§6. The emphasis on the accumulation of a large stock of gold in the Reichsbank has assumed almost the character of a fetish. The loss of gold by the runs at the outbreak of the war seemed to show that it would be impossible to continue convertibility of the notes.

That conclusion implied the disappearance of gold, if it left the possession of the Bank. In normal times gold, when paid out, would return. On the present situation, however, there was not only the expectation of hoarding, but of exportation. Cut off from the receipt of gold in payment of export balances, and rather forced to ship gold in return for needed imports from neutral countries, a firm control over the stock of gold seemed to be the order of the day. In any event, no chances were taken. The estimate placed on the possession of a substantial fund of gold had greater force than the alternative disturbance inevitably accompanying an inconvertible and depreciated currency. Doubtless, in this as in other situations, the German belief in a short war and an early victory became an obsession, which regarded depreciation as unthinkable, especially with a Theory of money which depends so largely on the will of the State. This was a serious error, a financial blunder, the results of which will be difficult to measure. Almost immediately the notes were depreciated, and by the end of the third year of the war were at a discount in neighboring neutral countries of from 43 to 49 per cent. That statement carries its own lesson.

Desire to Collect Gold

Depreciation
In Germany, the stock of gold is to be found either in the Reichsbank or in the hands of the public. Since the private banks carry very small reserves, before the war, the amount of gold in the country was estimated at from $150,000,000 to over $1,000,000,000, of which the Reichsbank then held only about $340,000,000; so that the gold bore a ratio of over 70 percent to the note issue, of $472,000,000. There was thus left in the circulation or outside the Bank, some $610,000,000 or more, as a possible resource, irrespective of sums held by the allies of Germany. In 1913, the Austrian-Hungarian state Bank was reported as holding $255,000,000 of gold. The gold holdings of Bulgaria and Turkey were, of course, inconsiderable.

Systematic efforts were then made to increase the gold funds in the Reichsbank. In addition to the war chest of $51,000,000 turned over to the Bank, as already mentioned, on November 23, 1914, the Reichsrat passed an act penalizing the buying or selling of gold at a rate higher than the face value of the coins; prohibiting the exportation of gold under penalty of 5 years imprisonment and a fine of $1,250; and providing

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1. The Imperial Bank of Russia carried in gold about $800,000,000; the National Bank of Belgium, $66,000,000; the Bank of France, over $800,000,000; and the Bank of England, $190,000,000. Cf. supra, p. 115.
The publication of the rates of foreign exchange, without South Sea Stock being obtained from Austria and Belgium. The main success in building up the gold stock in the Bank was a remarkable campaign conducted among the people to induce the purchase of gold coin, or articles of gold, from Reichsbank notes as a patriotic duty. A canvass from house to house, in ships, in small villages, through the press, schools, soldiers, mutual benefit societies, married, and sellers of tea, brought out 100,000,000 of gold. In the first six months of the year, much emphasis is put upon the fact that exchange was wholly voluntary, but effective official pressure was applied to prevent hoarding and to encourage the import of gold. As a consequence, the gold reserves of the Bank steadily increased until the end of 1915, with a general decline. The attainment seems to have been reached at something over 600,000,000. In the three years, the highest point was gained, May 31, 1917, at 7,641,500,000. From all sources, according to the Bank, the amount handled, in specie of gold, by about 380,000,000 through buying and effective organization. If the estimate of the amount in the country at the beginning of the war be accepted, there must still be about 360,000,000 still in hiding. On the other hand, it is to be noted that, in addition to the stock in the Bank, some of the gold withdrawn early in August went to Scandinavia, America, and Switzerland, and that other sums had to be sent out in attempts to (Estimates at first 90,000,000)

1. In an address to the New York Chamber of Commerce, after his return from Berlin in April, 1917, his reports to have described the hunt for gold in Germany as follows (N.Y. Times, July 15, 1917)

Signs were hung up in the streets saying, "He who keeps back a gold piece injures the Fatherland." Soldiers were given a two days' leave of absence if they would purchase a twenty-mark gold piece. For that they were given a twenty-mark note, just as good as the gold to Germany. School children, if they produced a ten-mark gold piece, were given ten marks in paper and a half holiday. In many of the towns if a person paid for his tobacco with gold he would receive a ticket good for another day. I know of one American woman who was visited by two gendarmes in her apartment in Berlin. Why, she said, "We have you have some gold, and if you do not give it to us now, we will search the apartment and break everything in it."
steady German exchange in neutral countries, or Tunes, for supplies not otherwise procurable. As a rule, events, at the end of the Third year of the war, it seems that, while the volume of credit gold was increasing, the stock of gold had reached its maximum. The percentage of gold to the notes which before the war was over 70 per cent. had fallen to 48.67 on November 23, 1914; to 38.9 on December 23, 1915; to 30 on December 30, 1916; and to 28 on June 30, 1917. There could be no more convincing evidence of the increasing strain on the central institution of the German credit system.

Again, we have an illustration of the wide difference as to the effect on the value of the notes of immediate, as contrasted with ultimate, redemption in specie. When the notes are convertible on demand, they remain as far with gold. Moreover, redemption on presentation of the notes at once determines the quantity that will remain in circulation. No more will then be retained in the hands of the public than is required for purely monetary purposes as a medium of exchange or for reserve. That is, an inflated condition of the circulation is impossible when there is immediate redemption in gold. But there is far more in the matter than this monetary result. In a country in which the notes are a necessary complement to loans, so that the volume of notes follows the volume of extending credit, immediate redemption of the notes prevents the expansion of credit beyond the point of soundness. That is, if it serves as a test of the solvency of a transaction, of
a bank expands its loans, so that it issues to borrowers more notes than it can redeem on demand, it must either stop lending or—what in effect is the same thing—accumulate more gold in its reserves. To secure more gold, the bank must raise the rate of discount, which acts as a brake on loans. On the other hand, suspension of specie payments removes these checks on the inflow of credit. The only limit to credit is the limit to the issue of notes. In Germany, the only check was that the notes should not exceed three times the cash reserves. Consequently, the future solvency of the Reichsbank depends upon the liquidity of the other two-thirds of its reserves of commercial paper. It is inevitable that in this unprecedented condition of business, many of these assets could not possibly be liquidated, even in represented paper, to say nothing of gold.

The savings of money and credit has not yet fully worked out. The psychological effect of a large amount of gold held in reserve behind notes that are convertible. Such gold is in a way a bond; but, of course, it would have a greater influence on public opinion as to the future value of the notes, when held by the issuer, than if this gold had disappeared into private hands. Even if there is gold in the possession of the public, or obtainable by foreign trade, it is no inexpressive task to mobilize it to be used for redemption sooner or later. Its retention in a conspicuous repository, where its amount is known to all the
works, gives positive basis for estimating the future chances of redemption. The depreciation of the paper, in spite of a hoard of gold behind the convertible notes, seems to be the greased wheels of the community as to the convertibility of time and certainty of redemption as far as possible. When the depression note issues are largely increased it gives evidence of a postponement of convertibility as viewed by the public, and the notes are sure to depreciate relatively to gold. The increasing volume of convertible notes does not require us to believe that prices have risen because there has been more money placed in circulation, but only that the paper money, in which prices are expressed, has depreciated, because the conditions affecting its value have become less favorable. We see the same processes at work every day in the market for securities when a non-dividend-paying stock changes in price as the earnings of the perfectly change. In any event, as the volume of Reichsbank notes has risen to unheard of sums, after the accumulation of gold has come to a standstill, the prospect of redemption has become more remote, and the quotation of the exchange price of a paper mark has steadily fallen. The error in Germany, as in France, lies in tying up the borrowing operations of the Government with the issue of the notes which form the circulation of the country, and then in validating the very standard in which prices and contracts are expressed. The mistake is the failure to distinguish between the fiscal and the monetary functions of the State.
§ 7 Since credit involves the obligation to return an equivalent in the future, this unparalleled inflation of credit, high and low, raises the question as to its probable solvency. Germany has not lost much surplus capital as Great Britain or France, but she is thrifty and her industrial organization is remarkably efficient in making the most of very moderate resources. Just the same, she and the other belligerents are drawing down the reservoir of their accumulated wealth and capital. The dislocation of industry caused by the war has diverted vast quantities of labor, capital and materials from the normal production of peace goods to the making of naval and military supplies, which, having been destroyed on a scale never equaled in the history of the world, has vanished in thin air. Yet, now as always, the thing fundamental to a country's maintenance, as well as to its credit, is the quantum of tangibles, present goods on which the population can draw at once. How is it possible for Germany to go on enormously increasing her promises to pay in the future at the same time that her accumulated wealth and capital is being reduced by the frightful expenditures of war?

Credit is a means of throwing burdens forward on the future; it enabled the needy to tide over a present shortage in the hope of larger means hereafter. 1. cf. Chapter II, § 4.
But for how long a period will credit take care of a shortage? If goods are not forthcoming to replace those destroyed, the surplus is being wiped out. Of course, how can credit obligations be actually liquidated? If met by an increase of paper promises to pay, that only postpones it. Sava only remove. The inevitable day of reckoning based on gold. The Germans did not expect so long a war. What we are witnessing today in Germany is an experiment in the length of time that credit can carry an isolated community in a condition of want and destruction of goods. Any credit liabilities are already enormously expanded, irrespective of the imperial debt. The whole matter pivots on the quality—that is, the liquidity by sale and conversion into cash of the assets which give support to the real structure of claims and credits. In normal times, the stability of credit is being constantly tested by recurring liquidation at short junctures, so that the entire volume of assets is always in a process of renewal and thus kept healthy and sound. Stop this process of renewal and decay sets in. If these assets held by German credit institutions are canned, without the possibility of payment at maturity in short periods of time, they cannot long remain sweet.

In respect of the sequestration of wealth and capital, that is going on in all the belligerent nations. It is not confined to the Teutonic powers. In the working of credit, however, a very different and far-reaching result is produced in Germany from that in the Allied countries, and for a very obvious reason. Germany
is practically cut off from foreign trade (except Norway that with Switzerland, Holland, Denmark, and Sweden); hence she must rely mainly on the goods which can be produced within her own boundaries. The war can be carried on only by goods strictly in hand, and not in the bush. There must be enough present goods to supply immediate consumption and destruction. Of England, or France, with by credit operations with the United States, to replace with American goods those consumed or destroyed in their firing line, they can do so. In effect, they can fill up by credit the responsive of goods, as fast as they are thrown down by war, through replenishment of present goods from an outside source. Not so with Germany. When she is compelled to borrow only at home — within the family so to speak — she cannot restore her losses except out of her own internal production. Germany, by credit now offers to her own people for goods destroyed can give promises to pay from the proceeds of goods produced in the distant future, but that goes not to provide her with goods for consumption today. All she can do to meet the waging down process is to try to increase her normal, peace-time capacity of production.

The war, however, has very seriously reduced her normal power of production, as may be illustrated by the following diagrams:
In $x+y$ are contained the output in goods from German labor, capital, and resources, to supply both the civil and military population of about 68,000,000, together with the gains from exchanging some of her products in foreign trade. In the second diagram are seen the first effects of war by the changes in direction of productive industry, so that $y$, the goods produced for war purposes, shows a disproportionate increase as contrasted with $x$, the non-military consumption of the civil population. In addition, the block representing the goods of foreign trade disappears. Then, later, come the effects of reduction in the factors of production, which influence the which output of both $x$ and $y$. The shaded parts of the blocks below the area of products shows what has happened to these factors. The withdrawal of men from industry, to the front, alone reduced the labor force; but as the war has gone on, millions have been killed, maimed, or taken prisoners. The intense pressure on industry and the need of labor in producing both $x$ and $y$ explains the policy of frightfulness in deporting laborers from Belgium, Poland, and Serbia. The waste of capital, as previously explained, has gone on apace. The cessation of foreign trade, except

1. cf. chapter II, §4.
though neighboring neutral countries, has produced a shortage of the raw materials such as cotton, coffee, rubber, and the lack of fodder has forced a depletion of the cattle; and the scarcity of labor has lessened the output of coal and the efficiency of transportation. Such depletion of the factors of production could have but one result on the total output of products and as the needs of the army come first, the burden of maintaining the nation’s consumption must fall upon the civilian population.

So obvious is the reduction in the production of goods that the who runs can read the inevitable fact that the basis of credit. It is impossible that the great mass of assets behind the demand liabilities should be liquidated with steady declining production. The volume of demand liabilities is increasing. If the assets are not more liquid, then the solvency of the traders has been maintained. The conversion of a diminishing stock of goods, however, into an increasing volume of demand liabilities, or trade notes, undermines the weight of the note, so that the liquidation is after all deceptive. Certainly the depression of the paper-money reflects this loss of confidence. So long as appearance are kept up being trading with a depreciated currency, the solvency of credit is only an empty, economically so far as a basis of acceptable goods as concerns, the credit is not solvent even now. An increase of the forms of money and credit by an antidote.

There seems to be considerable evidence to prove that if the military consumption remains at its present level, the productive power of the country will not suffice to provide more than the necessaries of existence to the civilian population. The division of production to war goods has practically taken over. The former surplus above necessaries is almost used up. It is a question whether production has not fallen below the "line of necessity" for many of certain classes who cannot meet the enhanced costs.

1. The textile industries, for instance, have been hard hit by the war. Of their own initiative many establishments have already closed. But now, as in the case of other industries, the textile concerns are threatened with compulsory syndication by Government authorities, accompanied by the shutting down of unnecessary factories. In the Rhineland and Ruhr, the textile work is falling off of nearly 50 per cent, as compared with 1913.
government, without a corresponding increase in the basic goods, may succeed in tiding over present burdens over a temporary emergency during the short period until goods can be again normally produced and sold or until time is given to permit gradual liquidation without too much sacrifice. But will this hold good for the great catastrophe in which Germany finds herself, now unexpectedly prolonged into the fourth year? Who is able to say what will be the worth of the expanded volume of assets after the war? But any one must know that they are not now liquid. To increase demand forms of credit and money, without a corresponding increase of quick assets convertible into cash, produces what we call an inflation of credit. Inflation of money is the symptom; the inflation of credit is the disease.
§ 8. How far the basis for credit operations has been
undermined may be learned by the breakdown of domestic production and trade both in the unprecedently disturbed location of Germany’s international dealings. The two, of course, are closely intertwined. As she got more and more away from the old regime to one of
the new, there and machinery, she has been supporting manufacturing to pay for imported materials and
subcontracting. When cut off imports by the closing of her ports
a German. The total volume of production has diminished. As for foreign
trade, the ports of commerce have been inhibited; it was difficult to produce
enough coal and other goods with which to pay for
the reduced stream of imports from Sweden, Holland.
It is to be noted that Germany’s
and Switzerland. It is not to be pronounced that German’s
dominated trade had been with Russia, Great Britain,
France and the United States. To lose all this trade
would be a staggering blow. Credit must shrink
according with the diminution of trade. If there are
no markets, there can be no sales, no demand;
and assets fade away.

For instance, our exports to Germany which
were $344,000,000 in 1914, dropped to $489,000,000
in 1915. Our imports fell from $28,800,000;
and our imports fall from $48,300,000. England’s
exports to Germany fell from $356,000,000 of goods;
and sent for $42,000,000 of goods. This interchange,
of course, has ceased. German exports in 1912 to British
possessions amounted to $477,000,000; to Africa, Asia,
North and South America, and Australia, $765,000,000.
Take away this real trade, and we may understand the

1. Since the early closing of the ports of Hamburg and
Bremen, Liebeck and Etzdorff have reported and imported
largely by the Baltic from Scandinavia. These ports became
the chief centers in Germany. Through them chemicals long
went to the United States.

2. of supra, p. 36.
Volcanic effect thereby caused to business enterprises and credit. It is estimated that of all German trade to her competitors, one-fourth to one-half is with countries now hostile to her, most of her ships are idle. The imports of Russian raw materials, as exports to Russia of her manufactured goods, stopped. The foreign markets for her specialized products, such as sugar, were largely closed, except through Sweden, Denmark, Holland, and Switzerland; and the same was true of her dye-stuffs, drugs, chemicals, potash and coal. The production of coke at home was about 50,000 tons against a consumption of 250,000 tons, the difference coming chiefly from the United States.

To a great extent she was cut off from coffee, nickel, flax, wool, cotton, rubber, and jute. The silk, steel, wooden and jute industries inevitably fell off in production. In that way, the basis of credit was removed. The general stock of her than were goods being resumed, there was little to be consumed by the labor. Capital and materials were shortened, so much the volume of goods declined. But not only was there a material diminution of trade goods, but there was a material diminution of trade goods, which could be paid. But the inability to meet their engagements has inevitably impaired the estimate of German credit on the markets of the world.

1. The coal plants and the potash mines were turning out not over 10 per cent. of their normal production before the war, largely because of a shortage of labor and coal. The Nuremberg coal had been, of course, cut off, and the Westphalian coal was too expensive.
§ 9. A phenomenon common to both belligerent and neutral countries during this war has been the rise of prices. At once the causal connection between money and cost, on the one hand, and the level of prices, on the other is suggested. Certainly the phenomena of each country will furnish much material taken from the years of war to test The Theory of Price. However, that may be, it is entirely clear that for Germany at least we have no very useful data as yet for a final discussion on this pivotal problem of credit and prices. There is not much more than secondary evidence. We know, of course, that German prices have risen; unofficially, prices in general are said to have risen 75 or 100 zlotys a unit, in the early part of 1916. In the autumn of 1914, according to the German press, coffee had risen 75 per cent; aluminum, 212; antimony, 360; nickel, 85. Potatoes, wheat, meat, fats, and all foodstuffs have actually risen to high levels. The same is true of horses. The growth in Scandinavia and Denmark of double former prices. Unimpeachable evidence comes in of a marvelous increase in the cost of living which has been a heavy burden on the poorer classes, causing suffering, a demand for higher wages, and of Serious discontent and occasional risings.

1. Frankfurter Zeitung, Nov. 12, 1914.

2. Investigations conducted by Korvé in September, 1915, showed that the price of food had increased 85 per cent in Berlin since the beginning of the war. The price of 52 common articles of food were taken from the price lists of the large co-operative stores and the average cost of one pound of each article was found to have been 35 marks in August, 1914, but to have increased to 65 marks in August, 1915. The official index number for food prices in Berlin also shows an increase of 82 per cent. Between July, 1914, and December, 1915, M. Chase Bond, Inc., cib., p. 545. Also, the nation provided for a German ration per week, which had been M. 25, 13 Hrs. in July, 1914, was M. 39, 13 Hrs. in August, 1915, showing an increase of 56 per cent.
together with petrol, nitrates and materials for war goods, have, of course, risen markedly.

Nevertheless, Germany offers no guide for a normal study of prices, and for an obvious reason. The very first upward movements of prices were the signals for a drastic regulation of maximum prices by a paternalistic and autocratic government. There was, and still is, an elaborate system for controlling the prices of all necessary articles of food. The extent to which this interferes with price-f catching has gone on how probably never before been equaled. Moreover, as time has passed, ordinary property rights have disappeared before the necessities of war, until military experience has come to create a conception of a national communism in which the State may requisition whatever it needs, even if all the economic surplus be taken. Additional taxation being little used, goods are obtained, if not by loans, borrowing on forced subscriptions from municipalities and others, then by commandeering. Prices, under such conditions, have little meaning to the economist.

And yet man who knows everything absolutely is willing to say that the admitted rise of prices is due to inflation. It is with the place to discuss here. The theory that prices must rise with an inflation of the currency is or, if prices have risen, assuming the rightness of the theory — that prices must have been an inflation of the currency. There
Inflation not a sufficient cause.

There is only space to say that no substantial body of facts has ever been collected which prove this theory, while so many other factors, which affect prices more than the quantity of money possible, are entirely overlooked. The facts as to the increase of money and credit in Germany have already been given and it is added that the additional circulation put into circulation as a symbol of expanded credit—since the war began has been about $2,800,000,000 (13 and 6 note, loan Bureau notes, and Imperial Treasury notes). Not more than about $300,000,000 of the stock of gold known to be in the country before the war is supposed to be still reserved. Certainly, some 2,500,000,000 may be regarded as a fair approximation to the addition made to the money of Germany since July, 1914.

The inflation of German money and credit is unmistakable; but it is not necessary to assume it as the cause of the admitted rise of prices. That the mark has depreciated, whenever a direct comparison is made between it and gold in neutral markets such as Amsterdam and Copenhagen, there is no doubt whatever. The suspension of gold redemption and the unrestricted increase in the circulation are sufficient reasons for the depreciation, as already said.

1. cf. the author's Principles of Money (1903).

2. cf. supra, pp. 255, 258, 263.
presumed. If there is a depreciation of the money, of course, prices registered in it will rise accordingly. Were everything else to remain the same and a country suddenly by law changed from a gold to a silver standard at one-half the market value of gold, prices would inevitably be doubled. In short, whatever the cause of the depreciation of the common money of account, the paper mark, the general level of prices must be affected by it, were no other cause at work.

Besides these were other causes at work on prices. It is oversimplified to discuss changes of price by considering only the money by which goods are exchanged. Obviously, the expenses of producing goods affect their prices. Higher wages have been always regarded as a reason for raising prices; and the same is true of a serious increase in the costs of materials, and rise in freight transportation for materials as well as finished goods. All these causes were actual at work in Germany. Moreover, many necessary materials, like wool, cotton, and copper, had a scarcity value. The high prices of German textiles are fully accounted for by the scarcity prices of raw cotton and wool. In addition, a shadow and imperative war demand for petrol, cloth, nitrates, steel and similar.

1. See §§ 6, 7.
Also, products needed for munitions must have had an inevitable effect on their prices. Therefore, while it is unnecessary to claim that the ease with which credit was obtained in Germany had no influence on the prices of goods which the borrower wished to purchase, it is evident that it was only one, and not the most important one, of the factors working together to raise prices. If price is a ratio of exchange between goods and some standard money, then it is as important to consider the forces working on the goods side of the ratio (such as wages and materials) as it is those on the money side (such as the quantity in circulation, its redemption, etc.).
§ 10 Between countries Bills of Exchange fill the same essential service as that of checks in domestic trade. On the shipment of goods the bill is drawn as a claim on the buyer in the land to which the goods are moving, and when accepted it becomes the best of short-term commercial paper discounted by international banks. Like other forms of legitimate credit it springs from, and is based on, the movement of goods or securities. When international trade ceases, the basis of this credit is destroyed. The foreign exchange problem is interesting by its contrast to that of England.

The rise in the number of marks which had to be paid in Germany for claims on money in other countries, or, vice versa, the decline in the amount of money of other countries which would buy a claim on marks in Germany, is what is meant by the fall in German exchange. From the middle of July in Berlin, the price of exchange was against Germany. That is, more marks were required to buy bills in foreign centres. This is another way of saying that there was a strong German desire to send funds abroad. As an exception, however, claims on St. Petersburg and Vienna were abundant. Russian exchange fell in Berlin to 204 (par being 216), and Austrian to 82. (par 1)

On and after Nov. 12, 1914, quotations of exchange were just published, being 85), showing that funds were moving from St. Petersburg, London, and Vienna to Berlin. The opposite was true respecting Paris and London; English and French capitalists were withdrawing their balances from Germany, Austria, and Russia through Berlin. Hence, since there was a strong demand in Berlin for claims on London and Paris, the foreign price of bills of exchange on these cities rose; that of St. Petersburg, German exchange fell. The rate on London rose from 20.67 (par 20.43 normal for 81), and by November, 1914, to 22.20, discharging a fall of over 8 per cent. below par. It will be remembered that, at the very beginning of the war, money was brought to the banks in 8 presents of bills at the Reichsbank for discount to get notes with which to meet cash demands at their own counters; so that no holder presented notes at the Reichsbank for gold. After some losses of gold, the Bank substituted specie payments. Obviously, foreign creditors wanted gold at a premium. The price to which exchange on London rose showed a large profit on the shipment of gold; but that was forbidden. In other words, the "shipping point" is suspended, and the means of restricting the price of exchange between limits based on the supply of shipping gold out and into Germany ceased to exist. By September, when the Reichsbank and II. November 5, 1914, the Frankfurter Zeitung gave the following quotations of exchange:

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notes had been sent by neutrals in payments to London at a discount of 20 per cent., they were refused. In exchange transactions with other countries, Germany played a large role, as in the case of Switzerland. Germany was the best customer for her special products, and Switzerland sent her the coal and minerals she lacked. The war greatly reduced this trade. Later on, as German coal came with difficulty to markets because of poor transportation and scarcity of labor, Germany was unable to pay for all the foodstuffs sent to her, entering Switzerland through Switzerland. Consequently, as gold shipments were negligible, claims to money in Germany fell in price in Switzerland. In June 1914, 100 German marks could be bought for 111 Swiss francs (par being 123.5). In November, 1916, Germany is reported to have sent $2,500,000 in gold to the Swiss National Bank to support the price of exchange. Evidently, the causes of the decline in German exchange were too small to be reached by such inadequate shipments of gold; for bills on Germany were then quoted at 84.60, showing a depreciation of 31 per cent.

1. In August, 1914, for foodstuffs bought by Germans in France, Belgium, and Holland, Germany paid by drafts on sufficiently German funds in London. When these drafts were sent to London banks, for collection, payment was refused. Cf. London Economist, August 29, 1914, p. 387.
Also coal and minerals were sent from England to Germany; but there is no evidence that the establishment of such credits has successfully restored German exchange to normal conditions; for quotations went to 67.50 (July 5, 1917) showing a discount of 45.3 per cent.

The exchange markets in Scandinavia were similarly affected. The large trade with Sweden, and the unwillingness to send German goods had the usual result. All the facts are not known. We do not know, however, that the exports of ore-stuffe were kept up as long as possible, mainly through Sweden. But, at the end of the third year of the war, Exchange on Stockholm (July 5, 1917) showed a depreciation of 47.1 per cent.; and on Copenhagen of 44.6 per cent.

As each 39th November, 1917, and Sweden more or less, in Amsterdam (July 5, 1917), these bills bore a discount of 43.2 per cent.

In South America, where German had owned street railway lines, water works, and lighting or power companies, more or less liquidation has been going on. To pay German goods for these, the South American banks have transferred funds to Berlin. Of these funds in balances in New York, they think aided the market for bills on Germany, by offsetting sums due from German, in all.
possible ways, Germany was trying to buy for such
infants, as could find their way directly or in-
directly into her territory.
During the time when the United States was neutral,
exports went to Germany through neutral ports in
considerable quantities. Cotton was sent even through
Switzerland. That is, Germans did not think of very
few exports came to us from them, as time went on,
balance was due us on the merchandise account. The
obvious resort of borrowing here and establishing Ger-
man credits was impossible, no large German loans
were placed in the United States. Deposits and securities
of American railways and industries were here helped
The quotations of the mark; but in spite of all de-
vises they declined. In Berlin the Dollar rose as
high as 6.30 (par being about 4.2 marks). In New
York, exchange is quoted on the price in dollars at
4 marks, par being 95.75 cents; but it declined even
to 66.25 cents, showing a depreciation of over 30 per
cent. Bills being a claim to marks in Germany,
and as paper marks were inconvertible into gold, it
not supported by holding, exchange could fluctuate, like the paper, for various
reasons; as a consequence, there arose speculation
in German exchange just as in any thing whose price
fluctuates. All dealings in German exchange, therefore,

1. Imperial German war bonds were offered and sold here at
prices fluctuating with the quotations for exchange. In
such transactions the rate of exchange was used as a
measure of the depreciation of the mark, and the price of
bonds changed accordingly. Imperial 5 per cent. loans
were offered in New York in December, 1915, at the price
of $202.50 for 1000 marks, showing a depreciation of
$2.5 per cent.
caused when the United States decided to go against Germany in April, 1917. For some time, the bankers in New York and Berlin had been reducing their balances in the respective countries.

The German explanation of the fall in exchange seems to be that it is solely a matter of exports and imports, but, being unable to export, they are not in a position to keep up the rate of exchange. That, by means of increasing commercial power and the subdivision of travel and transport, Germany has succeeded in increasing the volume of her exports; that, because of the more favorable terms in other countries, German goods are preferred; that the Reichsbank cannot part with its gold, and that the unfavorable rate of exchange is no index of economic or financial conditions at home. The rate, however, is a matter not subject to governmental control. In Germany, as in England, it has been proposed to go to the root of the matter by limiting imports to indigestible articles and aiming to stem what the export of goods not needed (as fish) for instance. The Sturmann is a fact. There is not much in such a suggestion, because it is not here to decide what she shall export or import.

1. Business in Germany and Austrian exchange was in fact suspended March 28, 1917, when the final quotation on Berlin was 69.50.

2. Mr. Halfbrich in the Reichstag, March 10, 1918, is reported to have said: "Foreigners think that if the fall in exchange means a depreciation of the Reichsmark, we can not deny that we have to pay more for the sterling notes, the Dutch guilder, the Scandinavian crown, and the American dollar than in normal times. The rise of the foreign rate of exchange, in my opinion, is in no way connected with the internal strength of our financial position. It depends simply upon certain technical points of our foreign trade. In normal times, Germany can pay for her imports by her exports and the interest on her capital invested abroad. Thus it is impossible to collect the greater part of this interest, especially on the foreign investments in London. We are importing raw materials and foodstuffs in normal times and pay for them in cash or short-term bills, while the greater part of the exports are manufactured goods sold on long-term credit. This machine in Europe has been turned over so in Russia. Exports have, moreover, suffered more than imports, and the exports are concentrated in a few natural commodities. It would be easier if gold could be exported, but we are of the opinion that the keeping of a gold reserve is at present more important than the maintenance of the German mark abroad." Of Mr. Chase's speech, p. 545.
The experience of Germany with foreign exchange suffers, as has been said, from that of England. In the case of the former, gold payments were abandoned from the beginning, and attempts to stabilize the unit of international payments were useless without considerable shipments of gold. The interesting problem of the German rate of exchange is its relation to the depreciation of the Bank note. That is, to the standard of prices. Without immediate redemption, it was inevitable that the note should depreciate. But what is the measure of the depreciation? Is it correct to assume that the rate of exchange is a fair indication of the depreciation of the notes? In any event, one point is obvious. A buyer of German exchange in Amsterdam pays Dutch guilder for a claim to paper marks in Berlin. The purchased bill is a means of paying a debt in Berlin; but how much should he give for the bill? If he were to bring the marks to Holland what would they be worth? In the open market they went at a 15% discount. That is, the bill is worth no more than the

1. It is interesting to compare the German situation with that during the restriction periods in England, 1797-1821, so much stressed by the Bullion Report and by Ricardo. In the theory of that day it was assumed as a matter of course that by the depreciation of the notes was measured by the rate of foreign exchange, or by the quantity of notes needed to buy the gold of another country. Cf. Laughton, Principles of Money, Chap. viii, §§3, 4, and p. 254.
value of the money in which they are payable. If the notes have depreciated, bills payable in notes will depreciate accordingly. In short, bills are affected by convertibility in the same way as paper money. If convertible on demand into gold (i.e. if shipping points exist, and gold moves freely), bills will remain at par; if not payable in gold, they will sell at a price which expresses the number of notes needed to obtain par in gold.

The pivotal matter in this case is the disappearance of the shipping points, or the suspension of gold payments in respect of foreign exchange. The bills can no longer be held within the prescribed limits determined by the expense of moving gold to and fro. It is exactly like the failure of the brakes on a car to work when going down a steep decline. Here, then, is the one important difference between the policy of Germany and that of England, and the contrast is full of significance not only to an understanding of the exchanges, but also to the proper means of conducting the operations of credit in a great war.

It is not to be supposed, however, that no other forces than the state of the currency act upon the price of bills! The analysis of these forces was given in the study of English exchange, of the five forces there enumerated, the shipment of gold (4) drops out, and the depreciation of the currency (5)

1. Supra, p. 141.
forces affecting German exchange.

enters, but the other forces, the movement of goods and securities, the payments for interest, freight, etc., and the creation of foreign credits, remain in operation both in a visible and invisible form. Yet these forces, common to both the German and English experiences, produce widely different practical results accordingly as they are restricted or not. The movement of goods, of course, Germany cannot export freely; but whether she sells or not, the one thing which would limit the fall of exchange to a normal shipping point is absent. The movement of goods. To this absence must be attributed the sensational fall in German exchange, and not to the disproportion between exports and imports of goods. Even the movement of securities or the creation of credits abroad is able to produce little effect on the downward course of exchange, because the brakes are not working. It is not merely a technical question.

It is to be noted, of course, that Germany trades with her enemies, but only with the few adjoining neutrals. If it be supposed that the rates of exchange are determined primarily by the balance between the exports and imports of goods and securities, then the price of exchange in any one neutral country would be essentially a question of the balance of trade between Germany and that country alone. Yet we know that this is not the fact. The rate on German bills in Holland depends on many things than the balance of trade between the two countries. The controlling force is the value of the money in which the bill is payable. The balance of trade may cause fluctuations between the shipping points. When they disappear, the balance of trade is not the controlling force.
§ 11. In financing the war, Germany furnishes a characteristic experiment of taxing little, but of borrowing much. Its credit operations in placing loans on a very large scale have especial interest. This choice, to be sure, in favour of loans as against taxation may not have been entirely voluntary. Additional taxes on already high levies may not have been politic; but undoubtedly it was less objectionable, indemnities on their defeated enemy being more than the expenditures of war. Whatever the reason, the necessary outlay of an unexpectedly long and destructive war was too large to be met by any possible taxation. Borrowing, if imprudent, was not inevitable. How they were raised by a country more or less isolated, and how the burden can be carried, are pertinent questions.

The public debt of the German Empire in 1913 was $1,947,000,000, with an interest charge of $58,000,000. In addition to which must be considered that of the German States amounting to $3,854,000,000 with interest charges of $170,000,000. The debt in the annual budget was $880,000,000. It is to be seen that, while the Imperial debt was small compared with that of other countries, France in particular, the debt of the German States was larger than that of the United Kingdom.
During the first year of the war, there was no additional taxation. In the beginning, the first needs of the government were met by the presentation of Imperial Treasury notes to the Reichsbank for discount; but as early as August 4, 1914, as if carefully forewarned beforehand, a new credit was voted. In the First Loan, Treasury notes to the amount of $250,000,000 were authorized, due October 1, 1920, bearing 5 per cent interest, and an unlimited amount of Imperial 5 per cent bonds, non-convertible within ten years. At 97 1/2, subscriptions were made to $115,000,000. It is claimed that this sum was raised entirely at home, no foreign subscriptions having been received. Of the receipts, President Hindenburg stated that less than one-fifth were in the notes of the Loan Bureau. Although the Savings Banks were not obliged to subscribe, Bonds were issued in denominations of 25 and 50,000,000. It is said that foreign subscriptions amounted to perhaps $30,000,000.

Estimates seem to have been running about 3,500,000,000 per month; so that the prolongation of the war rendered inevitable the issue of the Loan. This was put out in March, 1915, in the form of unlimited Treasury Notes, due October 1, 1922, and Imperial Bonds, as before, both at a price of 98 1/2. Installments could be paid within four months to August 20. This offering yielded $2,265,000,000. The savings banks taking about 495,000,000. It is said that foreign subscriptions amounted to perhaps $30,000,000.
The Third Loan, solely of 5% Imperial bonds, in September, 1915, yielded $3,025,000,000, at a time when the military situation looked favorable.

In the Fourth Loan, after the second winter of the war, offered in March, 1916, a change was introduced in 4½ per cent. Treasury Notes, at 95, due July 1, 1932; but also the same Imperial bonds as in former loans were sold at 98%. Although the number of subscribers was larger than in any previous loan the amount subscribed, $2678,000,000, fell below the last loan. There were 2,406,118 subscribers for sums less than $50.

The Fifth Loan, coming as usual in the autumn, proposed 4½ Treasury Notes maturing from 1923 to 1932, at 95, and the familiar Imperial 5 per cent. bonds at 98%; but while the amount subscribed was $2,675,000,000, the number of subscribers fell off more than a million, showing that the loan had been raised by the richer institutions and persons.

The Sixth Loan offered as before(a) the 5 per cent. Imperial bonds, not redeemable before 1924, at 98. But, there was also(c) an offer of new Treasury bonds, bearing interest at 4½ per cent., at 98, (instead of 95 as in the Fifth Loan). To justify the price, two striking features were introduced. Beginning in January, 1918, by drawings, groups of bonds drawn would be paid off at 110; after July 1, 1927, holders of bonds not yet drawn could convert them into a 4½% bond, but, if drawn at a second drawing, would be paid off at 115. By 1937, those not yet drawn could be converted into 3½ per cent. with a chance, if drawn, of repayment at 120. In 1967, any bonds yet unsold, would be redeemed by
It will be interesting to note that only about one-tenth of the whole subscriptions were for the new 4½ per cent.

The Government either at 110, 115, or 120 according to their fate in earlier drawings. By a second feature, subscribers were allowed to convert old Treasury bonds and old War Loans into the new Treasury bonds to double the amount of their subscriptions, if cash were paid in. For both forms of the Sixth Loan, the lists were opened March 15, and closed April 16, 1917, while the payments by installments ran to the middle of July.

One significant admission of bankruptcy in this loan should be given full notice. Out of the nominal value of the original 4½ per cent. bonds subscribed for, the Government specified that 5 per cent. should be devoted to the expenses of the drawings and the payment of interest. To come to paying interest out of the principal is not usually regarded as an evidence of solvency.

1. The Government gave a cash premium of ½ to 1½ per cent. for 5 per cent. bonds of the First Loan, and for those of the Second ½ to 1½ per cent. On the 5 per cents. of other loans could be converted at par without payment by either side. But the holder of 4½ per cent. Treasury bonds of the Fourth and Fifth loans must himself pay 3 per cent. if converted. If drawn in 1922 and paid off at 110, the rate of interest would be 6½ per cent. The lowest denomination was $250.
Early in 1915, about $10,000,000 of Imperial Treasury notes were disposed of in the United States. When they matured in January, 1916, they were paid off. In April of that year a similar issue was offered, but only $1,000,000 were paid off. When they fell due in April, 1917, the remainder being continued at 6 per cent, (the interest being paid in advance). Many of these notes remained in the hands of bankers undistributed, until the banks, on fear of war with the United States, insisted on payment. This seems to have been the only attempt to an made by Germany, second of the Imperial bonds, floated in Germany. It is reported that perhaps $30,000,000 were taken abroad. All told, it is believed that some $25,000,000 of these bonds were bought in the United States, and perhaps an equal amount in neutral countries.

End of Vol 12
The various loans may be summarized as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of Subscribers to Loan</th>
<th>Character of Loan</th>
<th>Maturity Date</th>
<th>Interest Rate</th>
<th>Amount Subscribed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 1914</td>
<td>1,797,235</td>
<td>$250,000, 7%</td>
<td>Oct. 1, 1920</td>
<td>97 1/2%</td>
<td>250</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Treasury Note</td>
<td></td>
<td></td>
<td>865</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1115</td>
</tr>
<tr>
<td>March 1915</td>
<td>2,694,063</td>
<td>Unlimited 4%</td>
<td>July 1, 1923</td>
<td>4%</td>
<td>194</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Treasury Note</td>
<td></td>
<td></td>
<td>2071</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2265</td>
</tr>
<tr>
<td>Sept. 1915</td>
<td>3,966,418</td>
<td>Unlimited 4%</td>
<td>Oct. 1, 1924</td>
<td>98%</td>
<td>3025</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Treasury Note</td>
<td></td>
<td></td>
<td>3025</td>
</tr>
<tr>
<td>March 1916</td>
<td>5,279,645</td>
<td>Unlimited 4 1/2%</td>
<td>July 1, 1924</td>
<td>95%</td>
<td>268</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Treasury Note</td>
<td></td>
<td></td>
<td>2675</td>
</tr>
<tr>
<td>Sept. 1916</td>
<td>2,809,976</td>
<td>Unlimited 4 1/2%</td>
<td>Oct. 1, 1924</td>
<td>98 1/2%</td>
<td>2407</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Treasury Note</td>
<td></td>
<td></td>
<td>2407</td>
</tr>
<tr>
<td>March 1917</td>
<td>7,063,347</td>
<td>1% Treasury Note</td>
<td>Oct. 1, 1924</td>
<td>98%</td>
<td>3280</td>
</tr>
</tbody>
</table>

1. The Seventh War Loan, Sept. 1917, was offered in two forms, on the same terms as in the Sixth Loan. The lists closed October 18, when the total subscriptions are reported to have been $3,108,000,000.
The funded debt, of course, lags far behind actual expenditures. After the South Korean conflict, the funded debt was about $15,000,000,000 and still increasing. The current estimate is $25,000,000,000 and at that rate, von Reichenbach estimated a war expenditure of $50,000,000,000. The total expenditure for the year of 1917, according to von Reichenbach's estimate, was $20,000,000,000. It is a estimate of the total cost of the war, in order to arrive at the total expenditure on debt by the end of the Third year of the war, at least $75,000,000,000. Therefore, in trying to ascertain the total burden of Imperial indebtedness for three years, the following may be set down as the approximate result:

<table>
<thead>
<tr>
<th>Total Debt</th>
<th>Amount (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-War Debt</td>
<td>15,000</td>
</tr>
<tr>
<td>Additional Expenditure to Aug. 1917</td>
<td>5,000</td>
</tr>
<tr>
<td>Total Debt</td>
<td>20,000</td>
</tr>
</tbody>
</table>

To find the full weight of debt to be carried by the German people, there should be added the debt of the various States and municipalities. Before the war, the States had a debt of about $3,854,000,000, which must have been seriously increased during the war. They have not been generously helped by the Loan Bureau, the municipal debt has been largely increased. For instance, the debt of one State was increased by a war debt of $40,000,000,000 by the end of February, 1917. While the one State of 20,000 people near the Rhine has borrowed $1,000,000,000. The figures are for previous years in the same manner. It would be a very conservative estimate to add to the German debt of $19,000,000,000,000 of foreign debt. Therefore, the total debt of all the States carried forward after the war, in August 1917, shows a debt of at least $38,000,000,000 of debt. The interest charge on this debt at 5% would be $1,900,000,000 a year, independent of normal war-time demands (which before the war were $800,000,000).

1. From February the monthly expenditure had been $750,000,000.

<table>
<thead>
<tr>
<th>Date</th>
<th>Amount (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 1, 1917</td>
<td>1250</td>
</tr>
<tr>
<td>December 2, 1917</td>
<td>1250</td>
</tr>
<tr>
<td>December 20, 1917</td>
<td>2500</td>
</tr>
<tr>
<td>August 30, 1917</td>
<td>2500</td>
</tr>
<tr>
<td>December 21, 1917</td>
<td>2500</td>
</tr>
<tr>
<td>Total</td>
<td>23,500</td>
</tr>
</tbody>
</table>

2. In February 1917, Court von Rodheim’s report to have said that the army expenditure for Germany to date had been $25,000,000,000. The estimate in the Report might be conservative, for during the total war debt for months salary is $25,000,000,000 and less.

3. This figure for Treasury bills is perhaps too conservative. The London Economist (Sept. 27, 1917, p. 423) estimates the total amount of Treasury bills outstanding to be over $5,000,000,000. If so, they may well come out of the estimate of additional expenditure after February, 1917.
It is to be remembered that the Loan Bureaus (Darlehenskassen) had as one of their objects to aid in placing loans to the Government. They were intended to relieve the Reichsbank from requests for loans on securities (a part of the Lombard business). The source of danger to credit was creating demand liabilities in these note issues (Darlehenskassen) against unprofitable assets. Since the Stock Exchange was closed, securities were unsaleable, and yet it was precisely this class of obligations which the Loan Bureaus were expected to accept as a basis for loans. Has the war been a short one, with a rebound of peace and prosperity, income, and earning power might have given securities a fresh life and value; and the assets behind the notes of the Loan Bureaus might have become alive, and furnished the means of liquidation through ready sale at home or abroad. As the war has lengthened out, and as the debts of the Empire, the States, and the municipalities (to whose securities the notes were made) have increased beyond all expectations, the liquidation of these assets, as well as the securities of many industrial concerns (except war companies), has become less and less certain. It is not so much the quantity of these loans, as the soundness of the assets they reflect upon, which determines their vulnerability. There is dangerous inflation, if demand liabilities are built up in undue proportion to the body of salable and quick assets

1. One apologist (M. J. Born, "German War Finance," pp. 11, 12) speaks of these banks as conservative in lending "on perfectly good securities which they could not sell, as the Stock Exchange was closed, and which, in any case, they could have paid only at a loss." It was the difficulty to frame a definition than in these words for unsound assets, especially for banks issuing notes payable on demand to the amount of $1,200, 000, 000, without large cash reserves.
hinds. There is therefore raised whether the Loan Bureau have aided in inflation when drawing unsaleable securities or even salable ones, into a form of money which made it accessible to any one wishing to subscribe to a war loan. In reply, it is stated that only 17.4 per cent. of the subscriptions to the first loan were paid for with notes of the loan Bureau; 5.7 per cent. of the second loan; 6.4 per cent. of the third loan; and about 6 per cent. of the others. However, this may be, we know that these Bureau have issued over 1200,000,000 notes and that the assets behind them are securities, no cash reserves. Are these assets capable of protecting demand notes circulating in the hands of the public? When we face the fact that the German people have incurred a war debt in three years which is more than one third of the whole wealth of the country (as estimated by Hilfirsch before the war) there is reason to examine the legitimate basis behind the credit of the state, and the methods used to place the loans. Of course, the amount of ready money in circulation, the ease in getting it by loans, is only a superficial part of the matter. The bookkeeping of the cash money is more than a means of putting a good face on the situation. The fundamental elements must always be the production and sale of goods, by which all credit

[Partial text cut off]
as all final liquidation of obligations, public or private, must be sooner or later accomplished. It is perfectly clear that the present production and exchange of goods (except from war supplies) has undergone a great reduction. While the credit obligations found generally in the production have increased enormously, these credit functions are increasing in a declining value of assets. This imposes the need of these social contents of credit being liquidated if it can be found. In short: it is necessary to increase the number of credit claims against a reduced volume of assets, and to enable transactions to be carried in cash. The end then accomplished is to make up appearances of progress by going through the forms of solvency and thereby postpone to the future by credit. The final test of liquidation is at present: the device for keeping up appearances in dealing loans is not in question. The term "solvency" is not doubt, admitted. The pyramid of credit when obtained which may be insufficiently understood. The process can go on indefinitely. So indispensable. The nation can stand for a moment if subjected to the rule."
It has been said, in explanation of the easy placing of enormous war loans, that the capital formerly engaged in foreign trade, and now released, is free to be loaned to the Government. It is not shown, however, that such capital is transferrable, that employed in shipping is obviously looks up and earns nothing, and that used in producing articles for export, if not in fixed form, has been shifted to making war supplies, or waste.

When it is added that there have been no new flotations to absorb accumulating capital, it is intimated that savings are going on at a rapid rate and that they can take up war loans accordingly on a great scale. So far as the statistics of savings banks can be relied on, it would seem that, even in war times, the spirit of thrift has been amazingly stimulated. Never could the less, the savings banks have taken but a fraction of the war loans. The largest subscriptions have come through the banks for their customers. In general, the war debt represents the amount of wealth consumed (to which labor and capital were contributory), and, when the surplus of goods above the necessities of life (arising out of the country's total productive efficiency) is used up in war, additional debt is no basis on goods, but becomes merely an unsubstantial promise, whose worth it is unknown. If the debt is already over one-third of the total wealth of the country, it implies that that debt has been consumed in war.

1. In 1916, the deposits in savings banks were said to have reached $5,000,000,000, and by the middle of 1917 to have added $25,000,000 more (M. J. Brown, ibid., p. 16). In March, 1916, Heffner stated that $1,125,000,000 had been withdrawn from the savings banks to be invested in war loans,
When the German Savings' whose funds are largely placed in fixed investments, or real estate, subscribed in large amounts to war loans, what goes on? Their investments are pledged to the State Banks, in return for note issues with which payment is made to the Treasuries for war bonds. The Government pays out these notes for its exchange to Germans. The public receives a circulation, to that extent, based on Savings' Bank (not commercial bank) assets, probably in the main real estate. Can you, how different is this money from the banks' assignats of ungranted money? The placing of German loans is obviously connected with the expansion of deposits, and the stable, rising inflation of credits as shown in the operations of the Reichsbanken (See Chart V). On the placing of each loan, the discounts show a sharp rise; but the borrowing at times of subscription is more strongly accentuated with each successive loan, that of the Sixth Loan showing an unprecedented rise of discounts. In short, the reserve to credit rises higher than a steadily rising expansion of credits. These events at the Reichsbanken are unexampled. Typical of conditions at other banks. The whole movement of credit operations, however, stands out in bold contrast to that of the Bank of England (in Chart I). The steadiness of deposits since October, 1915, and their low range as compared with those of the Reichsbanken, (being only about one-fifth as high) is striking, and significant of English as contrasted with the German, system of credit. England has more bonds of its Bank, and hence war loans do not upset the system of credit near the currency.

The relation of Treasury notes to the placing of loans is to be noted. The notes are taken in large amounts by all the banks. Before a new loan, when Government funds are running low, the banks would be working to increase deposits, likely to be used in subscriptions for the new loan. Such temporary funds would be invested for a time in Treasury notes, and later exchanged for bonds. When the Government receives installments on the new loan it can then retire the Treasury notes. Thus, like a cheque on a bond, they are used to anticipate coming receipts.
As few persons understand the intricacies of public finance, it is evident why, in order to remove doubts, an explanation should be offered to prove that the enforced isolation of Germany caused by the war is an advantage in her financing of the costs. It is regarded to be an advantage that her loans are placed with her own people; that the proceeds are spent at home; that all savings go into the national enterprise of war; that there is no economic strain in providing goods for exports, that hence the naval blockade of German ports has been a blessing. The argument seems to assume that foreign trade has in it no gains; that the destruction of wealth as capital in war is desirable the more it is confined to the German people. On this theory that a man who has lost an arm should congratulate himself on escaping the fatigue he might feel in using it; that loans are evidence of destruction in war which fall upon her own people; the reservoir of her goods has been drawn down, and no other country has helped her to supply the deficit; in the future her own people must deprive themselves of former satisfactions in order to pay the interest and possibly some of the principal of the debt; the value of foreign credits has been lost, and her industrial efficiency; and if the whole population were to work harder and show greater efficiency than ever before, it brings no return, because it is used up in compensating for war losses. No casuistry can be

1. W. M. J. Brown, _ibid_. pp. 14-17, 35-36. He adds:

"German finance is surely a German problem. When the war is over the German people will not be indebted to foreign nations. They will not have to send abroad a larger share of their annual produce in payment of their war debt." That is, having lost the arm they will be relieved from the service it might have rendered,
save any people at war from the grim necessity of paying sooner or later for what has been destroyed. To carry the burden herself does not lighten it, nor avoid the sweat and toil over the creation.

To a country whose absolute government gives it possibilities of taking great liberties with the property and income of its subjects—which could not be exercised over foreign owners of its securities—the holding of its debt at home presents what may in the German political code of morals, be called an advantage. The socialistic absorption of Germany goes so far as to make all wealth almost common property to be taken at will for national purposes. Without using the term confiscation, it might be possible, without the consent of security holders and without the alternative of being paid off, to lower the rate of interest on imperial bonds. Such methods could not be applied to foreign holders. A more extreme supposition may not be visionary. If the debt increases much more, when peace comes, it might plausibly be said that the people have already paid for the cost of the war in the diminished consumption and sacrifices during its continuance, and that the taxation to pay the interest and principal of the debt in the future would necessitate such heavy taxation that the sacrifices would really have to be undergone a second time; that this heavy taxation could not fall on the poor, for they have little to be taxed; that the burden of taxation must fall on the rich, who, after all, are the men who hold the war bonds; that this is the only way of removing the debt, only taken from the rich.