JIA 70 (1939) 0065-0088

STOCK EXCHANGE INVESTMENTS IN THEORY AND PRACTICE

The first of a series of articles supplementing the course of lectures delivered at the Institute of Actuaries during the session 1908–9

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THE Council of the Institute of Actuaries having asked me to prepare a new edition of the lectures which I delivered in 1908 and 1909, I wish in the first place to say that I consider this not only as a great compliment but as a request which I feel it my duty to endeavour to fulfil. I find, however, that the changes which have taken place in regard to all financial matters during the last 25 years are so fundamental that my task is much greater than I had at first imagined. Time after time I have felt that I must abandon the attempt, but I am so anxious to give any possible assistance to students that I have decided to endeavour to overcome my difficulties in sections by means of articles, which I am asking the editors of the *Journal of the Institute of Actuaries* to publish serially, with the intention of eventually incorporating them in the proposed new edition of my former lectures.

It appears to me that there are a number of subjects to which I referred in 1908 which are now so entirely out of date that some simple explanation of present-day conditions may be of considerable assistance to students. I shall, therefore, attempt to deal first with those matters which I feel can be referred to without encountering the danger of expressing opinions with which many others with greater knowledge and experience may not agree. Moreover, even in the near future, it is probable that opinions as to various problems will change when we have the advantage of looking back on actual happenings instead of endeavouring to forecast results. I am thinking of such matters as the probable future value and functions of gold and the effect of large holdings in different places. Also, I am thinking of what could be said as to the effect of the various devices whereby the settlement of debts between different countries is restricted. All these, as well as many other matters, are affecting the financial world at the present time to an extraordinary degree but however strongly I, personally, may feel as to the "causes and effects" I know that it will not be possible to speak about them with such confidence as the far more simple conditions and my youthful assurance and enthusiasm prompted me to do in the year 1908.

In pre-War days it was generally accepted that gold was, and probably always would be, the safe and final basis for settlement of debts. To anyone who was prepared to accept this doctrine it was a fairly simple matter to propound the general principles of Foreign Exchanges. It was only necessary to explain that trade was always a matter of barter and that if one country bought more from some other country than it sold to that country, then sooner or later shipments of gold might be expected, although this might be postponed as the result of loans. It was also a simple matter to explain that enormous economies were effected by means of bills of exchange, which enabled A, who had sold goods to B in some foreign country, to receive payment from C, who had purchased goods from D in that same foreign country. There were, of course, many interesting details to be described, such as the effect of the sale of investments from one country to another, the contracting of loans, the manner in which the Bank rates of interest in different countries influenced the rates of exchange and the effect of arbitrage dealings. However, when once these matters had been generally dealt with, the student was ready to grasp with relief an explanation of gold export and import points with the details as to current rates of discount and the actual cost of packing, insuring and transporting gold from one country to another.

It is true that generally it was thought advisable to give students some information concerning bimetallism and the possibility of including silver with gold as a financial basis of values, but even this did not greatly complicate the generally accepted basis of exchanges, although the question of the rupee and our Indian trade was always an interesting subject for debate as it necessarily involved many practical matters which were referred to in the money market columns of the daily newspapers. To-day we are faced with an entirely different state of affairs, with vague references to the possibility of a revaluation of the dollar, the pound and the franc and that importers with future obligations to meet in America are buying dollars in advance because they believe that the dollar is undervalued in relation to sterling. I can imagine a student of to-day, after trying his hardest to concentrate on the real meaning of these references, reading as I did on the morning of 5 August 1938 in *The Daily Telegraph and Morning Post* the following paragraph:

"As for the effect on the British Exchange Equalisation Fund of the demand for gold, there is no cause whatever for uneasiness. The fund is believed to be more than adequately supplied with gold resources, and there can be little reason to suppose that the authorities are displeased by the chance to sell part of their huge holdings at a price which shows a profit to the fund. On every occasion when a flurry blows up in the exchange or bullion markets, the effective stabilisation influence of the Exchange Fund and its skilful manipulation becomes more apparent."

I am in no way criticizing this statement, indeed I find the money market and financial articles of this paper generally well suited to my own decidedly limited knowledge and capacity, but I find it far more difficult to attempt to give a simple explanation suitable for students than I did in 1908, when I was prepared to take any similar current statement from a daily paper and give what appeared to me to be a rational explanation.

Having thus tried to indicate why the magnitude of the task which I have attempted has somewhat dismayed me, I will endeavour to describe what appear to be indisputable facts well within the comprehension of any average intelligent person, yet which appear to me to have been the subject of endless disputes and attempted explanations.

In August 1914 the Great War commenced and continued until November 1918. During the whole of that time, quite apart from the loss in human lives, there was incalculable destruction of property which was accomplished mainly by diverting productive activities into destructive activities. As a result it must be perfectly clear that the world in general had suffered immense loss, which could only be recovered by years of productive labour. Quite naturally, the victors contended that the vanquished should be called upon to make good some large proportion of the loss.

The problem to be solved was how this result should be accomplished. To any ordinary person like myself the problem does not appear very difficult to grasp. Certain colonies could be (and in fact were) occupied, but all previous experience had made it clear that at least no early advantage could be anticipated on this account, indeed the result might easily be an increased liability. Still, the universal cry was "Make them pay up". Of course, to the unthinking person this cry was popular and there was general irritation that someone did not get on with the job of collecting money due to us. I have used the word "money" purposely. Now let us consider how, for instance, Germany could be made to pay us huge sums of money. As it appears to me all that they could offer us were goods and labour, neither of which we were prepared to accept as we already had more than we wanted. We were suffering from unemployment and therefore did not want anything resulting from German labour which could be accomplished by British labour. We wanted Germany to buy from us, but we did not want to buy more than we could possibly help from Germany. This result of war is by no means a modern dilemma. Probably ancient Egypt encountered the same kind of trouble when, having enslaved whole nations, it found that they could not be employed remuneratively; quite possibly this was one of the reasons why the idea was conceived of constructing gigantic works, such as the pyramids, which must have conveniently banished any unemployment problems for many years.

It must not be supposed that anyone imagined that Germany could pay an immense war debt immediately, but it was believed that this could be accomplished by means of borrowing. If debts are paid out of borrowed money, the day of reckoning is merely deferred and exactly the same means of payment will be necessary as at any earlier date, which is a simple fact often overlooked by people who, having lived beyond their means, imagine they can remedy this by having recourse to moneylenders.

It is necessary here to point out that money lent for remunerative purposes is an entirely different matter. Millions have been lent for constructive works which have resulted in great advantage to the direct borrowers as well as to their customers, both directly and indirectly. The simple truth is that destructive warfare results in impoverishment and no financial jugglery can alter this fact.

The general misconception of money and what it stands for is undoubtedly the cause of many of our present-day troubles. When money was in the form of some metal such as gold, which was in pre-War days accepted throughout the world as being of intrinsic value, there was more excuse for regarding it as something other than a form of I.O.U., which was very convenient as a means of more rapid bartering transactions. The amount of pure gold in an English sovereign was known and its value in goods was practically the same whether in the form of actual coins or when melted down into lumps of metal. Silver as represented in English coinage had not for many years been in the same category as gold and at the present time the market value of the pure silver in a British shilling is less than twopence.*

For some years after the Great War it was quite usual in the Far East for silver coins to be weighed and used for bartering merely at their market value as silver metal.

At the present time gold coinage is seldom seen, the metal is dug up from mines at great trouble and expense and is then as quickly as possible locked away in strong rooms, which are generally underground, so that it can be imagined that if someone from another world could see us he must indeed wonder what purpose can be served by first getting this metal from the depths of the earth and then hiding it again in the earth. Bank of England notes, although originally exchangeable for a certain number of gold sovereigns, are no longer so exchangeable. The sovereign, which is not now in circulation, varies in value almost exactly with the price of gold. By the Bank Act of 1844 the price of gold was £3. 17*s*. 9*d*. per fine ounce, whereas on 20 October 1938 the price was £7. 5*s*. 9*d*., so that it will be seen that our currency unit as measured in gold is little more than half of its previous value. In France, whereas previously for each British pound (either as gold or banknotes) we could obtain only a little more than 25 francs, we can now with our depreciated Bank note obtain nearly 179 francs, about seven times as many. That is to say, French francs in terms of notes have depreciated so that whereas previously for 107·134 francs one ounce of fine gold could be purchased, the cost is now about 1300 francs.

Thus in terms of francs the price of gold has appreciated to about 1216% of its pre-War price. In terms of the pound it has appreciated to about 171·6%. The effect of such a fall in value of the currency is particularly severe upon those who have retired and are dependent upon pensions or upon interest payments from their invested savings, in other words those whose incomes are fixed in

* 1 shilling = 43·63636 grains of fine silver. Price of silver, 21 October 1938 = 19$\frac{11}{16}$*d*. per fine ounce. Value of silver contained in one shilling = 1·7898*d*.

terms of currency units. It must be remembered, however, that the real measure of the value of a given income is the purchasing power that it will confer upon the recipient and in this respect the rentier will be less concerned with the price of gold than with the price of food and other necessities of life. Concurrently with this depreciation of currency has occurred a world-wide fall in the price of commodities in terms of gold. A table is given on p. 88 of the cost-of-living index figures for France and Great Britain and these may be held in many respects to indicate better the variation in value of the currency unit than a mere consideration of the price of gold.

As may be easily imagined, the difficulties involved in carrying on business between one country and another are very great if the relative values of the respective currencies are a matter of uncertainty. In order to make this evident I will refer to what happened in the franc quotation for 1938: on Thursday, 11 August, the spot quotation for francs was $178^{59}/_{64}$, that is to say, for immediate cash one could obtain £1 for slightly less than 179 francs. On the same day the forward rate for 3 months was $183^{51}/_{64}$, which means that if you knew that you would have francs to dispose of in 3 months' time and wished to make the sale in advance, then the buyer would require nearly 184 francs for each £1. On Monday, 15 August, the spot and 3 months' rates were $178\frac{7}{8}$ and $186\frac{1}{8}$.

Now let us suppose that an English manufacturer A had on 15 August concluded a bargain with a French customer B, who was of undoubted financial standing, whereby B had contracted to pay 10,000,000 francs to A at the end of 3 months. A will naturally be disturbed at the sudden widening of the spot and 3 months' rates from $4\frac{7}{8}$ to $7\frac{1}{4}$ in the short space of five days. He will argue that surely those who are better able to judge than he is are anticipating that in the near future francs will be less valuable and he will carefully consider any possible means by which he can limit his risk of loss. If the francs were payable at once he could effect the exchange into sterling at about 179 and so obtain £55,865. 18*s*. 0*d*. Perhaps he will think that the rate of exchange in 3 months' time, when the 10,000,000 francs become payable, will be 200 to the £1, in which case he will only receive £50,000 and so make an exchange loss of about £5866. If he sells forward at $186\frac{1}{8}$ he will make certain of receiving $\frac{£10{,}000{,}000}{186\frac{1}{8}}$, i.e. £53,727. That is to say, he will limit his exchange loss to £55,866 − £53,727 = £2139, i.e. about 4%.

There are, however, possibly two other courses open to him either of which would very considerably lessen his cost of covering or insuring against his possible loss.

He may be able to borrow francs for 3 months in France, giving as part security the contract to pay 10,000,000 francs. If he has business in France which necessitates his having a big account with a French bank, then the bank cannot very well refuse to make him an advance provided he has assets acceptable as collateral security, and, by exchanging the francs borrowed, he may be able to cover his possible exchange risk at a much cheaper rate than by selling francs forward. The loan will, of course, be repaid when the amount due to him in francs is forthcoming.

He may possibly succeed in carrying through the following transaction. Some bank or some financial institution which has short money at its disposal for which it can obtain only a very low rate of interest may like to make a short investment, in which the main security is actual gold held in its own name. In this case, the bank or other institution would be asked to buy gold in its own name to the extent of 10,000,000 francs on the guarantee of the merchant to buy it back in 3 months' time, let us say for 10,100,000 francs. The bank would thus make 1% for 3 months, that is a rate of 4% per annum. The merchant would pay nothing down but he might be asked to give some other security. At the end of 3 months when he collects his 10,000,000 francs, he will go to the bank and hand them the 10,000,000 francs plus another 100,000 francs and will receive the gold which, if the value of gold as measured in sterling has remained stationary, will be worth approximately £55,866, even if the franc has fallen in value to a rate of 200. He will thus have insured himself against the depreciation of the franc at a cost of 1%, as against a cost of over 4% which would have resulted from the sale forward of francs at 186⅛.

Where the transaction between A and B was such that A could draw a Bill of Exchange on B, this, when accepted by B, would be a negotiable instrument which A could dispose of. He would discount it either with his French bank or through a London bank or billbroker.

It will be necessary, unfortunately, before we can expect to understand how the violent changes have come about, to set out at some length (but avoiding as far as possible unnecessary details) happenings both during and after the four years of the Great War. I intend to incorporate from time to time descriptions or definitions of terms constantly met with in the financial columns of the daily newspapers and to set out various tables (which I hope may be of use to students and others). Also, I think it will be useful to give some simple facts relating to well-known Stock Exchange securities.

I start with a broad description of the principal events in the post-War financial history of Germany. One of the major conditions of the Peace Treaty after the Great War was the provision for enormous payments over a long period by Germany to the Allied countries to compensate for war damages, or Reparations, as they were called. Looking back from the present time it is difficult to appreciate whether those who settled these terms understood the economic effect that they were bound to produce or whether the advice of economic experts was overridden by the political outlook of the time. This is not a matter suitable for consideration here, but the history of these payments illustrates many economic lessons.

In considering how Germany could be expected to carry out such payments in practice, let us first examine what actually happens when one of us pays a debt. If I have bought £1 worth of goods from the grocer I can settle my debt and satisfy him by handing over a banknote. But the grocer is not satisfied with the banknote for its own inherent value as a piece of paper or a work of art. The banknote is a token with which the grocer can draw upon the community for £1 worth of goods or services in whatever form he may need them, and it is only this power to exchange the note for other goods which makes it acceptable in the eyes of the grocer in place of the goods which he has sold. In other words, as has been said many times before, money is merely a convenience of civilization, and fundamentally goods and services are always exchanged for goods and services as in the old days of barter.

When we come to the settlement of debts between different countries we have the additional complication that the currency of the paying country is of no use to the receiving country unless and until it can be exchanged for the currency of the latter, or can be used to buy some form of goods or services which the latter country is desirous of having. It would be of no use to France (for example) if Germany paid her enormous sums in mark-notes, or opened a credit at the Reichsbank for the amount fixed for reparations, excepting to the extent that she could convert the marks into francs, or buy goods in Germany which she wanted to import. The only immediate payment that Germany could make, therefore, was to hand over any holding of gold or foreign securities which she had, or any stocks of coal or other commodities or goods which France could use, and therefore would be able to accept. These were, of course, negligible, as practically all the resources which Germany had available had been used up in obtaining supplies for war purposes.

Returning now to the case of an individual, if I owe a debt for which I have not sufficient money to pay, the only way in which I can meet it is to arrange to pay by instalments over a period, for which privilege I shall incidentally have to pay interest in addition on the debt due. Then I must work and by rendering service earn these instalments, and the maximum instalment I can pay periodically is the margin between my earnings and the cost of keeping myself and family alive and in a fit condition to work. Further, if my method of earning a living is by baking bread for example, then in order that I can pay these instalments in the future I must be allowed now to retain sufficient capital to buy supplies of flour, etc., and out of the money I receive from selling the bread I must retain enough to cover the costs of making the bread and enough to buy more flour to make more bread.

The position with regard to international debts is precisely similar. In order that Germany could pay periodic instalments of reparations her people would have to work and earn the means to pay. First, they could produce goods internally and hand them over in settlement, and part of the terms arranged for reparations was the regular transfer of supplies of coal, etc., to the French Government. The major industry of Germany, however, was and is manufacturing. The money or claims on other countries which she earned by selling these goods abroad could be used for the settlement of her debts, but first she must be allowed to pay for the imports of raw material which she must have in order to be able to manufacture and for the food and other necessities which she must import for her people to live.

It will thus be seen that the only way in which foreign debts can be paid is by the sale abroad of the natural productions of the debtor country and by the sale abroad of the labour and services used in converting raw materials into finished articles, and that part of the proceeds of these sales must be used to pay for the imports essential to the continued life of the nation. Hence, if the Allied nations wish to exact reparations from Germany they must be prepared to buy from her sufficient to enable her to live and to earn the foreign currency to pay her debts. The matter does not, however, end there. The very goods which Germany produces and exports are those which the Allied countries also produce. France was willing to take large quantities of coal from Germany, but that meant that she would not want to buy so much coal from Great Britain and other exporters. The manufactured goods which we might buy from Germany our own manufacturers would otherwise produce. If, then, reparations were to be paid the disturbance in our own industries must cause unemployment and trade depression at any rate temporarily. It must be remembered, moreover, that the industrial capacity of all countries had been expanded to an enormous extent during the War for the production of munitions, etc., and this enlarged capacity for production was all being converted to peace-time pursuits.

Supposing, however, that it were possible that the Allied countries could agree as to the extent to which they would restrict their own industries by taking additional exports from Germany, the margin that would be left for debt payment would depend upon the volume of imports of food and other materials required for internal consumption within Germany. In this there would always be room for variations as the standard of life in Germany varied and particularly when the imports of raw materials were increased to enable large national plans for building, road-making, etc., or armament expansion to be carried out. Difficulties would also arise with the fluctuation in world price levels. One of the major features of the economic difficulties of the post-War period was the severe fall in commodity prices. If all prices were exactly halved then the same volume of exports and imports by Germany would leave a margin available for debt service only half as great in terms of currency; but the debt was determined as a fixed amount in currency units.

Continuing the analogy with the private debtor unable to meet his liabilities, Germany in the first place needed capital in order that her industrial system could operate at all. During the War the enormous cost of prosecuting the War had been financed less by taxation than in Great Britain, for example, and more by borrowing, and as the War progressed supplies were more and more difficult to obtain and more and more costly. Like all the belligerents, Germany resorted to inflation, that is, the making of internal payments by continually increasing the note issue, producing rising prices and causing the currency to become less valuable. After the War Germany's position did not improve with the loss of her colonies and of some of her most productive areas. Inflation continued until the mark was falling in value so rapidly, assisted by foreign speculating, that no one wanted to hold currency which each day was less valuable than the day before. The time came in 1923 when the mark was to all intents and purposes valueless. At one stage the rate of exchange was actually quoted in the *Financial Times* as 40 billion marks to the £1. (1 billion in Great Britain = 1,000,000 millions. In France and U.S.A. 1 billion = 1000 millions.)

The currency was re-established in 1924 by creating a new Reichsmark based on gold and equal to 1 billion old marks. This was in accordance with the provisions of the Dawes Plan, a plan prepared by an international committee of experts to deal with the German budget and currency problems. To ensure the establishment of currency stability the committee proposed an international loan, and in October 1924 this was issued to provide a total sum of 800 million gold marks. This loan was issued in New York, London, and various Continental centres in October 1924. The London issue was for £21,680,000—at an issue price of 92%. It carries interest at 7% and is redeemable in sterling by 1949 by a cumulative sinking fund applied to purchase or drawings at par. The service of the loan is:

(1) A direct and unconditional obligation of the German Government.
(2) A specific first charge on the annuities payable by Germany by way of reparations under the Dawes Plan.
(3) A first charge by way of collateral security on the gross revenues of the Government from the Customs and from the taxes on tobacco, beer and sugar and from the net revenue from the spirits monopoly and such other taxes as might

> after the issue be assigned for the purpose of assuring the budgetary contributions to the annuities payable under the New Plan. No further charge may be created upon these revenues ranking in priority or *pari passu* with this charge.

The issues were a great success and immediately attained a substantial premium.

The currency collapse had rendered worthless the savings of the people and, together with the drain on the country's resources during the War, rendered essential the raising of large loans abroad. These were largely by way of loans to German State Governments, municipalities, banks and industries. The high rates of interest offered attracted lenders particularly in America, and also substantially in Great Britain and other European countries. A particular example of industrial borrowing is given by the German Potash Loans.

The owners of potash mines and factories in Germany were formed into a syndicate by a special act in 1919. The Potash Syndicate of Germany controls the whole industry and the disposal of all potash produced. In 1925 an issue was made in London of £5,000,000 7% bonds at 94½, a further £3,000,000 being issued at the same time in other European countries, redeemable by 1950 by a cumulative sinking fund applied half-yearly to purchase at or under 102½% or to drawings at 102½%. The service of the loan is a first charge on the gross proceeds of the sale of potash to countries outside Germany, the payments for which are made to a London bank which retains monthly the amount required. The loan is also a direct obligation of the syndicate and is guaranteed by the individual members. In 1926 a further £3,000,000 7% bonds were issued in London at 97, and in 1929 £2,250,000 6½% bonds at 96. The special point about this loan is that the service is always available in sterling as long as sufficient potash is sold by Germany abroad, and as will be seen later no default occurred in this case when Germany was unable to procure sufficient foreign exchange to meet all her external obligations.

The Dawes Committee had established the amount of annuity which Germany could pay, and in 1928 a further committee of experts was appointed to achieve a complete and definite settlement of the reparations problem. The Young Plan produced by this committee suggested the number and amount of the annuities to be paid. It proposed to divide these into two parts, the first termed unconditional, which was to be paid in any event (this was finally fixed at 612 million Reichsmarks per annum), and the second or conditional annuity which might be postponed in certain eventualities. In order to provide for the conversion of the reparation debt from a political to a commercial obligation it made two recommendations. The first provided for the capitalization of part of the unconditional annuities by means of an international bond issue. The second provision was the establishment of the Bank for International Settlements, the primary function of which was the collection of the reparation annuities and the distribution amongst the creditor governments after providing for the service of the Dawes and the Young Loans. Whilst the functions of this bank were not to interfere with the various Central Banks, nor to compete with the commercial banks, it could use its power to give credit to arrange temporary assistance in transferring the annuities and to facilitate deliveries in kind, thus assisting Germany and simplifying the enormous currency exchange problems involved in the reparation payments. The sponsors of the establishment of this international bank, however, had in mind that eventually it might expand its activities and become an increasingly close and valuable link in the co-operation of central banking institutions generally and, as a sort of world central bank, might act as a stabilizing factor in the foreign exchanges and go far to eliminate the costs and risks now involved in shipping and reshipping gold. To ensure the international character of this institution, it was established in Basle, Switzerland.

Bank for International Settlements.

The first step in mobilization of the annuities was taken in June 1930 when the German International $5\frac{1}{2}$% Loan 1930 was issued in various centres to produce a total amount equivalent to \$300 million. This sum was paid to the Bank for International Settlements; two-thirds, representing the capitalization of part of the unconditional annuities, was for the account of the creditor powers, and the remaining third was for the account of the German Government. The service of the loan was to be provided as to two-thirds out of the unconditional annuities and the balance as to one-third out of the general revenue of the German Government. By way of collateral security the Government assigned the proceeds of the Customs and of the taxes on tobacco, beer and spirits, subject to the charge in favour of the 7% Dawes Loan. The loan was redeemable by 1965 by means of a cumulative sinking fund applied to purchase or drawings at par. The British portion of this loan, amounting to £12,000,000, was issued at 90%.

It should be emphasized that the issue of the Young Loan was a transaction between the creditor Governments and the investing public and in no way altered the weight of Germany's liabilities. Before this the whole of the reparation payments were made between Government and Government and so remained entirely in the political sphere. The intention of the loan, in addition to enabling the creditor Governments to collect part of the debt in cash, was to remove the payments in part to the sphere of private debts between Government and bondholder and so out of the political sphere. The effect in practice was that, when reparation payments ceased, payments on this loan continued, although after a time Government action was necessary to secure this.

This foreign borrowing, in addition to helping Germany in her scarcity of working capital, also made available to her large balances of foreign exchange and this explains how she was able for a time to meet her obligations for reparations and interest on her foreign loans. It is estimated that during the period 1924–30 her payments under these headings amounted to over Rm. 12,800 millions (£626 millions at the par rate of exchange Rm. 20·43 = £1). During the same period it is estimated that imports of capital amounted to over Rm. 17,300 millions (£847 millions). In other words, Germany actually secured on balance £221,000,000 in the form of large imports of merchandise, gold and foreign exchange. This meeting of her obligations by borrowing was, of course, no settlement at all, and merely deferred the time of payment until the new loans became due. The problem of how she was to obtain an export surplus sufficient to provide for these liabilities in addition to reparation payments in the future appears to have been overlooked by her creditors, who by raising tariffs to protect their own industries were preventing the expansion of Germany's exports.

Foreign lending had always been unpopular with American investors, and signs of increasing difficulties in Europe were making it harder to raise loans in New York. In 1928 and 1929 the Stock Exchange boom in New York provided such remunerative opportunities for investment in that country, either by way of speculation in the market or by loans for speculative purposes at high rates of interest, that Americans ceased to be interested in foreign lending. In addition, money was also attracted from London and other centres to New York.

The practical cessation of foreign lending to Germany brought the problem of payment to a crisis, and in 1931 President Hoover of U.S.A. proposed a 12 months' moratorium of reparation and War debt payments. The delay in adopting this, however, considerably reduced its psychological value in restoring confidence in Germany. The failure of the Oesterreichische Credit Anstalt in Austria and other similar troubles in Germany had started a movement to withdraw foreign credits from Germany, and it was estimated that during the first seven months of 1931 about 3500 million marks were withdrawn. The position was particularly vulnerable as the increasing difficulty of obtaining foreign loans had caused a disproportionate increase in Germany's foreign short-term indebtedness which was estimated to amount in December 1930 to 10,300 million marks out of a total foreign indebtedness of 25,500 million marks against foreign assets of some 9700 million marks. Much of this short-term borrowing had been used to finance German industry or public improvement schemes, and was not in a very liquid form for repayment. Any criticism of the failure to see that the form of borrowing suited the use to which the money was to be put should not be confined to the borrower. It is known that at times lenders were so keen to make advances that potential borrowers were urged to accept them without sufficient consideration having been given to the financial soundness of the projects or the suitability of the form of the loans available.

Although the internal run on the German banks could be checked by decree limiting the amounts that could be withdrawn, and banks in difficulty were sustained by Government guarantee of their deposits, it was necessary to arrange a cessation of the external withdrawal of funds. Accordingly, a "Stillhalte" or Standstill Agreement was negotiated with the foreign bankers. This provided for a six months period to 1 March 1932 for the maintenance of all credits outstanding subject to certain conditions, in order not to impair her financial stability, which was essential in the interests of the whole world. It was a temporary measure intended to form a basis for

Stillhalte or Standstill Agreement.

more permanent action to follow. This agreement has been continued from time to time and is still outstanding. The amount involved has been reduced partly by repayments, partly by the cancellation of unused credits and partly by collection in the form of Registered marks, described later. The agreement represented an entirely new departure in international credit machinery and produced the position where banking creditors were constrained to think in terms not of individual debtors but of the community, and where sound potential individual borrowers were debarred from access to fresh credit facilities by the fact that credit had become immobilized by unsound debtors.

From this point the history of Germany's foreign exchange and foreign indebtedness shows a record of regulations and expedients in her struggle to maintain a balance between her foreign income from her export trade and her expenditure for service of the foreign debt and for purchase of food and of raw materials for her manufacturing industries. Despite the relief from the moratorium in reparation payments, which have not been restarted, the severe fall in world trade was very serious for a manufacturing country like Germany, the effect of which was greatly increased by the resulting increases in tariff barriers particularly in the British Empire. The other factor in the balance of payments, viz. transactions on capital account, was now all in the direction of withdrawing capital from Germany. First, there was the foreign investor who wished to recover such part of his capital as he could, either by selling his investments in Germany or by not renewing them as they fell due for payment. Secondly, there was the German national wishing to export his capital for safety. This particularly applied to the emigrant or would-be emigrant who wished to take his fortune with him, and in recent years there has naturally been a considerable increase in the flow of Jewish emigrants following the increasing severity of the Nazi anti-semitic policy.

The general policy, by regulation and control of every item of her foreign transactions, has aimed at prohibiting the export of capital, increasing her exports and decreasing her imports and reducing the charge for the service of her foreign debt.

In this period other countries have at different times devalued their currencies and so obtained a temporary advantage for their export trade. The advantage arises, of course, from the cheapening of the price of their exports in the currency of the importer, e.g. an article of British manufacture which was priced at £1 was worth \$4·86 before the £ was devalued, but cost only \$4 when the rate of exchange fell to \$4 = £1. The advantage was temporary in so far as the same currency movement increased the cost of manufacture in Great Britain by increasing the cost of the raw materials imported. The effect was also countered by tariff and quota restrictions by the importing countries and by the devaluation of other currencies in their turn. Following her experience of the currency collapse after the War, Germany was determined not to follow this course again and the mark was kept rigidly at its gold parity. This value became, however, only a nominal one with the exchange restrictions which were imposed. This advantage for their exports was achieved, however, by other means, as explained later. Another reason for this policy lay in the fact that the majority of Germany's indebtedness was expressed in terms of foreign currencies, the weight of which would be increased by devaluing the mark. Instead of this, however, Germany's foreign debt was *decreased* by the reduction in value of the £1 and other currencies.

Rigid control was imposed on all foreign exchange transactions by a series of German Control Boards, and various categories of Blocked Reichsmark Accounts were created as explained later. The export of capital was practically prohibited by regulations that the proceeds of the sale of investments and the repayment of loans, mortgages and bonds, must be paid into blocked mark accounts.

Blocked Reichsmarks. The use of the Reichsmarks in these accounts was restricted to long-term investments in Germany. Severe penalties were imposed for offences against these regulations. The restrictions on the use of these blocked marks naturally reduced their exchange value. The rates of exchange for some of the types of marks on 13 September 1938 were quoted:

Free marks	RM. 12·0 per £1.			
Registered marks	30 – 30¾,	approximate	discount	60½%.
Securities marks	136 – 138½,	„	„	91½%.
Emigrant marks	136 – 138½,	„	„	91½%.

Registered marks are balances which arise in respect of the repayment of cash advances under the German Credit Agreement of

1933, and can be used for travelling expenses in Germany, for payment of passages on German steamers, and, under permit, to pay for "additional" exports. They are, therefore, more valuable than "securities" or "emigrant" marks which can only be used for long-term investment in Germany. The last-named arise from the regulations which at present provide that emigrants must hand over half their assets to the Government and the other half must be taken in these blocked marks so that in effect the unfortunate emigrant can take less than 5% of his assets with him and in order to do this must forfeit the balance.

In order to increase the export of goods, a system was evolved for the utilization of certain classes of blocked and registered marks by foreign firms in payment of goods from German exporters, thus reducing the cost to the foreign importer. This was, of course, only allowed where the exporter could not sell his goods without the benefit of the discount on the blocked marks. In addition, German exporters were allowed to use part of the foreign currency received to buy abroad German securities which stood at very low prices and to sell them internally at the higher prices ruling there, the profit being used to reduce the price of the goods to the foreign importer.

This practice would appear on the surface to contravene one of the generally accepted principles of sound financing that, when a debtor is unable to meet his obligations in full, the whole of the resources which he can spare for the purpose should be applied towards meeting the contractual rights of the creditors and that it is unfair to withhold any part of those resources for the purpose of repurchasing indebtedness at the depreciated prices which result from this position. In this case it would presumably be argued that the creditor benefited by the operation since part of the proceeds of the exports were available to assist Germany's position and that the exports would not have been possible at all without the reduction in price made possible by this ingenious device.

Control has been imposed on all classes of imports to eliminate imports of goods which are unessential or for which substitutes can be provided internally, and to ration the use of imported materials in favour of the export manufacturing industries and (more recently) for the benefit of the rearmament programme. From time to time efforts have been made to arrange transactions on the actual barter principle and some agreements have been concluded for the exchange with other countries of raw materials in bulk against *additional** exports of manufactured goods.

In July 1933, owing to inability to obtain sufficient foreign exchange, a moratorium was declared in respect of all German external debt. After negotiations with foreign bondholders' committees an agreement was made for the six months to 31 December 1933 whereby all sinking funds were suspended and interest was payable as to 50% in cash and 50% in non-interest-bearing scrip. This scrip was to be bought back as far as possible at 50% of its face value so that the bondholder would receive, if he wished, 75% of his interest. The scrip might be bought by German exporters at 50% in respect of any *excess** exports and tendered at its face value, thus providing a bonus on additional exports. The moratorium was extended to June 1934 on the basis of 30% cash and 70% scrip, the scrip being encashable at 67%, giving a total value of 76·9%. The German Government 7% Loan (as to interest and sinking fund) and the 5½% Loan (as to interest) were exempted from this moratorium. The Potash loan by its conditions was unaffected.

Further negotiations were opened in April 1934 for the period subsequent to June. The basis adopted for 12 months to 30 June 1935 was the settlement of interest payments by means of 3% 10-Year Government Funding Bonds which would have absolute priority as to exchange transfer. Alternatively, the interest coupons would be bought by the German Government for 40% in cash in complete settlement, the payment to be made 6 months after the due date. In June 1934, however, the German Government stated that it was unable to make any payments owing to the absence of foreign exchange facilities, due to the decrease of exports, and declared a moratorium on all interest payments including the Dawes and Young Loans. This was followed by action by the British and other Governments and an agreement was reached by our Government, under threat of establishing a Clearing System in the same manner as had already been done in some other countries. This provided for the payment in full of the interest on the Dawes and Young Loans of all issues, provided they were in certified British ownership on 15 June 1934. Interest on other British-held

* Exports above the normal. It is, of course, necessary for the exporter to prove that he could not sell his goods without the benefit of these provisions.

German loans of all classes was met until 30 June 1938 in sterling in 10-Year Government Funding Bonds carrying interest at 4% which are promised absolute priority as to exchange transfer. As mentioned previously, owing to the special conditions of the Potash loans, the service has been met in full and the loans have been excluded from this and other discussions.

Since the inability of Germany to meet the service of her foreign debt arises from the unwillingness or inability of other countries to buy her exports, it is argued that a country which does buy more from Germany than it sells to her is entitled to receive more favourable treatment than a country whose balance of trade is adverse to Germany. In order to secure this, certain countries (as already mentioned) had established Exchange Clearing Systems. In the normal course a purchaser of goods from Germany would pay the exporter individually the price of the goods purchased. In a country where such a clearing system is established the nationals are required to make their payments into a central clearing fund in the currency of the importing country. Out of this fund all claims are met for payments for exports to Germany and the balance is available for payment of interest on German securities held by the nationals of the country concerned, thus securing to them the advantage of the special trade position of that country with Germany. Any balance after meeting these interest payments in full or in part as agreed would be available to the Germans in the form of foreign currency. On the German side the payments for imports into Germany could be made by the individual importer to the central fund in Reichsmarks. This would be used towards settling for the exports from Germany which would thus be paid for in marks. The balance due to these exporters would come from the interest payments of the German debtors who would thus be enabled to meet their liabilities in Reichsmarks. This they would be able to do as the original difficulty was a problem of foreign exchange transfer only. It is obvious that only those countries whose trade balance is favourable to Germany can gain by such a system.

Exchange Clearing System.

The weakness of the argument upon which clearing systems were started lies in the fact that international trade has not been based on an equality of payments between each pair of countries, but on the achievement by each country of equilibrium between its total imports and exports, e.g. if there were only three countries trading, viz. A, B and C, then country A could import from country B a large excess over its exports to country B providing that it had an equivalent excess of exports to country C. The position of countries B and C would be equally sound providing that country C had an equal excess of exports to country B. This, of course, ignores the complications arising from international investments and debts. The effect of these clearing systems is to canalize trade between countries and encourage the introduction of barter transactions, and therefore they must inevitably introduce a further obstacle to international trade.

In July 1938 after negotiations with the Committee of Long-Term and Medium-Term Creditors a permanent basis for settlement of the German debt to British holders was embodied in the Anglo-German Transfer Agreement 1938. This was a few months after Austria had been absorbed by Germany. The agreement provided for payment on the Dawes Loan and the Austrian 7% 1930 Loan* of 5% interest in sterling with a 2% cumulative sinking fund, on the Young Loan and the external loans of the City of Saarbruecken† of 4½% interest with a 1% cumulative sinking fund to start after 2 years. The Konversionskasse 4% bonds (the 10-Year Government Funding Bonds mentioned on p. 84) were to be met in full and no alteration was made in the terms of the German Potash loan. The agreement also provided for the settlement of interest and dividends on non-Governmental debts of Germany and Austria in lieu of the issue of Konversionskasse bonds by the payment to British holders of 50% in sterling of the nominal sterling value of such claims with a maximum rate of 4%. The scheme is to last for 18 months and thereafter to be subject to 6 months' notice by either party. It was specifically mentioned in

* The Austrian Government International 7% Loan was issued in 1930 in several countries to the extent of about £21,000,000 or its equivalent in other currencies. It was secured on the gross receipts of the custom duties and tobacco monopolies subject to the Guaranteed Loan of 1923–43 (since redeemed). The loan was authorized for productive capital expenditure on railways and postal and telegraph administration.

† The City of Saarbruecken 6% Sterling Loan was issued in 1928 to the extent of £1,000,000. By the Treaty of Versailles, the Saar was governed by a Commission appointed by the Council of the League of Nations. Following a plebiscite held in January 1935 the government of the territory was transferred to Germany.

Rates of exchange

	France (franc)		Belgium (franc)		U.S.A. (dollar)	
	Low	High	Low	High	Low	High
1922	47·40	72·20	50·65	79·80	4·19	4·66
1923	62·75	86·55	68·37$\frac{1}{2}$	103·90	4·30$\frac{1}{2}$	4·71$\frac{7}{8}$
1924: Jan.–Mar.	77·80	119$\frac{3}{8}$	96·25	137$\frac{3}{4}$	4·20$\frac{5}{8}$	4·73$\frac{3}{8}$
Apr.–Dec.	65·60	88·27$\frac{1}{2}$	76$\frac{5}{8}$	98$\frac{5}{8}$		
1925: Jan.–Sept.	87·10$\frac{1}{2}$	109·05	91·90	112·10	4·74$\frac{9}{16}$	4·86$\frac{1}{4}$
Oct.–Dec.	102·35	134·75				
1926: Jan.–Mar.	125$\frac{11}{16}$	142$\frac{3}{16}$	106·95	131$\frac{3}{4}$	4·84$\frac{1}{2}$	4·86$\frac{3}{4}$
Apr.–Sept.	139·65	238$\frac{3}{4}$	124$\frac{1}{2}$	233$\frac{1}{2}$		
Oct.–Dec.	120$\frac{1}{16}$	173$\frac{3}{16}$	34·81$\frac{3}{4}$*	34·90*		
1927	121·97$\frac{1}{2}$	124·10$\frac{1}{2}$	34·87$\frac{1}{2}$	34·99$\frac{1}{2}$	4·84$\frac{29}{32}$	4·88$\frac{13}{32}$
1928	123·97$\frac{1}{2}$	124·27$\frac{1}{2}$	34·87	35·03$\frac{1}{2}$	4·84$\frac{13}{16}$	4·88$\frac{25}{64}$
1929	123·73$\frac{1}{2}$	124·32$\frac{1}{2}$	34·85	34·96$\frac{1}{4}$	4·84$\frac{19}{32}$	4·88$\frac{3}{8}$
1930	123·54$\frac{1}{2}$	124·33$\frac{1}{2}$	34·73$\frac{3}{4}$	34·96$\frac{1}{4}$	4·85$\frac{33}{64}$	4·88$\frac{1}{32}$
1931: Jan.–Sept.	122$\frac{7}{8}$	124·45	34·74$\frac{1}{2}$	34·98$\frac{1}{4}$	4·83$\frac{7}{8}$	4·86$\frac{47}{64}$
Sept.–Dec.	83$\frac{1}{8}$	108	23$\frac{7}{16}$	30	3·25$\frac{3}{4}$	4·22$\frac{1}{2}$
1932	80$\frac{5}{8}$	96$\frac{5}{8}$	22·75$\frac{1}{2}$	27·45	3·15	3·80$\frac{1}{4}$
1933	78$\frac{23}{32}$	89$\frac{5}{16}$	22·10$\frac{1}{2}$	24·99$\frac{1}{2}$	Jan.–June 3·33$\frac{1}{2}$	4·38$\frac{1}{2}$
					July–Dec. 4·40	5·50
1934	73$\frac{27}{32}$	83$\frac{15}{32}$	20·86	23·52	4·90$\frac{3}{8}$	5·17$\frac{3}{8}$
1935	71$\frac{1}{16}$	75$\frac{61}{64}$	Jan.–Mar. 20·07	25$\frac{5}{8}$	4·73$\frac{3}{4}$	4·98$\frac{1}{2}$
			Apr.–Dec. 28$\frac{1}{4}$	29·52		
1936: Jan.–Sept.	74$\frac{29}{64}$	76$\frac{61}{64}$	29·19	30·00	4·92$\frac{13}{16}$	5·06$\frac{7}{8}$
Sept.–Dec.	104$\frac{53}{64}$	105$\frac{23}{32}$	28·82	29·32	4·87$\frac{1}{2}$	4·95$\frac{3}{8}$
1937: Jan.–June	105$\frac{3}{64}$	111$\frac{17}{64}$	28·89	29·63	4·87$\frac{13}{16}$	5·02$\frac{1}{4}$
July–Dec.	127$\frac{63}{64}$	151$\frac{3}{8}$				
1938: Jan.–July	147$\frac{19}{64}$	178$\frac{29}{32}$	29·07$\frac{3}{4}$	29·64$\frac{1}{2}$	4·91$\frac{1}{8}$	5·03$\frac{9}{16}$
Aug.–Dec.	176$\frac{49}{64}$	179$\frac{1}{16}$	27·38	29·00$\frac{1}{2}$	4·63$\frac{1}{4}$	4·90$\frac{9}{16}$

* Belga.

the agreement that the consent of the German Government to make these payments in connexion with the Austrian loans was without admission of legal liability.

Table of Outstanding Financial Events

1923. Entry into the Ruhr.

Jan. 1924. Increased French taxes; and credits obtained in London and New York.

March 1925. Suspicion that legal limit had been passed on loans by Banque de France to the Treasury and on fiduciary issue and that the Bank had under pressure issued fictitious weekly balance sheets to conceal this fact. Government admitted this and passed legislation raising limits.

1926. Wide fluctuations in franc. July. M. Poincaré's Government—expenditure reduced and budget balanced.

1927. Increased confidence produced a flight to the franc and Government had to sell francs to maintain rate of exchange.

1928. Legal stabilization of franc at 124·21.

1929–30. Repatriation of French foreign balances produced flow of gold from London to Paris.

Sept. 1931. Sterling departed from the gold standard.

April 1933. U.S.A. abandoned gold standard. Power to depreciate by not more than 50%. Gold value of $ refixed at $35 per fine ounce, equal to a depreciation of 40%.

Sept. 1936. Franc departed from the gold standard.

1937. Further depreciation of franc.

May 1938. Declaration that the franc-sterling rate would not be allowed to exceed 179.

Cost of living indices extracted from the *Economist* trade supplement

Base 100—July 1914.

	Great Britain	France
1920	255	341
1921	222	307
1922	181	302
1923	171	334
1924	171	366
1925	173	390
1926	170	485
1927	164	525
1928	166	519
1929	164	556
1930	158	581
1931	147	569
1932	144	526
1933	140	520
1934	141	516
1935	143	483
1936	147	507
1937	155	619
1938	156	698

Figures for the years 1920 to 1927 are given for the month of July in each year. Figures for the years 1928 onwards are the average of the monthly figures.