

# Germany's Capacity to Pay

By H. G. Moulton and C. E. McGuire

With the aid of the Council and Staff of the Institute of Economics

**T**HIS study made by the Institute of Economics is animated by a desire to get at the facts without prejudice or bias, regarding Germany's capacity to pay.

It is based upon an exhaustive study by the authors of official and other data bearing on the reparation problem.

The book answers conclusively most of the questions with reference to Germany about which there is so much controversy today.

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# GERMANY'S CAPACITY TO PAY

*A Study of the Reparation Problem*

BY

HAROLD G. MOULTON

AND

CONSTANTINE E. MCGUIRE

WITH THE AID OF THE COUNCIL AND  
STAFF OF THE INSTITUTE OF ECONOMICS

FIRST EDITION

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## PREFACE

NEARLY everybody now recognizes that there can be no genuine settlement of the reparation problem until those who are responsible for its solution reach general agreement on the economic facts and forces involved. It has been repeatedly suggested that a commission of business men and economists should be created for the purpose of making an impartial analysis of the extent of Germany's capacity to meet her reparation obligations. For various reasons no such commission has been appointed; and in the meantime the reparation situation has gone from very bad to worse, leaving public opinion at this crucial period to be formed mainly on the basis of conflicting statements and misinformation.

The Institute of Economics has felt that this situation has afforded an opportunity to render a distinct public service. The Institute has not been hampered by lack of time or facilities, and has accordingly not been content with any superficial gathering of data and opinion. The findings which it submits in this volume are believed to be as conclusive and trustworthy as would be those of any commission. No discussion of the political aspects of the problem is attempted, nor is any detailed plan of settlement recommended. The purpose has been merely to make as complete a diagnosis as possible of Ger-

many's economic condition and of her ability to continue making reparation payments, and to point out the bearing of international trade conditions and commercial policies upon any reparation settlement whatsoever.

The reader will no doubt wish to know the sources of the data on which the analysis is based. Germany's problem involves both budgetary and foreign trade considerations. On the budgetary side the figures used are official figures of the German government. Since agents of the Reparation Commission, located in Berlin, have had access to the German records and have made no report of any attempt to falsify the figures, they may be accepted as a trustworthy statement of the budgetary situation. The foreign trade figures are also official figures of the German government. Inasmuch as German exports appear as imports in the trade returns of other countries, and German imports appear as exports in the figures of other countries, it is clear that any wholesale attempt to falsify the foreign trade data could be readily detected. For internal production figures, official sources have likewise been employed. Use has also been made of many reports and documents consulted at the United States government departments and obtained through the foreign connections of the Institute. Specific source references are given in the book, particularly when the subject is in any way controversial. In order to relieve the main discussion of detailed technical analysis, much of the latter has been placed in the several appendices.

Acknowledgment must be made for assistance rendered to the authors by other members of the Institute. Cleona Lewis has made valuable contributions, particularly in Chapters II, III, and VII, and has written Appendices A and B. Florence A. Armstrong has rendered a similar important service, especially in Chapter IV. Constant Southworth has been of much assistance, particularly in Chapters III and V. Valuable criticisms and suggestions have also been made by the Council and by other members of the staff of the Institute. Dr. R. Kuczynski has checked all the statistical data used in the text and has made many valuable suggestions, especially with reference to Chapters III and V.

WASHINGTON, D. C.  
June, 1923.

HAROLD G. MOULTON,  
*Director.*

# CONTENTS

	PAGE
PREFACE . . . . .	vii
CHAPTER I	
WHAT PAYING FOREIGN DEBTS INVOLVES . . . . .	1
I. The Two-Fold Nature of the Problem	
II. Current Fallacies	
CHAPTER II	
GERMANY'S INTERNATIONAL BALANCE OF ACCOUNTS . . . . .	25
I. Germany's Pre-War International Trade and Financial Balance	
II. The Effects of the War upon Germany's International Trade and Financial Position	
III. Germany's International Balance, 1919-1922	
CHAPTER III	
WHAT GERMANY HAS PAID AND HOW . . . . .	56
I. The Extent of the Obligations	
II. The Extent to which the Obligations Have Been Met	
III. How Trans-Frontier Payments Were Made Despite an Adverse Trade Balance	
CHAPTER IV	
GERMAN FOREIGN TRADE REQUIREMENTS . . . . .	98
I. The Future Invisible Balance	
II. Germany's Import Requirements	
III. German Export Requirements	
IV. The Status of German Trade and Industry	
V. Germany's Problem of Export Markets	

	PAGE
<b>CHAPTER V</b>	
THE BUDGETARY PROBLEM . . . . .	141
I. The Pre-War Fiscal Situation	
II. The Effect of the War on the German Budget, 1914-1918	
III. The Fiscal Situation of the German Commonwealth, 1919-1923	
IV. The German Fiscal Problem	
<b>CHAPTER VI</b>	
THE GERMAN MONETARY SITUATION . . . . .	201
I. Causes of German Currency Expansion	
II. Was German Inflation Unavoidable?	
<b>CHAPTER VII</b>	
HOW FRANCE MET THE INDEMNITY OF 1871 . . . . .	220
<b>CHAPTER VIII</b>	
INTERNATIONAL IMPLICATIONS OF THE PROBLEM . . . . .	234
<b>APPENDIX A</b>	
GERMANY'S INTERNATIONAL TRADE AND FINANCIAL ACCOUNTS	251
I. Trade and Specie Statistics for Pre-War Years	
II. The Invisible Items	
III. The Annual Average Increase in Investments	
IV. Items in the War and Post-War Accounts	
<b>APPENDIX B</b>	
ESTIMATES OF GAINS FROM THE SALE OF PAPER MARKS . . . . .	295
<b>APPENDIX C</b>	
FOREIGN PURCHASES OF URBAN REAL ESTATE IN GERMANY . . . . .	301

**CONTENTS** **xiii**

**APPENDIX D**

	<b>PAGE</b>
<b>METHODS OF ACCOUNTING OF THE REPARATION COMMISSION . . . . .</b>	<b>303</b>

**APPENDIX E**

<b>CLEARING HOUSE OPERATIONS . . . . .</b>	<b>312</b>
--	------------

**APPENDIX F**

<b>THE VALUATION PROBLEM IN CONNECTION WITH GERMAN TREATY FULFILLMENT . . . . .</b>	<b>320</b>
---	------------

**APPENDIX G**

<b>BUDGETARY AND TAXATION QUESTIONS . . . . .</b>	<b>353</b>
---	------------

**APPENDIX H**

<b>BRIEF TABULAR SUMMARY OF PRINCIPAL OFFICIAL PROPOSALS FOR SETTLEMENT OF THE REPARATION PROBLEM FROM 1920 TO 1923 . . . . .</b>	<b>370</b>
---	------------

<b>INDEX . . . . .</b>	<b>381</b>
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# GERMANY'S CAPACITY TO PAY

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## CHAPTER I

### WHAT PAYING FOREIGN DEBTS INVOLVES

CONFLICTING opinions, assertions, and conclusions on the subject of reparations are to be explained in large measure by confused notions as to what is involved for a nation in paying foreign obligations. One person argues that Germany can assuredly pay, since her national wealth is greatly in excess of the amount of the reparation bill. A second urges that the sum demanded of Germany equals only about 50 gold marks (\$12.50) per capita annually; surely a thrifty people can pay that amount if the *will* to do so exists. Another points out that the reparation bill would increase German taxes by perhaps only 25 or 30 per cent, certainly not an impossible additional burden. Another contends that German national production is considerably in excess of reasonable consumptive requirements, leaving an ample margin for reparation payments. And still another asserts that if 60 millions of people in a country untouched by war devastation would stop whining



and get to work, it is not conceivable that the sum demanded could not be paid—and very much sooner than most people imagine.

On the other hand, there are those who insist that the evidence that Germany cannot pay is found in her lowered standards of living; in her depreciated exchanges and disorganized currency system; or in her loss of mineral resources and her diminished volume of trade. Others argue that Germany cannot develop a large enough excess of exports over imports to pay the sums demanded. Others admit that Germany could develop the necessary exports but insist that the Allies could not afford to receive them because of the bad effects upon their own industries. Finally, there are some who make bold to say that Germany cannot pay because the Allies will not permit her to recover her pre-war economic strength:—the creditors, it is said, insist upon having their cake and yet are unwilling to permit Germany to bake it.

It is in the light of such divergent principles of measurement that we the people of the world have made up our respective minds on the subject of reparation. Is it surprising that the conclusions reached as to German capacity to pay should vary all the way from nothing to 30 or 40 billion dollars in forty years? If there is ever to be any consensus of opinion on the matter, or any "sane businesslike settlement" of the problem of reparation, agreement must first be reached on the principles of analysis that are involved. It is obvious that we cannot agree on a nation's future capacity

to pay external debts unless we can first agree as to how such capacity to pay may be measured.

When an ordinary business corporation pleads inability to pay interest on its obligations and asks for a receivership for the purpose of effecting a settlement, the creditors concerned have little difficulty in ascertaining the main facts in the case. The immediate financial status of the corporation and its future prospects can readily be disclosed by the application of certain definite and *accepted* principles of investment analysis. It is equally possible to disclose the immediate financial status and the future paying capacity of a nation, although the problem is here more complex and the principles of analysis essentially different. It is precisely this greater complexity and this difference in the principles involved that is chiefly responsible for the existing confusion on the whole problem. Consequently, the necessary first step in a study of German capacity to pay is to reach agreement on the principles of investment analysis that are involved.

#### I. THE TWO-FOLD NATURE OF THE PROBLEM

The payment of foreign debts by a nation involves two distinct problems. The first is an *internal* fiscal or budgetary problem; the second an *external* commercial or foreign trade problem. The budgetary problem is somewhat analogous to that faced by an ordinary individual or corporation in meeting debts; the other finds no analogy in the settlement of ordinary private obligations. This aspect of

the problem has accordingly been the source of most of the confusion of mind that exists on the subject of reparations and of the misconceptions as to what is involved for Germany in making reparation payments.

Even the budgetary problem differs somewhat from that of an individual corporation. In order to pay its obligations, a corporation must have net income from its operation equal to the amount of the debts to be paid. This requires producing at a cost that is less than the selling price,—a straight problem of business administration. In the case of a government, the budget problem involves raising revenue from taxes in amounts sufficient to cover the ordinary expenses of government and to leave a surplus with which to meet the obligations assumed. Here is a complicated problem of political administration. A considerable number of government expenditures are practically fixed in amount and these have a first claim on government taxation revenues. Under ordinary conditions, the government has little difficulty in balancing accounts, but during and following wars the problem usually becomes extraordinarily difficult. Government financial administration thus involves many considerations not found in business finance.

The striking difference between the paying of ordinary debts between individuals living in the same country and the paying of external debts by a nation is due to the second aspect of the problem. An individual can pay his domestic obligation with the money derived from the profitable sale of goods;

but a nation, as we shall see, cannot pay its debts abroad—except to a very limited degree—with the *money* derived from the excess of revenues above ordinary expenditures. Payment of external government debts is, moreover, an essentially different matter from the payment of government debts within the country. When a government owes its own people, it can use for the purpose the surplus money derived from taxation. This, we repeat, is impossible—except to a very limited extent—in the payment of debts to foreigners.

*An understanding of what is involved in converting available domestic revenues into foreign means of payment is indispensable to an understanding of the whole problem of reparation and international debts.* The payment of foreign debts involves the sending of tangible wealth across the country's borders. Several possible means of making such transfers are available. Some of them, however, are of very limited availability for reasons that are readily explained.

1. *Gold and Silver.*—In so far as the government's surplus revenue is in the form of specie, it has an acceptable means of payment in other countries. Gold and silver will be received abroad at its bullion value. Thus far the analogy between the payment of a debt to its own people and the payment of a debt to a foreign nation is a true one;—money can be used to a very limited extent. We say *very limited* extent because a nation seldom has a very large total supply of precious metals. In the case of payment within a country, however, the supply of gold

does not diminish at all when payments are made. No money leaves the country; it merely circulates or changes hands, and the total supply is not affected.

The total gold supply of Germany at the end of the war was 2,281,000,000 gold marks, about \$560,000,000. A year later it was 1,109,000,000 gold marks; at the end of 1921 it was 1,092,000,000 gold marks; while in March, 1923, it was 1,004,829,000 gold marks, or a little over \$250,000,000, approximately one-quarter of which was on deposit in foreign countries. The silver money of Germany is almost negligible in amount. Since the war, Germany has thus parted with more than half of her entire supply of precious metals. If the total remaining supply were turned over by the German Reichsbank to the government for use in paying reparations, Germany could still pay in this way the sum of 1,004,829,000 gold marks. This would meet the minimum payments under the terms of the London settlement of May, 1921, for a period of less than six months.<sup>1</sup> In the meantime the loss of this gold supply would have disastrous economic consequences in Germany and greatly lessen the future capacity to pay by other means.

2. *Paper Money.*—To a limited extent paper money may also be used in meeting foreign obligations. While the Reparation Commission would not accept paper marks in the settlement of reparation, the German government was not debarred

<sup>1</sup> This "settlement" called for 2 billion gold marks per year, plus a sum equal to 26 per cent of Germany's total exports.

from exchanging paper marks for foreign currency and bills of exchange which were acceptable to the Reparation Commission. The process was simply this: Germany sold paper money to the people of the United States, for example, for as many dollars as the paper would bring at the rates of exchange then current. This American money obtained by Germany would then be turned over to the Reparation Commission for distribution among the Allies in proportion to their respective claims. Now it needs to be understood that this American money which was turned over to the Reparation Commission did not have to be actual gold. In fact, what was turned over to the Reparation Commission was bills of exchange, which were convertible into gold on demand or at some specified date in the near future. Therefore, when the French government in this way received payment from the Reparation Commission, it received bills of exchange which could be sent to the United States to be redeemed in American gold, or which could be used in purchasing goods from the United States, or for that matter, in other countries.

The reason why Germany cannot use this indirect means of payment indefinitely is that the citizens of other countries will not purchase unlimited quantities of paper money unless there is evidence that Germany can ultimately redeem such paper in gold. In fact, Germany did sell huge quantities of paper currency to foreign speculators who fancied the German mark would rise in value.<sup>1</sup> Germany is,

<sup>1</sup> See p. 85 below.

moreover, not the only European nation that has followed this device since the war.

3. *Labor Services*.—A nation may theoretically pay its external obligations by "working it out" within the creditor country. One has to say *theoretically* in this connection, since there may be practical reasons which prevent it. Concretely, Germany might have sent an army of workers into France to restore the devastated areas. In fact, Germany more than once offered, in good faith, to make payment by this means. The French government was, however, unwilling to allow the reparation to be paid in this way, for various reasons. The French exiles from the devastated areas wished to return immediately and to supervise, if not actually to carry out, the restoration or rehabilitation of their homes and businesses. This would obviously not have been possible if wholesale reconstruction by German armies were permitted. The French labor unions were also opposed to the competition of German labor in the French labor market. All classes of Frenchmen were, moreover, instinctively opposed to the continued presence of a large number of Germans in France. Wisely or unwisely, therefore, the French would not permit the reconstruction of the devastated areas by German labor.

4. *Exportation of Goods*.—The only means of payment remaining is shipment of goods across the frontier. To a limited extent, *existing* movable wealth may be exported,<sup>1</sup> and such foreign investments as

<sup>1</sup>The fallacy that German fixed property can be used as a means of payment through the transfer of ownership to foreigners is discussed on p. 21 below.

may be owned by German citizens may be liquidated.<sup>1</sup> But as a year-in-year-out proposition, current production in Germany constitutes the only source out of which payments can be made. If Germany is to make large annual payments over a long period of years she must annually produce large quantities of goods for export.

Payments through exports may be made in two ways: (1) By direct export to the creditor country, and (2) by export to other countries,—the proceeds or bills of exchange then being delivered to the creditor. The former method illustrates the so-called "deliveries in kind"; the latter illustrates the "cash" payments. It must be noted, however, that in either case the debtor country must export goods across her borders.

*The so-called "cash" payments are a myth.* The method of making cash payments through exports to other countries than the creditor country has given rise to a remarkable myth. The creditor country does not by this device, as is supposed, receive cash rather than goods. The French government would receive, let us say, bills of exchange drawn in American dollars,—the bills arising out of the export of goods from Germany to the United States. Let us inquire now what the French government can do with these bills of exchange. It can (1) send them to the United States for redemption in gold, or (2) send them to the United States or to other countries for use in purchasing goods. Since the

<sup>1</sup> These foreign investments, it should be understood, were acquired as a result of excess exports at some previous period.



American gold supply equals only about 10 per cent of the total reparation bill, it is obvious that even if France desired to redeem such bills in gold, and even if we were willing to part with our entire gold supply, only 10 per cent of the reparation bill could thus be received by France in the form of gold. The fact is that the total production of gold in the entire world since the discovery of America is little more than half of the sum which Germany is obligated to pay.

It is clear, therefore, that most of the bills of exchange which would be turned over to the Allies as "cash" can be used *only* in purchasing goods.<sup>1</sup> Thus even the *cash* payments are really payments in kind. It should be added here that the bills of exchange which France would in the first instance receive would not perform the services of money in France.

This analysis has been clearly recognized by M. Jules Décamps, chief of the Economic Research Division of the Bank of France.<sup>2</sup> He says:

If Germany were to turn over to the French government dollars, pounds, or florins, for example, the latter government will be obliged to cash them, to transform them into francs, if it is desired to use them in paying its own domestic expenses. Who would buy from the French government these foreign bills of exchange except persons in France who have foreign payments to make and who are debtors either for goods already imported or to be imported, or for services to be performed by foreigners for them?

<sup>1</sup> They could of course be utilized in meeting foreign debts owed by the Allies; this would obviously be of interest only to those countries which are disposed to meet their foreign debts.

<sup>2</sup> See article entitled *La Crise Financière Allemande et les Réparations*, *Revue de Paris*, Dec. 1, 1922, pp. 607-621.

There is no answer to this question. Décamp's is clearly right in calling the gold mark cash payments a "mirage." To make payments to France by either method—in kind or in cash—Germany must export goods across her borders either to France or elsewhere; and in like manner to receive payment, France must import goods across her borders either from Germany or elsewhere.

*Not only must there be exports, but there must be an excess of exports over imports.* Assuming for the moment that all payments in goods involve only direct obligations between Germany and France, it is obvious that if Germany were to make payments she would have to export more to France than she imports from France. For example, to pay a billion gold marks a year, she would first have to export to France enough goods to pay for her imports from France, and then she would have to send France an additional billion marks worth of goods. The indirect, round-about trading methods do not change this principle. Germany must export beyond her borders sums in excess of what she imports from abroad. Year in and year out, over a long period of years, Germany' cannot possibly pay a sum greater than that by which total exports exceed total imports.<sup>1</sup>

*"Invisible" items must be considered along with foreign trade.* The discussion in the paragraphs immediately preceding has centered around the export and import of commodities. It remains to be

<sup>1</sup> The possibility of curtailing imports and expanding exports is discussed in Chaps. II and IV.

observed now that there are a number of so-called *invisible* items entering into the industrial and financial relations of nations which must be taken into account. The invisible elements in the international balance of payments are as follows: (1) interest on foreign investments; (2) shipping and other transport earnings; (3) banking and insurance earnings and commissions arising out of international transactions; (4) expenditures of tourists, commercial travelers and government representatives; (5) emigrant remittances; (6) gifts and relief contributions; and (7) payments to migratory workers. Foreign investments obviously entitle the owners to receive income from the country where the funds are invested. A country whose ships carry the commerce of another nation receives payment therefor just as a nation receives payment from another for goods which it exports. A nation whose insurance companies and banks perform services for other countries is obviously entitled to payment therefor. A country which entertains travelers from other countries likewise receives payments from the visiting tourists for the services rendered.

Some countries receive a large income from these sources, while others obviously have large outlays to make on these accounts. In any analysis of international trade and financial relations, these items must therefore be brought into the balance of accounts along with the exports and imports. Germany could obviously make some payments to France if she were to carry French commerce free of

charge. Germany could obviously make some payments to France if she were to turn over to France interest due from German investments in foreign countries. Germany could obviously make payments to France if she were to perform for French citizens insurance and banking services free of charge. Germany could obviously make payments by entertaining French tourists in Germany without charge.

*The total capacity of Germany to pay will be measured by the excess of her exports of goods and services rendered to foreigners over the imports of goods and the receipt of services from foreigners.* Trade accounts, investment accounts, shipping accounts, banking and insurance accounts, and tourist accounts—all must be considered in gauging German capacity to pay. All these items taken together constitute what has come to be called the international balance of payments or balance of accounts.

In Chapter II we shall consider the international balance of payments of Germany; first, for a twenty-year period before the war; second, during the war; and third, for the years 1919-22 inclusive. For the present, we are concerned only with the nature of the problem of making external payments. All budgetary discussion is reserved for Chapter V.

## II. CURRENT FALLACIES

In the light of the preceding analysis, it would seem that we might now be prepared to proceed immediately to a detailed discussion of the actual

international trade and financial status of Germany. It is necessary first, however, to answer certain fallacious arguments and analyses that still persist in nearly all public discussions of international debts and reparation. We willingly devote this further space to a discussion of principles, for the simple reason that unless we can reach agreement concerning the fundamental nature of the problem of paying foreign obligations, there is little to be gained in entering upon a detailed analysis of German trade and finance. Unless we have a clear conception as to what is involved in making reparation from the point of view of international trade and finance, we shall come no nearer to a final appraisal of German capacity to pay than do those who start with the conflicting and divergent ideas enumerated in the opening paragraph of this chapter.

*The first fallacy is the notion that a nation's capacity to pay is measured by the excess of annual production over annual consumption.* This principle of measuring capacity to pay has been widely exploited. Strangely enough, it has even been advanced by certain economists who have failed to appreciate the peculiar problems involved for a nation in paying foreign debts. The principle is derived from a fundamentally false analogy. If it is true that an individual's ability to pay debts is measured by the excess of his income over his necessary consumption expenditures, why, it is asked, is not a nation's ability to pay foreign debts to be measured in the same manner? If an individual's income is \$5,000 per year, and his necessary expenditures \$4,000, he can pay

a debt of \$1,000. If a nation's income is 50 billion dollars per year and its necessary consumption outlay 40 billion dollars, why is not that nation's capacity to pay foreign debts precisely 10 billion dollars?

The answer is that, whereas an individual may receive his income in money and can transfer this money directly to his creditor, a nation's income, although it may be expressed in money values, cannot be transferred in the form of cash to a foreign nation. When a nation's annual production exceeds its annual consumption by 10 billion dollars, that amount of cash is not stowed away somewhere in national vaults; it is impossible to transfer this wealth to a foreign country simply by writing and delivering a check for 10 billion dollars. There have merely been created within the country various forms of wealth valued at 10 billion dollars in excess of the wealth that has been consumed during the year. This wealth is not necessarily in a form that could be transferred beyond the nation's border. It may consist of factories, equipment, railroads, highways, enriched soil, etc.,—fixed capital goods, which can be used for the future expansion of production but which cannot be turned over to foreign lands in payment of debts.

*Only such portion of the annual production can be turned over to a foreign nation as is in exportable form.* One cannot, therefore, assume that a nation's capacity to pay abroad is *necessarily* measured by the excess of current production over current consumption. The excess of production over consumption will measure capacity to pay external obligations

only when the amount of this excess is identical with the excess of exports over imports.

All this is merely another way of saying that the excess of exports over imports is the *only* true measure of what a nation can, year after year, actually pay abroad. It may be observed here, however, that a nation might deliberately seek to avoid having an excess of exports over imports, and then plead inability to pay. Undeniably there is here a problem of control. But it is equally true that a nation might have an actual excess of production over consumption and yet be unable to make payments beyond its borders because it was unable to export more than it imported. The problem of control is in no wise escaped by choosing as the measure of capacity to pay the excess of exports over imports. We are at present, however, not concerned so much with the problems of control as we are with ascertaining precisely what is involved in making foreign payments. The inescapable conclusion is that over a period of years, a nation cannot pay more than the amount by which exports do in fact exceed imports,—including, of course, the invisible items in the balance of accounts.

This fundamental truth has long been recognized by economists and bankers, and by some of the leading statesmen of the world. For example, it was recognized and explicitly stated by both Premier Lloyd George of England and Premier Aristide Briand of France several months before the London "settlement" of May, 1921. On Jan. 28, 1921, Mr. Lloyd George spoke as follows:

What I have put forward is an expression of the views of all the experts. . . . Everyone wants gold, which Germany has not got; and they will not take German goods. Nations can only pay debts by gold, goods, services, or bills of exchange on nations which are their debtors. The real difficulty . . . is . . . securing payment outside the limits of Germany. Germany could pay—pay easily—inside her own boundary, but she could not export her forests, railways, or land across her own frontiers and make them over to the Allies. Take the railways, for example. Suppose the Allies took possession of them and doubled the charges; they would be paid in paper marks which would be valueless directly they crossed the frontier.

The only way Germany could pay is by way of exports—that is, by difference between German imports and exports. If, however, German imports were too much restricted, the Germans would be unable to obtain the food and raw materials necessary for their manufacturers. Some of Germany's principal markets—Russia and central Europe—were no longer purchasers, and if she exported too much to the Allies, it meant the ruin of their industry and lack of employment for their people. Even in the case of neutrals, it was only possible generally to increase German exports by depriving our traders of their markets.

Less than a week later (Feb. 3, 1921), Premier Briand made the following statement before the French Chamber and Senate:

We must not lose sight of the fact that in order to pay us Germany must every year create wealth abroad for herself by developing her exports and reducing her imports to strictly necessary things. She can only do that to the detriment of the commerce and industry of the Allies. That is a strange and regrettable consequence of facts.

We are not here concerned with the question as to whether the Allied nations are willing to have German exports exceed German imports by the



amounts stipulated in the terms of payment; that is another story, the consideration of which is of the most vital significance to an understanding of the real nature of the reparation problem. We are at present interested only in the question of German capacity to pay.

*The second fallacy is found in connection with the means of payment.* Certain methods of payment have been suggested which do not constitute actual payments at all. Some of these are so absurd that they would not merit even a word in passing were it not that they are so widely indorsed.

The first of these beliefs is that Germany can pay the European Allies by borrowing from the United States or in neutral countries. This doctrine has been repeatedly stated in official communications and addresses. It is obvious, however, that if Germany borrows from the United States in order to pay the Allies, she would not thereby have liquidated her external obligations. There would merely have occurred a shifting of creditors; instead of owing the Allies she would henceforth owe the United States. In actual fact the operation might well involve robbing Peter to pay Paul.

The second so-called means of payment, closely analogous to the foregoing, involves the delivery of reparation bonds by Germany to the Allies and the discounting, or sale, of these bonds in the United States or neutral markets. Without an indorsement or guarantee by the Allies this would not be a particle different from the method above. If, however, the Allies stand back of the bonds and German

exports do not prove in excess of German imports over a period of years, the Allies would be obligated to the United States and neutral countries to the amount of the bonds that have been discounted, etc. Discounting reparation bonds may conceivably be a means whereby the Allied creditors could acquire *immediate* purchasing power; but this device is in no sense a means of actual payment by Germany. Her ability to develop an export surplus remains the crux of the problem.

The third mythical so-called means of payment is the delivery to the Allies of the securities of German corporations. This fallacy has a veritable host of adherents. What does it amount to in fact? At present the Allies have the German government's formal promise to pay—a promise that has been evidenced by the issue of huge volumes of reparation bonds. Bonds of German private corporations constitute their promises to pay to the holders thereof. The first point to note then is that both are promises to pay. Is the promise of the German government to pay less good than the promise of German corporations to pay? It is doubtful, since the German government in its debt-paying capacity can scarcely be disassociated from the German people; and in case of a default by private bond holders, the Allies would again have to look to the German government. But more significant—in fact, the real point,—is that the German people would have to pay across German borders the interest on these bonds, and this involves the same old trade problem.

Admitting this, there are many who nevertheless insist that the amount of the excess exports that would be required annually would, by this means, be very greatly reduced. For example, if 10 billions of industrial securities were turned over to the Allies, Germany would be credited by the Reparation Commission with 10 billions; and she would then have to pay each year merely the interest plus a small sinking fund. At 5 per cent this would amount to only 500 million gold marks per year. Quite so; but the point is that the 10 billions is not an actual payment, the delivery of such securities gives to the Allies no actual wealth. The "payment" is merely a promise to pay which is in the form of industrial bonds rather than in the form of government bonds. The actual annual payments would consist only of the interest and the sinking fund.

If the Allies wish to imagine that the delivery of industrial corporation bonds constitutes payment, whereas the delivery of government reparation bonds does not, there is, of course, no objection. Perhaps there are, for the moment, certain psychological advantages. If people think they are getting paid in huge instalments by the delivery of promises, it is no doubt politically advantageous. But, unfortunately, if the promises to pay are not fulfilled, the Reparation Commission will later have to "uncredit" Germany's account.

The fourth suggested means of payment is identical in principle with the third. It is the transfer to the Allies of title to property in Germany,—title to land, title to houses, title to castles, etc. Now, if

citizens of Allied countries wish to live in Germany and take advantage of the ownership of such properties within that country, the process of payment would be simple; but if they prefer to live in their own countries and receive the *income* from these German properties, it is another matter. The German people can make income available beyond the borders of the country only by means of exports. We stand exactly where we were before.

Similar to the so-called means of payment just discussed is the sale of German real property and securities to foreigners and the utilization of the proceeds in making reparation. As we shall see in Chapter III, some of the funds thus far used by Germany in making reparation have in fact been acquired in this way. If, for example, a piece of German property is sold to someone in the United States for 100,000 gold marks, the funds—provided the German government can get hold of them—could be used in reparation payments. But since the property remains in Germany and the foreign owner remains in the United States, the latter can receive income from such property only provided Germany can export goods for the purpose. As soon, therefore, as experience demonstrates that there is no available means of paying interest or dividends to the foreign owner of this property—then this so-called means of payment will no longer be effective. We shall show presently that experience has already practically demonstrated this very thing.<sup>1</sup>

*A third fallacy is that the Allies can go into Ger-*

<sup>1</sup> See discussion on pages 89-93 below.

*many, collect German revenues, and thus receive payment.* The belief still persists despite much convincing experience to the contrary. The Treaty of Peace provides for securities, guarantees, and sanctions, whereby, in the event that Germany does not pay, the Allies will have the right to proceed to collect. The belief that it is possible to get paid by collecting German revenues in Germany has been officially stated on numerous occasions. The Allied Ultimatum of March 3, 1921 declared in the most solemn language that unless Germany decided within four days to carry out the Paris Agreement of January 29, all customs duties collected on the frontiers of the occupied territories should be turned over to the Reparation Commission, and the rates fixed by the Inter Allied High Commission.<sup>1</sup> Control commissions have, moreover, been set up in Germany for the purpose of supervising all German fiscal operations.

Naturally these devices for extracting payments from Germany did not succeed when applied in the occupied cities of Duisburg, Düsseldorf, and Ruhrort. German paper currency could be collected, but such paper was not acceptable to the Allies. Within a few months M. Tardieu lamented—"Has anyone observed that we have been able to collect a single franc?" Somewhat daunted by this experience, the French plan for the settlement of the reparation problem dated Jan. 2, 1923<sup>2</sup> provided for

<sup>1</sup> Cf. "Sammlung von Aktenstücken über die Verhandlungen auf der Konferenz zu London vom 1 bis 7 März," 1921, p. 164.

<sup>2</sup> French plan for settlement of reparation and the Inter-

genuinely *productive* guarantees. What now is meant by *productive* as distinguished from ordinary guarantees?

Just before invading the Ruhr, the French government announced its Productive Plan whereby it was pointed out that a billion gold marks could be obtained annually within Germany. Of this amount 460 million gold marks were to be derived from deliveries of coal, timber, and other materials, and the remainder, 540 millions, from the collection of cash within the occupied territory and the Ruhr Valley. Whether the coal, timber, and materials will cost more to procure than they are worth is a question which we need not consider at this place. We are here concerned only with the most recent political invention for collecting cash in Germany.

Under the plan announced by the French government, this cash has to be obtained within the occupied area including the Ruhr by the following fiscal measures.

Taxing German exports . . .	400	million	gold	marks
Seizure of the customs . . . .	20	“	“	“
Seizure of the coal tax . . . .	120	“	“	“

The *productive* part of this plan lies in the fact that these various duties and taxes levied within Germany are not to be paid in German marks, but in *foreign currencies*. By making Germany pay in foreign money, it is assumed that the acceptance of

worthless paper marks will not be necessary. Now there is just one difficulty in this plan, namely, that in order to get foreign currency, Germany must be able to pay for it; and she can pay for it only by exporting more goods than she imports from foreign countries. Thus again we come right back to the fundamental problem, that of procuring an exportable surplus. Germany will be able to deliver foreign currency to the Allies only if she can obtain it through the sale of goods in foreign countries in amounts greater than what she has to buy from foreign countries.

*Guarantees and control agencies will prove of no avail if they do not increase German exports relatively to imports.* The truth is that not one of the devices proposed for enforcing payments has been based on any adequate understanding of what is involved in the reparation problem. Nearly all of the discussions have been largely beside the point because they have revolved around only one angle of the question, namely, the budgetary angle. The guarantees and control commissions have never been concerned with the international trade aspect of the problem. They have been designed merely to obtain revenues within Germany; and there has been little consideration of the problems involved in translating domestic revenue into acceptable means of payment in foreign countries. In fact, many of the means of collection employed actually tend to reduce exports and thereby to diminish capacity to pay.

## CHAPTER II

### GERMANY'S INTERNATIONAL BALANCE OF ACCOUNTS

In the preceding pages we have indicated that two fundamental problems are involved for a nation in meeting its external obligations. There is first the problem of securing a surplus of revenues within the country; there is second the problem of making such revenues available in foreign countries. Having thus revealed the general nature of the problem of paying foreign debts, we are now prepared for a specific study of the German reparation question. We shall find it advantageous to consider first the question of Germany's international trade and finance, leaving the budgetary problem for discussion in a subsequent chapter.

The trade and financial relations of Germany have been thrown out of balance as a result of the war. Accordingly, if we are to obtain a true perspective for gauging the future international commercial and financial possibilities of Germany, it will be necessary first to take a look backward. We may divide the discussion of the present chapter into three sections as follows: (1) The German international accounts from 1894 to 1914; (2) the effects of the war upon Germany's international status, 1914-



1918; (3) the situation from 1919 to the end of 1922. In Chapter III we shall show what reparation payments Germany has made up to date, and the means that have been employed in making them. We shall then be in a position to study what is involved for Germany, in so far as international trade and finance is concerned, in meeting future reparation requirements.

#### I. GERMANY'S PRE-WAR INTERNATIONAL TRADE AND FINANCIAL BALANCE

The table on page 27 gives the German imports and exports of both commodities and precious metals for a twenty-year period before the war.

With reference to the figures of imports and exports in this table, it needs to be pointed out that they give an exaggerated picture of the actual growth of German foreign trade. This is, of course, because of the steadily mounting prices during the period in question. As the figures stand, the average exports, for example, for the first five-year period were about 3.4 billions, and for the last five-year period about 8.2 billions. According to German wholesale index numbers, the price level advanced 40 per cent during the twenty-year period, and the average level for the last five years of the period was 30 per cent higher than that of the first five years. Therefore, on the basis of the price level of the middle nineties, the average exports for 1909-1913 would be, instead of 8.2 billions, approximately 6.3 billions. That is to say, the volume of exports increased between the first

and last five-year periods shown by the table by about 85 per cent.

## TRADE AND SPECIE BALANCE OF GERMANY, 1894-1913 \*

(In millions of marks)

Year	Trade Balance			Bullion and Specie Balance			Total Adverse (Commodity and Specie) Balance
	Imports	Exports	Net Adverse	Imports	Exports	Net Adverse	
1894	3,938	2,961	977	347	90	257	1,234
1895	4,121	3,318	803	125	106	19	822
1896	4,307	3,525	782	251	229	22	804
1897	4,681	3,635	1,046	184	151	33	1,079
1898	5,081	3,757	1,324	359	254	105	1,429
1899	5,483	4,207	1,276	301	161	140	1,416
1900	5,766	4,611	1,155	277	141	136	1,291
1901	5,421	4,431	990	289	81	208	1,198
1902	5,631	4,678	953	175	135	40	993
1903	6,003	5,015	988	318	116	202	1,190
1904	6,354	5,223	1,131	500	93	407	1,538
1905	7,129	5,732	1,397	307	110	197	1,594
1906	8,022	6,359	1,663	417	120	297	1,960
1907	8,749	6,846	1,903	257	250	7	1,910
1908	7,667	6,399	1,268	413	83	330	1,598
1909	8,527	6,594	1,933	334	265	69	2,002
1910	8,934	7,475	1,459	376	170	206	1,665
1911	9,706	8,106	1,600	301	118	183	1,783
1912	10,692	8,957	1,735	326	143	183	1,918
1913	10,770	10,097	673	436	101	335	1,008

\* These are the special trade figures compiled by the German government.

*The German trade balance was unfavorable for twenty consecutive years before the war. It will be seen from*

this table that every year, without exception, German exports were less than German imports. The adverse trade balance grew somewhat with each succeeding five-year period. The year 1913 was, however, a marked exception, due to the extraordinarily large exports of that year. A detailed analysis of these exports indicates that the increase was not confined to any particular group of commodities nor to any particular country. It was a very general increase. There is little reason to believe, however, that it indicated a permanent lessening of the German unfavorable trade balance. By five-year periods the average annual adverse trade balance grew as follows: 97 millions, 1,073 millions, 1,472 millions, 1,480 millions.

*Germany also found it necessary to import bullion and specie.* Since Germany is not a gold and silver producing nation, it was necessary throughout this period for her to import precious metals, both for monetary and for industrial and artistic purposes. The growth of German trade and industry, together with the general rise of prices, necessitated steadily increasing amounts of currency in the channels of trade and increasing aggregate quantities of specie in the banks to serve as a basis for the expanding note and deposit currency. The table shows that in every single year Germany imported more specie than she exported, though the amounts varied widely. The average annual net adverse balances by five-year periods were as follows: 87 millions; 145 millions; 248 millions; 195 millions.

As a result of trade and specie operations, Ger-

many had a large annual adverse commodity and specie balance, averaging for the five-year periods as follows:

1894-1898.....	1,074 million marks
1899-1903.....	1,218
1904-1908.....	1,720
1909-1913.....	1,675

This means that Germany had to pay the sums indicated in the final column of the table on page 27 in some other way than by commodity export. In fact, she met these payments with the so-called *invisible credits* arising out of interest on foreign investments and the rendering of current services.

*Germany derived large revenues, with which she could pay for her excess of imports, from the following sources:* (1) Interest on foreign investments, (2) shipping and inland transport service; (3) banking and insurance earnings and commissions. It is impossible to present for Germany any authentic figures as to the sums derived from each of these sources. A number of studies, however, were made by various German students before the war, which indicate that Germany's invisible credits exceeded her adverse trade and specie balance during most, if not all, of the twenty years preceding the war.<sup>1</sup>

The largest invisible credit was derived from interest on accumulated German investments in foreign countries. For the ten-year period, 1894-1903, the annual income from this source varied from about 600 to 850 million marks. Shipping and inland trans-

<sup>1</sup>See Appendix A for the available estimates of specific returns for the various items.

port earnings, the invisible item of second importance, varied during the same period from about 200 to 360 million marks. The sum of these two items, therefore, ranged from about 800 to 1,200 million marks—an average of about 1,000 millions per year. The adverse trade and specie balance for the same years varied from 804 million marks to 1,429 millions, with an annual average of 1,146 millions. It will be seen from these figures that the interest and shipping income was insufficient to meet the adverse trade and specie balance. On the average, an additional 150 million marks were required to meet this deficit. This was, apparently, more than supplied from the other invisible sources, as the growth of foreign investments during the period indicates.

No adequate data as to the amount of revenue derived from other sources are available. Banking and insurance earnings and commissions, however, added materially to the invisible credits of Germany.<sup>1</sup> The tourist trade during this earlier period may also have added something to Germany's credit in the international balance of payments. No figures are, however, available.

In the ten-year period immediately preceding the war, the adverse trade and specie balance, as the table shows, averaged about 1,700 million marks a year, an increase of about 550 million marks over the average for the preceding decade. Meanwhile the interest on foreign investments had increased, the average income received ranging from around

<sup>1</sup> See Appendix A, p. 257ff.

875 million marks in 1904 to perhaps a little more than 1,000 millions in 1913—the average amounting to about 950 million marks per year. Shipping and inland transport earnings also increased, the range being from about 360 millions to around 660 millions, with an average of about 500 millions per year. These two items thus fell short of meeting the deficit from trade and specie operations by perhaps 250 million marks annually. Banking and insurance earnings and commissions increased somewhat during this period. It appears that there was a debit balance during this period so far as the earnings of foreign laborers were concerned, the reason being that during these years Germany came to depend upon Slavic and Italian migratory labor for help in harvesting her crops. Such outlays for foreign labor, it is believed by German writers, more than offset any net earnings from the expenditures of other tourists in Germany.

All in all, therefore, it would appear that the German net credit balance was smaller during the ten years preceding the war than it had been during the preceding decade. We find confirmation for this belief in statements—made before the war—by German writers to the effect that the foreign investments of Germany did not grow so rapidly in the years just before the war as earlier, and that Germany was more or less continuously a heavy borrower in the financial markets of Amsterdam, Paris, and London.<sup>1</sup> Incidentally, it may be noted that it is these private German debts that have since the war

<sup>1</sup> See Appendix A, p. 273ff.

been adjusted through the foreign clearing houses. This will be discussed in Chapter III.

*The growth of foreign investments is the most reliable index of Germany's international financial status.* If one had adequate and complete statistics of the invisible credits which could be set off against the debits on account of trade and specie operations, one would be able to state precisely how much Germany had available each year for new investments abroad or, as the case might be, for the liquidation of existing obligations. In the absence of such data, however, we are forced to come at the problem from the other end, and compute from the growth of German foreign investments what the net balance in favor of Germany in the international accounts must have been. While the estimates of German investments during the twenty-year period before the war vary considerably, there is nevertheless substantial agreement as to the amounts at the beginning and at the end of this period.<sup>1</sup> In 1893 the total of German foreign investments was approximately 12 billion marks, and in 1913 it was approximately 20 billion marks.

*Germany's net annual international income from 1893 to 1913 averaged about 400 million gold marks a year as measured by pre-war values.* From the above figures it appears that Germany's foreign investments increased by about 8 billion gold marks in the twenty years immediately preceding the war, an average of about 400 million gold marks per year

<sup>1</sup> For a statement of the various estimates that have been made, see Appendix A, pp. 260 and 277ff.

on the basis of prices then prevailing. This means, in other terms, that Germany must have had an average of 400 millions of invisible credits in excess of the adverse trade and specie deficit. She had 400 million gold marks annually—on the average—available for new investments abroad.

It would appear at first glance from these figures that Germany would have been able to pay year after year for twenty years before the war foreign debts equal to 400 million gold marks on the basis of present values. This is, however, a large overstatement for the reason that if she had parted with 400 millions a year in the earlier years in meeting foreign debts, instead of building up foreign investments, her interest returns would have been no larger in the later than in the earlier years. This means that her average annual capacity to meet external obligations during the entire twenty-year period would have shrunk from 400 millions to less than 200 millions.<sup>1</sup> Her shipping earnings and her income from banking and insurance and commissions might also well have been lower in subsequent years if her net credit balance had not been available for building up foreign investments. It is impossible to state precisely how large a total of foreign obligations Germany could have paid out of existing international credits during the twenty years prior to the war, but that it was less than 200 million gold marks, on the basis of values then existing, is not to be doubted.

These pre-war figures, however, need to be trans-

<sup>1</sup> For computation, see Appendix A, p. 281ff.



lated into present prices for purposes of comparison with post-war conditions. At the present time gold prices are roughly 60 per cent above the 1913 level, and the prices for the year 1913 were materially higher than the average for the twenty-year period 1894-1913. In terms of present values, these 200 million gold marks per year are equal to about 400 million gold marks.<sup>1</sup>

It is almost universally believed that if Germany merely regained her pre-war economic strength, she would easily be able to meet the reparation that she has agreed to make annually, namely 2 billion gold marks plus a sum equal to 26 per cent of the value of her total exports.<sup>2</sup> The latter sum, on the basis of the export figures for the twenty years 1893-1913 would have amounted to about 1.5 billion gold marks per year. The above analysis indicates, however, that during the twenty years 1894-1913, the annual international credits of Germany amounted to only a small fraction, from 5 to 6 per cent,<sup>3</sup> of the sums that she is obligated to pay now. This, it may be recalled, was during the period of great German expansion, the period in which it was said that Germany was distancing the world commercially.

But did Germany during this pre-war period endeavor to obtain as large an international credit

<sup>1</sup> For computation, see Appendix A, p. 282.

<sup>2</sup> See reference to the London ultimatum, p. 59ff.

<sup>3</sup> This percentage is obtained as follows: 2 billions+1.5 billions =3.5 billions, average annual payment required on basis of pre-war export figures. 200 million (pre-war values) equal about 6 per cent of 3.5 billions.

balance as possible? If there had been any necessity for making large payments abroad, could she not have re-arranged her trade so as to make them without serious difficulty? Concretely, could Germany not have increased her favorable balance by reducing imports? There are those who argue that these figures of German pre-war international trade and finance are of little significance for the reason that no effort was being made to keep imports low. Germany, it is contended, could use the proceeds derived from exports and invisible credits either to buy imports, or to increase her foreign investments—or, if the need existed, to pay foreign obligations.

This belief that all, or at least a very large part, of a country's exports may be used for paying foreign debts, regardless of import requirements, is so widely held even among those who presume to be professional students of the problem, that it must be given careful consideration. The argument assumes, it will be noted, that large imports are not in fact essential to the maintenance of large exports—that Germany could export roughly the same volume of goods irrespective of the volume of imports. We say "irrespective of the volume of imports", for if exports are to be used for the payment of foreign debts, it is obvious that they cannot be used for the purchase of imports.

*The maintenance of German exports is largely dependent upon the maintenance of imports.* A country whose industrial organization has been built up as has that of Germany cannot prevent a decrease of exports if imports decline materially. German fac-

tories must import a great part of the raw materials and partly finished goods they manufacture for export. In fact, Germany cannot produce within her own borders any of certain kinds of raw materials required by her industries; and in relatively few cases can she produce sufficient quantities of raw materials for her factory needs. We shall elaborate upon this point a few pages further on.

The development of the German industrial system—which is based on imported materials—has, moreover, permitted a growth of population within Germany greatly in excess of the numbers which German agriculture is capable of supporting. It is estimated that nearly fifteen millions of the German city population was before the war dependent upon imported food. The following table of German imports for eighteen years before the war shows by broad classes the character of Germany's purchases abroad.

CLASSIFICATION OF PRE-WAR GERMAN IMPORTS \*  
(Average value for years specified)

Years	Raw Materials and Partly Manufactured Goods		Food and Living Animals		Manufactured Goods		Total Imports in Millions of Marks
	Millions of Marks	As a Percentage of Total	Millions of Marks	As a Percentage of Total	Millions of Marks	As a Percentage of Total	
1896-1900	2,329	46	1,682	33	1,053	21	5,064
1901-1905	2,899	48	2,024	35	1,185	19	6,108
1906-1910	4,650	65	2,415	29	1,315	16	8,380
1911-1913	5,798	68	3,082	30	1,509	14	10,389

\* These figures are the government trade statistics. In 1906 the German government made some changes in the basis of classification of commodity imports and exports. The figures for years before and after this change are therefore only roughly comparable.

It will be seen that the two classes of imports, "raw materials and partly manufactured goods" and "food and living animals," comprised from 79 to 86 per cent of the total of German imports.

For the years immediately before the war, the German statistical reports give a slightly more detailed classification. The following table of German imports and exports in 1913 indicates the extent to which the export of German manufactured goods was dependent upon imports of raw materials and foodstuffs. In the net figures imports are indicated by the minus sign, net exports by the plus sign.

CLASSIFICATION OF GERMAN IMPORTS AND EXPORTS, 1913  
(Value in millions of marks)

Trade	Raw Materials	Partly Manufactured Goods	Food and Drink	Live Animals	Manufactured Goods	Total
Imports..	5,003	1,239	2,759	290	1,479	10,770
Exports..	1,518	1,140	1,036	7	6,396	10,097
Net....	-3,485	-99	-1,723	-283	+4,917	-673

It will be seen from this table that Germany both imported and exported commodities in each of the five broad groups. It is the net column, however, in which for the moment we are interested. Germany imported large quantities of raw materials; food and drink; and live animals. She imported almost as great a value of partly manufactured goods as she exported; but she exported very large quan-

tities of manufactured commodities. The close relationship between the net imports of raw materials and food, and the exports of manufactured goods is seen from the following figures.

The combined net imports of raw materials, partly manufactured goods, and food and drink was 5,307 million marks, while the net exports of manufactured goods equalled 4,917 million marks. Thus Germany's net imports of raw materials, partly manufactured goods, and food and drink

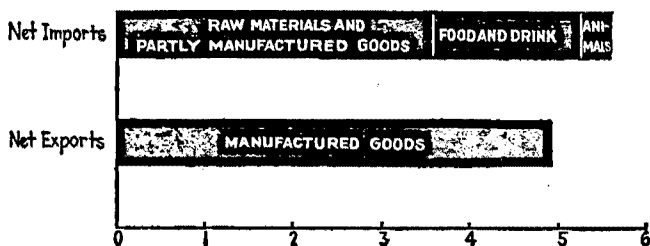


FIG. 1.—Dependence of Exports on Imports.  
(Value in Billions of Marks)

amounted to 390 million gold marks more than her net exports of manufactured goods. Besides this she had net imports of live animals to the extent of 283 million gold marks.

Let us now inquire to what extent it might have been possible for Germany to reduce her imports without affecting exports, and thereby lessen her unfavorable trade balance. There are certain *theoretical* possibilities, such as (1) curtailment of all imports of luxuries; (2) reduction of the quantity of food imports, on the theory that consumption could be curtailed without lessening efficiency; (3)

reducing imports of raw materials and partly manufactured goods, replacing them by domestic products. To what extent are these possibilities capable of practical realization?<sup>1</sup>

*Luxuries comprised a very small percentage of Germany's pre-war imports.* The following table shows the imports and exports of all the important commodities that might possibly be classed as luxuries.

PRINCIPAL LUXURIES IMPORTED BY GERMANY IN 1913 \*

(In millions of marks)

Commodity	Imports	Exports
Liquors (wines, rum, beer, etc.) . . . . .	81.3	65.4
Tobacco:		
Leaf . . . . .	134.2	0.5
Cigars and cigarettes . . . . .	12.7	6.8
Precious and semi-precious stones . . . . .	24.1	5.4
Opium . . . . .	5.4	0.9
Flowers, flowering bulbs, and shrubs . . . . .	16.3	1.4
Coffee . . . . .	219.6	0.2
Tea . . . . .	8.0	0.04
Nuts . . . . .	13.6	0.1
Books and pictures . . . . .	42.7	97.0
Silks and velvets (not including raw silk) . . . . .	39.6	192.0
Fresh vegetables . . . . .	34.6	2.0
Fresh fruits . . . . .	128.2	3.6
Pianos, violins, and harmonicas . . . . .	2.1	74.7
Children's toys . . . . .	1.2	103.3
Total . . . . .	763.6	553.3

\* *Statistisches Jahrbuch für das Deutsche Reich*, 1915, pp. 186-246.

<sup>1</sup> In Chap. IV we shall make an analysis of what is involved in the way of *future* readjustments of German international trade if an excess of exports over imports is to be obtained.

With total imports of luxuries of 763.6 million gold marks and total exports of the same classes of luxuries equal to 553.3 millions, the net imports of luxuries is seen to be only 210.3 million marks. In some cases an elimination of the imports would lead to a curtailment of exports, particularly in the case of tobacco products and silks and velvets, of which Germany's production is small. In other cases the exports would not be materially affected, as in the case of books and pictures, musical instruments, and children's toys. Allowing for every reasonable doubt, we may take a figure of 650 million marks as representing the total of luxury imports that might possibly be curtailed without directly reducing exports.

This total of imports of so-called luxuries, however, includes fresh vegetables, fresh fruits, coffee, and tea. Now if one regards these commodities as necessities, and hence removes them from the list, he thereby subtracts almost 400 million marks from the total luxuries figure, thus reducing it from 650 million marks to only 250 millions, a figure which amounts to little more than 2 per cent of the total imports. In order to be extremely radical in this matter, however, let us assume that all of these commodities are luxuries, and could be dispensed with.

*Imports of food could not be reduced much without directly reducing exports and without lowering productive efficiency.* In considering next the possible reductions of imports of food and drink it should be noted first, that in the luxuries classification above are in-

cluded certain commodities which fall specifically in the food and drink group. They are: liquors, tea, nuts, fresh vegetables, and fresh fruits—which together total 485.3 million marks. In other words the greater part of all the luxuries are to be found in the food and drink group. Since the total food and drink imports are 2,759 million marks (see table on page 37 above) there remains only 2,274 million other food and drink imports after deducting the

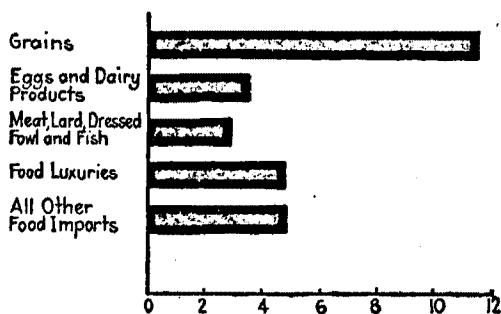


FIG. 2.—Classes of Food Imports  
(Values in hundreds of millions of marks)

luxuries (485.3) millions. Of these 2,274 millions, 1,150 millions, or about 51 per cent, consisted of grains; 346 millions, or 15 per cent, of eggs and dairy products; and 292 millions, or 13 per cent, of meat, lard, dressed fowl, and fish—79 per cent of the total being represented by these three groups. The remaining food imports cover a wide range of commodities, with relatively small amounts in each case.

It is impossible to assume that a reduction in the volume of these food imports would not affect



exports at all, since, in fact, Germany exported large quantities of these very commodities. For example: imports of wheat amounted to 417 million marks, and exports to 88 millions; imports of oats, 60 millions, and exports 93 millions; imports of rye, 42 millions, and exports, 132 millions. A reduction of imports would thus automatically reduce exports. While these are the more extreme cases, we find that in nearly every instance there were some exports of the commodities that were imported.

It is also true that a very substantial reduction in the volume of imports of these necessities of life would reduce the efficiency of the German population. Deprived of liquors and tobacco, of coffee and tea, and of fresh fruits and fresh vegetables, except in so far as they are produced at home, there can be no great additional contraction of consumption without impairment of efficiency. The standard of living of the masses of people in Germany before the war was extremely low, the per capita consumption being but 470 marks, or \$120.<sup>1</sup> We say that there could be no further contraction of consumption without impairment of efficiency, while fully aware of the drastic curtailment of consumption that occurred during the war. Such rigid economizing could not be continued indefinitely; and it did, in fact, decrease efficiency.<sup>2</sup>

<sup>1</sup> See p. 194.

<sup>2</sup> There are those who argue that Germany could dispense with all food imports without lowering efficiency. This might conceivably be true if everybody would fletcherize or follow the most approved and scientific principles of dietetics. In the world of reality, one would hardly be justified, however, in basing a study of German capacity to pay for reparation on any such assumption.

But in order again to give full consideration to any doubts let us assume that there could be a curtailment of these imports of food necessities to the extent of 20 per cent without curtailing exports and without reducing the vitality of the German working population. The net adverse trade balance would thereby be reduced about 450 million gold marks, in addition to the 650 million gold marks on account of luxuries of all sorts.

*The imports of manufactured commodities cannot be materially reduced.* Manufactured luxuries, it will be recalled, have already been eliminated. In any event, the total of manufactured imports is small, comprising less than 14 per cent of all German imports. The entire list is composed of essential manufactured articles which Germany is not equipped to produce in the quantities needed, if at all. It may be mentioned here that the military establishment did not require any considerable importations.<sup>1</sup>

*The importation of raw materials and partly manufactured goods cannot be reduced without directly reducing exports.* The close relationship between the net imports of raw materials and partly manufactured goods and the net exports of manufactured goods has already been indicated in the table on page 37. Reference to the table shows that in 1913 the net imports of raw materials and partly manufactured goods equalled 3,584 million gold

<sup>1</sup> In Chap. IV we shall take account of the reduction of the military establishment when considering future import requirements.

marks, and the net exports of manufactured goods equalled 4,917 million gold marks.

More specifically, the largest items among the German raw material imports were: raw cotton, silk, and wool (19.8 per cent); raw copper (5.3 per cent); hides and skins (10.0 per cent); iron-bearing ores and pig iron (5.0 per cent); rubber (2.3 per cent); tin, lead, and aluminum (1.8 per cent); pine, walnut, oak, mahogany, and other hard woods (6.4 per cent); chemicals and dyestuffs (6.4 per cent). These raw materials entered directly into the manufacture of commodities for export. Cotton, silk, and wool were converted into textiles and clothing; copper and iron went into the manufacture of industrial and agricultural machinery, rolling stock, and tools and metal articles of all kinds and descriptions for both household and industrial uses; hides and skins went into the manufacture of leather and leather articles; the various woods were used in practically every type of manufacturing; chemicals and dyestuffs produced dyes, fertilizers, and pharmaceutical products; etc., etc. The five principal groups of exports of German manufactured goods and their percentages of the total export in 1913 are as follows: Iron products (15.8 per cent); machinery (11.2 per cent); textiles, not including clothing (12.7 per cent); chemicals and dyes (9.4 per cent); leather and leather articles (5.4 per cent). The vital relationship between the importations of raw materials and the maintenance of German exports is sufficiently illustrated by the foregoing examples.

*Could not Germany—it may still be inquired—have*

*reduced her imports of raw materials and partly manufactured goods, replacing them by home production and thereby decreasing the ratio of imports to exports?* The answer again is that the imports were indispensable to the maintenance of exports. Many of the basic raw materials required by her industries, as has been pointed out, Germany did not produce at all, while others could be produced only in limited quantities or at prohibitive cost. Germany could get the largest output by purchasing raw materials abroad and paying for them with the commodities which she could produce most advantageously. If the German people had undertaken to produce within Germany materials and commodities for which the German resources were not adapted, the result would inevitably have been a lessened total volume of production. The economical thing for Germany—the thing which would produce the largest total output—was specialization in the production of the things for which she was well adapted, and the exchange of these commodities abroad for the materials which she could not produce advantageously at home.

*Could not Germany have expanded her exports of manufactured commodities if she had been disposed to do so?* It may still be urged that Germany might greatly have expanded her total exports if she had been willing to reduce her own consumption of manufactured goods—thus leaving more for export. There was perhaps some possibility of expanding such exports above the totals that were in fact attained in the years before the war. But in view

of the tremendous efforts that Germany was making to expand her foreign trade by means of low freight rates on export commodities and other forms of subsidy, and in view of the tariff laws of other countries which were designed to prevent the dumping of German goods, together with the efforts that were being made by Great Britain, particularly, to prevent the growth of German exports in the outlying regions of the world, it does not appear that Germany could have appreciably increased her manufactured exports. She was putting forth her whole energy as it was.

*The curtailment of imports affects exports indirectly, through restricting foreign purchasing power.* Thus far we have been considering only the direct relation of imports to exports; we must now call attention to the fact that if Germany eliminates or curtails her purchases of foreigners' goods, foreigners will in consequence not be able to purchase so many goods from Germany. The emphasis here, it must be noted, has been shifted from Germany's export capacity to the purchasing capacity of Germany's customers. For example, if Germany ceases to buy coffee from Brazil, then Brazil cannot possibly buy as many manufactured goods from Germany as before; nor will the decrease in demand here be taken up by increased purchases of German goods elsewhere. The fact can never be escaped that trade is a two-sided proposition. If Germany reduces her purchases from the rest of the world, the rest of the world will have to reduce purchases from Germany in something like the same proportion.

To recapitulate, we have found that Germany might conceivably have reduced her imports by as much as 650 million gold marks through the elimination of all items listed in the luxuries table above; and 450 million gold marks by a reduction of 20 per cent in the imports of food necessities—a total of 1,100 million gold marks. For ample and complete measure, let us raise this figure to 1,500 million gold marks—on the assumption that the imports of manufactured goods, raw materials, etc., might have been curtailed a little without affecting exports, and that by an extraordinary effort exports might have been slightly increased.

Now the actual credit balance in Germany's international accounts in the year 1913, it may be recalled, was very much larger than the average—due to the exceptionally large exports of that year. It amounted to about 600 million gold marks.<sup>1</sup> It should also be recalled that the average for the twenty-year period was about 400 million gold marks, and that except for the single year, 1913, the later years before the war averaged low. Thus, in the exceptional year 1913, if Germany had foregone all imported luxuries and done all the other things outlined above, she would have had available for new investments abroad in the neighborhood of 2,100 million gold marks. The average for the twenty-year period preceding the war would have been very much less.

*In the exceptional year 1913, Germany could have paid less than half the annual reparation sum stipu-*

<sup>1</sup> See Appendix A, p. 269.

lated by the London "agreement" of 1921. She would have been obligated to pay 4,500 million gold marks, and she would have had available from the proceeds of her trade, foreign investments, shipping services, banking, insurance, commissions, etc., only 2,100 million gold marks with which to pay. She would have had to pay 4,500 million gold marks because the London settlement stipulated that the annual sum should be 2,000 million gold marks plus a sum equal to 26 per cent of the value of German exports—which amounted in that year to 10,097 million gold marks. This was the situation in the extraordinary year 1913, when German export trade surpassed all records; when she had available 1,000 million gold marks of income from the accumulated foreign investments which had been built up over a long period of years; when earnings from her extensive shipping, banking, insurance, and other services were at the maximum; and when she still possessed the highly productive areas of Alsace-Lorraine, Posen, West Prussia, and Upper Silesia.

## II. THE EFFECTS OF THE WAR UPON GERMANY'S INTERNATIONAL TRADE AND FINANCIAL POSITION

During the war Germany's trade and financial position was tremendously impaired. Imports of food and raw materials were greatly reduced; exports fell even more; shipping, insurance, and banking earnings were practically eliminated; and interest on foreign investments practically ceased to be paid. Germany was thus compelled to part with a very considerable portion of her foreign investments in order to pay for necessary imports.

The official figures of exports and imports were not published for the war years, but Dr. von Glasenapp, Vice-president of the Reichsbank, in a recent article published by a leading journal of Great Britain,<sup>1</sup> gives the following totals for the balance from August 1, 1914, to the end of December, 1918:

Imports.....	22.8 billion gold marks
Exports.....	11.7
	—
Trade deficit.....	11.1 billion gold marks

He adds that this deficit was materially increased by the fact that Germany furnished, directly or indirectly, 4 billion marks worth of goods to her allies, thus making her total unfavorable trade balance 15.1 billions. There is little reason to doubt the substantial accuracy of these figures, for they are in accord with the generally known facts as to the effect of the war upon the trade of the belligerents. They have, in fact, been widely accepted as reasonably reliable estimates.

This trade deficiency of 15 billions was met in the following ways:

	Billions of Gold Marks
Gold exports.....	1
Sale of foreign securities.....	3
Sale of domestic securities.....	1
"Short-time" credits.....	3 to 4
Sale of paper marks, and open accounts.....	6 to 7

<sup>1</sup> Germany's Balance of Payments with other Countries, *Manchester Guardian Commercial, Reconstruction in Europe*, sect. 1, pp. 28-29.



Thus of the 20 billions of foreign investments owned by Germany in 1914, at least 3 billions had been disposed of outright; domestic securities amounting to 1 billion had been turned over to foreigners; and loans to the extent of 3 or 4 billions had been contracted, which in effect amounts to a reduction of foreign investments. The net result of these operations is equivalent to a reduction of German foreign holdings by 7 or 8 billion gold marks.

The paper marks used in purchasing imports during the war *theoretically* constitute 6 or 7 billion marks of German obligations to pay foreigners and are thus theoretically an offset against German investments abroad; but as a practical matter since German paper currency has now become virtually worthless, we may omit this item from the present reckoning, and assume that it does not affect the total of German foreign holdings.

Of the 13 or 14 billions of foreign investments remaining, it is generally conceded that the greater part has been lost. That held in the countries of Central and Eastern Europe has lost most of its value as a result of economic upheavals there and of transfers to the Allies in accordance with Article 260 of the Treaty. Most of that held in the Allied countries was also lost—for all practical purposes—being liquidated or sequestered by the Allied governments.<sup>1</sup> One will therefore not be far wrong in concluding that the total of German foreign investments left at the end of the war was not more than 2 or 3 billion gold marks. Certain confidential

<sup>1</sup> See p. 70.

French estimates, however, place the figure as high as 5 billion gold marks, while Keynes puts it as low as one-half to one billion gold marks.<sup>1</sup>

A second method of estimating the remnant of foreign investments still belonging to Germany at the beginning of 1919 results in a similar figure. The Germans have officially reported that 11.7 billions<sup>2</sup> of German property abroad was liquidated or sequestered by the Allied governments. M. Tardieu has estimated the amount at 13 billions. Of this amount Germany may eventually realize as much as 1.5 billion gold marks from German property held in the United States; but this is of no avail to Germany at present. That held in England and other countries will ultimately yield nothing to Germany. We may therefore assume a net loss of 10 billions in this connection. To this must be added the 7 or 8 billions reduction cited in the third paragraph preceding, making a total reduction of 17 or 18 billion gold marks, from the original total of 20 billions. Besides these reductions there remains the loss, in amounts unknown, of German investments in Central and Eastern Europe as a result of economic upheavals there. One is again brought to the conclusion that the net remnant of foreign investments left to Germany could not have

<sup>1</sup> Speculation in the Mark and Germany's Balance Abroad, *Manchester Guardian Commercial, Reconstruction in Europe*, sect. 8, p. 481.

<sup>2</sup> Dr. F. Schroeder (Secretary of State in the German Ministry of Finance): Germany's Payments under the Treaty and their Effect on the Budget of the Reich, *Manchester Guardian Commercial, Reconstruction in Europe*, sect. 8, pp. 474-476.

exceeded 2 or 3 billion gold marks at the outside.<sup>1</sup>

### III. GERMANY'S INTERNATIONAL BALANCE, 1919-1922

For the years 1919-1922 inclusive, Germany has continued to have a large deficit in her international trade and financial accounts. The trade figures in billions of gold marks are as follows:<sup>2</sup>

	1919	1920	1921	1922
Imports.....	6.6	7.0	5.7	6.2
Exports (exclusive of reparation deliveries).....	1.8	5.1	3.6	4.0
Deficit.....	4.8	1.9	2.1	2.2

It is often stated that the German trade figures since the war are unreliable. It is true, in fact, that they do not include everything. There were large importations through the occupied areas,—“the hole in the west,”—particularly during the earlier years—which were not included in the trade reports. There were also some exports through the same avenue. It is also true that there was probably some understatement of value, for the sake of escaping customs duties, in the case of both exports

<sup>1</sup> See Appendix A, p. 288.

<sup>2</sup> For the years 1919 and 1920, von Glasenapp's estimates, reported in sect. 1 of the *Manchester Guardian Reconstruction Series*, are accepted as the most reliable that are available. The 1921 figures are quoted from a recent official memorandum of the German statistical office. Since May, 1921, official figures have been regularly published.

and imports. The figures are likewise understated because there were some "illicit exports"—goods taken out of Germany at each fall of the mark by people from the neighboring countries—which evaded the customs officials and therefore do not enter into the reported exports. A French estimate—admittedly very rough—has placed these illicit exports at 150 million gold marks per annum.

There is, however, no reason to believe that the omissions noted tend to overstate the trade position of Germany—that is, to reduce the total export deficiency of 11 billions. Indeed, since the largest omission is imports through the "hole in the west"—kept open in order to permit the sale of Allied luxuries in Germany despite the efforts of Germany to restrict the consumption of non-essentials; it is reasonable to believe that if all the imports and exports had been included, the aggregate deficit each year would probably be somewhat larger—not smaller—than the figures given above.

*Invisible Items.*—The interest on foreign investments, if paid, would have been equal to say 5 per cent on the 2 or 3 billion marks which it has been estimated might have been left to Germany at the end of the war—a total of 150 million gold marks at best. It is doubtful, however, if much of this was paid. Moreover, most of these remnants of holdings have since then been utilized in making reparation payments, in purchasing imports, etc. Germany's interest receipts during the years 1919–1922 may, therefore, be regarded as negligible.<sup>1</sup>

<sup>1</sup> Indeed, von Glasenapp says that in the three years, 1919–1921,

Shipping earnings and banking commissions have also greatly decreased. In 1919 and 1920 German shipping was so disorganized that the German income from this source must have been very small. In 1921 and 1922, however, Germany began replacing her merchant marine, so that the shipping item again appears in the accounts; amounting to perhaps 60 or 70 million marks in 1921, and to 175 millions, more or less, in 1922.<sup>1</sup> Germany may have received some returns from the internal transport service and, on account of the recent establishment of branch banks in Holland, she may have profited a little from insurance and banking services.

The highest estimate that anyone has made for tourist expenditures in Germany since the war is a French estimate of 300 million gold marks per annum. This assumes an average of 100,000 transient foreigners each spending daily throughout the year 10 gold marks—with a subtraction of 65 million marks for expenses of Germans abroad. As opposed to this, some insist that the amount realized by Germany from this source is comparatively small. In view of the fact that the tourist trade did not flourish greatly in the year 1919, and that it was declining in the second half of 1922, we may reasonably assume that Germany's total receipts from this source for the four years 1919-1922 could not Germany actually had to pay abroad about 2 billion gold marks for the amortization of credits taken up in foreign countries and for interest due on foreign obligations, though he does not separate the two items. *Manchester Guardian Commercial, Reconstruction in Europe*, sect. 1, p. 29.

<sup>1</sup> See Appendix A, p. 264.

have been in excess of about 600 million gold marks.

The sundry credits, or earnings, among the invisible items which can be set off against the 11 billions debit, or deficiency, in the trade accounts for the four years since the war, cannot have exceeded 1 billion gold marks at the outside. This would leave a total deficit in the international accounts for 1919-22 inclusive, of about 10 billion gold marks.<sup>1</sup>

We must for the moment postpone consideration of the means employed by Germany in meeting this post-war deficiency, for it becomes necessary at this place to link the discussion of the ordinary requirements of German trade and finance with the extraordinary requirements involved in the making of reparation payments and in fulfilling other obligations resulting from the treaties of peace. This will be the subject of the following chapter.

<sup>1</sup> Reparation exports in kind do not appear in the German trade figures; and therefore do not enter into the present statement of accounts one way or the other.

## CHAPTER III

### WHAT GERMANY HAS PAID AND HOW

WE have established the principle in the first chapter that a nation cannot pay foreign obligations unless that nation is able to muster an excess of exports of goods and services over imports of goods and services. We have shown in Chapter II that at no time since the war has Germany had an exportable surplus available for reparation, that, instead of a surplus, she has had a cumulative deficit of approximately 10 billions gold marks. It would seem to follow that any reparation payments would have been impossible. But this has not been the case. Germany has, in fact, paid considerable sums despite the unfavorable trade and financial balance with other countries. Is there not something wrong, therefore, with the principle enunciated in the first chapter?

The principle laid down in the first chapter did not state that a nation could not *temporarily* make some payments abroad without a favorable trade and financial balance; it merely stated that this could not be done year after year over a considerable period of time. A nation may, indeed, pay external debts for a brief period even though there is no credit balance in the international accounts. Such a feat

can, however, be accomplished only by methods which rapidly reduce subsequent ability to pay. As we shall see, the reparation payments which Germany has been making during the past four years, together with the huge deficit in the ordinary international trade and financial accounts, have already produced a situation which has not only destroyed all possibility of making reparation payments for a long time to come, but have placed Germany's whole economic situation in a highly precarious condition.

The present chapter will undertake to answer three specific questions: (1) How much was Germany obligated to pay? (2) How much has Germany paid? (3) By what means have these payments been made—when Germany had a huge international deficit rather than an export surplus?

#### I. THE EXTENT OF THE OBLIGATIONS

The Treaty of Versailles holds Germany responsible in principle for all the losses sustained by the Allied and Associated Powers and their citizens which are directly or indirectly attributable to the war. The Allied and Associated governments recognized, however, that Germany's resources would not permit her to meet the entire cost of the war, direct and indirect, for it was estimated that the damages to property and persons, plus the total of Allied war expenses, would reach the stupendous sum of one trillion francs.<sup>1</sup> With an eye for what was regarded

<sup>1</sup> Not all war expenditures, it should be observed, do as a matter of fact constitute net national losses. For example, the men in the



as practicable, the Allies stipulated in the treaty merely that Germany should make reparation "for all damage done to the civilian population of the Allies and their property by the aggression of Germany by land, by sea, and from the air." This, as finally interpreted, included pensions and allowances for the civilian populations.<sup>1</sup> But the treaty did not in any case contemplate the collection of tribute or punitive damages, or any payments over and above the actual cost of indemnity to those who had suffered actual loss. The connotation of the term *reparation* as used in the treaty itself is quite clear from the various conditions to the conclusion of peace as laid down by President Wilson with the acquiescence of the associated governments and accepted by Germany.

The framers of the treaty did not, however, undertake to fix immediately the total amount to be paid and the means to be employed in making such payments. They merely formulated the various provisions dealing with restitution of property consumed and destroyed in the occupied areas or elsewhere, in such manner as to indicate in a general way the character of the reparation and the channels through which it might be made. They further specified certain time limits and minimum amounts required for immediate rehabilitation of the devastated areas. The development of the necessary

military establishments would have to be fed and clothed in any event.

<sup>1</sup> The inclusion of pensions, it will be recalled, has given rise to much bitter controversy.

administrative machinery was intrusted to a Reparation Commission invested with broad powers. By its ratification of the Treaty of Versailles, the German government implicitly and explicitly accepted these principles.

The treaty had provided, however, that 20 billion gold marks should be paid on account of reparation before May 1, 1921, by which time the total of German reparation obligations was to be fixed. Before proceeding to a consideration of the reparation "settlement" of May, 1921, it is necessary to state that there was held a long series of conferences, under one authority or another, dealing with one or another phase of the treaty obligations.<sup>1</sup>

*The amount of reparation and the methods of payment were fixed by the London "settlement" of May, 1921.* In the early spring of 1921 various official estimates of the damage for which Germany was to be accountable were transmitted by the Reparation Commission to the German government for acceptance or protest within periods ranging from two to four weeks. On April 24, 1921, the German government declared that it could not acknowledge that an opportunity to be heard, in the sense of the treaty, had been accorded to it during these negotiations. On April 27, the Commission announced the total sum for which Germany was accountable, to which was to be added the total war debt owed by Belgium to the Allied and Associated Powers prior to the Armistice. These figures became the basis of the

<sup>1</sup> Appendix H gives the dates and indicates the general purport of the principal official conferences and proposals.

settlement announced at the London conference on May 5, 1921.

	Gold Marks
Reparation debt.....	132,000,000,000
Belgian war debt (estimated at)....	4,000,000,000
	<hr/>
Total.....	136,000,000,000

From this total there were to be deducted amounts equal to: (1) the payments and deliveries already made; (2) the credits for Germany arising out of payments or deliveries by other ex-enemy powers.

Germany was also required to fulfill certain other provisions of the treaty involving both cash payments and deliveries in kind, such as the settlement of pre-war debts of German nationals and the restoration of property carried away from non-German territory.

The term of years during which payments were to be made was not fixed, and accordingly the total amount ultimately required to liquidate the account, including interest, cannot be definitely computed. The settlement provided, however, for the issue of three series of bonds, the first of 12 billion gold marks, the second of 38 billion gold marks, and the third of 82 billion gold marks. These bonds were to bear an annual interest rate of 5 per cent with an additional 1 per cent for sinking fund. The first series was to be issued on July 1, 1921, and the second on Nov. 1, 1921. The interest and sinking fund on these two issues amount to 3 billion gold marks annually. The third series, 82 billion gold marks, was to be delivered to the Reparation

Commission on Nov. 1, 1921, but not issued until such time as the Reparation Commission should be satisfied as to Germany's ability to meet the interest and sinking fund payments. This third series was obviously held back in the expectation that some time would elapse before Germany could pay interest and provide for amortization of the entire debt.

There is an additional provision, however, which affected the amount of payments that Germany must make annually. It was stipulated that Germany must pay an annual sum of 2 billion gold marks, *plus* 26 per cent (of which 1 per cent is for sinking fund) of her total exports. If the annual exports should equal 4 billion marks, the total annual payment required would thus be 3 billion marks, just equal to 6 per cent on the first two issues of bonds (50 billions). If the exports should be 8 billions, Germany would have to pay 4 billion gold marks in reparation; and the extra billion would be applied in settlement of interest and sinking fund on the third series of the reparation bond issues.

*The London settlement remains the principal reparation agreement, notwithstanding various modifications.* The total amounts to be paid, the methods by which, and the time within which payments must be made are regarded as having been definitely and finally determined at London. Subsequent modifications, which have been acquiesced in from time to time by the governments represented on the Reparation Commission, are expressly termed "provisional" and "temporary".

Departures from the methods and the sums fixed at London have invariably been authorized only on the distinct understanding that they are not to be regarded as substitutes for or alternatives to the schedule of payments announced at the London conference. They are regarded as nothing more than temporary concessions to the convenience of the debtor country.

## II. THE EXTENT TO WHICH THE OBLIGATIONS HAVE BEEN MET

In order to appraise the extent to which Germany has met the various obligations that have been imposed upon her since the war, it is necessary to bear in mind that the obligations are of several kinds and that the payments are chargeable to several different accounts. A complete story involves more than reparation proper. In fact, under the Armistice agreement, the provisions of the Treaty of Versailles and all the agreements subsidiary thereto, Germany has made payments to the Allied and Associated Powers on the following accounts.

1. Reparation proper (*i.e.*, reimbursement for or repair of actual damage to civilian population and property).
  - (a) Cash payments made directly to the Reparation Commission.
  - (b) Payments in kind to be credited to the German account at properly determined values.
2. Armies of occupation.
  - (a) Cash payments to the armies of occupation. A record of these payments is kept by the Reparation Commission, but they are not credited to the reparation account.

- (b) Payments in kind for the maintenance of the armies of occupation. These are also recorded by the Reparation Commission, but not credited to reparation account.
3. Restitution.
- (a) The return of objects removed from the occupied territory.
- (b) The delivery of substitutes where restitution is impossible.
- (c) Cash payments where neither restitution nor substitution is practicable.
4. Settlement of pre-war debts.
- Cash payments in settlement of pre-war debts of German citizens to citizens of the Allied and Associated Powers. It needs to be understood here that citizens of Allied countries also owed German citizens. These private international debts were settled through "clearing" offices, the balance against Germany being paid in cash.<sup>1</sup>
5. Miscellaneous payments.
- Germany is also required to make certain payments that do not belong in any of the above categories, such as miscellaneous deliveries of securities, and of foreign gold deposited in Germany, or acquired by Germany from Russia, coffee valorization funds, and the like.

*Allied and German estimates or calculations of the payments already made are widely divergent.* The latest complete official statement of reparation payments that has been made by the Reparation Commission is found in a publication issued by the British and French governments which is based on extracts from the accounting records of the Commission down to April 30, 1922.<sup>2</sup> Partial or summary statements have been issued for somewhat

<sup>1</sup> A fuller statement of what is involved is given in Appendix E.

<sup>2</sup> Reparation Commission, Statement of Germany's Obligations on April 30, 1922, 35 pp. London, 1922.

later dates, the most recent being a statement of account as of Jan. 31, 1923.<sup>1</sup> In the following table totals are shown in gold marks for this latter date as well as for April 30, 1922, but in our discussion of the methods of calculation variously employed, we shall have to refer principally to the earlier and more detailed report.<sup>2</sup>

	To April 30, 1922	To Jan. 31, 1923
Cash from Germany.....	1,313,660,496	1,702,912,000
Cash from other sources credited to Germany.....	112,121,000	114,774,000
Deliveries in kind.....	3,047,444,233	3,634,735,000
State property in ceded territories..	2,504,342,000	2,553,905,000
Total.....	6,977,567,729	8,006,326,000

The value of the state property in ceded territories has not yet been credited to the reparation account for the reason that this property has not yet been liquidated. It is nevertheless an acknowledged transfer of former German wealth to the Allies. Certain other deliveries were also stated (in the April 30 report) to have been made, but were as yet classified under "suspense" items. They consisted almost entirely of expenses connected with the armies of occupation, and reached a total of 1,126 million gold marks. Adding this sum to the 6,978 million gold marks acknowledged to April 30, we have a total of 8,104 million gold marks. To what extent the increase in the acknowledged

<sup>1</sup> For a discussion of the Reparation Commission's totals as of Aug. 31, 1922, cf. *Federal Reserve Bulletin*, February, 1923, p. 179 ff.

<sup>2</sup> For a more detailed statement and an explanation of the various items, see Appendices D and F.

receipts of Jan. 31, 1923 is to be accounted for by the crediting of "suspense" items, the records thus far published do not reveal. The increase in cash, amounting to 389 million gold marks, and the increase in the state property account, presumably constitute net additions to the 8,104 million total. If so, by the end of January, acknowledged receipts and suspense items doubtless exceeded 8,500 million gold marks.

On the other hand, Germany claims that, up to Sept. 30, 1922, she paid in fulfillment of treaty obligations a total of 44.7 billion gold marks plus 46.7 billion paper marks, in three main classes.

	Billions of Marks	
	Gold	Paper
1. Payments, deliveries, or transfers of property rights now or later capable of exact determination and applicable to Germany's capital debt.....	40.3	plus 0.1
2. Payments, deliveries, or transfers of property rights now or later capable of exact determination and applicable to the annuities fixed in the London schedule of payments: period May 1, 1921-Sep. 30, 1922.....	3.6	plus 0.1
Total for which Germany requests <i>reparation credit</i> .....	43.9	plus 1.2
3. Payments, deliveries, or transfers of property rights made by Germany in fulfillment of the treaty but not applicable to reparation credit.....	0.8	plus 45.5
Total of 1, 2 and 3.....	44.7	46.7



There is another German official computation expressed only in gold marks which reaches a total of 56.5 billion gold marks.<sup>1</sup> For our immediate purpose, however, the three classes given above will serve better, inasmuch as two of them represent reparation account exclusively, and are in sufficient detail to contrast directly with the Reparation Commission's totals.

With the Allies officially admitting that they have received from Germany only a little more than 8 billion gold marks, and the Germans contending that they should be credited with nearly 44 billion gold marks on reparation account, there is obviously much to be reconciled. What is the explanation of such wide divergence in the estimates? Are the Reparation Commission's figures altogether inaccurate and incomplete? Or are the German claims wholly without warrant? Since the parties to the controversy clearly have very different interests at stake, a disinterested investigator may well question whether either the German or the Allied figure tells the whole truth as to the amount that has been actually paid by Germany up to the present time.

*The explanation of the great discrepancy between Allied and German estimates of total payments made is threefold.* First, the Reparation Commission's figures are in numerous instances admittedly provisional and incomplete, the appraisal frequently being still in abeyance. The German estimates, on the other hand, are in nearly all cases complete. Second,

<sup>1</sup> Its relation to the Official Summary from which were taken the figures given above is explained in Appendix F.

there is a substantial difference in the valuations placed by Germany and by the Reparation Commission respectively upon the deliveries or payments which both admit have been made. This is due to a difference in the principles of evaluation that are employed. Third, the Reparation Commission is concerned only with payments that are technically classed as *reparation*; in consequence, such items as the cost of restitution, pre-war private debt settlement, and the other miscellaneous outlays which are included in class 3 of the German table on page 65, are covered in no single official report emanating from an Allied source. Only the clearing house operations have been reported officially in any detail.<sup>1</sup>

<sup>1</sup> Class 3 includes a large number of expenditures made wholly within Germany which are directly attributable to treaty requirements. Such expenditures undeniably increase the German budgetary difficulties; but they do not represent deliveries of tangible wealth to the Allies. These expenditures, many of which antedate the catastrophic fall of the mark since 1921, amount to more than 10 billion gold marks, as computed in the second German statement mentioned on page 66. The same table presents approximately three and a third billion gold marks as the outlay attributable to clearing-house settlements, restitution, domestic expenditures in Germany incurred in connection with the Allied military occupation, and miscellaneous deliveries and cash payments. The reason for not including restitution of property under reparation payments is obvious,—even though the cost to Germany in restoring property or in substituting other property therefor, often exceeded the value of the property taken. The clearing-house operations grew out of the settlement of outstanding, that is, pre-war private commercial debts between the citizens of Germany and the citizens of Allied countries. At the clearing houses the claims of Germany are set off against the claims of citizens of Allied powers in the manner explained in Appendix E. Since the amount owed by Germans is in

Our purpose here is to ascertain as nearly as possible from the data available the extent to which German wealth has actually been diminished as a result of payments that have thus far been made. Accordingly, we must distinguish between real and merely nominal payments—between actual transfers of tangible wealth and mere bookkeeping operations. From this point of view we shall find that some of the more important items included in the German estimates must be eliminated from the list of things which Germany has unquestionably lost and her former opponents have demonstrably gained. This does not necessarily mean that some of such transfers are not properly to be placed to Germany's credit towards the reduction of her total capital obligations.<sup>1</sup> This aspect of the problem involves con-

excess of the amount owed to them, Germany has had to make large net payments on this account. But, since these debts which are thus liquidated were contracted before the war for value received, they cannot properly be included among the reparation payments. It should be clearly appreciated, nevertheless, that the necessity of paying these pre-war commercial debts at this particular juncture—with accumulated interest at 5 per cent since 1914—has very seriously complicated both the German budget problem and the difficulties in balancing international accounts during this critical period. This side of the problem will come up more clearly after a review of the budgetary situation has been attempted.

<sup>1</sup>The vast number of items which went to make up the aggregate of the capital obligations did not by any means all represent definitely assessable losses of tangible objects and known income; they comprised, among other things, tentative calculations of the capital value of good-will, and of government subventions, of the duration of which no trustworthy estimate could have been made in 1921. Many of these subventions, moreover, were impossible of strict limitation to objects contemplated by the treaty. The German total of payments, deliveries, and transfers *applicable to the reparation*

siderations quite outside the field of economics—juridical and political in character—and, in any event, the answer to this question is something quite foreign to our present purpose.

The first and most important of the items which we exclude, pursuant to the foregoing principle, consists of the securities of Germany's war-time allies—Austria-Hungary, Bulgaria, and Turkey. They appear in the above-mentioned official table with a value of 11.6 billion gold marks, although one might properly raise a question whether the loans made by Germany to her associates in, let us say 1917 and 1918, ought to be set down at mark for mark beside credits extended in 1915. Now, since the interest on these bonds is not being paid, and since their ultimate value must be contingent upon the future solvency of these countries—none too promising a contingency in some cases—one can understand why the Reparation Commission should have been unwilling to enter these securities to the credit of Germany in payment of reparation. In any effort to isolate the actual fair value of what Germany has turned over to the Allied countries under the treaty, only a nominal valuation could properly be assigned to these debentures at present. But since the Reparation Commission has received these prior claims on the revenues of Turkey and Bulgaria—not to mention Austria—they ought in fairness to be recorded now at a nominal value of at least 1 gold mark, subject to such ultimate revision as the future may warrant.

*account* cannot however be rejected simply because it embraces hypothetical and for the moment unrealizable values.

Another item which involves no immediate appreciable transfer of wealth is the German claim for reparation credit to the extent of 485 million gold marks, on account of the non-assumption of the pre-war national or local debt to that amount by certain countries which have acquired former German territory. Germany is to go on paying the interest on this debt to the security holders who are now citizens of Czechoslovakia, Poland, Denmark, Belgium, and Danzig. This total of 485 million gold marks may properly enough appear in any record of Germany's reparation payments and deliveries, but it means no tangible present diminution of German wealth, and we therefore do not include it in our list.

The most important item which Germany includes and the Reparation Commission excludes consists of 11.7 billion gold marks of property of German citizens in foreign countries which has been seized and liquidated by the Allied governments. At the time of its seizure, this property was yielding interest and profits to German citizens, and its loss undeniably means a net reduction in the income of the German people. It is understandable why the Reparation Commission should not yet have credited the sums realized to Germany's account. The net proceeds of this complicated liquidation process will be assignable to reparation account only after all pending private claims against Germany for compensation have been disposed of, and the values in many cases have not yet been determined. In many instances, moreover, the liquidation did not yield substantial proceeds to the Allies. The reason

why these foreign investments have not always yielded much upon liquidation is interesting.

A considerable part of the wealth of individual Germans in Allied countries consisted of those German business enterprises which were the links in the German system of international commerce. When isolated from the German industrial and commercial system, such properties were of relatively little value. The people who bought these properties frequently did so as an experiment, tempted by the low price asked. A concrete example will best reveal the effects of the seizure and liquidation of German plants in Allied countries. A large German rubber concern owned a subsidiary plant near Paris which was seized during the war by the French authorities and sold at an extremely low price to a French company. The French company attempted, without success, to run the plant. Finally, after the conclusion of peace, the French management offered the parent company in Hanover approximately 40 per cent of the stock if it would agree to operate the plant.

While the seizure of German property may have added relatively little to the earning power of the Allies, it cannot be denied that it constituted a direct reduction of German earning power. Germany lost this wealth even if the Allies did not gain it in full measure. The difference between what the Germans lost and what the Allies received is a difference that is chargeable to the destruction of wealth, or of income-producing power, as a result of the attempt to transfer wealth from one country to

another without any regard to commercial considerations.

The entire sum of 11,700 millions cannot, however, be counted as German loss, since, as noted in the preceding chapter, there is a possibility that Germany will get credit for as much as 1,500 million gold marks for property returned by the Alien Property Custodian of the United States; while there is still some uncertainty as to the ultimate fate of the former German property in Russia, Brazil, and Cuba. No one, however, seriously believes that German citizens will recover any appreciable portion of the property elsewhere seized except for a relatively small amount returned by China. We may therefore conclude that Germany's ultimate loss in this connection will be about 10,000 million gold marks.

*There remain to be considered the different principles of valuation used by the Allies and Germany.* In general, it appears that the Allied and Associated governments have uniformly taken, as the value of a commodity, the lowest estimate of its worth from the point of view of immediate marketability,—that is, the price at which it could be liquidated at forced sale. The German principle, on the other hand, appears to be one which considers each piece of property as part of a going concern, with a value much in excess of what could be realized at auction. This difference in principle has already been illustrated in connection with the discussion of German property formerly held abroad;—many properties that were of high value as parts of the German com-

mercial organization are practically valueless when torn from their commercial setting and transferred to Allied citizens.

The German principle is obviously more nearly in accord with accepted fiscal, commercial, and legal practice. The British and French governments, for example, in valuing the property of their citizens for taxation purposes, or in computing their aggregate national wealth, do not use as a basis the values that would be derived if all this property were to be "knocked down" under the auctioneer's hammer. In computing the value of Germany's coal deliveries, they take care to use not world market prices, but the much lower German domestic price. Nor did they use the *forced-sale* principle in computing the property losses for which Germany was to be held accountable.<sup>1</sup> They valued the ships destroyed by Germany at a figure representing their actual worth in the carrying trade; and they computed the values at war-time prices. It is not consistent, therefore, to contend at the time of the shipping depression of 1920-21, when the Reparation Commission made its valuation, that ships delivered during the boom period of 1919 were not worth much. It is a generally accepted principle that valuations should be determined as of the time of delivery, rather than at some later date when commercial

<sup>1</sup> The reader will bear in mind that in this study we have accepted without question the official Allied valuations of the material damages to be made good by Germany, notwithstanding the sharp challenge to which they have been subjected by various writers in Allied countries.



conditions may have changed. It is, moreover, debatable whether, in the case of appropriated property, the value ought not to be determined primarily with reference to its worth as part of a going concern in the hands of the party dispossessed. In any event, it is clear that the liquidation by the Reparation Commission of valuable German property at only a fraction of its former "going" value will have a profound bearing upon the amounts that Germany can be expected to pay. This consideration is especially important when the property taken over consists of capital goods—for in the long run Germany can pay only out of income derived from the utilization of her capital equipment.

On the basis of an impartial analysis of all the available data, we have arrived at the conclusion that the tangible values surrendered by Germany to the Reparation Commission, *as distinguished from the total credits to which Germany may or may not be entitled on the books of the Commission in reduction of her capital debt*, aggregate between 25 and 26 billion gold marks. This estimate is the best that can be made in view of the incomplete data thus far obtainable, and it may possibly be several billions too high or too low. The following table classifies only the chief items which go to make up our estimate. The detailed statement of the methods by which this estimate is derived will be found in Appendix F.

It is to be borne clearly in mind that this estimate covers merely the property losses sustained by Germany in connection with fulfillment of the *reparation* clauses of the Treaty of Versailles. It does not

PROVISIONAL ESTIMATE OF ECONOMIC VALUE TO GERMANY OF  
REPARATION PAYMENTS, DELIVERIES, AND TRANSFERS OF WEALTH,  
NOV. 11, 1918 TO SEPT. 30, 1922

Classification	Billions of Gold Marks
Private property abroad, seized and liquidated.....	10.0
State property.....	5.0
Merchant marine.....	3.5
Cash.....	1.8
Railroad material.....	1.4
Non-military equipment and property surrendered on west front after the Armistice.....	1.2
Coal, coke, by-products, dyestuffs, chemicals, etc....	1.0
Saar coal mines.....	0.6
Live stock, cables, miscellaneous reconstruction deliveries, penal deliveries, inland watercraft.....	0.6
Private securities.....	0.3
All other.....	0.4
	25.8

take account of the value of German colonies, or of the ceded territories, such as Alsace-Lorraine, Posen, Upper Silesia. Nor is the cost of restitution, of the military occupation, of the clearing-house procedure, or of any of the domestic official activities within Germany (directly or indirectly attributable to the treaty) included in this estimate. Many of these expenses represent real, tangible sacrifice on Germany's part. The military occupation alone has cost 24.2 billion paper marks between Nov. 11, 1918 and Sept. 30, 1922, of which 11.3 billions were actually furnished in the form of cash to the occu-

pying forces and 12.8 billions were spent in furnishing the armies with supplies.<sup>1</sup> A number of the other payments which in class 3 of the list on page 65 aggregate 842 million gold marks plus 46,762 million paper marks undoubtedly represent demonstrable gain for the Allies, and permanent diminution of German wealth. If we were to place a gold-mark estimate on this class of non-reparation payments, deliveries, and transfers, making allowance for the fact that some of them, such as payments arising from clearing-house operations, restitution, and the like, do not represent complete losses to Germany,<sup>2</sup> we would hazard the guess that the figure must reach well over a billion gold marks.

### III. HOW TRANS-FRONTIER PAYMENTS WERE MADE DESPITE AN ADVERSE TRADE BALANCE

We are now in a position to answer the third question raised at the beginning of this chapter,

<sup>1</sup>Including (besides food, lodging, and transportation): 1,400 drawing-room suites, 10,300 bedroom sets, 5,000 dining-room sets, 4,600 kitchen sets, 180 club suites, 2,900 club chairs, 6,300 wicker chairs, 2,100 upholstered easy chairs, 1,400 upholstered straight chairs, 2,300 large size beds, 3,500 children's beds, 3,900 wardrobes, 3,400 washstands, 3,000 couches, 800 ladies' writing tables, 500 dressing tables, 18,000 rugs and carpets, 50,900 sets of knives, forks, and spoons, 175,000 napkins, 69,000 dinner services, 89,000 coffee services, 4,300 tea sets, 25,000 porcelain plates, 72,000 white wine glasses, 51,000 claret glasses, 15,000 port wine glasses, 45,000 champagne glasses, 58,000 liqueur glasses, 26,000 beer glasses, 9,000 decanters, 3 million square meters of linen for bedding, etc. "Deutschlands Wirtschaftsfrage," p. 12.

<sup>2</sup>As distinguished, of course, from budgetary losses to the German government.

namely: How has Germany been able to deliver some 25 or 26 billion gold marks during a period when, as we have seen, she had a deficit in her international accounts of about 10 billion gold marks? Incidentally, we shall show why the process of paying without an international credit balance has already run its course and cannot be relied upon in the future.

*Several of the payments made by Germany did not in fact have any direct connection with international trade and financial balances.* First, the transfer of the 11.6 billion paper marks worth of securities owed by Germany's wartime allies involved merely a transfer of temporarily unappraisable securities. Second, the seizure and liquidation of German private property in Allied countries, amounting to 10 billions net, necessitated no transfer of wealth from Germany to the Allies. This property already lay in Allied countries, and, while its appropriation by the Allies lessened the income which Germany would henceforth receive, it did not involve any present export of wealth across German borders. It is perfectly clear, however, that, since the property seized comprised practically all of the German property in the Allied countries, no additional payments by this process are possible. Third, surrender of state property in ceded territories, the value of which we have estimated at 5 billion gold marks, likewise occasioned no transfer across German borders. Through the very act of ceding territory this property passed into Allied hands; it does not have to be exported across present German boun-

daries. It is obvious again, however, that since no more of this property remains in German ownership, this method of payment cannot be repeated. Nor can the Saar mines, to which we provisionally assign a value of 650 million gold marks be used in payment a second time; such a payment cannot be duplicated. Finally, property abandoned by Germany in France, Belgium, and other countries did not involve subsequent exports from Germany.

It is apparent that items of this sort comprise a large proportion of the total tangible reparation payments made by Germany—perhaps as much as 18 billion gold marks of the 25 or 26 billion we have mentioned above.

*Two methods of payment do directly affect the international trade and financial situation.* The first is cash payments to the Reparation Commission, and the second, deliveries in kind. In order to understand these methods, a careful analysis of their operation is necessary.

1. *Cash Payments.*—Such payments require the turning over to the Reparation Commission of gold or acceptable bills of exchange,—which mean bills of exchange redeemable in the currency of countries other than Germany. While the official language always refers to all such payments as gold-mark payments, the reader should clearly understand that this does not necessarily mean actual gold. It means that the amounts received shall be figured in gold mark values rather than in paper marks. All told, the Allies have received from Germany on one account or another approximately 1,250

million marks in actual gold. The remainder has been in acceptable bills of exchange.

*In order to obtain foreign bills of exchange payable in foreign currency Germany must naturally give value received for them.* Germany, has in fact obtained these foreign bills of exchange in several ways aside from the ordinary export trade: (1) By the sale of the remnants of German foreign investments left at the end of the war; (2) by the sale of paper marks to speculators in foreign countries; and (3) by the sale to foreigners of shares of stock and property in Germany.

*Germany had the two-fold problem of making reparation payment and meeting the ordinary trade and financial deficit in her international accounts.* Before discussing the several means of acquiring foreign bills of exchange, it is important that we bring back into the discussion at this point the problem of the German export deficiency during the years 1919-22. The German imports during the four years from 1919 to 1922, it will be recalled, exceeded exports and invisible credits by roughly 10 billion gold marks. The problem for Germany, therefore, has been to find the means of paying for these imports and at the same time the means with which to meet the cash payments on reparation account. The cash payments of all sorts, to the end of 1922, according to a German official statement of March, 1923, totalled 2,230 million gold marks, to which must be added, for the purposes of the present discussion, the 615 millions of clearing-house payments (to Nov. 30, 1922).<sup>1</sup> Although the latter are not

<sup>1</sup> "Deutschlands Wirtschaftslage," pp. 11-12.

reparation and were properly excluded in the computation of cash payments on reparation account, they are nevertheless payments which have had to be met in foreign countries during the period under consideration. About 12.8 billion gold marks, then, constitute the total deficit on all accounts—exclusive of deliveries in kind—that Germany has had to meet abroad since the war. We shall discuss the deliveries in kind separately, for they are not included by Germany in the official trade figures.

The well-known British student of international finance, J. M. Keynes, estimates that from 1919 up to the middle of the year 1922 Germany had employed the following means in meeting her international obligations:<sup>1</sup>

	Billions of Gold Marks
Gold exports.....	1.25
Paper marks:	
Reichsbank notes sold abroad.....	3.5
Held in German banks for foreign accounts..	3.0
Invested in German bonds.....	1.5
Purchases of shares and property in Germany.....	8.00
Short time commercial credits extended to Germany	
0.5 to 1.0 billion, say.....	1.00
	0.75
Total.....	11.00

This total figure given by Keynes is 1.8 billion gold marks less than the total payments required on account of the trade deficiency of 10 billions plus miscellaneous treaty fulfillment payments in cash to

<sup>1</sup> J. M. KEYNES, *Speculation in the Mark and Germany's Balances Abroad*, *Manchester Guardian Commercial*, *Reconstruction in Europe*, pp. 480-482.

a total of 2.8 billions. Keynes, however, was dealing with a period six months shorter than the one we are considering.

According to the official census of German foreign securities, Germany has derived about 1 billion gold marks<sup>1</sup> from the liquidation of remnants of foreign investments still held at the end of the war. The loans that have been made to Germany or to German business men which are still outstanding may be underestimated; in 1919, there were large sales of goods on credit, and many of these accounts have not been liquidated. All these figures are fairly rough at best, but they indicate in a general way how Germany has thus far balanced her international accounts and kept going. The insuperable difficulties of continuing the process of making payments by these means may be seen from the following considerations.

(1) The liquidation of former German investments abroad is practically complete. It may be recalled that there were left at the end of the war only 2 to 3 billions at the most. Those that remain, according to the official census, are composed in large part of Russian securities, Austro-Hungarian government-secured loans, industrial stocks and bonds, also Turkish, Roumanian, and similar depreciated government obligations, the interest income from which has almost entirely ceased.<sup>2</sup>

(2) The sale of German shares of stock and German property to foreigners has recently fallen off,

<sup>1</sup> *Wirtschaft und Statistik*, no. 2, 1923, p. 64.

<sup>2</sup> *Ibid.*



because of the increasing unwillingness of many foreigners to assume the risks of ownership of German property.

(3) The sale of paper marks to foreign speculators is no longer lucrative since the buying of German currency is now recognized even by the most credulous as not better than a "billion-to-one shot".

*At this point it becomes necessary to consider the matter of Germany's accumulated bank accounts or balances in foreign countries.* It is believed by many people that German financiers and industrialists have been profiteering unconscionably at the expense of the masses, dodging taxes, converting their profits into foreign currencies, and thereby accumulating huge bank accounts in foreign countries which should have been devoted to reparation payments. Could not Germany continue to pay foreign obligations by drawing upon these foreign balances?

It is not denied—even by the Germans—that foreign bank balances of considerable size have been accumulated. Estimates of the amount of such balances, made by persons in a position to know something about the situation, vary from about one to four billion gold marks. The figures include any remnants of foreign investments that may still exist. In 1922 Sir Robert Horne, then Chancellor of the Exchequer of Great Britain, put the amount at 2 billion gold marks; Reginald McKenna, President of the London Joint City and Midland Bank, estimated the total at not in excess of 4 billion gold marks; while J. M. Keynes estimated the amount

at 1 to 3 billion gold marks, favoring the lower rather than the upper total.<sup>1</sup>

That these figures are conservative enough may be readily seen from the study of the German international trade and financial situation which we have here been making. Germany could build up foreign balances only by the process of exporting more goods than she imports or by some of the other means indicated in the preceding discussion. In view of the tremendous trade deficiency since the war it is obvious that Germany could have built up large balances abroad only by one or the other of the following means:<sup>2</sup> (1) The sale of huge quantities of paper currency,—much more than is commonly supposed to have been sold; or (2) the sale of vast amounts of German property to foreigners. The reader will note that about 11.8 billion gold marks were required from these sources *merely to meet* the trade and reparation obligations, one billion of the 12.8 billions deficit noted on p. 80 above, having been met by the sale of foreign securities.

Before commenting further on these two possibilities, it is necessary to point out that for a short time some foreign balances may be accumulated—even when there is an unfavorable trade balance—through the deposit abroad by individual exporters

<sup>1</sup>For a statement of the way in which Keynes arrives at his estimates of revenues derived from the sale of paper marks, see Appendix B.

<sup>2</sup>The only other possible means were the liquidation of the remnants of foreign investments and loans. The former, in fact, yielded, as we have seen, about 1 billion gold marks, while the latter have not been important sources of income.

of the proceeds of their foreign sales. Such a process cannot, however, be continued long, since it removes from the German market the only means by which importers into Germany can pay for food and raw materials purchased abroad. Without such imports the whole German economic system would soon break down and exports would be drastically curtailed. The balances built up by this process cannot, in fact, have been very large, since the German government for a time was forced to seize a considerable part of the foreign currencies derived from the sale of exports in order to meet the cost of reparation.

This "flight of capital" has been a matter of concern to the German government as well as to the supervising agents of the Reparation Commission resident in Berlin. The restrictive and punitive legislation that was enacted to prevent the export of capital, moreover, proved sufficiently effective to handicap very seriously the importation of raw materials and foodstuffs, in fact, so seriously that the German government with the consent of the Reparation Commission finally granted permission to exporters to retain abroad such portion of the payments received in foreign currency as were requisite for the future purchase of raw materials or other necessary commodities in foreign lands. It is recognized by all bankers and students of international trade that with the German currency rapidly depreciating, deposits in foreign banks are absolutely necessary as security for import credits. This matter will shortly be discussed further.

*Paper mark sales and foreign balances.* With reference now to the volume of paper-currency sales, it will be recalled that Keynes' figures show a total of speculative transactions in paper marks since the war to the extent of 8 billion gold marks. Kurt Singer, a German economist, in an article published in the *Wirtschaftsdienst* for July, 1922, estimates the amount at approximately 10 billion gold marks. Both Keynes and Singer indicate, however, that a large part of these paper marks are held on deposit within Germany to the credit of foreigners. The largest estimate that we have seen is a French estimate of 16 billion gold marks—approximately 4 billion dollars—of which a little less than 1 billion dollars is supposed to have been sold in the United States. On the other hand, there are some international bankers who place the amounts much below the Keynes figure. Now, unless the sum realized from the sale of marks was enormously larger than either the Keynes or the Singer figure, each of which falls considerably short of covering the trade deficit and reparation payments, it is clear that huge foreign balances have not been built up from this source. Before commenting on the second possibility of building up foreign balances it will be well to pause for a moment to consider the history of the whole paper-mark episode.

The purchase of German marks as a speculation apparently began with the armies of occupation, when the soldiers perceived the opportunity for gain in case the mark should return to par. Through the medium of letters to the folks at home, know-

ledge of this opportunity was soon disseminated among all classes of people. Dr. Walter Rathenau, whom even his enemies conceded to be honest, made, in effect, the following statement to a prominent American business man a short time after the speculation began:

We were completely surprised at the discovery of this means of procuring funds abroad. After the war Germany's commercial credit in world markets was almost extinct, and we could find practically no sale for interest-bearing bonds. Then, all of a sudden, we discovered that the citizens of foreign countries who were unwilling to purchase interest-bearing bonds were nevertheless willing and anxious to buy non-interest-bearing paper currency. We were thereby enabled to buy the food and raw materials required to replenish our depleted stocks.

The fact is that the demand for German paper currency developed almost spontaneously in nearly every country in the world. It was in no sense a case where the German government issued vast quantities of propaganda literature urging the citizens of other countries to buy this currency. On the contrary, the citizens of other countries insisted on having their paper marks in the belief that a new El Dorado had been discovered. Germany was to receive for the marks sold only three or four cents apiece, and then was to pay them back at full value, 23.8 cents, thereby enriching everybody who was so fortunate as to own some of the coveted paper!

*Without the selling of paper currency, Germany would have been forced to an early default on cash reparation payments. Having found an apparently insatiable foreign demand for paper currency, the*

German government, in cooperation with the Reichsbank, naturally resorted to the sale of paper currency whenever it proved impossible to procure in any other way the funds with which to meet reparation instalments. During nearly the entire period following the London ultimatum of May, 1921, Germany could pay her cash reparation instalments only by selling paper marks. She had no export surplus which could give her the commercial bills of exchange required; and she had no other liquid resources of a volume sufficient to meet the reparation requirements. It was a case of procuring the bills through the sale of paper marks or defaulting on reparation payments then and there. It was only the persistent confidence of speculators that the mark had reached bottom and was about to rise in value that enabled Germany to continue to make some cash reparation payments through the years 1921-22.

The contention of the foregoing paragraph needs to be slightly qualified for the reason that *temporarily* Germany could make some reparation payments without a surplus of exports. The government for a time commandeered the proceeds of foreign sales and turned them over to the Reparation Commission, meanwhile paying the exporter for his bills in paper marks. This practice was, however, later modified, with the consent of the supervising agents of the Reparation Commission, for the reason that the commandeering of the foreign currency derived from the sale of exports was seriously crippling the German import trade in food and

raw materials, since importers could not then procure the means with which to make payments abroad. This seizure of the proceeds of exports for reparation payments, it will be seen, did not obviate the necessity of issuing paper currency, so long, at least, as the German budget was not balanced. Paper currency, moreover, still had to be sold abroad by private individuals, if not by the government, in order to obtain imports. It is impossible ever to get away from the fact that imports have to be paid for in some way.

In conclusion, it does not appear that this paper currency was mainly sold by the German government; a very large part of it was undoubtedly disposed of by banks or exchanged by individuals. The Germans did not have the power to compel foreigners to buy their paper currency; people took it of their own free will, albeit too often on the advice of bankers who did not have adequate knowledge of what was involved in the whole problem. It is well to bear in mind, also, that it was not German paper currency merely that was the object of speculation. Russian roubles, Austrian and Hungarian crowns, Polish marks, British sterling, Italian lire, and even French and Belgian francs have also been purchased by "investors" in foreign countries. The roubles and the crowns are as nearly worthless as the marks, while the story with reference to some of the others has not yet finally been told. Were all of these currencies palmed off upon innocent people by designing governments? The most that can be said is that as soon as it became clear that redemp-

tion of outstanding currency at some appreciable price was impossible, governments should have ceased to offer more for sale, no matter how great the need for funds.

In the preceding paragraphs we have not been dealing with the whole German paper-money question; we have been concerned only with the speculation by foreigners in paper marks. In a later chapter we shall consider the larger problem of inflation in Germany.

*The sale of German property and foreign balances.* There is no means of knowing precisely how large a volume of domestic property within Germany has been sold to foreigners. Keynes's estimate was one billion gold marks; and this amount, it should be noted, was more than absorbed—as was the case with the 8 billions of paper currency—in meeting the trade deficit and the reparation obligations. From such rough data as are now available, we are inclined to believe that the total sum realized from the sale of German property amounted by the end of 1922 to as much as 7 billion gold marks, but that a considerable part of this was purchased with German paper currency previously sold.

With reference to German bonds and shares, Dr. Kuczynski, the eminent German statistician, estimates the sums sold abroad to the end of 1922 at 3 billion gold marks at the minimum.<sup>1</sup> He bases his

<sup>1</sup>The balance of payments is, of course, also influenced by the speculation of foreigners in German shares. In December, 1919, a Dutch group bought the majority of the shares of the "Eisenwerk Kraft" for about 3 million gold marks and sold it to the Brothers



estimates on the considerable number of companies whose securities are known to have been purchased in large amounts since the war, and on the large number of public securities, notably municipal bonds, purchased abroad.<sup>1</sup>

Sales of urban real estate, principally apartment houses, have yielded very considerable sums. For the Berlin suburb of Schöneberg, real estate sales to foreigners have been published month by month from October, 1918 to April 1, 1921. The total value was 84 million paper marks.<sup>2</sup> At this rate, the total for greater Berlin would have been about 2 billion paper marks, and for all German cities, allowing for lower prices and fewer sales in the smaller towns, about 15 billion paper marks. In terms of gold marks this amounts to something like 1.2 billions. Since April 1, 1921, the number of sales are given but not the actual values received. The figures show the greatest number of sales to have occurred in the year 1922, reaching the peak in the late summer and autumn. After April 1, 1921, the total number of houses sold was 809 as against 177<sup>3</sup> sold before that date. However, since the gold values realized were very much lower during the

Stumm (Germans) in December, 1920 for about 9 million gold marks. Examples in which foreigners lost money by purchasing and reselling stocks will probably be much more numerous.

<sup>1</sup> For the controversy between von Glasenapp, Vice-President of the Reichsbank, and Kuczynski, see *Verhandlungen der Sozialisierungs-Kommission über die Reparationsfragen*, Vol. III, 1922, p. 430.

<sup>2</sup> *Vierteljahrshefte Deutscher Städte*, no. 1, 1921, p. 35.

<sup>3</sup> *Deutsch-Französische Wirtschaftskorrespondenz*, 1923, no. 1, p. 10; no. 5 and 6, p. 16. For detailed figures, see Appendix C.

later years, we cannot assume that the sums equaled four times as much as in the earlier years (assuming the rate elsewhere to have been the same as in Schöneberg). Four billions, all told, appear to be the safest estimate that can be made. It may be added that by April 1, 1923, it was estimated that about one-third of all the inhabited houses in Schöneberg had been sold to foreigners.

No published data are available with reference to sales of German farm real estate. It is the opinion of German economists, however, that while the percentage of sales is not nearly so high as in the case of urban real estate, the sales were ordinarily consummated at a much higher price. It is conceivable that as much as 1 billion gold marks may have been realized from such sales. If so, we should have a total, not counting such sums as may have been derived from the sale of factory buildings, of about 8 billions for bonds and other securities, urban dwellings and rural property, hotels and business houses and lots, and the contracting of mortgages.

This total of 8 billions cannot be regarded, however, as constituting a *net* addition to German income which can be added to the 8 billions realized from the sale of paper marks (Keynes' estimate, p. 85). A considerable part of the purchases of German property have been made with the paper marks which had earlier been acquired by foreigners. For example, X in England buys paper marks as a speculation; later, when it becomes apparent that the mark is likely to continue to fall rather than to rise, he buys German property with his paper marks.

It may be recalled that in Keynes' table, it was estimated that of the 8 billion paper marks total, 4.5 billions were either held in German banks for foreign account or invested in German bonds. It is possible that half of the total investments roughly estimated at 8 billions gold marks were made with paper marks.

On the basis of these very rough estimates, one may conclude that the international trade and financial deficit which had not been covered by other means was more than met through the sale of German securities and real property, thus making possible the accumulation of some foreign balances.<sup>1</sup> This means of meeting international trade deficits cannot, however, continue for a very long period of time. Fraudulent sales, heavy taxes, controlled rents, and difficulties in collecting income gradually convince foreign investors, as distinct from mere speculators, that the purchase of real property in Germany is a highly uncertain proposition. It is interesting to note in this connection that citizens of countries with sound currencies have bought very much less in the last year or so than earlier, but that purchases by Austrians and Poles have steadily increased. The check in the decline of the mark at

<sup>1</sup> These sales of German capital have sometimes erroneously been referred to as "imports of capital". Imports of capital, in reality, should involve an increase of the nation's supply of capital goods. As a matter of fact, what has happened is this: Germany has traded the ownership of her existing capital to foreigners for consumption goods, thereby reducing her own capital supply. It will be seen that she has henceforth to pay to foreigners rents, dividends, or interest on these properties.

the end of 1922 occasioned a quick halt in the process. Moreover, a law was enacted by Prussia in January, 1923, as had already been done by some of the smaller states, giving to cities the right to forbid further sales of houses to foreigners. It remains to be added that from the standpoint of the German sellers themselves, the sale of such property is bad business. It is already the conviction of a great many Germans that it is much better, at least in the long run, for the Germans to hold on to their real estate than to sell it to foreigners who will buy only if they can get the property for what amounts to a song.

From all this discussion it is clear that we must leave the controversy over the precise amount of German foreign balances in doubt, although we are inclined to believe that McKenna's estimate of 4 billion gold marks—made in the autumn of 1922—is high. To have built up foreign balances of as much as 4 billion gold marks, Germany must have derived from the liquidation of the small remnants of foreign investments, the sale of paper marks, and the sale of German property and securities, 5.8 billion gold marks in excess of the sums estimated by Keynes. These balances, whatever their precise amount, have certainly been reduced since the beginning of the Ruhr invasion, being used in paying for imports.

Two final observations with reference to these balances are required. First, it is impossible for the German government to obtain possession of the foreign balances of private citizens. Once outside

the country, no government, however strong, would have the power to seize them and thus make them available for reparation payments.

Second, if the German government could seize these balances and use them in meeting reparation obligations, it would have disastrous consequences upon Germany's future paying capacity. These foreign balances, as has already been stated, serve as the basis for Germany's import trade. Under normal pre-war conditions it was possible for German importers to purchase goods in foreign countries on credit, paying at the end of thirty, sixty, or ninety days out of the proceeds of their trade transactions, payment being made in bills of exchange which were redeemable in gold. Under present conditions, however, an exporter to Germany cannot take the risk of exchange and currency fluctuations; and he therefore will sell only for cash. The German importer could not, however, pay cash through the process of sending *paper* money to the foreign seller, for that is not acceptable. He had to use foreign currency, and this could be obtained only from the proceeds of German exports. With Germany's internal finances badly deranged and the proceeds of the sale of German exports subject to seizure for the purpose of meeting reparation instalments, it is clear why American or British exporters dealing with Germany should be unwilling to sell to Germany even for cash, unless that cash be deposited in banks outside Germany. If all of these foreign balances could be confiscated and turned over to the Reparation Commission, German import trade would col-

lapse and with it would collapse the whole German economic organization. We emphasize this point again and again, because there is so little appreciation of the importance of these balances and because the problem is of such vital significance to all countries desiring to trade with Germany.

2. *Payments in Kind*.—On page 78 it was pointed out that there are two methods of making reparation payments that directly affect the general international trade and financial balance, namely, *cash payments* and *deliveries in kind*. Having discussed in detail what is involved in the cash problem, we may now consider how deliveries in kind affect the international balance of payments.

The payments in kind have been made in considerable part out of the transfer of capital goods, and in smaller part in commodities of current production. \*The merchant marine, dock and harbor equipment, maritime cables, bridges, dyes, livestock, etc., are capital assets. They can be transferred to the Allies only once. Their transfer, moreover, directly lessens the capacity of Germany to produce commodities with which to make subsequent payments.

Coal and its by-products, and limited quantities of machinery, timber, and building materials constitute the only important commodity deliveries which have been made out of current production. These total only from a billion to a billion and a quarter gold marks in all.

*Cannot Germany continue to make deliveries in kind?*  
Granted that the capital assets that have been

delivered to the Allies cannot be delivered a second time, is it not true, nevertheless, that the Germans could continue indefinitely to make deliveries of coal and other materials—regardless of the state of the international trade and financial balance? The answer is that small deliveries might for a time only continue to be made, and that all such payments would quickly result in lessened future payments. The reason for this is the now familiar one, namely, that German exports—whether in the form of deliveries in kind or in the form of ordinary sales in foreign markets—provide the only means with which Germany can pay for the imports of food and raw materials that are required.<sup>1</sup> If Germany delivers to France 2 million tons of coal per month under the treaty, she obviously receives no proceeds with which she may purchase raw materials for her factories. The process leads to a reduction of imports, and subsequently of exports, just as inevitably as does the seizure of the cash proceeds from ordinary exports. Deliveries in kind, moreover, reduce German capacity to export other commodities, the proceeds from which might be used to make cash payments; the two problems are inextricably related.

In this chapter we have endeavored to show the extent to which Germany has fulfilled the obligations imposed by the treaty of peace and the means that have been employed in making payment, when there was in fact no export surplus available for the purpose. We have found that, in one way or

<sup>1</sup> The crucial importance of this German import problem at the present time will be discussed in the next chapter.

another, Germany has relinquished, and the powers represented on the Reparation Commission have acquired, capital assets or the fruit of current production, worth to Germany around 25 or 26 billion gold marks, although, for reasons that have been mentioned, the Commission has credited Germany with much less. We have found that Germany's payments have been made in largest part out of capital, through the transfer of movable property and through the sale of practically all the liquid assets that were capable of mobilization. There have been some deliveries in kind and a relatively small volume of cash payments, the funds for which have been chiefly derived, directly or indirectly, from the sale of paper currency, and of private property in Germany. All of these means of payment are evanescent in their nature; they have in fact already been practically, if not completely, exhausted.

We shall show in the next chapter what will be required if Germany is to recover her international economic position sufficiently to permit reparation payments to be continued.



## CHAPTER IV

### GERMAN FOREIGN TRADE REQUIREMENTS

HAVING ascertained in the preceding chapters the effects of the war and of the peace settlement upon Germany's international trade and financial status, we are now prepared to indicate what is involved for Germany in meeting future reparation payments,—in so far as the international trade angle of the problem is concerned. We say merely international trade at this place, rather than international trade and finance, because for a great many years to come the invisible items will prove of negligible importance in the German international balance. In the present chapter we shall discuss: (1) The probable future invisible balance of Germany; (2) German import requirements; (3) the volume of exports that will be required if further reparation payments are to be made; (4) the present status of German trade and industry; and (5) the problem of export markets for German commodities.

#### I. THE FUTURE INVISIBLE BALANCE

It requires only a few general comments as to the various invisible items to indicate that Germany's income from these sources cannot be increased mate-

rially during the period when reparation payments are to be made.

First, interest on foreign investments cannot increase unless and until Germany's exports exceed her imports by more than the amount of the reparation payments. In view of the enormous amount of the reparation bill, it is inconceivable that Germany, after making reparation, should have any export surplus available for new investments abroad.

While it is true that Germany has some foreign bank balances and some remnants of investments totalling together at the end of 1922 perhaps 3 or 4 billion gold marks,<sup>1</sup> this is much more than offset by the investments that foreigners now hold in Germany, which we have estimated at something like 8 billion gold marks. The foreign bank accounts yield a very low rate of interest,—on the average not in excess of 2 per cent. On the other hand the investments of foreigners in German apartment buildings will, in the event of a stabilization of the currency, yield a very high rate. According to German economists, a 10 per cent return is a minimum estimate. In the case of bonds and shares, the situation is somewhat different. Without attempting to be very precise, therefore, we may conclude that the payments that Germany would have to make abroad in this connection would exceed the income due her from present bank balances by something like 500 million gold marks a year.

Second, the prospects for large earnings from shipping are not good, even though the German merchant

<sup>1</sup> See discussion in the preceding chapter.

marine should gradually be increased. In the year 1922, as was stated in Chapter II, the German mercantile fleet was about two-fifths restored. German shipping faces much severer competition than before the war because several European countries have increased their shipping facilities, and because the United States now carries a larger percentage of American trade than formerly. Ocean freight rates, moreover, are back to pre-war levels, while the volume of traffic cannot be expected to equal pre-war totals for some time to come. On the whole, therefore, the prospect that Germany will rapidly recover her pre-war shipping income is not good. We may roughly estimate the amount likely to be received at not more than 300 million gold marks. In 1922 it was not far from 175 million gold marks.<sup>1</sup>

Third, the returns from banking and insurance earnings and from commissions—small even before the war—are not likely to become important again. The loss of the German colonies and the disruption of Germany's commercial and banking connections throughout the world, particularly in Eastern and Southeastern Europe where the largest business of this kind was done, have perhaps permanently reduced German revenues from such services. They may be expected to increase materially only when this section of Europe shows substantial economic recovery. Germany is now paying commissions to Western European countries and the United States.

Fourth, the revenues from the tourist trade—unprecedentedly large since the war—stand to

<sup>1</sup> See Appendix A, pp. 264 and 290-1.

decrease sharply rather than increase. The large German tourist trade of 1921 and 1922 could not in the nature of things prove permanent, since it was largely induced by the great depreciation of the mark which made of Germany for the time being a veritable bargain counter. As one philosophically minded tourist describes the situation: "If you tried hard you could spend two dollars during the twelve hours of a day; but to get rid of a third dollar cost effort. Things were, at last, as they should be; you had more money than you knew what to do with and you were merry with reason." But, alas, he adds, "You were only a millionaire of the moment." An increasing value of the mark, or even a stable value, quickly destroys the tourist trade. In fact, the rise in the mark in February and March, 1923, put a summary stop to the tourist business. The following dispatch came from Berlin in March:

Foreigners are running from Germany like cattle before a storm. . . . Only 12,375 foreigners came to Berlin hotels last month (February, 1923) as against eight times that number in February, 1922. . . . There are rumors that some of the larger hotels will be forced to close.

Moreover, regardless of the currency situation, the large tourist trade of 1921-22 could not continue permanently. The tourists of those merry days were not buying merely articles of ordinary current production; rather they were buying Germany out of house and home, so to speak—purchasing art treasures, house furnishings, gold and silver plate, and heirlooms of every description. Such a traffic is ephemeral in its very nature.

For the four years since the war we estimated, in Chapter II, a net return from the invisible sources of income of about 1,000 million gold marks, an average of about 250 million gold marks per year.<sup>1</sup> Taking shipping at 300 millions, it is clear that with tourist revenues very greatly diminished, Germany's invisible credits are not likely to equal the invisible debit of 500 millions—on account of payments that must be made to foreign investors in Germany—mentioned above, at least not for many years to come. The utmost that one may assume is that Germany's invisible credits and debits will balance.

*Germany needs a gradually expanding supply of gold.* Since she has lost more than half of her pre-war supply of gold currency, Germany will doubtless need considerable importations of gold if she is to re-establish the gold standard and resume something like her pre-war financial position in the world. In the twenty years before the war, imports of bullion and specie averaged 170 million gold marks per year. However, in view of the loan suggested in the next paragraph, a considerable part of which might possibly be given to Germany in the form of actual gold, we may omit gold import requirements from the present calculation.

Germany may also have to pay interest on a foreign reconstruction loan. International financiers commonly assume that Germany must as a matter of course have a large foreign reconstruction loan before she can rehabilitate her domestic finances and

<sup>1</sup> See pp. 53-55.

recover her economic equilibrium.<sup>1</sup> A loan of several billions of gold marks is usually suggested, and it is recognized that in view of present conditions the interest rate would have to be at least 8 per cent. Eight per cent on a loan of 4 billion gold marks would mean 320 millions annually,—which would create a considerable deficit in Germany's invisible accounts.

*Germany's capacity to meet the cost of reparation will henceforth be measured by her trade balance.* This is because the invisible credits, as we have seen, have completely disappeared. If we are to ascertain the possibility of making large reparation payments continuously over a long period of years, we must, therefore, study the German foreign trade problem. What is involved for Germany in procuring a favorable balance of trade with which to meet the reparation payments demanded? Is it possible for Germany to secure a large excess of exports over imports?

## II. GERMANY'S IMPORT REQUIREMENTS

We must begin the study of German trade prospects with an analysis of import requirements, since large imports are absolutely indispensable to German economic life. We are here at the very heart of the German problem. As shown in Chapter II, Germany cannot exist as an industrial nation without importing very large quantities of food and basic raw materials as well as *some* quantities of a miscel-

<sup>1</sup> Whether German credit may not now be too badly shattered to make such a loan possible is another matter. We must, however, assume such a loan here if we are to assume that recovery is to occur.

laneous group of essential manufactured commodities. With many millions of people dependent upon importations of foodstuffs, and with the German factory system primarily dependent upon imported raw materials, it is perfectly plain that if the total German population is to survive and produce the tangible, material wealth with which to meet reparation obligations, large importations must be permitted. The importation of basic necessities is, in fact, the primary and paramount requirement, the condition absolutely precedent to any further fulfillment of treaty obligations.

The table on page 37 above classifies German imports into five broad groups: food and drink; raw materials; partly manufactured goods; living animals; and manufactured goods. Using the figures there given as a basis, we may arrive at a fairly definite figure as to the amount of importations that are indispensable if Germany is to regain approximately her pre-war economic position.

1. *Food and Drink*.—The total importation of food and drink in 1913 was 2,759 million gold marks. Since the German population has decreased by about 7 per cent,<sup>1</sup> we may reduce the food import figure on this account by 193 millions. In the analysis in Chapter II, pages 39–42, we calculated the total of luxuries in the food and drink class at 485 million gold marks. Seven per cent of this amount is included in the deduction made for the

<sup>1</sup> As a matter of fact, it appears that the loss of food production by the cession of territory was much greater than the loss of population.

decrease in population. Eliminating the remaining 451 million gold marks of food and drink luxuries as unnecessary imports leaves 2,115 million gold marks. Finally, we assumed in the analysis of Chapter II—in order to grant the benefit of every doubt—that imports of food necessities might be reduced an additional 20 per cent. This would leave approximately 1,692 million gold marks, on the basis of 1913 prices, as the indispensable import requirement of food and drink if the German population is to recover its physical efficiency. This is approximately 60 per cent of the pre-war imports of food and drink.

But it may be urged that Germany could possibly produce more food per capita than before the war. Yes, this is possible—to a limited extent—but in order to do so, she would have to divert her productive energies from other fields of endeavor. The gain in the production of food would be offset by loss in the production of other things. Indeed, the chances are that it would be more than offset, for the reason that it involves a diversion of energy from more productive to less productive pursuits. We shall give on page 129 the present food production figures for Germany.

*2. Raw Materials and Partly Manufactured Goods.*  
—The total imports of these classes of commodities, as shown by the table on page 37, amounted in 1913 to 6,242 million gold marks. We cannot assume here, as we did in the case of food and drink, that the reduction of the population by 7 per cent will correspondingly reduce import requirements. This



is because raw material imports, unlike food imports, are not primarily intended for consumption by the German people; a very considerable portion of such materials enters directly into the manufacture of commodities for export. If exports are to be main-

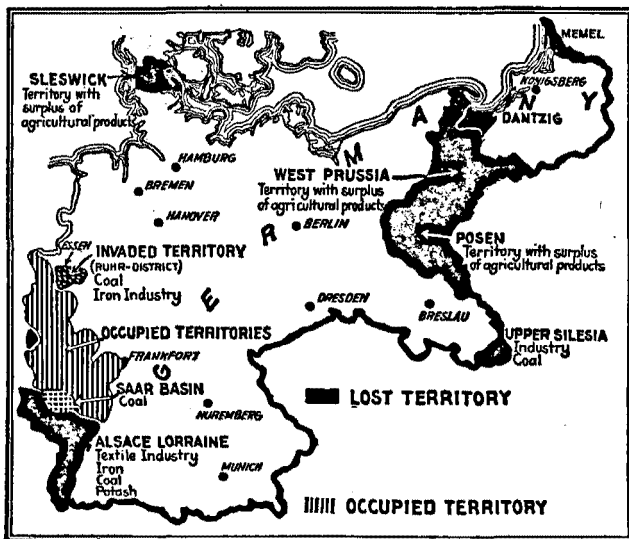


FIG. 3.—Germany's Territorial Losses.<sup>1</sup>

tained, raw-material imports must be maintained. Indeed, as we shall show in the next paragraph, they must now be increased because of the loss under the terms of the Treaty of areas rich in raw materials. Meanwhile, we may make, on account of reduced population, a generous lump sum reduction of 242 million marks, leaving an even 6,000 millions.

<sup>1</sup> Adapted from "Deutschlands Wirtschaftsfrage."

*Germany has lost important sources of raw materials.* This figure of 6,000 million gold marks cannot be taken as the minimum of imported raw materials and partly manufactured goods now required, since Germany has lost such important raw materials as the iron ore and coal of Alsace-Lorraine, and the coal of the Saar Valley and Upper Silesia. The figures for German production and importation of iron ore in 1913 in millions of tons are as follows:

Domestic production.....	28.6 <sup>1</sup>
Importation.....	14.0
	42.6
Total.....	42.6

The production in 1913 within the area comprised by present Germany amounted to nearly 7.4 million tons—which is another way of saying that the loss of Alsace-Lorraine and other areas reduced the domestic production by 21.2 million tons. If present Germany is to regain her production of iron, she would therefore have to import 21.2 million tons more than she imported in 1913, assuming imported ore to be of no better quality than ores of domestic production. In other words, instead of importing 14 million tons, she would have to import 35.2 million tons. But, as a matter of fact, the imports

<sup>1</sup> *Statistisches Jahrbuch für das Deutsche Reich*, 1921-22, p. 85. Before the war German foreign trade figures included the trade of Luxemburg, which was a member of the German Customs Union. Since the war, the trade figures of Luxemburg are not included with those of Germany. However, since Luxemburg made up most of her iron ore into pig iron, etc., this inclusion of the Luxemburg trade along with that of Germany affects but slightly the importation figure given in the table.

of iron ore, reckoned in terms of richness of iron, constituted about one-half of the total German consumption of iron ore, rather than one-third as the above table of crude tons would imply.<sup>1</sup> Allowing for this fact, the post-war imports would have to equal only about 28 million tons,<sup>2</sup> instead of 35 millions in order that Germany might regain her pre-war production, a net increase of imports of 14 million tons. The value of the iron-ore imports in 1913 was 227 million gold marks.<sup>3</sup> On the basis of 1913 prices, the imports of iron ore required at the present time would therefore cost about 450 million gold marks,—an increase of roughly 220 million gold marks.

However, since Germany has lost 40 per cent of her blast furnaces through the cession of territory,<sup>4</sup> it is obvious that her capacity for the consumption of iron ore has at least temporarily been greatly reduced. Nevertheless, if she is to regain her pre-war position as an exporter of iron and steel products, she will have to replace the lost blast furnaces. We must assume in this connection either that Germany is going to regain her position in iron and steel, that she will develop some other industry of equal importance, or that she will fail to return to pre-war productive capacity. Although the last is the alto-

<sup>1</sup> HELLMAN, *Eisensteinbergbau und Hüttenwesen des Siegerlandes, Montanus Industrie-Handbuch Westdeutschland*, 1922. p. 33.

<sup>2</sup> This is on the assumption that roughly 50 per cent of the increased importation will consist of the inferior ores from Lorraine.

<sup>3</sup> *Statistisches Jahrbuch*, 1921-22, 85-165.

<sup>4</sup> H. COLE ESTER, of the *Iron Trade Review*, *The New Balance of Power in European Iron and Steel. Manchester Guardian Commercial, Reconstruction in Europe*, sect. 7, p. 432.

gether probable alternative, we shall for the purposes of this analysis assume that she is to get back to pre-war capacity in one way or another.

*Germany has also changed from a coal-exporting to a coal-importing country.* The pre-war import of fossil-fuel—including coal, coke, lignite, and briquettes—amounted to 18.3 million tons, of which 10.5 million tons were coal. In the same year, 1913, Germany exported 44.3 million tons of fossil-fuel—34.6 million tons being coal. The post-war production of coal has been reduced through loss of territory by more than 25 per cent. The Saar mines produced 13 million tons of coal annually just prior to the war; those of Lorraine produced 4 million tons, and the lost mines of Upper Silesia, 32.7 million tons. The total quantity, 49.7 million tons, is 26 per cent of Germany's 1913 production of 190.1 million tons.

The consumption of coal within the ceded territories, together with Luxemburg, and the Saar Valley in 1913 equalled 26.4 million tons;<sup>1</sup> but since we have assumed above that Germany must replace the lost blast furnaces that were in this region with new ones within present Germany, we can make no great reduction for *industrial* consumption on account of the loss of territory. The reduction in *household* consumption, due to the loss of territory, could not have exceeded 2 or 3 million tons, leaving about 47 million tons that Germany must import in order that she may replace the losses sustained,—making no allowance, of course, for reparation deliveries.

<sup>1</sup> "Deutschlands Wirtschaftslage," 1923, p. 19.

Assuming that Germany regains her pre-war industrial capacity, present imports of coal would therefore have to be 47 million tons plus the 10.5 million tons imported in 1913, or 57.5 million tons as compared with 10.5 million tons before the war. The increase in the amount of coal imports required would raise the import value from 205 million gold marks in 1913 to approximately 1,100 million gold marks, an increase of about 900 million gold marks.

We may omit consideration of the increased import requirements of coke, lignite, and briquettes, because they are less important than coal. Lignite mining has been extensively developed in Germany since the war and has done something to replace—though at high cost—the lost coal supplies. Lignite is decidedly inferior to coal in calorific energy, the ratio being only as 2 to 9.

*Many of Germany's raw materials are more difficult to procure than they were before the war.* While pre-war supplies of hides and skins, for example, came from scattered countries all over the world, 40 per cent of the quantity imported came from countries nearby,—from Russia, Austria-Hungary, Great Britain, France, Italy, Spain, Belgium, Holland, and Scandinavia. Russia and Austria-Hungary together supplied one-fifth of the total hide imports, but since the war these countries have been able to produce very little of any sort of commodity for export, providing in 1922 only 3 per cent of Germany's relatively small imports of hides and skins. Similar readjustments have had to be made in acquiring other raw materials. While it is

true that most supplies needed by Germany might be procured from more distant sources, the cost in practically all cases would be materially increased.

Omitting from consideration these extra import charges due to the necessity of bringing supplies longer distances, we may recapitulate Germany's import requirements of food and raw materials (in millions of marks) as follows:

Food.....	1,692
Raw materials and partly manufactured goods:	
Pre-war figure.....	6,242
Increased imports of coal.....	900
Increased imports of iron ore.....	220
	<hr/>
	7,362
	<hr/>
	9,054

Other imports, in 1913, besides those in the groups already mentioned were live animals (290 million gold marks) and manufactured goods (1,479 million gold marks). The live animals consisted largely of breeding stock; and the manufactured goods, as indicated in the preceding chapter, consisted of small quantities of practically every variety of manufactured commodity. While many of these manufactured articles could doubtless be eliminated in time if it were desired to force Germany to produce every essential commodity within her own borders—regardless of her economic adaptability for the purpose—it would be absurd to assume that Germany could, as a practical matter reduce very greatly these manufactured imports without serious economic consequences. For the two groups of live animals and manufactured commodities, the best that could

possibly be hoped—if German efficiency is to be maintained—is a 50 per cent reduction. Manufactured luxuries, it may be recalled, comprise an insignificant percentage of the total imports. One may add here, however, that exporters of manufactured goods in Allied countries and the United States would “view with alarm” so great a curtailment of German markets. The Allies even desire to increase the sale of their luxuries in Germany.

Fifty per cent of the pre-war imports of live animals and manufactured goods—290 millions plus 1,479 millions—equals 885 million marks. Adding this amount to the above total of 9,054 million marks gives a present import requirement, if Germany is to recover her pre-war economic strength, of 9,939 million gold marks.

The foregoing value figures, it may now be noted, are all stated in terms of 1913 prices. To translate them into post-war gold values we must multiply them by 1.6, since 1923 prices are roughly 60 per cent higher than 1913 prices. This adjustment gives an import requirement in present values of 15,902 million gold marks.

There remain to be considered two other factors in the German situation which have some relation to import requirements. The first is the reduced annual expenditures upon the military establishment, and the second is a possible lessening in the rate of industrial expansion as compared with the generation before the war.

With reference to the military establishment, one cannot assume that the food and materials used in

maintaining the personnel and the materials used in building ships, barracks, etc., and in providing ammunition, were all imported. Only a small percentage consisted of imports; most of these materials were produced at home. In view of the fact that the total government expenditures for military purposes for the last year before the war were only 1,879 million gold marks, it is easy to see that the complete elimination of these expenditures would not lessen import requirements by more than a few hundred million marks at the outside. With only 2 or 3 per cent of the working population under arms, their release from military service would not have greatly increased the domestic production of food and could have had practically no effect upon the production of raw materials. The production of goods for export, however, might have been somewhat increased.

There is more to the point about the slowing down in the rate of industrial expansion. In the twenty years before the war, Germany undoubtedly imported considerable quantities of raw materials which went directly into the development of plant and equipment; and if the rate of industrial expansion should be less rapid in the future, import requirements would be somewhat reduced. As an offset to this possibility, however, one must bear in mind that the cost of annual replacement of a full-grown industrial establishment such as that of Germany at the present time, is considerably larger than the cost of replacement on the average in the years before the war. Moreover, one



must not forget that if Germany is to recover her industrial power in order to meet reparation obligations in the measure stipulated, she must replace and even expand her industrial equipment. Specifically, she must, as we have seen, replace the 40 per cent of her blast furnaces which were lost through the cession of territory, the 30 per cent of her steel mills, and the 28 per cent of her rolling mills, similarly lost, not to mention sugar factories, chemical

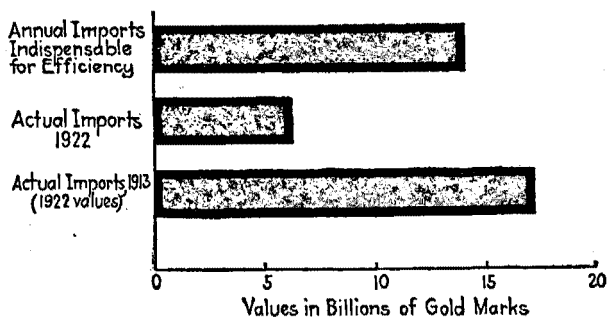


FIG. 4.—Minimum Import Requirements.

works, textile mills, or the merchant marine, which is thus far only two-fifths restored. In other words, if Germany is to regain her pre-war industrial capacity, she must for many years put about as much into industrial equipment as she did in the years before the war. Accordingly, it does not seem to us that import requirements on this score should be materially reduced.

In order, however, to be altogether on the conservative side, we shall reduce the above total of 15,902 million gold marks to an even 14 billions.

This amount of imports Germany must certainly have if she is to maintain the productive efficiency of her great urban population and to regain her export trade. This situation gives rise to the most difficult economic problem any nation has ever had to face.

### III. GERMAN EXPORT REQUIREMENTS

With import requirements thus definitely fixed, it involves merely an arithmetical calculation to indicate how much Germany must export each year in order to pay any stipulated sums toward reparation. It is obvious that she must export 14 billion gold marks,<sup>1</sup> in order to pay for necessary imports. She will then be able to make reparation to the extent that she can muster exports in excess of 14 billion gold marks' worth of goods each year,—without increasing imports above 14 billions.

Under the terms of the London ultimatum Germany was required to pay a fixed sum of 2 billion gold marks a year plus a sum equal to 26 per cent of total exports. On the basis of this reparation "agreement" over 20 billions of exports would obviously have been required: 14 billions to pay for imports, and 2 billions, plus 4.5 billions (on account of the 26 per cent provision), to cover reparation payments.

According to the more moderate views now prevailing, as indicated in both the French and London reparation proposals of January, 1923, a total of

<sup>1</sup> If a rehabilitation loan of 4 billion gold marks mentioned above were consummated, the exports required to pay for imports the *first* year would be correspondingly less.

about 50 billion gold marks—1 billion a year for fifty years—constitutes the amount that Germany was then believed to be able to pay. Our own conclusion is that no one can say precisely what amount Germany can pay, because nobody knows whether German exports can be made to exceed German imports. But, if Germany is to pay 1 bil-

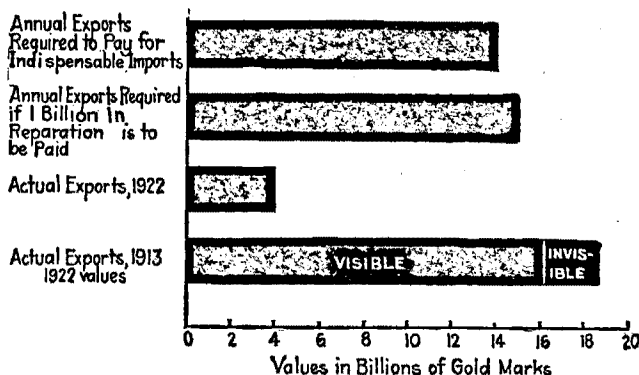


FIG. 5.—Actual and Required Exports Contrasted.

lion a year for fifty years, it is clear that her exports on the basis of 1922 values would have to average about 15 billion gold marks per year.

For the five years, 1909–1913, the total exports averaged 8,246 million gold marks, equivalent on the basis of 1922 prices to about 13,200 million gold marks per year. It is clear from these figures that if Germany is to pay for the 14 billions of necessary imports, not to mention reparation, she must have exports in excess of the five-year average, 1909–13. This increase in the amount of exports required to

pay for imports, notwithstanding the elimination of all unnecessary imports and the reduction of the German population, is obviously due to the fact that the invisible credits with which, before the war, Germany balanced her accounts and obtained a small surplus for new investments abroad—invisible credits amounting to 1.6 billion gold marks—have been completely lost.

*Exports now constitute Germany's only means of paying for imports and meeting foreign obligations.* The question then is whether Germany can develop as much as 15 billion gold marks' worth of exports annually and thus be enabled to pay as much as a billion each year. Lest the reader forget, we repeat at this place that we have already pared food imports down to the minimum quantity required for the maintenance of the German population in a state of productive efficiency, and we have reduced the quantity of raw materials and manufactured imports to the minimum required if Germany is to maintain her industrial plant and equipment and successfully operate her factories. The figures given show the minimum volume indispensable to the maintenance of output.

The volume of exports that can be developed will depend upon just two factors: first, the ability of Germany to develop a per-capita production equal to that of pre-war days, and, second, her success in finding markets in which to sell exportable commodities. Although a part of the post-war difficulties in Germany, as in all countries, is the unwillingness, or inability, of the population to work with pre-war

effectiveness, we shall assume for the purposes of our discussion that the disposition and ability to produce at pre-war speed is regained. We shall also assume, for the moment, that the German budgetary and monetary problems find a solution.<sup>1</sup> The question would then resolve itself merely into one of available markets. Before discussing export markets, however, we must consider the post-war status of German trade and industry.

#### IV. THE STATUS OF GERMAN TRADE AND INDUSTRY

No understanding of the German internal economic situation can be gained without considering both foreign and domestic trade. We shall note first the totals of German foreign trade since the war and then pass to a consideration of the more important commodities. For convenience we reproduce here the table of commodity imports and exports (in billions of gold marks) given on page 52.

	1919	1920	1921	1922
Imports.....	6.6	7.0	5.7	6.2
Exports (exclusive of reparation deliveries).....	1.8	5.1	3.6	4.0
Excess imports.....	4.8	1.9	2.1	2.2

In this table it will be noted that the exports exclude reparation deliveries in kind. According to recent figures, the value of Germany's 1922 deliveries of material of all sorts amounted to approximately

<sup>1</sup> But see discussion of these problems in Chaps. V and VI.

1,450 million gold marks of which only 681 millions are credited to reparation,—the remainder being “restitution” of materials and livestock, ships, dye-stuffs, etc., as required under various clauses of the Treaty.<sup>1</sup> If the entire 1,450 millions be added to the commercial exports, there remains an excess of imports over all classes of exports of 750 million gold marks.

It is clear from these figures that, whether for good or for ill, Germany has in fact been getting on since the war with a very much smaller quantity of imports than the minimum which we have been insisting is indispensable. Were not our estimates, therefore, obviously exaggerated? Reference to the export figures in the table affords the answer. With imports of only 6.2 billions in 1922, exports were correspondingly reduced. Indeed, it appears that exports decline in at least equal measure with imports.

The table on page 120, showing post-war German trade by broad classes in comparison with 1913 is particularly illuminating. It is necessary to give the figure in thousands of metric tons since the detailed value figures for 1922 have not been published.

First let us note what has happened to Germany's post-war trade. In 1922 the weight of imported raw materials had fallen to 65 per cent of the 1913 figure, of food imports to 43 per cent, and of living animals to 17 per cent. On the other hand, the weight of manufactured imports has increased to 152

<sup>1</sup> *The Manchester Guardian Commercial*, Mar. 29, 1923.

per cent. For all classes combined the 1922 total imports are only 63 per cent of the 1913 figure. The increase in the weight of manufactured imports may cause some surprise; it is in fact entirely due to the increased imports of iron bars and rods made necessary by territorial losses and adjustments. Apart from these commodities there has been a decrease in manufactured imports. The total values are considerably smaller than in 1913, according to the preliminary value figures published for the first eight months of 1922.

VOLUME OF GERMAN TRADE IN 1922 AS COMPARED WITH 1913 \*

(Thousands of metric tons)

Classification	Imports		Exports		Net Imports †	
	1913	1922	1913	1922	1913	1922
Raw materials and partly manufactured goods . . .	59,701	38,877	59,026	14,272	675	24,605
Manufactured goods . . . . .	1,249	1,894	9,321	5,836	-8,072	-3,942
Food . . . . .	11,700	5,074	5,368	1,443	6,332	3,631
Living animals . . . . .	180	30	2	5	178	25
<b>Total . . . . .</b>	<b>72,830</b>	<b>45,875</b>	<b>73,717</b>	<b>21,556</b>	<b>-887</b>	<b>24,319</b>

\* Compiled from *Wirtschaft und Statistik*, no. 5, 1923, pp. 140-141. In this table the figures for 1913 include a larger area than do those for 1922. Since German industry must now use the same quantity of raw materials as in 1913 if pre-war output is to be maintained, the loss of rich producing areas necessitates much larger imports than were required before the war. See discussion in preceding pages. In the case of food and manufactured goods, the 1913 figures should be reduced by about 7 per cent, in view of the reduction of population, to make them reasonably comparable with the 1922 figures.

† Net exports are indicated by the minus sign.

Turning now to the export figures, we find sharp declines in every division except the unimportant

group, living animals. Raw material exports declined to 24 per cent of the 1913 level,<sup>1</sup> manufactured commodities to 63 per cent, and food to 27 per cent. For all classes combined, the volume of 1922 exports was only 29 per cent of the 1913 figures.

With these general facts in mind concerning the precipitous decline of German foreign trade, we may now consider a little more in detail the German economic situation with respect to raw materials and foodstuffs.

*Germany is short of basic raw materials.* In our computation on page 111 we showed that if Germany is to regain her pre-war productive efficiency she must have, in consequence of the loss of important sources of raw materials, imports amounting to 122 per cent of the 1913 imports. With a decline in the net imports of raw materials from 59,701 to 38,877 metric tons (35 per cent), it is clear that Germany has gone backward industrially unless these losses have been made up by increased domestic production. Obviously enough, Germany has *not* been able to replace from domestic sources such basic materials as iron ore, cotton, copper, and rubber. The truth is that her capacity to replace imports by increased domestic production is strictly limited, because of her lack of such domestic resources.

<sup>1</sup> It is interesting to note in connection with raw materials that the weight of the exports in 1913 was almost equal to the weight of the imports. This is due to the fact that coal, which bulks heavy, was an important export in 1913. The value figures for 1913, however, show imports of raw materials to the extent of 5,003 million gold marks, and exports of only 1,518 million gold marks.



Coal is the only important exception. The following table of German imports and exports of the more important raw materials indicates more specifically what has been occurring.

GERMAN IMPORTS AND EXPORTS OF IMPORTANT RAW MATERIALS,  
1913 AND 1922 \*

(Thousands of metric tons)

Commodity	1913			1922		
	Im-ports	Ex-ports	Net Im-ports †	Im-ports	Ex-ports	Net Im-ports
Coal.....	10,540	34,598	-24,058	12,598	5,062	7,536
Iron ore.....	14,024	2,613	11,411	11,013	173	10,840
Iron, pig iron, bars, scrap, and alloys..	472	1,754	1,282	1,277	373	904
Copper.....	245	23	222	221	13	208
Hides and skins....	262	72	190	125	3	122
Rubber.....	28	10	19	33	1.65	32
Cotton.....	583	98	485	314	53	261
Wool and hair.....	245	54	191	215	22	193

\* Compiled from *Wirtschaft und Statistik*, no: 5, 1923, pp. 140-141.

† Net exports are indicated by the minus sign.

The figures in this table reveal, as nothing else can, the true status of German industry. Coal imports in 1922 were only about 20 per cent larger than in 1913, despite the loss of very important coal-producing areas. The Saar, Alsace-Lorraine, and Upper Silesian coal fields in 1913 produced 49.7 million tons of coal—26 per cent of the total German coal production. However, since there was a con-

sumption of 26.4 million tons in the ceded areas, we may deduct this total amount from the above figures,<sup>1</sup> leaving in 1922 a deficiency on this account of 23.3 million tons. Meanwhile domestic production of *Steinkohlen* or bituminous coal within Germany, rather than increasing, actually declined by 21.3 million tons, making a total deficiency as compared with 1913 of 44.6 million tons. To this shortage must be added 18 million tons delivered as reparation coal in 1922, leaving a total quantity available for German industry, or for export, of 62.6 million tons of coal less than the amount available in 1913.

This shortage of coal has been partly met in the following ways: (1) By a reduction of coal exports amounting to 29.5 million tons,—about 85 per cent of the 1913 total;<sup>2</sup> (2) by an increase in imports of 2 million tons; and (3) by increased production of lignite (50 million tons in excess of the 1913 figure). Since lignite compares to coal, in terms of calorific energy, only as 2 to 9, the increased lignite production really equals only about 11 million tons of coal. These three items, therefore, account for about 43 million tons, leaving the amount of coal available for internal consumption 19.6 million tons less than in the same area in 1913.

The net importations of iron ore aggregated, in

<sup>1</sup> In the discussion on p. 109 above, we did not deduct all of this total since we were there interested in computing the amount of coal Germany would require if she is to return to pre-war industrial output.

<sup>2</sup> This reduction in exports, it should be borne in mind, inevitably reduces German ability to buy necessary imports of food and raw materials.

1922, despite the loss of Alsace-Lorraine, only 10.8 million metric tons as compared with 11.4 millions in 1913, a decrease of 0.6 million tons. We found on page 108 that Germany would have to import 14 million tons more than she imported in 1913 in order to produce iron and steel on the pre-war scale. She is short, therefore, nearly 15 million tons—almost 50 per cent—of the import requirements for maintaining pre-war output in the iron and steel industry. The iron situation is similar, though imports have increased more than in the case of iron ore.<sup>1</sup>

While the net imports of copper were, in 1922, still 94 per cent of the 1913 figure, hides and skins were only 64 per cent, and raw cotton only 50 per cent of the net imports of 1913. On the other hand, rubber, and wool and hair have shown some increase over 1913 figures. All in all, therefore, it is clear that Germany's *present* imports of basic raw materials are vastly below the 1913 quantities, which obviously means below the amounts needed to restore domestic production to pre-war levels.

*Germany's industrial output is far below pre-war totals.* The above figures of German imports answer conclusively the contention so frequently made that German trade and industry have practically recovered from the effects of the war, and that the nation was never more prosperous than now. Greatly reduced quantities of raw materials enter into factory

<sup>1</sup> It is difficult to make a precise calculation in the case of iron because of the withdrawal of Luxemburg from the German Customs Union and because of other developments.

production. It is absurd to suppose that German industry has recovered and that the nation has been enjoying genuine prosperity. While there has been little outright unemployment, there has been a tremendous volume of partial unemployment. For social and political reasons the government deemed it necessary—when there was not work enough for all—to divide the tasks and thus enable everybody to work and to earn a little.<sup>1</sup>

People everywhere have, however, been misled by the *paper profits* that have been made in Germany as a result of rapidly mounting prices. We shall have more to say upon this subject in a later chapter.

*The German population is also seriously short of foodstuffs.* The reader should recall at this point that in our computation on pages 37-42 above—where allowance was made for the elimination of luxuries and all unnecessary consumption of food<sup>2</sup>—it was estimated that Germany's post-war import food requirements are approximately 60 per cent of the 1913 imports. Since net imports of food have fallen to 57 per cent of 1913 figures, as indicated by the table on page 120, it is clear that Germany's supply of food is somewhat short unless the dearth of imports has been compensated for by increased domestic production. As we shall see, this has been anything but the case. Before taking up the figures of domestic production, however, attention must be given to the following table which shows the net

<sup>1</sup> See further discussion on this point in Chap. VIII.

<sup>2</sup> The food demands of the ceded areas are more than offset by the supplies produced in those areas.

imports of the more important foods in 1913 and 1922 respectively.

The consensus of opinion derived from the casual observation of a host of tourists spending a few days or weeks in German hotels counts for nothing in comparison with these figures of German trade in foodstuffs coupled with the production figures which follow. If one is inclined to be skeptical about German statistics, he should remember that the German trade figures are open to the inspection of Reparation Commission experts. Moreover, the statistics of other countries, segregating the figures of the foreign trade with Germany, may be checked against these German figures.

GERMAN IMPORTS AND EXPORTS OF IMPORTANT FOODSTUFFS,  
1913 AND 1922 \*

(In thousands of metric tons)

Foodstuffs	1913			1922		
	Imports	Exports	Net †	Imports	Exports	Net
Wheat.....	2,546	538	2,008	1,393	4	1,389
Rye.....	353	934	- 581	540	2	538
Barley.....	3,238	6	3,232	267	3	264
Oats.....	505	662	- 157	91	6	85
Corn.....	919	...	919	1,085	...	1,085
Potatoes.....	382	332	50	168	67	101
Sugar.....	3	1,126	- 1,123	235	15	220
Dairy products.....	158	18	140	34	7	27
Fish.....	386	26	360	190	49	141
Meat, lard and other animal and vegetable fats.....	293	134	159	335	23	312

\* Compiled from *Wirtschaft und Statistik*, no. 5, 1923, pp. 140-141.

† Net exports are indicated by the minus sign.

It will be noted from this table that the total wheat imports in 1922 were only 55 per cent of the 1913 volume. Wheat exports, meanwhile, have been almost completely eliminated, the reduction being from 538 thousand to 4 thousand metric tons. The *net* imports of this very important food in 1922, in consequence of this reduction of exports, are only 69 per cent of the 1913 figures.

The figures on rye, supplementing the figures on wheat, afford a striking illustration of what has been occurring in German consumption. Exports of rye in 1913 exceeded imports by 581 thousand metric tons, but in 1922 exports had been almost completely eliminated, while imports had increased from 353 thousand to 540 thousand metric tons, giving an excess of imports of 538 thousand tons, so that Germany's status had changed from a leading exporter of rye to a heavy importer. The net imports of wheat and rye combined in 1913 equalled 1,427 thousand metric tons, and in 1922 they equalled 1,927 thousand tons.

If domestic production had not meanwhile declined heavily (see the table on page 129 and the discussion following) the total quantity of breadstuffs would have been ample. But since the large exports of rye had vanished, rye could no longer be used to purchase imports of other food or of raw materials.

The net imports of barley in 1922 equalled only 8 per cent of the imports of 1913; exports in both years were negligible. Oats changed from net exports of 157 thousand tons to net imports of 85

thousand tons. Corn shows a very slight increase in importation. The net imports of potatoes in 1922 were just about double the net imports in 1913, but the increase is not particularly significant, as Germany is practically self-sufficient in this commodity.

The story of the foreign trade in sugar resembles that in rye. The huge net exports of 1,123 thousand metric tons in 1913 were almost eliminated in 1922. Imports meanwhile increased from 3 thousand to 235 thousand metric tons. The result was a net importation of 220 thousand metric tons compared with a pre-war net exportation of 1,123 thousand. Again, it should be noted, while the elimination of sugar exports has kept sugar consumption close to pre-war figures, it has deprived the nation of the means of purchasing abroad other food and raw materials.

The net imports of dairy products were, in 1922, only one-fifth of the 1913 figure. Net imports of fish in 1922 equalled but 40 per cent of the 1913 figure. But meat, lard, and other animal and vegetable fats show an increase of 96 per cent over the 1913 figures.

Domestic production of foodstuffs in Germany is also much below pre-war levels. The table which follows shows the yield of the principal crops in 1913 and 1922.

It has been contended that German food statistics for 1922 have been falsified in order to evade the requisitions of the government. That they are not seriously in error, however, is evident from the

fact that they compare favorably with the statistics of previous years since the war and with those of other countries of Central and Eastern Europe.

## PRINCIPAL CROPS IN GERMANY IN 1913 AND 1922 \*

(In thousands of metric tons)

Crop	1913 (Present area)	1922 (Present area)	Percentage (1922 of 1913)
Wheat.....	4,043	1,957	48
Winter spelt.....	438	113	26
Rye.....	10,133	5,234	52
Spring barley....	3,040	1,608	53
Oats.....	8,620	4,016	47
Potatoes.....	44,023	40,665	92

\* *Wirtschaft und Statistik*, 1922, no. 24, p. 786.

The production of beet sugar has also declined over 50 per cent. Though formerly the leading European exporter of sugar, Germany now fails to produce enough for her own use. For a period of years ending August 31, the production has been as follows.<sup>1</sup>

1913-14 (present area)	2,241 thousand metric tons
1920-21 (present area)	1,084 thousand metric tons
1921-22 (present area)	1,297 thousand metric tons
1922-23 (present area)	1,483 thousand metric tons (estimated)

The meat situation in Germany is best indicated by the following table showing the slaughter of live-stock during the years 1913, 1921, and 1922.

<sup>1</sup> *Statistisches Jahrbuch*, 1921-22, p. 81, and *Wirtschaft und Statistik* no. 11, 1921, p. 500, and no. 1, 1923, p. 3.



SLAUGHTER OF LIVESTOCK IN GERMANY AS REPORTED BY  
INSPECTORS \*

(In thousands of head in present area)

Livestock	1913	1921	1922	1922 as Per- centage of 1913
Oxen.....	494,352	359,483	316,341	64
Bulls.....	471,156	364,635	323,497	69
Cows.....	1,491,829	1,283,536	1,442,421	97
Calves (over 3 months).....	804,192	866,466	965,852	120
Calves (under 3 months).....	3,737,957	3,108,376	3,207,762	86
Hogs.....	16,587,896	6,824,761	6,915,810	42
Sheep.....	1,968,434	2,092,358	1,768,360	90
Goats.....	422,856	315,387	259,535	61
Horses.....	153,564	148,679	240,081	156
Dogs.....	7,346	5,482	13,595	185

\* *Statistisches Jahrbuch*, 1921-22, pp. 66-67, and *Wirtschaft und Statistik*, No. 7, 1923, p. 202.

The livestock supply in Germany in 1913, 1921, and 1922 is shown by the following figures.

LIVESTOCK IN GERMANY, 1913, 1921, AND 1922 †

(In thousands of head in present area)

	1913	1921	1922	1922 as Per- centage of 1913
Cattle.....	18,476	16,791	16,309	88
Swine.....	22,534	15,817	14,683	65
Sheep.....	4,988	5,891	5,566	112
Goats.....	3,164	4,296	4,136	131
Horses.....	3,807	3,666	3,648	96

† *Wirtschaft und Statistik*, no. 3/4, p. 78.

*The reasons for the general decline in domestic food production are numerous. It is attributable partly to reduced acreage, partly to the scarcity of fertilizers,<sup>1</sup> partly to the farmers' resentment over the*

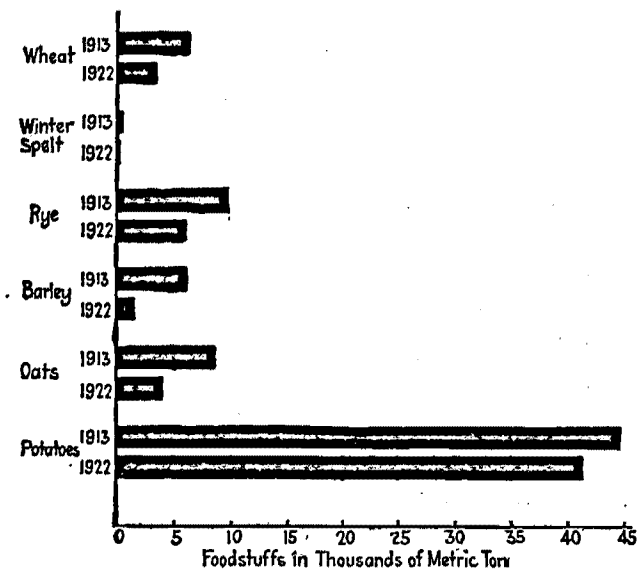


FIG. 6.—Foodstuffs Production, 1913 and 1922.

government's policy of food requisitions for the purpose of making bread for the city population, and

<sup>1</sup> The production of nitrate has increased somewhat since the war, but this does not begin to offset the general deficiency. Imports of saltpeter from Chile amounted in 1913 to 770,000 metric tons, and in 1922 to 31,000 metric tons; while the imports of guano (mainly from Peru) dropped from 37,000 tons in 1913 to 400 tons in 1922. The supply of potash is adequate, but there is a great shortage of phosphates.

in very considerable part to the lack of profitable markets, in consequence of the general disorganization of European industry and trade and the greatly reduced purchasing power of the city populations. Reduced agricultural output since the war is a phenomenon common to practically all of Europe. It should be added that weather conditions have also been exceptionally perverse.

German consumption of foodstuffs in 1922 was wholly inadequate to maintain efficiency. The actual consumption of important articles of food now as compared with pre-war times may be shown by combining the totals of net imports and domestic production for the several items as follows.<sup>1</sup>

GERMAN CONSUMPTION OF IMPORTANT FOODSTUFFS, 1913 AND 1922  
(In thousands of metric tons.)

Foodstuffs	1913	1922	1922 as percentage of 1913
Wheat.....	6,051	3,345	55
Winter spelt.....	438	113	26
Rye.....	9,551	5,772	60
Barley.....	6,272	1,872	30
Oats.....	8,463	4,101	48
Potatoes.....	44,073	40,765	93

Sugar consumption in 1922 was equal to that of 1913.

The country was apparently less badly off in the matter of meat supply although in the case of the

<sup>1</sup> Since the import figures for 1913 include the ceded areas which produced a surplus of foodstuffs, the present situation is a little less favorable than the table indicates.

hogs—by all odds the most important source of meat—the number slaughtered in 1922 was but 42 per cent of the 1913 total. According to calculations made by the Prussian Statistical Office,<sup>1</sup> the consumption of meat in Prussia dropped from 49.02 kilograms per capita in 1913 to 33.10 kilograms in 1921, or by 32.5 per cent. The decrease in the cities was, of course, very much greater than in the country.

That the food shortage in the principal commodities has not been made good by increased consumption of dairy products is evident enough from the decline in the number of cattle. The United States Department of Agriculture<sup>2</sup> reports that in October, 1922, Berlin consumed about 475,560 quarts of milk per day as compared with 2,114,000 quarts per day before the war. Consumption of eggs has also declined.

The results of this drastic reduction in the national supply of foods has been well described as follows:

On the side streets and by-ways of Munich and Karlsruhe "every third or fourth child had boils or blotches on its face. . . . Apart from profiteers, the people looked either anxious, or sour and embittered, or listless, or abstracted, or in dull despair. . . . Suicide was on the increase. . . . The children's hospitals were overcrowded. The children in the towns had very largely ceased to play games, or to play at all. The faces, as the human current swept by you, were gray and bloodless, and none more so than those of the University students."<sup>3</sup>

<sup>1</sup> *Zeitschrift des preussischen statistischen Landesamts*, 1921, p. 317.

<sup>2</sup> U. S. Department of Agriculture, *Foreign Crops and Markets*, Feb. 14, 1923, p. 102.

<sup>3</sup> LANGDON MITCHELL. Germany. *The Atlantic Monthly*, April, 1923.

## V. GERMANY'S PROBLEM OF EXPORT MARKETS

We may now return to a consideration of the German export problem. As we have seen, Germany cannot buy the necessary imports of raw materials and foodstuffs unless she can pay for them with exports, for no other means of buying imports is available. Since Germany must have 14 billion gold marks' worth of imports if she is to feed her city population and operate her factories successfully—quite apart from reparation—she must, therefore, find export markets that will absorb at least 14 billion gold marks' worth of goods. There is no possible escape from this fundamental necessity.

If we are to gauge the possibilities of a substantial expansion of German exports, we must carefully study prospective German markets. The table on page 135 shows Germany's export markets in 1913 by broad territorial divisions and principal countries.

It will be observed that 52 per cent of the total of German exports were disposed of in western Europe; about 24 per cent in central, eastern, and south-eastern Europe; and about 15 per cent in North and South America, with Asia and other remote regions taking almost negligible amounts. The total of 10,097 million gold marks represents in present gold prices a little over 16,000 million gold marks. What is the prospect that Germany can sell that volume of goods at the present time, or in the near future?

*German export markets have been very seriously*

## GERMANY'S EXPORT MARKETS, 1913 \*

Country of Destination	1913 Exports	
	In Millions of Marks	As Percentage of Total
Western Europe.....	5,272	52.2
Great Britain.....	1,438	14.2
France.....	790	7.8
Netherlands.....	694	6.9
Scandinavia.....	675	6.7
Belgium.....	551	5.5
Switzerland.....	536	5.3
Italy.....	393	3.9
All others.....	195	1.9
Central, eastern and southeastern Europe.....	2,405	23.8
Austria-Hungary.....	1,105	10.9
Russia.....	880	8.7
Balkan States.....	214	2.1
All others.....	206	2.1
North and South America.....	1,547	15.4
United States.....	713	7.1
Argentina.....	266	2.6
Brazil.....	200	2.0
All others.....	368	3.7
Asia.....	548	5.4
All others.....	325	3.2
	10,097	100.0

\* Compiled from data given in "Statistisches Jahrbuch für das Deutsche Reich, 1915.

*impaired.* In the first place, everyone knows that the purchasing power of all of central, eastern, and southeastern Europe has been very greatly reduced,—partly because of Bolshevism and new wars, partly by the economic impoverishment directly due to the Great War itself, and partly because that economic empire of central, eastern, and southeastern Europe, of which Germany was the center, has been completely disorganized as a result of the war and the peace.

Modern Germany and Austria have been the economic pivot of most of continental Europe, organizing and controlling through commercial, shipping, and financial connections the major part of the economic development that occurred in eastern and southeastern Europe during the generation before the war. It is hardly too much to say that the development of the German and Austrian organization of commerce and finance was the principal factor in widening the territorial boundaries of the capitalistic system in Europe, thereby promoting productive efficiency and making possible an increase of population in all of Europe east of the Rhine, including to some extent north Italy. The economic life of that whole great area, from the North Sea south and east to the borders of Asia, radiated from the financial and commercial offices of Hamburg, Berlin, Frankfort, and Vienna.<sup>1</sup> This intricate financial and economic system has now been completely disrupted. In consequence of this and

<sup>1</sup>To be sure, London, Paris, and Amsterdam provided a considerable part of the liquid capital required.

other factors a vast territory has rapidly deteriorated as a producing, *and hence as a consuming*, region for the products of German manufacture. The return to prosperity in central, eastern, and southeastern Europe is unfortunately too largely dependent upon the economic and financial rehabilitation of Germany.

Second, the markets in western Europe also have been very greatly curtailed. This condition has resulted partly from the worldwide financial and economic disorganization which has destroyed trade and impoverished nearly everyone, and partly from the necessity of drastic economy in order to balance domestic budgets and to pay war debts to foreign countries. Concretely, Great Britain, in her supreme effort at economizing in order to balance her budget must restrict imports from Germany to the barest necessities. France, Belgium, and Italy must obviously do the same. Only the neutrals among western European countries remain as large potential buyers of German goods; and these nations unfortunately cannot buy as much as they bought before the war, as the reduction in the demand for their own products in all the impoverished former belligerent countries has curtailed their capacity to buy imports from Germany or elsewhere. They, too, are caught in the tangled web of the international economic organization.

Third, the United States, Argentina, Brazil, and other American countries would seem to offer the chief markets where sales might be expanded beyond the pre-war volume. But Argentina and Brazil have been hard hit by the curtailment of European



purchases of foodstuffs and raw materials, notably grain, hides, and coffee, while the United States, more able to buy than any other country, is committed to a high-tariff policy, designed to prevent an increase of imports from Germany and other countries.

*Is the world determined to prevent an expansion of German exports?* Almost every country whose manufactures were stimulated during the period of the war has since raised its tariff barriers in the hope of safeguarding these infant industries. When, in the summer of 1921, German trade showed a slight revival from the depression of the early months of that year and German goods began once more to appear in increased volume in world markets—when it was believed that the depreciation of the German currency would give an artificial stimulus to German foreign trade—the trade and financial press of all the world was filled with articles and editorial strictures about the menace of reviving German competition in foreign markets. A recovery of German exports is almost universally regarded as something to be prevented at any cost. Emergency tariffs, anti-dumping laws, and safeguarding of industry acts are the striking features of post-war commercial legislation.

One can find no more striking illustration of human fatuity than the demand on the part of the Allied countries that Germany must make vast reparation payments and the simultaneous erection of tariff barriers, the result of which is to make such payments impossible. The tragedy is that even yet few people realize that any inconsistency is involved.

The analysis in this chapter has been based upon conditions as they stood in the year 1922, before the invasion of the Ruhr. It goes without saying that Germany's economic position during the occupation of the Westphalian industrial district is incalculably more difficult than we have described it. It is no part of our present purpose, however, to indicate either the economic consequences of the Ruhr invasion up to the present time, June, 1923, or its ultimate relation to the recovery of the shattered German industrial and financial system.

#### SUMMARY

In concluding this discussion of the relation of German foreign trade to the reparation problem, we may briefly summarize the analysis with the following statements.

1. Since Germany now has and can have for many years to come practically no net international income from the invisible sources, her ability to obtain the foreign bills of exchange with which to make reparation payments will depend almost entirely upon her foreign trade.

2. Since the whole German economic system has developed in such a way that roughly 20 per cent of the population cannot live unless food continues to be imported and that most of the factories cannot possibly operate without foreign raw materials, *the procurement of indispensable imports must take precedence over everything else.* This is necessary not merely for the purposes of meeting treaty obli-

gations; it is imperative if a considerable percentage of the German city population is not to perish.<sup>1</sup>

3. The imports required to maintain the German population in a state of physical efficiency and to enable the German factories to operate at something like pre-war capacity, total in value about 14 billion gold marks, as compared with actual imports in 1922 of only about 6.2 billion gold marks.

4. German exports must therefore equal 14 billion gold marks merely for the purpose of paying for the necessary imports. In 1922 they were less than half of this total.

5. German capacity to make reparation payments continuously year after year will be determined by the extent to which exports can be made to exceed 14 billion gold marks.

6. At the present time the total of Germany's imports of foodstuffs and raw materials, combined with the total of domestic production, is wholly insufficient to support the population in a state of efficiency and to permit the operation of the factories. Both the industrial and agricultural output is at a low ebb. The greater part of the German industrial population is even now seriously undernourished.

7. Export markets for German goods have been very greatly curtailed since the war because of the general impoverishment of Europe and the erection everywhere of tariff barriers against German goods even by the identical countries which declare that Germany can and must pay in full.

<sup>1</sup> We do not mention emigration as an alternative since for the great majority, deprived of the very means of subsistence, emigration is no longer financially possible.

## CHAPTER V

### THE BUDGETARY PROBLEM

THE two decades ending in 1907 witnessed a decisive realignment of the greater European powers. In 1887 Great Britain was still tranquilly pursuing her policy of colonial and commercial expansion, keeping clear of continental engagements, and the German Empire, animated by a policy of adjustment and consolidation of Central and Eastern Europe, was the dominant force on the continent. The ensuing twenty years saw radical changes in policy. Germany launched spectacularly upon a policy of aggressive commercial and maritime expansion. England, at first uncertain, then leaning, for a period, toward a German alliance independent of Germany's continental commitments, finally swung definitely toward understandings with Japan, France and Russia. Russia concluded an alliance with France. These decades, therefore, from the political point of view, represent a period of the greatest importance.

From the point of view of public finance these decades are also of unusual importance, since the political exigencies of the time could not fail to exert a profound influence upon fiscal policy and upon the status of national budgets. We are not,

of course, here concerned with the trend of French and British public finance; we are interested, however, in Germany's pre-war fiscal history for the light that it throws upon German finances during and since the Great War. After brief comment on the imperial finances during the first fifteen years of the Empire, we shall point out the more important factors in German fiscal policy, during the period after 1887, because that year immediately preceded the great changes referred to above particularly those of a fiscal character.

#### I. THE PRE-WAR FISCAL SITUATION

The finances of the German Empire were not as well ordered from the beginning as might have been expected. A German financial authority remarked in 1916: "The debt problem was the darkest part of the Empire's domestic economy, and made the lack of a sound financial policy stand out in the boldest relief."<sup>1</sup> Since the Empire could not raise money by direct taxation, the states refusing to surrender this right, the latter were frequently obliged to increase their own taxes in order to contribute to the needs of the Imperial Exchequer. The inadequacy of the imperial resources did not, however, give rise to any general concern until about 1886. By 1875 the Empire had paid off the whole amount of loans contracted by the North-German Confedera-

<sup>1</sup>Dr. F. W. R. ZIMMERMANN, formerly Chancellor of the Exchequer of Brunswick, in "Die Finanzwirtschaft des Deutschen Reichs und der deutschen Bundesstaaten zu Kriegsausbruch 1914," Berlin, 1916, p. 62.

tion before and during the Franco-Prussian War (amounting to 267 million marks at the end of 1870), and was free from debt, except for 120 million marks of treasury notes (Reichskassenscheine) which were issued in 1874 with a view to replace the treasury notes of the individual German states, remaining practically constant in amount outstanding until 1913, when the amount doubled.<sup>1</sup> During the ten years following 1875 small borrowings occurred from year to year for more or less justifiable expenditures on capital account, and by 1886 they brought the imperial funded debt up to about 446 million marks. From this date on, however, the increase in the debt reflected merely the inability of the central government to make both ends meet. A close examination of the budget of subsequent years will, therefore, be helpful.

*During the quarter century preceding the Great War, the total receipts and expenditures of the German government increased threefold.* Real receipts, that is to say, receipts from sources other than borrowing, increased from 618.4 million marks in the fiscal year 1886-1887<sup>2</sup> to 2,341.9 million marks in the fiscal year 1913-14, an increase of 279 per cent. Expenditures increased by 277 per cent from 686.8 millions in 1886-87 to 2,791 millions in 1913-14. (In all figures for total receipts or total expenditures given in this chapter, the only portion of the accounts of the public services,—railroads, printing

<sup>1</sup> WILL, R., "Die schwebenden Schulden der europäischen Grossstaaten," Tübingen, 1921, p. 87-8.

<sup>2</sup> The German fiscal year runs from April 1 to March 31.

office, postoffice, telegraph, and telephone,—included is the surplus or deficit, whichever happened to exist in the year concerned.)<sup>1</sup> The growth of total real receipts during the period concerned proceeded at a uniform rate, with the exception of the six years from 1903–04 to 1908–09, each of which witnessed smaller receipts than those of 1902–03. Expenditures followed the trend of receipts, but with less uniformity in the rate of increase.

*Indirect taxation furnished the greater part of the German federal government's revenue.* Not until the reform of 1919 did the component states surrender any important share of direct taxing privileges.<sup>2</sup> They naturally desired the lucrative direct taxes for themselves. Miscellaneous administrative receipts were next in importance. Public service surpluses (when existent) and receipts under the extraordinary budget (other than borrowing) comprised the remainder,—a very small proportion, however, of total receipts. The relative importance of taxation in total revenue increased in 1904–05; when miscellaneous administrative receipts decreased by about half from their average level of the pre-

<sup>1</sup> FÖLDES, "Finanzwissenschaft," Jena, 1920, p. 65. See Appendix G, for budgetary details, including the complicated financial relations of the states with the Empire. The only railroads formerly owned by the central government were those in Alsace-Lorraine and they were not profitable. Not all the postal service was imperial; Bavaria and Württemberg had their own postal systems at the end of the pre-war period.

<sup>2</sup> The giving over to the Empire of the inheritance taxes in 1906, and the establishment of the Wehrbeitrag and Vermögenszuwachssteuer in 1913 constitute the sole use by the Empire of direct contributions prior to the Great War.

ceding five years. In 1886-87, taxes supplied 63 per cent of total revenue, while by 1913-14 the proportion had increased to 86 per cent. The government tried, every few years, to increase the tax resources at its command. In 1881, in 1893, and in 1906, it submitted projects for limited sales taxes, but all were rejected.

The public service account, *i.e.*, the combined accounts of the government-operated railroads, printing office, postoffice, and telegraph and telephone systems, showed a surplus in every year from 1886-87 to 1913-14 except from 1907-08 to 1909-10 inclusive. This surplus varied from a high point of 92.5 millions in 1912-13 to a low point of 16.7 millions in 1900-01. Generally speaking, the surplus was a fairly constant quantity, its annual average from 1886-87 to 1913-14 being 38.1 million marks.<sup>1</sup> Even in pre-war days Germany had both an ordinary and an extraordinary classification of expenditures. The former were supposed to comprise merely the expenditures for the maintenance of civil and military departments. The extraordinary expenditures theoretically were confined to non-recurrent capital outlays and emergency expenditures.

Ordinary expenditures increased from 621.0 millions in 1886-87 to 2724.3 millions in 1913-14. Extraordinary expenditures were naturally a variable quantity, and were much smaller in amount

<sup>1</sup> This is the average net surplus, the total deficits having been deducted from the total surpluses and the balance averaged over the entire period.



than ordinary expenditures. Between 1886-87 and 1913-14 the largest ratio of extraordinary expenditures to ordinary expenditures in any one year was 32 per cent in 1909-10, while the smallest ratio was 2.4 per cent in 1913-14. Total budget expenditures consisted of the sum of these two items, except in the years 1907-08 to 1909-10 inclusive, when small public service deficits were also included.

*Only in three of the years from 1886-87 to 1913-14 was the German budget balanced without incurring a deficit.* These were the years 1896-97, 1911-12, and 1912-13. The annual borrowings during the period as a whole amounted to about 12 per cent of the total receipts from taxation. These deficits were largest during the four years from 1906-07 to 1909-10, amounting in that period to 29 per cent of real receipts; in the subsequent four years, that is, the last four complete fiscal years prior to the war, the total net deficit was smaller than during any other four years in the entire period.

INCREASE IN GERMAN NATIONAL DEBT, 1890-1914

(In millions of gold marks)

Fiscal Year (April 1 to March 31)	Increase in Indebtedness	Accumulated Budget Deficit
1890-95	960	852
1895-1900	218	192
1900-05	905	955
1905-10	1,690	1,972
1910-14	144	87
<b>Total 1890-1914</b>	<b>3,917</b>	<b>4,058</b>

As a necessary result of the deficits the national debt increased from 1,241 million marks on March 31, 1890, to 5,158 million on March 31, 1914. It is interesting to note the parallelism between the increase in the debt and the budget deficits, as shown on opposite page.

#### II. THE EFFECT OF THE WAR ON THE GERMAN BUDGET, 1914-1918

From April 1, 1914, to March 31, 1919, the five entire fiscal years within which the war period was embraced, the government of Germany disbursed in excess of 158 billion marks, while its total receipts from other sources than borrowing were less than 22 billions. The following table <sup>1</sup> shows the growth of the expenditures and deficits.

PROVISIONAL CLASSIFICATION OF EXPENDITURES AND REVENUES OF GERMANY DURING WAR YEARS  
(In billions of paper marks)

Fiscal Year	Expenditures	Revenues from Other Sources than Borrowing	Deficits
1914-15	8.8	2.4	6.4
1915-16	25.7	1.8	23.9
1916-17	27.8	2.1	25.7
1917-18	52.1	8.0	44.1
1918-19	44.4	7.4	37.0
	158.8	21.7	137.1

<sup>1</sup> Principally *Statistisches Jahrbuch*, 1920 and 1921-22. These figures are in paper marks, but the mark is not to be regarded as having been at a substantial discount during the war. Cf. Appendix G, p. 358.

The total German wartime expenditure was greater than these figures indicate, since the various states of the Empire, and even the municipalities, incurred heavy obligations.<sup>1</sup> The figures for state expenditures<sup>2</sup> are as follows.

EXPENDITURES AND REVENUES OF GERMAN STATES DURING WAR  
YEARS

Compared with 1913-14

(In billions of paper marks)

Fiscal Year	Expenditures	Revenues from Other * Sources than Borrowing	Deficits
1913-14. Closed accounts..	8.5	7.1	1.4
1914-15. ..	7.9	6.6	1.3
1915-16. ..	10.6	6.5	4.1
1916-17. ..	14.2	7.4	6.8
1917-18. ..	16.2	9.4	6.8
1918-19. (estimate).....	9.6	9.1	0.5

\* In the absence of definite figures as to the amount of borrowing included in total revenues the ordinary revenues alone have been taken in this column, as representing real revenue. The extraordinary revenue consisted probably in almost every case mainly of borrowing.

<sup>1</sup> On March 31, 1914, the total funded debt of the states amounted to 15,830 million marks, and their total floating debt to 952 millions; on March 1, 1920, these figures had been changed respectively to 18,403 and 16,320 millions; but the Commonwealth had assumed nearly 40 billions of these debts in return for the transfer of the railroads, leaving the total state indebtedness at 6,823 million marks.

<sup>2</sup> Taken from *Vierteljahrshefte zur Statistik des Deutschen Reichs*, 1921, no. 2, p. 49.

We are, of course, concerned primarily with the finances of the Empire, as opposed to those of the states, particularly because the central government was destined to absorb the most important tax resources of the nation after the constitutional reform of 1919. Reference to the wartime financial outlay of the states is made at this place only to emphasize

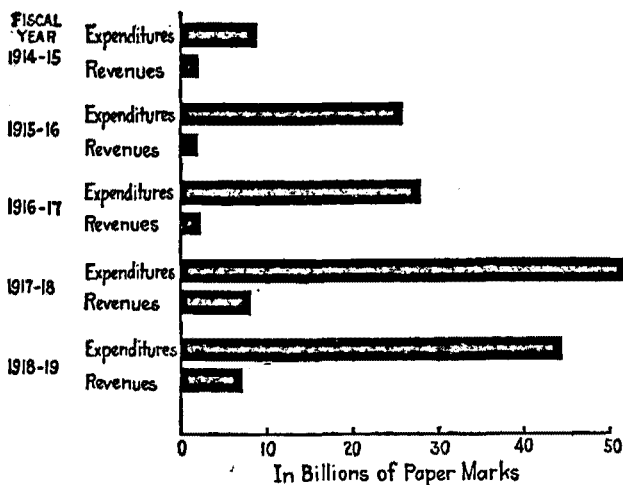


FIG. 7.—Wartime Revenues and Expenditures Contrasted.

the fact that during the war the central government was obliged to rely principally upon borrowing operations, because of the preemption by the constituent states of direct taxation. The German government cannot have had many illusions as to the costliness, and in the long run, the danger of

borrowing operations. Its loans in the period just prior to the war had been only indifferently successful. Four per cent loans by the Empire and Prussia issued respectively at 97 and 98 in March and June, 1913, were under-subscribed. Criticism of the German government's financial policy during the war is to be levelled primarily at the practice of borrowing paper money from the Reichsbank, which grew apace as financial needs expanded. We shall shortly have more to say on this point.

1. *Borrowing Operations.*—Resort to borrowing was practically simultaneous with the beginning of the war. The treasury met its requirements by two methods: (1) Its week-to-week needs were covered by the sale of three-month certificates yielding from  $4\frac{1}{2}$  to 5 per cent; while, (2) great national loans were floated semi-annually. The maturities of the certificates were so arranged as to enable them to be taken up by the loans, which, of course, also provided much new money. The certificates naturally enough were marketed in banking and industrial circles, whereas the loan campaigns were nation-wide and searching in their scope and character. The loans were nine<sup>1</sup> in number, as follows.

<sup>1</sup> Their terms varied considerably. They were issued in two forms, long-term and short-term bonds. The former class carried 5 per cent and were issued at from 97 $\frac{1}{2}$  to 99, redeemable at the option of the treasury after Oct. 1, 1924. The short-term securities ranged from 5-year certificates, redeemable after 3 years, to 15-year bonds redeemable at the option of the Treasury after 6 years, but automatically converted to lower rates of interest after 1927. The interest rates never exceeded 5 per cent, and were often held to  $4\frac{1}{2}$  per cent; the securities were issued at 97 $\frac{1}{2}$  and 98.

PROCEEDS OF GERMAN WAR LOANS \*  
(In millions of paper marks)

Loan	Date	Amount
First.....	September, 1914.....	4,461
Second.....	February-March, 1915.....	9,062
Third.....	September, 1915.....	12,102
Fourth.....	March, 1916.....	10,712
Fifth.....	September-October, 1916.....	10,652
Sixth.....	March-April, 1917.....	12,979
Seventh.....	September-October, 1917.....	12,458
Eighth.....	March-April, 1918.....	14,766
Ninth.....	September-November, 1918.....	10,434
	Total.....	97,626

\* *Statistisches Jahrbuch*, 1919.

The effect of this heavy borrowing on the budget may be gathered from the following tabular summary of the debt service (interest, sinking fund, and administration expenses) of the imperial government in the war years as contrasted with the last pre-war fiscal year.

COST TO THE GERMAN EMPIRE OF PUBLIC DEBT SERVICE, 1913-18 †  
(In millions of paper marks)

Fiscal Year	Total	Interest	Sinking Fund	Administration	Extraordinary
1913-14	245	178	65	1	.....
1914-15	463	398	63	2	.....
1915-16	1,340	1,264	68	7	.....
1916-17	2,635	2,535	76	6	18
1917-18	9,437	4,253	2,275	9	2,918
1918-19	9,564	.....	.....	.....	2,794

† *Statistisches Jahrbuch*, 1921-22, pp. 359-60, and *Vierteljahrshefte zur Statistik des Deutschen Reichs*, 1921, no. 2, p. 53. The total ordinary expenditures on national debt account for 1918-19 were in excess of 6,770 million marks, but it is not yet clear what proportion of this went in interest charges.

*Advances by the Reichsbank to the government became more and more frequent as the war progressed.* This is to say that instead of merely selling bonds and certificates to individuals, the government exchanged its own *time* promise to pay with the Reichsbank for the latter's *demand* notes,—in other words, for irredeemable currency. This easy but unsound method of finance caused a steady expansion of Reichsbank notes and reduced the ratio of gold from about 55 per cent (1913 average) to 10 per cent on Dec. 31, 1918.<sup>1</sup> This convenient device for procuring funds for war purposes has been denounced by nearly every German student of finance.

2. *The Taxation Program.*—The taxation problem presented itself in Germany as elsewhere simultaneously with the first military appropriations. The imperial government had for some years been getting from indirect taxes (the one field left to it by the states) as much as could reasonably be expected. The heavy expenses of the war were clearly not to be met to any great extent from an increase of these taxes; nor could inheritance taxes, taken over by the central government in 1906, furnish any important increase. Prior to the Great War the imperial German government had levied only one direct tax—that in the National Defence Contribution Act (*Wehrbeitragsgesetz*) of July 3, 1913. It was a capital tax and an income tax combined, intended to yield about a billion marks over

<sup>1</sup> See table on p. 202.

a period of years.<sup>1</sup> Only the greatest pressure could have made the states accept such a departure from long-established habits. That pressure was undoubtedly military in character, and due to the international uneasiness that had resulted from the first and second Balkan Wars of 1912-13. But it was definitely understood that this tax was not to reappear, and it figured in the budget as extraordinary income.<sup>2</sup> Its chief importance lay in the fact that it furnished a basis for the later war time and post-war income and property tax assessments. Thus the structure of the 1916 war-profits tax rested upon the Wehrbeitrag assessments.

For a variety of reasons, the imperial government did not again ask for the "defence contribution" after the war began. In the first place, there was a sturdy resistance from the states, which had no intention of acquiescing in the establishment of a strong system of direct national property taxation. Moreover, the financial and industrial elements strongly objected to the drastic character of the tax, which, they contended, would have prevented them from successfully carrying on their part in the war. Finally, the government itself had no intention of courting any more unpopularity than was absolutely unavoidable and it entertained hopes of having the question as to who would bear

<sup>1</sup> Of the 977 million marks collected, 637 million were received in 1914-15. Cf. *Denkschrift über die finanzielle Lage des Reichs*, submitted by Minister of Finance Wirth to the Reichstag, July 29, 1920. Doc. 254.

<sup>2</sup> The significance of the budgetary classification is explained in Appendix G.



the war bills settled in no uncertain way by the issue of the contest.

The policy at the outset appears to have been to raise from taxes merely enough to meet the interest charges on war borrowings, and the ordinary cost of civil administration.<sup>1</sup> In consequence, the government did not recommend material increases in taxation prior to March, 1916. When public opinion in 1915 demanded an excess profits tax, Minister of Finance Helfferich declared: "We feel that such a tax can be imposed only after the war."<sup>2</sup> He was obliged, however, before long to ask for a war profits tax (March 16, 1916), as well as various tax increases.<sup>3</sup> The Reichstag modified this proposal by taxing additions to wealth (the so-called capital increment tax). This was a tax on the excess war profits of corporations, and on the increase in personal wealth.

*During the last two years of the war, the tax program was much more thorough-going.* In April, 1917, the war profits tax of 1916 was re-enacted, but the rate for 1917 was fixed at 20 per cent of the assessment for 1916. The stamp tax on bills of lading was increased; and a tax laid on both freight and passenger traffic. The coal-consumption-tax of 20 per cent was established.<sup>4</sup> Another heavy tax on in-

<sup>1</sup> Cf. Kuczynski, *Deutsche Kriegssteuerpolitik in Annalen für Soziale Politik und Gesetzgebung*, vol. VI, 1918, pp. 278-338.

<sup>2</sup> Address in Reichstag, Aug. 20, 1915.

<sup>3</sup> A stamp tax for receipts, an increase in the bill-of-lading stamp tax, an increase in the tobacco tax, and a supplement to the postal rates. The last three were adopted, and instead of the receipts stamp tax a general sales tax was established.

<sup>4</sup> An intended reduction of 10 per cent for poor householders was

creases in both property and income between 1914 and 1918, on July 26, 1918, established, overlapped and supplemented the tax of 1916. By going back over the period the older tax had already covered, it gleaned additional amounts.

The 1918 tax program was intended to increase the revenues from sources other than borrowing by as much as 4,300 million marks. The program was loudly heralded as an example of remarkably thorough-going financial policy, although in fact the estimates were in many cases extremely optimistic, while in other instances the effect of the legislation could not possibly be felt during the fiscal year when the program was intended to become effective. A spirits monopoly, for example, was established which was to become effective at the end of the war with an estimated yield of some hundreds of millions of gold marks. For the first time, a tax on wine was established by the national government; previously, only some states had taxed wines. The rate was 20 per cent ad valorem. The champagne and beer taxes were also increased, the increase in the latter case being based on the alcoholic content. It was estimated that the additional yield would be a little over a third of a billion gold marks. The supplement to the postal and telegraphic rates, the sales tax, and the stock exchange tax were expected to yield perhaps as much as a billion and a third per annum over and above previous net yield. The customs rates were increased slightly. Obviously, cancelled just before the law took effect, on the ground that it could not be administered successfully.

however, the falling off in imports rendered horizontal increases in this class of taxation of little significance during the actual war period.

The states and municipalities were also increasing their income and other taxes throughout this period, some of them having made a notable effort to keep abreast of mounting expenditures.

The following columns show some of the more important receipts of the German imperial government during the war years.<sup>1</sup>

PRINCIPAL SOURCES OF IMPERIAL REVENUE (OTHER THAN BORROWING), 1914-1919

(In millions of paper marks)

Fiscal Year	Recurrent Taxes (including Inheritance, Sales, Increment, Stamp, Traffic Taxes)	Customs Revenues	Coal Tax	Reichsbank and Darlehnskassen contributions
1914-15	228	561	...	55
1915-16	215	360	...	270
1916-17	406	348	...	258
1917-18	850	233	413	482
1918-19	1,356	133	751	886

*Germany clearly did not tax as rigorously as either Great Britain or France during the war. In the first 3 years of the war the tax burden was light, and it*

<sup>1</sup> Budget Report of Chancellor Wirth, Oct. 20. 1920, Doc. 698. Cf. Appendix G, p. 358, for greater detail.

was not until the last year or so that anything like an adequate tax program was instituted. Moreover, it seems clear that what a German economist called Germany's "taxable reserve" was greater at the outbreak of the war than that of other leading countries in Europe.<sup>1</sup> This was due to the fact that the accumulated public debt of the Empire was relatively small, with a correspondingly slight interest burden. In fact, the value of Germany's pre-war imperial state property exceeded her imperial debt; while the aggregate value of her national state and local public property and publicly operated services considerably exceeded her aggregate public obligations of all classes.

We have enumerated the more important measures, and our conclusion on the basis of this material is that Germany relied altogether too heavily on loans throughout the war. When at length the German government began to tax effectively, the change was almost too late to be of any substantial benefit.

### III. THE FISCAL SITUATION OF THE GERMAN COMMONWEALTH, 1919-1923

After the war, Germany, deprived of strong central leadership, and guided only by a regency resting upon an insecure foundation of parliamentary compromise, faced an uncertain future with reparation payments of undetermined amounts, an enormous domestic indebtedness, an impaired credit

<sup>1</sup> JULIUS WOLF, "Steuerreserven in England und Deutschland," Stuttgart, 1914, quoted by B. Földes, "Finanzwissenschaft," Jena, 1920, p. 244.

structure, and universal popular depression and loss of morale. We have pointed out in Chapter III the magnitude of the payments and economic effort in general which the provisions of the treaty demanded of Germany. It is now necessary to consider, on the one hand, the effects on German public finance of the reduction in her economic power as a result of the war, and, on the other, the consequences of the policies which the government has since the treaty put into effect. In reviewing this period, we shall not undertake a searching analysis of the fundamental weaknesses or necessities of the German policies; our object at this place is simply to trace the course of the ever more complex financial problem, leaving criticism and appraisal to the following chapters.

1. *The Four Post-war Budgets.*—Reduced to their simplest terms, the four budgets covering the period April 1, 1919—March 31, 1923, are brought together in the following table. The figures represent actual yield or expenditures, at least so far as preliminary closed accounts are available. It is still necessary to say "preliminary closed accounts," for in the nature of the case many years must pass before any final audit of the tempestuous post-war accounts can take place. The accounts for 1919-20, 1920-21, and 1921-22 may be taken as approximately complete.

It will be seen from this table that the receipts from sources other than borrowing were less than a third of the total expenditures in each of the years 1919-20 and 1920-21; in 1921-22 they were about

37 per cent; while in the last year they fell to about 22 per cent. It was in the third year after the war that the situation was at its best.

## SUMMARY OF GERMAN BUDGETS, 1919-20 TO 1922-23 \*

(In billions of marks)†

Fiscal Year	Total Ordinary Expenditures, plus Net Extraordinary Expenditures, Public Service Subventions and Treaty Fulfillment Expenditures	Total Ordinary Revenues	Excess of Expenditures over Ordinary Revenues	Percentage of Expenditures Represented by Ordinary Revenues
1919-20	47	11	36	23
1920-21	182	59	123	32
1921-22	244	91	153	37
1922-23	7,630	1,558‡	6,072	22

\* Based for 1919-22 on Budget Reports of October 20, 1920, and February 24, 1923 (Reichstag docs. 698 and 5,584), and *Statistisches Jahrbuch*, 1921-22; for 1922-23 on German treasury statements in April, 1923, and *Reichsanzeiger*, April 23, 1923.

† It is difficult to convert these paper marks to gold mark equivalents since one cannot be sure just how much of the expenditures occurred when the mark stood at any given rate.

‡ Including 12.8 billions in receipts from compulsory loan, here regarded as real receipts. The returns from the occupied territory for the last three months of 1922-23 were not available when the total for the rest of Germany was given out. Cf. *Reichsanzeiger*, April 23, 1923.

The treasury had two alternatives if the budget was to be balanced, (1) to cut expenditures to the level of actual revenues, or (2) to increase revenues to the level of indispensable expenditures. That there was a very definite limitation to the first pos-

sibility is evident from the following figures of expenses incident to treaty fulfillment as compared with non-borrowed revenues. The figures are in billions of marks. They are taken from official sources and of course include both direct and indirect costs of carrying out treaty obligations.<sup>1</sup>

Fiscal Year	Disbursements Incident to Treaty Fulfillment	Ordinary Revenues
1919-20	2	11
1920-21	25	59
1921-22	97	91
1922-23	2,113	1,558

It will be noted that expenditures for treaty fulfillment increased from one-fifth of real receipts in 1919-20 to 150 per cent of real receipts in 1922-23.

We shall presently discuss what would have been involved in reducing general expenditures. We must, however, first trace the story of the German government's revenue policy in the post-war years.

2. *Taxation, 1919-1923.*—The first fiscal necessity in Germany immediately after the war was the reorganization of the entire financial machinery of the government. It will be recalled that the central government did not possess the constitutional right to levy direct taxes,—such wartime direct imposts as were levied being permitted by the

<sup>1</sup> For statement on indirect costs, see discussion in Chap. III. For a more detailed statement of treaty fulfillment disbursements, see table on pp. 170-171.

states only because of the paramount necessities of the situation. After the war it quickly became apparent to the responsible leaders that if the huge postwar obligations of the federal government were to be met and the credit of the nation preserved, the government must be constitutionally authorized to mobilize the financial resources of the country without regard to state rights, local or class tradition, or vested interests.

Accordingly, the Weimar assembly, which had been convened for the purpose of drafting a constitution for the Republic, took up the whole fiscal problem in its opening sessions. This convention began in May, 1919, and concluded its deliberations in December of that year. In brief, the constitutional assembly conferred on the central government unrestricted control over the collection of all forms of taxation, as well as the disbursement of the proceeds, with the proviso that the executive should have proper legislative mandate, and that both legislative and executive branches of the government should give due heed to the financial requirements of the local administration, whether state or municipal.<sup>1</sup>

*The actual reorganization of the fiscal administration proved a difficult task.* Constitutional authorization of a thorough-going change from one financial system to an entirely different arrangement is one thing, and the successful transition to the new system is quite another. In the first place, since the new government required some time to perfect its

<sup>1</sup> Cf. Appendix G.



organization, the constitutional assembly was obliged to assume legislative functions. It formulated the tax principles and rates for the fiscal period then current, and then enacted a series of modifications of the war time tax legislation, such as the "extraordinary war contributions" and capital-increment tax, culminating in the law of December 21, 1919, establishing the national emergency contribution (*Reichsnotopfer*). The struggle over this proposal lasted nearly a year, and its adoption marked a social democratic victory over the bourgeois parties which favored a forced loan, to be subscribed to by all the citizens having more than a rather low income.

This emergency contribution was essentially a capital levy with an imposing schedule of rates up to a maximum of 65 per cent. It was intended to be imposed but once, payable over several years with rates relatively high for the time of its enactment and based upon property assessment both in 1913 and during the war years. The difficulty of enforcing a measure of this kind, which entered into almost every phase of the complicated economic life of the nation, would have been formidable enough for a well-seasoned staff of fiscal officials working in relatively normal times; thrust upon an already over-burdened staff consisting largely of inexperienced personnel, it is not surprising that, under the abnormal conditions existing, the *Reichsnotopfer* failed to fulfill the anticipations of the assembly. It was hoped that it would provide means enough to cover all ordinary (civil) expenditures and leave something for treaty require-

ments. It yielded over 9,900 million paper marks in 1920-21.<sup>1</sup> Meanwhile, however, the ordinary paper mark expenditures of the government, as we shall presently indicate, had increased by leaps and bounds.

The new government accordingly found it necessary to modify the provisions of the emergency contribution law. Within a year (Dec. 22, 1920) the Reichstag enacted a law "to facilitate the collection of the *Reichsnotopfer* and the capital increment taxes". The chief amendment was directed to the collection in the single year ending Dec. 31, 1921, of one-third of the total assessment—although the original plan had contemplated from thirty to fifty annual instalments; but the other two-thirds of the total assessment were formally abandoned. The new arrangement still proved ineffective to produce rapidly the money necessary for the purposes of the government.

The alternative proposal of a forced loan, long inconclusively debated, was again taken up in 1921. It was designed to be levied only on productive capital,—banks, industrial concerns, and the like,—not touching the fixed-income classes. Its proceeds were to apply only to treaty-fulfillment obligations. After an intensely bitter parliamentary debate, it became law late in 1921.<sup>2</sup>

<sup>1</sup> Report of Minister of Finance in Reichstag, February 24, 1923. Reichstag Doc. 5584. For 1921-22 it yielded 8,600 millions, of which 7,800 millions appear to have been paid in public debt obligations. Its yield for 1922-23 was about 4,111 million marks.

<sup>2</sup> The forced loan was subscribed to throughout the fiscal year 1922-23. It was estimated before the end of that year that 45,840

In the fall of 1921, Dr. Wirth, then Minister of Finance, submitted bills dealing respectively with an annual capital levy and an annual capital increment particularly during the post-war period. These laws were enacted after heated discussion throughout the ensuing winter in a blanket taxation act of April 4, 1922, whereby the tax program of the Wirth régime, intended to provide the government with sufficient means to meet Germany's treaty obligations, was given its fullest expression.

Other taxes were also being increased during this period. Both direct and indirect taxes were frequently revised, in the latter case with a view to reach all classes of the people. Consumption, sales, and professional taxes were doubled and tripled as the government found itself from week to week faced with new classes of obligations for which no calculation had been made in the budget, but which, nevertheless, were shown to arise more or less directly from the provisions of the treaty and were, consequently, not to be rejected. Moreover, the demoralization of the currency wrought havoc with the taxation program. Early in the fall of 1921,

millions would be subscribed to it and that about 100,000 millions would be subscribed during 1923-24. It appears that about 13 billion marks were actually subscribed in 1922-23. The rates of "subscription" range from 1 per cent on the first 600,000 marks to 10 per cent on anything exceeding 6,000,000 marks. Manual laborers' incomes averaged 250,000 marks monthly early in 1923. The one most important drawback to the full success of the loan has been the low valuations authorized by the treasury officials. "Higher valuations and lower rates" would be a better formula for the German fiscal officials to observe than the principle of high rates and easy-going methods of valuation.

it became clear that taxpayers had more to gain by holding back their payments even beyond the closing dates prescribed by law, than they had to lose by paying the heavy penalties imposed for delinquency. This situation was destined to grow worse and worse until the beginning of 1923, by which time all relation between what the German government could collect by way of taxation and what it felt obliged to spend, had disappeared.

Another complicating factor was the obligation to turn back to the states certain portions of the proceeds of taxation. This continued to hamper the federal government throughout the fiscal year 1922-23. A tentative agreement was hammered out in April, 1922, at a conference at Würzburg between the Minister of Finance of the Commonwealth and the financial officers of the several political divisions. This was discussed at great length throughout the balance of the fiscal year. The arrangement would provide that the *nation alone* should collect the income tax, but three-fourths of its proceeds were to be distributed among the states, instead of two-thirds as had been the case heretofore. The ratios of distribution among the federal tax units were carefully worked out and corresponded roughly to the ratios of assessment. Within these units, however, further subdivision was to be made with reference to local laws and agreements, for only the federal states were to have definite claims against the Commonwealth.<sup>1</sup> Not only

<sup>1</sup> A few exceptions to this principle were incorporated into the law, chiefly to the effect that the entire proceeds of the real-estate sales

would this adjustment if realized, complete the fiscal reorganization of 1919, but it would serve in some measure to conciliate the local administrations whose expenditures had been mounting prodigiously just at the moment when their revenues were either absorbed for federal purposes, or cut down (relatively, in so far as purchasing power was concerned) mainly by reason of low valuations of real property, deemed necessary as compensation to property owners for losses of income due to rent control.

*The taxes proposed for 1923 were intended to be imposed in such a way as to prevent the flight of capital.* They were certainly thorough-going in theory, however impossible of successful application. The fiscal officials had sole authority to pass on the necessity from the nation's point of view for making foreign remittances. Exception was made in the case of firms or persons certified by their chambers of commerce as requiring such remittances in the ordinary course of their business. But if such certification were granted, the person or firm was to become wholly liable to the state for any unauthorized or unjustified purchase of foreign exchange. Export trade, therefore, was to be permitted only in so far as demonstrably necessary for imports officially regarded as indispensable to the economic life of the German people. The penalties for evasion have become most severe. But so long as the mark continued to fall, the value of augmenting the rates, adjusting on a

tax would be divided equally between the districts and the states, while in other cases the districts were to have 20 per cent of the proceeds as against the states' 10 per cent.

sliding scale the income classifications to the fall of the mark, or devising new means of collecting taxes promptly, must necessarily be far less than if the currency could have been stabilized. No device was adequate to enable the government to keep pace with the decline in the currency.

*In the three years following the London reparation decision of May, 1921, the German budget was directly supervised by the Reparation Commission.* The financial year 1921-22 began amid uncertainty in Germany tending toward apprehension; the financial year 1922-23 opened in an atmosphere of pessimism and widespread alarm. The correspondence between the Reparation Commission and the German government from December, 1921, to April, 1922, indicates a fair measure of compliance with the requirements of the Commission in the matter of taxation. Conferences took place, followed regularly by new taxation laws in Germany. Although yielding on each important point, the German government insisted that the process was leading toward imminent disaster.

The Reparation Commission not only stipulated the tax reforms that were made by the German government, but, after the end of the year 1921, it also instituted and maintained a vigilant control of all German fiscal operations. The representatives and observers of the Commission were stationed in strategic positions in the German Ministry of Finance and elsewhere, and had ample opportunity to acquaint themselves with the effort that Germany was making to find funds with which to cover

both her ordinary and reparation expenditures. While these representatives of the Commission criticized many things and took exception to minor matters of procedure and policy, nevertheless, after the fullest scrutiny of the German financial operations, they confined themselves to conventional recommendations that as far as possible Germany retrench and economize in domestic expenditures in order to meet the prior obligations of the treaty. Evasion on a considerable scale no doubt occurred; but it is unlikely that it could have been practiced to a wholesale extent in the presence of numerous observers and agents of control without being detected and made the basis of vigorous action.

3. *Expenditures.*—There are two main reasons why the expenditures were so large. First, there were enormous obligations directly and indirectly involved in the fulfillment of the treaty. Second, the depreciation of the mark necessitated unending increases of all appropriations. In examining the effect of treaty fulfillment upon the finances of the Commonwealth, we are not concerned with the variety of payments or deliveries; we are here interested only in the actual cash outlay of the German treasury for whatever object.

Considering first the treaty expenditures, we call attention to the table on pages 170-71. It shows payments by the treasury for the four fiscal years under review, duly itemized as to the more important classes of treaty fulfillment charges. It has been based, like the other tables in this chapter, on German official sources. Before commenting on the

significance of these figures, a word of explanation seems necessary.

To begin with, the table records *nothing but treaty fulfillment charges* and must not be confused with total figures of expenditures for all purposes as shown in the table on page 159. Practically all the disbursements were in cash; but whether in cash or otherwise, all computations were in marks, and naturally, in paper marks. Now these disbursements were made at different times throughout each of the fiscal years; and owing to the depreciation of the currency, successive payments, although nominally comparable, represented units of different value. Consequently, the totals of paper mark payments for each of the four years cannot be taken as real measures of the financial effort of the German government for the corresponding periods. But if we strike an average rate of conversion for each of the fiscal years, getting a total gold mark value for the payments in all four years of 6,096 million gold marks, we still fail to measure correctly the extent of Germany's financial outlay on the Treaty of Versailles. We must estimate these payments in terms of the internal purchasing power of the sums involved, during the respective periods.<sup>1</sup>

If it were possible to trace in detail the list of individual payments made by the German treasury in fulfillment of the treaty, it would be found that each purchase of foreign exchange for the purpose of making treaty payments or deliveries was accompanied by a roughly proportionate increase in the

<sup>1</sup> For method of computation, see Appendix G.



ACTUAL CASH DISBURSEMENTS BY THE GERMAN TREASURY  
APRIL 1, 1919, TO

(In paper marks; in gold marks at foreign exchange value,

Fiscal Year April 1 to March 31	Military Occupation	Inter-Allied Commissions	Restitution	Cash Reparation	Reparation in Kind (Coal, Coke, and the Like)	Disbursements Attributable to British Recovery Act
						In millions
1919-20	442	83	.....	.....	.....	.....
1920-21	3,178	498	162	.....	5,462	.....
1921-22	5,606	639	2,798	45,851	8,716	2,211
1922-23	177,598	20,160	462,392	588,770	262,832	242,194
<b>Total</b>	<b>186,824</b>	<b>21,400</b>	<b>465,352</b>	<b>634,621</b>	<b>277,010</b>	<b>244,405</b>
			In millions of gold marks converted dollar exchange value of the paper			
1919-20	49	9	.....	.....	.....	.....
1920-21	230	36	12	.....	395	.....
1921-22	162	19	81	1,321	251	64
1922-23	101	11	264	334	149	137
<b>Total</b>	<b>542</b>	<b>75</b>	<b>355</b>	<b>1,655</b>	<b>795</b>	<b>201</b>
			In millions of gold marks (on basis of of paper mark in each			
1919-20	127	23	.....	.....	.....	.....
1920-21	451	71	23	.....	774	.....
1921-22	293	34	147	2,391	454	116
1922-23	194	21	503	641	286	263
<b>Total</b>	<b>1,065</b>	<b>149</b>	<b>673</b>	<b>3,032</b>	<b>1,514</b>	<b>379</b>

\* To which must be added available and unexpended credits of 32,388 "Anleihenenschrift" for 192 , p. 18, and 1922, p. 28.

† Following ratios for paper marks to the dollar were used: 1919-20, 37.639;

‡ Following ratios for internal vs. external value of the paper mark were used: as to method of computing these ratios, and the disadvantage of using

These figures showing fiscal expenditures made by the German from the estimates in Chap. III of the losses sustained by the German many of the transfers of title and deliveries did not involve monetary property and the property liquidated in foreign countries. Moreover, sums for property taken from them for delivery to the Allies, such as pay-get figures. The losses of capital resources which do not find reflect

ON ACCOUNT OF ARMISTICE AND TREATY FULFILLMENT, FROM  
MARCH 31, 1923  
and in gold marks at purchasing power inside Germany)

Security Pay- ments to Com- mittee of Guaran- tees	Pay- ments Outside of Repara- tion	Clearing House Opera- tions	Reim- burse- ment of German Nationals Deprived of Property Abroad	Ship Delivery Disburse- ments	Miscel- laneous	Total
of paper marks						
....	797	....	157	506	93	*2,078
....	10,577	2,766	1,708	1,140	138	*25,629
3,375	11,219	12,109	3,835	1,107	199	97,685
....	32,361	93,481	61,519	162,938	8,862	2,113,107
3,375	54,954	108,356	67,219	165,691	9,292	2,238,499
from paper marks on basis of average mark in each year concerned †						
....	89	....	18	57	10	232
....	764	200	123	82	10	1,852
97	323	349	110	32	6	2,815
....	18	53	35	92	5	1,197
97	1,194	602	286	263	31	6,096
average domestic purchasing power year concerned ‡						
....	232	....	47	148	26	603
....	1,497	392	241	161	20	3,630
175	585	632	199	58	11	5,095
....	34	102	67	177	10	2,298
175	2,348	1,126	554	544	67	11,626

millions at the end of 1920-21, and 4,546 millions at the end of 1921-22. Cf.

1920-21, 58.156; 1921-22, 145.832; 1922-23, 7418.794.

1919-20, 2.60; 1920-21, 1.96; 1921-22, 1.81; 1922-23, 1.92. Cf. Appendix G  
average exchange values for an entire year.

treasury in connection with reparation payments differ materially  
nation in fulfilling treaty obligations. The explanation is simply that  
outlay within Germany by the treasury, as, for example, the ceded state  
in many cases where the treasury is required to reimburse private citi-  
zents have been greatly delayed and hence do not appear in the bud-  
get in the table greatly exceed in value these treasury disbursements.

"floating" indebtedness incurred through the placement with the Reichsbank of treasury bills in exchange for the banknotes used in buying foreign exchange and followed by a corresponding decline in the value of the mark. This phenomenon is most frequently observable in the third and fourth fiscal years with which we are concerned. The outstanding example, perhaps, is the effect of the purchase by the German government of sufficient exchange to cover the billion gold mark payment made in the late summer of 1921 as the first instalment of payments under the London schedule. In short, every political and economic development since May, 1921, relating directly or remotely to the fulfillment of the treaty, has accelerated the increase in the floating indebtedness.<sup>1</sup> The public credit of Germany, in consequence, has been gravely impaired, if not completely shattered. Its restoration can only come hand in hand with the reestablishment of sound and enduring social and economic conditions, and the

<sup>1</sup> In January, 1923, after all hope of balancing the budget for the fiscal year then current had been abandoned, disbursements of the German treasury for the purpose of purchasing foreign exchange to give effect to the provisions of the treaty or its subordinate conventions resulted in the expenditure in the brief period from January 11-20 of 44,735 million paper marks to cover cash payments earlier contracted for; 468 millions to cover exchange purchases incidental to deliveries in kind; 10,031 millions to cover British Recovery Act "sanction" payments; 1,517 millions to meet the requirements of Inter-Allied Supervisory Commissions; 139 millions to meet the requirements of the Rhineland Commission; and 46 millions to cover clearing-house requirements long since contracted for. These items, together with some less important ones, totaled 53,598 million paper marks. Statement of the Ministry of Finance, Jan. 31, 1923.

renewal of confidence in the future integrity and prosperity of the nation.

*The progressive depreciation of the currency demoralized the budget.* With revenue from taxation insufficient to meet total budgetary requirements, the resort to borrowing from the Reichsbank steadily reduced the value of the mark. As prices rose it became necessary month by month to readjust government expenditures. Not only had the salaries of government employees, including the public services taken over by the Commonwealth, to be raised with increasing frequency in order to assure at least a minimum existence, but, before the second half of the period under consideration had set in (since Oct. 1, 1921) all the state and municipal governments had to be assisted by payments from the national treasury to cover analogous increases in the compensation of their respective employees. Moreover, a large class of military and civil pensioners, frequently living close to the edge of existence by reason of physical inability, had to have supplementary payments to cover, at least in some small degree, the currency depreciation.

The government also found itself obliged to submit to the revision,—by tribunals—of contracts made with industrial establishments for various works of reconstruction. An outstanding example was its compromise with the contractors engaged in the building of shipping intended to replace the tonnage surrendered or destroyed. Made at a time when the mark was relatively stable, the contracts in question were thought to have taken fully into

account any minor currency fluctuation or depreciation which might occur; but before the work was fully under way, the currency suffered so disastrous a shrinkage that the government was obliged to consent to wholesale increases in payments under the contracts in order to prevent this essential industry from being utterly paralyzed.

*The expenditures of the administrative departments do not appear excessive throughout this period.* Apart from constant revisions of the appropriations in order to compensate for the declining value of the currency,—an element we find as inevitable and omnipresent in domestic expenditures as in those relating to the Treaty,—it appears that the German budget, during the four fiscal years ending March, 1923, presents no important example of increased expenditure, and may on the contrary be regarded as having kept administrative expenditures within reasonable limits, comparatively speaking. The number of government employees tended steadily to decrease with two notable exceptions. The staff of the treasury has increased steadily throughout this period, because of the growing complication of the fiscal program; while the government now has the whole railroad personnel of Germany in its employ.

The taking over of the entire railroad system of the country by the federal government on April 1, 1920, had grave disadvantages even though a variety of arguments could be advanced in its favor. It was thought at the time that rivalries and duplication of service would be eliminated through the consoli-

dation of the roads, while it was regarded as desirable, if the national government was to have to face frequent salary bonuses to the railroad personnel to counteract currency depreciation, that undisputed title should vest in the Commonwealth. The question of the valuation of the roads and the form of compensation offered serious difficulties. The value at the time of transfer, estimated provisionally at 25 billion marks, was declared by the states to be unfair in that it took no account of wartime and post-war deficits. Something in the neighborhood of 40 billions seemed likely eventually to be fixed as the aggregate valuation. As the states could not expect the Commonwealth to pay for the roads on a gold mark basis, they accepted an arrangement whereby corresponding amounts of their funded and floating indebtedness were assumed by the nation.<sup>1</sup>

The railroads had been losing ground financially throughout and after the war, and the states were well rid of them. The Commonwealth had perhaps still less reason to hope to make them self-supporting. The enormous rehabilitation cost alone would have given the pre-war imperial government all it could have handled, had it acquired the roads, say in 1913, in the condition in which they were in 1919. As part of the agreement of transfer, it was stipulated that any construction already under way should be completed by the national government. Much unnecessary construction was begun by the

<sup>1</sup> Much of it was floating debt—16 billions in 1921-22, for example. Cf. *Geschäftsbericht der deutschen Reichsbahn*, 1923, p. 10.

states, the completion of which they now urged without any scruple since they were free from any further financial responsibility. But it was in the handling of the personnel question that the railroad authorities of the states revealed their utter lack of any sense of national responsibility and solidarity. On the eve of the transfer, nearly 100,000 employees of the non-official ratings (*Arbeiter und Hilfsbeamter*) were promoted by the state railroad administrations to the rank of officials (*Beamter*), or in other words, made permanent and for all intents and purposes, irremovable employees. Then, too, a number of officials from the ceded territories had to be cared for within post-treaty Germany. Finally the eight-hour day precluded any decisive reduction in the number of workmen. The prospect of reducing personnel was thus made remote indeed, for even if a strong government could have risked the political consequences of wholesale dismissals in the face of technical obstacles and official traditions, it would still have been at a loss what provision to make for these ex-employees and ex-officials. The Wirth and Cuno cabinets have contented themselves with the policy of filling no vacancies caused by death or disability.<sup>1</sup>

In short, this vast and formidable transaction took place at as bad a time from the point of view of the

<sup>1</sup> Railroad employees numbered 695,794 in 1908, 782,731 in 1913, 680,387 in 1914, 816,990 in 1917, 1,121,745 in 1919, 1,089,829 in 1920, 1,050,898 in 1921, and 1,026,969 in 1922; estimated for 1923, 971,960. Cf. Budget Report of Feb. 24, 1923, and R. KUCZYŃSKI, "Reichseisenbahnen und Reichsfinanzen," 1922, pp. 32 and 48 ff.

federal treasury as one could imagine. While the assumption of the debts of the states by the nation was not likely to be the last straw, the burden of the carrying charges of an unprofitable service with a million employees has shown itself quite the worst domestic handicap with which the treasury has had to struggle. Few operating economies have been effected. As there is now no free market for coal or railroad equipment, the purveyors of these commodities are no longer in competition as to a slight degree was the case when the states owned the railroads. The equipment manufacturers and coal companies have now but one customer which must deal with them all; and that customer proceeds on the basis that it has no recourse but to accept the urgently needed products at the prices the supplying agencies may fix.<sup>1</sup>

*The outlook at the end of the fiscal year 1922-23 was plainly desperate.* The government faced the fiscal year 1923-24 in an insecure financial position. Its estimates were admittedly provisional. The cost of treaty fulfillment and some other classes of disbursements had still to be calculated, and included in supplements to the budget; new credits were being opened under authorization of the Reichstag almost from week to week,<sup>2</sup> and the carrying

<sup>1</sup> While in 1913 not less than 61 per cent of the total operating expenses were personal, and only 39 per cent for material, in 1923, only 29 per cent go for personnel and 71 per cent for material. Cf. Budget report, Feb. 24, 1923 Reichstag doc. 5,584.

<sup>2</sup> Cf. Budget Report of Minister of Finance, Feb. 24, 1923. In all, during the fiscal year 1922-23, 8,969,256 million marks in credits were opened under authorization of the national legislature;



charges gave strong indications of becoming proportionately larger.<sup>1</sup> Looking back over 1922-23, the government had to recall that its expenditures increased over the estimates at the opening of that fiscal year by nearly 2,000 per cent, although its real receipts had turned out to be only 1,300 per cent of the amount initially estimated; the deficit at the close of the year was 25 times what had been foreseen!

#### IV. THE GERMAN FISCAL PROBLEM

Could expenditures have been reduced, or taxes increased more than they were between 1919 and 1923? It is easy enough to recommend the drastic reduction of expenditures for ordinary domestic purposes, and to insist that a greater portion of the total national income—that is the aggregate earnings and savings of the whole people—be taken for the extinguishment of state obligations. Let us consider whether Germany could, at any time since the winter of 1919-20, have inaugurated a sustained program of progressive retrenchment in expenditures and progressive increase in taxation.

1. *Expenditures.*—In order to arrive at some conclusion as to the necessity of the principal expendi-

that is to say, the government was authorized to incur that much additional debt, *over and above all its non-borrowed receipts*. The various credits included 5,700 billions for treasury requirements, 1,920 billions for foreign and domestic food purchases, and 500 billions in connection with the Rhineland and Ruhr occupation.

<sup>1</sup> As stated in the Budget Report of Feb. 24, 1923, the total non-borrowed receipts during 1923-24 would amount to 731,956 million marks, and the total borrowing required would be 621,961 millions.

tures, we have examined two analyses of the budget for 1922-23,—the budget, it will be recalled, wherein the effect of the Wirth taxation program that had finally been agreed upon several months before was expected to be materially helpful, if not decisive. These analyses differ in their method of classification, and moreover are based on different figures, one of them dealing with the budget as presented to the Reichstag in the early spring of 1922, and the second being concerned with the budget as actually approved by the Reichstag in June of that year. The first was made by the statistical division of the League of Nations,<sup>1</sup> the second was made by a German economist and public official.<sup>2</sup> The order of the items in the League's estimate is the one uniformly used by the League Secretariat in such analyses, and purports to present the various charges in the order of their priority of claim. It needs hardly to be pointed out that in the case of Germany the treaty-fulfillment charges come first in point of priority. For convenience, however, they have been put at the foot of the table.<sup>3</sup> The analysis of the League is as follows:

<sup>1</sup> In its "Memorandum on Public Finance for 1922."

<sup>2</sup> DR. ARNOLD BRECHT in *Der Wiederaufbau*, Dec. 22, 1922, p. 385 ff. (The English edition of this review, *Reconstruction*, carries this article in part in the February number, 1923.)

<sup>3</sup> The item of treaty fulfillment expenditures in both of these analyses includes many sub-items which do not appear in the tables in Chap. III and Appendix F, since direct and indirect emergency appropriations of various sorts are included in the budgetary summaries by the German Government as due to the financial operations incidental to treaty fulfillment.

LEAGUE OF NATIONS ANALYSIS OF ESTIMATED GERMAN  
EXPENDITURES, 1922-23 \*

Items of Expenditure	Millions of Paper Marks	Percentage of Total Net Expenditures	
		(Exclud- ing Treaty Fulfill- ment)	(Includ- ing Treaty Fulfill- ment)
<b>For Domestic Purposes</b>			
Defence.....	4,695	4.7	1.6
Pensions.....	12,469	12.4	4.3
Subsidies for the reduction of food prices.....	954	0.9	0.3
Postal and telegraph services.....	2,456	2.4	0.9
State railroads.....	6,789	6.7	2.4
Contributions to subordinate politi- cal units.....	24,522	24.3	8.5
Interest on the public debt.....	27,947	27.7	9.7
Amortization of public debt.....	1,909	1.9	0.7
Miscellaneous expenditures.....	19,149	19.0	6.6
Total net expenditure exclusive of treaty fulfillment.....	100,892	100.0	35.0
Treaty fulfillment expenditure.....	187,531	....	65.0
<b>Total.....</b>	<b>288,423</b>	<b>....</b>	<b>100.0</b>

\* The figures are taken from the budget as introduced into the Reichstag.

Adapting slightly the analysis of the German economist,<sup>1</sup> we present his principal classes of appro-

<sup>1</sup> Dr. Brecht presents the appropriations in billions of paper marks and then converts them into gold marks, both according to the domestic and foreign purchasing power of the mark. Some of his actual totals exceed those in other computations, because he has

riations and the corresponding appropriations of 1914-15, the percentage of the total being also indicated.

COMPARISON OF GERMAN DOMESTIC EXPENDITURES, 1914-15 AND 1922-23 \*

Items of Expenditure	1922-23		1914-15	
	Millions of Paper Marks	Percentage of Total Disbursements	Millions of Gold Marks	Percentage of Total Disbursements
National debt operations.....	32,000	9.09	247	7.06
Pensions for all wars, additional allowances, etc.....	15,000	4.26	181	5.17
Care of families and persons damaged by the war—care of fugitives and the like.....	900	0.26	14	0.40
Army and navy.....	6,000	1.70	1,879	53.72
Police.....	1,900	0.54	(local in 1914)	
Social purposes (insurance of all classes, reduction of food prices, etc.)	7,600	2.16	63	1.80
Economic purposes, canals, subsidies to encourage production, ship construction, etc.....	2,400	0.68	29	0.83
Cultural objects (education and the like).....	100	0.03	2.3	0.07
Health and sanitation.....	110	0.03	0.7	0.02
Financial administration and tax collection.....	7,050	2.00	48	1.37
All other administrative expenditures.	6,300	1.79	62	1.77
Total estimated domestic expenditures	81,200	23.06	2,526	72.21

\* Account is not taken here of the allowances to the states, or the subventions to the railroads, posts, and telegraphs.

It will be understood, of course, that there have been a good many other studies, more or less com-distributed proportionately the allowances for increased cost of living.

plete, of the German financial policy in the last year or two, but the two classifications shown will serve to illustrate broad lines upon which expenditures are allocated. For one thing, these estimates were made for the most favorable fiscal period.<sup>1</sup>

*It is difficult to see how expenditures could have been greatly reduced.* The German government contends that its expenditures for domestic administration, public debt service, defence, and social purposes, are incapable of further reduction. But some German observers concede that numerous injudicious expenditures have been made, that leakage has occurred, and that many small savings could have been effected. For example, the economist quoted above is of the opinion that as much as 100 million gold marks could have been saved, a sum that is negligible in proportion to the total expenditures.

<sup>1</sup> A classification similar to that mentioned in the text was used in the official publication of the German Commonwealth's Statistical Office, entitled "The Economic Situation in Germany in Consequence of the War" ("Deutschlands Wirtschaftslage unter den Nachwirkungen des Weltkrieges," Berlin, 1923, p. 42). The analysis in this case is unfortunately based on another draft of the 1922-23 budget rather than on the figures of the approved appropriations used by Dr. Brecht. It there appears that of total appropriations amounting to approximately 328 billions, 102 billions, or 31 per cent only, went for non-treaty fulfillment purposes. This 31 per cent of the whole was further subdivided into the following ratios of allocation: 9.8 per cent in debt charges, 6.1 per cent in public service deficits, 5.2 per cent in assistance to fugitives and persons made wholly or partly destitute by the war and its consequences, 2.3 per cent in social charges (state insurance and the like), 2.8 per cent in revenue collection, 1.9 per cent for military purposes, 0.8 per cent for education, etc., 0.5 per cent for police purposes, and 2.1 per cent for general civil administration.

There is something in the contention of critics that the railroads and other public services could be run more economically if it were not for the rigid enforcement of the eight-hour law and the prohibition of piece-work; but they fail to take into account what alternative the government would have had to the issue of paper money in the form of unemployment grants if it had discharged 100,000 railroad employees. Unless it can be shown that these discharged government workers could be absorbed in private industry, the conclusion seems well founded that from the point of view of the budget the situation would not have been improved since the government would have had to support them with unemployment insurance.

Perhaps the strongest criticism levelled against the German government has been directed to appropriations which it has made from time to time for the completion of the Central German Canal and the construction of canals elsewhere in Germany, and the establishment of central hydroelectric plants. In this connection, it must be borne in mind that enterprises of this character which have been given the support of the Commonwealth government were all under way before the war began in 1914. The German justification for the encouragement of hydroelectric construction is the loss of fuel resources. In any event, the total appropriations for purposes of this kind do not represent as much as 1 per cent of the aggregate appropriations of the 1922-23 budget.

There are certain other types of expenditure to

which objection has been made, such as the cost of replacement of the shipping delivered to the Reparation Commission. These expenditures, which Germany classifies as due to the carrying out of the treaty, are in fact directed to the improvement of economic conditions in Germany. Those who complain of such outlays simply overlook the fact that if Germany is to restore her foreign trade and international earnings she must replace her lost merchant marine.

If we consider only the expenditures of a purely administrative character, it is apparent that no extensive savings can be effected in the handling of public obligations. The entire funded indebtedness contracted during the war (97.6 billions) was reduced by the end of September, 1922 to little more than 46 billions, the rest having been taken up in tax payments and the like. The great interest burden, of course, arises through the discounting of treasury certificates. No one can expect much to be saved here, certainly not so long as the budget remains unbalanced.

The reduction of personnel has been carried out under difficulties which increase as time passes, for either the government must continue to carry on its payrolls slightly incapacitated war veterans, superannuated civilians and others without whom it could manage to get along, or it must support them in idleness. If it be true that the government has granted additional pension payments so as to compensate for the diminished purchasing power of the currency, it is no less true that the relatively slight

saving it has effected by holding these supplements down in amount and voting them slowly has been quite wiped out by tax losses incidental to the loading down of all business establishments with the burden of a law requiring the employment of incapacitated veterans to the extent of 10 per cent of their total personnel. As for the cost of the executive departments, the judiciary, and the legislative bodies, we find that their total personnel for the fiscal year 1922-23 ranged in the neighborhood of 90,000 civil servants. The cost of these services could hardly have been reduced in view of the falling currencies. Only a fraction of the total administrative expenditures could be saved. In any event they constitute a very small percentage of the total cost of government.

The other expenditures call for little comment. The proportions of national resources dedicated to military<sup>1</sup> and police purposes and the like are small. The educational, charitable, and public health expenditures have increased slightly, as the central government has, at least in a measure, had to step into the place formerly occupied by private initiative, now wiped out in these fields.<sup>2</sup> Here and there minor services could have been consolidated, and appropriations discontinued.

<sup>1</sup> Interestingly enough, the German government points out that its expenditures on military and naval equipment would be less than they are, if it were not for the fact that its military establishment is now wholly on a volunteer basis.

<sup>2</sup> Over 9 million people are drawing benefits from public authority, two-thirds of them having no other source of support. *Frankfurter Zeitung*, April 22, 1923.



In short, the only items of expenditure where economy could and should have been introduced are unfortunately those which do not bulk large in the total of national expenditures. Those of major importance, such as interest on the public debt, pensions, contributions to subordinate political units—not to mention expenditures incurred in treaty fulfillment—could not have been materially reduced. We do not believe it possible that the aggregate reduction in the domestic expenditures could have at any time exceeded 10 per cent.<sup>1</sup> On the basis of the two analyses quoted above, this 10 per cent saving in domestic expenditures would be about 3 per cent saving in total expenditures, to be contrasted with a deficit on the 1922-23 budget according to the preliminary closed account of 78 per cent of total expenditures. The possibilities of economy as a remedy for Germany's financial collapse are clearly limited.

2. *Taxation Revenues.*—Could not Germany have paid larger taxes since 1919-20? In the brief analysis<sup>2</sup> of the tax policy of the Commonwealth since the Treaty of Versailles, we have pointed out that in 1919-20, an extraordinary income tax, an extraordinary capital increment tax, and, finally, a thorough-

<sup>1</sup> Cf. "The burden of taxation caused by the World War has borne heavily upon us all, and it has been the earnest desire of the government to reduce this burden to the minimum consistent with a proper functioning of the federal services. We have seen, however, that approximately two-thirds of the taxes collected go to pay certain fixed charges, over the expenditures of which there can be exercised little or no administrative control." President Harding's Message on the 1923-24 Budget, Washington, 1922, p. xiii.

<sup>2</sup> See Appendix G.

going capital tax taking as much as 60 per cent of the larger fortunes, were imposed. We have seen that in 1920-21 and 1921-22 all property, consumption, sales, and traffic taxes were increased. Finally, we discussed the tax program of the spring of 1922 which, on the one hand, smoothed out the difficulties between the Commonwealth and the states, and on the other, attempted to collect as large a proportion of the earnings of the nation as possible. As we look at the situation in the spring of 1923, it seems plain that the German tax system, in so far as the terms of the statutes are concerned, reaches every phase of individual human activity.

The general income tax, ranging from 10 for the first 400,000 marks to 60 per cent on 7,500,000 marks and over, is supplemented by the corporation tax of 20 per cent on taxable income, 25 per cent on profits, and 20 per cent on compensations of boards of directors. The corporation tax is in reality manifold. In addition to the minimum rate on profits, there are supplements rising progressively from 1 to 10 per cent according to the ratio of dividend to capital. The government therefore virtually acquires a part proprietor's interest in every corporate industrial, financial, or commercial concern. All property<sup>1</sup> is taxed—except for the usual charitable and like exemptions,—at 2 per mill for the smallest fortunes up to 30 per mill for the largest; while all property or income increments are to be taxed at

<sup>1</sup> The land and building taxes and professional license fees which continue to be collected by the states and local tax districts constitute additions to the federal taxes.

rates of from 1 to 10 per cent,—a peculiar provision intended to compensate for the fall in the currency.<sup>1</sup> Over and above this taxation rests the obligation to participate in the compulsory loan. The inheritance tax ranges from 3½ to 70 per cent. Then, there is the whole series of transfer taxes, ingeniously contrived to follow up sales and all classes of property transfers in so far as they are intended to defraud the government. The issue of negotiable instruments is taxed from ½ of 1 per cent (minimum) to 7½ per cent and every transfer thereof is taxed. Passenger traffic is taxed from 10 to 16 per cent, and freight uniformly at 7 per cent of the invoice value. Insurance and self-propelled vehicles, horse races, and lotteries are all taxed heavily.

The indirect taxes on a number of the primary articles of ordinary use are many times as high (in real values) as they were before the war. By the beginning of 1923 the Reichstag had adopted an *ad valorem* basis for most of these consumption taxes on beverages, tobacco, sweetening materials, etc., that is, the tax applied was a percentage of the price paid by the consumer. The two most important of these imposts were the 40 per cent coal tax and the general sales tax. The latter, it should be realized, is collected at every step in the process of production, so that the same article going through different steps of fabrication may involve the payment of the sales tax at least a half dozen times. Analogous to this tax is the luxury tax, closely allied with many

<sup>1</sup> Income from interest and dividends is no longer taxed (May, 1923) for the cost of collecting such a tax exceeds the yield.

of the tariff schedules. All export trade is subject to a universal export tax. Customs duties on imports are calculated in gold values as determined from week to week on the basis of dollar exchange.

The successful administration of so comprehensive a tax program must naturally depend upon the uninterrupted functioning at a high rate of velocity and a minimum of friction or disturbance of the entire economic machinery of the nation. To have persuaded a nation of 60 millions of people, rent with class and party strife, of the necessity of such a program, was in itself a task that ordinarily would have consumed a long period of time. To have succeeded in fully realizing this program would have required not only time and freedom from external control, but the instilling of confidence on the part of the people in the resolute earnestness of the German government, as well as the possibility of ultimate release from such a burden. These prerequisites remain (June, 1923) conditions contrary to fact. As we have indicated in the preceding section, the German government has been only partially successful in carrying out this program.

*The proportion of the national income absorbed by taxes in Germany compares favorably with that of other countries.* The rates of taxation, as we have already seen on page 187, indicate the intention of the government to raise large amounts by taxation. Now, if we are to ascertain the actual results of the government tax program, it is necessary to ascertain the proportion of the national income absorbed in taxation. In order to simplify matters, we shall

consider the single fiscal year 1921-22, the year in which the currency was most nearly stable.

In the nature of things, accurate estimates of the total national income of Germany in 1921 are impossible. It is possible, however, to arrive at a rough figure by the following process. For the year 1913, Dr. Helfferich's computation shows a total national wealth of 300 billion gold marks,<sup>1</sup> and an annual production, or gross income, of 40 billion gold marks—about 13 per cent of the national wealth. This computation is generally regarded as the most reliable estimate of pre-war German wealth and income. Now, as a result of the war and the years that have followed, this total national wealth has been very materially reduced, due to the following causes.

1. Germany has lost in territory and population about one-sixth of her productive capacity. The loss in area was only about 13 per cent—one-eighth—but it was an area which was particularly rich in resources. It was better than average for agricultural purposes, and industrially; with the exception of the Ruhr, it was by far the richest area Germany had. The cession of Alsace-Lorraine and the Saar cost Germany 74 per cent of her iron ore supply and 26 per cent of her total pre-war coal supply. The loss of this territory also took from Germany 40 per cent of her total blast furnaces. The later cession of Upper Silesia to Poland reduced the German mineral and industrial resources of Silesia by more than two-thirds.<sup>2</sup>

<sup>1</sup> DR. KARL HELFFERICH, "Germany's Economic Progress and National Wealth," 1913, p. 123.

<sup>2</sup> For detailed figures, see VON STOEPHASIUS of the Upper Silesia

2. Germany suffered heavy losses due to depreciation of plant and equipment during the war period. M. Tardieu, in his book "The Truth about the Treaty," written in 1921, estimated this item at 43 billion gold marks. This estimate may now be regarded as high, in view of the repair work that has occurred during the last year or two. 25 billion is a better figure for the early summer of 1923.

3. There was considerable damage caused by the Russian invasion of East Prussia. This was estimated by M. Tardieu at 2 billion gold marks.

4. Germany has lost during the war and since practically all of her foreign investments, as shown in Chapter II. The net value of these investments was 20 billion gold marks; allowing for the estimated 4 billions of bank balances accumulated abroad, we would have a net loss of 16 billion. But since we found that German citizens have sold domestic securities and property estimated to aggregate a value of 8 billion gold marks, Germany may be said to have lost 24 billions in this connection.

5. Germany has sustained in fulfillment of the treaty,—exclusive of securities (2 billions) and property liquidated in foreign lands (10 billions),—losses amounting to approximately 14 billion gold marks.<sup>1</sup>

6. Large stocks of commodities and supplies of every kind were used up during the war and have Chamber of Commerce. The Coal and Metallurgical Industry of Upper Silesia as Affected by the Geneva Decision and the German-Polish Treaty, *Manchester Guardian Commercial*, Sept. 7, 1922, p. 430.

<sup>1</sup> See detailed analysis in Chap. III and Appendix F.

not been replaced. Tardieu estimated the amount at 20 billion gold marks. In view of the known facts as to the increasing impoverishment of the masses of German people during 1922-23, there is no ground for believing that stocks and supplies have been replaced. Rather there would seem to have been further reductions. We may therefore conservatively place the amount of this item at 20 billion gold marks.

Summarizing these losses, we have the following figures:

	Billions of Gold Marks
Loss of one-sixth of productive capacity.....	50
Depreciation of plant and equipment.....	25
Damage caused by Russian invasion.....	2
Losses of foreign investments under treaty.....	24
Other treaty fulfillment losses.....	14
Loss of stocks of goods.....	20
<b>Total (approximately).....</b>	<b>135</b>

It would appear therefore that the wealth of Germany, as measured in 1913 gold values, was by 1921 reduced from approximately 300 billions to something like 165 billions. The world is, however, not so much interested in the nominal value of German wealth as in the annual earning capacity of the German nation. In 1913 the wealth was 300 billions, and the annual gross income 40 billions. If the rate of return had been the same in 1921 as in 1913 the gross income in that year would have been approximately 22.5 billions. But the rate of

return could not possibly have been the same as in 1913, in view of the greatly reduced volume of German industrial and agricultural production, as shown in Chapter IV.

On the basis of all the estimates available, it does not appear that the rate of production in 1921, notwithstanding the various attempts artificially to stimulate industry, could possibly have been in excess of 75 per cent of the 1913 rate. This means that the total production in 1921 could not have exceeded 17 billion gold marks. These gold mark figures, it will be observed, are computed on the 1913 price basis. The reader should clearly bear in mind in this connection that if the nation's rate of earning has fallen off by one-fourth, the capital value of German wealth has been reduced in similar proportion. The 300 billions of aggregate wealth at the end of the pre-war period represent calculations of capital values based upon existing earnings, and, no doubt, upon confident expectations of increases in future earnings. In arriving at the figure of 165 billions as the nominal wealth in 1921, no allowance was made for either the reduction in actual earnings or the greatly changed industrial outlook. On the basis of the reduced rate of earnings in 1921, the 165 billions become something less than 125 billions. It goes without saying that this is a very rough estimate; but it is the best that can be made. It demonstrates beyond question that German wealth and German income had both been greatly diminished by the year 1921. By the summer of 1923, they must have shrunk still more.



*In 1921 German per capita consumption was only about five-eighths that of 1913.* Before attempting to convert these figures into 1921 paper mark values, we must pause for a moment to see what light the present computation throws on the question of the German standard of living. Helfferich estimated the total consumption of the German people in 1913 at about 32 billion gold marks.<sup>1</sup> Since the population in 1921 was about 7 per cent less than in 1913, it is clear that if the population consumed in that year 29.8 billion gold marks, the standard of living would be as high as it was in 1913. But with production only 17 billion gold marks, it is obvious that the standard of living in 1921 was less than three-fifths as high as in 1913,<sup>2</sup>—unless indeed consumption was in excess of production. In view of the fact that the total imports since the war have been in excess of the total exports (with almost no invisible credits with which to pay for the import excess), there is good reason to believe that consumption has been somewhat in excess of production. Germany has clearly been living on her capital. This may be contrasted with the 1913 situation when total production exceeded consumption by approximately 8 billion marks.

We must now convert the 17 billions of gold marks (1913 value basis) into 1921 paper mark values. The first step is to multiply 17 billion by 1.5, since the world gold price level in 1921 was approximately 50

<sup>1</sup> *Ibid.*

<sup>2</sup> Since 1921 the standard of living has been reduced still further.

per cent higher than that of 1913. This gives a total gold mark value of 25.5 billion marks. The next step is to convert the 25.5 billions computed on the basis of the world gold price level into paper-mark values within Germany. During the fiscal year, April 1, 1921—March 31, 1922, one gold mark was on the average the equivalent of 34.3 paper marks, as shown by exchange quotations on New York. But it is necessary to take into account the decided lag in the adjustment of German paper mark prices and incomes. In accordance with the formula given in Appendix G, page 368, we must divide this 34.3 by 1.81 to convert gold values into internal paper mark values. This gives a ratio of 19 paper to 1 of gold. Multiplying 25.5 billions by 19 gives 485 billions.

In the table on page 159, it will be seen that the central government in the year 1921-22 received from other sources than borrowing 91 billion paper marks. In addition to this, the revenues raised by the various states and municipalities are estimated at approximately 20 billion paper marks, making a total revenue derived from other sources than borrowing<sup>1</sup> amounting to 111 billions, or about 23 per cent of the total national income.

Some additional light is thrown on the German fiscal situation by converting these total income

<sup>1</sup> In the case of the federal government upwards of 90 per cent of this income was derived from direct and indirect taxes. The remainder consists of fees, royalties, public domain income, etc., which are in effect indirect taxes. In the case of the states and municipalities, the latter sources of income play a much more important rôle.

figures into terms of per capita income. In 1913 the German national income was 40 billion gold marks for 67 millions of people. This amounts to approximately 600 gold marks, or \$143, per capita. The per capita income in Germany even before the war, owing to the pressure of population against natural resources, was considerably less than that of France and that of Great Britain. The *total* wealth and income of Germany were greater than those of France, but had to be divided among *sixty-seven* millions instead of *forty* millions of people.

The League of Nations computed the national income for Germany in 1920 at \$103 per capita; for France, \$265 per capita; and for Great Britain \$435 per capita.<sup>1</sup> Because of the business depression and the great fall in prices in Great Britain and France, these totals would have to be reduced considerably in 1921. Our estimate of 25.5 billions of gold marks as the gold value of the total German income in 1921, gives 409 gold marks, or roughly \$100, per capita. Derived by very different methods of computation, our figure checks closely with that of the League of Nations.

In terms of paper marks, the 485 billions of income of the entire German nation during the fiscal period ending March 31, 1922, equal 7,770 paper marks per capita. This may be compared with an estimate of the Brussels Conference at the beginning of 1920, of 3,900 paper marks; with an estimate made in the year 1921 by Dr. Arthur Heichen in the *Pester*

<sup>1</sup> League of Nations Financial Conference, Brussels, 1920, paper IV, p. 151.

Lloyd (June 5, 1921) of 4,451 paper marks; and with an estimate made in August, 1921 by J. M. Keynes, of 5,000 paper marks.<sup>1</sup> Keynes was basing his estimate upon the value figures of August, 1921, while ours are based upon the average for the year ending March 31, 1922. Since paper-mark prices and incomes were more than doubled during the second half of that fiscal year, our estimate, derived by a very different method, checks closely with that of Keynes.

A tax rate equal to 23 per cent of the national income in Germany may be compared with about 18 per cent in France, close to 30 per cent in Great Britain, and approximately  $14\frac{1}{2}$  per cent in the United States—including, of course, federal, state, and local taxes.<sup>2</sup> In view of the fact that the German per capita income is lower even than that of France, it will be seen that the *burden* of taxation has been comparatively heavy in Germany.

We have made this computation showing the percentage of the national income taken by taxes in Germany simply for the light that it throws upon the contention so frequently made that the German government has made no real taxation effort. We feel it necessary to add, however, that all estimates of the relation between taxation and national income in Europe under the conditions prevailing since the war are anything but satisfactory. In Germany, for

<sup>1</sup> "A Revision of the Treaty," p. 87.

<sup>2</sup> These rough estimates are from different sources. The estimates for France and Great Britain are derived from the League of Nations' data for 1920. The estimate for the United States is based on a study made by the National Industrial Conference Board (Report 55, p. 35).

example, much of the money paid to the government in taxes imposes no direct restriction upon the consuming power of those who pay the taxes. The funds are commonly derived from inflation; that is, the tax is added to the selling price of the commodity, the money with which to finance business at the resulting higher prices being borrowed from the banks. The process is very similar to that by which the excess profits tax in the United States was paid during the period of rising prices from 1917 to 1920. In these circumstances the real burden of taxation is less onerous than it seems.

Such considerations might lead one to conclude that the percentage of the national income taken by taxation in Germany may well have been much below 23 per cent. But, as an offset, there is an enormously heavy *indirect* tax not shown in our computation at all which is attributable to the depreciation of the currency. The effects of rapid currency depreciation upon all classes whose monetary incomes cannot be adjusted upward as fast as prices rise is simply appalling. Under such conditions, who can decide with any confidence whether the rate of taxation is 20, 30 or 40 per cent? All that one can be reasonably certain of is that the German people taken as a whole have directly and indirectly sustained a heavy taxation burden.

*In the best post-war years the German budget did not even approach a balance.* German expenditures in the fiscal year 1921-22 were 244 billion marks; the receipts from other sources than borrowing were 91 billion marks; and the deficit was 153 billion

marks. If the German government could have doubled revenues and cut expenditures by 25 per cent, the budget would have been balanced. That is to say, it would have balanced, provided reparation payments were *not* made in full, which was in fact the case during the fiscal period in question.

Since the summer of 1922 the German taxation program, as we have already seen, has broken down in consequence of the demoralization of the currency. This does not mean that the tax burden has been lightened; on the contrary, as we have pointed out, the inflation of the currency, which we are discussing in the next chapter, has itself constituted an almost confiscatory indirect tax, of the most inequitable and socially destructive character. This in turn has resulted in a lessening of the national productive capacity and of the aggregate income of the German people.

The German budgetary story from 1914 to 1923 may be briefly summarized as follows. (1) During the war, for reasons of political expediency, taxes were kept relatively low. (2) In the fiscal years 1919-20 and 1920-21, demobilization, internal reconstruction, and treaty fulfillment required enormous expenditures to be made *at once*, while the necessary reorganization of the fiscal system delayed the collection of taxes. (3) In 1921-22, the tax program was more effective, perhaps as much as one-fourth of the national income being taken by the government. In spite of this, the budget was still far from balanced, for the increased outlays under the terms of

the London ultimatum quite offset any gains otherwise made. (4) In 1922-23, the almost uninterrupted fall of the currency completely demoralized the fiscal system.

We do not doubt that there has been evasion of taxes in Germany, and we incline to accept the opinion of competent German critics that their government's fiscal policy has not been as vigorously administered as might have been possible even under the conditions which actually have obtained. Nevertheless, we are convinced that at no time since 1919 has it been possible to increase taxes and reduce expenditures sufficiently to balance the budget and provide a surplus for reparation payments.

## CHAPTER VI

### THE GERMAN MONETARY SITUATION

THE world has never witnessed a more extraordinary inflation of currency than that in Germany since the war. Even the Russian paper money experience of the Soviet régime has not surpassed the German "debauch." The issue of irredeemable paper currency, which had its beginnings during the war, was rapid during 1919-20. It was somewhat slower during the first half of 1921, again very rapid until the middle of 1922, and since then the expansion has been at an almost unbelievable rate, following the law of geometric rather than of arithmetic progression. The table on page 202 tells the dramatic story of disaster.

It will be seen that in May, 1923, the rate of increase was over 250 billion marks per week, or 1,000 billion marks per month, or 12 trillion marks per year,—without making any allowance for the geometrical rate of progression. What is the explanation of so amazing a phenomenon?

#### I. CAUSES OF GERMAN CURRENCY EXPANSION

German currency expansion immediately following the war was due to the same general causes that produced inflation in other European countries,



## GERMAN CURRENCY INFLATION

(In millions of marks)

Date	Notes in Circulation	Gold Reserve	Ratio of Gold to Notes
1913, Average.....	1,958	1,068	0.55
1918, December 31.....	22,206	2,281	.10
1919, December 31.....	35,723	1,109	.03
1920, December 31.....	66,806	1,092	.016
1921, June 30.....	75,321	1,092	.014
1921, December 31.....	113,639	995	.009
1922, June 30.....	169,212	1,004	.006
1922, September 30.....	316,870	1,005	.003
1922, December 31.....	1,280,095	1,005	.0008
1923, January 31.....	1,984,496	1,005	.0005
1923, February 28.....	3,512,787	1,005	.0003
1923, March 29.....	5,517,920	1,005	.0002
1923, April 30.....	6,545,984	920	.00014
1923, May 31.....	8,513,716	758 *	.00009

\* In recent months approximately one-fourth of Germany's gold has actually been outside of Germany, being used as collateral for foreign credits.

plus certain particular causes. The causes which affected all European countries more or less alike were, first, the post-war trade boom, and, second, budgetary difficulties. The trade boom of 1919-20, accompanied by rapidly mounting prices, naturally required a steadily expanding volume of currency with which to finance business.<sup>1</sup> Similarly, the slowing down in the rate of currency expansion in the first half of 1921 was largely due to the commer-

<sup>1</sup> We are not here concerned with the controversial question as to which came first, the increase in currency or rising prices. All we are interested in for present purposes is the fact that rising prices and expanding currency go together.

cial depression in Germany at that time, just as in other countries, including the United States, depression of industry was accompanied by a reduction of outstanding currency.<sup>1</sup>

The budget difficulties which led to the issue of paper currency immediately after the war have been discussed in the preceding chapter. We may merely repeat that the new and weak Social Democratic government in Germany was confronted with an extraordinarily difficult situation. Either unemployment doles or work had to be provided for the returning armies, lest acute social unrest, if not outright Bolshevism, develop. Subsidies were granted with a view to stimulate industry and provide employment, and many government agencies took on extra employees in order to take care of those who could not obtain employment elsewhere. Enormously high prices had to be paid for the raw materials and supplies required for the railroads and other government enterprises. The effect upon the budget was disastrous.

At the same time, there were, as we have pointed out, inevitable delays in Germany, as elsewhere, in getting the new and complicated taxation machinery into effective working order. Accordingly, Germany could no more be expected to straighten out all of her financial problems immediately than could any of the other continental belligerents. In general, the post-war fiscal difficulties on the continent

<sup>1</sup> The reason why there was not an actual decrease of currency in Germany during this period is that commercial or business deflation was more than offset by fiscal or government inflation.

were practically insuperable. Frank A. Vanderlip wrote, after conferring with practically every finance minister in Europe:

These finance ministers are not fools; they are in the main able, clear-sighted, intelligent men. . . . They have had no other course open to them. I am convinced that the same thing would have happened in any community faced with the same circumstances. They could not raise enough money from taxation or from loans to balance their budgets. Their income from all possible sources was less than their necessary expenses. . . . I have come to see that [to advise them to stop the inflation] is just about as practical as it would be to advise a man afflicted with insomnia, who had been sleepless for a week, that if he went to bed earlier and slept soundly he would wake up in the morning feeling better.<sup>1</sup>

*Germany's post-war financial problem was particularly difficult.* In addition to the ordinary fiscal requirements, the German government was also under the necessity of finding funds with which to meet large external obligations in connection with the fulfillment of treaty obligations. First, there were heavy expenditures in connection with restitution and reparation payments. Second, the clearing-house settlement plan also imposed large obligations upon the German treasury. We must recall that, as the clearing system worked out in practice, all the countries which had net balances due from Germany on account of pre-war commercial debts presented their claims, while all those countries which would owe Germany through the clearing houses were naturally in no hurry to set up clearing systems.<sup>2</sup>

<sup>1</sup> "What Next in Europe," 1922, pp. 53-4.

<sup>2</sup> See Appendix E for discussion of the clearing system.

The primary difficulty from the point of view of the Minister of Finance during the years 1919-20 was simply this: treasury obligations for ordinary administrative expenditures, for extraordinary demobilization expenditures, and for the meeting of foreign obligations arising out of the peace settlement gave to expenditures a tremendous bulge that could not possibly be matched by a similar bulge in taxation revenues. Most of these expenditures, moreover, were for relatively unproductive purposes—some of them, notably those made in foreign countries, were wholly unproductive from the German point of view. Even had there been no subsidies to German industry and no padding of government payrolls and no outlays for unemployment insurance, it would still have been impossible for Germany to balance her budget during the first year or so following the war.

*When a nation does not succeed in balancing its budget, the printing of paper money is sooner or later inevitable.* We say sooner or later for the reason that Germany might conceivably have procured *for a time*, through the sale of bonds, the funds necessary to meet the domestic expenditures which could not be covered from taxation receipts. Her credit in foreign countries was practically non-existent; it is clear that the bond issues would have had to be sold to Germany's own citizens. It may be that had Germany undertaken early in the day to finance her budgetary deficits through the sale of bonds to her people rather than through the issue of paper money, she could have held her monetary expansion some-

what in abeyance. The success of such a policy, however, ought not to be overestimated. Selling a huge voluntary loan at home would have required a much greater degree of certainty as to the future tax policy of the government and the definitive figures of the indemnity, than has ever obtained in Germany since 1919. As for forced loans, their first effect is to unsettle the currency.

*Borrowing through the issue of bonds only postpones inflation.* In view of the fact that every bond issue gives rise to new interest obligations, thus adding to subsequent revenue requirements; it would not have been possible by this method of covering deficits to avoid the ultimate resort to paper money. The reader must clearly appreciate the point that every new bond issue adds to the annual interest charges that the government must meet, and thus steadily augments the fiscal burden.<sup>1</sup> France, as we have indicated, has followed this method and, notwithstanding the fact that France has received some cash from Germany as well as loans from foreign countries, she has already reached the point where the method of meeting treasury deficits by issuing bonds has practically run its course. The time appears not so very far distant when the interest charges alone on the French public debt will absorb the entire revenue from taxation.<sup>2</sup>

<sup>1</sup> The government also pays interest on bills discounted with the Reichsbank in exchange for non-interest bearing Reichsbank notes. But the rate was only 5 per cent until the middle of 1922.

<sup>2</sup> For an analysis of the French fiscal problem, see H. G. MOULTON, *Stable Money Abroad*, in *Proceedings* of the Academy of Political Science, January, 1923.

It was distinctly unfortunate nevertheless that the German government did not attempt to sell bonds instead of resorting to the issue of paper currency. Although the issue of bonds could not possibly have prevented an eventual resort to the printing press, it might have delayed the fatal day and would for a time doubtless have improved German credit through creating a much better impression in the world at large. Having said this much, we must add that we do not believe the general demoralization of the German fiscal situation could thus have been delayed for more than a year or two at the most.

*The raising of funds from domestic bond issues could not create foreign balances.* This point needs to be clearly appreciated if the practical necessity of resorting to paper currency issues is to be understood. Germany was continually under pressure to procure *foreign* currency with which to buy necessary imports and make reparation payments; and this could not be procured by domestic bond sales alone. The bond-issue method of acquiring funds with which to make external payments is effective only if the bonds are sold abroad and paid for in foreign currencies. Foreigners were unwilling to buy German bonds, but willing and eager to buy non-interest-bearing German currency,<sup>1</sup> either with a view to speculate on a future improvement in exchange, or in order to acquire marks with which to pay for German goods and property. The German government, therefore, in order to acquire funds with which to meet foreign payments, had no

<sup>1</sup> See statement by Rathenau on p. 86.

practical alternative to the policy of interposing as few obstacles as possible to the ready replenishment of the supply of currency intended for export.

## II. WAS GERMAN INFLATION UNAVOIDABLE?

In Chapter III attention was called to the fact that many people insist that the resort to paper money inflation in Germany has been the result of a deliberate policy designed to bankrupt the country financially and thus to make reparation payments impossible. We are now prepared to consider how much plausibility there is in this charge.

In the first place, we have seen that immediately after the war there was no practical alternative to inflation in Germany,—the pressure on the government to obtain funds by one method or another being greater than in almost any other continental country. In the second place, the pressure did not cease with the completion of demobilization. There was a continued necessity for raising extraordinary amounts of cash in consequence of the necessity of making reparation payments abroad. Once more let it be clearly understood that if bonds could not be sold abroad, paper money had to be sent abroad either by the government or by private citizens.

What chance had the German government to postpone, until the taxation system was in better working order, the payment of any of the numberless claims for cash disbursements that were thrust upon it? The deliveries of food and other materials to the armies of occupation had to be paid for at

once, and the paper-mark cash deliveries were imperatively demanded. The workmen engaged in manufacturing articles intended for reparation deliveries and the coal operators and laborers furnishing coal for the same purpose, all had to be paid promptly. The foreign clearing offices had to be given cash, and lest she bankrupt her citizens whose debts were thus settled, Germany had also to assume the loss on exchange. Wages of railroad employees and official salaries generally had to be advanced as the level of prices rose,—at least tardily advanced. The shipping interests had to be reimbursed, without loss of time, for the ships handed over under the treaty.

All of these outlays had to be met promptly; suspension or delay was impossible. How long would any German government have lasted which posted the sign over its treasury

ALL PAYMENTS SUSPENDED UNTIL THE ENTIRE FISCAL SYSTEM IS REORGANIZED AND REVENUES FROM TAXATION ARE AVAILABLE
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What would have been the effect upon domestic industry? What would have been the effects upon reparation payments? How would such a policy have been regarded by Allied statesmen?

The German government is, moreover, not altogether blameworthy for having spent money since the war on canal construction, high tension electrical trunk lines, and similar productive purposes. If Germany is to produce the vast amount of transferable wealth necessary to make reparation pay-



ment, she must make every effort to have her industrial machinery produce as much as possible with the least possible outlay of energy and material. If a great central power plant would increase the efficiency of a given manufacturing district, the German government was justified in investing the money and effort to set it up. The government was compelled to take such action, if it meant honestly to carry out the treaty. Anyone who complains that the German government has spent money with a view to stimulate industrial development simply fails to see that without an increased output and an increased export of goods Germany could not possibly pay the sums demanded. Only in so far as it can be shown that the internal improvements that were undertaken did not increase productive and exporting capacity can they be denounced as detrimental to Allied interests.

*Paper-currency inflation once fully under way cannot be checked.* The history of paper currency inflation, as, for example, in the American colonies in our revolutionary days, in France following the revolution of 1790, in the American Confederacy, and since the Great War, in Russia, Austria, Hungary, and elsewhere, shows that once under way it is practically impossible to check the devastating process.<sup>1</sup> The primary reason is that as prices advance wages and salaries must be raised and costs

<sup>1</sup> It may be checked for a time by a business depression or by loans; but unless the budget can be balanced the arrest of inflation can be only temporary. The same thing is true of the depreciation of the foreign exchanges.

of every kind increased. Hence, the more prices rise, the greater the volume of currency that is required. Indeed, it is a striking phenomenon that the more rapid the currency inflation the greater appears to be the "shortage" of currency,—this for the reason that each new advance in prices, wages, etc., calls for a new increase in the supply of money required for the conduct of business. German employers, including the government, must of necessity advance wages each month in proportion to the rise in prices as shown by an index number,—the alternative being political if not social revolution. Thus whatever may be the initial causes of price advances, successive increases in wages, salaries, and raw materials' prices soon become intricately inter-related, giving rise to what is commonly known as the vicious spiral of rising prices, rising wages, rising costs, rising prices, and so on.

*Rapid inflation completely disorganizes the government budget.* Once inflation has gained momentum it becomes utterly impossible to increase taxes and reduce government expenditures, and thereby obviate the necessity of issuing additional supplies of paper currency. The budgetary discussion in the preceding chapter has indicated the disastrous effects of the rapid inflation of 1922 upon the German budget. To understand why ordinary taxes cannot be increased in a period of rapid inflation, one needs only to reflect that inflation is itself an indirect form of taxation of the most ruinous kind. Nearly all classes find their real incomes tremendously reduced by virtue of the fact that monetary

incomes do not keep pace with swiftly mounting prices. Even with wage adjustments made monthly, labor is always somewhat behind in the race between wages and prices. Similarly, the business man, as we shall presently see, finds his real profits steadily falling in purchasing power, however large they may appear to be when measured in terms of paper currency.

*Moderate or "controlled" inflation may have been regarded as beneficial to trade and industry.* The only ground for believing that the policy of inflation may have been in any sense deliberate lies in the possible belief of German leaders that some inflation was necessary if trade and industry were to flourish sufficiently to permit the expansion of exports and the payment of reparation obligations. In the first half of 1921, German industry, like that of other countries, was suffering from depression. The reparation ultimatum of May, 1921 made a recovery of trade—particularly foreign trade—absolutely imperative. There is considerable reason for believing that Dr. Rathenau, then Minister of Reconstruction, together with other leaders both in the government and out regarded moderate inflation as necessary if reparation was to be made. They saw clearly that export trade must be stimulated, and they doubtless believed that gradual inflation, with depreciating exchanges, would stimulate industry and give Germany a competitive advantage in foreign trade. A "forced draft," as it were, had to be applied to industry if a rapid expansion of exports was to occur. This is of course familiar doctrine. The

United States resorted to inflation during the war when we were making huge shipments of goods to the Allies on credit. And there are now many exponents of "controlled" inflation in France and in England, as well as in the United States.

But all this is far from saying that the Social Democratic government of Germany, in league with profiteering industrialists, deliberately set out on a policy of wholesale inflation for the express purpose of bankrupting the country. Before one concludes that the German leaders actually desired to wreck the entire financial system, he should bear in mind what such a catastrophe involves. It means (1) the almost complete ruin of the middle classes and the practical destruction of all professional, educational, and scientific activities; and (2) a great reduction in the purchasing power of the laboring masses, accompanied by acute social and political unrest. Can anyone seriously argue that in the light of Russia's experience this policy would have been regarded as a wise one for either the government or the industrialists deliberately to pursue?

There are many who assert that the German industrialists have been willing to see these great classes sacrificed for the sake of their own profits. The argument is that the rapidly rising prices mean vast profits to business men at the expense of the masses of the people. In other words, one is asked to believe that the way for the business men of a nation to get rich is to destroy the purchasing power of the only people to whom they can sell goods.

Everybody recognizes that German foreign markets have not been good; and if at the same time the process of inflation destroys domestic markets it is utterly absurd to suppose that the inflationary process really enriches the industrial and merchant classes; no one can get rich through a policy of impoverishing his customers.

*The plain truth is that the business interests have grown poorer along with everybody else.* The huge profits are only *paper profits*. A merchant buys a stock of goods for 100,000 paper marks, and sells it for 150,000 paper marks, making paper profits of 50 per cent; but before he can replenish his stock the cost of the same quantity of goods has risen to 175,000 or to 200,000 marks, thus diminishing his actual tangible wealth. An importer pays 20,000 marks for raw materials, and sells the finished product for 60,000 marks; but before he can convert these profits into new raw materials the price has advanced to 75,000 to 80,000 marks. Although making enormous paper profits, nearly all business men have been steadily growing poorer in terms of actual tangible wealth. The so-called prosperity and huge profits are wholly illusory. The one sensible use that one could have made of the paper profits is the one so often condemned by outsiders, namely, their immediate utilization in the improvement of plant and equipment. Whatever mistaken notions there may at one time have been with reference to the economic value of inflation, the disastrous consequences to every class have long since been perfectly clear to the German industrialists themselves.

It is urged, however, that through inflation the financial interests have succeeded in ridding themselves of the vast majority of their bond and mortgage obligations, thus enriching themselves and enhancing their control over industry at the expense of the German people. Underlying this contention is the baseless assumption that before this inflation process began German industry was not owned and controlled by the interests but by the German people in general. If public bonds be left out of account, to what extent has any evidence been adduced to show that the ownership and direction of industry was in former days largely vested in other than the financial and industrial groups? The truth is that in few countries was the ownership and control of industry more highly concentrated than in Germany. Necessarily the heaviest losers through the depreciation or liquidation of corporate indebtedness have been the industrial and financial interests themselves.

*The land-owning classes derive only temporary benefits from inflation.* It has often been pointed out that the owners of mortgaged farms benefit enormously as the result of inflation, since the great rise in prices results in an almost automatic liquidation of the mortgage indebtedness. The proceeds from the sale of a cow, or even a chicken, in time become sufficient to pay off a mortgage of many thousands of marks. This is made possible, of course, by virtue of the fact that the mortgage was originally made simply in marks, without specifying that payment should be made in gold.<sup>1</sup> The principal, therefore,

<sup>1</sup> Even in those cases where there had been specific mention that

remains fixed in amount, notwithstanding the fact that it may be paid in paper marks. It would seem, therefore, that the golden—or rather the paper—age for the distressed farmers had arrived.

But, unfortunately, even the agriculturist comes to grief in the end, since the prosperity of the farmer is dependent upon the prosperity of the city people who are the only purchasers of surplus agricultural produce. We have stated in a previous chapter<sup>1</sup> that the reduction in agricultural output in Germany and in other European countries is partly attributable to the lack of profitable markets. The more the masses in the cities are impoverished in consequence of currency demoralization, the smaller and less profitable become the markets for the agricultural surplus. Agriculture is dependent upon industry just as truly as industry is dependent upon agriculture. Although in a period of profound economic disorganization those engaged in agriculture may escape starvation and retain some measure of economic security, they cannot maintain profit margins and they cannot maintain previous standards of living. We do not contend that in a period of inflation some classes do not lose more than others; we merely insist that all lose, that none in the long run can gain.

The complete story of the inflationary movement in Germany may be briefly summarized. At first

the obligation would be payable in gold, the provision lost its binding force after August, 1914, when all gold obligations were declared to be payable in other legal tender.

<sup>1</sup> See p. 132.

the flow of manufactured money to the channels of production gave a decided stimulus to output—vitalizing the industrial organism like new blood circulating through the body. Later, however, a state of fever inevitably developed, which, while it did not for a time fully offset the tonic effects of the steady flow of new money through industrial channels, gradually began to undermine the whole system, morally as well as physically. As time proceeded, the blood itself grew thinner and thinner, and the consuming fires of the fever burned steadily brighter. If one may personify the German state, one may say that that individual is now suffering simultaneously from pernicious anæmia and delirium tremens. Production has recently declined, unemployment is increasing, and fundamental economic and social disintegration is in progress. Repairs and extensions to plant and equipment may still be made in the hope of escaping taxes, or because, everything considered, the loss entailed is less when funds are put into real estate development than when used for any other purpose except immediate consumption. No German business man, however, knows whether or not he is making profits; it is impossible any longer to compute day-to-day earnings in foreign values with any degree of accuracy; and, even if one could, by the time the computation was finished it would have become obsolete. When the price of a meal can increase 10 per cent between the first and second courses, it is clearly difficult to keep pace with price indexes. It is not surprising that the national motto of Germany has



become: "Save, and you are lost; spend freely, speculate, or buy foreign currencies, and you win." No class in society can under present circumstances make provision for old age or effect savings for the rainy day.

By no means least serious of the consequences of such a situation is its effect upon the different groups in society. As has been well said, it creates a country divided into three classes, "one that suffers silently and goes under in decency; another that profiteers cynically and spends recklessly; and a third that writhes in desperation and wishes to destroy in blind fury whatever is left of a government and of a society that permits such conditions." Is it seriously to be contended that either the German government or the German industrialist class has deliberately sought to bring about such an internal situation? And this with the experience of Russia and Austria before them?

*Apparently the worst is yet to come.* With each succeeding month the disastrous effects of inflation become more pronounced. Eventually, this paper will either become utterly worthless, because no one will longer accept it in exchange for goods, or it will have to be redeemed at some such vast ratio as a million of paper to one of gold. This also means that it will be practically worthless, for it usually costs more to send the paper to the treasury for redemption than it is worth. This was the case, for example, with the American revolutionary currency which Hamilton agreed to redeem at the ratio of 100 paper to one of gold.

Assuming the obliteration of this ocean of paper, what next? A return to the gold standard would no doubt be attempted; but its successful inauguration under the chaotic conditions prevailing would be extremely difficult. The statement so often heard that all of the outstanding paper currency could be redeemed in gold at current rates of exchange, thus restoring sound financial conditions, is simply absurd. For unless the budget could then be balanced, the result would be renewed issues of paper currency "new tenor"—and a repetition of the tragic story. It cannot be too often reiterated that there can be no solution of the monetary problem until revenues once again equal expenditures.

## CHAPTER VII

### HOW FRANCE MET THE INDEMNITY OF 1871

THE rapid payment of the indemnity of 5 billion francs imposed upon France after the Franco-Prussian War of 1871 has excited almost universal admiration. The treaty of peace was signed at Frankfort on May 10, 1871; the first payment was made on June 1, 1871; and the last payment, not due until March 2, 1874, was made on September 5, 1873. The thrifty French citizens thus apparently "drew upon their hidden hoardings of specie, gritted their teeth, tightened their belts, and worked and saved with such spirit that they actually paid off the huge indemnity six months before it was due, the whole account being liquidated in less than two years and four months from the day when the treaty was signed." An analysis of the process by which the French indemnity was met should throw some light upon the present problem of reparation payments by Germany.

Contrary to popular notions, the French people did not through thrift and economy pay off this huge debt in little more than two years. This is, in fact, a true statement; and its explanation we trust will do something to dissolve the myth that has always

surrounded the French indemnity and its marvelously rapid liquidation.

The explanation of the conundrum is to be found in the fact that there is a difference between "paying" a debt and effecting an adjustment or settlement that will be acceptable to the creditor. The significance of the distinction just drawn can be made clear only by indicating the means by which the settlement was actually effected. The data used, except where otherwise specifically noted, are taken from an official French report made in 1874,<sup>1</sup> by Léon Say, who was at the time a member of the National Assembly.

The following means were employed in paying and adjusting the indemnity, which with some interest and incidental costs amounted to 5,315 million francs, or 4,250 million marks.

1. France surrendered to Germany the franchise right of that portion of the Railroad of the East which was located in the ceded territory of Alsace-Lorraine. This was valued at 325 million francs. Since the French government did not own this railroad, it was necessary that it should obligate itself to pay the railroad corporation in due time the amount specified.

2. There was a minor credit balance of 98,400 francs due the City of Paris from the German government, which was credited to the indemnity account.

<sup>1</sup> Rapport fait au nom de la commission du budget de 1875, sur le paiement de l'indemnité de guerre et sur les opérations de change qui en ont été la conséquence.

3. France was by special agreement permitted to pay in paper money (bills of the Bank of France) to the extent of 125 million francs.

4. The sum of 105,039,145 francs of German coin and bank notes, a large part of which had been brought into France by the German army, was collected by the French government and turned over to Germany.

5. French gold to the amount of 273,003,058 francs was transferred to Germany. Of this amount, 150 million was advanced to the government by the Bank of France.

6. Silver to the amount of 239,291,876 francs was paid, of which 93 millions were procured from the Bank of Hamburg.

The total of the above six items is 1,067,432,479 francs.

7. The remainder, amounting to 4,248,326,374 francs, was adjusted by turning over to Germany foreign bills of exchange.

The question now is, by what means did the French government obtain the ownership of this large amount of foreign bills of exchange,—that is to say, how did the French government procure the ownership of the money of other countries? First, the French government issued two large loans which yielded a total of 5,792 million francs.<sup>1</sup> Of this amount, approximately two-fifths, or 2,316 million francs were sold in foreign countries for foreign

<sup>1</sup> GASTON JÈZE: *Cours de Science des Finances et de Législation Financière Française*, Paris, 1922, p. 391. According to Léon Say the yield of the two loans amounted to 5,724 million francs.

money,<sup>1</sup> and, interestingly enough, a considerable part of the bonds that were floated abroad were sold in Germany. Second, approximately 2 billion francs of existing foreign investments of French citizens were utilized.

Since these foreign investments belonged to French private citizens, it will be seen that the French government had its own problem of getting possession of them. Instead of using money derived from taxation to buy these bonds, the French government, in effect, borrowed them. The process was as follows: the French government issued its own bonds and induced its citizens to take these, suggesting that in exchange they should turn over to the government foreign currency procured by selling foreign bonds which they held. The government also accepted foreign bonds from its citizens in direct payment for their purchases of the new government bonds. In this case the government could either deliver the foreign bonds directly to Germany—the evidence is not clear as to what extent this was done—or, could sell the foreign bonds for foreign money which it could use in paying Germany.

*The French government borrowed in one way or*

<sup>1</sup> Based on Victor Canon: *Précis d'histoire de la finance française 1870-78*, p. 261, and on reports in the *London Times* of June 29, 1871, and of Aug. 2, 1872, and in the *London Economist* of Aug. 3, 1872. The face of the first loan was 2,799.5 million francs, of which 20 per cent, or 556 million francs were issued to foreigners. The face value of the second loan was 4,140.5 million francs, of which 58 per cent or 2,401 million francs were issued to foreigners. The total amount issued to foreigners (2,956 million francs) was thus 40 per cent of the total face value of the two loans (6,920 million francs).

another practically all of the funds used in paying Germany. It borrowed 325 million francs from the Railroad of the East; it borrowed 805 millions from the Bank of France, of which 150 millions in gold and 125 millions in paper were used in paying the indemnity; and it borrowed all of the funds necessary to procure the foreign bills of exchange. Indeed, a further analysis of the French government's loan operations indicates that the government went into debt during the years in question to a considerably greater extent than it got out of debt through the payment of the indemnity.

The French government floated two large bond issues. The face value of the first issue, floated in 1871, was 2,779.5 million francs; the rate of interest was 5 per cent; the bonds were sold at 82.5; and the yield of the loan was 2,293 million francs.<sup>1</sup> The second loan, put out for subscription July 28, 1872, had a face value of 4,140.5 millions and it also bore a rate of 5 per cent. It sold at 84.5, yielding a total of 3,499 million francs. The two loans combined thus yielded the government the sum of 5,792 million francs, and increased the funded debt by 6,920 million francs. Besides these loans, the debt of the government increased to the extent of 805 millions,<sup>2</sup> by virtue of its direct borrowings from the Bank of France and 325 millions on account of the debt to the Railway of the East. All told, therefore,

<sup>1</sup> JÈZE, *ibid.*

<sup>2</sup> ANDRÉ LIESSE, "Evolution of Credit and Banks in France" (*Report of National Monetary Commission*), p. 139. The total debt of the Government to the Bank at this time was 1,530 million francs. JÈZE, *ibid.*

the French government, while paying off the indemnity of 5,315 millions, incurred new obligations of 8,050 millions.

We must now inquire to what extent these new bond issues of the government were paid for out of French savings. The two large loans put out for public subscription together yielded 5,792 million francs. Of this amount, approximately two and a quarter billions were subscribed by foreigners, and another 2 billions were paid for through the sacrifice of foreign investments owned by French citizens. This leaves roughly 1.5 billions to be accounted for, a sum which possibly may have been paid out of current savings.

There is no means of ascertaining to what precise extent the payment of this 1.5 billions was made by the French public at the expense of ordinary consumption; that is to say, to what extent the French people tightened their belts in order to buy bonds. Data are not available to indicate whether a considerable part of it may not have been paid with funds borrowed from the banks just as during the Great War we "paid" for Liberty bonds by borrowing the funds from the banks. Nor does it appear to what extent the banking institutions themselves purchased government bonds. Some bonds, no doubt, were purchased with money drawn from hoards.

At the very outside then—assuming no inflation of the currency in connection with the flotation of these bonds—the French public bought 1.5 billions out of current savings or with accumulated hoards. Mean-



while, the interest burden had been increased by the following amounts: 346 million francs, the annual charge on the 6,920 million francs increase in the public funded debt; 20.5 million francs, the sum annually due, according to agreement, to the corporation of the Railway of the East; 8.1 million francs, representing interest at 1 per cent due the Bank of France on loans received from that source after the war,—a total of 374.6 million francs. In addition to this, the treasury had agreed to repay the loan to the Bank at the rate of 200 million francs a year.<sup>1</sup>

*Taxes were increased little more than enough to meet the increased interest charges.* The following table shows the total French revenues from taxation for the years 1867–1878 inclusive, classifying these into direct and indirect taxes—the latter being those derived from customs, registration, and stamp duties, and from excise duties on alcoholic liquors, salt, sugar, tobacco, powder, etc.

The total revenue from taxation during the year 1873 was 2,371 million francs, as compared with a total of 1,805 million francs for the year 1869, the year preceding the war year of 1870—an increase of 566 million francs. This leaves a margin of only 191.4 million francs over the increased interest charges. Meanwhile other revenues of the government had increased only slightly, while other expenditures had very greatly increased.

The fact that the government secured 5,792 millions from the two bond issues, and 805 millions

<sup>1</sup> JÈZE, *ibid.*, p. 437.

from the Bank of France—the total indemnity payments being 5,315 million francs—indicates that the French government during the years in question was borrowing to meet ordinary fiscal requirements as well as to procure the funds with which to pay the indemnity. In fact, only 70 per cent of the proceeds of the first bond issue, and 87 per cent of the second, were actually intended for indemnity purposes.

## FRENCH TAX RECEIPTS, 1867-1878

(In millions of francs) \*

Year	Direct Taxes	Indirect Taxes	Total
1867	545	1,177	1,722
1868	562	1,207	1,769
1869	576	1,229	1,805
1870	586	1,083	1,669
1871	581	1,230	1,820
1872	605	1,524	2,129
1873	673	1,698	2,371
1874	669	1,748	2,417
1875	684	1,933	2,617
1876	697	1,996	2,693
1877	698	1,970	2,668
1878	704	2,036	2,740

\* Compiled from data contained in the *British Statistical Abstract for Principal and other Foreign Countries*, 1885, p. 206.

*This increase in the French public debt has left a permanent fiscal burden. The face value of that portion of the two loans that was earmarked to provide funds with which to meet the indemnity, was 5,548*

million francs. The annual interest charge on this sum at 5 per cent is 277 million francs. From the time the loans were floated until 1883 this sum had to be provided for annually in the French budget. Meanwhile, it appears that most of the bonds which had been sold abroad had been repurchased in France, and in 1883 a refunding operation<sup>1</sup> reduced the rate to 4½ per cent and slightly reduced the debt. From 1883 to 1894, the annual interest charge on account of the indemnity was, therefore, reduced to 245 millions. From 1894 to 1902 the rate was only 3½ per cent, the interest charge then amounting to 190 million francs. From 1902 on to the present time, the rate has been 3 per cent, and the annual interest chargeable to the indemnity has amounted to 165 million francs a year.

It thus appears that from the point of view of the internal budgetary problem, France has never got rid of the indemnity burden. The notoriously large French public debt, which for decades has seriously embarrassed the financial administration, is in no small degree directly attributable to the fact that the French people never did, through economy and heavy taxation, liquidate the indemnity.

*From the point of view of international trade and finance, the payment of the French indemnity did not give rise to serious difficulties.* The first six items

<sup>1</sup> For data with regard to the refunding operations, see EDMOND THÉRY, "Conséquences Economiques de la Guerre pour la France," 1922, pp. 311-314. Théry gives the interest charge on the total war loans. Our figures represent the separate amount directly chargeable to the part of the loans which was used for the payment of the indemnity.

enumerated on pages 221 and 222 which total 1,067,-432,479 francs in specie payments and credits, did not involve the transfer of commodities across French borders. The borrowing transactions did, however, directly influence the international financial and trade situation. The sale of 2 billions of French-owned foreign investments built up in the years before the war, meant a direct loss of interest from foreign sources, while the flotation of 2.25 billions of French bonds in foreign markets amounted to the same thing, since it served to reduce the net amount of French foreign investments.

*France's international balance of payments was distinctly favorable during the indemnity period.* There was a slight adverse balance of trade, amounting to roughly 100 million francs in the three years; but the invisible credits—mainly the interest on foreign investments—yielded approximately 900 millions per year, giving a net favorable balance for the three years 1871-73 of 2,600 million francs. It was the existence of these large invisible credits that enabled France to repurchase rapidly the bonds that had been sold abroad when the indemnity loans were floated.

The total indemnity with interest, etc., was 5,315 million francs. Of this, 1,067 millions were paid, as already noted, by specie transfers and credits. The normal international income (derived from interest on foreign investments and from foreign trade) during the years when the indemnity was being paid (2,600 million francs) was thus about five-eighths of the amount required to meet the 4,248 millions not settled by specie payments or credits.

The import and export figures (including re-exports) for the years 1867-1873 inclusive, are as follows.

FRENCH FOREIGN TRADE, 1867-1878 \*

(Special commerce and re-export trade, in millions of francs)

Year	Imports	Exports	Net
1867	3,202	3,085	-117
1868	3,415	2,974	-441
1869	3,269	3,257	-12
1870	2,935	2,915	-20
1871	3,599	2,925	-674
1872	3,603	3,814	+211
1873	3,651	3,925	+274
1874	3,574	3,806	+232
1875	3,585	3,968	+383
1876	4,046	3,689	-357
1877	3,737	3,552	-185
1878	4,246	3,297	-949

\* French Official Statistics.

It will be noted that the unfavorable trade balance of 1871 and earlier years was converted into a favorable balance in 1872 which continued favorable until 1877. This resulted not from a reduction of imports, which in fact slightly increased, but from a considerable expansion of exports. Again, there is no evidence of rigid self denial on the part of the French people. The favorable balance of trade in 1872-73 resulted merely from the thriving export business,—an export business which necessitated

increased imports of raw materials, and which was possible only because France's credit and economic plant and equipment had not been gravely impaired.

It is interesting to observe that French sales in Germany increased markedly during the period of the indemnity payments. Exports to Germany in the two years before the war averaged 260 million francs; while in the two years 1872 and 1873 they averaged 436 million francs.<sup>1</sup> It was the proceeds of the favorable trade balance in the years 1872-75 and the returns from foreign investments throughout the period that enabled France to purchase the bonds which had been sold abroad and to replenish the gold reserves of the Bank of France.

*The story of the French indemnity brings out into bold relief the essential features of the German reparation problem.* As is always the case in meeting external obligations, the payment of the French indemnity involved the two distinct problems, (a) the internal budgetary problem, and (b) the problem of making settlements across the border. France made the payments across the border in two ways: first, by the utilization of cash resources, that is gold, silver and paper money; and second, by selling foreign investments and floating new bonds in foreign markets and transferring the proceeds to Germany. This second method provided more than four-fifths of the total sum. These methods of making annual payments could not possibly have continued over a long period of years, for there was a definite limit to French accumulated investments and a still

<sup>1</sup> French official statistics.

more definite limit to French credit abroad. It is likewise true that France used about all of the cash with which she could part without wrecking her banking system.

France was enabled to borrow in foreign markets primarily because the Franco-Prussian War did not even temporarily jeopardize her sound credit and international trade position. The Franco-Prussian War was a mere skirmish as compared with the World War. It lasted only a few months; no considerable percentage of the population of either country was involved; it was in no sense a war of attrition; there was little disruption of foreign trade or of the foreign exchanges, of the monetary or banking systems, or of the internal economic organization of the nations involved. Moreover, France had to sacrifice during that war practically none of her accumulated foreign investments. Most important of all for its bearing on the reconstruction problem is the fact that the Franco-Prussian War involved only Germany and France, whereas the Great War involved every commercial nation in the world. When it came to the problem of re-establishing trade relations and building up a favorable trade balance after the Franco-Prussian war, it was of vital importance that the purchasing power of such countries as Great Britain, the United States, Italy, Austria-Hungary, and Russia remained unimpaired. The reader will do well to study carefully in this connection the French export figures for 1872 and 1873 given on page 230 in comparison with the tables showing German foreign trade after the Great War, given on pages 120, 122 and 126.

The domestic or fiscal side of the indemnity problem France did not face squarely. The budget was not balanced during the years when the indemnity was being paid; such increases in taxes as occurred were little more than sufficient to meet the interest charges on the increased public debt. For a short period France could thus temporize with the budgetary problem; but if payments had been required over a long period of years there would have been an inevitable breakdown of French domestic finance.

In comparing the French situation of 1871 with the German situation at the present time, it will be observed that the total of French payments, 4 billion marks, was only a fraction of the sacrifice that Germany has *already* made. Like France, Germany has utilized all available cash resources, and she has sacrificed practically all of her foreign investments. Germany, however, could not borrow in foreign markets through the sale of bonds. The policy of her creditors has operated to prevent Germany from making normal use of her foreign credit, even to satisfy their claims. The loss of her principal sources of international income and the magnitude of her external obligations combined to destroy her foreign credit, except among speculators in irredeemable currency. The outstanding German payments have been in the form of the transfer of the merchant marine and other tangible property. *All of these means of payment have, however, now been practically exhausted.* Henceforth, as we have seen, payments can be made only out of a favorable balance of trade. Can an export surplus be developed in view of the disruption of world trade and industry?



## CHAPTER VIII

### INTERNATIONAL IMPLICATIONS OF THE PROBLEM

IT has commonly been presumed that meeting the cost of reparation is a simple matter of working and economizing on the part of the German people. Let the disposition or, better, the will to pay prevail and it is believed that Germany could easily produce more and consume less and thus quickly repair the damages wrought by the aggression of the war. If only the reparation problem were as simple as this, its solution would be easy indeed. The truth is, however, that the making of reparation payments is not a mere matter of domestic household economics. In the problem are involved not only internal political and social issues of the greatest delicacy and complexity but international economic and political conditions over which Germany has no direct control. The German international trade and financial situation, as we have seen, is the essence of the whole reparation problem,—even the balancing of the German budget being dependent upon the recovery of Germany's international economic position.

*The budgetary difficulties are inextricably linked with the whole network of political, social, and economic relations.* The ability of Germany to balance her

budget and to return to a sound fiscal position will depend upon considerations such as the following.

1. The ability of a weak and unstable government to levy and collect from an impoverished people a very great increase in taxes.

2. The ability of the government to eliminate the numerous subsidies that have thus far been so heavy a drain on the budget, without, at the same time, precipitating serious problems of internal readjustment.

3. The maintenance of social order and the development of a unified public opinion and national policy in place of the bitter class dissensions and divergent policies that now exist.

4. The willingness of the Allies to adjust the reparation payments demanded to the capacity of Germany to pay, as measured by the possibilities of an export surplus. This will naturally be dependent in part upon the attitude of the United States toward the adjustment of international debts.

5. The ability of Germany during a moratorium period to procure abroad the credit with which to purchase the raw materials and foodstuffs required to restore her productive power, and then the ability to expand exports relatively to imports. The finding of foreign credit will depend largely upon the feeling of lenders in Allied and neutral countries with reference to the future solvency of Germany; while the expansion of exports will depend in no small degree upon the tariff and trade policies of the nations in which Germany must find the markets for her goods.

Merely to raise these questions is enough to indicate the utter impossibility of forecasting the capacity of Germany to restore sound financial conditions.

*It is equally impossible to predict how inflation may be checked and some measure of price stability restored in Germany.* The money and price problem in Germany is emphatically not an isolated phenomenon capable of independent diagnosis and cure; and any program for price stabilization that attempts merely to control the quantity of money that banks may issue is foredoomed to failure. In Germany to-day the monetary problem is definitely related both to budgetary difficulties and to the international trade and financial maladjustments that have occurred; and these problems, in turn, involve practically all of the economic, social, and political issues which vex and thwart not only Germany but all Europe.

*Regardless of fiscal and monetary demoralization, is not the German economic system substantially intact?* It is urged repeatedly that the present financial troubles are but temporary, and that if Germany can escape her reparation obligations through the plea of bankruptcy she can then straighten out her finances and promptly regain her pre-war economic strength. Her territory, except in East Prussia, was not devastated; her factories were not destroyed; her great technical and managerial skill remains; her population has been reduced but little. Are not the fundamentals of wealth production therefore still unimpaired?

What is *seen* in this connection is that the so-

called fundamental factors of production—land, labor, plant and equipment, and management—are all substantially intact, although, be it remembered, the ownership of much of the plant and equipment, and of some of the land, has passed out of German hands. What is *not seen* is that these production factors have become in considerable measure economically impotent in consequence of far-reaching maladjustments in the larger economic organization. The fundamental difficulty in all the European countries, in fact, is not the lack of land, or labor, or plant and equipment, or managerial ability. The really deep-seated trouble is to be found in the disruption of the intricate international financial and economic system.

Consider, for example, the position of Spain. The land area is intact; the labor supply has increased since 1914; the supply of capital goods was greatly expanded during the war; and much valuable managerial experience was gained. Spain, then ought to be in a most gratifying condition. Ought! but isn't. The trouble is largely one of markets. The war demands having ceased, Spain's new industries are unable to function. High prices, unemployment, and other things, have, moreover, given rise to a very difficult social, and hence political, situation. The government budget also presents a sorry picture.

Consider Switzerland. Natural resources intact; population enlarged; capital goods increased; management improved; and with banking coffers overflowing with gold. Swiss economic conditions should

leave nothing to be desired. The Swiss economic organization is, however, no longer properly articulated with that of the rest of the world. Before the war, Switzerland exported visible luxuries and "invisible" scenery sufficient in amount to pay for her food, about three-fourths of which had to be imported. At the present time the people of Europe, at least, must curtail their purchases of Swiss luxuries, and they have more important uses for their money than the purchase of Swiss scenery. Meanwhile, the Swiss need for food is as great as ever. One must conclude, therefore, that Switzerland is in a precarious economic condition. All of the neutral countries, in fact, have economic resources in abundance; but these resources are in considerable measure impotent because the general economic organization is out of joint.

Great Britain is in a similar situation. She is not suffering from a lack of managerial capacity, or a dearth of factories, or warehouses, or railroads, or ships; nor is her difficulty to be found in a shortage of labor. On the contrary a considerable percentage of her capital equipment is lying idle, and she has more than a million of unemployed workers. The chief source of trouble is to be found in the fact that British markets, particularly those on the continent of Europe, have been very greatly reduced in consequence of the war and the peace. Even in the case of France, the greatest source of impoverishment is not the devastated areas. It is the destruction of the international financial and commercial organization in which France is also inextricably involved.

European countries have been scolded not a little for not getting down to work. They have been told that if only they would get rid of the excess labor on the railroads, in other public enterprises, and in government offices generally, and set these people to work—if only they would work more hours a day in creating wealth—the reconstruction of Europe would soon be completed. This is undoubtedly true. But in the complicated profit-making, capitalistic system of today there is little point in urging involuntarily unemployed people to go to work, when—in consequence of disrupted trade and industry—there are insufficient jobs available. What is the use of scolding the million and a half of unemployed in Great Britain for not getting down to work when British markets have been so shattered that the employers of labor cannot sell the goods which labor would produce? Without doubt there has been an increase of malingering and shiftlessness; without doubt too many have become imbued with the idea that the world owes everyone a living. War produces such states of mind. But these conditions are in no sense the primary causes of low post-war production in Europe.

Germany and the continental countries generally have handled the problem of unemployment differently from England, in that instead of having a large number of people idle they have given practically everybody a chance to work part of the time, as the best means of preserving social peace during a troubled period when its preservation was of paramount importance. The German government has

also endeavored through subsidies to certain industries to make good the dearth of private employment, private opportunities for non-speculative profits being severely restricted. While subsidizing industry has had its temporary advantages from the standpoint of employment and of industrial output, its consequences upon the budget have been utterly disastrous. France, similarly, has subsidized the reconstruction of the devastated areas, thereby temporarily holding unemployment in check, but at a fearful cost to the budget. Either the British or the continental method has disastrous consequences. In the absence of an effective and confident private initiative, which of these methods—both inherently objectionable to the governments concerned and both roundly condemned by critics everywhere—should have been followed? If neither, what was the practical alternative?

The fundamental difficulty in Europe today is, in a word, economic maladjustment. When that day arrives when the nations of the world are less concerned with forcing industry and trade into unwonted channels, less intent upon simultaneously demanding and *preventing* the payment of debts and the making of reparation, and more intent upon facilitating the restoration of industry, upon promoting the free flow of commerce through its usual channels, and upon the restoration of a balanced state of international trade—only when that day arrives will one be able to say that Europe is once more headed in the direction of genuine economic prosperity.

*Germany and Great Britain have been the principal sufferers as a result of the post-war maladjustment of world trade and finance.* This is simply because the commercial and financial organization of these countries was more highly integrated and more intricately interwoven with that of the world at large. England's international economic system developed earlier than Germany's, but they were very similar. Each had before the war a huge urban population which could sustain itself only through the import of foreign foodstuffs. Each had a large adverse trade balance which was paid for with (1) the income derived from interest on foreign investments, and (2) shipping, banking, insurance, and other miscellaneous earnings. In each case before the war there was a net balance available for new investments abroad. A brief statement of their relative post-war positions in this regard is therefore pertinent.

As a result of war and post-war financial requirements, Germany has lost, as we have seen, practically all of her income from the invisible sources. Great Britain, on the other hand, has retained more than half of her overseas investments and the larger part of her earnings from shipping, banking, insurance, and miscellaneous sources. In fact, Great Britain's total income from all invisible sources in 1922 was approximately £240,000,000, or 5 billion gold marks, more than sufficient in amount to cover her heavy adverse trade and specie balance. If these £240,000,000 derived from foreign investments, shipping, banking, insurance and other services were wiped out, Great Britain's economic situation would



be fundamentally impaired. She would be no more able to meet external debt obligations at the present time than is Germany.

The loss by Germany of all income from the so-called invisible sources which in 1913 amounted to about 2 billion gold marks, the loss of very important sources of raw materials through the cession of territory, together with the great impairment of foreign markets have combined to shatter the whole German economic system. Even with the balancing of the domestic budget and the restoration of a sound and stable currency, the German economic system would be anything but intact. Germany will regain economic health and strength only as the rest of Europe recovers from the disastrous shattering of established economic relationships that has resulted from the war.

*The ability of Germany to develop an export surplus is the essence of the whole reparation problem.* We must repeat that year after year Germany can make reparation payments only to the degree that she is able to export more than she imports,—the invisible credits, as we have found, now yielding practically no net balance. Temporarily, it is true, Germany might conceivably place some loans, say in the United States, and turn the proceeds over to the Allies; but, as stated in Chapter I, this might be merely robbing us to pay them. In any case, Germany would be able to pay her *total* foreign obligations only by means of an export surplus.

Temporarily, also, a "settlement" might be patched up by transferring German industrial securi-

ties to the Allies,—the securities being obtained by the German government through a direct “capital levy” or by outright confiscation. But, as pointed out in the opening chapter, the interest or dividends on these securities could be converted into acceptable foreign currencies only by means of an export surplus. Unless there is an export surplus German industries cannot procure the bills of exchange with which to make payments abroad, even though able to earn domestic profits. Interest or dividends cannot be paid abroad in paper marks; and the total national gold supply is less than a billion gold marks.

Our analysis has shown that if Germany is year after year to meet the cost of reparation, her exports must exceed 14 billion gold marks, the estimated amount of the indispensable imports. The reader may still ask, however: could not Germany pay as much as a billion a year out of an export surplus, if imports were, for example, only 6 billions and exports 7 billions? The answer is yes, so far as figures are concerned; but the practical problem is, could Germany actually export as much as 7 billions if imports were restricted to 6 billions? This does not appear to be humanly possible for the reason that unless food and raw material imports are very much in excess of this total, the whole industrial machine becomes stalled and exports inevitably decline. Recall that in 1913 the large exports consisted principally of (1) coal, in the raw material group; (2) sugar and rye, in the food group; and (3) large quantities of a vast range of manufactured commodities.

With imports curtailed to 6 billions, as has in fact been the case, the German nation, in order to eke out the domestic shortage, has been compelled to eliminate exports of coal, sugar, and rye, and to reduce materially the exports of many other commodities in the raw material and food groups.<sup>1</sup> At the same time, it has been impossible to manufacture for export anything like the pre-war quantities of goods. Present exports, it may be recalled, are not 7 billions, but 4 billions (5.5 billions, including the value of the restitution and reparation deliveries), and no one can doubt that Germany has done all in her power to expand exports. Subsidies on production, low transportation rates, depreciated exchanges,—all are supposed to stimulate foreign sales. But, in spite of every effort, Germany has not been able to make exports exceed imports.

It must be emphasized once again that the 14 billion gold marks of indispensable imports represent an estimate based on the assumption that the present German population of 63 millions is to be permitted to survive and to work at pre-war efficiency. If imports of food and raw materials are greatly reduced, either the deficiency must be made good by increased home production, or else starvation and industrial stagnation will be the inevitable result. A material increase in the domestic production of copper, iron ore, rubber, cotton, and oil is impossible; and a relatively poor agricultural area of only 182,867 square miles—two-thirds the size of Texas—cannot produce sufficient food to support a population of 63

<sup>1</sup> See table on pp. 122 and 126.

million people. The only hope for the German people lies in the preservation of German industry at the highest efficiency and lowest cost of operation commensurate with the maintenance of wholesome standards of living, for it is only through the exchange of commodities made primarily from imported materials that the entire population can survive.

Large reparation payments can be made only provided the German standard of living is held down to the minimum of subsistence, or at least to the minimum below which social revolt becomes inevitable. The will to produce must of course be preserved; some opportunity for gain must be permitted. Implied in this is a driving down of wages and production costs below the level of the world at large, in order that Germany may persistently undersell competitors in world markets. This is the only possible way whereby any substantial exportable surplus can be procured. Whether it is a way that would please and prove profitable to the rest of the world constitutes another story.

We have set no definite annual sums that Germany can pay through the development of an export surplus, for the simple reason that it is utterly impossible for anyone to know whether, in view of all the conditions that exist and that will continue to exist, Germany will be able to develop any export surplus. It depends upon wholly indeterminate factors. The Germans themselves do not know a particle more about the possibility than anyone else. Hence, any promise to pay any definite sum per year that may under military compulsion be extracted from the

German government would be worth not a whit more than the "agreement" reached at London in May, 1921. No threat or compulsion, no promise, no guarantee of any kind whatsoever will ensure the payment of any definite sum. If the Allies hope to get paid, there is only one policy to follow, namely, to facilitate the recovery of German import and export trade, and then to require the delivery of whatever excess of exports may be developed.

*The problem of control—the prevention of German evasion—is not particularly difficult.* On the budgetary side all that is required is to retain in Berlin the present supervisory fiscal agents appointed by the Reparation Commission. On the side of foreign trade, a considerable part of the mechanism of control is already in the hands of the Allies. In order to prevent the importation of luxuries from France, Italy, Belgium, and Great Britain, it is merely necessary for these countries to prevent their citizens from exporting such commodities to Germany. It will be seen, of course, that this involves a complete change of policy on the part of at least some of the Allied governments, which have up to the present time, despite the protests of the German government, insisted on keeping open the "hole in the west". Imports of non-essentials from other countries may be controlled by having Allied agents at the custom-houses.

Similarly, in the matter of exports, the control, in considerable measure, lies directly in the hands of the Allies. The average German manufacturer who is dependent for the making of profits upon sales in

foreign markets, may, we believe, be relied upon to increase his foreign sales wherever possible. It is well to remember at this place that no one has yet charged the German industrialists with endeavoring to curtail exports; the only charge has been that they are tax dodgers. The Allies can do a great deal towards facilitating the expansion of German exports through a reduction of their tariff barriers and through the negotiation of favorable trade treaties with Germany. Their efforts should, of course, also be directed towards inducing other countries, particularly the United States, to foster through commercial treaties the recovery of German trade.

If, however, by any chance Germany should endeavor to curtail her export trade with a view to prevent exports from exceeding the indispensable minimum of imports, it will then be time to consider ways and means of compelling her either to sell more goods in competitive world markets, or to ship more goods directly to Allied countries as deliveries in kind.

The continued exaction of reparation payments under conditions which directly reduce imports of raw materials and foodstuffs—we repeat a final time—will not only quickly reduce the subsequent payments that can be made, but it will shortly result in the disintegration of the whole German economic system, accompanied by wholesale unemployment and starvation for a considerable portion of the German population. The process of compelling Germany to pay when she has no international credit

balance available for the purpose is analogous to forcing complete liquidation upon a temporarily insolvent debtor. A little more juice may be squeezed out by the process—and then the end.

If the Allies wish to procure from Germany the maximum reparation payments over a period of years, Germany must be given time in which to recover her international economic equilibrium. This is what such true friends of France as the representatives upon the advisory committee of bankers urged in the early summer of 1922. This is what is behind the whole *moratorium* idea,—which every experienced business man and economist knows is now a condition precedent to any further substantial payments. If Germany is to pay in the largest measure, her creditors must squarely face the facts and give her time in which to recover, if possible, her international economic position.

If one believes that the economic prosperity of the world will be promoted by the economic recovery and the restoration of the consuming power of Germany, he should favor her importation of large quantities of necessary food and raw materials and the exportation of correspondingly large quantities of manufactured goods. If, on the other hand, one believes that the disintegration of the German industrial system and the starvation of some millions of German people will promote the general welfare of the world, then he should welcome the continued curtailment of both German import and German export trade.

## APPENDICES



## APPENDIX A

### GERMANY'S INTERNATIONAL TRADE AND FINANCIAL ACCOUNTS

AVAILABLE data on which to base a connected story of Germany's commercial and financial relations with the rest of the world are far from satisfactory. Until the outbreak of the war, the movement of commodities and of specie and bullion was recorded at the custom-houses and was officially reported by the German government in its trade publications. But during the war the publication of such data was discontinued, and was not regularly resumed until May, 1921. For the years 1919 and 1920, and for the first four months of 1921—as well as for the war years—consecutive official trade figures were not published. Fortunately, estimates have been made for these years that are generally accepted as being as nearly accurate as the unsettled state of Germany's foreign commerce will permit. These are stated in an article by von Glasenapp, Vice-president of the Reichsbank, in the *Manchester Guardian Commercial Reconstruction Series*, while corresponding estimates are also published in other recent studies. For the invisible items that enter into the international balance of payments there is, of course,

no official source of information; and the estimates that are available are on the whole neither complete nor convincing.

#### I. TRADE AND SPECIE STATISTICS FOR PRE-WAR YEARS

The German trade statistics for pre-war years are reasonably reliable and furnish a valid basis for year-to-year comparisons of Germany's exports of domestic produce and imports of goods for home consumption. This is true for the years 1894-1913 in spite of the fact that in 1906 considerable changes were made both in the territory covered by the reports and in the commodity classification; that during this period the list of commodities covered by the returns was slightly changed; and that altogether the basis on which the trade was valued is open to certain criticisms.<sup>1</sup>

The German trade statistics are compiled to show: (a) The *general trade*, which is given only in terms of volume and by the two broad classes, total imports and total exports; (b) the *gesamteigenhandel*, or *total-trade-proper*; (c) the *special trade*. Both (b) and (c) are given in terms of value as well as volume with imports and exports classified into five broad commodity groups, and also according to commercial source or destination, and itemized for a long list of commodities. The figures for the general trade

<sup>1</sup> The facts with reference to German trade statistics here presented are largely taken from the *Statistische Jahrbücher*. Additional information has been furnished by M. L. Jacobson, statistician of the Federal Reserve Board. Cf. J. J. Kral, "Methods of Computing Values in Foreign Trade Statistics."

include *all* goods brought into or shipped out of the German economic union, including the transit trade. Goods classed as transit trade are those which are shipped through the country in bond—in sealed cars not opened while within the German borders. The total-trade-proper does not include the transit trade, but otherwise covers the same imports and exports as the general trade. The special trade and the total-trade-proper also differ slightly in certain ways.

1. The imports are recorded as special trade imports only after they have come through customs, and after the duty has been collected on such as are subject to duty. They are recorded in the *Gesamt-eigenhandel* statistics at the time they enter the custom-house. The difference involved here is one of time, rather than of quantity and value. For the purpose of making comparisons of the total of German trade over a considerable period of time, therefore, it makes little difference whether the special trade or total-trade-proper figures are used. For single years, however, the amounts may differ from one another because of the time lag in the special trade.

2. Goods for consumption brought into any part of the economic union are shown in the figures for both the special trade and the total-trade-proper. Of commodities brought in for the purpose of being put through some manufacturing process (the *Veredelungsverkehr* or improvement trade), the special imports include only those that are for German consumption, and only those that are brought into such parts of the economic union as are subject to the German tariff law. The total-trade-proper in-

cludes all of the improvement trade—whether for German consumption or for re-export—of the whole economic union.

Goods for further manufacture and for re-export which are brought into the free port of Hamburg, for example, appear in the total-trade-proper as imports of raw materials or partly manufactured goods and again as exports of manufactures, but are not included in the special trade figures. Such of these "improvement trade" exports as go from Hamburg into parts of the economic union subject to the German customs law are recorded at the place of entry, both in the special trade and in the total-trade-proper, as imports of manufactured goods from foreign countries. The result of this difference in method is unimportant, so far as the trade totals are concerned. So far as commodity groups are concerned, imports of raw materials appear larger in the case of the total-trade-proper; imports of manufactures appear larger in the case of the special trade.

Whether for purposes of comparison it is best to use the special trade or the total-trade-proper is a minor question on which authorities do not agree. In this study the special trade figures have been used, the reason for the choice being expediency. The special trade figures are the ones currently published by the government, while the total-trade-proper is not published until the annual report for the year is issued.

*In 1906 certain territorial and classification changes were made that affected the German trade statistics.*

Prior to March 1, 1906, the territory covered by the trade returns was the *Zollgebiet* or customs union. This territory included the German Empire (with the exception of the free ports of Hamburg, Cuxhaven, Bremerhaven, and Geestemunde, the island of Helgoland, and certain small districts on the Swiss border) and included also the grand duchy of Luxemburg and two Austrian communities—Jungholz and Mittelberg. In 1906 the territory covered by the trade statistics was enlarged to include the four free ports named above—although for customs-tax purposes these ports were still outside the union—and from that time was known as the *Wirtschaftsgebiet* or economic union. The special trade figures, however, are little affected by this change in territory. There is an increase in the figures because they now include the special imports for consumption and the exports of domestic production of the four free ports. There is a decrease because the trade between these free ports and the rest of the economic union, except the improvement trade, mentioned above, was no longer shown as foreign trade. The increases practically balance the decreases so far as total imports and total exports are concerned, though there was some slight shifting as between commodity groups.

In 1906 a change was also made in the commodity classification in order to make it agree with that in the 1902 tariff law, which at this time was becoming effective. But while these changes in classification raise difficulties in the way of detailed comparisons of the trade in *certain classes* of commodities before

and after 1906, they should not stand in the way of comparisons of the *total* trade as reported for these years. This statement obviously also applies to some lesser classification changes that have been made since 1906. Another change concerned the goods covered by the returns. Shipbuilding materials brought in for the construction or repair of sea-going vessels, and also foreign goods shipped for use as stores on outgoing German vessels were recorded as imports. Against this increase in imports there was a decrease because of the fact that fish caught by German ships and crews and the manufactures therefrom, were no longer recorded as imports. The net result of these changes was relatively unimportant.

Until the end of April, 1909, the value of German trade, except in the case of a limited number of commodities, was determined on the basis of a schedule of estimated values prepared by the Advisory Board for Commercial Statistics in annual session. Beginning with May 1, 1909, declared values instead of estimated values were required in the case of 32 items of imports and 1,336 items of exports; and since April 1, 1911, declarations of value were required for all exports and for 60 numbers of the import schedule. The value of other imports were, until in 1921, calculated on the basis of official valuations established generally for certain kinds of goods or separately for each country of origin. The declarations also were checked by the Advisory Board. It is difficult to say what effect these changes had on the totals reported. It is important to notice,

however, that in one respect the method of valuation remained unchanged—the values reported were practically frontier values, or in other words, exports were reported as f.o.b. frontier, imports c.i.f.<sup>1</sup>

The fact that the trade is valued at the German frontier necessarily means that there is uncertainty with regard to the value that should be set on goods brought in on consignment and on exports sent to foreign markets on consignment. In either case it is impossible to determine at the German frontier exactly what the proceeds of the goods will be. Nothing better than estimates were to be had in the case of consignment goods, whether valuations were based upon traders' declarations or upon official estimates. But what is true in this respect with regard to exports is likewise true of imports, and vice versa. Any understatement in the one because of failure to make a proper allowance for profit or loss is in all probability balanced by a like underestimate in the other. All in all, a careful study of the German trade statistics for pre-war years leads to the conclusion that they furnish a basis for valid year-to-year comparison of the special trade.

## II. THE INVISIBLE ITEMS

It is practically impossible to determine year by year and item by item, the amounts of income which Germany received from invisible sources. It is known, however, that they were sufficient not only to meet her adverse trade balance, but also to yield

<sup>1</sup> F.o.b. = free on board; c.i.f. = cost, insurance, freight.

a surplus which she invested abroad. In a general way it is known what invisible resources Germany possessed, and some estimates are available for certain years with regard to the probable income received on account of certain of the items.

*In the pre-war account, interest on accumulated German investments in foreign countries was the largest of the invisible items.* To determine the amount of the interest received or receivable by Germany year after year, one of course needs to know (a) the average interest rate applicable to Germany's foreign investments, and (b) the net investment, year by year, on which interest was due—allowance being made for foreign holdings of German securities. With regard to the average interest rate, Sir George Paish found as the result of careful study that the average yearly rate of return on English foreign investments was approximately 5 per cent.<sup>1</sup> In estimating German earnings on capital invested abroad Riesser assumes an average rate of 6 per cent on proprietary and partnership investments and 5 per cent on securities.<sup>2</sup> Crammond<sup>3</sup> and von Glasenapp<sup>4</sup> used an average rate of 5 per cent for all investments. Pupin<sup>5</sup> uses a  $4\frac{1}{2}$  per

<sup>1</sup> *Journal Royal Statistical Society*, January, 1911, pp. 168-172.

<sup>2</sup> "The German Great Banks and their Concentration" (*Report of the National Monetary Commission*), p. 546.

<sup>3</sup> *Journal Royal Statistical Society*, July, 1914, p. 798.

<sup>4</sup> *Manchester Guardian Commercial, Reconstruction in Europe*, sect. 1, p. 28.

<sup>5</sup> *La Balance Economique de la France, Journal Société de Statistique de Paris*, 1916, pp. 393-404.



cent average in estimating the French pre-war interest income. From a study of these writers it seems reasonable, therefore, to estimate Germany's pre-war interest income at 5 per cent on the net amount of her foreign investment.

It is, however, impossible to state the precise amounts of the net foreign investments which actually stood to Germany's credit in *each* of the 20 years before the war. Available estimates vary widely in amount, and, practically without exception, they refer to isolated years. It is therefore difficult to know to what extent the variations between different estimates may be taken as evidence of actual changes in Germany's holdings of securities over a given period; to what extent they are due to the fact that it is often not clear whether an estimate is intended to show the total German foreign investment, or whether it is a net figure in which allowance has been made for foreign ownership of German securities and enterprises; and to what extent they represent merely a difference in the degree of optimism with which different estimators looked at the problem. The table below, citing a considerable number of the estimates that have been made, shows clearly that these estimates will not serve as a satisfactory basis for determining year by year the interest which Germany received from her foreign investments.

The explanation of the high estimates for 1909 and the exaggerated Müller estimate for 1913 will be found on p. 280.

## ESTIMATES OF GERMAN FOREIGN INVESTMENTS

Year	Billions of Marks	Authority
1892	10	Schmoller <sup>2</sup> , <sup>3</sup>
	13	Christians <sup>3</sup>
1892-93	15	Von Miquel, estimate for Prussia alone <sup>4</sup>
1893-94	12	Koch <sup>5</sup>
1905	25	Ballod <sup>6</sup>
	24 to 25	Imperial Marine Office <sup>6</sup>
	26	Halle <sup>5</sup>
	24 to 25	Riesser <sup>5</sup>
1906	16	Koch <sup>2</sup>
1909	30	Crammond <sup>6</sup>
	30	Steinmann-Bucher <sup>1</sup>
1912	20	Crammond <sup>7</sup>
1913	20	Helfferich <sup>8</sup>
	20 to 25	Kurt Singer <sup>9</sup>
	35	August Müller <sup>10</sup>
Outbreak of the war	20	C. K. Hobson <sup>11</sup>
	30	Paish <sup>12</sup>
	21	Hans David <sup>3</sup>
1914	25	Ballod <sup>3</sup>
	25	Pistorius <sup>3</sup>
	25	Steinmann-Bucher <sup>13</sup>
	18.26	Census taken by the German government <sup>14</sup>

<sup>1</sup> STEINMANN-BUCHER, A, "350 Milliarden Deutsches Volksvermögen," pp. 44-47.

<sup>2</sup> Cited in STEINMANN-BUCHER, *Ibid.*

<sup>3</sup> KEYNES, J. M., "Economic Consequences of the Peace," p. 175.

<sup>4</sup> Cited in RIESSER, J., *The German Great Banks and their Concentration* (Report of the National Monetary Commission), p. 803.

<sup>5</sup> RIESSER, *Ibid.*, p. 546.

<sup>6</sup> *Journal Royal Statistical Society*. In his comments on a paper presented by Sir George Paish, September, 1909, p. 483.

<sup>7</sup> *The Economic Relations of the British and German Empires*, *J. Roy. Stat. Soc.*, July, 1914, p. 803.

<sup>8</sup> HELFFERICH, KARL, "Germany's Economic Progress and National Wealth, 1888-1913," pp. 112-113.

<sup>9</sup> *Wirtschaftsdienst*, July 7, 1922, pp. 660-661.

*Income from shipping was the invisible item of second importance in Germany's pre-war accounts.* Shipping earnings as they appear in the international balance of payments of a country should show the net income which the country receives from other nations for the services of its merchant shipping. It is the country's net receipts—not the aggregate income of her shipping companies—that furnish her with a means of paying her foreign obligations. From this it will be seen that the figure should not include government subsidies to shipping, nor any other income which the shipping companies derive from the people of the country concerned. It should exclude freights paid on imports, for the reason that freight charges become a part of the selling price of commodities and are paid by consumers in the importing country. It should exclude expenditures made in foreign ports by the country's ships or crews, but should include expenditures of foreign ships and crews in the country's own ports. Clearly, it should include freights earned on exports, for these are paid by foreign consumers; and likewise, all freights earned by ships serving as common carriers between foreign ports.

In the case of shipping, as in the case of interest

<sup>10</sup> The European Payment Balance, *Reconstruction*, February–March, 1922–23, p. 218.

<sup>11</sup> HOBSON, C. K., British Oversea Investments, *The Annals of the American Academy of Political and Social Science*, Vol. 68, p. 32.

<sup>12</sup> PAISH, G., The Economic Outlook in Europe, *Contemporary Review*, September, 1919, p. 255.

<sup>13</sup> STEINMANN-BÜCHER, A., "Deutschlands Volksvermögen im Kriege," Second ed. Stuttgart, 1916, p. 10.

<sup>14</sup> *Wirtschaft und Statistik*, no. 2, 1923, p. 64.

income, no thoroughgoing study has been made of the German situation. There is, however, a round about method of arriving at figures that will roughly serve the present purpose. C. K. Hobson has published in his "Export of Capital" an estimate of British shipping earnings for each of the 33 years, 1870-1912; and other estimates are available for later years. These figures together with a comparison of British and German tonnage statistics year by year serve as a basis for determining what the German earnings probably were—and as a matter of fact figures computed on this basis check fairly closely with the estimates that have been published for certain pre-war years.

Hobson points out that the methods which he used in calculating British shipping earnings give a figure which includes not only freights earned on exports from Great Britain, but also freights on imports into Great Britain. His estimate of shipping earnings is therefore too high because it includes freights paid to British shipowners for the carriage of goods consumed in Great Britain, which in the last analysis means freights paid to British shipowners by British consumers. However, a compensating error appears in the British trade statistics. British imports are valued on a c.i.f. basis (exports, f.o.b.), thereby showing as a national expenditure for imports not only the price paid to the foreign exporter but also charges for insurance and freight, part of which were paid by British consumers to British agents and companies. In the international balance of accounts the overstatement in earnings is set against the overstatement

in expenditures, so that neither error is carried into the net balance of payments.

Now, since the German trade statistics also show imports valued c.i.f. and exports f.o.b., a method of estimating shipping earnings which will cancel the error involved in the trade figures should be used for Germany as well as for Great Britain. This leads to the conclusion that in the absence of other data from which to work, one might use the British estimates as a basis for a rough determination of what Germany's shipping earnings probably were. In doing this, of course, one will have to assume that British and German ships were operated with practically equal efficiency—not an unlikely assumption, except for the fact that the German merchant marine contained a somewhat larger proportion of sailing tonnage than the British.

The table below is compiled to show: (1) The total steam and sailing tonnage, ships of 100 gross tons or over, of both Germany and the United Kingdom as reported in *Lloyd's Shipping Register*; (2) German tonnage as a percentage of British tonnage; (3) estimated British earnings; (4) estimated German earnings, based on the British figure. Because of the fact that there are some ships not registered with Lloyd's, a comparison was also made between the total tonnage shown on the national register of the United Kingdom and Germany. For the United Kingdom this report includes all ships of 15 tons and over; for Germany, ships of 17½ tons and over. It made very little difference in the ratio, however, whether Lloyd's figures or those from the national registers were used.

## ESTIMATED GERMAN SHIPPING EARNINGS

Year	Merchant Tonnage (in thousands of gross tons)		German Tonnage as a Percentage of British Tonnage	Earnings (in millions of marks)	
	British	German		British *	German
1894	11,807	1,785	15	1,040	160
1895	12,118	1,886	16	1,004	160
1896	12,294	1,944	16	1,080	175
1897	12,404	2,030	16	1,154	185
1898	12,588	2,114	17	1,310	225
1899	12,927	2,454	19	1,290	245
1900	13,242	2,650	20	1,526	305
1901	13,656	2,905	21	1,200	255
1902	14,431	3,138	22	1,200	265
1903	14,890	3,283	22	1,290	285
1904	15,391	3,370	22	1,320	290
1905	15,803	3,565	23	1,450	335
1906	17,611	3,811	22	1,700	375
1907	16,999	4,111	24	1,800	435
1908	18,710	4,232	23	1,580	365
1909	17,378	4,267	25	1,660	415
1910	17,517	4,333	25	1,900	475
1911	17,873	4,467	25	2,000	500
1912	18,214	4,629	25	2,000	500
1913	18,696	5,082	27	2,000	540
1921	19,772	717	4	1,700	68
1922	19,296	1,888	10	1,800	180

\* For the years 1894-1910, C. K. HOBSON, "Export of Capital," p. 187. For 1913 and 1920, C. K. HOBSON, *Economica*, May, 1921, pp. 144 and 146. For 1911 and 1912 the same figure is used as for 1913 in preference to the figure given in the "Export of Capital," because Hobson himself says that the figures he gives for these years are probably too large. For 1921, estimate is based on the 1920 estimate generally accepted, on the *Statist* freight rates index and on comparison of 1921 volume of trade with that for 1920 and for 1922, *Manchester Guardian Commercial, Annual Review*, 1922, p. 141. The figure is placed higher than this in certain other estimates.

Hobson's method of estimating the shipping income of the United Kingdom takes into account three factors: total tonnage; current freight rates; and the efficiency of shipping, which depends partly on the speed of ships, and partly on the comparative amounts of steam and sailing tonnage on the register at a given time. The first of these has been taken into consideration in the above attempt to estimate German earnings. So far as the second is concerned, differences in ocean freight rates between British and German ships were never likely to persist long, because of the keen competition in shipping. The third factor has been disregarded. If taken into account it would probably tend to lower the estimated German income. Admittedly the figures arrived at are rough approximations. They nevertheless agree reasonably well with estimates which various writers have made from time to time, several of which are cited in the following table.

ESTIMATES OF SHIPPING INCOME

Year	Millions of Marks	Authority	Reference
Before 1900	300	Halle, Ernst	"Volks- und Seewirtschaft," p. 69
1906	300	Riesser, J.	"Die deutschen Grossbanken," p. 128
1907	350	Zagorski, S. O.	"Voyna Poslye Mira" (War After Peace), p. 17
1907	360	Crammond, E.	<i>Journal Royal Statistical Society</i> , July, 1913, p. 798
1912	600	Crammond, E.	<i>Ibid.</i> , p. 798
Pre-war	500	Rist, Charles	"Les Finances de Guerre de l'Allemagne," p. 283

*Practically no estimates and no data on which to base estimates are available with regard to the other invisible items.* Crammond estimated the German income from banking, insurance and commissions at about 200 million marks for 1912. For the same year C. K. Hobson estimated the British income from this source at 598 million marks. The estimates that have been made of the annual earnings of the United Kingdom from this source would give a rough indication of the German income.

The highest estimate made with regard to the annual earnings of German railways and canals from carrying goods for other countries is that of Dr. August Müller,<sup>1</sup> who sets the pre-war figure at 120 million marks. A French estimate places it at 100 million marks. In 1913 the total railway receipts from freight traffic were 2,046 million marks and the average yearly receipts for the period 1909-1913, inclusive, were 1,874 million marks.<sup>2</sup> In view of the fact that the greater part of the transit trade is carried by rail rather than by water, it would seem that the foregoing estimates of German receipts from the transit trade were probably somewhat overstated. Von Glasenapp estimated that in 1913 Germany received from international freights (rail and water) and from banking transactions about 1 billion marks.<sup>3</sup>

<sup>1</sup> The European Payments Balance, *Reconstruction*, February-March, 1922-23, p. 218.

<sup>2</sup> SNOW, C. D., German Foreign-Trade Organization, U. S. Department of Commerce *Miscellaneous Series*, 57, p. 153.

<sup>3</sup> *Manchester Guardian Commercial*, *Reconstruction in Europe*, sect. 1, p. 28.



With regard to earnings from the tourist trade, Riesser says that these are "more than fully offset by the corresponding foreign earnings on account of Germans travelling abroad."<sup>1</sup> Von Glasenapp estimates that the migratory laborers in Germany in 1913 totalled about 700,000, and that through them probably 400 million marks were taken out of the country. The income from the tourist trade, he estimates, practically balanced the sums spent by Germans travelling abroad.<sup>2</sup>

Estimates concerning the other invisible income and expenditures of Germany, mentioned on page 12 of the text, are not to be had.

If one attempts to base a judgment of the German balance of payments on the estimates presented above, the result is not altogether satisfactory. The figures obviously are too rough to be used in calculating the balances year by year, and even when 5-year averages are used to smooth out the yearly variations in the trade and specie balance, the figures lead to negative rather than positive conclusions. In view of the fact that it is known that Germany actually was slowly accumulating investments abroad, it is quite evident that some of her sources of income are not accurately measured or are altogether overlooked in the estimates given. In any event it appears that Germany's international investment position was not so strong as commonly supposed. Various writers point out that she was borrowing in the short-time money markets of other countries. See pp. 273-77.

<sup>1</sup> "The German Great Banks," *ibid.*, p. 541.

<sup>2</sup> *Manchester Guardian Commercial*, *ibid.*

In making up the following table we have used the adverse trade and specie balances calculated from the official returns (see p. 264); shipping returns as shown on p. 27; and interest income estimated on the assumption that at the beginning of the 20-year period in question the net investment abroad was 12 billions, at the end of the period 20 billions, and that the amount annually invested abroad was greater in the earlier than in the later years (see p. 269). We have estimated German earnings of banking, insurance, etc., at about one-third the British earnings from this source; and we have set figures for earnings from the inland carrying trade, and for sums carried out of the country by migratory laborers, using as a basis the few estimates available.

GERMANY'S AVERAGE BALANCE OF PAYMENTS

(Averages, in millions of marks)

Years	Invisible Items					Favorable Balance (Invisible Items)	Adverse Balance (Commodity and Specie)	Net Payments-Balance
	Shipping	Interest	Inland Carrying Trade	Commissions etc.	Migratory Workers			
1894-1898	190	685	50	90	.....	1,000	987	+ 13
1899-1903	270	800	65	125	.....	1,260	1,073	+187
1904-1908	355	895	80	170	-150	1,350	1,472	-122
1909-1912	475	965	100	200	-250	1,490	1,842	-352
1913	540	1000	120	340	-400	1,600	1,008	+592

The plus sign indicates favorable, the minus sign unfavorable items.

In the above table an average for the 4 years 1909-1912 is shown instead of a 5-year average for

the years 1909-1913. This is done because the year 1913 was so exceptionally favorable that the inclusion of it in the average blurs what the figures have to show with regard to the trend of Germany's international balance. The year 1913 is shown separately for comparison. In the whole 20-year period under consideration, there had been only 3 other years in which the adverse commodity and specie balance had been as low as it was in 1913. It is this one item alone which makes the great difference between the average net payments balance for the 5 years and that for the 4 years. The effect of including it in the average is to cut in half the net payments balance against Germany. Even if the average of the favorable invisible items is assumed to be the same for the 4- as for the 5-year period the average net balance of payments against Germany for the 4 years would still be twice as great as that for the 5 years—332 million marks as against 165 millions.

*The figures in the table indicate that the annual amounts which Germany had available for investment abroad were decreasing rather than increasing.* These figures, of course, lay no claim to precision, and yet there is no glaring omission or understatement in them. As they stand, they give strong confirmation to the statement frequently made before the war that the sums which Germany was annually investing abroad were gradually decreasing in amount. The adverse commodity and specie balance was growing faster than the favorable balance from the invisible items.

However, if it were possible to prove that the total for the favorable items were understated by 100 million, or even by 200 million marks a year, the average annual figure standing in Germany's favor, after deductions had been made for the adverse commodity and specie balance, would not be very impressive. Even if we should assume that the favorable invisible balance were as much as 300 million marks greater each year than the table indicates, the net payments balance available for new investments abroad, would not have furnished the means for any great expansion of Germany's foreign holdings.

*A complete estimate of the balance of payments has been attempted by a few writers. These estimates are presented below for whatever evidence they contain.*

1. EDGAR CRAMMOND'S ESTIMATE FOR THE YEAR 1912 \*

(In millions of marks)

Credits		Debits	
Exports of manufactures, etc. ....	9,634	Imports of commodities.	11,572
Exports of precious metals. ....	143	Imports of precious metals. ....	326
Interest on capital invested abroad. ....	1,000	Capital invested abroad during 1912. ....	260
Earnings of German shipping and transport generally. ....	600		
Earnings of German banking, insurance and mercantile houses engaged in foreign trade. ....	200		
	11,627		12,158

\* *Journal Royal Statistical Society*, July, 1914, p. 798.

An examination of this account shows that:

(a) The trade figures given are for the *Gesamteigenhandel*. If special trade figures are substituted—imports, 10,692 million marks; exports, 8,957 million marks—the result is to increase the debits by 153 million marks.

(b) No allowance one way or the other is made for the tourist trade and migratory labor.

(c) As it stands, the account shows that, aside from the proceeds of borrowing operations,<sup>1</sup> which Crammond must have considered but does not indicate, Germany had no income for investment abroad in the year 1912. In fact, the credits did not equal the debits, leaving out of the debit accounts the item "capital invested abroad."

## 2. ESTIMATE OF F. S. SCHMIDT, FOR THE YEAR 1913 \*

(In millions of marks)

Credits		Debits	
Exports of manufactures, etc. . . . .	10,892	Imports of commodities. . . . .	11,655
Interest and profits from international enterprises and capital investments. . . . .	1,250		
International travel. . . . .	.....	International travel. . . . .	.....
		Short-term money credits	200-300
	12,142		11,855-11,955

\* "Internationaler Zahlungsverkehr und Wechselkurse," p. 392.

<sup>1</sup> On this, see pp. 273-77.

This estimate is obviously very rough and incomplete:

(a) In this, as in Crammond's estimate, the *Gesamteigehandel* figures are used.

(b) It shows a figure of 200-300 million marks for short-term money credits—an item that is often referred to by writers on the subject of the German balance, but is practically never put into figures. (For further consideration of this item, see p. 274.)

(c) It leaves out of the reckoning the bullion and specie movement, which increased Germany's net adverse balance in 1913 by 335 million marks. It also leaves out the tourist trade; the receipts from the carrying trade; earnings from banking, insurance, commissions, and from other minor items that together probably amount to a considerable sum in Germany's favor.

### 3. VON GLASENAPP'S ESTIMATE FOR THE YEAR 1913 \*

(In millions of marks)

Credits		Debits	
Exports of commodities	10,097	Imports of commodities	10,770
Interest on foreign investments.....	1,000- 1,250	Migratory laborers took away about.....	400
International freights and banking transactions.....	1,000	Available for investment abroad.....	927- 1,177
	12,097- 12,347		12,097- 12,347

\* *Manchester Guardian Commercial, Reconstruction in Europe*, sect. 1, p. 28.

(a) Von Glasenapp, like Schmidt, leaves the bullion and specie movement out of consideration. If this is included, the sum available for investment abroad is cut to between 600 and 850 millions. It might perhaps be argued that the bullion and specie should not be included in arriving at a net payments balance—the basis for such an argument being that Germany had a choice of using the proceeds of her exports either for investments abroad or for importing gold. This argument, however, would apply not only to gold but to all imports. Germany is not a gold-producing country, and in order to get the gold which she needed for monetary purposes and for use in the arts she had to import it. That her accounts show year after year a net importation of gold indicates a need for gold imports pressing enough to outweigh the alternative choice of increasing foreign investments and the resulting increase of interest returns.

*Germany was a borrower in the short-time money markets of the world.* This fact explains to some extent the discrepancy between the average amounts which the above table of estimates shows she had available for investment, and the average amounts that it appears she actually was investing abroad. If these short-time borrowings had been liquidated within a reasonably short period of time, and if they had been contracted to provide current funds for the financing of the commodity trade, the matter would not warrant consideration here. The fact is, however, that frequently these borrowings were renewed again and again. This does not mean that

as a rule the renewals were made with the bank which had granted the original loan. On the contrary, each loan was paid as it fell due, but it was paid from the proceeds of a new loan from some other source. A borrower from Bank A in London, for example, paid the loan when due from new credits extended to him by Bank B, located perhaps in London, perhaps in Paris or Amsterdam. Thus, directly or indirectly, these loans furnished Germany with part of the funds which she used for foreign investments.

In his "Internationaler Zahlungsverkehr und Wechselkurse," Dr. F. S. Schmidt<sup>1</sup> points out that statistical information concerning short-time credits is almost entirely lacking for the obvious reason that, as a rule, few people have cognizance of such transactions. He quotes one estimate, however, which is given in Schwarz's "Diskontpolitik" (1911), p. 122, to the effect that of the 500 or 600 million marks of short-time credits extended each year, from 200 to 300 millions were not based on merchandise transactions but represented pure money borrowings. These sums were borrowed principally in France and Great Britain, where the rates were comparatively low. Whether or not the figures which he gives are reliable is a matter of less importance than the fact which he states. A great deal of light is thrown upon Germany's financial position by the fact that she was borrowing in the short-time markets where interest rates were low and was using the proceeds to

<sup>1</sup> Pp. 28 and 393.



finance undertakings in countries where interest rates were high.

Dr. Kurt Singer,<sup>1</sup> in an article dated July 1, 1922, also contends that before the war Germany exceeded her economic capacity in her foreign investments, a theory which he says was often maintained in German conservative circles in pre-war days. In referring to von Glasenapp's estimate of the 1913 balance of payments, he says that while in 1913 Germany may have had a credit balance of 1 billion marks, in the four previous years her accounts barely balanced. To show that during these and many other pre-war years, the increase in her foreign investments was made possible only by contracting short-dated obligations in the richest money markets, he calls attention to the rates at which mark drafts drawn in these markets were discounted in Berlin.

The table on p. 276, taken from his article, shows the number of days in which mark bills<sup>2</sup> of exchange were above par, at par, and below par, as compared with sterling, francs, and guilder. The figures are Berlin quotations.

During the fifteen years under consideration, the mark steadily depreciated, indicating, according to Singer, that the balance of payments was gradually growing less and less favorable. Owing to the ever-increasing pressure caused by the home demand for

<sup>1</sup> Die deutsche Auslands-Verschuldung, *Wirtschaftsdienst*, July 7, 1922, pp. 660-661.

<sup>2</sup> Singer states that this is compiled from Reichsbank documents, the rates used being for eight-day drafts, except that sterling and francs are quoted "at sight" for the years 1909 and 1910.

foreign currency, the value of the mark as compared with British, French, and Dutch currencies gradually drifted below par.

NUMBER OF DAYS MARK EXCHANGE WAS OR WAS NOT DEPRESSED \*

In Terms of	1896-1900			1901-1905			1906-1910		
	Above Par	At Par	Below Par	Above Par	At Par	Below Par	Above Par	At Par	Below Par
Sterling....	366	21	395	252	41	489	115	32	932
Francs.....	265	64	453	43	65	674	50	15	1,014
Guilder....	316	36	429	224	42	516	125	28	630

\* Singer does not explain why the total number of days set down is not greater for each of the five-year periods.

The theory which Singer and Schmidt advance in explanation of the growth of German foreign investments agrees with the findings of an investigation which the British government made at the beginning of the war into the affairs of London agencies of enemy banks. A combined balance sheet of five of these banks, published in 1917, shows large liabilities under the heading "Bank of England acceptance advances", and the offsetting asset of "debtors in enemy countries". Considerable evidence of German borrowing operations in Paris likewise came to light in 1911 when trouble between Germany and France was brewing over conditions in Morocco.

*Before the war Germany exceeded her economic capacity as an investor, and yet her new annual investments were gradually decreasing in amount. Each of these statements is frequently met in discussions of*

German pre-war trade and finance. Taken together they are highly illuminating. Even though Germany was exerting herself to the utmost, she was finding it more and more difficult to obtain a surplus in her international accounts, after providing for the needs of her growing population. The fact remains, however, that she was finding a way to expand her foreign holdings; she was in some way or other providing herself with a surplus and finding a way to make this surplus available in foreign countries. From the point of view of reparation, it is important that a measure of this surplus should be found. The foregoing discussion of German international income from trade and service and from borrowings does not give the estimate that is needed. Some other way of arriving at the figure must be found.

### III. THE ANNUAL AVERAGE INCREASE IN INVESTMENTS

*The growth of foreign investments over a considerable period of time indicates roughly the average annual amount invested abroad.* From the table on page 260 it will be seen that the several estimates concerning Germany's holdings in 1892-3 are in fairly close agreement as are likewise those for the year 1913; but this is not the case for the intervening years.

The report of the Imperial Marine Office, made in December, 1905, is widely used as a basis for most of the later estimates, but it is recognized that the figures given in the report are undoubtedly overstated. Riesser<sup>1</sup> explains that the report was

<sup>1</sup> RIESSER, J., *ibid.*, p. 803.

based on the returns from a questionnaire sent out to German consuls everywhere, and that the consuls' reports, in turn, were based upon the more or less accurate estimates furnished by others to the consuls at their respective posts. As he summarizes it, the report states that:

(a) The amount of German capital invested in foreign undertakings, plants, business enterprises, and participations, is estimated at 7.7 to 9.2 billion marks, equivalent to an income, reckoned at an average of 6 per cent, of 462 to 552 million marks.

(b) The amount of foreign securities in the possession of German holders is estimated at least at 16 billion marks, equivalent to an income of 800 million marks, reckoned at 5 per cent.

In commenting on this same report, Helfferich<sup>1</sup> points out the obvious fact that

it will not do simply to add over-sea capital investments to holdings of foreign securities. . . . This would give a total, for the two groups of the Imperial Marine Office in 1905, of 24 to 25 billion marks. On the contrary, a large part,—in fact, by far the largest part, of oversea capital investments are in the form of securities. Upon the basis of the Marine Office's figures, therefore, total investments of capital abroad in 1905 ought not to be placed higher than 20 billion marks. Even this total appears doubtful; for, from the total amount of foreign securities brought out in Germany, considerable reductions must be made to represent securities redeemed or bought back by foreign countries.

A spirit of optimism seemed to prevail in 1905, however, for it is evident, by reference to the table on page 260, that the report was accepted at that time without a correction being made for the error which Helfferich points out. This accounts for the

<sup>1</sup> HELFFERICH, KARL, *ibid.*, pp. 112-113.

fact that the estimates published at that time are considerably higher than those published seven or eight years later.

In arriving at an estimate of the net amount of Germany's foreign investments in 1913, Helfferich argues that

within the past few years new investments abroad had been considerably restricted, owing to the home demand for capital for industrial and public purposes.

He therefore sets his estimate at 20 billion marks, with the comment that in view of all the circumstances, "even this figure seems rather too high than too low."

C. K. Hobson's estimate is even more conservative than Helfferich's, for he says that at the outbreak of the present war German foreign investments did not, perhaps, greatly exceed £1,000,000,000 (M. 20 billions) in amount, and were to some considerable extent offset by investments in Germany on the part of foreigners.

A census of the foreign securities owned by German nationals, taken in Germany in accordance with a decree of Aug. 23, 1916, helps confirm the estimates reported by Helfferich, Hobson, and others for the years just before the war. German nationals reported to the German government in August, 1916, ownership of 16,248 million gold marks. They also reported that from the middle of 1914 to August, 1916, an export of about 2 billion gold marks of foreign securities had taken place. It was on the basis of the information furnished by this census that the

government, on Mar. 22, 1917, acquired complete control of the utilization of foreign securities in German possession, and in May, 1918, began to mobilize certain Swedish, Danish, and Swiss securities.<sup>1</sup>

As the purpose of the investigation was more or less generally known, it is probable that the returns were somewhat understated. The fact that the government was able at this time to get definite information with regard to 18,248 millions of securities indicates that the total investment at the beginning of the war was considerably in excess of this figure, and that after deductions were made for German securities owned by foreigners, a net figure of 20 billions was probably not far from the truth. Hans David's estimate of 21 billions, given in the table on page 260, was based on this census. It appears that Müller's figure of 35 billions is an estimate of the total ownership by Germany of foreign securities and enterprises, with no allowance for duplication or for foreign investments in Germany. It is interesting to note that Steinmann-Bucher's estimate for 1914 is only 25 billions, as against an estimate of 30 billions for 1909.

Taking everything into consideration we conclude that the net amount of Germany's foreign investments increased during the 20-year period 1894-1913 from approximately 12 billion marks to 20 billions, the net increase for the period being about 8 billion marks. This is the equivalent of an average annual investment of about 400 millions, assuming that the amount invested remained the same year

<sup>1</sup> *Wirtschaft und Statistik*, no. 2, 1923, p. 64.

after year. Helfferich, Crammond, and others, however, state that the annual sums invested were not the same throughout the period, but that the amounts invested in the later years were less than those in the earlier years. In other words, the annual balance of payments in favor of Germany was gradually decreasing: the annual foreign investment in the early years of the period was somewhat more than 400 millions, and in the later years, somewhat less than 400 million marks.

If no allowance is made for possible changes in the trade and financial balance before the war (but see text, pages 34-48), Germany could not, however, have made annual payments of 400 million marks to foreign countries year after year during the twenty years before the war. If she had done this her foreign investments could not have increased above what they were in 1893, namely, 12 billion marks. In fact, they might even have fallen below this figure, for it is the experience of investing nations that their investments actually shrink in value unless new investments are added, thereby building up the competitive strength of their enterprises as compared with those of other countries.

If we assume that with foreign investments remaining at 12 billion marks, interest income would have remained at 600 millions—the estimated interest income for the year 1893—the average annual interest income for the twenty-year period would have been reduced from 836 millions to 600 millions, a reduction of 236 million marks. This cut in income would of course have reduced her ability to invest abroad

or to pay foreign obligations. In other words, if in this period Germany had used all of her net payments balance for the purpose of meeting foreign obligations, and had made no additions to her foreign investments, her ability to pay foreign obligations would have been cut from about 400 million marks to less than 200 millions a year.

*In terms of 1922 prices, this average of 200 millions per year is equal to not quite 400 millions.* Three series of price index numbers for the period are published for Germany:<sup>1</sup> those published in the *Jahrbücher für Nationalökonomie*, which are based on actual average prices as shown by official statistics of the German customs union; those compiled by Otto Schmitz, and those published in the *Statistisches Jahrbuch für das Deutsche Reich*, the latter two being based on wholesale prices in Germany. The average price level during the twenty-year period 1894-1913, was, according to Schmitz, 82.5 according to the *Jahrbücher*, 84.9; and according to the *Statistisches Jahrbuch*, 86.6 per cent of the 1913 prices. In terms of 1913 prices, therefore, an average annual investment of 200 millions during each of the twenty years, was equal to 245 millions according to the Schmitz index; to 235 millions according to the *Jahrbücher*; and to 230 according to the *Statistisches Jahrbuch*. Converted into present-day prices, which are about 60 per cent above those of 1913, 245 millions become 392 millions;

<sup>1</sup> *Bulletin 284*, U. S. Bureau of Labor Statistics, Index Numbers of Wholesale Prices in the U. S. and Foreign Countries, pp. 228-254. *Statistisches Jahrbuch für das Deutsche Reich*, 1921-22, p. 285.



235 millions become 375 millions; and 230 millions become 370 millions.

Taking into consideration the fact that Germany's favorable balance of payments was gradually decreasing in amount, we might assume that during the first ten years of the period she would have been able to make annual payments averaging about 250 millions; and during the last ten years, about 150 millions. On this basis, the average for the twenty-year period appears slightly higher, when converted into 1922 prices, than that calculated above.

Taking the 1913 price level as 100, the average level of prices during these first ten years was, according to the Schmitz index, 73.8; according to the *Jahrbücher*, 76.6; and according to the *Statistisches Jahrbuch*, 79. The average level for the years 1904-1913 was 90.5 according to Schmitz; 92.5 according to the *Jahrbücher*; and 94.2 according to the *Statistisches Jahrbuch*. On the basis of the Schmitz index, an average of 250 millions each year for the ten years 1894-1903 is equal to 339 millions at the 1913 price level; on the basis of the *Jahrbücher* index, to 326 millions; on the basis of the *Statistisches Jahrbuch*, to 316 millions. An average of 150 millions for the years 1904-1913 is equal to 166 millions at 1913 prices, according to the Schmitz index; to 162 according to the *Jahrbücher* index; and to 159 millions according to the *Statistisches Jahrbuch*. Over the whole period, therefore, the average annual investment, in terms of 1913 prices, was, according to Schmitz, 250 mil-

lions; according to the *Jahrbucher*, 244 millions; and according to the *Statistisches Jahrbuch*, 237 millions. When converted into present prices, 250 millions become 400 millions; 244 millions become 390 millions; and 237 millions become 380 millions.

#### IV. ITEMS IN THE WAR AND POST-WAR ACCOUNTS

For war and post-war years the German trade statistics are much less reliable than formerly. During the war years, and until September, 1922, whatever value-figures were officially reported by Germany were stated in terms of paper marks. Those who wished to compare these figures with data for pre-war years found it necessary to convert these paper-mark values into gold-mark values, making the conversion as a rule on the basis of the monthly trade returns and of the corresponding monthly average exchange values of the mark.<sup>1</sup> In 1922, however, the fall of the mark was so rapid that such conversions became practically meaningless. In September, 1922, therefore the German statistical office decided to publish an officially computed gold-mark value for the total imports and total exports—in addition to the paper mark values which it continues to give for the many commodities itemized in the returns.

The method used in this conversion is somewhat

<sup>1</sup> See pp. 52-53 of the text for a further discussion of post-war difficulties in the way of compiling accurate trade statistics. In making comparisons between pre-war and post-war trade statistics, an allowance must, of course, be made for the change in territory which has resulted from the execution of the peace treaties.

complicated, but in view of the difficulties involved, it has been accepted by the statisticians of other countries as a fair and reasonable method. As explained in *Monatliche Nachweise über den auswärtigen Handel Deutschlands* (the German monthly trade report) for September, 1922, the gold mark values reported are arrived at in the following way.

1. *Imports.* In accordance with the decree of Feb. 12, 1921, concerning the declaration of the value of the goods imported, the value of the imports must be declared in paper marks,<sup>1</sup> that is, the importer must state the number of marks he actually paid to cover the cargo, whether the invoice was made out in marks or in foreign currency. It often happens that the value of imports is much higher than is indicated by this declared paper-mark value, because of the fact that in many cases several months intervene between the conclusion of a contract, or the date of payment, and the importation of the goods, and that during this time a considerable depreciation in the value of the mark may take place. If, in order to offset this, the declared import values be converted into gold marks at the average rate of the dollar during the preceding month, the resulting gold-mark figures are also too low, because more than a month generally elapses between the time of payment and the date on which the goods pass the frontier. A possible alternative is to convert the paper-mark values into gold marks on the basis of

<sup>1</sup> Notice that both exports and imports are now on a declared basis, but the change does not affect the method of dealing with shipping charges: exports are still *f.o.b.*; imports, *c.i.f.*

the latest London commodity price quotations—taking that as the best index of world prices. This method of conversion, however, gives too high a valuation because some imports are from countries selling below the world price level, and a small part of the imports are even from countries which accept payment in paper marks. To avoid the objections offered to each of the above methods, the German statistical office makes the conversion by *both* methods, determines the arithmetical average of the two figures, and reports this as the gold-mark value of imports.

2. *Exports*.—Exports are declared in terms of the currency for which they were sold. The fact that those exports which are sold for foreign exchange are also *declared* in terms of foreign currency gives a better guaranty under present circumstances of the accuracy of the export returns than does the method used for imports. At present about 60 per cent of the total exports are declared to the statistical office in terms of foreign currency. To determine the gold value of the remaining 40 per cent, the statistical office converts the paper-mark values into gold-mark values by using the average rate of the month of exportation (Berlin exchange). So long as the exchange continues to fluctuate, this method is, of course, not accurate, but as foreign payments may be made either before or after the month of exportation there are sufficient grounds for making the conversion at the rate of the month of exportation.

Other difficulties in the way of collecting accurate statistics of Germany's post-war trade are discussed

on pages 52-53 of the text. Any comparisons made between the trade for pre-war, war, and post-war years, must make allowance for the difficulties under which the later statistics are compiled, for the decrease in German territory and population that has resulted from the Peace Treaty, and also for the abrupt rise in the world price level since 1913. On the other hand, it is reasonable to make comparisons between the import and export figures for a given year, since both sets of figures are compiled under practically the same conditions. In the result, known as the balance of trade, errors in the export figures to a large extent cancel similar errors in the import figures. In view of all the facts, therefore, it seems that we may accept the war and post-war balance-of-trade figures published by the German government as being reasonably reliable approximations, fairly good expert guesses—as well as being the only available official data—with regard to the annual deficits in Germany's trade accounts for these years.

Without doubt, Germany is no longer able to meet this trade deficit out of a favorable invisible balance. To the evidence on this question that is given in the text, some further information and details are added in the following paragraphs.

*Since the outbreak of the war, Germany's net income from foreign investments and foreign balances has completely disappeared.* Two methods of estimating the remnant of foreign investments left to Germany at the close of the war are used in Chapter II of the text. Both of these lead to the conclusion that this

remnant could not have amounted to more than 2 or 3 billion marks.

Chapter III states that even the greater part of this remnant has probably now been used in providing payment for German imports, and that while Germany has been accumulating some foreign bank balances, she has little left that will yield her a net interest income. A report<sup>1</sup> that has recently been published by the German statistical office concerning the census of foreign securities that was taken in 1916, and the disposal made of the securities since then, is in agreement with these statements. The 16,248 millions held by German nationals in August, 1916, were disposed of as follows.

	Millions of Gold Marks
(a) Exported between 1916 and 1919.....	6,180
(b) Sold by the German government during 1917 and 1919 for the purchase of foodstuffs and raw materials...	832
(c) Deposited in enemy countries, and confiscated after the war.....	3,887
(d) Delivered to the Allies, according to the Treaty of Versailles.....	792
(e) Exported during the period from April 1, 1919 to the end of 1922.....	1,000
(f) Unsecured pre-war Austro-Hungarian securities, now practically valueless.....	1,400
(g) Still in Germany at the close of 1922, comprised in large part of Russian securities; Austro-Hungarian government secured loans, industrial stocks, and bonds; and of Turkish, Roumanian, and similar depreciated government securities; interest income on all of which has almost entirely ceased.....	2,157
Total.....	16,248

<sup>1</sup> *Wirtschaft und Statistik*, no. 2, 1923, p. 64.

Whereas the estimates in Chapter II lead to the conclusion that the net remnant of German securities at the end of the war was probably not more than 2 or 3 billion marks, the above table shows only about 1 billion of saleable foreign securities left to Germany on April 1, 1919. In Chapter II it is, of course, assumed that the total German investment in foreign securities and foreign enterprises was somewhat more than 20 billions, but that, on the other hand, there had been foreign capital invested in German securities and German enterprises. The 20 billions are estimated to be the *net* amount—after allowance had been made for foreign investments in Germany—on which Germany received income in pre-war years. It is the remnant of this net amount—or the net remnant—which is estimated to have been 2 or 3 billions at the end of the war, and now to have dwindled to practically nothing.

The German securities census probably did not succeed in revealing all German-owned foreign securities; it also seems to have taken no account of German capital directly invested in foreign undertakings, plants, business enterprises, etc.; nor does it raise the question of the extent to which foreigners have invested in German securities and German enterprises. If these facts are taken into consideration, and if allowance is made for the fact that the total value of German foreign securities—18,248 million marks—which the census revealed, p. 280, is 1,752 millions short of the estimate used as a basis for the computation in Chapter II, the figures with regard to the probable amount of this remnant of

holdings disclosed by the securities census agree very well with those arrived at in the text.

*As a result of the war, German shipping earnings have been greatly reduced.* In accordance with the Treaty of Versailles, the greater part of Germany's ocean-going tonnage was transferred to the Allies during the years 1919 and 1920, thus leaving her with practically no shipping income for these years. Since then, however, she has bought back some of these transferred ships, has added new ones to her merchant fleet, and has also leased foreign ships to supplement her insufficient tonnage, so that once more the shipping item appears in her international accounts.

It should be remembered that, since the German trade (both exports and imports) is valued at the German frontiers, the figure recorded as the value of imports includes not only the cost of the goods but also the cost of transporting them, and charges for insurance, banking, commission services, etc. The export figure is exclusive of costs added after the goods leave the German frontier. Thus Germany's expenditures for shipping are automatically set down in her international accounts as a part of the import figure, but her shipping receipts are not included in the export figure. It is therefore necessary that these accounts should also include any income which she receives from shipping. To determine the net shipping item it would be necessary to separate from the import figure the part that was paid to foreign ships, and to set against this the income received from foreigners for the services of German



ships. If this were done, the result would probably show that at present Germany is receiving very little, if any, net return from shipping. The so-called "shipping income" that is usually recorded is not this net figure; it is simply the credit item which is balanced against the concealed shipping debit included in the import figure.

On page 264, the German shipping income for 1921 is estimated at 68 million gold marks, and for 1922 at 180 millions. The method used in arriving at these estimates is open to more objections when used for post-war than for pre-war years, but it at least furnishes a rough guess, and at present nothing better is to be had.

*Germany's international receipts from the transit trade have been considerably reduced.* According to a French estimate, they amounted to probably 25 million gold marks for the year 1922, a figure which represents a reduction of 75 per cent or more as compared with the 1913 estimates. In accounting for the decrease, a number of causes are cited. (1) The total trade to be carried has greatly decreased since the war. (2) Goods for Russia and Poland that formerly came through the port of Hamburg may now enter through the port of Danzig and proceed from there by way of the Polish corridor, thereby increasing the freight receipts of Poland at the expense of Germany. (3) Since East Prussia is now separated from the rest of Germany by the Polish corridor, German goods going to or from East Prussia must pass through this part of Poland, thus further reducing Germany's net income from the

transit trade. (4) Foreign boats on German rivers are more numerous now than in pre-war times.

The above estimate of 25 millions may be somewhat low, but since the item bulks very small in Germany's balance of payments, the net effect of an understatement or overstatement here would be of minor importance. As matters of detail, however, attention may be called to the following facts: (1) Germany's state-owned railway mileage in 1922 had been reduced, as a result of the war, to about 92 per cent of the 1913 figure. (2) Exaggerated importance is given above to Germany's losses in the transit trade in Poland's favor. Shipping in the port of Hamburg is rapidly approaching the pre-war level,<sup>1</sup> while the Polish corridor is a strip of territory only about 15 miles wide, in which freight charges accruing against Germany cannot be very large.

Dr. Kuczynski contends that Germany's income from the transit trade in 1922 probably stood at 50 per cent, rather than at 25 per cent of the pre-war figure—although he believes that the estimates which set Germany's transit-trade income in 1913 at 100 to 120 million marks, are probably too high. He points out that cheap German freight rates are attracting trade to the German railways which formerly went by ocean carrier.<sup>2</sup> Dutch potatoes

<sup>1</sup> See shipping statistics in the *Federal Reserve Bulletin*, May, 1923, p. 610. *Hamburger Uebersee-Jahrbuch*, 1922 (edited by Friedrich Stiebert), pp. 444-5. *Geschäftsbericht der Deutschen Reichsbahn über das Rechnungsjahr 1921*, p. 16.

<sup>2</sup> KUCZYNSKI, R., "Reichseisenbahnen und Reichsfinanzen," p. 23 f. Cf. TECKLEBURG, "Die Reichsbahn," vol. II, p. 15.

bound for France are now carried through Germany rather than by way of Belgium. Czechoslovakia, which in pre-war times got its overseas goods by way of Trieste, receives them nowadays by way of Hamburg, and sends its exports of sugar and timber to the German North Sea ports. English coal, which in former days went by ship to Genoa, now goes through Germany by rail.

Whether the figure is 25 millions or 40 to 50 millions, it is a relatively small item in the international balance of payments.

*The maximum estimate for post-war tourist income is 300 million gold marks per annum.* The method by which this estimate is reached, is explained on page 54 of the text. If the income from the tourist trade ever did reach this figure, it seems quite certain that that time is now past. C. E. Herring, American Commercial Attaché to Berlin, would discount the statement altogether. He says:<sup>1</sup>

The profits from tourist expenditures in Germany are, no doubt, smaller than before the war, as the hotel crisis in all the larger cities and the discomforts of travel tend to keep away all but business visitors. Furthermore, while foreigners usually spend much more than the domestic population, their expenditures, calculated on a gold basis, are exceedingly low, and the purchasing power of the dollar, pound, or franc, in terms of commodities, transportation, or even hotel accommodations, is considerably more than before the war. Foreign visitors in Germany, as well as the armies of occupation in occupied Germany, are really beneficiaries of the abnormally low prices (measured in

<sup>1</sup> *Trade Information Bulletin* 40, C. E. HERRING, MAURICE PARMELEE, and ROBERT J. SCOVELL, "German Reparations, Budget, and Foreign Trade," June 26, 1922, p. 31.

gold) resulting from German financial exhaustion, despite large expenditures in paper marks and the frequent payment of higher prices than Germans.

Germany's post-war income has been increased somewhat through the receipt of gifts and relief contributions.

The statement is made on page 102 that a balance between Germany's invisible debits and credits is the most that may be assumed for some years to come. She may increase her shipping income, but her future progress in rebuilding her merchant marine is likely to be less rapid than it has been in the last year or two. Already the tourist income has begun to decrease. Other items that yielded her a temporary income following the war are disappearing from the accounts. There is little prospect of much increase in her income from the transit trade. The income from all other invisible items is practically negligible. The only items likely to bring an appreciable future income, therefore, are shipping and the tourist trade; and against these items stand the large payments which Germany must make to foreign investors who have been buying the stock and bonds of German corporations, as well as other forms of property in Germany.

## APPENDIX B

### ESTIMATES OF GAINS FROM THE SALE OF PAPER MARKS

In the text use has been made of the estimates of Kurt Singer and of J. M. Keynes with regard to the gain which accrued to Germany through the purchase of paper marks by foreign speculators. Both writers had made some use of an estimate published by von Glasenapp; Singer, in fact, makes definite reference to it. This estimate of von Glasenapp's was to the effect that early in 1922 foreigners were in possession of some 25 to 30 billions of paper marks, that foreign credit balances in German banks amounted to about 35 billions paper, that foreigners held German securities valued at about 35 billions paper, and that the total credits granted to Germany amounted to a maximum of 30 billion paper marks.

Singer's method is as follows. Having quoted this estimate, he proceeds to the question of ascertaining the gold-mark equivalent received by Germany in return for this paper. Of the total 130 billions<sup>1</sup>

<sup>1</sup> When testifying before the Sozialisierungs-Kommission über die Reparationsfragen, April 1, 1922, von Glasenapp was asked whether the mortgages given to foreigners by German real estate owners were included in the 130 billions. His answer was, "As to the mortgages, we have no figures," and director Nordhoff of the Reichsbank said, "Some billions will have to be added on their account." In the

itemized above, 100 billions, according to Singer, may be considered as short-term obligations. Of these 100 billions, he assumes that probably 60 billions are payable in paper marks, and that the rest are payable in some other form of currency or are secured by some form of tangible assets. These 60 billions of paper, then, converted into gold-mark values, represent according to Singer the amount which Germany gained from her foreign dealings in paper marks.

As a first step towards this computation he gives the following comparison of paper-mark and gold-mark values over the period during which these sales took place:

	Paper-mark Equivalent
Average rate during the war.....	1½
Average rate for the years 1919-1921 inclusive.....	8
For separate years the rates were: 1919.....	4
1920.....	15
1921.....	20

His next step concerns the way in which these sales of paper marks were distributed over the period in question. Singer says that since the larger sums in notes were in all probability liquidated soon after the end of the war and since the arithmetical average rates for the years 1914-1921 inclusive,

same session, von Glasennapp said he considered that the estimates which placed German-owned foreign exchange at a value of 1 to 1.5 billion gold marks were too high. See, "Verhandlungen der Sozialisierungs-Kommission über die Reparationsfragen," 1922, vol. III, pp. 430 and 426.

shows 2 paper marks as the equivalent of 1 gold mark, it is reasonable to assume that the mean rate of purchase was approximately the same as the rate quoted for 1919, or 4 paper marks to 1 gold mark.

At this rate of conversion, 60 billion paper marks are the equivalent of 15 billion gold marks, or, as Singer puts it, for the acquisition of these 60 billion paper marks, foreign purchasers have expended about 15 billion gold marks. He adds that if the unlikely supposition is made that these 60 billions of paper were acquired at an average rate of 10 paper marks to 1 gold mark, foreign holders have paid 6 billion gold marks for the 60 billions of German bank notes, deposits in German banks, and short-dated loans which they hold. These figures, as Singer points out, do not take into account the losses incurred by the purchase of German securities. To a certain extent, all foreign purchases of German securities since the war might be considered as a form of mark speculation, but this applies more clearly to government and municipal than to industrial securities.

The statement made on page 85 of the text to the effect that Singer's estimate shows that Germany's gain from mark speculation since the war has amounted to 10 billion gold marks, is not a direct quotation from Singer, but is deduced from the data which he presents. He says that of the 23 to 30 billion paper marks held by foreigners, from 6 to 7 billions were sold by Germany during the war, with a view to covering surplus imports, in addition to German notes—the amount of which he does not

specify—expended during the war in occupied territories. Converted into gold marks at the average rate for war years— $1\frac{1}{3}$  paper marks to 1 gold mark—7 billion paper marks becomes approximately 5 billion gold marks. Of the total 15 billions, therefore, which he estimates as Germany's gain from mark speculation for the years 1914–1921, some 5 billions or more were gained during the war; the remaining 10 billions or less were gained after the war.

*Keynes' estimate of Germany's gains from mark speculation refers altogether to post-war years.* He states that speculators in marks could take their securities in any of three ways: Reichsbank notes, deposits in German banks, or German mark bonds. His estimates with regard to each class are as follows:

(a) Reichsbank notes held abroad at the end of 1921, according to most authorities, amount to from 25 to 30 billions, for which foreigners paid in gold approximately.....	3.5 billions
(b) Balances for foreign account held in German banks, on the assumption that directly or indirectly 300,000 foreigners have opened bank accounts in Germany and have remitted £500 each on the average, amount to a total of gold marks of.....	3 billions
(c) German mark bonds, mainly government and municipal—only a limited number of issues of which have interested foreigners on an important scale—may at the most be estimated in gold marks at perhaps.....	1.5 billions

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The total realized from these sources amounts in gold marks to..... 8 billions

The method by which he arrives at his estimate that approximately 3.5 billion gold marks were paid



for the 25 to 30 billions of Reichsbank notes held by foreigners is as follows: First, he tests the paper-mark estimate to see if it appears reasonable; second, he states the conversion rates applicable to each of the 3 years 1919-1921; third, he computes his gold mark totals.

1. To test his estimate that about 25 to 30 billions of paper marks had been acquired by foreigners since the war, he proceeds as follows:

At the end of 1918, the total note issue of the Reichsbank was 22 billions; and at the end of 1919, it was 36 billions; an increase of 14 billion marks during the year 1919. During the year 1919, however, German prices doubled, so that a part of this increase was required at home, leaving for export during the year probably not more than.....	5 to 7 billions
During the year 1920, the note issue increased to 69 billions, a net increase for the year of 33 billions. During 1920, however, prices trebled (the average for the year 1920 being seven times that for the year 1918) so that in 1920 as in 1919, a considerable share of the new note issue was required at home, the export for the year amounting to, say.....	7 to 14 billions
During 1921, the note issue increased by 45 billion marks, or from 69 billions to 114 billions, but again prices rose, increasing this time to nine times the 1918 level, so that if the internal currency needs of the country could be met by a volume of circulation four times that of 1918, there would be room only for a further export of.....	14 billions

2. The conversion rates which he quotes, practically the same as those used by Singer, are as follows:

	Paper-mark Equivalent of One Gold Mark
1919	4 to 5
1920	14
1921	20

3. On the basis of his estimates with regard to the amounts that were exported each year, and the respective conversion rate, he concludes that at a minimum, 2 billion gold marks, and at a maximum, 3 billion gold marks, were spent by foreigners in the years 1919–1921 in the purchase of Reichsbank notes. For the year 1922, while the volume of sales was probably large, the value of the mark was low, so that the proceeds from mark sales in 1922 were not large. He therefore sets 3.5 billion gold marks as for his maximum estimate of Germany's receipts from Reichsbank notes held in foreign countries.

## APPENDIX C

### FOREIGN PURCHASES OF URBAN REAL ESTATE IN GERMANY

THE experience of the Berlin district of Schöneberg has been used in the text as a basis from which to estimate the extent to which foreigners have bought up urban real estate within Germany. The data on which this estimate is based are as follows:

NUMBER OF BUILDINGS IN SCHÖNEBERG SOLD TO FOREIGNERS  
IN EACH MONTH, 1918-1923

Months	Number of Sales *					Average Number of Marks to the Dollar				
	1918-19	1919-20	1920-21	1921-22	1922-23	1918-19	1919-20	1920-21	1921-22	1922-23
October . . .	1	3	4	18	113	6.6	26.9	68.1	150.2	3,181.0
November . . .	...	8	3	35	140	7.4	38.4	77.2	263.0	7,183.1
December . . .	...	16	2	29	51	8.3	47.4	73.0	191.9	7,589.3
January . . .	...	11	6	15	33	8.1	59.6	65.3	191.8	17,972.4
February . . .	...	27	9	11	16	9.1	99.0	61.3	207.8	27,917.7
March . . .	...	24	2	19	3	10.3	82.7	62.5	284.2	21,190.0
April . . .	...	18	1	41	...	12.5	59.6	63.5	291.0	
May . . .	...	10	4	37	...	12.7	46.5	62.3	290.0	
June . . .	...	12	2	37	...	14.2	39.1	69.4	317.4	
July . . .	...	8	...	53	...	15.2	39.5	76.7	493.2	
August . . .	1	5	1	56	...	19.3	47.7	84.3	1,134.6	
September	1	6	4	90	...	24.1	58.0	104.9	1,465.9	

\* Figures for 1918-19 to 1921-22 taken from Stegemann, *L'acquisition de maisons allemandes par des étrangers (Deutsch-Französische Wirtschafts-Korrespondenz, no. 1, 1923, p. 10; exchange rate of the dollar for 1922-23 taken from Wirtschaft und Statistik; house sales in 1922-23 taken from Stegemann, L'acquisition d'immeubles berlinois par des étrangers (Deutsch-Französische Wirtschafts-Korrespondenz), no. 5/6, 1923, p. 16).*

PLACE OF RESIDENCE OF FOREIGN PURCHASERS OF BUILDINGS IN  
SCHÖNEBERG\*

Residence of the Purchaser	Number of Buildings Sold to Foreigners					
	Oct., 1918, to Sept., 1919	Oct., 1919, to Sept., 1920	Oct., 1920, to Sept., 1921	Oct., 1921, to Sept., 1922	Oct., 1922, to March, 1923	Oct., 1918, to March, 1923
Austria.....	...	...	...	66	88	154
Belgium.....	...	5	...	6	6	17
Czechoslovakia..	...	4	...	50	25	79
England.....	...	6	2	7	1	16
Esthonia.....	...	...	...	9	7	16
France.....	...	2	1	18	8	29
Holland.....	...	19	13	18	6	56
Hungary.....	...	5	...	4	31	40
Italy.....	...	2	1	24	11	38
Latvia.....	...	3	2	23	17	45
Poland.....	2	19	5	62	74	162
Roumania.....	...	...	2	12	17	31
Spain.....	...	5	...	46	7	58
Sweden.....	...	38	...	13	8	59
Switzerland.....	...	5	...	10	5	20
Other European countries.....	1	21	5	35	26	88†
United States...	...	6	5	16	9	36
All other coun- tries.....	...	8	2	22	10	42‡
	3	148	38	441	356	986

\* Compiled from the two articles by Stegemann referred to above.

† Bulgaria 7, Danzig 11, Denmark 11, Finland 5, Greece 2, Jugoslavia 9, Lithuania 7, Memel 2, Norway 12, Russia 12, Turkey 10.

‡ Argentine Republic 5, Armenia 2, Brazil 1, China 1, Cuba 1, Egypt 6, Eritrea 9, Meesopotamia 2, Mexico 4, Palestine 1, Panama 1, Peru 1, South African Union 3, Syria 3, Tripoli 2.

## APPENDIX D

### METHODS OF ACCOUNTING OF THE REPARATION COMMISSION

THE document cited in the note on page 63 was the first of a series published by the British and French governments which it is hoped will throw considerable light on the operations of the Reparation Commission.

It is fundamentally necessary to bear in mind that, since 1918, the German payments, so far as reparation is concerned, have been credited under two great headings, those required by virtue of Article 235 and those required under the other reparation clauses (231-234, 236-244). Let us take these two stipulated sets of payments in order.

Article 235 of the treaty obligated Germany to pay, by May 1, 1921, "in such instalments and in such manner" . . . as the Reparation Commission might fix, the equivalent of 20,000,000,000 gold marks. This sum was intended to cover the expenses of the Army of Occupation, together with the cost of "such supplies of food and raw materials as 'might' be judged by the governments of the Principal Allied and Associated Powers to be essential to enable Germany to meet her obligations for reparation." The balance was to be reckoned

towards the liquidation of the amounts due for reparation. The military occupation costs were thus the first charge upon this sum of twenty billion marks. These costs, under Article 249, were to be calculated in two ways. All requisitions within occupied territory were to be paid for by Germany in marks "at the current or agreed rate of exchange". All other costs, salaries, allowances, and equipment were to be paid for by Germany in gold marks.

According to the Commission's figures, the total cost up to April 30, 1921 of the European armies of occupation was 2,471,336,000 gold marks. Against this, states the report, Germany has delivered paper marks to the value of 339,432,000 gold marks. The net Allied cost of 2,131,904,000 gold marks had, therefore, to be charged up to whatever Germany might pay under Article 235. Moreover, if the costs of the United States Army of Occupation were to be included, to these 2,132 millions must be added 1,011 millions more, making a net total of about 3,143 millions of army costs to be met by Germany's payments under Article 235. Still another item, namely, the cost of coal requisitions prior to May 1, 1921, amounting to 392 millions, has to be included in the aggregate of Germany's minimum obligations under Article 235. This gives a total figure of 3,535 million marks.

Toward the payment of this aggregate sum, the Commission admits having received 2,595 million marks in kind or in cash (from other sources than Germany but to Germany's credit). In other words, on April 30, 1922, the balance still to be cov-

ered by Germany on this account, namely Article 235, for the period Nov. 11, 1918 to April 30, 1921, was 940 million gold marks.<sup>1</sup>

The Commission, however, mentions several other items which it says are as yet not definitive, but which, when all pending questions shall have been settled, are to "rank against Article 235". These "suspense items" the Commission sets down provisionally at the German figures. They amount to 4,961 millions and include the following, in millions of gold marks.

Gold deliveries and other payments made for food and raw materials for Germany (German figure).....	3,835
Saar coal delivered to France prior to German cession of the Saar (German figure).....	
Currency furnished to the armies of occupation up to April 30, 1921.....	485
Goods and services furnished to the armies of occupation up to November 30, 1920 (German figure)....	600
Expenses of inter-Allied commissions to November 20, 1920 (German figure).....	40
	4,961

It is true that the first item represents a payment in consideration for which Germany really received something. We may, therefore, strike it from the account, as it would appear on both sides. But the balance of these items as enumerated aggregates 1,126 million gold marks, and from this figure, provisional though it may be, enough may reasonably be expected to be realized to offset the pending Ger-

<sup>1</sup> On Jan. 31, 1923, this balance amounted to 913 millions.

man debit of 940 millions on the account prior to May 1, 1921.

For a clear understanding of the significance of this provisional deficit, it must be remembered that although Article 235 contemplated large reparation payments over and above occupation costs, its first object was to meet what might be called the overhead charges of treaty enforcement. If Germany failed to turn over sums in excess of those overhead charges, up to the maximum demanded—twenty billions—then she simply failed to pay just that much of her ultimate aggregate debt, losing in consequence many advantages attached to early payment. The Commission, while not waiving any of its claims under Article 235, has in fact merely insisted that enough money should be forthcoming from the debtor to meet the costs incident to collection. When the deficit or surplus to Germany's debit or credit on account of Article 235 shall have been determined, presumably it will be carried over to the reparation account for the reparation year 1921-22. Thus if the deficit on the military occupation cost payments is set at 940 millions, and carried over to 1921-22, Germany will be liable for 940 millions over and above what she was to have paid in 1921-22 on her reparation account (2 billions, plus 26 per cent of the value of her exports), as prescribed in the schedule of payments. On the other hand, if the Commission finally credits Germany in respect of the "suspense items" with a sum greater than 940 millions, there will be a net surplus of payments on occupation account down to



April 30, 1921; and this surplus will be treated as payment on reparation account for the year ended April 30, 1922.

We now come to the period between May 1, 1921 and April 30, 1922. The Reparation Commission, as we have seen, fixed Germany's liability for reparation at 132,000,000,000 gold marks. From this sum certain deductions were to be made, and to it there was to be at least one addition, namely, the Belgian foreign war debt. The deductions were (a) amounts *already paid and chargeable to reparation*, and (b) credits for ceded state property. What these deductions will ultimately involve cannot—even now in June, 1923—be definitely indicated. If they were to represent the total of state-property valuations, together with the surplus payments under Article 235 which we have noted above as within the range of possibility, they might even attain as high a figure as 6,500 million gold marks.

Nor is the addition to the reparation liability on account of the Belgian war debt to the other Allied and Associated powers much more precise. This debt was calculated in April 1, 1921 as amounting to 4,000,000,000 gold marks. The amount, however, could not be definitely stated until the negotiations regarding international debts had been concluded.<sup>1</sup>

However, starting out with a *provisional* aggregate liability of 136,000,000,000 gold marks, according to the Commission, Germany paid during the

<sup>1</sup> By Jan. 31, 1923, the Belgian foreign war debt appears to have mounted (still provisionally) to 5,624 million gold marks.

year May 1, 1921-April 30, 1922, the equivalent of 1,877,814,749 gold marks. The composition of this total in millions of gold marks is as follows:

Cash and securities.....	1,313.6
Deliveries in kind.....	560.4
Armistice deliveries in kind.....	3.6
	1,877.6

Had Germany complied with the requirements of the schedule of payments of May 5, 1921, she would have paid by April 30, 1922 2 billion gold marks, plus 26 per cent of the value of her exports for the preceding twelve months, or an amount approximating 2,570 million gold marks. This she declared herself unable to do. She requested on Dec. 14, 1921 a reduction of this amount. On Jan. 13, 1922, the Commission required her to pay 31 million gold marks every ten days until a decision might be given as to a moratorium. On March 21, a modification of the schedule of payments was authorized *but only for the balance of the calendar year 1922*. According to this modification Germany was to pay in cash or kind a total of 2,170 millions down to the end of the year 1922. At the end of the Reparation Commission's year (April 30, 1922), the Commission had credited Germany with 509 million gold marks, leaving 1,253 millions in kind and 407.7 millions in cash to be paid by Dec. 31, 1922. The later transactions of the Commission with Germany and the successive modifications of the schedule of payments have not yet been the subject of official reports

by the Commission, although, to be sure, there is sufficiently authoritative official public record of them to make possible the construction of a trustworthy chronological narrative.

Reverting now to the total of "passed" items acknowledged by the Commission to have been actually received from Germany in the period May 1, 1921-April 30, 1922—namely, about 1,878 million gold marks—we must examine the method of its distribution in order to answer fully the question raised above as to the reasons why what is acknowledged to have been received from Germany is not applied to reparation account.

To begin with, the cost of military occupation continued still to be a first charge on all receipts, and this cost, although less than before May, 1921, was still very large. For the twelve months ending April 30, 1922, it amounted (gross) to 289 millions of gold marks, of which 79 millions were stated by the Commission to have been met by paper-mark deliveries. The net cost of 210,591,000 gold marks was met from the deliveries in kind received during the year (noted above as totalling 560 million gold marks). But the costs of the United States in excess of 56 million gold marks had not been met. Notwithstanding this last fact, the Allied Powers decided (March 11, 1922) to meet their own army costs since May 1, 1921 out of cash and kind received in the same period. In consequence of this decision, 640,000,000 gold marks of the receipts were transferred to army account. The Commission concludes its statement of the account with the definite declara-

tion that Germany was 965 millions in arrears for the twelve months ending April 30, 1922 *so far as the schedule of payments of May 5, 1921, was concerned.*

The Commission thus concludes that, as of April 30, 1922,

- (1) Germany was still 940 million gold marks behind in meeting the overhead charges of treaty enforcement to May 1, 1921;
- (2) Germany could not be *finally* credited with *any* portion of *any* of her payments under *any* of the reparation clauses, because of deficits in *all* of her accounts, and because of her inability to live up to the provisions of the schedule of payments of May 5, 1921;
- (3) Germany was at least 965 million gold marks behind in her 1921-22 payments under the schedule of payments; and
- (4) The provisional valuations of state property transferred by Germany might be regarded as provisionally deductible from the capital debt (tentatively amounting to 136,000 million gold marks)—that is to say, about 2,504 millions might be subtracted—leaving a provisional net capital debt of about 133,496 millions, of which debt the A, B, and C bonds given to the Reparation Commission by Germany are formal evidences. But the capital amount is

still as indeterminate as the deductions, for the reasons stated in 2 above.<sup>1</sup>

<sup>1</sup> In the brief official statement covering the period down to Jan. 31, 1923, we get the following interesting figures in millions of gold marks without commentary:

1. On all accounts prior to May 1, 1921, Germany's liability to the Commission or Allied governments amounted to 3,535 million gold marks, and she has paid, to Jan. 31, 1923, 2,622 million, leaving an unpaid balance of . . . . .	913
2. On the capital debt account, Germany's liability was 137,504 million gold marks, and she has paid 2,553 million, leaving an unpaid balance of . . . . .	134,950
3. On army and related costs since May 1, 1921, Germany's liability was 392 million, and she has paid 321 million, leaving an unpaid balance of . . . . .	71
4. On the schedule of payments, from May 1, 1921, to Jan. 15, 1923, Germany's liability was 4,931 million gold marks and she has paid 2,427 million, leaving an unpaid balance of . . . . .	2,503
Or, in other words, Germany's total liability on Jan. 31, 1923, was . . . . .	138,437

## APPENDIX E

### CLEARING HOUSE OPERATIONS

THE Treaty of Versailles (Article 296) provided that each contracting party should assume responsibility for the commercial debts owed by its nationals, except in the case of the pre-war insolvency of the debtor. Clearing houses for this purpose were set up by Germany (April 26, 1920), and from time to time by Great Britain, France, Italy, Belgium, Greece, Siam, and Haiti. Several other states, however, the merchant classes of which were known to have had fairly heavy outstanding obligations due to Germany (Poland, Czechoslovakia, Roumania, the Serb-Croat-Slovene State, and others) have not been unduly hasty in providing the debt-settlement machinery. The majority of those states which have had recourse to Article 296 have naturally been those countries to which in pre-war times German citizens normally were heavily in debt on commercial account. France's position, of course, is affected particularly by the special problem of liquidating the balances of Alsace-Lorraine with the rest of the former German empire.

So far as Great Britain is concerned, we have a provisional estimate that at the outbreak of the war the balance in favor of Great Britain in respect to con-

tract debts was in the neighborhood of £35,000,000, —or about 700,000,000 gold marks. (*First Report of the Controller of the Clearing Office*, London, 1921, page 11.) In addition to these commercial obligations, there was much British and other Allied property in Germany, and the clearing offices were charged with the recovery of such property or its proceeds. Both general classes of obligations were to be liquidated at pre-war rates of exchange.

The Allied clearing houses were to notify the German office of the various claims made by their nationals for payment of debt or restitution of or payment for property. The German office, on the other hand, was to notify the Allied offices of all German claims. If the incoming claim were admitted by the debtor as represented by the receiving clearing office, it was to be credited on the latter's books to the office of origin, regardless of whether or not it could be collected. At the end of each month accounts were to be exchanged showing the aggregate debits and credits; and whenever the German clearing office's debit balance were larger than the corresponding credit balance, it was to pay the balance in cash to the respective creditor clearing office; while, if the position were reversed, the German office was to have its credit balance apply to successive months. If at the end of the entire process of liquidation, any balance were to exist in favor of the German office, it was to be retained by the respective clearing office until complete payment should have been effected of the sums due by Ger-

many to the other signatories of the Treaty of Versailles. Finally, if contests arose over any question between the original parties to the contracts, between the proprietors of expropriated or damaged property—and the respective public authority—or between the clearing offices themselves, such litigation was to be subject to the final jurisdiction of independent mixed arbitral tribunals set up by the treaty.

It is not difficult to see the practical effects of this clearing system upon Germany. All contracts involving debts owed by Germans, irrespective of the language of such contracts, were to be regarded as payable in the foreign currencies of the various creditors. If a German owed 10,000 marks to an English firm at the outbreak of the war, the treaty bound him to pay the debt at the rate of 20.4 gold marks to the pound,—in other words he paid at par and derived no benefit from depreciated exchanges. Moreover, accrued interest at 5 per cent was demanded for the seven years since 1914. This meant on the basis of a German debt of 10,000 marks, payments of £487-12s-7d on account of principal and £170-13s-4d on account of interest—a total of £658-5s-11d.

If German creditors were to get any cash in the liquidation process, or if German debtors were to find any way of bridging the chasm between current and pre-war values of contract obligations expressed in either foreign or German currency, it would have to be with the aid of the German government. As a matter of fact, the government felt compelled to



assume nearly the entire burden of the clearing process. The German government undertook to absorb (in its budget) the loss on exchange, taking payment from the German debtor in the exact number of marks that had been stated in the given contract or that would have equalled the foreign currency involved. It also undertook to advance payments in marks to German creditors, when the claims were admitted.

It is not surprising, therefore, that the German clearing office early got behind in transmitting the cash balances required under the agreement outlined above. Substantial balances of claims for compensation as well as for settlement for contract debts had been presented by the Allied clearing offices throughout the summer of 1920, and in November of that year the German clearing office was obliged to request an alteration in the system of settling balances. After considerable discussion between Allied prime ministers and the directors of the Allied clearing offices, an agreement was entered into with the German representatives at London on June 10, 1921, in accordance with which a fixed monthly instalment of £2,000,000 was estimated for various balances. This instalment was to be divided *pro rata* among the Allied clearing offices in the settlement of their admitted claims. But this agreement also soon broke down and in August, 1922, the German government requested the further reduction of these fixed instalments to an amount not in excess of £500,000. Before an arrangement to this effect could be made, the Ger-

man treasury was forced to default the instalment of approximately £2,000,000 due in August.

The agreement of June, 1921, was thereupon denounced by all the interested powers and the controllers of the clearing offices were instructed to conclude forthwith a new arrangement with the German government as to the settlement of these balances. When the second report of the controller of the British clearing office was issued (Sept. 26, 1922) the matter was still under negotiation; but subsequently, Germany was given a moratorium until June 30, 1923, as to all clearing-house foreign payments.

It will be of some interest to note that according to the *Second Annual Report of the Controller of the Clearing Office* (page 17), there had been admitted by the German office and paid to British claimants by the British office on Sept. 26, 1922, a total of £39,203,736 5s. 9d, and admitted by the British office with consequent credit to Germany, a total of German claims against British debtors of £15,999,832 1s. 3d. The greater part in both cases had been contested and was under further consideration by respective clearing offices or even subject to adjudication by the mixed arbitral tribunals. The report of the controller gives (page 23) a summary statement as of March 31, 1922, for the cash actually received from the German clearing office by the Allied clearing offices, contrasting in each case with the amount paid to the Allied creditors by the respective offices (the latter amount, of course, being equivalent to the admitted claims). The

values are given in sterling, into which other currencies have been converted at an arbitrary rate approximating the average rate of exchange on London.

Country	Cash received from the German Clearing Office*			Cash paid to Allied Creditors*		
	£	s.	d.	£	s.	d.
Belgium.....	2,585,749	8	10	1,435,468	19	1
Great Britain.....	20,077,559	15	9	34,434,980	12	7
France:						
Paris office.....	4,775,285	9	0	4,382,872	8	0
Strasbourg office...	4,093,679	1	0	3,598,285	5	4
Greece.....	773	0	11	13,009	11	10
Italy.....	Nil			Nil		
Siam.....	19,719	8	8	10,293	18	8
	31,552,766	4	2	43,874,913	3	4

\* The amounts include treaty interest to date of admission.

The process of securing the proceeds of liquidation and compensation (under Article 297 of the Treaty of Versailles) had not resulted at the end of the fiscal year for which the controller's second report was made, March 31, 1922, in the transfer of any actual cash from the German clearing office to that of Great Britain. Of nearly 58 million pounds sterling of claims forwarded by the British office to the German office, more than 37 millions were still under consideration on March 21, 1922, about 9 millions had been abandoned, just above 2 millions had been awarded by arbitral tribunals, and the

German clearing office had credited proceeds of liquidation to the amount of £14,948,000. This last-named sum was intended to be paid as soon as possible from the balance of the proceeds of the liquidation of German property in England left over after any prior charges (such as the contract debts of Germans) had been covered. The following table indicates what has been paid out by the Allied clearing offices to their respective claimants, on the basis of either tribunal awards or German admissions, and it indicates further the total credits which these clearing offices will be entitled to collect from the German clearing office. The exchange conversions have been made at the arbitrary rate indicated above.

Countries	Total Credits Admitted by German Clearing Office		Payments to Claimants by Allied Clearing Houses			
			Proceeds of Liquidation, Article 297 (h)		Compensation, Article 297(e)	
	£	s. d.	£	s. d.	£	s. d.
Belgium.....	275,331	6 7	Nil		Nil	
Great Britain....	17,519,732	18 7	14,948,034	8 4	Nil	
France:						
Paris Office....	2,806,236	9 1	338,989	16 2	243,075	12 8

It may be of interest in just this connection to note the statement given by the German government of the amounts actually paid over to the clearing offices of the other countries to Jan 15, 1922. The

statement is to be found on page 60 of the pamphlet entitled "Carrying out of the Treaty of Versailles from Jan. 10, 1920, to Jan. 10, 1922," published at Berlin, 1922.

From the beginning of the Clearing House Procedure to Jan. 15, 1922, inclusive, there have been paid altogether to the Opposing Clearing Offices the following amounts:

To the British Clearing Office.....	£19,013,008 14s. 0d
To the French Clearing Office.....	192,222,376. 97 francs
To the Alsace-Lorraine Clearing Office..	250,311,255. 97 "
To the Belgium Clearing Office.....	133,928,892. 27 "
To the Greek Clearing Office.....	73,614. 93 drachma
To the Siamese Clearing Office.....	£19,715 10s. 11d

The collection of these amounts necessitated the expenditure of about 15 milliard (paper) marks.

The amounts of paper marks required for the payments after January, 1922 rapidly became far more burdensome until, as has been indicated above, the deliveries practically broke down in August.

Up to Nov. 30, 1922, the German government paid out about 615 million gold marks through the clearing office, according to the official publication "Deutsche Wirtschaftsfrage," Berlin, 1923, page 12.

## APPENDIX F

### THE VALUATION PROBLEM IN CONNECTION WITH GERMAN TREATY FULFILLMENT

As stated in the note on p. 73, we have refrained from any examination of the methods of valuation used in calculating the claims against Germany filed with the Reparation Commission. It is not because we fail to realize that the fair examination of the extent and character of these claims must precede any really final solution of the reparation problem, but chiefly because there is not enough information available on the subject. Such of it as has been brought together and published by the German commission established to deal with this matter (*Kriegslastenkommission*) leads the investigator to wonder in accordance with what sound business principles the bills were drawn up.<sup>1</sup> The answer to this question is, however, not directly involved in the discussion of Germany's capacity to pay which we have undertaken. We are interested only in the valuation methods which the contending

<sup>1</sup> See the three detailed volumes entitled "Die Kriegsschädenrechnungen der alliierten und assoziierten Mächte," Berlin, 1922. See also J. M. Keynes, "A Revision of the Treaty," 1922, chap. IV.

parties have used in estimating the value of what Germany has paid, delivered, or transferred to her late enemies. It has seemed necessary to take up at greater length than the limits of the text would permit, certain aspects of the valuation problem.

### 1. THE STATEMENTS OF THE REPARATION COMMISSION

From time to time the British and French governments have published official statements based upon extracts from the accounting records of the Reparation Commission. Whether in detail or in summary form, these statements are all avowedly provisional. The most detailed statement emanating from the Commission available to the authors while this study has been in course of preparation is the one entitled "Statement of Germany's Obligations at April 30, 1922."<sup>1</sup>

This official statement divides the record of German payments into two distinct periods, the first extending from Nov. 11, 1918 to April 30, 1921, and the second covering the first so-called reparation year, *viz.* May 1, 1921-April 30, 1922. The following table shows the amounts which the Reparation Commission acknowledges having received during these two periods.

<sup>1</sup> London, 1922; this is No. I of a series of Reparation Commission documents published in English and French. It is understood that No. IV appeared in the late spring of 1923, with detailed figures bringing the provisional accounts down to Dec. 31, 1922. Summary statements which purport to present the situation as of Jan. 31, 1923, have been available (cf. Appendix D, p. 311).

RECEIPTS FROM GERMANY TO APRIL 30, 1922 ACKNOWLEDGED  
BY REPARATION COMMISSION

(In gold marks)

Period *	A Cash from Germany	B Cash from Other Sources Credited to Germany	C Deliveries in Kind †	D State Prop- erty in Ceded Ter- ritories (and other capital items) ‡
Nov. 11, 1918- April 30, 1921	.....	84,121,000†	2,483,290,000	2,504,342,000
May 1, 1921- April 30, 1922	1,313,660,496	28,000,000†	564,154,233	

\* In point of fact, not all the payments were actually made within these precise periods.

† Miscellaneous credits are included here, such as Schleswig's proportion of German pre-war debt. France is recorded as having paid the Commission 643,000 gold marks for Germany's proportion of the capital of the Moroccan State Bank. Germany is credited with these amounts, as well as with the proceeds of sales of converted war material and receipts from the Rhine Customs Zone.

‡ Including ships, docks, livestock, reconstruction material, coal, by-products of coal, dyestuffs, and the like; also armistice deliveries; also submarine cables.

§ Column D includes various items, some of which will be transferred to Column B when the cessionary powers have agreed as to the portions of German pre-war debt for which Germany will be given credit. (See note †.) The items strictly classifiable as estate property, with provisional assessments are: Saar coal mines, M. 400,000,000; German share in French concession at Shanghai, M. 2,042,000; property in British concession at Shameen, M. 538,000; property in Kiao-Chow, M. 59,000,000; property acquired by Czechoslovakia, M. 5,640,000; Danzig, M. 300,000,000; Poland, M. 1,712,025.

There are other deliveries enumerated in the report of the Commission but classified as "suspense items". The figures for these items in three instances



are recorded as from German sources. They consist of the following, in millions of gold marks:

Saar coal delivered to France prior to German cession of the Saar (German figure).....	1
Currency furnished to the armies of occupation to April 30, 1921.....	485
Goods and services furnished to the armies of occupation to Nov. 30, 1920 (German figure).....	600
Expenses of inter-Allied commissions to Nov. 30, 1920 (German figure).....	40
	1,126

These items, it will be observed, are mainly expenses connected with the armies of occupation. While these figures have not in all cases been finally accepted by the Reparation Commission, there is little reason to believe that they are materially in error. Adding this total of 1,126 million gold marks to the 6,977 millions, we have a total of more than 8,000 million gold marks which the records of the Commission permit us to regard Germany as having paid up to April 30.

This total, it should be definitely understood, does not include payments under all of the accounts enumerated on pp. 62-3 in the text. It includes only reparation and costs of the armies of occupation. Restitution, pre-war debt-settlement expenditures, and all the other items for which Germany was not intended to receive any credit under the reparation clauses (Articles 231-244) are not accounted for in this approximate total of 8,103 million gold marks.

In its report of payments to Aug. 31, 1922,<sup>1</sup> the

<sup>1</sup> *Federal Reserve Bulletin*, February, 1923.

Reparation Commission's total of acknowledged receipts rises from 6,977 million gold marks to 7,835 million gold marks. Of this total, 21 per cent was paid in gold or foreign currency, 45 per cent in kind, and 34 per cent in state property. It is remarked in the *Federal Reserve Bulletin* that 39 per cent of the total paid was absorbed in occupation expenses and food advances.

Another statement which appears to have emanated from the Reparation Commission and which has been made available by the International Labor Office of the League of Nations gives figures down to Sept. 30, 1922, being in this respect comparable with the long official statement of the German Commonwealth to which reference is made on page 331. According to this table, the Commission acknowledges the receipt of 5,520 millions in cash or other liquid forms of payment and 2,605 millions in kind, a total of 8,125 millions. From this must be deducted, the Reparation Commission goes on to point out, 3,249 millions to cover occupation expenses and advances made to the German government. In other words, the net credit assignable to Germany on reparation account according to this particular statement would be 4,876 million gold marks. The German government has checked up these figures, and submits a total for each item therein contained greater in every instance than the ones reached by the Reparation Commission. For the same items included in the Reparation Commission's statement under cash, the German government lists 11,961 million gold marks; and for those items only which

are given by the Commission under deliveries in kind and state property, the German government reaches the total of 6,714 millions. Its total, in place of the 8,125 million gold marks announced by the Reparation Commission, is 18,676 million gold marks.

Finally, there is available the statement of the Commission as of Jan. 31, 1923, which is as follows.

## STATEMENT OF GERMANY'S REPARATION ACCOUNT, JANUARY 31, 1923

(In thousands of gold marks)

Main Accounts	Payments Made	Balance Due
On pre-May 1, 1921, army costs and coal advances.....	2,622,835	913,033
On capital debt.....	2,553,905	134,950,095
On post-May 1, 1921, army costs.....	321,455	71,216
On schedule of payments account:		
On instalments due Nov. 15, 1922..	2,427,792	2,503,545
On instalments falling due Nov. 15, 1922 .....	80,339	80,339*
	8,006,326	138,457,550
Additional army cost payments*....	630,603	

\* Amount is subtracted from the balance due, and is presumably an advance payment.

Army costs since Jan. 31 have been accumulating at the following rate:

French and Belgian troops, 16 francs per man per day.

British troops, 16 francs plus 2 gold marks per man per day.

During 1923, the 6-months treasury bills given to Belgium fall due.

Beginning July, 1923, 2 million pounds sterling per month are due through the clearing house system in settlement of pre-war private debts.

## 2. THE GERMAN OFFICIAL STATEMENTS

Not until after the middle of 1922 were the German statements of deliveries, payments, and property transfer in fulfillment of the Treaty of Versailles submitted in detail; up to that time only aggregate figures with fragmentary explanation appear to have been published.<sup>1</sup> In the summer of 1922 a pamphlet entitled "The Carrying Out of the Treaty of Versailles from Jan. 10, 1920 to Jan. 10, 1922" furnished an explicit record of German payments, deliveries, and transfers under the treaty, considering it in the order of its articles. An analytical statement appeared in the *Manchester Guardian Commercial, Reconstruction Series*, sect. 7, p. 474ff, signed by Dr. F. Schroeder. This statement was brought up to Sept. 30, 1922, in a document published in both English and German on the authority of the various German diplomatic missions abroad in the early months of 1923. The table is reproduced in full below. It reaches a total of 56½ billion gold marks, representing the value of payments, deliveries, and transfers apart from the value of the ceded territories both in and outside of Europe as future sources of revenue. Even in this total of 56.5 billions, certain deliveries are not included by the German government because it is contended that they

<sup>1</sup> Exception must be made of the costs of occupation, in connection with which a great many details were furnished by the German government in official statements made in 1920 and 1921, as well as in 1922.

were required without justification under the treaty. The table, which covers payments from Nov. 11, 1918, to Sept. 30, 1922, is as follows. All amounts are in gold marks.

### EXECUTION OF THE VERSAILLES TREATY

#### I

#### DELIVERIES FROM MATERIALS ON HAND AND CESSION OF PROPERTY WITHIN THE REICH AND ABROAD

1. Property of the Reich and of the states (exclusive of Eupen-Malmedy, Alsace-Lorraine, and the colonies) .....	5,507,616,000
<i>Add.</i> Property of the Reich and of the states in Eupen-Malmedy .....	150,000,000
2. Saar mines .....	1,017,570,000
3. Private and public cables .....	79,410,000
4. Non-military property left in the territory evacuated by the German troops on the western front .....	1,897,150,000
5. Railroad and pontoon bridges over the Rhine (part belonging to Baden) .....	9,611,000
6. Shares of the Morocco State Bank and value of the stocks and bonds delivered in accordance with Art. 260 of the peace treaty .....	392,643,000
7. German property liquidated abroad .....	11,740,000,000
8. Germany's claims on her former allies ceded in accordance with the peace treaty .....	8,600,000,000
	<hr/>
Total .....	29,394,000,000

## II

## PAYMENTS AND DELIVERIES FROM NATIONAL CAPITAL AND CURRENT PRODUCTION

9. Railroad material delivered in accordance with the Armistice terms, including reserve parts, motor trucks, all locomotives, rolling stock, and other railroad equipment in the ceded territories (inclusive of Upper Silesia, exclusive of Memel district, Denmark, and Eupen-Malmedy) . . . . .	2,238,433,000
10. Ocean-going vessels (inclusive of vessels in American waters and ships on which an embargo had been placed) and fishing boats, ships of inland waterways, harbor equipment, and river boats . . . . .	6,020,391,000
11. Coal without by-products (world market price) . . . . .	2,333,600,000
12. Deliveries for reconstruction in accordance with the Armistice terms (for instance, coal by-products, animals, pharmaceutical products, machinery, tools, woods, University of Louvain, paintings, etc.) . . . . .	520,576,000
Total . . . . .	11,113,000,000

## III

## CASH PAYMENTS

13. Payments in foreign exchange . . . . .	1,580,000,000
14. Sale of destroyed and damaged war material (scrap), estimate . . . . .	200,000,000
15. Rhineland customs and other revenue from the economic sanctions of 1921 . . . . .	69,337,000
16. Yield from the English Recovery Act . . . . .	126,295,000
17. Miscellaneous (war expenditures of Alsace-Lorraine, Franco-German pension agreement, guarantees given to the Guarantee Committee, etc.) . . . . .	164,368,000
Total . . . . .	2,140,000,000

## IV

## OTHER PAYMENTS AND DELIVERIES

18. Clearing house operations.....	603,000,000
19. Internal costs of occupation including mark advances (the external costs of occupation—i.e., the expenses, borne in the first instance by the powers occupying German territory, and met without mark advances—are paid by Germany by means of deliveries in kind. These costs amounted to 3.4 billion gold marks on April 30, 1922).....	861,000,000
20. Cost of the Reparation Commission and the other Inter-Allied Commissions.....	90,000,000
21. Restitutions and substitutions (i.e., deliveries of material restored or substituted) of machines, tools, ships, and animals—estimate..	400,000,000
22. Navy delivered to the Allies exclusive of those vessels interned in Scapa Flow, but inclusive of the marine equipment in Tsingtau ceded to Japan—Articles 184, 185 and 188 of the Peace Treaty.....	1,417,000,000
Total.....	<u>3,371,000,000</u>

## V

## EXPENDITURES AND LOSSES WITHIN GERMANY

23. Military disarmament (exclusive of sales of scrap), estimate, (army, navy, or air material undamaged or destroyed), delivered to the Reparation Commission, or sold to the highest bidder, the proceeds to be credited to the Allies. The yield from the sales of scrap was credited to capital account (vide supra 14)...	6,250,000,000
24. Industrial disarmament, estimate.....	2,700,000,000
25. Non-military material left by the German troops in the evacuated territory on the eastern front, estimate.....	1,050,000,000
26. Miscellaneous (costs of plebiscites, determining frontiers, transfers, care of refugees, etc., estimate.....)	482,000,000
Total.....	<u>10,482,000,000</u>

## SUMMARY

I. Deliveries from materials on hand.....	29,394,000,000
II. Payments and deliveries from national capital and current production.....	11,113,000,000
III. Cash payments.....	2,140,000,000
IV. Other payments and deliveries.....	3,371,000,000
	<hr/>
V. Expenditures and losses within Germany.....	46,018,000,000
	10,482,000,000
	<hr/>
Total.....	56,500,000,000

If, to this total, the value of Alsace-Lorraine, of the German colonies, and of the purely military material in the various evacuated territories be added, the figures representing Germany's total payments and deliveries run well above 100 billion gold marks.

The total of 56.5 billion gold marks has been reached by converting each disbursement in paper marks at the exchange rate prevailing at the time of payment and adding the converted items. Because of the difficulties involved in this conversion, it has seemed preferable to use the official German table of disbursements to which reference was made in page 65 and following, wherein payments, deliveries, and property transfers are classified according as made in gold marks (or on gold mark valuations) or in paper marks. The totals in this table have been used by the authors as the most authoritative German statement, not only because of the detail as to the form in which payment was made, but also because all its items are classified clearly as to their applicability to reparation account.



COMPREHENSIVE SUMMARY OF GERMANY'S PAYMENTS AND DELIVERIES OF EVERY DESCRIPTION IN ACCORDANCE WITH THE TREATY OF PEACE, AND AGREEMENTS PRIOR AND SUBSEQUENT THERETO, NOV. 11, 1918 TO SEPT. 30, 1922

	Millions of Gold Marks
I. Payments, deliveries, or transfers of property rights now or later capable of exact determination and applicable to Germany's capital debt:	
A. Property, goods, securities, or payments acknowledged or credited in whole or in part.	
1. National or state public property in ceded territories in Europe.....	5,044.1
2. Proportionate share of the German pre-war public debt (national or local) as fixed by the Reparation Commission in its Document 1927 A and B.....	485.0
3, 4, 5. Property in Shameen (Canton), Shanghai, and Shantung, China.....	61.6
6 (a). Saar mines—including privately owned mines and those of the Prussian and Bavarian governments.....	1,016.0
6 (b). Additional Saar deliveries.....	1.1
7. Privately owned maritime cables.....	77.8
8. Non-military property abandoned on the western front, including miscellaneous railroad material.....	1,897.2
9. Railroad equipment.....	368.1
10. Five railroad bridges and 10 pontoon bridges across the Rhine.....	9.6
11. Shares of the State Bank of Morocco.....	0.6
12. Railroad rolling stock, freight cars, etc.....	1,265.7
13. Shipping:	
Delivered.....	3,192.4
Interned.....	1,245.2
Seized by United States.....	1,250.7
Forty fishing vessels belonging to government.....	20.2
Scapa Flow salvage.....	45.4
	5,753.9

14. Inland water craft.....	78.0
15. Live stock.....	192.9
16. Coal, coke and by-products.....	473.2
17. Dyestuffs and pharmaceutical products.....	43.8
18. Miscellaneous deliveries in kind:	
Penal deliveries.....	24.9
Industrial machinery.....	2.2
Other machinery.....	1.7
All other.....	1.2
	30.0
19. Cash derived from the sale in Germany of scrapped military material paid in francs or sterling to Reparation Commission..	200.0
20. Miscellaneous cash deliveries.....	0.5
21. Rhineland customs and other "sanction" proceeds up to April 30, 1921. (150 millions in paper marks of spring of 1921, of which approximately 30 millions were converted to 3.3 million gold marks. The remaining 120 millions are counted below in the totals for paper marks).....	3.3
	17,002.4
B. Estimated value of seized and liquidated German property abroad.....	11,700.0
C. Surrendered claims of Germany on her wartime allies (including Austria-Hungary, 4,200 mil- lions, Bulgaria, 2,000, and Turkey, 5,400) ...	11,600.0
	40,302.4
(In addition there are 120 millions in paper marks men- tioned in 21).	
II. Payments, deliveries or transfers of property rights now or later capable of exact determination and applicable to the annual payments fixed in the London schedule of payments (May 1, 1921-Sept. 30, 1922):	
A. Deliveries in kind:	
1. Railroad rolling-stock deliveries made in this period but in pursuance of Armistice provi- sions; and penal deliveries.....	4.0
1 (a). Railroad equipment in ceded territories..	632.7

**THE VALUATION PROBLEM**

**333**

2. Shipping.....	161.3
3. Inland water craft.....	28.4
4. Livestock.....	80.4
5. Coal, coke, and by-products.....	456.5
6. Dyestuffs and pharmaceutical products.....	27.9
7. Reconstruction deliveries.....	129.3
8. Louvain reconstruction.....	1.0
9. "Sanction" payments (practically all under British Recovery Act).....	126.3

Total of A..... 1,647.8

**B. Payments in cash:**

10. Payments in bills of exchange.....	1,580.0
11. Payments in bills of exchange covering secur- ity payments for export-tax collections Oct. 15-Dec. 31, 1921.....	44.9
12. Miscellaneous cash (gold shipment to United States, etc.).....	0.9

Total of B..... 1,625.8

Totals of A and B..... 3,273.6

(In addition there are 1,109 million paper marks, not appearing above).

C. Value of securities delivered to the Reparation Commission under Article 260 of the treaty (negotiations concerning the valuation are still in progress).....

303.0

Total of II..... 3,577.0

*Total of I and II (representing amount for which reparation credit is expected by Germany), 43,879 million gold marks, plus 1,229 million paper marks.*

III. Payments, deliveries, and transfers of property rights made by Germany in fulfillment of the treaty, not applicable to reparation credit. (Estimates not final.)

A. Clearing house payments..... 603.0

B. Franco-German convention concerning indemnification of Alsace and Lorraine for subscriptions to German war loans..... 28.0

C. Franco-German convention concerning civil and military pensions in ceded territories.....	14.0
D. Payment to the state of Sao Paulo, Brazil, covering coffee-valorization funds held in Germany before the war.....	1.0
E. Reparation Commission maintenance.....	35.0
F. Value of artistic objects delivered to Belgium...	11.0
G. Value of national and state public property delivered to Belgium in Eupen-Malmedy.....	150.0
<b>Total.....</b>	<b>842.0</b>
	Millions of Paper Marks
H. Domestic occupation costs (including those for United States troops).....	12,898.0
I. Inter-Allied military commissions.....	2,414.0
J. Other non-reparation deliveries or payments (restitution, disarmament, and frontier fixing).	15,185.0
K. Expenditures within Germany (for the care of refugees from former German colonies, compensation for damage done in the colonies, etc.)	11,180.0
L. Security payments to the Committee on Guarantees.....	3,375.0
M. Miscellaneous.....	481.0
<b>Total.....</b>	<b>45,539.0</b>

*Total of III (representing amount for which Germany does not expect reparation credit) 842 million gold marks, plus 45,539 million paper marks.*

**Grand total, 44,721 million gold marks,  
plus 46,762 million paper marks.**

The differences between the table entitled "Comprehensive Summary" and the table found on page 327, entitled "Execution of the Versailles Treaty" are due not only to currency calculations, but also to the fact that they differ as to the items included and the bases of valuation. In the "comprehensive summary" the aggregate coal value is

in the neighborhood of 930 million gold marks, while, according to world market prices, the computation in the other official list is given as  $2\frac{1}{3}$  billions. It was the German domestic price which was to be used in computing the value of coal according to the direction of the Reparation Commission. The two statements differ likewise in the valuation placed on the war-time obligations of Germany's allies, the statement which we have taken as more authoritative placing them at 11.6, rather than at 8.6 billion gold marks.

The propriety of including the cost of military and industrial disarmament in the more general and less detailed statement need not be discussed at this place. Doubtless, from the German point of view, the wholesale break-up of plants and equipment originally constructed for military purposes but easily adaptable to peace-time industry may properly represent a loss chargeable to treaty fulfillment.

### 3. VALUATION IN LAW

We have referred in the text to the wide difference between the principles of valuation which appear to have guided the Reparation Commission and those which have guided the German government. There seems to be good ground for holding that in so far as relates to expropriation in municipal law, the person dispossessed is to be given credit for the value to him of the thing taken at the time of taking, and not for the value to the expropriator at that or any other time.

The United States Supreme Court in the case of *Monongahela Navigation Co. vs United States* (1893) 148 U. S. 312, 325, 341, 343, held that although the United States acquired only the lock and dam of the company and although the state franchise under which the company operated was useless to the government, nevertheless the government would have to pay for the franchise because it was of value to the company.

It is also suggested that the government does not take this franchise; that it does not need any authority from the state for the exaction of tolls if it desires to exact them; that it only appropriates the tangible property, and then either makes the use of it free to all, or exacts such tolls as it sees fit, or transfers the property to a new corporation of its own creation, with such a franchise to take tolls as it chooses to give. But this franchise goes with the property; and the navigation company, which owned it, is deprived of it. The government takes it away from the company, whatever use it may make of it; and the question of *just compensation* is not determined by the value to the government which takes, but the value to the individual from whom the property is taken; and when by the taking of the tangible property the owner is actually deprived of the franchise to collect tolls, just compensation requires payment, not merely of the value of the tangible property itself, but also of that of the franchise of which he is deprived.

Commentators on this decision and state decisions have held that compensation must be "a full and perfect equivalent for the property taken".<sup>1</sup>

<sup>1</sup> John Lewis, "Eminent Domain" third edition, Chicago, 1909, Sec. 684: "'Just compensation,' therefore, as used in the Constitution, means a fair and full equivalent for the loss sustained by the taking for public use." Cf. Sec. 678 and 680 and cases cited. Cf. Borchard, "Diplomatic Protection of Citizens Abroad," New York, 1916, Sec. 104.

On May 21, 1923, the Supreme Court of the United States handed down a decision of considerable interest in this connection, and some extracts are quoted from it. (*United States vs New River Collieries Company*).

"On various dates between Sept. 17, 1919, and Feb. 1, 1921, at Hampton Roads, Virginia, the United States requisitioned from defendant in error upwards of 60,000 tons of bituminous coal for use of the Navy. The taking was under Section 10 of the Lever Act. (40 Stat. 276.) The President, acting through the Navy Department, fixed certain prices as just compensation. These were not satisfactory to the owner. . . . When the coal was taken, there was at Hampton Roads a market for coal for export and also a domestic market. . . . There was a strong demand for export coal. . . . Supply and demand were controlling factors affecting market prices which prevailed in both the export and domestic markets. The prices for export coal were considerably higher than for domestic coal. If the coal had not been taken by the United States, it could have been sold by the owner at export market prices. . . . The owner was entitled to the full money equivalent of the property taken, and thereby to be put in as good position pecuniarily as it would have occupied if its property had not been taken. . . . The ascertainment of compensation is a judicial function, and no power exists in any other department of the Government to declare what the compensation shall be or to prescribe any binding rule in that regard. . . . Where private property is taken for public use, and there is a market price prevailing at the time and place of the taking, that price is just compensation. . . . The United States admits that market value is usually the basis for ascertaining the pecu-

niary equivalent, but suggests that sometimes an article has no market price and that in such case 'proof of real value' is admissible and that therefore market value and just compensation are not necessarily synonymous. The court below excluded evidence offered by the United States to show the owner's cost of production and a reasonable profit. This ruling was right, because it was shown beyond controversy that there were market prices prevailing when and where the coal was taken. The United States had the right to take the coal on payment of these prices; the owner was not entitled to more and could not be required to take less. The owner's cost, profit, or loss did not tend to prove market price or value at the time of taking, and was therefore immaterial. . . . The facts bring this case within the rule stated by the Circuit Court of Appeals (276 Fed. 690, at p. 692):

If it be an article commonly traded in on a market and it is shown that at the time and place it was taken there was a market in which like articles in volume were openly bought and sold, the prices current in such a market will be regarded as its fair market value and likewise the measure of just compensation for its requisition.

The lower courts rightly held that market prices prevailing at the times and place of the taking constitute just compensation. . . . The owner was entitled to what it lost by the taking. That loss is measured by the money equivalent of the coal requisitioned. . . . Export prices . . . were controlled by the supply and demand. These facts indicate a free market. The owner had a right to sell in that market, and it is clear that it could have obtained the prices there prevailing for export coal. It was entitled to these prices."



To what extent do these sound principles apply to the valuation of German deliveries to the Reparation Commission? From a technical point of view, the obligations under the treaty are *contractual* obligations to deliver a wide variety of objects. Some of these objects were described in general terms and the German government might exercise its own discretion in finding the ways and means to furnish them. For example, so many thousand tons of chemical products were to be delivered; where and under what conditions they were to be manufactured and paid for was Germany's affair. Other objects were specifically identified, as, for instance, the Saar mines, the merchant shipping, and the cables. Still other things were to be delivered, where the particular objects were not specifically mentioned, being covered merely by group classifications. No discretion was, however, left to the German government; all things falling within the group had to be delivered. A notable example is the sequestered private property in Allied countries. However classified, all of the objects intended to be covered by the treaty were to be delivered at certain times and in certain ways, all of which were set forth in the Versailles instrument which German plenipotentiaries signed on June 28, 1919.

If, however, we look below the formal language to the real nature of the obligations which the treaty embodies, we cannot fairly regard them as essentially contractual in character. In no branch of the juridical sciences is emphasis upon the significance of

documentary form greater than in the law and custom of international relations, for procedure and other formal sanctions have always been emphasized most strongly in situations where the inherent force of legal principles has been least effective. The Treaty of Versailles consists of a series of conditions and directions *imposed upon* the German people with no alternative to submission, practically speaking, on their part. The fulfilment of these conditions, in whole or in part, could not avoid being tantamount to the expropriation of German private property, it being left to the German government to devise schemes for the future compensation of those whose property had to be taken directly or indirectly to satisfy the terms of the treaty.<sup>1</sup>

German public property in ceded territories was taken by the Allies as a natural consequence of their acquisition of political control over the respective territories. There could be no alternative to the surrender of this property to the Allies. It is now theirs, "whatever use they may make of it,"

<sup>1</sup> The feeble efforts of the German government to protect German traders from the full effect of the treaty clearing-house provisions, by advancing payment to German creditors, only elicited cold disapproval from the British clearing-house controller. "Had the German clearing office law given effect to the treaty provision, there would have been no resultant loss to the German government, for the position of a clearing office is merely that of an agent for the collection and payment of the debts owing by and to its nationals." *Second Annual Report*, p. 6. In other words, the German government should have used its resources to whatever extent might be necessary to satisfy Allied creditors in gold with interest, and permitted German creditors to wait until the liquidation of all the reparation accounts, say, forty years later, might leave some clearing-office balances from which their claims could be paid.

to paraphrase the expression of Justice Brewer quoted above. Since the Allied governments have seen fit to resort to quasi-judicial methods in determining the value of the property delivered or transferred to them, it would seem reasonable to expect that consistent use of "trustworthy modes of computation"<sup>1</sup> would call for the valuation of both state and private property with due reference to the use it had been to its former owners. Whether the value could be equitably and precisely measured by the book valuations at which the property had been carried on the records of the respective public authorities in Germany would of course be a matter open for reasonable discussion. That the public property might be found to be of much less value to the cessionary powers than to Germany is well within the range of possibility; and that it lost practically all its value to Germany, is altogether obvious.<sup>2</sup>

As long as the whole process of valuation has been clothed with legal forms by the powers in a position

<sup>1</sup> Even though the Reparation Commission was expressly declared not to be bound by any rules or principles, it was to be "guided by justice, equity, and good faith." "Its decisions must follow the same principles and rules in all cases where they are applicable. It will establish rules relating to methods of proof of claims. It may act on any trustworthy modes of computation." Treaty of Versailles, part VIII, annex II, 11.

<sup>2</sup> About 29 million gold marks are in dispute between Denmark and Germany, leaving the amount noted by the German authorities as beyond dispute, 5,044 million gold marks. Minute details have been furnished by the German government as to the classes of state property, public buildings, forests, hospitals, schools, mechanical equipment, and the like, throughout the ceded territories in Europe.

to dictate the conditions of peace, the conclusion seems inescapable that all surrendered property, whether public or private, whether specified or indeterminate, must be appraised with serious and equitable regard for its value to the former owners. The payments, deliveries, and property transfers made under the Treaty of Versailles represent in the last analysis the surrender of goods or rights under constraint, and if in computing aggregate totals for the liquidation of treaty obligations, use is made of the forms and terminology of law, the responsible authorities would seem obliged to observe broad principles of the character of those laid down in the courts of the United States—all the more so when these principles have been used in appraising Allied losses.

The analogy, sometimes advanced, that in case of ordinary commercial default the debtor's property may be liquidated at forced sale and credited against the account merely for what it brings in actual cash is not pertinent in this connection. At the time the reparation deliveries in question were made, Germany was not in default. She was in the position of an ordinary solvent corporation with a large amount of current bills payable. Suppose in the latter case the banks and other creditors claimed the right to compel the forced sale of inventories, or even of plant and equipment, in the settlement of obligations on which there had as yet been no default. How long could such a corporation remain solvent? Concretely, if at the peak of prices early in 1920 creditors of American corporations had been

permitted to seize inventories of high value in settlement of current debts—then to hold these goods until after the collapse of prices and throw them upon disorganized markets for what they would bring, how many business corporations could have remained solvent? This is exactly what the Allies have done with Germany in respect to ships and many other commodities. It is bad ethics and bad business procedure; and the law is clear on the point that valuation must be made at the time of delivery.

In any event, if Germany is to be credited, as has been the case thus far, on a valuation basis that compels her to deliver property worth to her several times what it is worth upon liquidation by the Reparation Commission, it is clear that her chances of being able to pay the total sum demanded of her will disappear.

The conclusion of the writers is that the only proper basis of valuation is a reasonable value to the one dispossessed at the time of dispossession. Past international practice furnishes little help in the peculiar cases with which we are now concerned. Accordingly, a decision by a competent committee of impartial jurists on the justice of the procedure that has been followed would prove of inestimable value at this time, when there is so much ground for confusion, as to how much Germany has actually paid.<sup>1</sup>

<sup>1</sup> Professor Charles Gide of Paris is quoted by the *London Economist* of June 2, 1923 (p. 1227), as saying that the true valuation would lie somewhere between the Reparation Commission's

#### 4. EXAMPLES OF VALUATION DIFFERENCES

Not enough exact data have yet been made available to explain clearly the divergencies between the figures given by the German government and those provisionally submitted by the receiving countries. It may help, however, to take up some specific items and set forth the conflicting claims.

For example, the Reparation Commission credits Germany with but 8.9 million gold marks from the proceeds of scrapped military material. The German government declares that 200 million gold marks' worth of military material was turned over to be scrapped. Apparently the process used consisted in the delivery to contractors of material intended for destruction and its subsequent sale by the contractors. The proceeds of the sale were to be delivered to the Reparation Commission and the contractors paid for their services by the German government. Such material as the German government presents impresses us more than the bare and unexplained figure given by the Commission. It is no longer possible to check the records on the matter since the transactions have long since been closed.

With regard to the proportionate share of Germany's national and state pre-war debts for which credit is to be given to Germany on reparation account and that of Germany,—possibly 12 or 14 billion gold marks. The *Economist* remarks that "the basis of valuation will continue to be of importance, for, if fair principles are adopted, it may help to reconcile figures which at the moment are separated by much too wide a gulf."

count, while she is, nevertheless, to continue paying interest and amortization, the amount appears to have been fixed by the Reparation Commission as 485 million gold marks, of which 2 million have actually been credited. The German government claims that these debts, apportioned to the ceded territories, ought to be taken at the stock market prices current on August 1, 1914. There has been no agreement on this point; and until some agreement is reached, the figure 485 millions is set down by the German government. We have included no credit for this item in the provisional list of valuations at the end of this Appendix for the reason, of course, that no *substantial economic* loss to Germany is represented by the eventual credit to be given to her on reparation account. The item illustrates well the difference between tangible economic losses, which we have been interested in segregating, and valuations for treaty credit purposes, which, as we have several times pointed out, must be determined by jurists and economists.

Probably the most controversial item upon which there is a divergence of value is the merchant marine. The German figure of 5,753 millions is based upon the prices in 1919 and 1920, while the figure of the Reparation Commission (749 millions) is based upon liquidating prices at a time of severe shipping depression. In computing the cost of the war to themselves, the Allied governments included at peak values the aggregate value of destroyed shipping. The Reparation Commission, however, refuses to include any credit for interned ships or those seized by the

government of the United States, while, on the other hand, deductions are made for the expense of repair and upkeep. We have decided to set down in the list on page 350 a conservative estimate of 3.5 billions as the very least value to Germany which these ships could have had at the time of delivery.

Another striking difference between the two sets of values is to be found in the case of the Saar coal mines. Germany calculates their value at 1,016 million gold marks, while the Reparation Commission has provisionally set them down at 300 millions. Germany states that the same principles have been used in valuing them that were used in calculating the value of the destroyed coal mines at Lens. It is contended on the other hand that the German valuation is based upon a calculation of all coal to a depth of 6,000 feet, whereas below 4,000 or 5,000 feet mining usually becomes unprofitable. If it were possible to examine carefully the operating records of the mines in the pre-war years and to have available a dispassionate scientific estimate of the recoverable coal, one could arrive at a fairly unprejudiced valuation. This is one of the cases where it seems altogether too obvious for argument that the value to Germany was greater than could ever be the value to the receiving country; the only natural market for the Saar coal is Germany. We have selected the figure 650 millions as a low value to Germany in 1919—a value naturally much less than they would have had after the loss of the Silesian mines.



Reference has already been made (page 334) to the difference in valuation of coal between the various German official statements. This is a case in which the difference between the German "comprehensive summary" and the Reparation Commission figures is to be accounted for largely by the difference in the periods respectively covered.

An interesting point is brought up in connection with the value of railroad material and like property surrendered at the time of the Armistice. Much of it, of course, had been subjected to a wide variety of conditions. When it was transferred to the receiving countries, however, no matter how much it may have deteriorated through the strain of war-time use, this railroad material represented very great value indeed to the German people. The hundreds of thousands of cars, the thousands of locomotives, and the vast tonnage of rails, parts, and other equipment, at the high prices prevailing in 1919, were probably worth to Germany at the time of transfer much more than they could possibly have represented when brand-new, and even more than the material with which they were replaced represented at a later time. Clearly, in this instance, the dispossessed country was deprived of something altogether indispensable to its economic recovery. In our list of Germany's economic losses we have therefore included valuations for this group of objects fairly close to the German totals. Such reduction as we have made is due to the allowance we have felt it reasonable to make for material which called for almost immediate replacement at the time of surrender.

The value of the inland water craft was estimated by Germany at at least 106 million gold marks, and by the Reparation Commission (down to April 30, 1922) at 21 millions. This canal and river fleet was manifestly a part of a going concern and its loss meant a replacement outlay for Germany of much more than 106 million gold marks.

One could go on citing other instances of the difference in value of cables, miscellaneous deliveries, live stock, and other things required of Germany under the Treaty, but it is believed that enough examples of the great difference in valuation have been given. These differences relate chiefly to the items capable of inclusion on reparation account. On the non-reparation items there is no such difference of record, largely because the receiving countries have published very few figures. Restitution, for instance, of property carried away from the occupied districts seems to have reached a very large total.<sup>1</sup> The deliveries of military material have also attained very high figures. For such as were not destroyed and sold as scrap (see page 344) Germany was to receive no credit. The following table contains some of the larger items reported to have been

<sup>1</sup> According to the *League of Nations* (a periodical published by the World Peace Foundation), vol. III, no. 6, December, 1920, the articles restored up to 1920 included 13,560 agricultural machines, 271,000 tons of industrial material, and 407 locomotives. M. Tardieu estimated in 1921 ("Truth about the Treaty," New York, 1921) that 6.5 billion gold marks of material and objects of art had been restored. By July 31, 1922, about 8.5 billion francs worth of works of art, securities, and the like had been restored, or compensation had been made therefor.

delivered by the German government up to December, 1922, to the various inter-Allied military commissions.<sup>1</sup>

5,909,149 rifles and carbines
105,163 machine guns
28,469 trench mortars
38,800,000 rounds artillery ammunition
16,600,000 rounds rifle and grenade ammunition
60,400,000 live fuses
472,200,000 rounds small arms ammunition
335,000 tons of empty artillery cartridges
23,500 tons of empty cartridges and cases
37,600 tons of gunpowder
79,500 ammunition gauges

The miscellaneous expenditures recorded by the German government but not admissible on reparation account according to Allied interpretation of the treaty include subventions for the rebuilding of shipping in partial replacement of the tonnage destroyed or surrendered at the close of the war. The depreciation of the currency has naturally resulted in a great increase in the paper mark values of these subventions, for the ship construction companies were unable to fulfill their part of the contract and have been obliged to appeal to Article 42 of their agreement with the government whereby their compensation might be fixed through arbitral tribunals. In an address to the Reichstag on Jan. 17, 1923, the Chancellor observed that for 1922 alone this item had cost the German treasury 12.9 billion paper marks.

<sup>1</sup> "Deutschlands Wirtschaftslage," p. 13,

## 5. GERMANY'S ECONOMIC LOSSES

The authors have been obliged to use provisional valuations for the more important items of payment, delivery, or property transfer in the light of their examination of the conflicting claims and divergent systems of valuation. A table of tentative valuations follows. It does not represent a mere compromise between the two sets of calculations. Let it be made clear once more that the table which follows and upon which the computation in the text (page 75) is based, keeps clear of technical questions as to how much of what Germany has relinquished may be properly admissible to her credit under the treaty. We think, however, that whether the amount so admissible be greater or less than the aggregate of the items which follow, this aggregate fairly represents the tangible economic value to Germany of what she has lost, insofar as the items capable of credit on reparation account are concerned.

ESTIMATE OF COST TO GERMANY OF REPARATION FULFILLMENT  
TO SEPT. 30, 1922

*(Figures preceded by an asterisk represent valuations differing from those both of the Reparation Commission and of Germany.)*

- I. Payments, deliveries, or transfers of property rights now or later capable of exact determination and applicable to Germany's capital debt.

Millions of  
Gold Marks

- A. Property, goods, securities, or payments acknowledged or credited in whole or in part.

1. National or state public property in ceded territories in Europe..... \*5,000.0

2. Proportionate share of the German pre-war public debt (national or local) . . . . .	*0.0
3, 4, 5. Property in Shameen (Canton), Shanghai, and Shantung, China . . . . .	*0.0
6. Saar mines . . . . .	*650.0
Additional Saar deliveries . . . . .	1.1
7. Privately-owned maritime cables . . . . .	77.8
8. Non-military property abandoned on the western front, including miscellaneous railroad material . . . . .	*1,200.0
9. Railroad equipment . . . . .	*200.0
10. Five railroad bridges and 10 pontoon bridges across the Rhine . . . . .	9.6
11. Shares of the State Bank of Morocco . . . . .	0.6
12. Railroad rolling stock, freight cars, etc. . . . .	*800.0
13. Shipping . . . . .	*3,500.0
14. Inland water craft . . . . .	78.0
15. Live stock . . . . .	192.9
16. Coal, coke, and by-products . . . . .	473.2
17. Dyestuffs and pharmaceutical products . . . . .	43.8
18. Miscellaneous kind deliveries . . . . .	30.0
19. Cash derived from the sale in Germany of scrapped military material paid in francs or sterling to Reparation Commission . . . . .	200.0
20. Miscellaneous cash deliveries . . . . .	0.5
21. Rhineland customs and other "sanction" proceeds up to April 30, 1921 . . . . .	3.3

Total of A. . . . . 12,460.8

B. Estimated value of seized and liquidated German property abroad . . . . . \*10,000.0

C. Surrendered claims of Germany on her wartime allies . . . . . \*0.0

Total of I. . . . . 22,460.8

II. Payments and deliveries or transfers of property rights now or later capable of exact determination and applicable to the annual payments fixed in the London Schedule of Payments (May 1, 1921-Sept. 30, 1922).

A. Deliveries in kind.	
1. Railroad rolling stock deliveries and penal deliveries made in this period but in pursuance of Armistice provisions . . . . .	*2.0
Railroad equipment in ceded territories . . . . .	*400.0
2. Shipping . . . . .	*150.0
3. Inland water craft . . . . .	28.4
4. Livestock . . . . .	80.4
5. Coal, coke, and by-products . . . . .	456.5
6. Dyestuffs and pharmaceutical products . . . . .	27.9
7. Reconstruction deliveries . . . . .	129.3
8. Louvain reconstruction . . . . .	1.0
9. "Sanction" payments (practically all under British Recovery Act) . . . . .	126.3
	<hr/>
Total of A . . . . .	1,401.8
B. Payments in cash.	
10. Payments in bills of exchange . . . . .	1,580.0
11. Payments in bills of exchange covering security payments for export-tax collections, Oct. 15-Dec. 31, 1921 . . . . .	44.9
12. Miscellaneous cash . . . . .	0.9
	<hr/>
Total of B . . . . .	1,625.8
	<hr/>
Totals of A and B . . . . .	3,027.8
C. Value of securities delivered to the Reparation Commission under Article 260 of the treaty . . . . .	
	303.0
	<hr/>
Total of II . . . . .	3,330.6
	<hr/>
TOTALS OF I AND II . . . . .	25,791.4

## APPENDIX G

### BUDGETARY AND TAXATION QUESTIONS

Under the Constitution of April 16, 1871 (Article 70), the states were intended to contribute per capita toward expenditures made in their common interest by the Empire not covered out of imperial revenue. These contributions, known in German budgetary terminology as *Matrikularbeiträge*, averaged 65 million marks annually until 1878. It was expected that after 1879, because of the new customs tariff, the imperial revenue would suffice to meet all imperial expenditures; but inasmuch as certain taxes, including the yield of the customs and tobacco taxes in excess of 130 millions, had from that time on to be divided with the states per capita, the Empire for some years (1883-92, 1895-98) actually paid out more to the states than it received from them. After 1899 the contributions of the states were again in excess of the grants to them from the imperial exchequer. From 1909 on the maximum excess of state contributions over imperial grants to the states was fixed at 80 pfennigs per capita, which resulted, on the basis of the census of 1910, in a payment by the states to the Empire of 51.9 millions.

The new constitution which came into effect on

August 14, 1919, put an end to the contributions of the states as such.<sup>1</sup>

The table on page 356 indicates how important a part the contributions of the states to the Empire and the grants of the latter to the former played in the national finances during the quarter century preceding the war. Another significant fact which has been emphasized in the text was the growing necessity of recourse to borrowing in order to cover the increasing expenditures. According to German financial legislation and treasury regulations, expenditures were divided into two main classes, ordinary and extraordinary, the former in turn being subdivided into recurrent and non-recurrent expenditures. Recurrent expenditures were those broadly classifiable as made for ordinary administrative purposes. Non-recurrent were either capital investments or special administrative expenditures. No exact definition can ever be given of the expenditures which in any country enter the extraordinary budget.<sup>2</sup> Many of them are supplementary estimates for ordinary recurrent purposes where the original estimates were low. In time of war, the financial accounts for the military and naval establishments of the German Empire automatically

<sup>1</sup> *Vierteljahrshefte zur Statistik des Deutschen Reichs*, no. 2, 1921, pp. 54-5.

<sup>2</sup> It is reported that Premier Rouvier of France, when once pressed for a definition of the limitations of the extraordinary budget, declared that the only definition he could give was that an item in the extraordinary budget was an item which the legislative body believed should be in the extraordinary budget. FÖLDES, "Finanzwissenschaft," p. 92.



passed from the ordinary to the extraordinary budget. The pre-war budget contemplated both recurrent and non-recurrent revenues. An outstanding example of the latter was the *Wehrbeitrag* (see page 152). This tax was to be collected over a period of three years in the form of an income tax of from 1 to 8 per cent, or a capital tax of from  $\frac{1}{2}$  to 1 per cent to  $1\frac{1}{2}$  per cent, or both income and capital tax, on the fortunes or income or both of about 1,326,000 individuals and 3,900 companies subject to the tax. Approximately 20.4 per thousand of the population as it stood in 1910 were liable to this tax. The proportion varied widely in the different states from as high as 44.6 per thousand in Bremen to as low as 13.2 per thousand in Sax-Meiningen. Of those liable to the *Wehrbeitrag*, 31.8 per cent paid both on capital and income, 60.2 per cent on capital alone, and 8 per cent on income alone. As was remarked in the text, this tax was of the utmost importance because of the ground which it furnished for later income and property taxation. The wealth of individuals was estimated at 182,351 million marks; 29,807 millions were tax-exempt for one or another reason. The value of the corporations for the purposes of this tax aggregated 4,629 millions. Of the assessment of the property of individuals, 41.6 per cent was represented by landed property,<sup>1</sup> 13.1 per cent by industrial property, and 45.3 per cent by capital

<sup>1</sup> This includes property, or portions of property, hypothecated; the mortgages, consequently, appear twice,—in the property class and in the capital-investment class. But the 182,351 millions of wealth of individuals represent net values, evidences of debt being excluded.

BUDGETS OF THE GERMAN EMPIRE, 1886-87 to 1913-14

(Millions of marks)

356

Fiscal Year April 1 to March 31	Receipts						Expenditures				Excess of Ex- pendi- tures Over Receipts from Sources Other than Borrow- ing
	Taxa- tion	Public Service Surplus	Contri- butions to the Empire from the States ( <i>Matrik- ularbei- träge</i> )	Borrow- ings	All Other	Total	Grants to the Federal States ( <i>Über- weis- ungen</i> )	Other Ordinary	Extra- ordinary	Total	
1886-87	389.3	41.3	119.2	46.8	68.6	665.2	137.1	483.9	65.8	686.8	68.4
1887-88	419.4	46.3	170.9	233.1	73.3	943.0	176.3	516.5	177.8	870.6	160.8
1888-89	508.4	39.8	207.8	167.0	59.0	982.0	277.8	526.8	201.9	1,006.5	191.6
1889-90	632.6	48.1	215.3	240.6	61.1	1,197.7	355.0	567.0	180.0	1,102.0	144.9
1890-91	668.1	33.0	301.1	176.3	61.1	1,239.6	378.9	632.2	328.9	1,340.0	276.7
1891-92	683.6	30.9	316.5	309.4	59.4	1,399.8	383.4	694.8	153.0	1,231.2	140.8
1892-93	655.6	36.5	316.3	55.0	61.2	1,124.6	358.9	722.6	150.9	1,232.4	162.7
1893-94	646.9	35.3	369.0	153.2	67.9	1,272.3	338.8	748.6	165.2	1,252.6	133.6

APPENDIX G

1894-95	694.9	21.6	385.4	145.6	65.3	1,312.8	382.9	799.1	123.6	1,305.6	138.4
1895-96	729.4	44.0	382.7	44.2	76.9	1,277.2	400.1	823.5	66.4	1,290.0	57.0
1896-97	799.1	46.4	399.4	15.7	113.1	1,373.7	414.6	880.5	52.4	1,347.5 (g)	10.5
1897-98	803.2	55.0	419.9	39.8	62.8	1,380.7	433.1	854.7	105.8	1,393.6	52.7
1898-99	861.3	52.0	454.9	37.9	66.4	1,472.5	467.6	937.2	66.5	1,471.3	36.7
1899-1900	874.3	57.5	490.0	69.0	72.1	1,562.9	476.9	994.9	78.5	1,550.3	56.4
1900-01	912.8	16.7	527.7	94.4	70.0	1,621.6	508.5	1,044.1	169.3	1,721.9	194.7
1901-02	914.2	24.6	570.9	332.8	92.5	1,935.0	555.7	1,112.4	175.3	1,843.4	241.2
1902-03	918.3	37.3	580.6	32.7	109.7	1,678.6	556.2	1,134.7	131.4	1,822.3	176.4
1903-04	919.3	37.8	565.9	265.0	120.5	1,908.5	541.5	1,181.3	100.8	1,823.6	180.1
1904-05	945.4	35.5	219.7	99.5	143.4	1,443.5	195.9	1,176.0	134.5	1,506.4	162.4
1905-06	1,071.4	33.7	213.3	341.7	122.8	1,782.9	189.1	1,250.8	143.9	1,583.8	142.6
1906-07	1,103.9	35.8	230.2	258.4	91.1	1,719.4	205.9	1,348.9	180.6	1,735.4	274.4
1907-08	1,246.6	.....	226.6	196.0	118.3	1,787.5	195.0	1,552.5 (a)	318.7	2,079.6	488.1
1908-09	1,147.0	.....	220.0	245.0	94.7	1,706.7	195.4	1,558.3 (b)	159.9	1,930.4	468.7
1909-10	1,377.1	.....	169.0	639.0	319.5	2,504.6	120.5	1,728.5 (c)	585.4	2,463.9	598.3
1910-11	1,519.1	60.7	228.5	.....	383.9	2,192.2	180.0	1,840.0 (d)	253.4	2,273.4	43.4
1911-12	1,693.8	89.9	212.0	.....	257.6	2,253.3	163.5	1,738.2 (e)	191.4	2,093.1 (g)	176.0
1912-13	1,723.3	92.5	247.0	.....	183.2	2,246.0	195.1	1,882.8 (f)	146.1	2,224.0 (g)	26.5
1913-14	2,025.1	74.2	255.4	109.3	190.7	2,654.7	203.5	2,520.8	66.7	2,791.0	245.6

- (a) Includes 13.4 millions of public service deficit.  
 (b) Includes 16.8 millions of public service deficit.  
 (c) Includes 15.8 millions of public service deficit.  
 (d) Includes 37.8 millions of loans repaid.

- (e) Includes 15.8 millions of loans repaid.  
 (f) Includes 4.3 millions of loans repaid.  
 (g) Excess of receipts (other than borrowings).

investment and the like. A wealth of interesting information on the *Wehrbeitrag* is gathered in a special number of the *Vierteljahrshefte zur Statistik des Deutschen Reichs*, 1919, Zweites Ergänzungsheft.

WAR REVENUES<sup>1</sup>

In addition to the important taxes or contributions mentioned on page 156 as having been collected between 1914 and 1918, it may be of interest to note the receipts from other taxes.

## WARTIME REVENUES

(In part)

(In millions of marks)

Fiscal Year	Tobacco and Cigarettes Tax	Beer Tax	Alcohol Tax	Stamp Tax	Inheritance Tax	Sales Tax	Property Tax	Export Tax
1913-14	54	130	194	255	46			
1914-15	68	131	228	181	43			
1915-16	80	79	96	165	49			
1916-17	203	55	73	250	65	.....	.....	25
1917-18	420	22	20	466	70	.....	101	281
1918-19	699	33	29	511	78	151	89	517

Fiscal Year	Extraordinary Contribution of 1916	Supplement to Extraordinary Contribution of 1916	War Contribution of 1918
1916-17	38	7	
1917-18	4,036	807	
1918-19	660	132	1,617

<sup>1</sup> See especially R. KUCZYNSKI, *Deutsche Kriegsfinanzpolitik*, in *Deutsche Politik*, 1917, Vol. II, no. 33, and *Deutsche Kriegssteuerpolitik*, in *Annalen für soziale Politik und Gesetzgebung*, 1918, vol. VI, Heft 3 and 4; and "Denkschrift über die finanzielle Lage des Reichs," Reichstag Doc. 254 (July 29, 1920).

WAR TIME EXPENDITURES

The expenditures during the last pre-war year, and the fiscal years within which the war occurred have been analyzed in the "Denkschrift" mentioned on page 358, note 1, as follows.

ORDINARY EXPENDITURES 1913-14 TO 1918-19

(In millions of marks)

Fiscal Year	Civil Administration	General Financial Administration	Administration of Military Forces	Administration of Navy	Colonial Ministry	Administration, Interest, and Sinking Fund of National Debt	Total Ordinary
1913-14	189	7	1,547	451	25	209	2,427
1914-15	182	40	649	317	23	442	1,653
1915-16	173	7	227	39	21	1,319	1,786
1916-17	186	5	170	21	2	2,591	2,974
1917-18	913	27	152	19	2	6,501	6,894
1918-19	186	4	181	21	2	6,753	7,146

EXTRAORDINARY EXPENDITURES 1913-14 TO 1918-19

(In millions of marks)

Fiscal Year	Expended with the War	General War Expenses	National Debt	Total Extraordinary
1913-14	111	....	....	111
1914-15	65	6,936	....	7,001
1915-16	14	23,909	....	23,923
1916-17	10	24,739	18	24,767
1917-18	15	42,188	2,918	45,122
1918-19	11	33,928	2,794	36,835 *

\* Including 151 millions for reconstruction.

Other interesting discussions are to be found in the studies of Professor Charles Rist, "Les Finances de Guerre de l'Allemagne," Paris, 1921, and Professor von Pistorius, "Die deutsche Finanzwirtschaft und der Ausweg aus der Not," Stuttgart, 1920.

#### TAXATION SINCE 1919

An enumeration of the taxes put into effect since 1919 and still in effect at the end of 1922 would be of interest chiefly for the purpose of observing how many of the fundamental laws of the former empire have been amended in the last few years.<sup>1</sup> Statutes dealing with fiscal procedure as well as those fixing rates, have undergone thorough overhauling, in some instances more than once since 1920. By the end of the year 1922-23 the taxes of outstanding importance so far as yield is concerned were as given below, the yield for the fiscal year 1922-23 being shown in each case.<sup>2</sup>

<sup>1</sup> Side by side with the national elected legislative body (Reichstag) to which the Constitution of August, 1919, delegated comprehensive legislative powers, there was erected a Commonwealth Economic Council (Reichswirtschaftsrat) which was to be the keystone of the nation's economic system and to furnish an adequate means for articulate expression to the technical and professional elements of the nation in so far as the formulation of economic laws and policies might require their advice. Since its establishment under the new constitution, the Economic Council has sought to carry out its difficult mandate, but up to the early months of 1923 it has not appreciably affected the course of legislation. It has approximately 325 members, divided into ten groups as follows: (1) Agriculture and forests, (2) fisheries, (3) industry, (4) trade, banking and insurance, (5) transportation, (6) hand labor, (7) consumption, (8) professional and official classes, (9) experts appointed by the federal council (Reichsrat), (10) experts appointed by the executive.

<sup>2</sup> *Deutscher Reichsanzeiger*, April 23, 1923.

**BUDGETARY AND TAXATION QUESTIONS 361**

	In Billion of Marks
Income tax.....	533
Coal tax.....	238
Sales tax.....	229
Export tax.....	187
Import (duties and surcharges).....	95
Tobacco tax.....	65
Traffic tax.....	55
Stock exchange transaction tax.....	43

The income tax rates finally in effect at the end of 1922, and those for 1923 are as follows:

	1922 (end)		1923 (beginning)		
	Income, Marks	Rate Per Cent	Income, Marks		
Up to	4,000,000.....	10	Up to	1,000,000.....	10
Next	200,000.....	15	Next	1,000,000.....	15
	200,000.....	20		1,000,000.....	20
	200,000.....	25		1,000,000.....	25
	400,000.....	30		2,000,000.....	30
	600,000.....	35		2,000,000.....	35
	1,000,000.....	40		2,000,000.....	40
	1,000,000.....	45		2,000,000.....	45
	1,500,000.....	50		3,000,000.....	50
	2,000,000.....	55		3,000,000.....	55
Any further amount....	60		Any further amount....	60	

In 1921 approximately 28 million persons were liable to the income tax. In 1920, about 14.7 per cent of the income was derived from landed property, 21.8 per cent from industry, 2.7 per cent from capital investment, and 60.7 per cent from labor. The income tax has been regularly collected at the source of income, so far as wages and salaries are concerned. Whereas in 1921 less than half the persons liable to income tax were paying it through deduction from wages, salaries, and the like, by the middle of 1922 56 per cent of the total income-tax receipts were

derived from wage and salary deductions, in October, 1922, 72 per cent, in December 84 per cent, and in March, 1923, 95 per cent were so derived.<sup>1</sup>

The coal tax, from April 1, 1922, to March 31, 1923, was collected at the rate of 40 per cent of the value of the coal at the pit; on the latter date it was reduced to 30 per cent. For three months after November, 1922, it was not collected because of the alleged difficulty of the operators in securing currency with which to pay the tax. It has been calculated that the government lost several billions of marks by this arrangement, partly through the fall in the mark during the "moratorium", and partly through the fact that the railroads still paid coal prices which included the tax.

The sales tax is collected at the rate of 2 per cent on all gainful transactions, even exports being now subject to the tax if sold directly by the manufacturer. The sales tax code has been expanded to cover luxury taxation (15 per cent), room hire, storage facilities, and the like (10 per cent), and advertisements (from 1 to 5 per cent). The rate of the general sales tax may soon be raised to 2½ per cent, in order to give the states an increased amount.

The export and import taxes hardly need any special comment. They are both collected according to gold exchange rates. The Commonwealth has been free since Jan. 10, 1923, to alter the customs duties in force in 1914—having been prohibited from

<sup>1</sup> Some of these figures are set forth in Appendix 2 to the report of the Reichstag committee on "tax legislation amendments intended to counteract currency depreciation" (Reichstag Document 5600, March 7, 1923, p. 56).



taking such action prior to that date by the Treaty of Versailles. The changes during the first half of 1923 were insignificant, consisting of reductions on timber and foodstuffs. The consumption taxes call for no special comment. The capital transactions taxes, of which the stock exchange tax is the most important, are likewise based on the value of the securities involved in the various transactions.

It has been difficult to secure any precise calculations of the incidence of taxation in Germany from 1919 through 1922-23. The figures which follow have been taken from the German treasury statements published on May 8, 1922, and on Jan. 15, 1923. They are only provisional, however, and subject to revision. Such estimates as have been available for state and local taxation are so fragmentary as not to justify inclusion in the table.

PROVISIONAL TABLE OF THE INCIDENCE OF GERMAN NATIONAL TAXATION, 1918-19 to 1921-22

(The yield is shown in millions of marks)

Fiscal Year	Direct Taxes		Indirect Taxes		Total Yield	Per Capita
	Yield	Per Capita	Yield	Per Capita		
1918-19	3,766	62.77	2,683	44.72	6,449	107.49
1919-20	3,663	61.05	5,273	87.88	8,936	148.93
1920-21	43,118	718.63	13,446	224.10	56,564	942.73
1921-22	68,395	1,139.92	24,527	408.78	92,922†	1,548.70

† This total includes 7,800 millions paid in government securities (Reichnotopfer) and accounted for in the extraordinary budget. As extraordinary receipts were excluded from the table on p. 159, the total there given for 1921-2 is necessarily smaller than the one which appears here.

Moreover, they do not include certain sources of revenue such as Reichsbank contributions, etc., which are accounted for in the general totals of ordinary revenues on pages 149 and 159. Were sufficient material at hand, however, it is probable that its examination would disclose a fairly heavy per-capita burden in state and local taxes.

By 1922 the old classical division of taxes into direct and indirect had lost its significance.<sup>1</sup> The total receipts (compare page 361) from taxation and compulsory loan in 1922-23 were 1,558,182 million marks or about 24,733 marks per capita (assuming 63,000,000 as the population for the middle of the fiscal period).

#### THE GERMAN NATIONAL DOMESTIC DEBT DURING AND AFTER THE WAR

The funded debt rose to its highest point in 1919-20 as will be noted from the table of imperial and premium loan totals at the top of page 365.

The column headed imperial or commonwealth loan includes certain interest-bearing certificates as well as the perpetual war loan (*Kreigsanleihe*). The decline is by no means to be explained as due to the repayment of the issues, as the interesting table<sup>2</sup> at the bottom of page 365 reveals.

<sup>1</sup> Cf. remarks of Professor Jastrow, in his article, *The New Tax System of Germany* (in *Quarterly Journal of Economics*, February, 1923, pp. 302-341), p. 306 ff. The article is a comprehensive and vivid survey of the German tax situation in 1922.

<sup>2</sup> "Anleihenbeschriftung für das Reich, 1922" (Feb. 17, 1923, Reichstag doc. 5557, p. 3).

**BUDGETARY AND TAXATION QUESTIONS 365**

Outstanding, March 31	Imperial or Commonwealth Funded Debt	
	Imperial or Commonwealth Loan	Premium Loan
	(Millions	of marks)
1913	4,586	....
1914	4,698	....
1915	8,277	....
1916	28,299	....
1917	45,583	....
1918	64,123	....
1919	80,988	....
1920	77,041	3,627
1921	69,341	3,629
1922	55,131	3,508
1923	49,517	3,471

**REDUCTION OF FUNDED DEBT (War Loan)**

Total issue of 5 per cent imperial or commonwealth loan.....	Marks 88,578,758,500
Taken in payment for new securities *.....	3,669,898,000
	<hr/> 84,908,860,500
Purchased by the treasury to support the market...	11,775,846,700
Other government purchases.....	12,191,600
Taken in tax collection.....	22,909,387,800
Taken in payment for surplus war stores and material sold in Germany.....	4,013,827,800
Taken in settlement of government insurance premiums.....	112,459,700
Miscellaneous.....	99,000
	<hr/> 38,823,812,600
Outstanding (Sept. 30, 1922).....	46,085,047,900

\* Treasury certificates and notes, some of them long-term, however. No consolidated or "funded" loan has been issued in recent years.

Meanwhile the floating debt continued to increase rapidly. The so-called non-interest-bearing debt (as noted in the text, this comprises in reality interest-bearing obligations since the treasury certificates are discounted by the Reichsbank) has grown prodigiously, especially in 1922-23. The so-called interest-bearing floating debt has declined slightly. The following figures are taken from the German treasury statements.

Outstanding, March 31	Imperial or Commonwealth Floating Debt	
	"Interest-Bearing" *	"Non-Interest-Bearing"
	(Millions	of marks)
1913	220	....
1914	220	....
1915	1,220	7,218
1916	1,936	9,261
1917	4,716	18,552
1918	7,793	33,028
1919	11,408	63,696
1920	10,681	91,473
1921	9,190	166,329
1922	7,029	271,935
1923	6,669	6,601,142

\* In reality, some of these "floating" obligations are long-term securities, redeemable only in 1963, for example. It is only the use of the expression "treasury certificate" which causes these securities to be conventionally classified as floating debt.

For an interesting discussion of items comprising the aggregate "floating" obligations held outside Germany, see Rudolph Will, "Die schwebenden Schulden der europäischen Grossstaaten," Tübingen, 1921.

METHOD OF CALCULATING THE INTERNAL PUR-  
CHASING POWER OF THE MARK

In the table on page 170-171 an attempt was made, as indicated in the text, to reach an estimate of the actual value of treaty fulfillment disbursements of the German treasury. In addition to paper mark totals, the table gives figures in gold marks according to the exchange value of the mark averaged over each fiscal year, and in gold marks according to the internal purchasing power of the mark. These different methods of conversion, giving substantially different results, call for some explanation.

The paper marks involved, if delivered over the German border, would, it is true, command gold only to the value of 6,096 million gold marks. But inside Germany the paper mark had, during the four years in question, a purchasing power averaging about twice its foreign purchasing power. The reasons for this paradox cannot be discussed here. Suffice it to say that, at any time, the ratio of the purchasing power of the mark inside Germany to its purchasing power in another country can be approximately determined by comparing the relation between the general index price level at that time in Germany and the general index price level in the country in question with the exchange ratio existing at the same time between the mark and the currency of the country in question. See "Depreciated Exchange and International Trade," United States Tariff Commission, Washington, 1922, page 11. For example, in April, 1919, the mark was worth one-

third of its 1913 or parity dollar exchange value. If prices in Germany at that time had been no higher than prices in the United States, with relation to the 1913 level (assuming equal gold prices in the two countries in 1913), the mark would have purchased three times as much inside Germany as in the United States. However, as prices in Germany in that month had actually risen to 1.43 times the height of the level of United States prices, the internal purchasing power of the mark was  $\frac{3}{1.43}$  or slightly more than twice its purchasing power in the United States.

Thus, so far as actual cash outlay on the part of Germany is concerned, the gold mark figures for treaty expenditures in any year must be multiplied by the ratio of the internal to the external value of the mark in the year concerned. These ratios were as follows: 1919-20, 2.60; 1920-21, 1.96; 1921-22, 1.81; 1922-23, 1.94.

It has, of course, been impossible to ascertain with precision the dates on which the payments were made by the treasury. Their variety and number ought, in an ideally weighted exchange average for the year, to be duly provided for. To achieve absolute accuracy, each separate payment of paper marks would have to be converted to gold marks or dollars at the rate prevailing on the day or even at the hour of paying. We have had, for the present, to be content with isolating the payments by fiscal years. Disbursements are assumed to be distributed evenly throughout the fiscal year. We know that the

facts as to dates of payment were quite different from what they would have been if this assumption were correct. We know, too, that many payments were made at times when exchange was well below or above the year's average. Consequently, the gold mark values (both those based on foreign exchange quotation averages and those based on the internal purchasing power of the mark) which appear in the table on pages 170-171 must be regarded as wholly provisional in character.<sup>1</sup>

<sup>1</sup> Attention may here be called to an apparent inconsistency between the table on pp. 170-1 and the official "Anleihenrechnung" for 1921 (Reichstag doc. 3556, Feb. 11, 1922, p. 18). The latter states that up to March 31, 1920, the total outlay on treaty fulfillment had been 2,873 millions. The larger sum apparently includes certain disbursements incidental to Armistice fulfillment. If this larger figure had been used on pp. 170-1, the gold mark equivalents in the second and third parts of the table would become 321 and 835 instead of 232 and 603 millions respectively.

## BRIEF TABULAR SUMMARY OF PRINCIPAL OFFICIAL PROPOSALS FOR

(All amounts of money)

June 28, 1919—The Treaty of Versailles (Articles 231, 232, 233) placed the moral responsibility on Germany, and established the Reparation Commission to assess the settlement to be determined by May 1, 1921.

Date	Place of Conference or Brief Name of Proposal (with names of countries officially represented in parentheses)	Cash Payments: Amount, Method, and Duration
April 18-26, 1920, May 15-16, 1920	Conferences at San Remo and Hythe (Belgium, France, Great Britain, Italy, Japan).	Tentative understanding regarding the methods to be followed in assessing Germany and her former allies and dividing their payments. Experts were to work out these amounts for Supreme Council, while the Reparation Commission was also to continue its investigation of the damage done and the methods of collection. An international loan for Germany was to be studied.
June 21-22, 1920	Boulogne conference (Belgium, France, Great Britain, Italy, Japan).	Germany to pay as a minimum 3,000,000,000 annually for 35 years and as a maximum 269,000,000,000 in all, method and time not announced, amount to be fixed according to economic conditions in Germany. Germany was to issue an international loan.
July 5-16, 1920	Spa conference (Belgium, France, Germany, Great Britain, Italy, Japan, Portugal). (The work of this conference was based largely on a meeting of experts at Brussels, July 2 and 3, 1920.)	These mid-summer conferences all discussed proposals of a tentative character based upon the principle of 42 German annual payments aggregating 240,000,000,000 as a maximum.



## SETTLEMENT OF THE REPARATION PROBLEM FROM 1920 TO JUNE, 1923

in gold marks)

ability for all damage done to the populations of the Allied countries "by land, sea, or damage and define the mode and time of payment; both the assessment and form of

Provisions Regarding Deliveries in Kind	Provisions Concerning Guarantees and Conditions	Remarks
		At the second of these meetings it was tentatively agreed that France's debt to Great Britain would be paid <i>pari passu</i> with Germany's payments to France. This agreement was abandoned later.
Military occupation expenses to be first charge on deliveries. Coal deliveries to be increased.	Customs and natural resources to guarantee payments and be subject to forfeiture in event of non-payment.	
Coal deliveries to be fixed at 2,000,000 tons monthly after August 1, 1920.	German delegates emphasize importance of territorial integrity and export surplus as prerequisite to any reparation payments or deliveries.	Chiefly devoted to determination of proportions of distribution of German payments. All over military costs to be divided: 52 per cent to France, 22 per cent to England, 10 per cent to Italy, 8 per cent to Belgium, 4 of 1 per cent to Japan and Portugal each; 6.5 per cent reserved for Greece, Roumania, Jugoslavia, and other countries not represented in the conference. The Austrian and Hungarian payments were also allocated.

## BRIEF TABULAR SUMMARY OF PRINCIPAL OFFICIAL PROPOSALS FOR

(All amounts of money)

Date	Place of Conference or Brief Name of Proposal (with names of countries officially represented in parentheses)	Cash Payments: Amount, Method and Duration
Dec. 16-22, 1920	Brussels conference of financial experts (several intermittent sessions). (Allied countries and Germany.) Recommendation to Supreme Council.	To be required of Germany payable semi-annually. May, 1921-May, 1926, 3 billions annually; May, 1926-May, 1931, 6 billions annually; May, 1931-May, 1963, 7 billions annually. Discount on advance payments 8 per cent until 1923, dropping 1 per cent annually to 5 per cent, 1928. Germany to be permitted to hypothecate her revenues with consent of Reparation Commission as security for an international loan.
Jan. 24-28, 1921	Paris (Belgium, France, Great Britain, Italy).	226,000,000,000 to be paid, partly by fixed annuities, partly by 12 per cent ad valorem export tax, for 42 years; advance payments to be discounted; 8 per cent to May 1, 1923; 6 per cent, 1923-5; 5 per cent thereafter.
March 1-7, 1921	First London conference (German Proposal to Allies) (Belgium, France, Germany, Great Britain, Italy).	Germany proposed total payments of 30,000,000,000 cash, over 30 years, to be derived from a loan of 8,000,000,000 internationally subscribed everywhere tax free, 5 per cent interest. She asked credit for 20,000,000,000 as already paid, to be checked by international commission of experts.
April 24, 1921	German offer through the Secretary of State of the United States to the Allied governments.	200,000,000,000 offered by Germany to be paid on the following basis: The capital sum to be recognised as 50,000,000,000, an international loan to be raised, and Germany to guarantee its service, as well as interest and amortisation of the sum not covered by the loan at 4 per cent, payments on amortisation to vary with German prosperity, as shown by an agreed index; immediate payment of 1,000,000,000 to be arranged.

SETTLEMENT OF THE REPARATION PROBLEM FROM 1920 TO JUNE, 1923—*Cont.*  
 in gold marks)

Provisions Regarding Deliveries in Kind	Provisions Concerning Guarantees and Conditions	Remarks
<p>Minimum deliveries in kind; military costs not to exceed 240,000,000 per annum; return of some German property recommended.</p>	<p>Customs and other taxes to be guaranteed; Germany to suspend her domestic debt service. State and individual guarantees, latter not to exceed 5,000,000,000, to be deposited with Reparation Commission. Prohibition of change in customs rates and foreign credit operations without consent of Commission; creation of an international German debt commission; hypothecation of all customs revenues, and creation of an inter-Allied customs administration.</p>	<p>Germany to be permitted to devote 20 per cent of the international loan to domestic purposes.</p>
	<p>Failure to complete payments to result in occupation of Ruhr and other territory. Customs to be carefully supervised.</p>	<p>Germany not to be allowed into the League of Nations.</p>
<p>Restoration of what had actually been removed from occupied territory by Germany during the war.</p>	<p>Germany offered security for the loan, but asked that Upper Silesia be returned to her, and that she be granted conditions of commercial equality and economic freedom.</p>	<p>On March 7, Germany submitted an alternative offer, abandoning request for freedom from tax of its loan, and other privileges, and offering 13,000,000,000 in first five years in place of 12 per cent export tax.</p>
<p>Deliveries of material and the like to be charged as cash payment.</p>	<p>Germany requested an assurance that expert figures on reparation payments would be binding on all in the future; she insisted upon return of Upper Silesia and entire economic freedom; and she asked for protection of German private property abroad.</p>	<p>Germany expressed a willingness to take over a part of the debts of European countries to the United States.</p>

## BRIEF TABULAR SUMMARY OF PRINCIPAL OFFICIAL PROPOSALS FOR

(All amounts of money)

Date	Place of Conference or Brief Name of Proposal (with names of countries officially represented in parentheses)	Cash Payments: Amount, Method and Duration
May 5, 1921	Ultimatum (based on Reparation Commission report of April 27) to Germany at close of Conference of London. (Belgium, France, Great Britain, Italy.)	The Reparation Commission announced on April 27 that the damage for which reparation was due amounted to 132,000,000,000. The Council directed Germany to pay this, plus 4,000,000,000 (provisional estimate of the war debt of Belgium) in annual cash payments comprising 2,000,000,000 plus 26 per cent of the value of German exports. Three series of bonds to be issued, two in 1921, the third at discretion of Commission. Series A, 12 billions; Series B, 38 billions; and Series C, 82 billions; to bear 5 per cent interest, 1 per cent amortisation.
Oct. 6, 1921	Wiesbaden Agreement (French and German ministers of reconstruction).	
Jan. 13, 1922	Reparation Commission decision (As result of conferences of Allied prime ministers at London, Dec. 22, 1921, and Cannes, Jan. 4-13, 1922.)	The Commission granted a moratorium to Germany from payment of amounts due under Schedule of Payments (of May 5, 1921) on Jan. 15 and Feb. 15, accepting instead payments of 31,000,000 every ten days from Jan. 18.
Jan. 28, 1922	German offer.	720,000,000 annually distributed evenly through the year.

## SETTLEMENT OF THE REPARATION PROBLEM FROM 1920 TO JUNE, 1923—Cont.

in gold marks)

Provisions Regarding Deliveries in Kind	Provisions Concerning Guarantees and Conditions	Remarks
All military costs to be as before; deliveries of coal, materials, and services to go on, Germany being credited with values.	In case of non-acceptance by Germany, occupation of the Ruhr Valley and forfeiture of customs and other revenues. A Committee on Guarantees was to be established to safeguard Allied interests by examining German records of collection of domestic revenues, export tax, etc.; and supervising actual delivery of funds, commodities, etc.	1,000,000,000 were to be paid by Sept. 1, 1921; this amount was actually paid. The 26 per cent export tax was paid by Germany for first quarter of the fiscal year 1921-22 (250,000,000). The reparation payments and deliveries of Germany's former allies were to be credited to German account.
France to receive materials from Germany in lieu of her share of the 26 per cent export tax, Germany to be credited with not more than one billion marks each year for fourteen years, covering such deliveries.		Practical details worked in two subsidiary agreements (one in February, 1922, between Reparation Commission and German government, and second in April, 1922, between French and German governments). Other Allied governments acquiesced in this arrangement.
Provisions of earlier arrangements regarding deliveries in kind not affected.	Germany was to present plans for balancing budget, fixing tariff in gold, stabilizing currency, making Reichsbank autonomous, prohibiting export of capital.	Payments were made up to the end of March. The Cannes conference was adjourned before it could consider a British plan to reduce total payments from Germany.
1,450,000,000 in kind to be delivered annually.	Germany to balance her budget, raise coal tax to 40 per cent, sales tax to 2 per cent, make public service enterprises self-supporting, make the Reichsbank autonomous and check increase of floating debt by compulsory loan.	Germany requested reduction of all Treaty payments other than reparation to some moderate amount within her capacity.

## BRIEF TABULAR SUMMARY OF PRINCIPAL OFFICIAL PROPOSALS FOR

(All amounts of money)

Date	Place of Conference or Brief Name of Proposal (with names of countries officially represented in parentheses)	Cash Payments: Amount, Method and Duration
March 11, 1922	Paris conference (Belgium, France, Great Britain, Italy, Japan).	This conference, without modifying previously fixed total payments, requested the Commission to study the possibility of a German external loan. The International Bankers Loan Committee, which met between May 24 and June 10, found such a plan impracticable so long as Germany's external payments were not reduced.
March 21, 1922	Reparation Commission decision.	Germany was to pay in all during 1922, 720,000,000, including 281,948,920 already paid; the payments were to be 50,000,000, except on April 15, November 15, and Dec. 15, when they were to be 18,051,079, 60,000,000 and 60,000,000 respectively. The Schedule of Payments was to become operative again in 1922.
Aug. 31, 1922	Reparation Commission decision.	Based partly on discussions at third London Conference (Aug. 7-14, 1922) which in turn was called after Germany requested two and a half years moratorium. Cash payments were suspended (as in case of clearing houses) and the Commission agreed to accept balance of instalments for 1922 in 6-months bills at 4½ per cent.
Nov. 8, 1922	Reply of German government to Commission.	The German government requested an indefinite moratorium on all payments and a revision of total to be paid.
Jan. 3, 1923	Proposal of British prime minister at Paris conference (Belgium, France, Great Britain, Italy).	Two series of bonds to be issued by Germany to Reparation Commission: (A) 50,000,000,000 maturity December 31, 1954, 5 per cent per annum payable semi-annually—interest suspended in entirety for the first four years, and as to 1 per cent for the next four years (down to Jan. 1, 1931); (B) 17,310,000,000 (deferred interest at 5 per cent on Series A compounded to

## SETTLEMENT OF THE REPARATION PROBLEM FROM 1920 TO JUNE, 1923—Cont.

In gold marks)

Provisions Regarding Deliveries in Kind	Provisions Concerning Guarantees and Conditions	Remarks
Wiesbaden agreement to be followed for at least three years. Germany to be credited for coal deliveries at her domestic prices for coal.		This conference was chiefly concerned with the distribution of German payments made up to that time.
1,450 millions gold in kind.	Germany was to impose drastic new taxation by April 30, reform her budget and stabilize her currency. Failure to do so would expose her to the London "sanctions." All fiscal legislative drafts were to be passed upon by the Committee on Guarantees. Measures were to be taken to prevent the flight of capital.	Payments were made through July according to this arrangement.
	In the event of further default, "productive guarantees" were to be seized.	
A moratorium on all deliveries was requested.	Germany asked that she be given credits and ample time to carry out plans for currency stabilization recommended by currency experts consulted in October.	
Deliveries of coal, timber, dyes, etc., to continue, amounts to be determined, and all excess of maximum to be set off against bond interest; special provisions for deliveries in the treaty to be observed.	Germany to agree to currency stabilization plan recommended by majority report of foreign experts in November, 1922, within six months, balance budget within two years, accept supervision of a Foreign Finance Council to which all executive functions of Reparation Commission will be transferred, the lat-	This plan was linked up with cancellation of Inter-Allied indebtedness, partly at once, partly after several years.

## BRIEF TABULAR SUMMARY OF PRINCIPAL OFFICIAL PROPOSALS FOR

(All amounts of money)

Date	Place of Conference or Brief Name of Proposal (with names of countries officially represented in parenthesis)	Cash Payments: Amount, Method and Duration
Jan. 3, 1923	British proposal ( <i>continued</i> )	<p><i>Continued from page 376.</i>  <i>April 1, 1923</i>) or such less amount as an arbitral tribunal might determine, issuable April 1, 1933, maturing March 31, 1965, 5 per cent per annum payable semi-annually. This Series B is to be issued unless Germany proves to an arbitral tribunal before April, 1933, her inability to meet the payments. Series A to replace all previous claims to payment except German bills issued to Belgium; and to be redeemable by Germany after June 30, 1923, at her option, at prices scheduled so as to represent 8 per cent yield at the start, and 5 per cent at the end of the period.</p>
Jan. 3, 1923	Proposal of French prime minister at Paris conference.	Capital amounts as determined in May, 1921; moratorium not to exceed two years; Germany to be permitted to anticipate payments under discount. If any of France's foreign debts were remitted she would be prepared to consider the reduction of the German debt.
May 2, 1923, June 7, 1923	German notes.	Capital debt to be fixed at 30,000,000,000 of which 20,000,000,000 would be covered by international loan dated July 1, 1927, 5,000,000,000 between July 1, 1927 and July 1, 1929, and 5,000,000,000 between July 1, 1929 and July 1, 1931; Germany to do her best to turn over proceeds of these international loans to the Reparation Commission within stipulated periods. Guarantees of service after July 1, 1927, on the loans to consist of: (a) 500,000,000 annually from hypothecation of railroads at 10,000,000,000; (b) 500,000,000 annually from blanket mortgage on industrial and natural resources of Germany; and (c) hypothecation of luxury, tobacco, beer, wine and sugar taxes to yield an amount not fixed, but believed considerably to exceed 200,000,000.



SETTLEMENT OF THE REPARATION PROBLEM FROM 1920 TO JUNE, 1923—*Cont.*  
in gold marks)

Provisions Regarding Deliveries in Kind	Provisions Concerning Guarantees and Conditions	Remarks
	<p><i>Continued from page 377.</i> ter remaining a judicial body. Germany to agree to forfeiture of customs, military occupation and other penalties in the event the Allied Powers find them justified. All loans issued in Allied markets to be applied, unless expressly released, to bond redemption.</p>	
<p>Continuation of deliveries in kind under Treaty. Military occupation costs still to be borne by Germany.</p>	<p>Customs to be collected and various productive pledges to be retained by Allied governments. Inflation of German currency to cease at once. Control of German finance by Reparation Commission to be exercised. Maintenance of export taxes as fixed by London Conference of May, 1921.</p>	
	<p>Evacuation of the Ruhr Valley and restoration of German economic freedom.</p>	<p>German government agrees to an international conference and the determination by an international commission of Germany's capacity to make further payments.</p>

## INDEX

- A**  
Area, loss of, 106, 190
- B**  
Balance of accounts (see *Balance of Payments*).  
Balance of payments, Chapter II (see also *French Indemnity of 1871*).  
    course during and after the war, 284-294  
    definition of, 13, 89, 92-97  
    future, 98-103, 117-118, 134-139  
    pre-war statistics of, 252-284  
Bank balances abroad, 82-95, 99  
Banking earnings (see *Invisible Items*).  
Borrowings (see *Budget; Investments, Foreign; Methods of Payment*).  
Briand, Aristide, 16-17  
Budget, 88  
    analysis of by League of Nations, Dr. Brecht and others, 179-182  
    borrowings, 147-152, 178  
    during the war, 147-157, 358-360  
    federal states and pre-war, 142, 353-355  
    future outlook, 177-178  
    nature of post-war expenditures, 168-186  
    post-war, 157-178, 360, 364  
    post-war taxation program, 160-168, 186-189, 360-364  
    pre-war, 142-147, 353-358  
    relation of to reparation solution, 234-235
- C**  
Capacity to pay, 1893-1913, 32-34  
    Great Britain's, 241-242  
    in 1913, 47-48  
    vital factors determining, Chapter VIII  
Cash payments, myth of, 9-10  
    amount of, 62-76, 170-171, 322, 324, 328, 333  
Clearing house operations, 60, 63, 68, 76, 79-80, 204, 312-319  
Coal, production and importation of, 107-110, 121-124  
    reparation deliveries of, 96  
    requirements, 110  
Currency, Chapter VI; 79, 82, 85-89  
    internal vs. external purchasing power of, 169-171, 367-369  
    stabilization of, 236

## D

- Debt, national, increase in, 146, 151, 364-366
- Debts, war, Austro-Hungarian, Bulgarian and Turkish, 69-77  
and reparation, 60, 235  
Belgian, 59-60
- Décamps, Jules, 10-11
- Devastated areas, 8, 58-59, 73  
cost to French budget, 240
- Disarmament of Germany, 348-349

## E

- Economic system, disruption in Europe, 236-248
- Emigrant remittances (see *Invisible Items*).
- Europe, economic maladjustment of, 236-248
- Expenditures (see *Budget*).
- Export of capital (see *Flight of Capital*).
- Export surplus, necessity of, 11, 56, 242-248
- Exports, and foreign bank balances, 84  
dependency upon imports, 35-47  
future markets for, 134-139  
volume in the future, 115-118

## F

- Flight of capital, 84-88, 166-167
- Foodstuffs, production and consumption of, 36-38, 40-43, 104-105, 119-121, 125-133, 244
- Foreign balances (see *Bank Balances Abroad*).
- Foreign investments (see *Investments Foreign*).
- France, currency inflation in, 206, 213

- French Indemnity of 1871, 220-233  
borrowings to meet, 223-226  
contrast with German reparation obligations, 232-233  
French taxation and, 226-228  
international balance of payments and, 228-232  
means of payment, 221-222  
popular notions concerning, 220

## G

- George, David Lloyd, 16
- Glaserapp, Otto von, 49, 52, 90
- Gold, German supply, 6, 243
- Goods, manufactured (see *Exports, Imports*).
- Great Britain, economic situation of, 238-239, 241-242  
income per capita, 196
- Guarantees, 370-379  
productive, 23  
weakness of, 22-24

## H

- Helferich, Karl, 154, 190, 194
- Horne, Sir Robert, 82

## I

- Imports, of luxuries, 39, 40, 246  
possibility of reduction of, 38-47, 243-244  
relation of to exports, 34-47, 78-80, 117-119, 124-125  
required, 103-115, 134, 140
- Income, national (see *National Income*).
- Industry, slowing down of, 113-115  
ownership of, 215, 242-243  
status of, 118-125
- Inflation, 201, 219
- Insurance earnings (see *Invisible Items*).

- Interest on foreign investments (see *Invisible Items*).
- International balance of payments (see *Balance of Payments*).
- International income, net, nature of, 32
- Investments, foreign, income from (see *Invisible Items*).
- borrowings for, 31-32
- growth of, 32, 277-284
- liquidation of, 81
- shrinkage in, 49-51, 287-289
- Invisible items, 11-13
- losses compared with those of Great Britain, 242
- in the future, 98-103
- offsets, 99
- post-war decrease, 53-55
- pre-war income from, 29-31
- various estimates of pre-war net yield, 257-284
- Iron, production and importation of, 107-108, 120-124
- requirements, 108
- K
- Keynes, J. M., 80-83, 85, 91-93, 197, 295, 298-300
- Kuczynski, R., 89, 90
- L
- Labor, migratory (see *Invisible Items*).
- Living standards (see *Standards of Living*).
- London reparation settlement (see *Reparation, London Conference on*).
- M
- McKenna, Reginald, 82, 93
- Markets (see *Exports*).
- Marks, speculation in (see *Currency*).
- Methods of payment (see also *French Indemnity of 1871*)
- borrowing, 18
- cash, 7-10, 78-81, 139
- collection of German taxes, 21-24
- deliveries in kind, 95-96
- delivery of German industrial securities, 19, 242-243
- delivery of title to German property, 20
- discounting of bonds, 18-19
- gold and silver, 5
- goods, 8, 17
- labor services, 8
- only by export surplus, 242-248
- paper money, 6
- proposed, 370-379
- Military occupation, 22-24
- cost of, 75-76, 303-311, 323-325, 329, 334
- N
- National income (aggregate income of German people), amount taken by taxation, 189-199
- P
- Payments, reparation (see *Methods of Payment, Reparation, Valuation*).
- Price levels, advance in, 34
- Private property, seizure of, 70-72 (see also *Real Estate*).
- R
- Railroads, 148, 174-177, 180-183
- Rathenau, Walther, 86, 212
- Raw materials (see *Imports, Exports*).
- Real estate, sale of, 81, 83, 89-93, 99, 301-302

Reparation, conferences on, Appendix H  
 economic value to Germany of payments, 74-76  
 extent of German liability for, 57-62  
 fallacies concerning, 13-24  
 international trade and financial deficit and, 79-95  
 London Conference on, 59-62, 374-375  
 two-fold nature of problem, 3-5

Reparation Commission, 20, 59, 87  
 budget supervision, 167-168, 246-247  
 methods of accounting of, 303-311

Restitution (see *Treaty of Versailles, Valuation, Reparation*).

Ruhr, 22-23, 93, 139

S

Saar mines, 78, 107-109, 190, 339, 346  
 Sarre mines (see *Saar Mines*).  
 Say, Léon, 221  
 Schedule of payments (see *Reparation, Conferences on*).  
 Schöneberg, 90, 91, 301-302  
 Shipping earnings (see *Invisible Items*).  
 Silver, 6, 28  
 Singer, Kurt, 85, 275-276, 295-299  
 Spain, economic situation of, 237  
 Standard of living, 2, 42  
 reduction of, 194, 245  
 Surplus of production, 14-16  
 Switzerland, economic situation of, 237-238

## T

Tardieu, André, 22, 191, 192  
 Taxation (see *Budget*).  
 Tourist expenditures (see *Invisible Items*).  
 Trade balance (see *Balance Payments, Exports, Imports*).  
 Treaty of Versailles (see *Reparation*).  
 Article 235 of, 303-304  
 cost of fulfillment of, 168-171, 180

## U

United States and reparations loans, 18-19, 242  
 and carrying trade, 100  
 and European debts, 235  
 inflation in, 213  
 purchasing power after Franco-Prussian War, 232  
 United States Supreme Court and valuation theory, 336-338

## V

Valuation, explanation of discrepancies, 66-74, 344-349  
 independent estimate of treaty fulfillment deliveries, 74-76, 350-352  
 German estimates of, 65-66, 326-335  
 Reparation Commission estimate of, 63-65, 321-325  
 Vanderlip, F. A., 204

## W

Weimar Assembly, 161  
 Wilson, Woodrow, 58  
 Wirth, Dr. Joseph, 164  
 Würzburg, financial compromise of, 165

## Z

Zimmermann, F. W. R., 142

2003-04