Senate Banking and Currency Committee, (65: 2), 1918.

Assistant Secretary Crosby: Loans to Allies greater than expenditures in the United States. Difficult to establish exact relationship, because loans cover Sterling exchange offered in New York, part of which is used to pay for American commodities.

*Fiduciary Issues, Maximum, On putting into force recommendations of Cunliffe Committee relating to.* Treasury Minute. December 15, 1919. Cmd. 485, (1919).

*Finance Accounts.* (Great Britain.) 1914-24.

*Finances of the United States.* Yearly Report on State. 1914-25.

Discussion of inflation and government finance, the problem of the depreciated exchanges, the banks and public debts.

*Financial Facilities.* Report of the Committee. Cmd. 9227, (1918).

Do joint stock banks provide adequate facilities?

*Financial Facilities for Trade,* Report of Committee on. Cmd. 8346, (1916).

*Financial Risks Attached to Holding of Trading Stocks.* Report of Committee. Cmd. 9224, (1918).

Anticipates drop in prices and offers relief to holders of stocks.

*Finansstatistisk Undersøkelse.* 1 mai 1919. S.M. (Norway)

Unique study on holdings of foreign assets. Classifies them according to nature of investment, according to currencies in which they are denominated, and according to type of industry holding them.

*Food Prices, Royal Commission on.* First Report. Cmd. 2390, (1924-25).

Great Britain received its foodstuffs from abroad at prices disproportionately low compared with the price of its manufactured goods sold abroad. The increase in prices for the former (base 1913) is 55 per cent, and for the latter 90 per cent.

*Food Supply Manual.* 1917.

*Foreign Commerce and Navigation of the United States.* 1922.

*Foreign Debt Funding Legislation:* Hearings, House Ways and Means Committee, (69: 1), 1926.

Mellon: Advances made during War primarily to pay for supplies purchased in the United States. Advances were made after Armistice to obtain supplies and fulfill contracts.

*France and Her Capacity to Pay.* Memorandum to War Debt Funding Commission, by H. Berenger. 1926.

Improvement in balance of trade in last two years cannot be considered as permanent. Heavy fiscal burdens of France. *France.* Report of Committee of Experts Appointed by Decree Dated May 31, 1926. 1926.

Direct taxation unsuitable in a period of inflation; moreover, the consumers pay the tax. Prepared to meet refusals to renew Treasury bills and the like. Recommends stabilization above the current value of the franc abroad in order to stimulate the necessary movements of capital.

*French Debt Settlements:* Hearings, Senate Committee on Finance (69: 1), 1926.

Method of repaying Africs. Estimates of Europe's unfunded debt to America in the early post-War period are excessive.

*French War Debt.* Agreement for Settlement of War Debt of France to Great Britain. Cmd. 2692, (1926).

Approximately £50 million remain as a non-interest bearing debt against which Great Britain retains in the meanwhile, gold remitted to London by the French.

*French and Yugoslavian Debt Settlements:* Hearings, House Ways and Means Committee (69: 1), 1926.

Classification of expenditures of money advanced by the United States; also advances and transfers by periods.

*Gold Production Committee Report.* Cmd. 1, (1919).

Subsidy would be wasted. Increased costs account for reduced output. Miners' agreement with the Bank of England was equitable.

*Government Assistance to Credit and Business.* Cmd. 7684, (1914-16).

*Government Department Securities.* British Government Securities Held by Several Departments. H.C. Paper. 1914, 1915, 1919.

*High Prices and Profits, Select Committee on.* Special Report and Evidence. H.C. 166, (1919).

Significance of price control. Roberts, Geddes, and McCurdy describe measures taken by Government to control prices as well as measures to be taken in the future.

*Housing Finance*. Interim Report of the Treasury Committee on Housing Finance. Cmd. 444, (1919).

Abnormal monetary conditions in relation to financing of housing.

\* *Imperial Economic Conference*, 1923. Canadian Sessional Papers, 1924, Vol. 7.

Discussion of remedies for high charges for remittances made by Colonial and Dominion banks. It is pointed out that high charges are justified in part by the necessity of maintaining surplus balances in one market or the other. The question of elasticity of note issue is also discussed. The British Treasury suggests issues secured by Sterling.

*Imperial Mineral Resources Bureau*. Mineral Industry of British Empire and Foreign Countries. Statistics 1920-22. Gold. 1925.

*Imperial War Conference*. Proceedings. Canadian Sessional Papers. No. 21. 1917.

*Imports and Exports Regulation Act*. 1919.

Provides against exchange dumping.

\* *Increase of Wealth (War)*, *Select Committee on*. With Proceedings, Evidence, Appendices. H.C. 102, (1920).

Relation of banks to industry. How far is the increase in wealth fictitious? The levy is proposed as an effective method of bringing about deflation, of redeeming the floating debt and of reducing the long term debt while prices are still high.

*India. Accounts and Estimates*. Explanatory Memoranda of Under-Secretary of State for India. 1914-25.

— *Accounts of Government of India for 1913-14*. Memorandum by Secretary of State for India. Cmd. 8034, (1914-16).

— *(Budget) 1926-27*. H.C. 108, (1926).

— *Return of the Budget of the Governor General of India in Council for 1927-28*. H.C. 85, (1927).

Discussion of rate of stabilization.

— *Correspondence*. Between the Government of India and the Secretary of State Laid by Him before the Committee, Cmd. 7060, (1893-94).

Discussion of fiscal burden in relation to the monetary standard.

— *(Currency.) Indian Currency Committee*, 1893. Correspondence between the Government of India and the Secretary of

State, relative to the Currency of India, Cmd. 7060, I, (1893-94).

The former demands a gold standard in order to overcome the losses resulting from a depreciating exchange. The latter anticipates an appreciation of gold.

*India. (Currency.) Further Papers, Correspondence, and Proceedings of the Government of India.* Cmd. 7098, (1893-94).

Indian Government favor a gold standard. Anxious to prevent further fall in the price of silver.

\*———. ——. *Indian Currency Commission*, 1893. (Herschell). Report and Appendices.

Witnesses seem to be equally divided between those who favor a gold standard and those who prefer the continuance of the present system on the grounds that gold would appreciate. Too much weight given to the evidence of Government officials. Contains a valuable series of notices on monetary policies in foreign countries.

\*———. ——. *Correspondence Respecting the Proposals on Currency Made by the Government of India.* Cmd. 8840, (1898).

The Government's version of the history since 1893. Proposes a permanent contraction of the currency by borrowing to cover expenditures abroad.

\*———. ——. *Indian Currency Committee*, 1898. Index and Appendices to the Evidence. Taken before the Committee Appointed to Inquire into Indian Currency. Cmd. 9376, (1899).

Marshall's statistical studies, Waterfield's memorandum on Council bills, memoranda received through the Foreign Office on monetary policies abroad, a Minute on the Evidence before the Committee by Sir J. Westland, and a memorandum by Sues on gold, are all outstanding.

———. ——. *Indian Currency Committee*, 1898. Minutes of Evidence, I. Cd. 9037, (1898).

O'Connor on prices and Lindsay on policy are especially valuable.

———. ——. *Indian Currency Committee*, 1898. Minutes of Evidence, II. Cd. 9222, (1899).

Marshall's and O'Connor's evidence on prices and Sir R. Giffin's evidence on the relation of the fiscal problem and monetary reform are especially important.

———. ——. *Indian Currency Committee*, 1898. Report. Cd. 9390, (1899).

Excellent discussion of the monetary policy since 1893; and recommendations concerning future policy. Good bibliography of early reports on Indian currency.

*India. (Currency.)* Copy of Dispatch of the Secretary of State for India in Council to the Governor General of India in Council Dated July 25, 1899. Cd. 9421, (1899).

Announcement of recommendation of Currency Committee concerning closing of mints, making sovereign legal tender and stabilizing the rupee at rs. 4d.

———. ——. Dispatch Addressed by the Court of Directors to the Governments of Bengal and Madras on the 25th day of April, 1806, dealing with the coinage of India. H.C. 127. 1898.

Gold coins should not be forced into circulation.

———. ——. *Indian Finance and Currency, Royal Commission, 1913.* Interim Report, Cd. 7068, (1914).

Evidence of Abrahams on the nature of the system, of Newmarck on sales of Councils, of Cole on the relation of the Bank of England and the London money market to India's system and Webb on the attitude of India's business interests, are especially valuable.

\* ——. ——. *Indian Finance and Currency, Royal Commission, 1913.* Appendices to Interim Report, I, Cd. 7070, (1914).

Particularly valuable are papers and memoranda presented by L. Abrahams and Newmarck on the central banking controversy 1899-1913, the Paper Currency Reserve and the Gold Standard Reserve and Appendices (1 & 2) on Government balances and sales of Council bills.

\* ——. ——. *Indian Finance and Currency, Royal Commission, 1913.* Final Report of the Commissioners. Cd. 7236, (1914).

Good discussion of gold policy, sales of Council bills, location and magnitude of reserves, and the desirability of a central bank.

———. ——. *Indian Finance and Currency, Royal Commission, 1913.* Evidence, II. Cd. 7069, 7237, (1914).

Evidence of Sir F. Schuster, J. Meston and F. C. Harrison especially interesting. The relation of the India Office to the London money market is discussed, the problem of a central bank for India, gold policy, reserves and Council bill policy.

———. ——. *Indian Finance and Currency, Royal Commission, 1913.* Appendices to the Final Report. Cd. 7238, (1914).

\* ——. ——. *Indian Exchange and Currency Committee, 1919.* Report, Evidence and Appendices. Cmd. 527-29, (1920).

\* ——. ——. *Indian Currency and Finance, Royal Commission, 1926.* Report, Appendices and Evidence. Cmd. 2687, (1926).

\* ——. ——. *Reports on Operations of the Currency Department.* (This title varies.) 1917-27.

Detailed description of Ways and Means operations during the year. Movements of balances between India and London. Currency fluctuations.

— — —. *Depression of Trade and Industry*. Third Report of the Royal Commission, 1886. Appendices B and C. Cmd. 4797, (1886). (This is not a document primarily on India.)

Explanations of recent movements of prices in India by Frewen, Daniell, Palgrave, Mallet. Problem of appreciation of gold and depreciation of silver stated.

\* — — —. *Finance Department*. Reports on the Administration of the Mints of Calcutta and Bombay, 1914-15 to 1924-25.

Valuable for statistics on gold movements, purchases and sales. Transactions with the Bank of England are given.

\* — — —. *Financial Statement and Budget*. 1914-28.

\* — — —. *Gold and Silver Commission*. Second Report, Royal Commission appointed to inquire into the Recent Changes in the Relative Values of the Precious Metals. Minutes of Evidence and Appendices. Cd. 5099, (1887).

— — —. Second Report. Cd. 5248, (1888).

— — —. Final Report. Cd. 5512, (1888).

Explanation of influx of silver into India. Discussion of movements of prices in India and Great Britain and in value of gold and silver.

\* — — —. (*Gold Currency*.) *Resolution and Correspondence*. H.C. 79, (1865).

Controversy between Indian Government and India Office in '50's and '60's as to the introduction of a gold standard.

— — —. *Index Numbers of Indian Prices*, 1861-1926. Department of Commercial Intelligence and Statistics. 1928.

— — —. (*Silver*.) Copy of Papers Received from Government of India on Silver Question. H.C. 120, (1877).

Explanation of failure to adopt gold standard or close mints to silver.

— — —. Copy of Letter from Government of India, Forwarding Reports on Effects of the Fall in the Price of Silver. H.C. 416, (1877).

— — —. Copy of Extracts of Papers from Her Majesty's Representatives Having Reference to the Silver Question. H.C. 208, (1878-79).

— — —. (*Silver Question*.) Copy of Extracts of Papers from Her Majesty's Representatives and Consuls in Foreign Countries.

— — —. (*Sovereigns*.) Correspondence with the Government of India. H.C. 368, (1865).

Government of India demands a change in conditions under which sovereigns are acceptable.

*India. Statistical Abstract of, 1917-18 to 1926-27.* Cmd. 3291, (1928-29).

\* —, *Statistical Tables Relating to Banks in.* 1926-28.

Figures for deposits and cash both in India and outside of India; banking figures for various classes of banks including a division of exchange banks into banks doing considerable business in India and others.

—, *United States Bureau of Foreign and Domestic Commerce, Report on.* 1927.

—, (*Value of Silver.*) Copy or Extracts of a Letter from the Government of India, dated the 13th day of October, 1876, no. 368, and of a resolution by the Government, dated the 22d day of September, 1876, relating to the Depreciation in the Value of the Silver. H.C. 449, (1893).

Proposes an increase in the weight of the rupee. Opposes the closing of the Mints.

*Indian Wheat Committee for 1915 and 1916.* Report. Cmd. 9090, (1918).

*Industrial Conference.* Report of Provisional Joint Commission. Cmd. 139, (1919).

*Industrial Unrest.* Cmd. 8662-69, 8696, (1917-18).

Emphasizes importance of prices and control.

*Industry and Trade.* Balfour Committee.

1. Factors in Industrial and Commercial Efficiency. 1927.

2. Final Report, Cmd. 3282, (1928-29).

*International Monetary Conference (Paris).* Report of the Commissioners Appointed to Represent Her Majesty's Government at the Monetary Conference Held in Paris in August, 1878. Cd. 2196, (1879).

Conference concerned over possibility of scarcity of gold. In 1867 gold standard had been recommended.

—, Copy of Correspondence between Foreign Office, Treasury, Bank of England and India Office. H.C. 449, (1881).

Indian Government would even adopt bimetallism in order to sustain the value of silver. Emphasizes fiscal difficulties.

—, Translation of the Procès-Verbaux. H.C. 409, (1881).

Proposals to help silver by representatives of various countries. Luzzatti points out that countries on silver standard are worse off than those on paper standard.

*Irish Banking Commission.* Final Report, 1926. (Willis Commission).

Ireland cannot free itself from the influence of the London money market.

*Japan. Financial and Economic Annual. 1918-28.*

Estimates resources at the disposal of the Allies as equivalent to the excess of exports over imports in the War period. In recent years has shipped gold in order to strengthen the exchanges.

*Joint Stock Banks (Amalgamation Control) Act. Bill. H.C. 64, (1919).*

*Journal of the Parliaments of the Empire. 1928. Volume 9.*

Discussion of Gold Standard and Reserve Bank Bill. (India).

*League of Nations. Financial Reconstruction of Austria. General Survey and Documents. 1926.*

— *Memorandum on the Balance of Payments. 1910-1923. 2 volumes.*

Compares merchandise exports and imports of important countries from 1913 to 1922. Adjusts figures for fluctuations in the value of the different currencies. Also gives exports and imports by weight. It is apparent that Great Britain's export trade suffered more severely than that of any other large country but Germany. It is generally true that the prices of imports relative to exports were higher in 1919 than in 1913. The explanation in part is the higher cost of freight. However, the United States, Canada and Spain are exceptions. The export position of the United Kingdom was stronger than that of most European countries for the early post-War period. The explanation probably is that the prices of British exports rose more rapidly than of imports.

It is apparent from the trade figures published that the exports (quantities) even of neutral countries were generally below the pre-War level. However, frequently the excess of exports over imports in stable values was appreciably greater than before the War. Hence the problem of payment. Almost all the countries that converted an unfavorable balance of trade into a favorable balance during the War, began to import heavily either in 1919 or 1920; and they generally had large unfavorable balances from 1919 to 1922. They paid for these large imports with balances accumulated during the War; and frequently when balances were not large enough, the exchanges suffered.

*League of Nations. Memorandum on Balance of Payments.* 1911-25. 2 volumes.

Includes a discussion of the balance of payments of most large countries with particular attention to banking and other short-term capital items. The estimates are obtained from official and semi-official figures of the countries concerned.

— . *Memorandum on Central Banks.* 1913, 1918-23.

Percentage of notes issued by Government and central banks. Where notes constitute a small percentage of liabilities, central banks are usually also commercial banks. Declining importance since 1920 of advances on Government securities. In most extra-European countries and the Baltics, relations between Government and banks not close. Bills constitute a declining proportion of foreign assets, although there has been a reaction in last few years. Increased importance of foreign assets.

— . *Memorandum on Currency.* 1913-21.

Price decline more rapid when it set in late. Contraction of currency was moderate (compared to prices) because sales were limited, and hence prices were fictitious. Moreover, notes were withdrawn from effective circulation, not from hoards.

— . *Memorandum on Currency.* 1913-23.

Correlation between movements in prices and notes, and in prices and sight deposits, not close in the years 1920-23. Classification as between sight and time deposits is not always consistent. The decline of prices was of varying magnitude and prices reached a minimum over a period of two years for different countries. On the whole, 1922 was a year of stable prices for most countries except countries in Central Europe.

Points out that inclusion of gold, not physically held abroad, with gold reserves, is not desirable.

— . *Memorandum on Currency and Central Banks.* 1913-24.

Price decline delayed in South America. General rise in 1924 except in Switzerland and Australia. Compares maximum level in 1923-24 with previous low level in the post-War period.

— . *Memorandum on Currency and Central Banks.* 1913-25. 2 volumes.

Comparative price levels (base 1914) of important countries of world. Gold reserve against notes; exchange rates. Currencies of most European neutrals and Egypt and Australia follow British Sterling closely, 1921-25.

— . *Memorandum on Production.* 1920.

*League of Nations. Memorandum on Public Finance. 1921.*

The effect of a reduction of prices on public expenditures; relation of expenditures on public debt to all expenditures; classification of all expenditures.

— *Memorandum on Public Finance. 1922.*

Foreign bank credits of France are given in detail, 1920-23. Advances of 128,000,000 pounds to Great Britain were in large part gold transferred to Great Britain.

— *Memorandum on Public Finance. 1922-26.*

Reduction of floating debt; public debts in 1913 and 1926 in stable purchasing power; percentage of national incomes taken by taxation.

— *Provisional Economic and Finance Committee. Note on Plan for an International Clearing House.*

Shipments of gold to purchase foreign bills in order to prevent an increase in the Bank rate abroad.

*Liberty Bond Bill, Fifth: Hearings, House Ways and Means Committee, (65: 3), 1919.*

Has the Treasury the authority to advance money to Europe for purposes other than the prosecution of the War? Leffingwell says that if we accept British gold, inflation will spread to the United States. We are lending to Great Britain only the equivalent of Sterling that the United States will need later.

\* *Loans to Foreign Governments: Document no. 86. Senate Judiciary Committee, (67: 2), 1921.*

Conditions under which Allies were allowed to use American credits. Exchange of dollars in the United States for Sterling received in Great Britain and francs received in France. Opposition to the use of dollars for expenditures outside of the United States.

*London Conference on Reparations. Minutes, August, 1922. Cmd. 2258, (1924).*

— *Proceedings, July and August, 1924. Miscellaneous no. 17. Cmd. 2270, (1924).*

\* *Manual of Emergency Legislation with 4 Supplements. 1914-17. Edited by A. Pulling.*

*Manual of Emergency Legislation. Financial Edition. 1915. Edited by A. Pulling.*

*Meat Supplies for United Kingdom. Report of Later Departmental Committee Board of Trade. Cmd. 456, (1919).*

*Ministry of Food.* Financial Report with Appropriations Account, Trading Account and Balance Sheet for the Financial Year ending March 31, 1918. Cmd. 191, (1919).

*Ministry of Shipping.* Appropriation Account. 1918-19. H.C. 60, (1920).

\* *Mint Reports, United States.* 1914-27.

Significant notes from all countries on production of metals, monetary laws, and the like. Gold movements for important countries. Gold received at the United States Mints.

\* *National Expenditures, Select Committee on.* See especially Reports in H.C. Papers in 1917, 1918, 1919, 1920; Cmd. 1581, 1582, 1589, (1922).

Causes of high prices, absence of Treasury control of expenditures, possible economies in expenditures in the post-War period, the activities of the State as a trader are important subjects discussed.

*National Monetary Commission.* Interviews. 1913.

Policy of Bank of England before the War.

*Norges betalingsbalanse overfor Utlandet i 1923 og 1924.* S.M. 1925.

*Overseas Trade Reports.* (1) Argentina. September, 1921.

No inflation in 1920-21, but exchanges depreciated.

(2) Australia. October, 1922.

(3) Austria. May, 1921.

Many banks have debts outstanding (particularly to the United Kingdom) in excess of their capital.

(4) Brazil. October, 1921.

Domination of foreign banks. Exchange history. Excessive imports.

(5) Bulgaria. February, 1924.

(6) and (7) Czecho-Slovakia. March, 1922; February, 1924. Price adjustment in period of depression is too slow.

(8) Egypt. April, 1924.

(9) Finland. March, 1924.

Large advances from London to Finnish banks.

(10) France. June, 1924.

(11) Germany. April, 1924.

(12) Greece. July, 1923.

Drachma rose from 420 per pound sterling to 120 in a period of 2½ months; but prices did not decline.

(13) Greece. 1923-24.

Government enact that the Bank is to pay its gold debts

in drachmas at their normal value, and the Government are to receive the profits thus made. (Later this decree was modified.)

- (14) Hungary. 1925.
- (15) Prospects of British Trade in India. 1919-21.
- (16) Conditions and Prospects of British Trade in India to September, 1922.
- (17) India. 1924-25.
- (18) Japan. June, 1922.  
Private banks lost their foreign assets, and were forced to borrow from the Bank of Japan.
- (19) Dominion of New Zealand. 1926.
- (20) Roumania. April, 1922.  
British have large deposits in Roumania as a result of large exports. The Minister of Finance has announced the eventual restoration of the lei although it is now at 1/20 to 1/25 of its 1913 value.
- (21) South Africa. July, 1922.  
The price of gold has fallen from 128s. to 93s.; the reduction in costs has been at a slower rate.
- (22) South Africa. July, 1923.  
Apparently deflation has advanced further in South Africa than in Great Britain, for South African exchanges are at a premium.
- (23) Sweden. March, 1923.  
Riksbank refuses to abide by petition of Swedish Banking Union to allow free imports of gold. Sweden is unwilling to restore the gold standard before Great Britain, as it would be the target of large speculative manœuvres. Deflation much more drastic than in Great Britain. Retail prices declined 45 per cent in Sweden, and but 20 per cent in Great Britain. Large purchases of devisen by the Riksbank in the last months of 1922 in order to prevent the krone from rising above parity with the dollar.
- (24) Sweden. January, 1925.  
Germans have accumulated substantial balances in Swedish banks in the last three years. Sweden raised the price of gold above the New York price because it had suffered large losses.

*Pittman Act, Bills to Amend: Hearings, Banking and Currency Committee.* (66: 2), 1919.

*Poland.* Reports of Experts Headed by Dr. E. Kemmerer. 1926.

Favors stabilization at current rate of zloty. Prices have been adjusted. Stabilization at a high value will put a strain on cash resources of the country.

*Postponement of Payments Act*, 1914, Copies, Cmd. 7633, (1914-16).

*Present and Pre-War Expenditure*. Memorandum. Cmd. 802, (1920).

*Pre-War Contracts*. Reports of Committee Appointed by Board of Trade to Consider Matter. Cmd. 8975, (1918).

*Price Control*. Order of Board of Trade under Defense of the Realm Act. Memorandum of Royal Commission on Sugar Supply. Cmd. 8395, (1916).

— Order of Board of Trade under Defense of the Realm Act. Relating to Manufacturing Flour, Bread, and the Price of Milk. Cmd. 8400, (1916).

*Prices, Departmental Committee on*. Interim Report on Committee appointed to investigate Increase of Prices of Commodities (Meat, Milk and Bacon). Cmd. 8358, (1916).

Also Second and Third Reports. Cmd. 8483, (1917-18).

In general the Departmental Committees of the Board of Trade emphasized the scarcity of supplies.

*Private aktienbanker i 1925*. S.M. 1926.

Deposits in Norwegian banks belonging to foreigners. Details of all foreign assets and liabilities of banks.

*Privileges extended to banks not banking with the Bank of England*. Treasury Minute. August 20, 1914.

*Production and Distribution of Milk*. Third Interim Report of Committee. Cmd. 315, (1919).

*Production, Price Movements, and Currency Expansion*. Board of Trade. Cmd. 434, (1919). Cmd. 734, (1920).

*Protection of the Gold Reserves: Hearings*, House Ways and Means Committee, (66:2), 1920.

Credit policy in war times does not depend on supplies of gold. (Straus Committee) Cost of mining has increased 100 per cent notwithstanding actual (though concealed) bounties.

*Public Accounts*. Canadian Sessional Papers, no. 2. 1916-19.

Gives the details of financial relations of Dominions and British Government; also the details of expenditures.

\* —. Reports of Committee. 1914-24.

Exchanges, prices, fiscal policy, relations (financial) with other countries, methods of purchasing commodities, methods of accounting, are discussed.

*Public Accounts Committee*. XVII. Epitome of Reports from the Committee of Public Accounts. 1857-1925. 1926.

*Public Social Services*. Total Expenditures 1891, 1901, 1911, 1921, 1926, 1927. H.C. 108, (1927).

*Reconstruction Committee*. Report of the Sub-Committee of the Agricultural Policy. Cmd. 9079. 1918.

——. Chemical Trade. Cmd. 8882, (1917-18).

——. Electric Power Supply. Cmd. 8880, (1917-18).

\* *Recueil des Documents Officiels*. Egypt. Notes by the Financial Advisor. 1915-18.

Can estimate Egypt's financial gains from the figures for the balance of trade and military expenditures, or from the increase in notes and deposits.

*Réforme Monétaire en Égypte*, La. 1885.

Seasonal needs satisfied by imports and exports of gold.

*Refunding of Obligations of Foreign Governments*: Hearings, Senate Banking and Currency Committee, (66:3), 1921.

*Refunding of Obligations of Foreign Governments*. Hearings, Senate Finance Committee. (67:4), 1923, Parts 1, 2, 4.

Letter of Chancellor of Exchequer to Assistant Secretary of the Treasury proposing cancellation.

*Reichsbank, Reports of Commissioner of*, 1924-28. (Two each year.)

Lucid summary of monetary policy and history. Relation to London and New York. Redemption of devisen in currency notes not obligatory. Control of the Reichsbank. Removal of control of dollar exchange gives Reichsbank more freedom in credit policy.

*Relief of European Populations*: Hearings, House Ways and Means Committee. (66:2), 1920.

Secretary Glass: We have too much gold. Hence, we should postpone acceptance of payments on debt account.

*Reparation Agent*. Reports, 1926-28.

Relative movement of prices in United Kingdom, United States, and Germany. Reichsbank gradually adopts a more liberal lending policy. Availability of foreign funds jeopardizes control.

\* *Reparations and Inter-Allied Debt*. Inter-Allied Conference. State Papers. Cmd. 1812, (1923).

Germany requires foreign help in stabilizing. Discussion of British-French debt.

*Reparation Payments*. Correspondence with Allied Governments. State Papers, Cmd. 1943, (1923).

*Schweizerischen Bankwesen im Jahre 1915-24*. Yearly in the J.S.S. (Published by the National Bank.)

Excellent analysis of banking figures and movements of foreign assets and liabilities. Increase in bills during the War attributed to necessity of financing allied import trade and increased holdings of Treasury bills.

*Silver Purchases under Pittman Act*: Hearings, Banking and Currency Committee. (67:4 and 68:1), 1923, 1924.

*South Africa. Bank Notes, Act to Provide for the Issue of*. No. 7, 1917.

— *Cost of Living Commission*. General Report. U.G. 55-'18. 1918.

An investigation of the cost of living during the War, and suggestions for bringing costs down.

— *Currency and Banking Act*, 1920. Act to Amend. No. 22, 1923.

— *Currency Conference*. Report, held October, 1921. U.G. 9-'22.

— *Economic and Wage Commission*. Report. 1925.

Points out importance of advance in mining technique since 1921. The reduction in costs of mining gold have made it possible to work 360,000,000 tons profitably as compared to 225,000,000 tons at 1921 costs.

\* — *Embargo on Export of Specie, Select Committee on*. Proceedings, Report, Evidence. 1920.

Gold leakage. Refusal of banks to finance export trade. Committee does not recommend the creation of currency notes on basis of British Treasury bills. Pressure to operate with smaller reserves. The desirability of a central bank.

— *Gold Conference*. Summarized Report of the Proceedings held October 22, 1919. U.G. 18-'20. 1920.

— *House of Assembly Debates*. 1914-15, 1924-28. (Unfortunately the debates were not published during the larger part of the War. The Journal of the Institute of Bankers in South Africa occasionally summarized financial debates.)

— *Low Grade Mines Commission*. Interim Report. 1919. Discussion of higher costs of mining.

— *Low Grade Mines Commission*. Final Report. 1920.

Explanation of increased cost of gold mining. Attempt to obtain part of gain made by Indian Government through sales of gold in open market. Not advantageous to sell gold elsewhere than in London.

— *Mines and Industries, Department of*. Annual Reports of Secretary of Mines and Government Mining Engineer. 1918-25.

Estimates of future of gold mining. Excellent statistics on costs, profits, expenditures for wages, materials, and the like.

*South Africa. Official Year Book.* 1917 to 1927.

The future of mining in South Africa depends on profitable-ness of deep mining. Profits in gold mining. Activities of Reserve Bank.

———. *Public Accounts.* Select Committee. 1914-20.

\* ———. *Resumption of Gold Payments by the Union of South Africa.* Report, Appendices, and Evidence. 1925.

Proposes to tie up South African currency with gold because its value is not subject to manipulation. South African price level is lower than any other; hence further deflation is not necessary.

*Stabilization of Purchasing Power of Money:* Hearings, House Banking and Currency Committee. (67:2), 1922, (68:1), 1925.

*Standard Silver Dollar:* Hearings, House Committee on Coinage, Weights and Measures, (66:2), 1920.

*Statistical Abstract British Overseas Dominions.* Board of Trade. 1911-13, 1922-25. Cmd. 3198, (1928-29).

*Statistical Abstract of the United Kingdom.* 1911-25. Cmd. 2849.

Production figures. Area under cultivation and size of crops. Exports and imports by values and quantities; trade relations with important countries.

*Status de la Banque Nationale de l'Égypte.* 1920.

Requirement of reserve of 50 per cent of gold apparently was not changed.

*Strong Bill. Stabilization:* Hearings, House Banking and Currency Committee, (69:1), 1926-27, Two Parts; (70:1), 1928.

Extent of control of prices by the Federal Reserve system. Coöperation with Great Britain in the restoration of its gold standard. Legality of credit to Bank of England.

*Sugar Purchases.* Treasury Minutes as to Financing of Sugar Purchases Made Abroad. Cmd. 8645, 8806, (1917-18).

———. Treasury Minute. January 1, 1919. Cmd. 38, (1919).

Method of financing.

*Sugar Supply.* First Report with Statement as to operation of Royal Commission December, 1916. Cmd. 8728, (1917-18).

*Sugar Supply, Royal Commission on.* Cmd. 447, (1919).

*Suisse Economique, La.* Département Fédéral de l'Économie Publique. (1922)

Repurchase of Swiss securities. Large losses on account of purchases of foreign securities and on account of retention of deposits in foreign banks.

*Supplementary Bond Legislation: Hearings, House Ways and Means Committee, (65:2), 1918.*

Leffingwell: Neutral exchanges were a problem even before the embargo on export of gold was introduced. Gives the measures taken to support American exchange in neutral markets.

*Surplus Government Property.* Cmd. 850, (1920).

*Swiss Credits.* Treasury Minute. April 17, 1918. Cmd. 9049.

Arrangement with several large London banks to procure credits of 100,000,000 francs from Switzerland.

*Telling av Landets Gjeld til og Tilgødehavender i Utlandet* pr. 31 Desember 1925. S.M. 1926.

Short term balances and debts, 1924-25.

— 1 Januar 1927. S.M. 1927.

Foreign assets and liabilities of Norwegian banks, 1919-1927. Classifies them according to currency in which contract was made.

*Total Expenditures under Certain Acts of Parliament.* H.C. 160, (1920).

*Trade and Commerce of 1919, Report of Deputy Minister of.* Canadian Sessional Papers. 1921.

Gives the official figures for gold movements of Canada during the War.

*Trade Facilities Act.* 1921.

Statement by the Treasury of guarantees up to September 30, 1922.

\* *Trade of the United Kingdom with Foreign Countries and British Possessions,* Annual Statement of. 1914-19.

\* *Trading Accounts and Balance Sheets. Operations, etc.* See especially H.C. 116, (1918-19). Cmd. 1062, (1920). Cmd. 1368, (1921). H.C. 126, (1922). H.C. 92, (1923). Also see the Finance Votes 1923-25. (Trading Accounts and Votes of Credit—cash transactions.)

Detailed figures on trading operations, relations to other departments, supplies of commodities held, ability to sell large supplies advantageously in periods of declining prices, price policies of the Government, and the like.

\* *Treasury Assistance to Banks and Discount Houses.* H.C. 457, (1914).

*Treasury Control of War Expenditure.* H.C. 325, 1915.

*Vote of Credit.* Appropriation Account. 1917-18. Naval and Military Operations and Other Expenditures Arising out of the War, H.C. 97, (1919).

Details of all votes of credit for period. Comprehensive statements of purchases of food, and the like. Methods of lending to Allies.

*Vote of Credit*. H.C. 416. (1914).

Purpose of first vote.

——. Cash Transactions. Cmd. 1367, (1921); Cmd. 1714, (1922).

——. Treasury Minute. August 20, 1914. Cmd. 7836, (1914-16).

——. ——. August 20, 1918. H.C. 458.

Explains the origin of the system.

\* *War Cabinet*. Report, 1917. Cmd. 9005, (1918).

Imports restricted to commodities necessary for the prosecution of the War. Extensive control by Food Ministry.

——. Report, 1918. Cmd. 325, (1919).

United States obtained a large part of all the supplies needed for its army in Europe from Great Britain, which was a very important cause of the scarcity in Great Britain. Exchange problem was still acute; leather imports had to be restricted. Note extent of economies—passenger train service reduced to 60 per cent of pre-War service.

*War Charges*. March 31, 1915. H.C. 323, (1914-16).

War charges and how they were met.

*War Finance Corporation*: Hearings, House Banking and Currency Committee. (66:3, 67:1 and 2), 1920, 1921, 1922; Senate Banking and Currency Committee, (70:1), 1928.

War Finance Corporation suspended activities when it had advanced but \$46,000,000 although it had the right to advance one billion. Advances required endorsement of American banks.

——. Hearings. House Ways and Means Committee. (65:2) 1918.

*War Industries Board*. Department of Commerce. W. C. Mitchell. History of Prices during the War. 1919.

Control of prices effective in 1917-18, and hence absence of rise in 1917-18.

——. Department of Commerce. W. C. Mitchell. International Price Comparisons. 1919.

*War Office*. Statistics of the Military Efforts of the British Empire during the Great War. 1914-20.

Shipments of stores to France for the British Army. Numbers enlisted, supplies, manufacture of munitions, etc.

*War Trade Board*. Research Bureau. Brazil. By A. H. Redfield. 1918.

- War Trade Board*. Research Bureau. Economic Aspects of Commerce and Industry of the Netherlands. By B. F. Moore. 1918.
- . Economic Position of Argentina during the War. 1918.  
Movements of gold.
- . Export Trade Policy of the United Kingdom. 1918.  
Allies had received larger part of American and British exports. After the United States entered the War, its exports to European Allies declined.
- Wheat Supplies, Royal Commission on*. First Report. Cmd. 1544, (1921).  
Purchases abroad. Operation of bread subsidy. Financial relations.
- . Second Report. Cmd. 2462, (1924-25).
- Wirtschaft des Auslandes*, 1900-27. Einzelschriften zur Statistik des Deutschen Reichs. No. 5. 1928.

## SECTION III

## BOOKS AND PERIODICAL ARTICLES

- “Abgelegener Winkel der Währungsfrage,” *D.B.* 1919.  
A discussion of Australia’s dissatisfaction with its monetary system.
- ADDIS, C. S., “Bank Reserves and Depreciation,” *E.J.* 1917.
- \*AFTALION, A., *Monnaie, Prix et Change*. 1927.  
Points out mechanical limits to increase in velocity of circulation; exchanges or prices have been the causal factor of increase of money. Contagion of price movements less strong after 1922; broad definition of speculation.
- ALLEN, J. E., “Some Changes in the Distribution of the National Income During the War,” *R.S.J.* 1920.
- AMBEDKAR, B. R., *The Problem of the Rupee*. 1923.  
Extremely critical exposition of India’s monetary policies. Critical of the reforms of 1893-98, of the failure to introduce a gold standard, and of the policy since 1914. Prefers a limitation of rupees.
- ANDERSON, B. M., Jr., and HEPBURN, A. B., “Gold and Rediscount Policy of the Federal Reserve Banks,” *C.E.B.* 1921.  
Surplus Gold? Normal for gold to be in circulation.

ANDERSON, B. M., Jr., and HEPBURN, A. B., "Gold Standard versus a Managed Currency," *C.E.B.* March, 1925.

Great Britain's elasticity before the War derived from gold movements.

— "Some Major Forces in the International Money Market," *C.E.B.* 1927.

American purchase of French gold in London. Criticism of Gold Exchange Standard.

— "Three and a Half Billion Dollar Floating Debt of Europe to Private Creditors in America," *C.E.B.* 1920.

Depreciation of Sterling caused by financing of Europe by

Great Britain. London's attempt to collect debts unsuccessful. ANGELL, J. W., "Equilibrium in International Trade. The United States, 1919-1926," *Q.J.E.* 1928.

Limitations on excess of debits are fixed by willingness of banks to build up large foreign balances. Countries with currency not in demand must build up large foreign balances.

— *Theory of International Prices.* 1926.

Severe criticism of Bullion Report. Puts emphasis on balance of payments. Points out confusion between convertible and inconvertible paper money.

ARNDT, E. H. D., *Banking and Currency Development in South Africa* (1652-1927).

ARNOLD, S., "A Capital Levy," *E.J.* 1918.

Payments can be made without a loss of liquid capital.

ATKINSON, F. J., "Rupee Prices in India, 1868-1901," *R.S.J.* 1903.

— "Rupee Prices in India, 1870-1908," *R.S.J.* 1909.

High prices in relation to sales of Council bills, balance of payments, crop conditions, gold and silver movements. Puts main emphasis on redundancy.

*Barclay's Monthly Review*, 1923-29.

BARRÉ, M., "La Circulation Fiduciaire," *R.E.P.* 1917.

When War ends, currency notes in circulation will be reduced, and hence danger of large issues will be reduced.

BASTER, A. S. J., *The Imperial Banks.* 1929.

BAUDIN, L., "Les Causes Profondes du Malaise Britannique d'après les Banquiers Anglais," *R.E.P.* 1926.

Adequacy of gold supplies?

— "L'Or du Transvaal," *R.E.P.* 1922.

Inflation in South Africa the result of embargo on gold exports. Loss of premium would be disadvantageous to miners.

BAUDIN, L., "L'Or du Transvaal," *R.E.P.* 1926.

Description of improvements in mining technique.

BEACH, W. E., *International Gold Movements in Relation to Business Cycles*. 1929. (Unpublished Doctorate thesis deposited in Harvard College Library.)

Gold movements internally and externally. Mint, customs, and Bank of England figures on gold. Discusses discrepancies. Internal drains are taken in part from till money.

BELL, H., "The Bank of England and the Big Five," *Manchester Guardian Supplement*. 1922.

BENDIXEN, F., *Währungs politik und Geldtheorie im Lichte des Weltkrieges*. 1919.

Great Britain cannot restore the pre-War price level. Hence devaluation is necessary. High prices not caused by great demand for goods. Internal value of money does not determine external value. People buy exchange to make payments.

BENFREY, F., *Die Neuere Entwicklung des Deutschen Auslandsbankwesens*, 1914-25. 1925.

BERNATZKY, M. V., "Zur Zusammenbruch der Russischen Währung," *S.V.S.*

Gold shipments to Great Britain.

BERNHARD, G., "Die Politik der Reichsbank im Kriege," *A.S.S.* 1915 and 1916.

Reichsbank has little control in normal times. Approves of the German gold policy.

BEVERIDGE, SIR WILLIAM, *British Food Control*. 1928.

Contrast of the policies of Lord Devonport and Lord Rhondda. Control of prices without control of supplies cannot be successful. Control of all commodities and at every stage the necessary result of the introduction of control.

BICKERDIKE, C. F., "The Instability of Foreign Exchanges," *E.J.* 1920.

As long as people anticipate further depreciation, exchanges will remain unstable.

— "Internal and External Purchasing Power of Paper Money," *E.J.* 1922.

Under a paper standard, the expense of moving commodities is analogous to the expense of moving gold under a gold standard.

— "On Paying for War by Loans," *E.J.* 1915.

An early presentation of the argument that the fiscal system should be managed with a view to obtaining the maximum supplies of commodities for the government.

BIRCK, L. V., *Scourge of Europe*. 1926.

Discussion of many monetary problems, especially from Danish viewpoint. Prefers devaluation to deflation. Banks responsible for inflation after 1918.

BIRKETT, M. S., "Iron and Steel Trades during the War," *R.S.J.* 1920.

Profits reduced by the introduction of control.

BLAKE, W., "Observations on Principles which Regulate the Course of Exchange," *McCulloch's Tracts*. 1810.

As against Ricardo, Blake maintains that gold is exported because of the difference in value between bullion and coin. Convertibility is necessary to prevent exportation.

BONAR, J., "Mint and Precious Metals in Canada," *R.S.J.* 1921.

Statistics relating to gold received for Imperial Government and for the Bank of England in Canada.

BONN, M. J., *Stabilization of the Mark*. 1922.

A reduction of the currency would not prevent further depreciation. Points out the difficulty of setting a maximum value for a currency that is to be stabilized.

\*BONNET, G. E., *Les Expériences Monétaires Contemporaines*. 1926.

Improvement of British exchanges from 1921 to 1924 was the result of capital movements. Heavy taxation is inflationary. Reduction of notes is not part of a program of deflation, but the result of a decreased demand for notes. Banks have become bankers for governments. They convert deposits of public into government securities.

— *La Politique Anglaise d'Assainissement Monétaire*. 1923.

British monetary policy is moulded by the desire to keep exchanges above their natural level. Currency notes were an effective means for financing the War with a minimum of effort. The process of deflation was hampered by the increase of private borrowing.

— "Un Système de Stabilisation Monétaire: le Régime Égyptien," *R.E.P.* 1924.

Marked deflation in Egypt not the result of monetary policy. Large hoards of notes in recent years.

BORDEWIJK, H. W. C., "De Toekomst Van Het Goud, by C. A. V. Stuart," *D.E.* 1918.

Notes issued on the security of incoming gold have not all been hoarded.

BORTKIEWICZ, L. von, "Die Ursachen einer Potenzierten Wirkung des Vermehrten Geldumlaufs auf das Preisniveau," *S.V.S.*

Lack of confidence directly affects prices which in turn

affect the velocity of circulation. Deflation not the opposite of inflation. Transfers to savings account are made interminably.

BOWLEY, A. L., "The Measurement of Changes in the Cost of Living," *R.S.J.* 1919.

Study of prices and of consumers' budgets for 1917 and 1918. Discussion of the problems of diets and calories.

--- *Wages and Prices in the United Kingdom, 1914-20.* 1921.  
Workers transfer to higher paying occupations.

BOYD, W., *Brief Observations on Late Letter Addressed to Right Hon. W. Pitt.* 1801.

BRAND, R. H., *War and National Finance.* 1921.

Describes financial conditions prevailing at outbreak of War. Protests against the activities of foreign banks.

BRESCIANI, TURRONI C., *Oscillazioni dello Sconto e dei Prezzi.* 1916.

*British Association for the Advancement of Science, Labour, Finance and the War*, edited by A. W. Kirkaldy. 1917.

Effects of foreign borrowing, of internal loans and of many other types of transactions on British banking figures.

British Association. *Report on Monetary Policy.* 1921.

\* BROWN, W. A., JR., *England and the New Gold Standard, 1919-1926.* 1929.

Discussion of gold movements and the gold standard of the post-War period. Discussion of variables on which the gain from the premium on South African gold depended. Note especially the relation of the price of gold to the over- and under-valuation of Sterling in dollars. India's purchases of gold depended in large part on the movement of Sterling-dollar and Sterling-rupee exchange.

BRUINS, G. W. G., "De Goudkwestie (C. A. V. Stuart, 1918)," *E.S.B.* August 7, 1918.

Bruins takes the metallist position as against Stuart. Would rather accept gold than give more credits.

--- "De Goudpolitiek des Nederlandsche Bank," *E.S.B.* June 26, 1918.

In 1917, the operations of central banks reached a minimum; but conditions changed in the next 6 months. Large demands for central bank credit. Sweden now appeals for gold. Sweden's policy was not expedient.

--- "Goud, Crediet en Distributiekosten," *E.S.B.* November 28, 1917.

Export credits of the Netherlands as large as imports of

gold. An important cause of inflation. Suggestion that governments pay the cost of sterilizing excessive gold.

BRUNYATE, SIR J. B., "Indian Currency Committee," *E.J.* 1926.

Concise summary of more important recommendations of Young Committee.

BUFF, S., "Die Auswärtigen Wechselkurse im Kriege," *A.S.S.* 1916-1917. (43)

Quality versus quantity of notes. Discount rates of little significance for the movement of balances, for the public hesitates to transfer balances on account of the fluctuating exchanges.

BULKLEY, M. E., *Bibliographical Survey of Contemporary Sources for the Economic and Social History of the War.* 1922. (United Kingdom.)

Very useful compilation although the financial items are neither complete nor particularly well selected.

CABIATI, A., *Il Ritorno dell' Oro.* 1926.

"Call Loans in N. Y.," *J. C. B.* October, 1916.

\* CANNAN, E., *An Economist's Protest.* 1927.

— "Industrial Unrest," *E. J.* 1917.

Increased resources at the disposal of working classes. Hence increased prices. Competitive prices preferable to controlled prices. Consumption might thus have been further reduced.

— "Limitation of Currency or Credit?" *E. J.* 1924.

Notes issued according to fiscal rather than trade needs. Contract notes by introducing a vigorous program of taxation. No danger in floating debt.

— *Money*, 5th ed. rev. 1926.

Production increased during the War.

— *Paper Pound of 1797-1821.* 1919.

Lag in the movement of internal prices; confidence in Bank of England note; weakness of human direction. Accumulation of gold purchased at a premium is condemned by Cannan.

— "Professor Cassel on Money and Foreign Exchanges," *E. J.* 1921.

Central banks cannot bring about stabilization. The influence of the government prevents the consummation of an adequate central banking policy.

— "Recent Memoirs on Currency Policy," *E. J.* 1922.

Ten years are a short period in monetary history. A dis-

cussion of the advances to the Government by the Bank of England during the War.

\* CANNAN, E., "Report on Food Prices," *E. J.*, 1916.

Condemns maximum prices and rationing. The consumption of the wealthy is of little importance.

— "Reports on National Expenditure," *E. J.* 1918.

Condemns system of low prices supplemented by heavy excess profits duty.

— "South African Currency," *E. J.* 1920.

\* CASSEL, G., *Money and Foreign Exchange after 1914.* 1922.

The government responsible for low money rates. Inflation is not a justification of deflation. Heavy taxes are paid by borrowing at the banks. One of objects of central bank policy is to stabilize prices.

— "Riksbanken och Dytriden," *E. T.* 1918.

Riksbank has followed the author's advice and made the Swedish currency system independent of foreign systems.

— *The World's Monetary Problems.* 1921.

Large floating debt accounts for the depreciation of the exchanges below the level corresponding to relative price levels. Now proposes deflation for Great Britain. Banks ought to lend less than savings deposited with them and hoard part of the money deposited with them. Chaos in wholesale prices; hence no criterion of the general price level.

*Cenni Statistici.* 1918.

Adequate supplies of short term money available on the Italian money market even in 1918. (Contrasts conditions in other countries.)

CHIABLANI, H. L., *Indian Currency and Exchange.* 1925.

Critical of Indian monetary policy.

CHANDLER, H. A. E., "British and American Money Market," *J. C. B.* 1924.

CHAPMAN, S. J., and KEMP, D., "The War and the Textile Industries," *R. S. J.* 1915.

Credit and exchange disturbances in the early months of the War.

CLAY, H., *The Post-War Unemployment Problem.* 1929.

CLEGG, W. H., "Central Banking in South Africa," *E. J.* 1929.

COHN, A., "Besteuerung und Geldentwertung," *S. V. S.* 1925.  
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Fiscal measures taken in an attempt to keep up with inflation.

— "Verhandlung über Theoretische und Ökonomische-Technische Seite des Währungsproblems," *S. V. S.* 1925. (170)

COHN, E., "Die Wirtschaftlichen Verhältnisse Dänemarks unter dem Einfluss des Krieges." *J.N.S.* 1916. (107)

Depreciation of Danish exchanges in early months of War caused by refusal of Paris and London to renew short term credit.

— "Økonomiske Oversigter Danmark," *N. T.* 1914-1917.

Banking figures. Exchanges strengthened early in War by borrowing from France and Great Britain.

COLER, F. H., *A State Trading Adventure.*

Discussion of food policies.

\* COPLAND, D. B., "Australian Banking and Exchange," *E. R.* 1925.

Close correspondence between excess of deposits over advances and magnitude of London balances. Authorities in recent years have confused expansion of notes resulting from large exports, with inflation.

— "The Australian Problem," *E. J.* 1930.

— "The Commonwealth Bank of Australia," *E. J.* 1925.

Bank has reversed policy of contraction of Notes Board.

\* — *Credit and Currency Control.* 1930.

— "Currency Inflation and Price Movements in Australia," *E. J.* 1920.

Orthodox statement of quantity theory in relation to Australian experiences.

\* — *Monetary Policy and Its Application to Australia.* 1926.

Advantage of pre-War system was corrective influence of gold. The importance of central banks is increased by the adoption of the gold exchange standard. Recent attempts to cooperate with England by accumulating balances instead of withdrawing gold.

— "Notes on Australian Exchange," *E. J.* 1925.

Bankers prepared to limit accommodation rather than modify exchange rates. Commonwealth Bank reduces selling and buying rate for T. T. in order to discourage gold movements.

CRUMP, N., "Interrelation and Distribution of Prices," *R. S. J.* 1929.

Standard deviation of prices is greater than before the War. Stabilization is fictitious.

— "Review of Recent Foreign Exchange Fluctuations," *R. S. J.* 1921.

Hawtrey points out that the Purchasing Power Parity doctrine provides a checking process.

- DALBERG, R., *Finanz-Gesundung aus Währungsnot*. 1920.  
Deviations from purchasing power parity. Emphasizes control of prices.
- DANIELS, G. W., and JEWKES, J., "Crises in Lancashire Cotton Industry," *E. J.* 1927.  
Exports of unfinished goods suffer. Increasing competition.
- DARWIN, L., "Stability of Gold and Silver Prices," *R. S. J.* 1899.  
Argues that gold prices of Indian goods as well as silver prices should be considered. If conditions that cause British and Indian index numbers to move harmoniously had a decisive effect, we should expect to find Indian and British index numbers under same standard fluctuate in close agreement. But this does not happen.
- DAVIDSON, D., "Guldet och Penningväsendet," *E. T.* 1915.  
Demonetization of gold would not be disastrous for Great Britain. It could still use its gold in payment of debts.
- "Kriget och England's Penning och Bankväsen," *E.T.* 1914.
- DAWSON, W. H. (Edited by), *After-War Problems*. 1917.
- DECAMPS, J., *Les Changes Étrangers*. 1922.  
"Depreciation of British Home Investments," *E. J.* 1917.
- DICKINSON, SIR A. L., "Publicity in Industrial Accounts," *R. S. J.* 1924.  
Banks—allowance for bad debts?
- "Die Englischen Aktienbanker," *D. V.* March 4, 1927.  
Banks have lost several millions through bad debts. But advances are still above traditional level.
- DIEHL, K., *Über Fragen des Geldwesens und der Valuta*. 1918.  
Emphasizes quality as against quantity of currency.
- "Discussion on Monetary Reform," *E. J.* 1924.
- "Discussion on National Debt." Royal Economic Society. Meeting May, 1925. *E. J.* 1925.  
Question of rate of repayment is discussed.
- DORP, E. C. Van, "Bankbiljetten-Circulatie en Goudvooraad," *D. E.* January, 1916. Also see Van Dorp.  
Small countries cannot pursue an independent exchange policy. Also see Van Dorp.
- DULLES, E. L., *French Franc 1914-1928*. 1929.
- DYASON, E. C., "Gold Marketing," *E. R.* 1928.  
Pressure of gold producers to remove embargo on gold in 1919. Successful sales 1919-24. Australian producers received more than price of gold in London on account of appreciation of exchanges.

ECKHARDT, H. M. P., "Stock Exchange Loans," *J.C.B.* 1915.

EDGEWORTH, F. Y., *Currency and Finance in Time of War.* 1918.

EDIE, L., "Rate of Increase of Monetary Gold Stock of the United States," *J.P.E.* 1928.

Accumulations of gold of the United States at a less rapid rate than before the War.

EHEBERG, K. T. VON, *Die Kriegsfinanzen.* 1917.

The rate on British Treasury bills is dependent on the conditions of the money market, on the magnitude of bank discounts and especially on military results.

EINAUDI, L., *Il Problema della Finanza Post-Bellica.* 1919.

EINZIG, P., *International Gold Movements.* 1929.

Figures for exports and imports of gold are not comparable because they are given in terms of paper currency. In Great Britain, movements of bullion from 1914 to 1925 were recorded at their market prices.

ELLIOTT, J. C., "Dollar Parity and Canadian Crude Gold," *J.C.B.* 1926-27.

Gold export policy of Canada in post-War period.

ELIAS, F., "Einige Grundfragen der Ernährungsmittel im Kriege," *G.S.S.* 1917.

Short-sightedness of German control policy is explained by expectation of brief war. Price fixing without control of consumption is futile.

ELSTER, K., *Die Deutsche Valuta-Politik nach dem Kriege.*

Exchange is wanted only to make payments. If production is in excess of consumption, exchanges will be high. Hence opposes contraction of prices.

ENFIELD, R. R., *The Agricultural Crisis 1920-23.* 1924.

EULENBERG, F., *Das Geld im Kriege.* 1915.

Reserve and quality of note.

— "Die Entwicklung der Warenpreise in England während des Krieges," *J.N.S.* 1917.

Accounts for increase in prices until 1916 by the conditions of supply and demand of commodities.

EVANS, S., *The Gold Premium.* 1920.

Effects of inflation in the United Kingdom and South Africa.

— "La Renaissance de l'Or," *Revue Économique Internationale.* 1929 (4).

Opposition of Dominions may explain failure of conference of central banks to agree on a gold exchange standard. Bankers responsible for the continuance of inconvertibility.

"Existencias de Oro del Banco de España, 1918, Las," *R.N.E.* 1918.

Varying discount at which gold is purchased by Bank of Spain. Discriminates between countries.

FALK, O., "Currency and Gold now and after the War," *E.J.* 1918.

The high prices paid for gold for industrial and consumption uses.

FANNO, M., *Inflazione Monetario e Corso dei Cambi.* 1923.

Historical discussion of Purchasing Power Parity; also a discussion of measures of depreciation. Exchanges of a country on an inconvertible standard depreciate in boom periods.

FAULKNER, C. C., *The Commonwealth Bank of Australia.* 1923.

Chronicle of achievements. Light on gold movements of War period and transactions between Commonwealth and British Governments.

FEDERN, W., "Die Kreditpolitik der Wiener Banken," *S.V.S.* 1925 (169).

Banks made direct advances to war industries instead of purchasing more war securities. Government postponed payments of debts when war securities and currency notes did not yield adequate returns. Author prefers rationing to high rates.

FERRARIS, C. F., *Moneta e Corso Forzoso.* 1879.

Upon return to a gold standard, a country should have a reserve of 100 per cent against notes.

FLUX, A. W., "British Export Trade," *E.J.* 1926.

England's export trade much below 1913 level; but position relatively better than that of rest of world. Prices of manufactured commodities rose more rapidly than prices of raw materials.

— *Foreign Exchanges.* 1924.

In the application of the Purchasing Power Parity doctrine, shall only the commodities exchanged between two countries be considered? Relation of discount and central bank rates.

— "International Statistical Comparisons," *R.S.J.* 1923.

— "The Measurement of Price Changes," *R.S.J.* 1921.

The weight of food in different indices.

FOWLER, W., "India and the Report of the Committee on Currency," *E.J.* 1893.

Importance of excluding India from gold market.

\* FOXWELL, H. C., *Papers on Current Finance*. 1919.

Inadequate reserves of British banks. England still on gold standard in 1917. English banks not venturesome.

FRANCK, L., *La Stabilisation Monétaire en Belgique*. 1927.

Possibility of redemption of currency notes is not great. Large reductions would result in scarcity. Large floating debt outstanding is dangerous for a country with an unstable monetary standard. Less likelihood of large demands for gold and devisen if stabilization is introduced when the exchanges are rising.

FRASER, SIR D. D., "The Maturing Debt," *R.S.J.* 1921.

Inflation and bonds on tap. Excess of deposits over the sum of investments, discounts and loans can be invested on the security market. Hawtrey points out relative advantage of sinking fund and funding loan.

FURUYA, S. Y., *Japan's Foreign Exchange*. 1928.

Balances transferred from London to New York beginning in 1916. Government contributed to financing of exports to Allies by selling Treasury bills and purchasing export bills, and induced the banks to purchase foreign securities.

GARRETT, P. W., *Government Control Over Prices*. (Published by the War Trade Board in coöperation with the War Industrial Board.) 1920.

Detailed description of regulations and administration of price control.

GIDE, C., "De l'Influence de la Guerre sur les Prix," *R.E.P.* 1915.

Slow rate of increase of prices is attributed to hoarding of notes.

— "La Guerre et l'Organisation Nationale de l'Alimentation," *R.E.P.* 1916.

Legislature can fix prices with a view to preventing middlemen and producers from receiving unnecessary profits. Necessity of inflation in war times.

"Gold Production Committee." Review in *E.J.*, 1919. (O'Farrell.)

Unfair treatment of gold miners.

GOLDSCHMIDT, A., "Hahn's Von der Kriegs--Zur Friedenswährung," *A.S.S.* 1918.

Hahn advocates reduction of gold holdings; they are not available in an emergency. Would redeem notes in devisen.

"Gold Standard Act," *E.J.* 1925.

GRADY, H. F., *British War Finance, 1914-19*. 1927.

Ways and Means pure credit inflation. Large issues of Bank

of England notes after August, 1917, are explained by the need of large denominations.

GREGORY, T. E., *First Year of the Gold Standard*. 1926.

The Bank of England since 1925 has attempted to stabilize the supplies of credit outstanding and to attract floating capital from abroad. Prefers to maintain exchanges at an artificially high level rather than bring prices down. Gregory points out that an overvaluation of Sterling is not revealed by all index numbers.

— *Return to Gold*. 1925.

— *Select Statutes and Reports Relating to British Banking, 1832-1928*. 1929. 2 vols.

GRIZIOTTI, B., *Politica Monetaria e Finanziaria Internazionale*. 1927.

Increase of wealth and production is the automatic method of deflation. Help is necessary during the transitory period of stabilization. Compulsory conversion of Treasury bills into long term securities enables the Government to repay the banks and thus more money is made available for industry. By repaying the central banks with the proceeds of foreign loans, the Government enable them to obtain added security against notes. Depression in Great Britain not caused by monetary policy.

GRÜNFELD, J., "Die Russische Volkswirtschaft im Kriege," *A.S.S.* 1915.

GUEBHARD, P., "Le Problème Monétaire et Bancaire dans l'Afrique du Sud," *Revue Économique Internationale*. 1920 (40).

HAIN, A., *Geld und Kredit*. 1924.

Inflation advances slowly in first few years, for public hoards new currency or converts it into investments. Folly of putting a limitation on money in circulation in order to restrict credit. Possibility of exchange depreciation merely because purchasing power is diverted from commodity to valuta market. Limitation of sales of valuta during the War made more money available for commodity markets.

— *Volkswirtschaftliche Theorie des Bankkredits*. 1920.

Money and capital markets are separate entities. Liquidity is obtained by borrowing from the central bank. Latter obtains liquidity by suspending specie payments.

HANSEN, E., *Argentine Emergency Measures on Outbreak of War*. 1915.

HARDING, W. P. G., *Formative Period of Federal Reserve System*. 1925.

Pegging of Sterling required purchase of 40 millions (dollars) of bills weekly in the early months of 1918. Low discount rate forced on system by Treasury.

HARRISON, F. C., "The Indian Currency Question," *E.J.* 1894.

Critical of policy 1893-94.

— "The Past Action of the Indian Government with Regard to Gold," *E.J.* 1893.

Discusses the policy in the fifties and sixties.

HAWTREY, R. G., *Currency and Credit*. 2d edition. 1923.

\* — *Gold Standard*. 1927.

Defects of gold standard in nineteenth century not inherent in the system, but rather the result of the method of operation. Gold standard puts a limit to possible expansion; but authorities allowed expansion and contraction to attain considerable progress before action was taken. Central banks destroy idea of any automatic gold standard.

Under gold standard, different currencies become approximately commensurable. Otherwise market can deal with residual balances only by adjusting valuations of currencies. Bank of England in managing its gold reserve should consider the effects of its action on the purchasing power of gold currencies throughout the War. Value of gold is affected by the action of individual countries.

— *Good and Bad Trade*. 1913.

Government balances and the money market.

\* — *Monetary Reconstruction*. 1st edition. 1923.

Large expansion possible at home without depreciation of Sterling because of large foreign credits outstanding. Reduced bank advances explained by reduction of stocks and speculation. Bank accounts are inflated on account of holdings of public securities. They should be redeemed out of the proceeds of taxes.

— "On Cannan's 'An Economist's Protest,'" *R.S.J.* 1927.

— "On Hargreave's 'Restoring Currency Standards,'" *E.J.* 1927.

Possible alternatives are stabilization of existing currency at new metallic value, introduction of new currency at rate, or multiple of old, or re-introduction of old currency at its full value.

— "Review of J. M. Keynes, 'A Tract on Monetary Reform,'" *E.J.* 1924.

No danger in depreciation of gold on account of inflation in the United States. Describes the movement of gold as inflation spreads. The Bank of England would have to forego

its profits or demonetize gold in order to stop the progress of inflation.

HAWTREY, R. G., *Trade and Credit*. 1928.

Exchange banks often over-purchase Sterling bills because they are always sure of obtaining gold in London. But excessive purchases of Sterling will result in reduction of advances outside of Great Britain. Possibility of improving exchanges by moving balances is limited.

HELANDER, S., "Das Inflations-Problem im Kriege," *J.N.S.* 1915.

Issues of paper money not inflationary in war time for future goods are made available in the present.

HELFFERICH, K., *Das Geld*. 6th edition. 1923.

Price movements preceded fluctuations in the quantity of currency outstanding. A cessation of the manufacture of currency notes would have made the payment of wages impossible. An improvement in dollar exchange was followed by a reduction of prices even though more currency notes were being manufactured.

HENRIQUES, C. O., "Danmarks Financielle Forhold Til Udlandet," *N.T.* 1916.

Criticizes Cassel. A nation cannot pursue an isolated monetary policy. Introduction of the new gold policy resulted in appreciation of Danish exchanges in London and Paris.

HERRMANN, K., *Die Zukunft des Goldes*. 1926.

Indebtedness of market to central banks in 1913 and 1924, and possibilities of consuming gold in repaying these advances. Notes in circulation and gold reserves. Possibilities of absorption of gold by Europe and the United States. Balance of payments and gold movements. England losing stake in gold.

HERTZ, F., "Zahlungsbilanz under Lebensfähigkeit Österreichs," *S.V.S.* 1925. (167).

Settlement of pre-War debts between Austria and England. Largely funded into new credits.

HEYN, O., "Der Kursrückgang der Deutschen Wechsel Keine Fogel einer Entwertung des Deutschen Geldes," *J.N.S.* 1916.

Depreciation as applied to money is an inaccurate term. No loss of confidence in money is involved when we invest in goods. Prices rise in war times and, therefore, a reduction of currency would be unwise.

— "Die Erschnte Kurssteigerung under deren Folgen," *J.N.S.* 1920.

One difficulty with exchange appreciation is that rents

and wages and the prices of necessities are at a low level and further reductions are unlikely.

HEYN, O., *Über Geldschaffung und Inflation*. 1921.

Issues of currency notes are defended when the only alternative is heavy taxes.

— "Zum Problem der Geldenwertung," *A.S.S.* 1919.

— "Zur Verteidigung der Chartaltheorie des Geldes," *A.S.S.* 1916.

State can force people to accept money in payment of debt.

However, the central bank needs gold to inspire trust in chartal money.

HOWARD, H. F., *India and the Gold Standard*. 1911.

A vindication of monetary policy since the closing of the mints.

HULFTEGGER, O., *Die Bank von England*. 1915.

Description of Other Deposits, Ways and Means, Finance Bills. Activities of foreign banks in London.

IJSSELSTIJN, A., *Étude sur le Régime Monétaire et Bancaire de l'Afrique du Sud*. 1925.

Detailed discussion of monetary history and policies since 1914.

"Indische Muntwezen En De Belangen Der Planters, Het," *De Economist*. 1887.

A discussion of the demand of planters in Dutch East India who complain of losses suffered because the country is on a gold standard. Would receive more guildens for their Sterling.

INIÜLSEN, C. H. P., "Deutsche Bankniederlassungen und Kapitalanlagen in England," *J.N.S.* 1918.

Parliament's attitude toward foreign banks.

"Internationale Geldmarkt, De," *D.E.* 1915.

Appreciation of dollar caused in part by large purchases of South American products by Allies.

JAFFE, E., *Das Englische Bankwesen*. 1910.

London's attitude toward foreign banks. Proportion of capital to all liabilities is not a criterion of strength of banks. Liquidity of investments and reserves should be considered. Colonial and Dominion banks obtained large deposits in London which they put at the disposal of their home customers. Disastrous results in the nineties.

— "Die Militarisierung unseres Wirtschaftslebens," *A.S.S.* 1915.

Price fixing and control necessary to assure subsistence of people.

JANACCONE, W., *Relazione fra Commercio Internazionale, Cambi Esteri e Circolazione Monetaria in Italia*. 1918.

JENNY, O. H., "Die Nominelle und die Effektive Teuerung," *Z.S.S.* 1918.

Compares weights of 1912 that were used in the construction of index numbers with current consumption. There are large differences.

JEVONS, H. S., *The Future of Exchange and the Indian Currency*. 1922.

Monetary policy since 1914. The period 1920-22 covered more carefully. Critical of stable exchange policy in War period and objects to attempt to maintain high exchanges.

— *Money, Banking and Exchange in India*.

A discussion of the exchanges since 1914.

JÉZE, G., *Les Finances de Guerre de l'Angleterre*. 1915.

Excessive prices paid by Treasury no net loss. No objection to large issues of Treasury bills.

— and TRUCHY, H., *War Finance of France*. 1927.

French Treasury made payments for American and British Treasuries in France and received in return the equivalent in dollars and Sterling.

JÖHLINGER, O., *Der Britische Wirtschaftskrieg und seine Methoden*. 1918.

— "Uebersicht über den Weltgetreidemarkt," *J.N.S.* 1917.

KATZELLENBAUM, S. S., *Russian Currency and Banking*. 1925.

Degrees of confidence in money are denied. Are people conscious of inflation? Not even a parallelism between issues and exchanges. Country on a paper standard is generally a debtor country; therefore the retention of foreign credits is dependent upon successful military and political events.

KEILHAU, W., *The Valuation Theory of the Exchanges*.

Cassel's theory not acceptable. Exchange is also wanted to buy securities and pay debts.

KELLENBERGER, E., "Richtlinien für eine Schweizerische Währungsreform," *J.S.S.* 1917.

Governments accumulated gold to inspire confidence abroad and did not use it to meet adverse balances. Before the War, it was thought that no asset would have as good a market as gold. But neither gold nor devisen helped in 1914.

KERSCHAGL, R., *Die Geld Probleme von Heute*. 1922.

Active deflation in Great Britain early in 1919. Government have a prior lien on stocks of commodities. Hence the competition of others for supplies brings about inflation. Different methods of deflation.

KEYNES, J. M., "Balance of Payments," *E.J.* 1927.

Effect of the return of Great Britain to a gold standard on the movement of short term balances.

— "Comment on Professor Cannan's Article," *E.J.* 1924.

— "The Committee on the Currency," *E.J.* 1925.

Points out various methods of reducing the discrepancy between sheltered and unsheltered prices.

— *Economic Consequences of Sterling Parity*. 1925.

\* — *Indian Currency and Finance*. 1913.

Recent tendency to offer a varying price for gold and to hold foreign assets as substitutes for larger gold holdings. Growing realization that the retention of gold in circulation is not necessary under a gold standard. The India Office's ability to determine the monetary supplies in India through its control of the Council bill market is distinctly limited. Distinguishes monetary from banking reserves.

— "Mr. McKenna on Monetary Policy," *London Nation*. February 12, 1927.

Divergence of sheltered and non-sheltered prices greater than ever.

\* — "Prospects of Money," *E.J.* 1914.

Privilege of borrowing from Bank of England on security of War loans at 1 per cent below the Bank rate, makes that rate the significant rate. The Bank of England's policy of re-discounting pre-moratorium bills has resulted in large increases in Other Deposits.

\* — *A Tract on Monetary Reform*. 1924.

\* — *A Treatise on Money*. 1930 (Two volumes).

— "War and the Financial System," *E.J.* 1914.

KIERNAN, T. J., *British War Finance and Its Consequences*. 1920.

Bank of England is losing control. Large holdings of Treasury bills by market.

KISCH, C. H., and ELKIN, W. A., *Central Banks*. 1928.

KOCK, K., "Organisation of Swedish Money Market," *Economica*. 1927.

High rates in Sweden do not attract short term money from abroad.

KOCK, K., *A Study of Interest Rates*. 1929.

Threat of non-renewal of Treasury bills is not great, because trade bills are scarce.

LACOUT, G., *Le Retour à l'Étalon-Or*. 1926.

Great Britain should have introduced normal monetary conditions before stabilization. The appreciation of Sterling was followed by a large influx of capital, which offset the increased imports. Rise of exchanges after 1923 was speculative.

LANGE, L., *Expansion und Volkswirtschaftliche Bedeutung der Deutschen Überseebanken*.

LANSBURGH, A., "Die Ausschaltung London's als Clearinghaus der Welt," *D.B.* October, 1914.

England's supremacy is endangered by refusing to meet Austrian and German obligations, and by the introduction of a moratorium.

— "Bankkredit und Depositenbildung," *D.B.* August, 1928.

Criticism of Midland's policy. Irregular importation of gold did not result in anticipated increase of deposits.

— "Die Berliner Grossbanken im Jahre 1919," *D. B.* June, 1919.

Attributes increase in "Other Money" to speculative activities of foreigners.

— "Die Berliner Grossbanken im Jahre 1927," *D.B.* April, 1928.

German banks keep small cash reserves at home because they hold large resources abroad. Few bills drawn in marks because exchange fluctuations are large and discount rates in Germany are high.

— "Die Berliner Grossbanken im Kriegsjahr 1914," *D.B.* April, 1915.

Foreign money markets closed. Hence necessity of larger banking reserves.

— *Der Internationale Kapitalmarkt im Kriege und nach dem Kriege*.

Ten per cent rate in London to protect currency.

— *Die Politik der Reichsbank*. 1924.

Hoarding of notes. Notes only a symptom of disease of inflation.

— "Die Zukunft der Bank von England," *D.B.* April, 1919.

Discussion of Cunliffe Report.

— "Zur Frage der Deutschen Rohstoffversorgung," *D.B.* April, 1920.

Exporting countries anxious to give import credits. Have large supplies of goods.

LANSBURGH, A., "Die Zusammenfassung des Englischen Geldumlaufs," *D.B.* June, 1928.

Recommendations of Bradbury Committee were not put into effect early in 1928 because the circulation of notes at the current level of prices was still excessive.

LAVINGTON, F., *English Capital Market*. 1921.

Stabilization program of joint stock banks and Bank of England. Analysis of banking figures. Weakness of control of Bank of England.

LAWRENCE, F. W. P., "Deflation and Prices after the War," *E.J.* 1918.

Favors deflation by means of levy.

— *A Levy on Capital*. 1918.

LAWSON, W. R., *British War Finance*. 2d edition. 1916.

Domestic and foreign bills. Money market in 1914.

LEDERER, E., "Die Organisation der Wirtschaft durch dem Staat im Kriege," *A.S.S.* 1915.

Large issues of notes did not result in depreciation, because the public substituted cash for credit payments.

— "Die Regelung der Lebensmittelversorgung während des Krieges in Deutschland," *A.S.S.* 1915.

Two alternatives: non-interference or full control. Price fixing is not adequate. It is necessary to introduce complete control by the State. Peculiarity of sugar market was that one half of the total supplies was exported in pre-War years; the Government pegged its price during the War.

— "Die Ueberleitung der Wirtschaft in den Friedenszustand," *A.S.S.* 1916-17.

LEHFELDT, R. A., "British Industry after the War," *E.J.* 1916.

— *Gold, Prices and Witwatersrand*. 1919.

Discusses the possibility of controlling prices by an agreement to control the production of gold.

— *Restoration of World's Currencies*. 1923.

Letters Addressed to T. Thompson. An Inquiry into the Causes of the Present High Price of Gold Bullion in England. 1810.

Points out that both paper money and sovereigns were depreciated in bullion. Paper currency was necessary to take the place of bullion that had disappeared.

LEXIS, W., "Der Gegenwärtige Stand der Silber-und Währungsfrage," *J.N.S.* 1893 (61).

Favorable balance of trade of India will continue. Imports restricted.

LEXIS, W., "Die Währungsfrage und die englische Untersuchungs-Kommission," *J.N.S.* 1888 (50).

Description of process by which risk of fluctuations in the value of the rupee may be covered. Silver has depreciated rather than gold appreciated. India forced to reduce prices as a result of European competition. If gold were scarce, a premium would emerge.

LIEFMAN, R., *Die Geldvermehrung im Weltkrieg.* 1918.

Quality of notes immaterial. Prices did not increase because of loss of confidence, but rather because of the increase in incomes. Gold standard a means by which Great Britain floods the world with gold. Gold is not used to settle balances.

LITMAN, S., *Prices and Price Control in Great Britain and the United States during the World War.* 1920.

Loss of production resulting from diversion of man power to military pursuits not offset by increases made possible by use of more machinery and by substitution of female labor.

LLOYD, E. M. H., *Experiments in State Control at the War Office and the Ministry of Food.*

Particularly valuable for the legal aspects of control.

— *Stabilisation.* 1923.

Effects of deflation on producers and on the finances of the Government.

*London Essays in Economics.* 1927. "T. E. Gregory, Professor Cannan and Contemporary Monetary Theory." In particular see Plant, A., *Relations between Banking and the State in the Union of South Africa.*

LORIA, A., "La Crisi dell' Economia Britannica," *A.E.* 1927.

Gloomy picture of England's future.

— *Le Peripezie Monetarie della Guerra.* 1920.

Expansion of credit not limited by reserves. Strong argument for deflation. British exchanges and inflation.

LOTZ, W., *Die Deutsche Staatsfinanz-Wirtschaft im Kriege.* 1927.

Inflation was still under control at end of War; but series of unfortunate events followed. Excellent discussion of price control and discount policy.

MACROSTY, H. W., "Inflation and Deflation in the U. S. and U. K., 1919-23," *R.S.J.* 1927.

Relation of "Other Deposits" and bank reserves, of current and time deposits. Treasury bills and Ways and Means statistics are discussed. Denies that deflation has occurred.

MACROSTY, H. W., "Some Current Financial Problems," *R.S.J.* 1922.

Excess of deposits over advances, investments and discounts may be considered genuine savings and surplus current income.

— "Submerged Banking Information," *R.S.J.* 1927.

MACGREGOR, D. H., "Balance of Trade 1924-26," *E.J.* 1927.

If new investments abroad exceed funds apparently available for this purpose, Great Britain is not necessarily lending too much.

MCKENNA, R., *Post-War Banking Policy.* 1928.

Critical of Bank of England. Proposes a broader basis of credit through the purchase of assets by the Bank of England. Optimistic concerning possibilities of improving trade by creating additional deposits.

MCVEY, F. L., *Financial History of Great Britain, 1914-18,* 1918.

MARSHALL, A., *Official Papers.* 1926.

Great Britain has inadequate reserves. Proposes that the fiduciary issue be increased and small notes be substituted for gold. Scarcity of gold in '70's and '80's has had an unfavorable effect on money rates. Stability of the value of gold purely accidental. The value of gold is in part fiduciary.

MAWAS, A., *Le Système Monétaire et le Change Anglais depuis la Guerre.* 1921.

MAZZEI, I., *Il Cambio Italiano.* 1926.

Treasury bonds may be considered as money hoarded.

MELCHIOR, C., "Das Gold der R.B.," *B.A.* May, 1921.

Legal question as to whether the Allies can deprive the Reichsbank, a private institution, of its gold.

"Memorias de Sociedades," *R.N.E.* 1918.

Bank of Spain made large profits in acquiring gold at a premium.

MEYNAL, P., "La Balance des Comptes de la France," *R.E.P.* 1925.

Gives the fluctuation in short term balances of French institutions in the post-War period.

MIDDLETON, T. H., *Food Production in War.* 1923.

*Midland Monthly Review,* 1915-1930.

MILLS, R. C., and BENHAM, F. C., *The Principles of Money, Banking and Foreign Exchanges.* 2d edition. 1925.

Stability of exchange related to large balances in London. Notes Board pursued indecisive policy. Prices in Australia after 1914 determined by local conditions.

MIÑANA, E., *Los Bancos de Emisión antes de la Guerra en la Guerra y después de la Guerra.* 1918.

The Bank offered generous accommodation at outbreak of War. A reduction of advances to the Government would be desirable.

MINTY, L. L. M., *English Banking Methods*. 1925.

Description of foreign and colonial banks in London. Recent developments in foreign exchanges.

MISES, L., *Die Geldrechtliche Seite des Stabilisierungsproblems*. 1923.

Excellent on later stages of depreciation and the transition to a metallic standard. Strongly opposes exchange control.

— *Theorie des Geldes und der Umlaufsmittel*. 1924.

Excessive issues of currency by one country are not possible in normal times. By inflating, governments in reality increased the receipts from taxation.

MITCHELL, A. A. "A Levy on Capital," *E.J.* 1928.

MITCHELL, W. C., *Prices and Reconstruction*. 1920.

Initial increase in the United States caused by exportation of commodities.

MLYNARSKI, F., *Gold and Central Banks*. 1928.

Attempts to explain increase in prices of 50 per cent over the pre-War level, by substitution of devisa for gold (20 per cent), and increase in monetary circulation (30 per cent). Banks receiving gold from the United States hoard it.

MOLL, B., *Die Modernen Geldtheorien und die Politik des Reichsbank*. 1917.

Refutes Bendixen and Gesell who would demonetize gold. No single nation can take this step successfully. England would thwart Germany's efforts.

*Monetary Times*. (Toronto.) 1919-1921.

MONTAGU AND Co., *Weekly Bullion Letter*. 1916-1920.

Miscellaneous information of all kinds on the gold industry, gold movements, etc.

MOULTON, H., "Economic Conditions in Europe," *A.E.R.* 1923.

Great Britain's surplus, which was formerly invested, is now being appropriated by the Government.

MOUSSET, A., "Les Établissements Financiers de Yugoslavie en 1921-22," *R.E.P.* 1923.

Important part played by the foreign banks in the business of the country.

NARAIN, B., "Exchange and Prices in India, 1873-1924," *Weltwirtschaftliches Archiv. Chronik*. 1926.

Analysis of price and exchange conditions. Favors stable price policy.

NASSE, E., "Der Schlusbericht der englischen Gold und Silberkommission," *J.N.S.* 1889.

Emphasizes elasticity of supply of gold. English competitors of India's exporters have no grievance if depreciation of silver is caused by appreciation of gold.

— "Zwei Schriften des Finanzsecretärs der britisch-indischen Regierung über die Silberfrage," *J.N.S.* 1881 (36).

Price changes may be erroneously attributed to changes in the value of precious metals.

NEWMARK, F., *Begriff der Inflation*.

Inflation does not reduce consumption to the extent that taxation does.

NICHOLSON, J. S. "Indian Currency and Gold Exchange Standard," *E.J.* 1914.

Emphasizes dangers of system resulting from non-automatic character, limited convertibility and misguided government policy.

— "Inflation of the Currency and Rise in Prices," *E.J.* 1916.

Under the system of note issue and of credit creation introduced during the War, the country was deprived of checks on expansion.

NICHOLSON, W., *War Finance*. 2d edition. 1918.

Bank of England's reserves abroad. Relation of currency expansion to higher prices.

NOWAK, G., "La Réforme Monétaire en Pologne," *R.E.P.* 1924.

Organic vs. technical school of monetary reform. "Rejet de Impôts"—pass on taxes to those with fixed incomes, who then demand higher wages.

ODATE, G., *Japan's Financial Relations with the United States*. 1922.

Japan began to transfer balances to the United States when London refused to finance Japanese-Australian and Japanese-Indian trade. The Government contributed to the financing of exports to belligerents by selling Exchequer bonds and putting the proceeds at the disposal of exporters, and also by allowing the issue of notes on the security of foreign deposits of gold.

OLIVIER, M., "Le Change et les Prix," *R.E.P.* 1922.

Countries with currencies seriously depreciated suffer from depreciated exchanges that fluctuate wildly above and below the purchasing power parity level. High correlation between internal and external values. But only a rough measure of correlation was used.

PAISH, SIR GEORGE. "War Finance." *R.S.J.* 1916.

Great Britain is financing the War out of own resources.

PATTERSON, E. L. S., "New York Exchange in Canada," *J.C.B.* 1918-19.

PEAKE, E. G., *Academic Study of Money Market and Other Statistics.* 1923.

PEARSON, R. J. H., "Comparison of pre-War and post-War Production Costs in Engineering," *R.S.J.* 1921.

PENSON, J. H., "Polish Mark in 1921," *E.J.* 1922.

Internal and external values of a currency will be equal sooner or later.

PICARD, R., "Les Questions Financières à la Conférence de Gênes," *R.E.P.* 1922.

Objection to devaluation is that when stabilization level is reached, speculators withdraw balances.

PIGOU, A. C., *Economics of War Loans.* 1917.

Borrowing at banks to pay taxes is inflationary.

— "Government Control in War and Peace," *E.J.* 1918.

Price control was successful during the War. But it is difficult to control prices and distribution in peace times.

— *Industrial Fluctuations.* 1927.

Rationing of credit not approved. Reserves of banks are affected at an early stage by expansion. Effectiveness of a low Bank rate in inducing expansion, is distinctly limited.

— "Interest after the War and the Export of Capital," *E.J.* 1916.

Some restrictions on the export of capital are favored. Maintenance of plant during the War not greatly neglected.

\*— *Political Economy of War.* 1921.

Repayment of Treasury bills would result in larger banking reserves and therefore would cause inflation. Prefers price control to high prices and a heavy taxation of excess profits. Process of inflation is described.

— "Some Problems of Foreign Exchanges," *E.J.* 1920.

Allowing for transport, prices of goods entering into trade will be equal. Explains the depreciation of the exchanges in 1919 by the necessity of financing the export trade of Europe.

— "Special Levy on War Wealth," *E.J.* 1918.

Increased productivity will not make it possible to obtain increased money income to meet public debt unless real income is also larger in monetary terms.

\*— *A Study in Public Finance.* 1928.

Methods of inflating in war times. Money rates were kept low in order to allow the Government to borrow at low rates.

Possibilities of economizing supplies for war purposes.  
External and internal drains of cash held in check.

POLIER, L., "La Circulation de la Livre Sterling dans le Système Monétaire Égyptien," *R.E.P.* 1915.

Crises in Egypt in the pre-War period because of reduced gold supplies. Proportion of gold imported into Egypt from various countries retained.

POPOVICS, A., *Das Geldwesen im Kriege.* 1925.

High prices in Austria (relative to other countries) are the result of scarcity of supplies and economic isolation. Austria had a relatively free gold market during the War. Large hoards of notes.

PORSE, A., "Théorie de la Parité des Pouvoirs d'Achat et les Faits," *R.E.P.* 1926.

The experiences of Great Britain and Italy confirm the Purchasing Power Parity doctrine.

POWELL, E. T., *Evolution of Money Market.* 1925.

PRIBRAM, K., "Zur Entwicklung der Lebensmittelpreise in der Kriegezeit," *A.S.S.* 1916-17.

Extensive control necessary in Germany because of its position of isolation. When an upward movement is once begun, prices rise rapidly.

PRICE, L. L., "Reconstruction and Monetary Reform," *E.J.* 1922.

PRION, W., *Das deutsche Wechseldiskontgeschäft.* 1917.

Large banks are obtaining increasing influence at expense of R.B. Large use of acceptances is explained in part by business of foreign branches and by the attractiveness of this method of finance when rates on advances are high.

— *Der Internationale Geld und Kapitalmarkt nach dem Kriege.* 1918.

England's vigorous policy of taxation the result of its inadequate capital resources. Post-War problem is to fund floating debt and thus put these resources at disposal of industry. Great Britain not in a position to carry this operation through. Bank rates are determined by conditions in the capital market.

— *Die Deutschen Kreditbanken im Kriege und Nach.* 1917.

War has revealed that German banks can carry on profitably without the use of traditional German methods of financing industry. Banks sold foreign bills at an early date on account of great demand for neutral exchanges.

"Rechnungsabschlüsse von acht Grössen Schweizerischen Handelsbanken für der Jahren 1914-1917, Die," *J.S.S.* 1915-18.  
History of banking advances to foreigners.

- REES, J. M., *Trusts in British Industry*. 1922.
- REW, SIR R. H., *Food Supplies in Peace and War*. 1920.
- "Prospects of World's Food Supplies after the War," *R.S.J.* 1918.
- RICARDO, D., *High Price of Bullion*. 1810.
- Too much gold cannot be exported.
- *Letters to Malthus*. 1887.
- Exchanges and payment of indemnity. Redundancy sole cause of unfavorable balance.
- RICHARDS, C. S., "Kemmerer-Vissering Report," *E.J.* 1925.
- Explains impotency of the reserve bank.
- \*RIST, C., *La Déflation en Pratique*. 1924.
- Appreciation of British exchange due to balancing of budget and repayment of debt.
- "Les Banques d'Émission et l'Après-Guerre," *R.E.P.* 1921.
- Devaluation advisable because gold supplies are inadequate for conversion at current values. Central banks will be banks of conversion for several years. Banks have not protection of usual safeguards against over-issue.
- "Les Dettes Interalliés et les Réparations," *R.E.P.* 1926.
- History of controversy over gold with Great Britain.
- *Les Finances de Guerre de l'Allemagne*. 1921.
- Depreciation of exchanges brings its own corrective; but successive issues of notes prevented this corrective from operating. Absence of correlation between exchanges and political events. Futility of exchange control.
- ROBERTSON, D. H., *Banking Policy and the Price Level*. 1926.
- The advantage of an unstable monetary policy.
- *Money*. 1922.
- ROBINSON, L. R., *Foreign Credit Facilities in the United Kingdom*, 1923.
- Bills and acceptances since the War. Banking resources on the London market. Foreign activities of joint stock banks.
- ROGERS, J. H., *Process of Inflation in France, 1914-1927*. 1929.
- ROSENBAUM, S., "Effects of War on Overseas Trade of the U. K." *R.S.J.* 1915.
- Deficiency in imports, large in raw materials, and especially large in manufactured goods.
- SAMUEL, H., "Taxation of Various Classes of People," *R.S.J.* 1919.
- SANTAPONTE, G., "Il Mercato Monetario e la Guerre," *G.E.* 1917.
- Great Britain and France normally raise discount rate to

attract balances from Russia and Italy, but to no avail at present.

SAUNDERS, A. J., "The Indian Reserve Bank," *E.J.* 1928.

Mr. Blackett's reforms. Dispute over State vs. Shareholders' bank.

SCHARLING, W., "Die Jetzige Geschäftsstille und das Gold," *J.N.S.* 1885 (45).

Gap filled by paper money.

SCOTT, W. R., "Aspects of the Proposed Levy," *E.J.* 1918.

SHAW, W. A., *Currency, Credit and Exchanges.* 1927.

Estimate of paper money and gold in circulation 1913-20.

Treasury Minute of 1919 never put to a test.

SHIRRAS, G. F., "Future of Gold and Indian Currency Reform," *E.J.* 1927.

Describes currency reform.

— "Gold and British Capital in India," *E.J.* 1929.

— *Indian Finance and Banking.* 1920.

Chamberlain Commission pointed out the necessity of introducing more elasticity into the Indian note system. Council bills have been sold since 1898 in order to prevent large imports of gold into India.

— "Some Effects of the War on Gold and Silver," *R.S.J.* 1920.

Accounts for reduced production of gold in the United States by the absence of a premium.

SIEPMAN, H. A., "Brussels Conference," *E.J.* 1920.

SIMON, W., "Die Tschechoslowakische Deflationspolitik und die Quantitätstheorie," *J.N.S.* 1926 (124).

Correlation between monthly movements of notes, prices and dollar exchange.

"Situazione del Mercato Monetario," *G.E.* 1914.

Disturbances all over the world were similar.

SNOWDEN, P., *Labour and National Finance.* 1920.

Attributes most of financial and economic evils of the post-War period to the absence of a vigorous tax policy during the War. Fears a levy only because it is accompanied by deflation.

— "La Société d'Économie Politique de Paris. La Circulation Fiduciaire et la Compensation," *Économiste Français.* May 27, 1916.

Methods of payment in vogue since War and increased activities account for increased supplies of money in circulation.

SPITZMÜLLER, V., "Die Soziale Wirkungen der Währungsverhältnissen," *S.V.S.* 1925.

Prefers stabilization at higher internal value, for inflation is

averted at a later stage. Agrees with Wieser that national conditions should be an important factor in the determination of price policies.

STAMP, SIR J., *Current Problems in Finance and Government*. 1924. The significance of fluctuations in the value of a currency for the Excess Profits Duty and a capital levy. Need of production indices in order to obtain estimates of the curtailment of consumption.

— "The Effect of Trade Fluctuations upon Profits," *R.S.J.* 1918.

— *Wealth and Taxable Capacity*. 1922.

To estimate the burden of the public debt, we should compare interest payments to income, for deflation has a more marked effect on income than on capital.

STEFANI, A., *Documenti Sulla Condizione Finanziaria Sulla Economica dell' Italia*. 1923.

— *La Restaurazione Finanziaria, 1922-1925*. 1926.

A country cannot be daily occupied with the problem of the renewal of the floating debt.

STRAKOSCH, H., *South African Currency*. 1920.

Depreciation of South African Sterling is revealed only by the disappearance of sovereigns, for the South African pound is linked with the English pound.

STRINGHER, B., *Note su la Circolazione Cartacea, gli Scambi e i Cambi con l' Estero Roma*. 1920.

STUART, C. A. V., "Gold Question," *E.J.* 1919.

Fears that belligerents will refuse to accept gold.

— "Die Valutafrage," *J.N.S.* 1920 (114).

A gold standard is not necessary in order to maintain exchange stability. Austria maintained stable exchanges by a proper discount policy from 1892 to 1914. Strong measures are necessary in order to resist the spread of deflation under the gold standard.

SURFACE, F. M., *Grain Trade During the War*. 1928.

Relations between Allies and the United States Food Administration.

SYKES, J., *Amalgamation Movement in English Banking, 1825-1924*. 1926.

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— *The Present Position of English Joint Stock Banking*. 1928.

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